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Autoría ditelliana: Penas, María Fabiana (*Universidad Torcuato Di Tella. Escuela de Negocios*)

Otras autorías: Cerqueiro, Geraldo (*Católica Lisbon School of Business and Economics*); Mâo-De-Ferro, Ana (*University of Zurich*)

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GERALDO CERQUEIRO
ANA MÃO-DE-FERRO
MARÍA FABIANA PENAS

Political Uncertainty and the Geographic Allocation of Credit: Evidence from Small Businesses

We investigate how banks change the geographic distribution of their small business loan portfolio when they face political uncertainty in some of the states where they operate. Using exogenous variation in gubernatorial elections with binding term limits, we show that political uncertainty causes local banks to increase out-of-state lending to small firms, particularly those located in higher-income areas. This effect follows a decrease in local lending and is stronger for banks that are more capital-constrained. The increase in out-of-state credit leads to an increase in employment growth and net firm creation in sectors with larger capital needs.

JEL codes: G21, L26, M13
Keywords: political uncertainty, banking industry, small firms

We investigate whether and how banks change the spatial allocation of small business credit in response to election-induced uncertainty in one of the states where they operate. Recent research points to the role of financial integration in allowing banks to redistribute credit across markets in response to local shocks (see, e.g., Loutskina and Strahan 2015, Berrospide, Black, and Keeton

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Geraldo Cerqueiro *is an Associate Professor, Católica Lisbon School of Business and Economics* (*E-mail*: geraldo.cerqueiro@ucp.pt). Ana Mão-de-Ferro *is a PhD Candidate, University of Zurich (Department of Finance) and at Swiss Finance Institute* (*E-mail*: ana.ferro@df.uzh.ch). María Fabiana Penas *is an Associate Professor of Finance, Universidad Torcuato Di Tella* (*E-mail*: fpenas@utdt.edu).

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2016, Gilje, Loutskina, and Strahan 2016, Ben-David, Palvia, and Spatt 2017, Cortés and Strahan 2017, Chakraborty, Goldstein, and MacKinlay 2018). When a particular region is hit by political uncertainty, banks that are geographically diversified may change their supply of credit not only locally but also in the other markets where they operate. In this paper, we show that in response to political uncertainty, banks increase lending to small firms located in unaffected markets. In turn, this increase in lending leads to the creation of additional firms and jobs.

We use gubernatorial elections with binding term limits as an exogenous source of political uncertainty. A binding term limit prevents the incumbent governor from seeking reelection and thus it implies a change in the governor's office. It is well-known that incumbency is an important predictor of election outcomes and that elections with binding term limits often lead to much closer election outcomes. For example, Atanassov, Julio, and Leng (2019) document that over the period 1976–2015, incumbents win more than 80% of the gubernatorial reelections. In fact, the fraction of undecided voters in the preelection polls is substantially higher in elections with binding term limits.

Banks operate in a heavily regulated industry, and uncertainty about future policies can affect their lending decisions. State governors exert significant influence over various state policies, including state taxation, expenditures, and procurement (Peltzman 1987, Poterba 1994, Besley and Case 1995). Moreover, they play an important role in appointing the heads of state bank regulatory bodies, who are responsible for supervision and enforcement. Kara and Yook (2023) document that financial institutions frequently discuss in their earnings calls how local political developments and potential regulatory decisions might affect their operations.

Our data set consists of a panel of loans granted to small businesses at the bank-county-year level. We obtain small business lending data reported under the Community Reinvestment Act (CRA), which are compiled by the Federal Financial Institutions Examination Council (FFIEC). Each banking institution that is subject to CRA reporting must provide annual information about the number and dollar amount of small business loans originated in each census tract. Small business loans include commercial and industrial loans, as well as nonresidential property loans, with original amounts of \$1 million or less. The CRA is well suited to analyze small business lending activities, since it covers approximately 86% of all loans of \$1 million or less (Greenstone, Mas, and Nguyen 2020).[1] Importantly, loans are reported according to the location of the borrower, not the bank branch that granted them, which allows us to investigate the economic effects at the local level.

Besides the availability of data, we focus on small business loans for two additional reasons. First, small businesses are important drivers of job creation, innovation, and economic growth (King and Levine 1993, Haltiwanger, Jarmin, and Miranda 2013). Second, small businesses are informationally opaque entities that depend heavily on

1. CRA data have been extensively used to study small business lending (e.g., Smolyansky 2019 and Cortés et al. 2020). Brown, Cookson, and Heimer (2017) validate the use of CRA as a measure of broader credit market activity.

bank financing (Petersen and Rajan 1994, Robb and Robinson 2014, Brown and Earle 2017). Since physical proximity enables banks to obtain improved information about the creditworthiness of borrowers, small businesses tend to borrow from local banks (Berger et al. 2005, Agarwal and Hauswald 2010). Consequently, small businesses are very exposed to any fluctuations in local credit market conditions.

In our empirical analysis, we start by showing that political uncertainty leads to a fall in the equilibrium amount of credit in the affected states, corroborating the findings in Bordo, Duca, and Koch (2016), Barraza and Civelli (2020), and Berger et al. (2022). But our focus is whether credit is redistributed to safer states. If banks are financially constrained and have unfunded out-of-state profitable investment opportunities, they could reallocate credit to these other states. We obtain empirical support for this hypothesis.

We measure for each bank its exposure to out-of-state uncertainty as the fraction of states where it operates that hold elections with binding term limits, weighted by the bank's lending share in each state in the previous year. We find that a one-standard-deviation increase in this measure boosts the growth rate of lending to small firms by 1.9 percentage points. We also show that this credit reallocation is driven mainly by less capitalized banks, which are more likely to have unfunded positive net present value (NPV) projects. We obtain these results after including county-year and bank-county fixed effects. The county-year fixed effects control for local demand shocks and thus ensure that potential changes in credit growth to small businesses are driven by the banks' decisions to expand their supply of credit. The bank-county fixed effects account for the bank's lending intensity in a given county and control for time-invariant characteristics of the bank. Our result remains unaltered when we add several bank-specific control variables, indicating that time-varying bank heterogeneity is not driving our results. We also find that banks reallocate relatively more credit to higher-income areas.

How does the geographic scope of uncertainty affect banks' lending behavior? We compare term elections held in the bank's headquarters (the bank is affected globally) with term elections held in other states where it operates (the bank is affected only locally). We find that banks reallocate credit to other states only if uncertainty does not hit their state headquarters. When uncertainty hits the bank's state headquarters, it acts as a global shock that limits any potential benefits of geographic diversification.

We also investigate how competing banks with different sizes react to the increase in lending by banks exposed to out-of-state uncertainty. We find that the smaller competing banks are relatively more reluctant to reduce lending to small businesses than the larger banks, a result that is line with the available evidence that small banks have a comparative advantage in lending to small businesses (e.g., Berger et al. 2005).

Next, we estimate how individual banks' responses materialize at the county-level in terms of total lending and real effects. We aggregate our data at the county-year level and build a measure of the average exposure to uncertainty across all banks that operate in a given county and year. We find that counties more exposed to out-of-state political uncertainty experience a significant increase in aggregate credit and higher rates of job and net firm creation. Smaller firms depend more heavily on local banks and are more likely to be financially constrained. Consequently, these firms should benefit the most from an increase in the supply of credit, especially if they operate in industries with high credit needs. We confirm that the increase in net firm creation is driven mainly by the smaller firms (1–4 employees) and by industries with high start-up capital needs.

If the increase in out-of-state lending and the consequent real effects are indeed driven by political uncertainty, then they should both fade out after the elections. To test this premise, we reproduce our results adding a lagged term that should pick any effect of political uncertainty on these outcomes in the year after the elections. We find that the effects of political uncertainty documented above dissipate after the elections.

Our study contributes to an emerging literature that investigates how political uncertainty affects credit markets. There is growing evidence that political uncertainty reduces credit availability by banks (, Bordo, Duca, and Koch 2016, Barraza and Civelli 2020, and Berger et al. 2022).[2] Since these studies employ the aggregate economic policy measure developed by Baker, Bloom, and Davis (2016), one would interpret this result as the impossibility for banks to diversify away systematic policy risks. Our results suggest that, when policy uncertainty is local, banks can diversify away the political risk by reallocating credit to other states. In this respect, our paper complements the findings in Biswas and Zhai (2021), who document an increase in cross-border syndicated lending when domestic economic policy uncertainty is high.

Some recent studies rely on gubernational elections as a source of exogenous variation in political uncertainty. In particular, political uncertainty has been associated with declines in venture capital investment (Tian, Wang, and Ye Forthcoming), initial public offerings (Çolak, Durnev, and Qian 2017), households' access to small loans (Li, Liu, and Tian 2018), and mortgage loans (Kara and Yook 2023). We add to this literature by investigating how political uncertainty affects the geographic distribution of bank lending to small businesses. When in-state elections take place, the equilibrium amount of lending decreases. We show that this political uncertainty causes local banks to increase lending in other states where they operate. In turn, the increase in credit availability leads to an increase in employment growth and net firm creation in those connected markets, especially in industries with high start-up capital needs. To our knowledge, our paper is the first to document that banks sidestep the negative local economic effects of political uncertainty by reallocating small business loans to firms located in other regions.

Our paper is also related to a growing literature on how local shocks are transmitted to other regions through the banking system (for example, see Gilje, Loutskina, and Strahan 2016, Cortés and Strahan 2017, Smolyansky 2019, Kundu and Vats 2021).

2. Several studies associate political or policy uncertainty also with various negative local economic outcomes, including lower corporate investment (Jens 2017, Julio and Yook 2012, Gulen and Ion 2016, and Falk and Shelton 2018) and lower mergers and acquisitions (M&A) activity (Bonaime, Gulen, and Ion 2018 and Nguyen and Phan 2017).

We contribute to this literature by showing that financial integration allows banks to reallocate credit away from regions with uncertainty to regions without political uncertainty.

The remaining sections are organized as follows. Section 1 describes the data and variables used, and Section 2 explains our empirical methodology. Section 3 presents our main results, Section 4 reports some robustness tests, and Section 5 concludes.

1. DATA AND VARIABLES

1.1 Lending Data

We use small business lending data reported under the CRA, which are compiled by the FFIEC. Each banking institution that is subject to CRA reporting must provide information annually about the number and dollar amount of small business loans originated in each census tract. Small business loans include commercial and industrial loans, as well as nonresidential property loans, with original amounts of $1 million or less.

The CRA applies only to large banks and thrifts and thus it excludes, for example, the smaller community banks. The CRA reporting asset threshold has changed over time. It was first set to $250 million in assets in 1995. In 2005, it increased to $1 billion.[3] In 2007, it started being updated annually based on changes to the Consumer Price Index. Although reporting is not mandatory for all banks, the CRA is well suited to analyze small business lending activities, since it covers approximately 86% of the population of loans of $1 million or less (estimates are for 2007 from Greenstone, Mas, and Nguyen 2020). Other studies (e.g., Brown, Cookson, and Heimer 2017) validate the use of CRA as a measure of broader credit market activity.

For a given bank and census tract, the CRA data are aggregated into three categories based on loan size: less than $100,000, between $100,000 and $250,000, and between $250,000 and $1,000,000. Loans up to $100,000 (up to $250,000) account for 93% (97%) of all loans reported in the CRA data in our sample period. We focus on loans up to $100,000 since our goal is to analyze smaller businesses that tend to be more opaque and hence more vulnerable to credit market conditions. In robustness tests, we show that results are similar when we include loans up to $1 million.[4]

Our data structure is as follows. The time period is from 1996, the first year for which data are available, to 2014. For a given year, we observe how much each re-

3. The number of banks and loans changes during our sample period, reflecting this regulatory change. In robustness tests, we show that our main results hold when we restrict the full sample to banks with at least $1 billion in assets.

4. One limitation of the CRA data is that it excludes the smaller community banks, which are known to be important for local small businesses (see, e.g., Avery and Samolyk 2004). In robustness tests that we do not report for brevity, we find that restricting our bank-level analysis to markets where community banks are less present does not alter our conclusions.

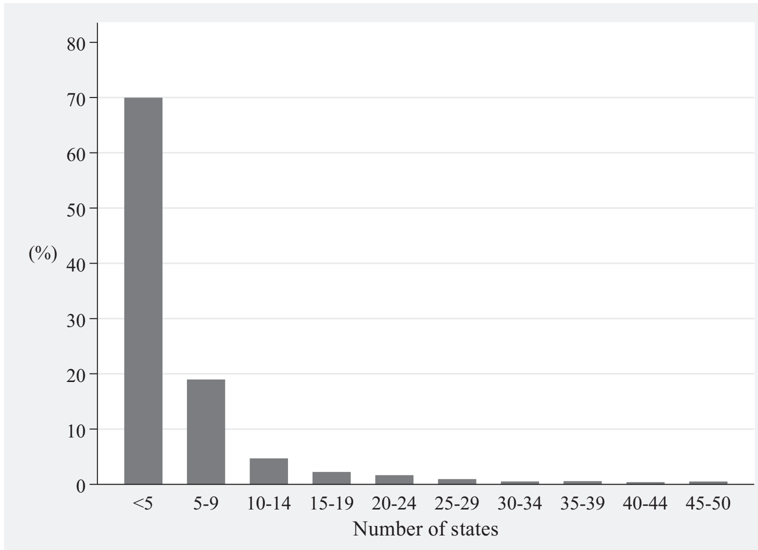

Fig 1. Spatial Distribution of Bank Lending.

NOTES: The figure plots the distribution of banks according to the number of states where they maintain lending activities. We calculate for each bank the average number of states where it lends over the period 1996–2014.

porting bank lends to small businesses located in different counties (i.e., we aggregate all loans granted to different census tracts within the same county). Our main unit of analysis is therefore at the bank-year-county level.

Our final sample contains 3,424 different banks. Most of the banks in our sample are small. Statistics at the bank-county level indicate a median bank asset value of \$10.7 billion. In terms of size distribution, 49.2% of the observations correspond to banks with assets below \$10 billion, 19.6% correspond to banks with assets between \$10 and \$50 billion, and 31.3% to banks with assets above \$50 billion. These statistics overstate the importance of larger banks, since on average they operate in more counties. If we aggregate our data at the bank level, median asset value is \$597 million and 90% of banks operate in less than 10 states (see Figure 1). The fraction of banks operating with state charters is 65.4%.

1.2 Measuring Political Uncertainty

We combine the small business loan data from CRA with election information that we obtain from Congressional Quarterly (CQ) Press. All states in our sample have gubernatorial elections every 4 years with the exception of New Hampshire and Vermont, which have elections every 2 years. Gubernatorial elections are held in November in all states with the exception of Louisiana, where a primary race that can lead to the election of the state governor is held in October. We supplement these

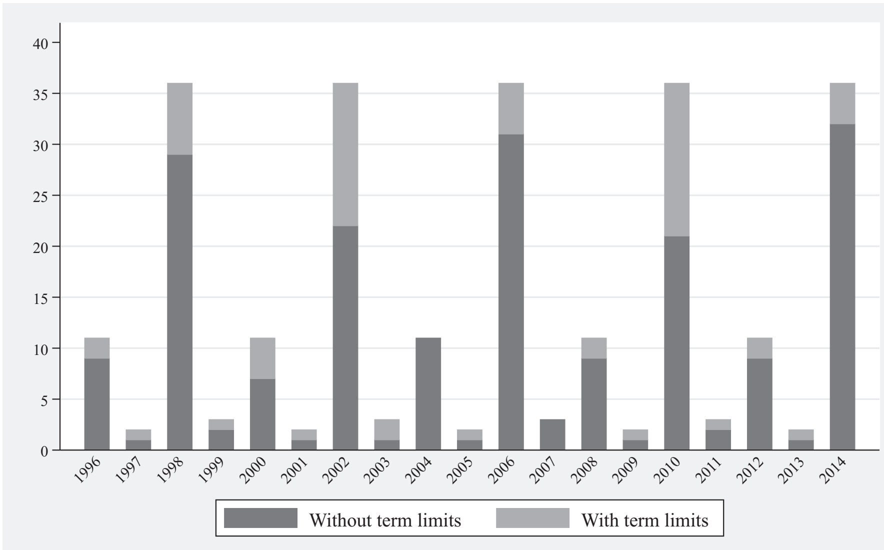

Fig 2. Time Distribution of Gubernatorial Elections.

NOTES: This figure plots the distribution of elections with and without binding term limits by year. Not all states in the sample experience term limit elections: in addition to the 14 states without term limits (Connecticut, Idaho, Illinois, Iowa, Massachusetts, Minnesota, New Hampshire, New York, North Dakota, Texas, Utah, Vermont, Washington, and Wisconsin), New Jersey has no binding term limits during this time period.

data with term limits that we hand-collect from the states' constitutions. A term limit is a legal restriction that limits politicians to a maximum number of (consecutive) terms in office. During our sample period, 14 states have no term limits in place.[5] When a term limit is binding, the incumbent governor is "termed-out" and cannot run for reelection. In our sample, we have 64 elections with binding term limits, which represents one quarter of the total number of elections we have in the sample (257 in total). Figure 2 shows the timing of the elections in our sample period.

The literature has employed different measures of political uncertainty. One popular choice is to explore the timing of U.S. gubernatorial elections. The election dates are predetermined by law and plausibly independent of the states' economic conditions. However, whether an election is associated with political uncertainty depends on how predictable the election outcome is. If the likely winner is known *ex ante*, then there is limited uncertainty about future policies.

For this reason, some studies instead use close election outcomes as a source of political uncertainty. This measure has, however, a few caveats. First, it captures a

5. These are: Connecticut, Idaho, Illinois, Iowa, Massachusetts, Minnesota, New York, North Dakota, Texas, Utah, Washington, and Wisconsin (4-year term states), and Vermont and New Hampshire (2-year term states).

realized election outcome, making it a potentially noisy measure of uncertainty prior to the election. Second, whether we observe a close race may depend on current economic conditions (Jens 2017). Third, there is evidence that strategic campaign behavior can also alter the *ex post* election outcome when elections are expected to be close (Grimmer et al. 2011).

To avoid these potential empirical challenges, we use elections with binding term limits as our main measure of political uncertainty. This measure has two desirable attributes. The first is that elections with binding term limits carry considerable uncertainty. A binding term limit implies that voters are forced to replace an incumbent governor by a new governor about whom they know less, creating uncertainty about future policies. It is well documented that incumbency is an important predictor of election outcomes (Ansolabehere and Snyder 2002, Atanassov, Julio, and Leng 2019). For example, Atanassov, Julio, and Leng (2019) document that over the period 1976–2015, incumbents win more than 80% of the gubernatorial reelections.[6] There is also evidence that binding term limits lead to much closer election outcomes (Jens 2017, Kara and Yook 2023).

The second attribute is its exogeneity. A binding term limit is predetermined, it provides exogenous variation in political uncertainty that is unrelated to current economic conditions. This is recognized, for example, in Jens (2017)—who instruments close election outcomes using elections with term limits—and more recently by Kara and Yook (2022). By analyzing elections with binding term limits, we are essentially using *ex ante* and exogenous variation in race closeness.

1.3 Evidence from Poll Data

To validate the use of binding term limits as a measure of political uncertainty, we hand-collect poll data for elections occurring between 2010 (the first year with available data) and 2014 (the end of our sample). Our goal is to simply obtain independent confirmation that binding term limits carry, in general, more uncertainty regarding the election outcome than elections without binding term limits. To do so, we focus on the fraction of undecided voters in the preelection polls.[7]

In Table 1, we run descriptive regressions in which the dependent variable is the fraction of undecided voters in a given poll, and the independent variable is a dummy that indicates a binding term limit. The fraction of undecided voters proxies for *ex ante* uncertainty in the election outcome. In this regression, we are simply testing whether uncertainty is on average higher when the incumbent governor cannot run for reelection (relative to the situation in which he/she can). We estimate three spec-

6. The fraction of incumbents that are reelected during our sample period is 88%.

7. We collected the poll data from Ballotpedia, a nonprofit and nonpartisan organization that compiles and disseminates information about politics at all levels of the U.S. government. Our sample contains poll data ranging from the 2010 Gubernatorial Elections up to every election at that government level until 2014. The group of undecided voters also includes those voters who revealed preference for other minor candidates (i.e., neither democrat nor republican). We include in our analysis all available polls for each state election.

TABLE 1
BINDING TERM LIMITS AND UNDECIDED VOTERS

Panel A. All elections

Dependent variable:	Fraction of undecided voters		
	(1)	(2)	(3)
Elections with term limit	0.037*	0.0482**	0.0514**
	[0.0199]	[0.0208]	[0.0237]
Observations	372	372	372
R^2	0.049	0.094	0.594
Year fixed effects	N	Y	Y
State fixed effects	N	N	Y

Panel B. Elections with uncertain winner

Dependent variable:	Fraction of undecided voters		
	(1)	(2)	(3)
Elections with term limit	0.0577*	0.0576**	0.103*
	[0.0281]	[0.0290]	[0.059]
Observations	187	187	187
R^2	0.098	0.125	0.706
Year fixed effects	N	Y	Y
State fixed effects	N	N	Y

NOTES: Poll data collected from Ballotpedia are at the state-year level and cover all gubernatorial elections from 2010 to 2014. For each election, we collected the fraction of undecided voters from opinion polls. The group of undecided voters also includes those voters who revealed preference for other minor candidates (i.e., neither democrat nor republican). We include in our analysis all available polls for each state election. The variable "Elections with term limit" equals one if the incumbent governor cannot run for reelection, and it equals zero otherwise. Panel A includes all gubernatorial elections with poll data. Panel B includes only polls in which the fraction of undecided voters is larger than the point distance between the two top contenders. The average % of undecided voters is 11.6% (Panel A) and 14.2% (Panel B). Results are statistically significant at the 10% (*), 5% (**), and 1% (***) level, respectively.

ifications. The first specification has no control variables. The second includes year fixed effects. The third controls both for state and year fixed effects. Standard errors are clustered at the state level.

In Panel A, we include all elections. The results show that when incumbents cannot seek for reelection, the fraction of undecided voters is significantly larger, with the estimated difference ranging between 3.7 and 5.1 percentage points. These coefficients are statistically significant and economically large, since the average fraction of undecided voters in Panel A is 11.6%.

Several of the elections in Panel A have almost certain outcomes. For example, suppose polls indicate 75% support toward one of the candidates and a fraction of undecided voters of only 5%. In this example, there is little uncertainty because the fraction of undecided voters is too small to affect the election outcome. For this reason, we analyze in Panel B the subsample of elections that carry some degree of uncertainty. We restrict our sample to elections in which the fraction of undecided voters is large enough to decide the outcome of the election in favor of any of the contenders. One such example is if polls indicate 55% support toward one of the candidates and the fraction of undecided voters is 8%.

As expected, the economic effects become larger relative to the full sample. For example, column (3) shows that the fraction of undecided voters is 10.3 percentage points higher when term limits bind relative to nonbinding term limits, after accounting for year and state fixed effects. This figure represents 72% of the average fraction of undecided voters in Panel B (which equals 14.2%). Therefore, these results show that when we focus on a subsample of uncertain elections, the existence of binding term limits explains most of the uncertainty.

1.4 Other Variables

We collect from various sources several county-level variables that we use in our analysis. We obtain data from the Census Bureau County Business Patterns (CBP) to assess whether the geographic allocation of credit has real effects. In particular, we analyze net firm creation across different firm size bins, as well as net changes in employment. We use these data both aggregated (for our entire sample period, 1996–2014) and disaggregated at the two-digit North American Industry Classification System (NAICS) industry (for the period 1998–2014).

From the Bureau of Economic Analysis (BEA), we obtain the county's population and per capita personal income (in dollars). From the Federal Housing Finance Agency (FHFA), we additionally collect the house price index, as well as the annual percent change in the house price index.

From the Call reports, also available from the FFIEC, we obtain several bank-level variables that we use as controls: the fraction of liquid assets (the ratio of cash and securities to total assets), capital ratio (the ratio of equity to total assets), the ratio of real estate loans to total assets, return on equity (the ratio of net income to equity), the ratio of loan loss provisions to total loans, and the ratio of deposits to total liabilities. For a subsample of the banks, we also compute a regulatory capital ratio: the ratio of core tier 1 capital to total risk-weighted assets.

2. METHODOLOGY AND SAMPLE DESCRIPTION

2.1 Political Uncertainty and Out-of-State Lending

To test how political uncertainty in a given state affects the supply of credit of affected banks to firms in other regions, we estimate the following regression model using only observations from states that do not experience elections in that particular year:

$$\Delta Log(Loans)_{b,c,t} = \alpha_{b,c} + \alpha_{c,t} + \beta(Bank\ Exposure)_{b,t} + \delta' Z_{b,t-1} + u_{b,c,t}. \quad (1)$$

The dependent variable is the growth rate in the number (or dollar value) of small business loans that bank b grants in year t to firms in county c (in state s, which does not experience elections). The independent variable *Bank Exposure* is a measure of the degree of political uncertainty that a given bank is exposed to in the other regions where it operates. Before we explain how we compute this variable, we turn to the remaining elements in equation (1). Lagged control variables that vary at the bank-year level are denoted by the vector Z. We add two sets of fixed effects: bank-county and county-year. The bank-county fixed effects account for the bank's lending intensity in a given county. It also controls for time-invariant characteristics of the bank. The county-year fixed effects compare loan growth changes for a given county in a given year across different banks with different out-of-state exposures to political uncertainty. Since the county-year fixed effects control for local demand shocks, they enable us to isolate the effect of out-of-state political uncertainty on the supply of credit (as in Khwaja and Mian 2008).[8] Our methodology ensures that we are comparing banks that face different out-of-state political exposure, but the same economic conditions at the county level (and thus, also regardless of possible effects stemming from uncertainty at the national level). We cluster standard errors at the bank level.

We measure a bank's exposure to political uncertainty as the fraction of states where the bank operates that have elections with binding term limits in that year. In Section 1.2, we argued that elections with binding term limits proxy for political uncertainty and we presented results that support this claim. To test whether the driver of our results is the existence of binding term limits (and not elections *per se*), we also control in some specifications for the fraction of states where the bank operates that have elections without binding term limits.

To see how these measures work, consider a bank that operates in five states. Our goal is to assess how the supply of credit in one state reacts to political uncertainty occurring in the other four states. Consider the following scenario for these four states: (i) one state holds elections with binding term limits, (ii) two states hold elections without binding term limits, and (iii) the last state has no elections. In this case, the fraction of states with term elections (our measure of exposure to uncertainty) equals 1/4, while the fraction of states with nonterm elections equals 1/2.

The previous measures assign an equal weight to all states where the bank operates, which may understate or overstate the importance of specific markets for individual banks among those states. Therefore, we weight our exposure measure by the bank's lending share in each state in the previous year. The resulting variable, *Weighted fraction of states with term elections*, is the main measure of political uncertainty in our analysis.

2.2 Out-of-State Lending and Aggregate Outcomes

We test whether the geographic reallocation of credit has aggregate effects using county-level data from states that do not experience elections, and the following regression model:

$$\Delta Log(Outcome)_{c,t} = \alpha_{d,t} + \beta(County\ Exposure)_{c,t} + u_{c,t}. \qquad (2)$$

8. Note that a key source of variation in our empirical strategy is that banks operate in different regions. If, for example, all banks operated in all 50 states, then we would not be able to identify β because all banks would face the same out-of-state election cycles. Figure 1 shows that this is not the case, as 90% of banks operate in less than 10 states.

The dependent variable is the growth rate in the outcome of interest (loans, employment, or number of establishments) in year t, in county c (in state s, which is part of census division d). We include division-year fixed effects, which forces comparison in the same year of counties located within the same division.[9] The variable of interest, *County Exposure*, measures the exposure of the county to banks affected by political uncertainty. We compute this exposure as the county average of the *Weighted fraction of states with term elections*. We cluster standard errors at the county level.

2.3 Summary Statistics

Having introduced our main measures of political uncertainty exposure, we now briefly comment on our sample. Table 2 displays summary statistics for the variables used.

The statistics in Panel A are computed at the bank-county-year level. Average lending growth rates are around 5% per year both for the number and volume of loans, and for the three lending size groups. Our main lending variable of interest is *Number of loans (<$100K)*, which averages 4.5%.

Our main explanatory variables of interest are the out-of-state exposure to uncertainty measures, described in the previous section. The average fraction of states with elections is 15.2% (variable *Fraction of states with elections*). Restricting this measure to contain only elections with term limits, which captures political uncertainty more precisely, reduces this fraction to 3.9% (variable *Fraction of states with term elections*). The previous measures assign an equal weight to all states where the bank operates. Therefore, we also analyze the fraction of states where a bank operates that experience elections with binding term limits, weighted by the bank's lending share in each state in the previous year. *Weighted fraction of states with term elections* is then our main bank-level measure of exposure to uncertainty. The sample average of this variable is 3.5% (only marginally lower than its unweighted counterpart).

We note that the statistics on bank controls included in Panel A of Table 2 are at the bank-county-year level.

In Panel B, we provide statistics for the aggregated county-level variables. Starting with the outcomes of interest, the average county-level growth in the number of loans below $100K, *Lending (number of loans <$100K)*, is 4.9%. The average rates of firm and job creation are close to zero in our sample period. However, the high standard deviations indicate substantial heterogeneity across counties and years: While the 25th percentile rates in employment and number of small firms are −2.7% and −3.1%, the 75th percentile growth rates for the same variables equal 3.6% and 2.7%, respectively.[10] Another relevant source of county heterogeneity is the market structure of small business lending by type of bank. The fraction of small banks (with assets below

9. The Census Bureau defines nine divisions: New England, Mid-Atlantic, East North Central, West North Central, South Atlantic, East South Central, West South Central, Mountain, and Pacific.

10. Part of this variation is explained by the 2007–09 crisis. In robustness tests, we show that our results hold when we exclude the crisis years.

TABLE 2

Summary Statistics

Panel A, Bank-county-year analysis

	Mean	SD	P25	P50	P75
Lending (growth rates)					
Number of loans (<\$100K)	0.045	0.806	−0.318	0	0.405
Lending value (<\$100K)	0.051	1.417	−0.450	0	0.520
Number of loans (<\$250K)	0.047	0.809	−0.336	0	0.405
Lending value (<\$250K)	0.054	1.418	−0.464	0	0.543
Number of loans (<\$1M)	0.048	0.810	−0.353	0	0.405
Lending value (<\$1M)	0.054	1.186	−0.477	0.002	0.565
Out-of-state exposure to political uncertainty					
Fraction of states with elections	0.152	0.203	0.04	0.060	0.220
Fraction of states with close elections	0.052	0.084	0	0.020	0.074
Fraction of states with term elections	0.039	0.066	0	0.020	0.040
Weighted fraction of states with elections	0.136	0.203	0	0.060	0.204
Weighted fraction of states with term elections	0.035	0.067	0	0.020	0.040
Weighted fraction of states with nonterm elections	0.101	0.161	0	0.022	0.144
Bank controls					
Liquid assets/Assets	0.210	0.121	0.130	0.206	0.276
Capital/Assets	0.112	0.061	0.081	0.096	0.121
Tier 1/Risk-weighted assets	0.115	0.063	0.085	0.100	0.122
Real estate loans/Assets	0.307	0.194	0.172	0.315	0.450
Loan loss provisions/Loans	0.004	0.225	0.001	0.002	0.006
Return on equity	0.031	0.122	0.018	0.032	0.045
Deposits/Liabilities	0.701	0.263	0.600	0.786	0.894

Panel B. County-year analysis

	Mean	SD	P25	P50	P75
Aggregate outcomes (growth rates)					
Lending (number of loans <\$100K)	0.049	0.358	-0.102	0.063	0.226
Employment	0.004	0.068	-0.027	0.006	0.036
Establishments (all sizes)	0.001	0.035	-0.018	0	0.019
Establishments (1–4 employees)	−0.002	0.056	−0.031	0	0.027
Establishments (>4 employees)	0.005	0.058	−0.023	0.004	0.032
Exposure to uncertainty					
County exposure to uncertainty	0.037	0.055	0.011	0.019	0.037
County controls					
Fraction of small banks	0.465	0.188	0.333	0.462	0.591
Per capita income (\$000)	28.256	9.576	21.744	26.612	32.664
Population (in thousands)	93.518	302.485	11.042	25.134	63.964
Active population/Population	0.510	0.1370	0.411	0.500	0.594
House price growth	0.026	0.056	−0.004	0.026	0.054

Notes: Data are for the period 1996–2014. The unit of analysis in Panel A is at the bank-county-year. The unit of analysis in Panel B is at the county-year level. The statistics presented are the sample mean, standard deviation, and percentiles 25, 50, and 75, respectively.

\$10 billion) operating in the county varies significantly, with an interquartile range going from 33.3% to 59.1%.

Our main county-level measure of exposure to political uncertainty, which averages the bank-county-level *Weighted fraction of states with term elections*, is on average 3.7%.

3. RESULTS

3.1 Political Uncertainty and Out-of-State Lending

We know from previous research (Bordo, Duca, and Koch 2016, Barraza and Civelli 2020, Berger et al. 2022) that political uncertainty leads to a fall in the equilibrium amount of credit in the affected states. Our own tests suggest the same result. In Table A1, we report the results of studying the effect of term binding elections on the local growth rate of loans. With this analysis, we cannot tell whether the reduction in small business loans reflects the lower demand for credit by local businesses or a reduction in supply of credit by local banks that adopt a "wait and see" strategy. Instead, the goal of this set of regressions is to document that political uncertainty reduces the equilibrium level of credit to local small firms. We find a 1.56 percentage point decrease in credit growth in states that hold elections with binding term limits. This reduction corresponds to 36% of the average credit growth in our sample period. We also find that this effect nearly doubles in magnitude when the election occurs in the bank's home state.

In response to this reduction of lending in states that experience elections, banks that have good unfunded opportunities in other markets may decide to reallocate credit to those other states that do not experience elections. Since banks that are financially or regulatory constrained are more likely to have unfunded good investment opportunities, we conjecture that banks with low capital ratios are more likely to reallocate credit to other states.

We begin by testing in Table 3 whether local political uncertainty makes banks reallocate credit to other connected but unaffected markets where they operate. The estimation sample uses only observations from states that do not experience elections in that particular year. The dependent variable is the growth rate in the number of small business loans up to $100,000 in value. In a robustness section, we show that our results hold when we include loans of higher value or when we analyze lending volumes. All regressions shown include county-year and bank-county fixed effects. The county-year fixed effects control for changes in demand, while the bank-county fixed effects control for the time-invariant importance of a bank within a county. To control for time-varying heterogeneity across banks, we add several control variables lagged one year: the fraction of liquid assets (cash and securities), the capital ratio, the fraction of real estate loans, loan loss provisions divided by total loans, return on equity, and deposits as a fraction of total liabilities.[11] We cluster standard errors at the bank level.

We estimate several specifications with different measures of bank exposure to political uncertainty. All measures are a function of the fraction of states in which a bank operates that experience elections. In column (1), we consider the fraction of states that experience any election. In column (2), we use the fraction of states with

11. Most of these control variables turn out to be statistically insignificant in our regressions. This may have to do with limited variation left during our sample period following the inclusion of bank-county fixed effects.

TABLE 3

Political Uncertainty and Out-of-State Lending

Growth rate in:	Number of loans (<$100K)				
	(1)	(2)	(3)	(4)	(5)
Bank exposure to political uncertainty					
Fraction of states with elections	0.0484				
	[0.0847]				
Fraction of states with close elections		0.0238			
		[0.0856]			
Fraction of states with term elections			0.266***		
			[0.102]		
Weighted fraction of states with term elections				0.289***	0.274**
				[0.111]	[0.112]
Weighted fraction of states with nonterm elections					−0.102
					[0.118]
Bank control variables					
Liquid assets/Assets	0.336	0.336	0.336	0.336	0.336
	[0.457]	[0.458]	[0.458]	[0.457]	[0.458]
Capital ratio	0.979	0.980	0.980	0.983	0.985
	[1.307]	[1.307]	[1.306]	[1.306]	[1.306]
Real estate loans/Assets	1.185*	1.185*	1.186*	1.186*	1.189*
	[0.681]	[0.681]	[0.681]	[0.680]	[0.680]
Loan loss provisions/Loans	−13.35*	−13.36*	−13.36*	−13.37*	−13.38*
	[6.908]	[6.910]	[6.908]	[6.908]	[6.909]
Return on equity	−0.270	−0.270	−0.271	−0.271	−0.272
	[0.304]	[0.305]	[0.305]	[0.305]	[0.305]
Deposits/Liabilities	−0.508	−0.507*	−0.507*	−0.507*	−0.506*
	[0.306]	[0.306]	[0.305]	[0.305]	[0.305]
Observations	700,572	700,572	700,572	700,572	700,572
R^2	0.266	0.266	0.266	0.266	0.266
Bank × County fixed effects	Y	Y	Y	Y	Y
County × Year fixed effects	Y	Y	Y	Y	Y

Notes: Data are for the period 1996–2014. The unit of analysis is bank-county-year. The estimation sample excludes the state and years when the elections take place. The dependent variable is the annual change in the log of the number of loans (up to $100,000) granted by a given bank in a given county. The measures of bank exposure to political uncertainty are computed as the fraction of states where the bank operates that experience gubernatorial elections. Measures (1) through (3) are simple averages. Measure (1) includes all elections. Measure (2) includes elections with close election outcomes (where the voting difference between the two top contenders is in the lowest tercile). Measure (3) includes elections with binding term limits. Measures (4)–(6) are weighted by the bank's lending share in each state in the previous year. Measure (4) includes all elections. Measure (5) includes elections with binding term limits. Measure (6) includes separate measures for elections with term and nonterm limits. Bank controls are lagged one year. Standard errors are clustered at the bank level. Results are statistically significant at the 10% (*), 5% (**), and 1% (***) level, respectively.

elections with close outcomes. Following Jens (2017), we define a close election as a dummy that indicates a vote differential for an election in the lowest sample tercile.[12] In column (3), we use the fraction of elections with binding term limits. The measures in columns (1)–(3) implicitly assume that all "treated" states are equally important to the bank. To properly assess the economic importance of each state for each bank, in columns (4) and (5) we weight our exposure measure in column (3) by the bank's lending share in each state in the previous year. The latter is the measure we described in Section 2.1 and is our preferred measure.

12. Close elections have an average vote differential of 3.5%, while nonclose elections have an average vote differential of 22.7%. Jens (2017) reports average differentials of 3.6% and 22.9%, respectively, for the period 1984–2008.

TABLE 4
The Role of Bank Capital

Growth rate in:	Number of loans (<$100K)	
Bank capital measure:	Equity/Assets	Tier 1/Risk-weighted assets
	(1)	(2)
Weighted fraction of states with term elections	0.276**	0.323***
	[0.110]	[0.120]
Weighted fraction of states with term elections × Bank capital in excess of median	−0.0611	−0.0552**
	[0.0437]	[0.0236]
Bank capital in excess of median	−0.00196	0.00642
	[0.00885]	[0.00637]
Observations	700,572	551,899
R^2	0.255	0.287
Bank × County fixed effects	Y	Y
County × Year fixed effects	Y	Y

Notes: Data are for the period 1996–2014. The unit of analysis is bank-county-year. The dependent variable is the annual change in the log of the number of loans (up to $100,000) granted by a given bank in a given county. *Weighted fraction of states with term elections* is the fraction of states where a bank operates that experience elections with binding term limits, weighted by the bank's lending share in each state in the previous year. The bank capital measures are the ratio of book equity to total assets (in column (1)), and the ratio of tier 1 capital to risk-weighted assets (in column (2)). Tier 1 capital includes common equity tier 1 and additional tier 1 capital. For each bank capital measure, we subtract its median (which equals 9.6% in column (1) and 10% in column (2)) and express the difference obtained in percent. Standard errors are clustered at the bank level. Results are statistically significant at the 10% (*), 5% (**), and 1% (***) level, respectively.

All estimated coefficients for the exposure measures are positive. However, they are only quantitatively important and statistically significant when we use out-of-state elections with binding term limits as a measure of a bank's exposure to political uncertainty (in columns (3)–(5)). As discussed extensively in Section 1.2, elections with binding term limits carry more uncertainty (in contrast to all elections in column (1)) and are more exogenous to current economic conditions (in contrast to close elections in column (2)).

The estimated coefficients in columns (3)–(5) are similar in magnitude. Comparing column (3) with column (4) shows that the equal-weighted measure in column (3) leads to a slight underestimation of the effect in column (4) (our preferred specification). In column (5), we additionally control for the fraction of states holding elections without binding term limits. We show that a bank's exposure to nonterm elections—which have highly predictable outcomes as incumbent governors are almost always reelected—has no material effect on credit reallocation. The point estimate in column (4) indicates that a one-standard-deviation increase in the fraction of states with term limit elections boosts the bank's loan growth by $0.289 \times 0.067 = 1.9$ percentage points. We analyze in a separate section below this effect in the context of the lending behavior of competing banks.

In Table 4, we test whether the reallocation driven by the increase in political uncertainty in some markets is more likely for banks that have lower capital ratios, as regulatory restrictions may hinder them to expand credit before the uncertainty hits (i.e., these are the banks that are more likely to be financially/regulatory constrained). That is, we are interested in understanding if the credit reallocation is stronger in a group of banks (those with above-median capital) than in another group of banks (those with below-median capital). To this end, we interact the variable *Weighted fraction of states with term elections* with bank capital. In column (1), we measure capital ratio as the ratio of book equity to total assets. We observe this ratio for all banks in the sample. In column (2), we employ the ratio of tier 1 capital to risk-weighted assets.[13] Although, the second measure is a regulatory capital ratio, we note that ratio is available only for a subset of the banks in our sample.

To facilitate the interpretation of results, we subtract from each bank's capital measure its sample median (9.6% in column (1) and 10% in column (2)). The estimated coefficient for the variable *Weighted fraction of states with term elections* thus measures the change in lending for a bank with median capital ratio. Since the estimated effects are both positive and significant, we can conclude that banks with median capital ratios react to political uncertainty by increasing out-of-state lending. The estimates obtained for the interaction term are negative, quantitatively similar, and the one corresponding to the regulatory capital ratio is also statistically significant, indicating that well-capitalized banks redistribute less credit. This supports our conjecture that banks redistribute credit only if they have unfunded positive NPV projects, and this is more likely the more capital-constrained banks are.[14]

3.2 Distributional Effects

Where are banks reallocating credit to? Banks react to local political uncertainty by providing additional credit in connected markets. In Table 5, we investigate what types of destination counties are chosen by banks. We characterize counties along two dimensions that should be correlated with better loan opportunities for banks: the average real per capita income (column (1)) and the level of the local house price index (column (2)).

To illustrate our approach, take a given bank that is shocked in a given year and consider the first county trait (average real per capita income). Our goal is to see whether this bank is more likely to reallocate credit to richer counties. To do so, we start by identifying the set of eligible counties as those where the bank extended loans in the previous year. Then, we assign each county to either the "high average income" or "low average income" group based on whether its average income per capita lies above or below the median average income calculated over the entire sample of coun-

13. As defined by the Basel III standard, tier 1 capital has two components: common equity tier 1 and additional tier 1 capital. Common equity tier 1 is the highest quality of capital and can absorb losses immediately as they occur. This category includes common shares, retained earnings, among other categories. Additional tier 1 capital includes noncumulative, nonredeemable preferred stock and related surplus, and qualifying minority interest. These instruments can also absorb losses, although they do not qualify for common equity tier 1.

The tier 1 capital ratio compares a bank's equity capital with its total risk-weighted assets—that is, all assets held by a bank that are weighted by credit risk.

14. In a regression that we omit for brevity, we use data at the bank-year level and find that a bank's exposure to political uncertainty anywhere it operates does not significantly affect its aggregate lending volume, confirming our conjecture that banks redistribute credit from states where they experience uncertainty to unaffected markets where they operate.

TABLE 5

WHERE ARE BANKS REALLOCATING CREDIT TO?

Dependent variable:	Growth rate in number of loans (<$100K)	
County has above-median:	Per capita income (1)	House price level (2)
Weighted fraction of states with term elections	0.194	0.134
	[0.123]	[0.123]
Weighted fraction of states with term elections × County type	0.172	0.280
	[0.149]	[0.175]
County type	0.0915***	0.141***
	[0.0244]	[0.0323]
Observations	700,572	700,572
R^2	0.266	0.267
Bank controls	Y	Y
Bank × County fixed effects	Y	Y
County × Year fixed effects	Y	Y

NOTES: Data are for the period 1996–2014. The unit of analysis is bank-county-year. The dependent variable is the annual change in the log of the number of loans (up to $100,000) granted by a given bank in a given county *Weighted fraction of states with term elections* is the fraction of states where a bank operates that experience elections with binding term limits, weighted by the bank's lending share in each state in the previous year. For each bank and year, we select all counties where the bank is lending and compute the sample median for two county characteristics: real per capital income, and house price level. For each characteristic, we then assign the county to the high or low group depending on whether the county is above or below the median, respectively. Lagged bank controls are the ratio of cash and securities to total assets, the capital ratio, the ratio of real estate loans to assets, the ratio of loan loss provisions to loans, the return on equity and the ratio of deposits to liabilities. Standard errors are clustered at the bank level. Results are statistically significant at the 10% (*), 5% (**), and 1% (***) level, respectively.

ties where the bank is active. Since our goal is to assess to which type of county the shocked bank is channeling credit to, we interact our measure of exposure to uncertainty with an indicator of whether the county is in the high average income group. We apply this approach for both county characteristics. The regressions in Table 5 are otherwise similar to those we discussed earlier.

Column (1) shows that banks prefer to redistribute to higher-income counties, while column (2) shows that banks are more likely to expand lending to areas with high house price levels. However, both effects are statistically insignificant.

Which income groups benefit? The CRA reports small business lending data for different income tracts groups. In Table 6, we use this information to analyze which income tracts benefit from the lending spillovers documented earlier. We consider three types of census tracts: low, middle, and upper income.[15] In contrast to the previous subsection, which considers only target counties where the bank operates, in this subsection we analyze lending spillovers to different income areas. For each income group, we estimate regressions similar to our baseline regression in column (4) of Table 3. The explanatory variable of interest is again the fraction of states where

15. A low-income census tract has a median family income (MFI) that is less than 50% of the MFI for the broader area (the metropolitan area containing the tract or the entire nonmetropolitan area of the state); middle-income census tract has 50% to less than 120%; and an upper-income census tract has 120% or more.

TABLE 6

Which Income Groups Benefit?

Growth rate in:	Number of loans (<$100K)		
Income group:	Lower (1)	Middle (2)	Upper (3)
Weighted fraction of states with term elections	0.0628**	0.248**	0.181***
	[0.0283]	[0.105]	[0.0695]
Observations	700,572	700,572	700,572
R^2	0.230	0.266	0.272
Bank controls	Y	Y	Y
Bank × County fixed effects	Y	Y	Y
County × Year fixed effects	Y	Y	Y

Notes: Data are for the period 1996–2014. The unit of analysis is bank-county-year. The dependent variable is the annual change in the log of the number of loans (up to $100,000) granted by a given bank to a specific income group in a given county. *Weighted fraction of states with term elections* is the fraction of states where a bank operates that experience elections with binding term limits, weighted by the bank's lending share in each state in the previous year. Income groups are at the census tract level and are based on the family's median income (MFI): Lower income is below 50% of MFI (excluding zero), Middle income is between 50% and 120% of MFI, and Upper income is above 120% of MFI. Lagged bank controls are the ratio of cash and securities to total assets, the capital ratio, the ratio of real estate loans to assets, the ratio of loan loss provisions to loans, the return on equity and the ratio of deposits to liabilities. Standard errors are clustered at the bank level. Results are statistically significant at the 10% (*), 5% (**), and 1% (***) level, respectively.

a bank operates that experience elections with binding term limits, weighted by the bank's lending share in each state in the previous year.

The results in Table 6 show that in all three groups, the coefficient for exposure to out-of-state political uncertainty is positive and significant. Still, the distribution of credit across income groups is not uniform. The estimated effects are substantially larger for the middle- and high-income groups than for the low-income group. A one-standard-deviation increase in the weighted fraction of states with term limit elections increases the growth rate in the number of loans granted by 0.42 percentage points to low-income areas, 1.66 percentage points to middle-income areas, and by 1.21 percentage points to high-income areas. These results suggest that lending spillovers benefit mainly more economically developed areas that tend to offer better credit opportunities.

3.3 *Local versus Global Uncertainty*

In this section, we investigate whether the effects of political uncertainty on credit reallocation decisions depend on the geographic scope of uncertainty faced by banks. To do so, we analyze two uncertainty scenarios. In the first scenario, the elections take place outside the bank's home state. In this case, any uncertainty about future political or regulatory decisions affects the bank only locally. One example is state income taxes, which apply only to in-state lending activities (Smolyansky 2019). In this scenario, banks can—at least partially—sidestep uncertainty by reallocating lending to other states where they operate.

In the second scenario, the elections take place in the state where the bank is headquartered. In this case, legal reforms enacted in the state could potentially affect the

TABLE 7

Local vs. Global Uncertainty

Growth rate in:	Number of loans (<$100K)		
Banks included:	All (1)	All (2)	> 5 states (3)
Weighted fraction of states with term elections	0.289***		
	[0.111]		
Weighted fraction of states with term elections × Term elections in HQ state		0.0476 [0.363]	0.204 [0.431]
Weighted fraction of states with term elections × No term elections in HQ state		0.311** [0.125]	0.441*** [0.160]
Observations	700,572	700,572	643,472
R^2	0.266	0.266	0.276
Bank controls	Y	Y	Y
Bank × County fixed effects	Y	Y	Y
County × Year fixed effects	Y	Y	Y

Notes: Data are for the period 1996–2014. The unit of analysis is bank-county-year. The estimation sample excludes the state and years when the elections take place. The dependent variable is the annual change in the log of the number of loans (up to $100,000) granted by a given bank in a given county. *Weighted fraction of states with term elections* is the fraction of states where a bank operates that experience elections with binding term limits, weighted by the bank's lending share in each state in the previous year. *HQ* refers to whether the bank is headquartered in one of the states that hold elections. Columns (1) and (2) include all banks. Column (3) includes only banks with lending operations in at least five states. Lagged bank controls are the ratio of cash and securities to total assets, the capital ratio, the ratio of real estate loans to assets, the ratio of loan loss provisions to loans, the return on equity, and the ratio of deposits to liabilities. Standard errors are clustered at the bank level. Results are statistically significant at the 10% (*), 5% (**), and 1% (***) level, respectively.

bank in all states where it operates. Since the bank may no longer sidestep uncertainty in this second scenario, we could see limited credit reallocation. Although this applies more directly to state banks that are not members of the Federal Reserve System (state nonmember banks), it can also apply to national banks, since they must also comply with regulations enacted in their home state. One such example is the case of usury laws, in which the maximum interest rate a bank can charge is determined by the bank's home state rather than the state where credit is granted.[16]

The results in Table 7 confirm that banks behave very differently depending on whether elections take place in their home state or not. The first column replicates the results in column (4) of Table 3. In column (2) of Table 7, we interact our measure of exposure to out-of-state uncertainty using indicators of whether an election with binding term limits was held in the bank's home state. One potential concern with this analysis is that, for a small bank that operates in few states, the state headquarters can also be interpreted as the state that concentrates most of the bank's lending activities. Therefore, in column (3) we restrict our sample to banks that operate in at least five states. The results show that banks reallocate credit to other states only if the election-induced uncertainty does not take place at their home state. When uncertainty hits the bank's state headquarters, we no longer see an increase in out-of-state lending. In this

16. Another reason why the state of incorporation matters is because governors typically appoint the chief executive (i.e., the "Commissioner of Banking"), who is in charge of examination, regulation, and supervision not only of state-chartered banks but also of banks incorporated in the state. For example, in the case of Delaware, see: https://delcode.delaware.gov/title5/c001/sc02/index.shtml.

case, uncertainty seems to act as a global shock that limits any potential benefits of geographic diversification.[17]

3.4 How Do Competing Banks React?

In Section 3.1, we show that an increase in out-of-state political uncertainty increases bank loan growth in unaffected counties. In particular, we estimate that banks with a positive fraction of states with term limit elections (i.e., treated banks) experience higher loan growth in unaffected counties than banks that do not face out-of-state political uncertainty (i.e., untreated banks). In this section, we explore potential heterogeneous responses in the control group, that is, whether small and large untreated banks respond differently.

Following the analysis introduced by Berger et al. (1998), we conjecture that beyond the direct effect of political uncertainty on treated banks, there may be an indirect (or external) effect.[18] *A priori*, this external effect in our setting can be positive or negative.[19] For example, the extra lending from treated banks in unaffected counties may push some competing banks to adjust their lending behavior. Or, the extra lending may revamp economic activity and thereby lead to a local increase in the demand for credit. Irrespective of the mechanism at play, these indirect effects may be different between untreated small banks and untreated large banks, since small banks have a comparative advantage (relative to larger banks) in lending to small businesses (Berger et al. 2005).

To test for the presence of heterogeneous indirect effects, we classify banks in the control group in three bank size categories: small banks with assets of less than \$10 billion, medium-size banks with assets between \$10 and 50 billion, and large banks with assets more than \$50 billion.[20] We then run similar regressions to the one in column (4) in Table 3 using banks of different sizes in the control group. We report the results in Table 8.

The first column in Table 8 replicates column (4) of Table 3, showing the effect of out-of-state political uncertainty relative to the average bank in the control group. The control group in column (2) includes only untreated small banks (with assets below \$10B). Therefore, the estimate of the variable of out-of-state political uncertainty reflects the difference between all treated banks and the small untreated banks.

17. In Table A1, we show that banks reduce credit growth in states that experience elections with binding term limits. The results in column (3) indicate that this effect is stronger when the elections take place in the bank's home state suggesting, as expected, that political uncertainty in the home state may have larger local effects.

18. Berger et al. (1998) examine the direct impact and the external effect of bank M&A on small business lending, showing that dynamic reactions of other banks can offset the static effect to a given shock.

19. Berg, Reisinger, and Streitz (2021) discuss several economic mechanisms that can lead to indirect effects.

20. This classification is used, for example, in Granja, Leuz, and Rajan (2022).

TABLE 8

How Do Competing Banks React?

Growth rate in:	Number of loans (<$100K)			
Banks in control group:	All	Small (<$10B)	Medium ($10B–$50B)	Large (>$50B)
	(1)	(2)	(3)	(4)
Weighted fraction of states with term elections	0.289***	0.247**	0.849**	0.765**
	[0.111]	[0.106]	[0.353]	[0.364]
Observations	700,572	635,088	465,754	472,863
R^2	0.266	0.284	0.343	0.334
Bank controls	Y	Y	Y	Y
Bank × County fixed effects	Y	Y	Y	Y
County × Year fixed effects	Y	Y	Y	Y

Notes: Data are for the period 1996–2014. The unit of analysis is bank-county-year. The estimation sample excludes the state and years when the elections take place. The dependent variable is the annual change in the log of the number of loans (up to $100,000) granted by a given bank in a given county. *Weighted fraction of states with term elections* is the fraction of states where a bank operates that experience elections with binding term limits, weighted by the bank's lending share in each state in the previous year. Column (1) replicates our benchmark result (column (4) of Table 3). Columns (2)–(4) restrict the control group to include only banks in the following asset categories: below $10B (column (3)), between $10B and $50B (column (4)), and above $50B (column (5)). Lagged bank controls are the ratio of cash and securities to total assets, the capital ratio, the ratio of real estate loans to assets, the ratio of loan loss provisions to loans, the return on equity and the ratio of deposits to liabilities. Standard errors are clustered at the bank level. Results are statistically significant at the 10% (*), 5% (**), and 1% (***) level, respectively.

The control groups in columns (3) and (4) include, respectively, medium-sized banks (assets between $10B and $50B) and large banks (assets above $50B).

As noted earlier, the coefficient in column (1) indicates that a one-standard-deviation increase in the fraction of states with term limit elections increases the loan growth of treated banks by 1.9 percentage points. The estimate in column (2) indicates that following a one-standard-deviation increase in the exposure measure, loan growth of treated banks increases by $0.247 \times 0.067 = 1.65$ percentage points relative to the unaffected local small banks. In contrast, the point estimates in columns (3) and (4) are substantially larger than the estimate in column (1), suggesting that the loan growth difference between treated and untreated banks is much larger when the control group does not include the smaller banks. This means that the small untreated banks are relatively more reluctant to reduce lending to small businesses than the larger untreated banks, a result that is line with the available evidence that small banks have a comparative advantage in lending to small businesses (e.g., Berger et al. 2005).

3.5 Out-of-State Lending and Aggregate Outcomes

Results in the previous sections focus on differential effects at the bank level and showed that affected banks increased out-of-state lending relative to other local banks that were unaffected by uncertainty. We explore in this section whether out-of-state political uncertainty affects aggregate lending at the county level, and whether there are real effects on small businesses.

In this county-level analysis, our main measure is *County exposure to uncertainty*, the average of the individual exposures to political uncertainty (*Weighted fraction of*

TABLE 9

Out-of-State Lending and Aggregate Outcomes

Growth rate in:	Loans	Employment (All)	Establishments (All)	Establishments (1–4 emp.)	Establishments (>4 emp.)
	(1)	(2)	(3)	(4)	(5)
County exposure to uncertainty	0.231*	0.0879***	0.0418***	0.0571**	0.0130
	[0.129]	[0.0309]	[0.0153]	[0.0263]	[0.0236]
Per capita income	0.000200	0.00156***	0.000752***	0.000503**	0.00104***
	[0.000668]	[0.000277]	[0.000151]	[0.000240]	[0.000233]
Log(population)	0.779***	0.672***	0.567***	0.588***	0.566***
	[0.0766]	[0.0255]	[0.0200]	[0.0259]	[0.0227]
% of active population	0.323***	0.770***	0.238***	0.173***	0.328***
	[0.0981]	[0.0391]	[0.0169]	[0.0260]	[0.0250]
House price growth	0.122***	0.0110	0.0252***	0.0248***	0.0265***
	[0.0264]	[0.00855]	[0.00438]	[0.00730]	[0.00741]
Fraction of small banks	0.0684***	0.0178***	0.00553**	0.00682	0.00117
	[0.0193]	[0.00515]	[0.00268]	[0.00439]	[0.00414]
Observations	32,256	32,256	32,256	32,256	32,256
R^2	0.748	0.206	0.324	0.149	0.209
Division × Year fixed effects	Y	Y	Y	Y	Y

Notes: Data are for the period 1996–2014. The unit of analysis is county-year. All growth rates are calculated as log-differences. The dependent variables are the county-level growth rates in: (1) the number of loans up to $100,000, (2) employment, (3) establishments, (4) establishments with one to four employees, and (5) establishments with five or more employees. *County exposure to uncertainty* is the average across all banks in a given county and year of their individual exposures to uncertainty. We measure a bank's exposure to uncertainty as the fraction of states where a bank operates that experience elections with binding term limits, weighted by the bank's lending share in each state in the previous year. Standard errors are clustered at the county level. Results are statistically significant at the 10% (*), 5% (**), and 1% (***) level, respectively.

states with term elections) across all banks that lend in that county. We note that since the uncertainty shocks are imported from outer states, and since our definition of political uncertainty is based on elections with binding term limits, the average exposure of banks to political uncertainty should be exogenous to local economic conditions. All regressions include division-year fixed effects, and the following county-level control variables: per capita income, the log of population, the fraction of active population, and the house price growth index. In addition, we include the variable *Fraction of small banks* to control for the size structure of the banking market. In the previous section, we show that small untreated banks (with assets below $10B) seem more reluctant to reduce lending than their larger peers. Consequently, the composition of the control group should also affect our estimate of the effect of average county exposure on lending. Standard errors are clustered at the county level.

We report results in Table 9. We start by testing in column (1) whether counties with a high exposure to out-of-state uncertainty experience an increase in aggregate credit, which we compute as the total number of loans up to $100K granted by all banks operating in the county. We find that aggregate credit is growing in response to out-of-state uncertainty (the estimated effect in column (1) is statistically significant at the 10% level). The coefficient indicates that, following a one-standard-deviation increase in the county exposure measure, loan growth in the county increases by $0.231 \times 0.055 = 1.27$ percentage points. We also note that the control of the size banking structure of the county, *Fraction of small banks*, is positive and significant, consistent with small banks specializing in small businesses.

We analyze real economic effects in the remaining columns of Table 9. Counties where banks have a higher exposure to out-of-state political uncertainty experience higher rates of job creation (column (2)) and establishment creation (column (3)). The estimated effects are statistically significant at the 5% level. To assess economic significance, consider a one-standard-deviation increase in the average exposure intensity (0.055). The estimates indicate that on average employment grows by 0.5 percentage points and the number of establishments grows by 0.2 percentage points.

Columns (4) and (5) further investigate firm creation at the county level by distinguishing between smaller firms of one to four employees and firms with more than four employees. Since smaller firms depend more on local banks (e.g., Berger et al. 2005) and they are more likely to be financially constrained, they should benefit the most from an increase in the supply of credit. Indeed, we find that the increase in net firm creation is larger and only significant in column (4). These results indicate that the exogenous increase in the supply of credit by banks that are shocked elsewhere benefits the creation of very small firms, with the effects for larger firms being negligible.

In Table 10, we investigate which industries are more responsive to the increase in credit availability. If credit constraints were preventing some entrepreneurs from creating new businesses, then the increase in credit availability should benefit mostly sectors with high start-up capital needs. To test this premise, we run county-level regressions separately for industries with low capital needs (columns (1)–(3)) and high capital needs (columns (4)–(6)). Following Adelino, Schoar, and Severino (2015), we use data from the 2007 Survey of Business Owners (SBO) and calculate for each two-digit NAICS sector the median amount of capital needed to set up a firm. An industry with low/high start-up costs is one in which the amount of capital needed to start a business is below/above the sample median.[21]

The three dependent variables analyzed in Table 10 are employment growth (columns (1) and (4)), net firm creation (columns (2) and (5)), and net creation of firms with one to four employees (columns (3) and (6)). The estimates shown in columns (1)–(3) are statistically insignificant, while those shown in columns (4)–(6) are economically larger and statistically significant in columns (4) and (5). The estimate in column (6) shows that the increase in net firm creation is driven mainly by the smaller firms with one to four employees (although the point estimate is not significant). Our evidence therefore shows that counties with a high exposure to out-of-state political uncertainty experience higher rates of job creation and firm creation mainly in sectors with high start-up costs.[22]

21. Figure A1 provides the median start-up cost for each two-digit NAICS industry. The 2007 SBO asked business owners to select the total amount of start-up capital from the set of ranges shown in Figure A1. The two lowest bins correspond to our definition of an industry with low start-up costs (i.e., < \$10,000), while all other industries belong to the group of industries with high start-up costs).

22. In Figure A2, we run the same regression as in column (3) of Table 9 separately for each two-digit NAICS industry and plot the estimated coefficients. We omit Agriculture, Mining, and Utilities because these industries have a very small number of firms and are very concentrated in particular regions. The

TABLE 10

Out-of-State Lending and Real Effects by Industry

Industries with:	Low start-up costs			High start-up costs		
Growth rate in:	Employment (All) (1)	Establishments (All) (2)	Establishments (1–4 emp.) (3)	Employment (All) (4)	Establishments (All) (5)	Establishments (1–4 emp.) (6)
County exposure to uncertainty	−0.105	0.0155	0.0605	0.407***	0.0822**	0.0853
	[0.0999]	[0.0233]	[0.0387]	[0.135]	[0.0322]	[0.0668]
Per capita income	0.00236***	0.000657***	0.000646**	0.00377***	0.000868***	−0.000166
	[0.000861]	[0.000172]	[0.000283]	[0.00114]	[0.000275]	[0.000446]
Log(population)	0.860***	0.575***	0.587***	0.760***	0.552***	0.537***
	[0.0696]	[0.0243]	[0.0316]	[0.0882]	[0.0258]	[0.0392]
% of active population	0.543***	0.228***	0.182***	1.066***	0.241***	0.0777
	[0.0940]	[0.0203]	[0.0307]	[0.131]	[0.0271]	[0.0489]
House price growth	0.0405	0.0326***	0.0311***	0.0504	0.0169**	0.0346**
	[0.0335]	[0.00549]	[0.00934]	[0.0387]	[0.00752]	[0.0147]
Fraction of small banks	−0.0285*	0.00316	0.0111**	0.0323	0.00920*	0.00296
	[0.0155]	[0.00339]	[0.00563]	[0.0233]	[0.00494]	[0.00918]
Observations	30,316	30,316	30,316	29,750	29,750	29,750
R^2	0.049	0.260	0.121	0.042	0.144	0.048
Division × Year fixed effects	Y	Y	Y	Y	Y	Y

Notes: Data are for the period 1996–2014. The unit of analysis is county-industry-year. Industry classification is based on two-digit NAICS codes. An industry with low/high start-up costs is one in which the amount of capital needed to start a business reported in the 2007 Survey of Business Owners is below/above the sample median. The growth rate in employment is the annual change in log of total employment in a given county. The growth rate in the number of establishments is the annual change in the log of the total number of establishments in a given county. *County exposure to uncertainty* is the average across all banks in a given county and year of their individual exposures to uncertainty. We measure a bank's exposure to uncertainty as the fraction of states where a bank operates that experience elections with binding term limits, weighted by the bank's lending share in each state in the previous year. Standard errors are clustered at the county level. Results are statistically significant at the 10% (*), 5% (**), and 1% (***) level, respectively.

TABLE 11

How Persistent are the Political Uncertainty Effects?

Growth rate in:	Number of loans (< $100K) (1)	Employment (All) (2)	Establishments (1–4 emp.) (3)
Weighted fraction of states with term elections (t)	0.292**		
	[0.117]		
Weighted fraction of states with term elections ($t-1$)	−0.380		
	[0.339]		
County exposure to uncertainty (t)		0.105***	0.0852***
		[0.0354]	[0.0312]
County exposure to uncertainty ($t-1$)		−0.0412	−0.0334
		[0.0356]	[0.0303]
Observations	454,634	21,914	21,914
R^2	0.333	0.226	0.155
Bank controls	Y		
Bank × County fixed effects	Y		
County × Year fixed effects	Y		
County controls		Y	Y
Division × Year fixed effects		Y	Y

Notes: Data are for the period 1996–2014. The unit of analysis is bank-county-year (column (1)) and county-year (columns (2) and (3)). The dependent variable in column (1) is the annual change in the log of the number of loans (up to $100,000) granted by a given bank in a given county. The dependent variable in column (2) is the annual change in the log of the total employment in a given county. The dependent variable in column (3) is the annual change in the log of the total number of establishments with up to four employees. *Weighted fraction of states with term elections* is the fraction of states where a bank operates that experience elections with binding term limits, weighted by the bank's lending share in each state in the previous year. *County exposure to uncertainty* is the average of *Weighted fraction of states with term elections* across all banks in a given county and year. County controls are lagged one year and include: per capita income, population (in log), the fraction of active population, house price growth, and fraction of banks with up to 10 billion dollars in assets. Standard errors are clustered at the bank level (in column (1)) and county level (columns (2) and (3)). Results are statistically significant at the 10% (*), 5% (**), and 1% (***) level, respectively.

Overall, these results confirm that the increase in real economic activity we observe is driven by industries with more pressing capital needs. While we are not the first to document the importance of credit markets for small businesses, the distinctive aspect in our study is that the credit shock we analyze originates from banks reallocating resources away from regions hit by political uncertainty.

3.6 *What Happens after the Elections?*

If the effects we find are indeed driven by political uncertainty, then they should fade out after the elections. To test this premise, we reproduce our main results adding a lagged term that should pick up any effect of political uncertainty on loan growth, employment, or growth the year after the (term) elections take place. Table 11 displays the results. Column (1) corresponds to column (4) of Table 3. Columns (2)–(4) correspond to columns (2)–(4) of Table 9, respectively. The estimated lagged terms are statistically insignificant in all four specifications, indicating that the effects of political uncertainty dissipate after the elections. At the same time, we confirm our main findings: political uncertainty causes local banks to increase lending in other states

figure shows that the increase in net firm creation rates in industries with high startup capital needs is driven mainly by Wholesale Trade, Accommodation and Food Services, and Transportation and Warehousing.

TABLE 12

Political Uncertainty and Out-of-State Lending: Robustness Tests

Growth rate in:	Number of loans (<$100K)			
Sample restriction:	Banks with assets >$1B	Exclude 2007–09	Excl VA	Excl CA and OR in 2010
	(1)	(2)	(3)	(4)
Weighted fraction of states with term elections	0.437**	0.258**	0.263**	0.289***
	[0.196]	[0.116]	[0.108]	[0.111]
Observations	464,560	639,995	671,699	700,572
R^2	0.304	0.244	0.267	0.266
Bank controls	Y	Y	Y	Y
Bank × County fixed effects	Y	Y	Y	Y
County × Year fixed effects	Y	Y	Y	Y

Notes: Data are for the period 1996–2014. The unit of analysis is bank-county-year. The dependent variable is the annual change in the log of the number of loans (up to $100,000) granted by a given bank in a given county. *Weighted fraction of states with term elections* is the fraction of states where a bank operates that experience elections with binding term limits, weighted by the bank's lending share in each state in the previous year. The sample in column (1) contains only banks with at least $1 billion in assets. Column (2) excludes Virginia. Column (3) excludes the 2010 elections in California and Oregon. Bank controls are lagged one year. Standard errors are clustered at the bank level. Results are statistically significant at the 10% (*), 5% (**), and 1% (***) level, respectively.

where they operate. In turn, the increase in credit availability leads to an increase in employment growth and net firm creation in those connected markets.

4. ROBUSTNESS TESTS

This paper shows that banks react to local political uncertainty by increasing out-of-state lending. In this section, we perform additional robustness tests on the findings in Table 3. We present four tests in Table 12. In column (1), we restrict our sample to banks with at least $1 billion in assets. This test addresses the concern that the reporting asset threshold in the CRA data has increased over time, reaching $1 billion in 2005. The point estimate in column (1) becomes larger in magnitude. In column (2), we drop the years 2007–09 to exclude the concern that the financial crisis years are driving our results. In column (3), we drop Virginia from the sample, since this state has the highest number of elections with binding term limits (representing 8% of all term elections in our sample). In column (4), we exclude the 2010 elections in California and Oregon, since the binding term limits applied to the incumbent governors, but not to former governors. As a result, Jerry Brown in California and John Kitzhaber in Oregon were elected for a third term and returned to office. Our results in columns (2)–(4) are similar in magnitude to our main specification, remaining economically and statistically significant.

In Table A2, we show that our results in Table 3 are robust to changing the definition of our dependent variable. Columns (1)–(3) analyze the number of loans. Column (1) replicates our baseline result. In column (2), we increase the loan threshold from $100,000 to $250,000. In column (3), we increase the loan threshold to $1 million.

In columns (4)–(6), we repeat the analysis using the same loan thresholds but for lending amounts.

The point estimates remain stable and statistically significant across all specifications shown. These tests provide us with two additional takeaways. First, the number of loans and the volume of lending grow proportionally, implying that the implicit average loan size in the nonaffected states is not changing. That is, the increase in lending in the nonaffected states appears to happen along the extensive margin (more loans) rather than along the intensive margin (larger loans). Second, the results are driven mainly by the small loans (up to $100,000), suggesting that smaller enterprises benefit disproportionally more from the credit spillovers.[23]

5. CONCLUSION

In this paper, we investigate how banks change the geographic distribution of their small business loan portfolio when they face political uncertainty in some of the states where they operate. We use gubernatorial elections with binding term limits as an exogenous source of political uncertainty. A binding term limit prevents the incumbent governor from seeking reelection and thus it implies a mandatory change in the governor's office.

Using a panel of loans granted to small businesses at the bank-county-year level that we obtain from the CRA disclosure reports, we first document that there is a reduction in credit in states with binding term limit elections. Second, we find that political uncertainty causes local banks to increase lending to small firms in other states where they operate that are not experiencing political uncertainty. The effect is stronger for banks with lower capital ratios, and banks increase lending mainly to firms located in higher-income areas. These findings support the notion that these regulatory-constrained banks have more unfunded profitable lending opportunities. Third, we show that the increase in out-of-state lending occurs only when political uncertainty is truly local and does not affect the bank everywhere it operates. Fourth, we document how competing banks react to the increase in lending from banks directly exposed to uncertainty. Finally, while small business lending is only one component of banks' portfolio, it is vital for economic activity and dynamism. We provide evidence that the increase in credit availability in turn leads to a modest increase in employment growth and net firm creation in states with higher exposure to out-of-state political uncertainty, especially in sectors that need more start-up capital. All documented effects dissipate after the elections take place.

Our results are robust to alternative measures of political uncertainty, lending measures, and sample restrictions, all in all supporting the hypothesis that political uncertainty affects small business lending. Though the reduction in credit in states with binding term limit elections cannot be clearly attributed to supply or demand effects,

23. As noted earlier, loans up to $100,000 account for over 90% of all loans reported in the CRA data.

our methodology allows us to identify supply-driven effects in other states where banks operate that do not experience political uncertainty.

Our findings highlight the role of geographic diversification and financial integration in enabling banks to partly diversify away the risks associated with local political uncertainty.

APPENDIX

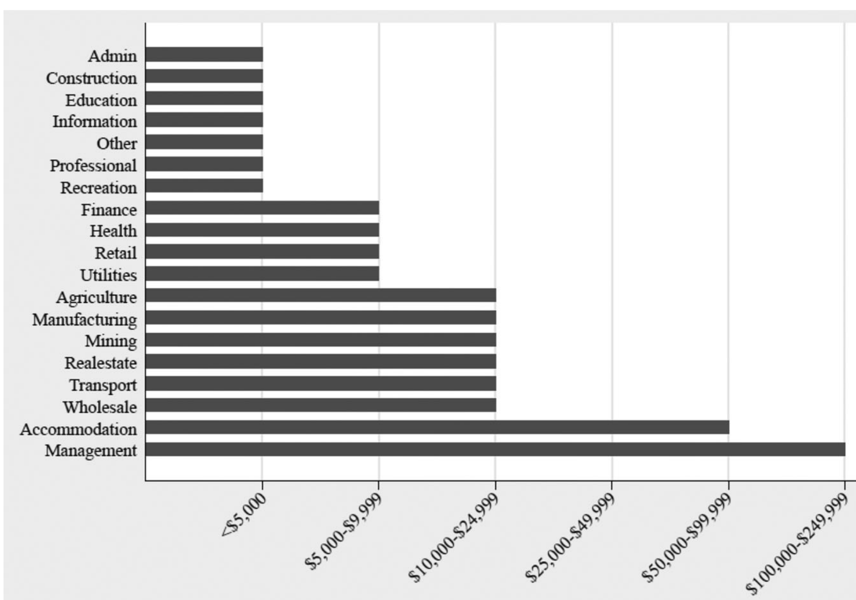

Fig A1. Median Startup Cost by Two-Digit NAICS Industry Codes.

NOTES: Data are from the 2007 Survey of Business owners. The medians shown account for the 2007 SBO survey weights.

TABLE A1

Political Uncertainty and In-State Lending

Growth rate in:	Number of loans (<$100K)		
	(1)	(2)	(3)
Election	−0.00930		
	[0.00663]		
Election with term limit		−0.0156**	
		[0.00739]	
Election without term limit		−0.00656	
		[0.00760]	
Election with term limit in HQ state			−0.0300**
			[0.0129]
Election with term limit in non-HQ state			−0.0139
			[0.00856]
Election without term limit in HQ state			0.00435
			[0.0116]
Election without term limit in non-HQ state			−0.00771
			[0.00787]
Observations	979,260	979,260	979,260
R^2	0.467	0.467	0.467
County controls	Y	Y	Y
Bank × Year fixed effects	Y	Y	Y
Bank × County fixed effects	Y	Y	Y
Division × Year fixed effects	Y	Y	Y

Notes: Data are for the period 1996–2014. The unit of analysis is bank-county-year. The dependent variable is the annual change in the log of the number of loans (up to $100,000) granted by a given bank in a given county. *Election* is a dummy variable that equals one if the state is holding elections that year, and zero otherwise (analogously for elections with and without term limits). In this set of observations, there are 26.3% with an *Election* taking place: 6.8% with *Election with term limit*, and 19.4% with *Election without term limit*. HQ refers to whether the bank is headquartered in one of the states that hold elections. County controls are lagged one year and include: per capita income, population (in log), the fraction of active population, and house price growth. Standard errors are clustered at the state level. Results are statistically significant at the 10% (*), 5% (**), and 1% (***) level, respectively.

TABLE A2

Political Uncertainty and Out-of-State Lending: Alternative Specifications

Growth rate in:	Number of loans			Lending value		
Loan origination amount:	<$100K	<$250K	<$1M	<$100K	<$250K	<$1M
	(1)	(2)	(3)	(4)	(5)	(6)
Weighted fraction of states with term elections	0.289***	0.297***	0.302***	0.275**	0.275**	0.242**
	[0.111]	[0.109]	[0.107]	[0.127]	[0.119]	[0.110]
Observations	700,572	700,572	700,572	700,572	700,572	700,572
R^2	0.266	0.268	0.272	0.220	0.223	0.234
Bank controls	Y	Y	Y	Y	Y	Y
Bank × County fixed effects	Y	Y	Y	Y	Y	Y
County × Year fixed effects	Y	Y	Y	Y	Y	Y

Notes: Data are for the period 1996–2014. The unit of analysis is bank-county-year. The dependent variables equal the annual change in the log of either the number of loans (in columns (1)–(3)) or the total amount of loans (in columns (4)–(6)) granted by a given bank in a given county. In columns (1) and (4), only loans up to $100,000 are considered. Columns (2) and (5) include loans up to $250,000, and columns (3) and (6) include loans up to $1,000,000. *Weighted fraction of states with term elections* is the fraction of states where a bank operates that experience elections with binding term limits, weighted by the bank's lending share in each state in the previous year. Standard errors are clustered at the bank level. Results are statistically significant at the 10% (*), 5% (**), and 1% (***) level, respectively.

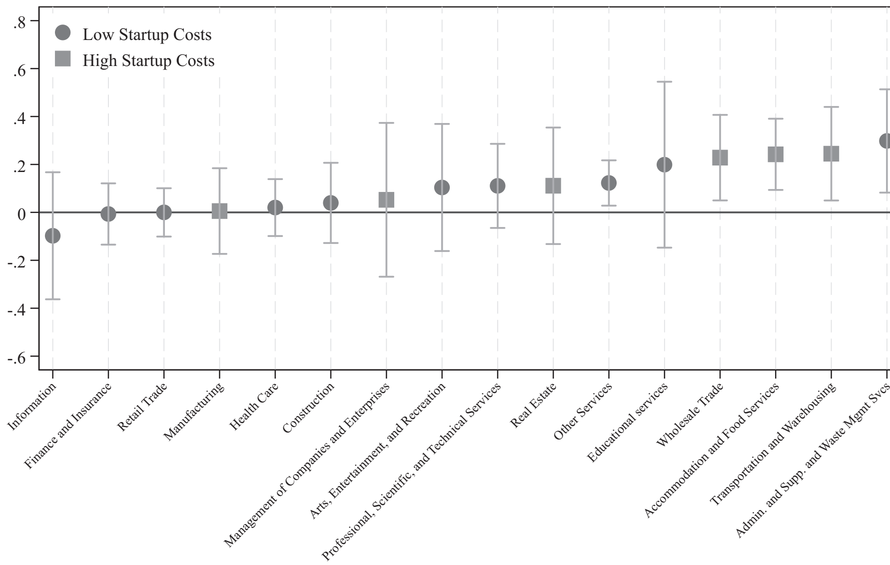

Fig A2. Establishment Creation by Industry.

Notes: Data are for the period 1998–2014. The unit of analysis is county-year. We run regressions similar to column (2) in Table 5 separate for each industry (two-digit NAICS), excluding Agriculture, Mining, and Utilities. The figure plots estimated coefficients and 95% confidence intervals for *County exposure to uncertainty*, which equals the average across all banks in a given county and year of their individual exposure to uncertainty. We measure a bank's exposure to uncertainty as the fraction of states where a bank operates that experience elections with binding term limits, weighted by the bank's lending share in each state in the previous year. Standard errors are clustered at the county level.

LITERATURE CITED

Adelino, Manuel, Antoinette Schoar, and Felipe Severino. (2015) "House Prices, Collateral, and Self-Employment." *Journal of Financial Economics*, 117, 288–306.

Agarwal, Sumit, and Robert Hauswald. (2010) "Distance and Private Information in Lending." *Review of Financial Studies*, 23, 2758–88.

Ansolabehere, Stephen, and James M. Snyder. (2002) "The Incumbency Advantage in U.S. Elections: An Analysis of State and Federal Offices, 1942–2000." *Election Law Journal: Rules, Politics, and Policy*, 1, 315–38.

Atanassov, Julian, Brandon Julio, and Tiecheng Leng. (2019) "The Bright Side of Political Uncertainty: The Case of R&D." Manuscript.

Avery, Robert B., and Katherine A. Samolyk. (2004) "Bank Consolidation and Small Business Lending: The Role of Community Banks." *Journal of Financial Services Research*, 25, 291–325.

Baker, Scott R., Nicholas Bloom, and Steven J. Davis. (2016) "Measuring Economic Policy Uncertainty." *Quarterly Journal of Economics*, 131, 1593–636.

Barraza, Santiago, and Andrea Civelli. (2020) "Economic Policy Uncertainty and the Supply of Business Loans." *Journal of Banking & Finance*, 121, 105983.

Ben-David, Itzhak, Ajay Palvia, and Chester Spatt. (2017) "Banks' Internal Capital Markets and Deposit Rates." *Journal of Financial and Quantitative Analysis*, 52, 1797–826.

Berg, Tobias, Markus Reisinger, and Daniel Streitz. (2021) "Spillover Effects in Empirical Corporate Finance." *Journal of Financial Economics*, 142, 1109–27.

Berger, Allen N., Omrane Guedhami, Hugh Hoikwang Kim, and Xinming Li. (2022) "Economic Policy Uncertainty and Bank Liquidity Hoarding." *Journal of Financial Intermediation*, 49, 100893.

Berger, Allen N., Nathan H. Miller, Mitchell A. Petersen, Raghuram G. Rajan, and Jeremy C. Stein. (2005) "Does Function Follow Organizational Form? Evidence from the Lending Practices of Large and Small Banks." *Journal of Financial Economics*, 76, 237–69.

Berger, Allen N., Anthony Saunders, Joseph M. Scalise, and Gregory F. Udell. (1998) "The Effects of Bank Mergers and Acquisitions on Small Business Lending." *Journal of Financial Economics*, 50, 187–229.

Berrospide, Jose M., Lamont K. Black, and William R. Keeton. (2016) "The Cross-Market Spillover of Economic Shocks through Multimarket Banks." *Journal of Money, Credit and Banking*, 48, 957–88.

Besley, Timothy, and Anne Case. (1995) "Does Electoral Accountability Affect Economic Policy Choices? Evidence from Gubernatorial Term Limits." *Quarterly Journal of Economics*, 110, 769–98.

Biswas, Sonny, and Wei Zhai. (2021) "Economic Policy Uncertainty and Cross-Border Lending." *Journal of Corporate Finance*, 67, 101867.

Bordo, Michael D., John V. Duca, and Christoffer Koch. (2016) "Economic Policy Uncertainty and the Credit Channel: Aggregate and Bank Level U.S. Evidence over Several Decades." *Journal of Financial Stability*, 26, 90–106.

Brown, J. David, and John S. Earle. (2017) "Finance and Growth at the Firm Level: Evidence from SBA Loans." *Journal of Finance*, 72, 1039–80.

Brown, James R., J. Anthony Cookson, and Rawley Z. Heimer. (2017) "Law and Finance Matter: Lessons from Externally Imposed Courts." *Review of Financial Studies*, 30, 1019–51.

Chakraborty, Indraneel, Itay Goldstein, and Andrew MacKinlay. (2018) "Housing Price Booms and Crowding-Out Effects in Bank Lending." *Review of Financial Studies*, 31, 2806–53.

Çolak, Gönül, Art Durnev, and Yiming Qian. (2017) "Political Uncertainty and IPO Activity: Evidence from U.S. Gubernatorial Elections." *Journal of Financial and Quantitative Analysis*, 52, 2523–64.

Cortés, Kristle R., Yuliya Demyanyk, Lei Li, Elena Loutskina, and Philip E. Strahan. (2020) "Stress Tests and Small Business Lending." *Journal of Financial Economics*, 136, 260–79.

Cortés, Kristle Romero, and Philip E. Strahan. (2017) "Tracing Out Capital Flows: How Financially Integrated Banks Respond to Natural Disasters." *Journal of Financial Economics*, 125, 182–99.

Gilje, Erik P., Elena Loutskina, and Philip E. Strahan. (2016) "Exporting Liquidity: Branch Banking and Financial Integration." *Journal of Finance*, 71, 1159–84.

Granja, João, Christian Leuz, and Raghuram G. Rajan. (2022) "Going the Extra Mile: Distant Lending and Credit Cycles." *Journal of Finance*, 77, 1259–324.

Greenstone, Michael, Alexandre Mas, and Hoai-Luu Nguyen. (2020) "Do Credit Market Shocks Affect the Real Economy? Quasi-Experimental Evidence from the Great Recession and 'Normal' Economic Times." *American Economic Journal: Economic Policy*, 12, 200–225.

Grimmer, Justin, Eitan Hersh, Brian Feinstein, and Daniel Carpenter. (2011) "Are Close Elections Random?" Manuscript.

Haltiwanger, John, Ron S. Jarmin, and Javier Miranda. (2013) "Who Creates Jobs? Small versus Large versus Young." *Review of Economics and Statistics*, 95, 347–61.

Jens, Candace E. (2017) "Political Uncertainty and Investment: Causal Evidence from U.S. Gubernatorial Elections." *Journal of Financial Economics*, 124, 563–79.

Kara, Gazi I., and Youngsuk Yook. (2023) "Policy Uncertainty and Bank Mortgage Credit." *Journal of Money, Credit and Banking*, 55, 783–823.

Khwaja, Asim Ijaz, and Atif Mian. (2008) "Tracing the Impact of Bank Liquidity Shocks: Evidence from an Emerging Market." *American Economic Review*, 98, 1413–42.

King, Robert G., and Ross Levine. (1993) "Finance and Growth: Schumpeter Might Be Right." *Quarterly Journal of Economics*, 108, 717–37.

Kundu, Shohini, and Nishant Vats. (2021) "Banking Networks and Economic Growth: From Idiosyncratic Shocks to Aggregate Fluctuations." ESRB: Working Paper Series 2021/128.

Li, Xiang, Bibo Liu, and Xuan Tian. (2018) "Policy Uncertainty and Household Credit Access: Evidence from Peer-to-Peer Crowdfunding." Manuscript.

Loutskina, Elena, and Philip E. Strahan. (2015) "Financial Integration, Housing, and Economic Volatility." *Journal of Financial Economics*, 115, 25–41.

Peltzman, Sam. (1987) "Economic Conditions and Gubernatorial Elections." *American Economic Review*, 77, 293–97.

Petersen, Mitchell A., and Raghuram G. Rajan. (1994) "The Benefits of Lending Relationships: Evidence from Small Business Data." *Journal of Finance*, 49, 3–37.

Poterba, James M. (1994) "State Responses to Fiscal Crises: The Effects of Budgetary Institutions and Politics." *Journal of Political Economy*, 102, 799–821.

Robb, Alicia M., and David T. Robinson. (2014) "The Capital Structure Decisions of New Firms." *Review of Financial Studies*, 27, 153–79.

Smolyansky, Michael. (2019) "Policy Externalities and Banking Integration." *Journal of Financial Economics*, 132, 118–39.

Tian, Xuan, Yichu Wang, and Kailei Ye. (2023) "How Does Policy Uncertainty Affect Venture Capital?" *The Review of Corporate Finance Studies*, cfad023. https://doi.org/10.1093/rcfs/cfad023