

Bank Branching and Bank Runs in the United States, 1920–1933

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October 30, 2026

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Abstract

In this paper, I investigate the relationship between bank branching and bank runs and other distress events in the United States between 1920 and 1933. I first develop a model showing that branch banks are less likely to experience liquidity crises in normal times but more likely to experience them in the presence of systemic shocks. Branch banks, in fact, optimally reduce their holdings of liquid assets in response to deposit diversification, making them more vulnerable to highly correlated liquidity shocks. I then construct a novel dataset of national bank branches and complement it with existing distress-event and balance-sheet data. I use the assembled data to test the predictions of the model. Overall, the results of the empirical analysis are consistent with the theory and help reconcile the mixed findings in the literature. Specifically, branching is associated with a lower likelihood of distress events between 1920 and 1929, but with a higher likelihood during the early years of the Great Depression.

1 Introduction

This paper studies the relationship between U.S. bank branching and banking distress events such as runs and closures during the period 1920–1933. Historically, the bank-

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ing system in the United States had been largely dominated by unit banks, that is, banks operating a single office. Until the 1920s, intrastate branching was prohibited or highly restricted in most states, while interstate branching was virtually non-existent. Some have argued that the lack of branching was one of the main reasons behind the frequent and severe banking crises that characterized the United States in the national banking era (1863-1933). Countries such as Canada and England, where larger and more geographically diversified banks were common, experienced a much lower frequency of banking crises despite being exposed to similar macroeconomic shocks and sharing other features of the financial system. However, previous research on the effects of branching on bank stability provides mixed evidence, with several studies finding that branching tends to be positively associated with episodes of distress.¹

In this paper, I argue that the intrastate branching observed among state and national banks in the United States likely reduces the probability of distress events in normal times, such as during the decade preceding the Great Depression, but increases that probability during systemic shocks, such as the Great Depression. I first describe the mechanisms through which branching affects the probability of distress events using a simple theoretical framework. The main mechanisms can be summarized as follows. Both branch and unit banks face a certain probability of liquidity shocks. The key difference between the two types of banks is that branch banks operate multiple offices. Branching provides deposit diversification; therefore, for a given amount of deposits, branch banks face a lower variance of withdrawals and, consequently, a lower probability of a liquidity crisis. However, for a given correlation of shocks across offices, branch banks respond to this lower probability by reducing the amount of reserves they hold. If the correlation turns out to be higher than expected, the probability of liquidity crises becomes higher for branch banks than for unit banks, as the former hold a lower reserve ratio.

I test the theoretical predictions of the model using national bank-level data and state-level aggregates for the period 1920–1933. This period is particularly suitable for testing the predictions of the model, as branch banking among national banks was virtually non-existent in earlier years, while no episodes of bank panics comparable to those ob-

1. For example, [Carlson \(2004\)](#) and [Carlson and Mitchener \(2006\)](#).

served during the Depression occurred after the introduction of federal deposit insurance in 1933. Branch data for national banks are collected by digitizing information from the annual reports of the Office of the Comptroller of the Currency (OCC). The annual reports provide a list of locations of all branches operated by national banks between 1920 and 1927, while they report the flows of branches opened and closed between 1928 and 1933. I then complement the branch data with distress-event and balance-sheet data from [Correia, Luck, and Verner \(2026\)](#) and [Correia, Luck, and Verner \(2025\)](#), respectively.

I use the assembled dataset to examine the relationship between branches and distress events such as bank runs, suspensions, and closures. In the regression specification, I include a dummy variable for the period 1930–1933, as well as an interaction term between this dummy and the number of branches, to allow the relationship between branching and distress events to differ between the periods 1920–1929 and 1930–1933. Two results stand out. First, consistent with the predictions of the theoretical framework, additional branches are associated with fewer distress events before the Depression and with more distress events during the early years of the Depression. Second, bank runs are the distress event most strongly associated with branching in both periods, suggesting that branching may reduce the risk of liquidity crises in normal times while amplifying such risk in periods of systemic shocks. These results are confirmed across various specifications, including those that use aggregate state-level data instead of bank-level data.

The contribution of this paper is threefold. First, I develop a theoretical framework that formalizes the mechanisms and empirical evidence regarding branching and distress events documented in previous research. Second, I construct a comprehensive dataset of national bank branches between 1920 and 1933 by digitizing data from the OCC, which I complement with existing balance-sheet and distress-event data. I also construct a state-level dataset on branching for both state and national banks by digitizing data from the OCC and the Board of Governors of the Federal Reserve. Third, I use the newly constructed dataset to provide empirical evidence on the relationship between branches and distress events. While previous research has used either state-level data or bank-level data from a subset of states, I use the universe of national banks between 1920 and 1933 for the empirical analysis. The main results are consistent with the predictions of the

theoretical model and help reconcile the mixed empirical evidence documented in the literature.

Related Literature.

This paper contributes to two main strands of literature. First, this paper relates to the literature that studies the characteristics and the effects of the U.S. branching system. Some studies highlight the positive effects of branching on growth in agriculture and manufacturing ([Dehejia and Lleras-Muney \(2007\)](#)) and on aggregate productivity ([Quincy and Xu \(2025\)](#)). Several papers document the positive effects of branching on the stability of the banking system. For example, [Calomiris \(1992\)](#) and [Wheelock \(1992\)](#) show that branch banks were more likely to survive than unit banks when hit by local agricultural shocks in the 1920s. [Calomiris \(2000\)](#) points to the lack of asset diversification as a source of fragility of unit banks; [Chari \(1989\)](#) argues that the lack of interstate branching was among the factors behind recurrent episodes of bank panics in the national banking era.² On the other hand, the empirical evidence on the effects of branching on bank failures is somewhat mixed, with some studies highlighting a positive relationship between branching and failures. [Carlson \(2004\)](#) conducts an empirical analysis using data on state-chartered banks from California, Maryland, and North Carolina, showing that branch banks were more likely to fail during the Great Depression. In fact, branch banks, while more geographically diversified and less prone to idiosyncratic risks, systematically reduced reserves, increased loans, and increased the overall risk of their portfolios, thereby increasing their vulnerability to systemic shocks.³ A contribution of this paper is to provide a theoretical framework that formalizes the mechanisms described by [Carlson \(2004\)](#). In addition, I test the theoretical predictions using data from the universe of U.S. national banks as well as aggregate state-level data for the fifty states.

Second, this paper contributes to the literature that investigates the causes of bank runs,

2. [Mengle \(1990\)](#) also provides arguments in favor of interstate branching, and details legal and historical developments regarding branching in the U.S.

3. [Carlson and Mitchener \(2006\)](#) point to increased bank competition as a relevant mechanism affecting the probability of survival. Specifically, branching increases the stability of the system, without the branch banks themselves necessarily being the strongest banks.

panics, and failures during the national banking era, particularly in the Depression years. Previous studies identify several factors contributing to bank crises, including periods of agricultural distress ([Alston, Grove, and Wheelock \(1994\)](#)), banks' fundamentals ([Calomiris and Mason \(2003\)](#)), macroeconomic policies and the structure of the banking system ([Grossman \(1994\)](#)). More recently, [Correia, Luck, and Verner \(2025\)](#) and [Correia, Luck, and Verner \(2026\)](#) document that runs are considerably more likely in banks with weak fundamentals, which are the main cause of bank crises and failures in most cases. Runs also occur in strong banks, but with much lower probability and typically do not result in failures. In [Correia, Luck, and Verner \(2026\)](#), the authors construct a dataset covering episodes of bank runs and other distress events between 1863 and 1934. One of the contributions of this paper is to complement the distress-event dataset by adding data on branches of national banks from the OCC, as well as state banks aggregates. I then use the newly assembled data to assess the relationship between bank branching and distress events.

The paper proceeds as follows. Section 2 describes the historical background of bank branching in the U.S. Section 3 presents the theoretical framework. Section 4 describes the data collection and presents summary statistics. Section 5 conducts the empirical analysis and describes the main findings. Section 6 concludes.

2 Historical Background

While the National Banking Acts of 1863-1864 did not expressly prohibit the establishment of branches, for about sixty years, the prevailing interpretation of the Comptroller of the Currency and the courts de facto prevented national banks from opening new branches. In fact, Section 5190 mandated that the usual business of national banks to be transacted at an office in the place specified in its organization certificate. The acts included only one provision concerning branches. Section 5155 allowed state banks that took out a national charter to retain and keep their existing branches. The combination of

the National Banking Act, widespread state prohibitions, and low capital requirements encouraged the growth of unit banks.⁴ As a result, out of several thousands national and state banks, only a small percentage operated branches: in 1910, nine national banks were operating a total of twelve branches, while 283 state banks were operating 536 branches, about half of which operated outside the head-office city.⁵

The narrow interpretation regarding branches was reversed in the 1920s.⁶ First, in 1922, the OCC let national banks “open and operate offices at places other than their banking houses, within the place specified in their organization certificates” in states permitting state banks to operate branches. Table 1 shows that the number of national banks operating branches increased from 17 in 1921 to 145 in 1926, while the total number of branches of national banks increased from 67 to 464 over the same years.

Second, Congress passed the McFadden-Pepper Act in 1927, which codified the OCC’s 1922 ruling into law. Importantly, the act also allowed national banks to keep existing branches following a conversion from a state charter, a merger with a state bank, or a consolidation of national banks, as long as such branches were established before February 25, 1927. Overall, the Act represented a compromise between different objectives: the increase in the number of state banks entering the Federal Reserve System, as the Act allowed state banks entering the system to retain their existing branches; providing a more equal footing between national banks and state member banks; and the opposition to the intrastate branching of national banks, particularly from interest groups associated with unit banks. Shortly after the passage of the Act, two California state banks, the Bank of Italy and the Los Angeles First National Trust and Savings Bank, took out a national charter, adding about 400 branches to the national banking system. Consequently, branches of national banks increased from 464 in 1926 to 1314 in 1932, as shown in Table 1.

Branches of national banks were located in states that allowed state banks to open branches, with only a few exceptions. While state laws regulating branches differed along several dimensions, previous research has typically divided such laws into four categories: (i)

4. [White \(1983\)](#), p.156.

5. [Board of Governors of the Federal Reserve System \(1943\)](#), Table 74.

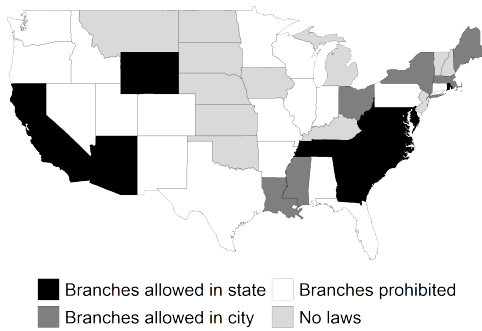
6. [Bradford \(1940\)](#), [Chapman and Westerfield \(1942\)](#), [White \(1983\)](#), and [Calomiris \(2000\)](#) provide detailed information on the evolution of the branching system in the 1920s.

branches prohibited, (ii) branches permitted within limited areas, (iii) branches permitted statewide, and (iv) no laws prohibiting or permitting branches.⁷

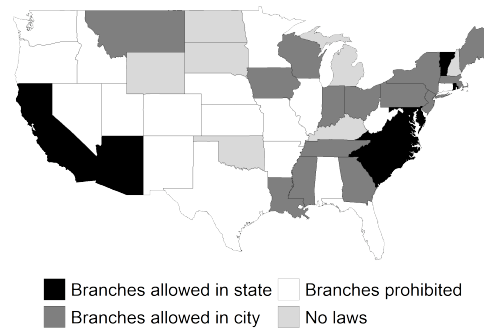
Figure 1 shows the distribution of the four categories of laws in 1924 and 1931. In 1924, states permitting branches were mainly located on the Atlantic Coast and in the South, with the addition of California and Arizona. The overall picture did not change dramatically in the following years, with only a few states in the Midwest passing laws allowing branches within the city limits of the main office.

Figure 1

(a) Branching Laws by State, 1924



(b) Branching Laws by State, 1931



Source: Own elaboration based on Bradford (1940).

3 Theory

Environment. Consider banks entirely financed by a continuum of depositors of measure one. Each depositor invests one unit in the bank. There are multiple locations denoted by $i = 1, 2, \dots, N$. There exist two types of banks: *unit banks*, whose depositors are all located in a single location, and *branch banks*, whose depositors are located in $N > 1$ locations. For simplicity, I assume that $N = 2$, i.e., there are two locations, and that each location provides one-half of the branch banks' deposits. Banks keep a fraction $\theta \in (0, 1)$ of deposits as reserves and loan out the residual fraction. I abstract from differences in the asset composition across banks.

7. The absence of laws left the ultimate decisions about branching to regulators and courts; in most cases, they ruled out the establishment of branches.

In a given location i , the withdrawal rate W_i depends on the probability of withdrawing in normal times μ , common across locations, and an idiosyncratic liquidity shock ε_i . Let

$$W_i = \mu + \varepsilon_i$$

denote the withdrawal rate faced by the bank, where $\varepsilon_i \sim N(0, \sigma^2)$. It follows that

$$W_i \sim N(\mu, \sigma^2), \quad \forall i.$$

For a unit bank, aggregate withdrawals equal $W_U = W_i$, $i = 1, 2$. For a branch bank, aggregate withdrawals equal $W_B = (W_1 + W_2)/2$.

I assume that the cross-correlation of the two shocks is equal to $\rho > 0$.

Proposition 1. *The branch bank has (i) the same expected withdrawal rate as the unit bank; (ii) a lower withdrawal variance whenever $\rho < 1$.*

Proof. See Appendix A.

Case 1: Fixed reserve ratio. Define illiquidity as a condition that occurs whenever $W > \theta$.

Proposition 2. *For a given reserve ratio, the branch bank faces a lower probability of illiquidity than a unit bank whenever $\rho < 1$.*

Proof. See Appendix A.

Proposition 2 highlights the benefits of deposit diversification for a given reserve ratio.

Next, I consider the case where banks optimally choose their reserve ratio.

Case 2: Endogenous reserve ratio. Suppose that banks choose the reserve ratio θ to maximize expected profits as follows

$$\max_{\theta} \{R(1 - \theta) - LE[(W - \theta)^+]\}. \quad (1)$$

Where $R > 0$ is the return from uses other than reserves, $L > 0$ denotes a loss parameter, therefore $LE[(W - \theta)^+]$ reflects the expected shortfall loss, as

$$(W - \theta)^+ = \begin{cases} W - \theta & \text{if } W > \theta \\ 0 & \text{if } W \leq \theta \end{cases}$$

I assume the following timing of events: (i) banks choose the optimal reserve ratio taking μ, σ, ρ, R , and L as given; (ii) withdrawals W realize.

Assumption 1: $\frac{R}{L} < 1/2$.

Assumption 1 requires the loss parameter to be sufficiently large relative to the return on non-reserve assets. Under this condition, the optimal reserve ratio exceeds expected withdrawals, $\theta^* > \mu$.

Proposition 3. *Under Assumption 1, the optimal reserve ratio θ^* is increasing in the standard deviation of the deposit withdrawals σ .*

Proof. See Appendix A.

Corollary 1. *Under Assumption 1, the optimal reserve ratio of a branch bank is lower than the optimal reserve ratio of a unit bank whenever $\rho < 1$.*

Corollary 1 follows directly from Proposition 1 and 3. It states that the branch bank optimally reduces its reserve ratio as an optimal response to the lower withdrawal risk due to deposit diversification.

Unexpected correlation and liquidity risk. Now we consider a case where the branch bank chooses its reserve ratio assuming a cross-correlation of ρ_1 , which results to be lower than the realized correlation $\rho_2 > \rho_1$.

Proposition 4. *If the branch bank chooses its reserve ratio assuming a correlation ρ_1 and the realized correlation is $\rho_2 > \rho_1$, then the branch bank's probability of illiquidity exceeds that of a unit bank.*

Proof. See Appendix A.

The intuition behind Proposition 4 is that the branch bank will face a higher probability of illiquidity if realized cross-correlation turns out to be higher than expected. Conversely, a unit bank is not affected by changes in the shocks' cross-correlation.

4 Data

4.1 Bank-Level Data

Branches. I obtain bank-level branch data by digitizing the annual reports of the *Office of the Comptroller of the Currency (OCC)* from 1920 to 1933 and complementing them with *call reports* from the *Board of Governors of the Federal Reserve System*. The annual reports from the OCC provide detailed information on branches of national banks. From 1920 to 1927, OCC reports list the location of all the branches operated by national banks with at least one branch. The section on branches is typically divided into two parts for those years; the first part lists the national banks that formerly were state banks and continued to operate branches under section 5155. Branches operating under this section could be located either within or outside the limits of the main office city. The second part lists the national banks with additional local offices under section 5190, along with the date of establishment.⁸

From 1928 to 1933, the OCC does not provide a complete list of the branches of national banks. However, the annual reports detail added or closed branches in the given year. I construct a series of the number of branches for each national bank between 1928 and 1933 by adding the net flows recorded in the reports. Unfortunately, these net flows do not include the location of added or closed branches. However, it is possible to retrieve the number of branches located outside the main office city of the parent bank using data from call reports. In fact, national banks typically filed call reports every other year, reporting the total number of branches along with the breakdown of offices located within and outside the boundaries of the main office city. Although call reports were not released annually, I reconstruct the annual stock of branches within and outside the main office city by complementing flow data from OCC reports, branch data from call reports, and state branching laws.⁹

8. Appendix C includes sample OCC reports showing stocks and flows of branches of national banks.

9. Suppose, for example, that a bank had two branches within the main office city in 1927 and a branch was added in 1928. Even if there is no information on its location, if the 1929 call report shows that there are three branches, one of which is located outside the main office city, then the branch added in 1928 must have been located outside, provided that there were no net flows in 1929. Other cases may be more complicated, but in virtually all of them it is possible to infer the location of branches that were closed

To sum up, the branch dataset contains the location of all branches operated by national banks between 1920 and 1927, while data on the total number of branches located within and outside the main office city span the entire period 1920–1933.

Distress event data. I complement the branch data with data on distress events at national banks, as collected by [Correia, Luck, and Verner \(2026\)](#). This database provides information on bank distress episodes in the United States between 1804 and 1963. It includes runs, suspensions, closures, and reopenings, and each episode is linked to newspaper articles that provide primary source documentation.¹⁰

Balance sheet data. For national banks' balance-sheet variables, I use data from call reports digitized by [Correia, Luck, and Verner \(2025\)](#). The original dataset contains bank-level annual data on assets, liabilities, and their components, including loans, government and other securities, reserves, deposits, and capital.¹¹

4.2 State-Level Data

Branches. Branches data come from two sources. First, I compute state aggregates of the branch data from the OCC reports described in section 4.1. As these data only cover branches of national banks, I complement them with state-level aggregates digitized from the [Board of Governors of the Federal Reserve System \(1943\)](#), which contain the number of banks with branches and the number of branches within and outside the main office city for both state and national banks. These state-level aggregates are available for four years within the period of interest, namely 1920, 1925, 1930, and 1933.

Distress event data. I complement the data with aggregate counts of distress events at national and state banks, classified as runs, suspensions, and closures, as categorized by [Correia, Luck, and Verner \(2026\)](#). Additionally, I digitize data from the [Board of Gover-](#)

or added. Additionally, some states prohibited the establishment of branches outside the main office city, making the assignment of branch locations straightforward.

10. The list of events is available at <https://finhist.com/bank-runs/index.html>.

11. The data are available at <https://finhist.com/historical-call/index.html>.

nors of the Federal Reserve System (1943) containing the number of suspensions of state and national banks in each state along with the aggregate deposits of the banks involved. These data are available from 1921 to 1933.

Number of banks and balance sheet aggregates. I use the digitized version of “All-Bank Statistics, United States, 1896-1955” from [Cao and Richardson \(2022\)](#). This dataset contains the number of national and state banks for each state, along with aggregate assets, liabilities, and their components.

4.3 Summary statistics

Figure 2 shows the location of branches of national banks in 1920 and 1927. A blue dot represents a branch located outside the main office city, a purple dot denotes a location with a parent bank and at least one branch, while a red dot indicates a location with a parent bank only. Branching of national banks was limited in 1920, as only 16 banks operated 58 branches, 19 of which were located outside the main office city. A considerable expansion occurred throughout the 1920s: in 1927, 158 national banks operated 898 branches, 345 of which were located outside the main office city.¹² The branching expansion is evident in the North Atlantic states, where branching was typically limited to the main office city, and in California and a few Southern states, where intrastate branching was more common.

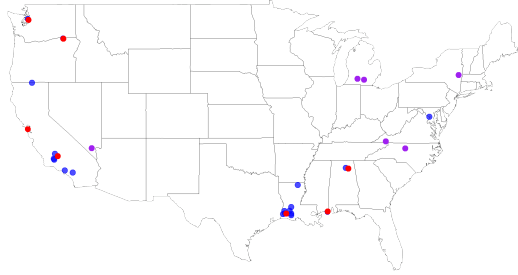
Figure 3 highlights the increase in branching intensity of national banks across states between 1920 and 1933. The share of national banks with at least one branch increased nationwide, except for some Western and Midwestern states that had no branches during the period considered. In 1933, the highest shares were observed in Rhode Island and Maine, at 32% and 20%, respectively.

Figure 4 shows branching intensity by state in 1920 and 1933. Unlike figure 3, this measure reflects branching among both state and national banks. In the figure, branching intensity is measured as the ratio between the number of branches and the sum of branches

12. Year-by-year nation-wide figures are shown in Table 1.

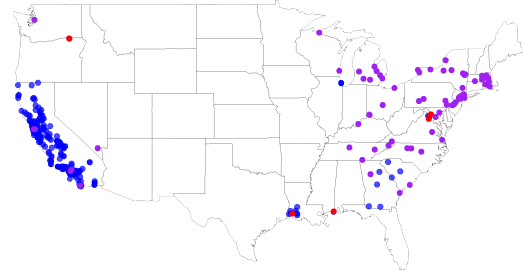
Figure 2

(a) Branches of National Banks, 1920



• Branch only • Parent and branch • Parent only

(b) Branches of National Banks, 1927

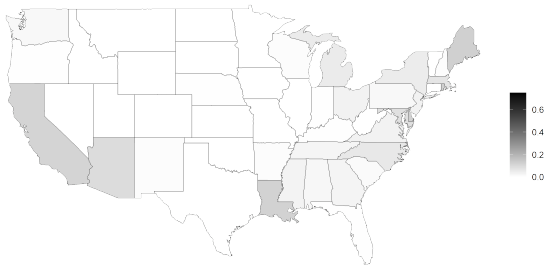


• Branch only • Parent and branch • Parent only

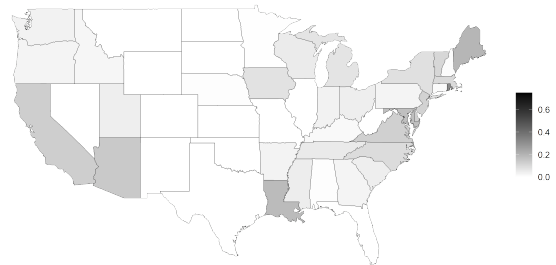
Blue dots represent branches located outside the main office city, red dots denote parent banks, while purple dots represent locations shared by a parent bank and at least one branch. Source: Own elaboration based on OCC annual reports.

Figure 3

(a) Share of National Banks with Branches by State, 1920



(b) Share of National Banks with Branches by State, 1933



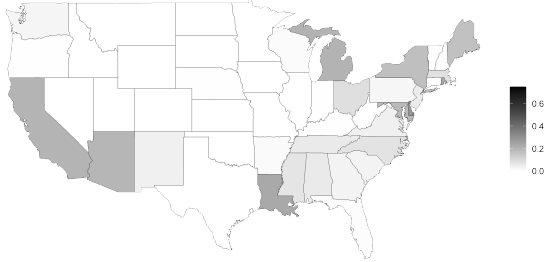
Source: Own elaboration based on OCC annual reports and Cao and Richardson (2022).

and banks.

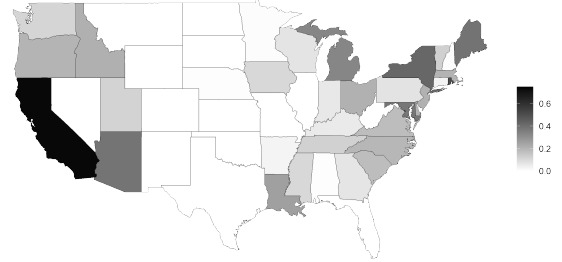
Table 1 provides more information on the increase in branching intensity of national banks in the 1920s. The expansion concerns the number of branches, which rose from 58 in 1920 to 1061 in 1929, as well as the number of national banks with at least one branch, which peaked at 164 in 1929. The increase in branching corresponded to an increase in the share of branch banks, as the total number of national banks declined slightly throughout the period. The table also shows the rise in branching through the intensive margin, as

Figure 4

(a) Branching Intensity by State, 1920



(b) Branching Intensity by State, 1933



Branching intensity is defined as the ratio between the number of branches of state and national banks and the sum of branches and state and national banks. Source: Own elaboration based on OCC annual reports and Board of Governors of the Federal Reserve System (1943).

the number of branches per branch bank increased from roughly 3 in 1920 to more than 6 at the end of the decade.

Table 1: Branch Banking of National Banks, 1920–1933

Year	Branches	Branch banks	Share (%)	Branches per bank
1920	58	16	0.20	3.62
1921	67	17	0.21	3.94
1922	149	53	0.64	2.81
1923	197	83	1.00	2.37
1924	296	119	1.46	2.49
1925	363	139	1.70	2.61
1926	464	145	1.80	3.20
1927	898	158	2.00	5.68
1928	992	164	2.12	6.05
1929	1061	164	2.17	6.47
1930	1086	163	2.24	6.66
1931	1184	160	2.37	7.40
1932	1314	156	2.47	8.42
1933	1211	162	2.60	7.48

Share denotes the percentage of national banks with at least one branch. Source: Own elaboration based on OCC annual reports for branch data and on Correia, Luck, and Verner (2026) for the number of national banks.

Table 2 displays the differences in some balance sheet items between unit banks and branch banks. Columns (2) and (3) highlight that branch banks are considerably larger than unit banks in terms of asset size, averaging \$68.9 and \$2.4 million, respectively.

Columns (4) and (5) show the liquid asset ratio, defined as the ratio between liquid assets, namely reserves and U.S. government securities, and total assets. While the average liquid asset ratio of unit banks and branch banks is very similar over the entire 1920–1933 period, it is slightly higher for unit banks in the 1920–29 period, as it averages around 26% compared to 24% for branch banks. This statistic is consistent with the theoretical prediction of section 3 –specifically, Corollary 1– as branch banks might optimally choose to reduce the share of liquid but lower-yield assets as they benefit from deposit diversification. Finally, columns (6) and (7) show that branch banks are more highly leveraged on average, as their capital-to-assets ratio stands at 13% throughout the period, compared to a 16% ratio for unit banks. While the theoretical model in section 3 provides mechanisms through which deposit diversification leads to a lower reserve ratio, it is reasonable to expect branch banks to increase their leverage as well.¹³

Table 2: Assets, Liquidity Ratio, and Capital-To-Assets Ratio of Unit and Branch Banks, 1920–1933

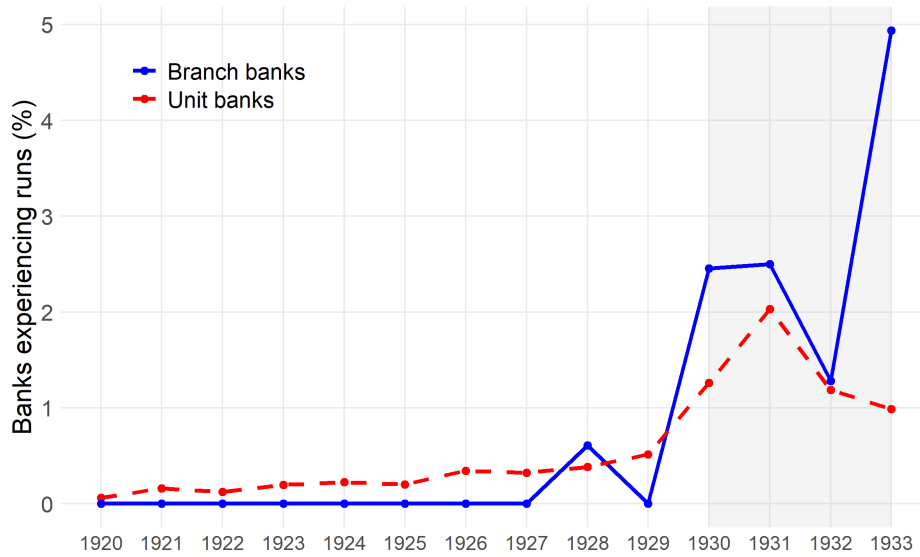
Year	Assets (1929 \$mn)		Liquidity Ratio		Capital-to-assets	
	Unit	Branch	Unit	Branch	Unit	Branch
1920	2.50	62.65	0.28	0.26	0.14	0.10
1921	2.15	93.90	0.26	0.27	0.18	0.13
1922	2.22	59.17	0.26	0.29	0.16	0.12
1923	2.18	45.55	0.26	0.26	0.15	0.13
1924	2.21	47.45	0.27	0.27	0.15	0.12
1925	2.22	46.44	0.26	0.24	0.15	0.12
1926	2.27	51.03	0.25	0.24	0.15	0.11
1927	2.34	57.32	0.25	0.23	0.15	0.12
1928	2.58	74.02	0.25	0.23	0.14	0.12
1929	2.45	72.20	0.24	0.21	0.15	0.14
1930	2.63	84.86	0.24	0.22	0.16	0.14
1931	2.69	87.66	0.25	0.25	0.17	0.14
1932	3.05	88.72	0.27	0.30	0.17	0.14
1933	3.28	93.66	0.36	0.39	0.17	0.14
Average 1920-29	2.31	58.37	0.26	0.24	0.15	0.12
Average 1920-33	2.44	68.93	0.26	0.26	0.16	0.13

Assets are deflated using December 1929 as base year. Source: Own elaboration based on OCC annual reports for branch data and on Correia, Luck, and Verner (2025) for balance sheet data.

13. This mechanism has been documented in previous research, such as [Carlson \(2004\)](#). In the model of Section 3, there is no corresponding measure for leverage as banks are 100% deposit-financed.

Figure 5 shows the share of branch banks (blue solid line) and unit banks (red dashed line) experiencing runs during the period of interest. Branch banks display lower run rates than unit banks for most years through 1929. The opposite occurs from 1930 to 1933, when run rates increase for both types of banks, with branch banks exhibiting higher run rates throughout the period. Overall, the graph provides some suggestive evidence in favor of the predictions of the theoretical model. The relationship between branching and distress events is empirically tested in the next section.

Figure 5: Share of Banks Experiencing Runs by Bank Type, 1920–1933



Source: Own elaboration based on OCC annual reports for branch data and on Correia, Luck, and Verner (2026) for run data.

5 Empirical Analysis

5.1 Bank-Level Regressions

I perform the following regression analysis at the national bank level:

$$\begin{aligned}
 dist_{i,t} = & \beta_0 + \beta_1 branches_{i,t} + \beta_2 D_t + \beta_3 branches_{i,t} \times D_t \\
 & + \beta_4 share-out_{i,t} + X'_{i,t-1} \beta_5 + Z'_t \beta_6 + \gamma_s + \varepsilon_{i,t}
 \end{aligned} \tag{2}$$

where $dist_{i,t}$ is a dummy variable for a distress event, such as a run or suspension, for bank i in year t , $branches_{i,t}$ is the number of branches, D_t is a dummy variable equal to 1 for the years 1930–1933, $share-out_{i,t}$ is the share of branches outside the main office city, $X_{i,t-1}$ are bank-level balance-sheet measures in year $t - 1$, Z_t are nation-wide macroeconomic measures, γ_s are state fixed effects, and $\varepsilon_{i,t}$ is an error term. In the main specification, I include asset size (in logs), asset liquidity ratio, capital-to-assets ratio, and surplus-to-equity ratio as bank-level balance sheet measures, while I include GDP growth and stock market growth as macroeconomic controls. The coefficients of interest are β_1 , which captures the relationship between an additional branch and distress events between 1920 and 1929, and β_3 , which captures the same relationship for the period 1930–1933.

Table 3 reports the regression results when bank runs are the dependent variable. Column (1) shows the relationship between branches and runs when only state fixed effects are included. The estimated coefficient β_1 highlights a positive correlation between the number of branches and bank runs when no additional controls are included. The coefficient switches sign in column (2), where I include the Depression dummy and its interaction term with the number of branches. Columns (3) and (4) add bank-level balance-sheet and macroeconomic controls, respectively. The inclusion of the interaction effect between branches and the Depression years in columns (2) to (4) implies that the coefficient β_1 captures the relationship between an additional branch and the probability of a run during the period 1920–1929. To give a sense of the magnitude of the effect, using the coefficient from column (4), a bank with three branches has a 0.075 percentage-point lower probability of a run than a unit bank, which is roughly a third of the unconditional probability of a run in the period. Importantly, columns (2)-(4) show that the coefficient β_3 is positive, statistically significant, and larger in magnitude than β_1 . This is consistent with the theoretical prediction that branch banks face a lower probability of distress events in normal times but a higher probability during episodes of systemic shocks.

Tables 4 and 5 report the regression results using bank suspensions and closures, respectively, as the dependent variable. Similarly to the previous table, the coefficient β_1 is positive in the absence of controls and turns negative when controls are included. However, the coefficient is not statistically significant when I control for balance-sheet measures,

Table 3: Branch Banking and Runs - National Banks

Dependent Variable:	Run			
	(1)	(2)	(3)	(4)
<i>Variables</i>				
Number of branches	0.066*** (0.022)	-0.005*** (0.002)	0.028 (0.078)	0.028 (0.078)
1930-33 dummy		1.18*** (0.075)	1.13*** (0.076)	1.10*** (0.111)
Number of branches $\times$ 1930-33 dummy		0.103*** (0.032)	0.116*** (0.038)	0.116*** (0.038)
Number of branches outside city			-0.083 (0.112)	-0.082 (0.112)
Log lagged assets			0.327*** (0.036)	0.330*** (0.036)
Lagged liquid assets ratio			-1.86*** (0.245)	-1.81*** (0.243)
Lagged capital-to-assets			-0.875** (0.393)	-0.809** (0.394)
Lagged surplus-to-equity			-0.224*** (0.029)	-0.229*** (0.029)
Annual GDP growth				0.007 (0.005)
Annual stock market growth				-0.004*** (0.001)
<i>Fixed-effects</i>				
State	Yes	Yes	Yes	Yes
Observations	107,036	107,036	96,090	96,090
Mean dependent variable	0.535	0.535	0.572	0.572
<i>Clustered (charter) standard-errors in parentheses</i>				
<i>Significance levels: ***: 0.01, **: 0.05, *: 0.1</i>				

suggesting that the number of branches is a less relevant determinant of bank suspensions and closures than bank runs between 1920 and 1929. The coefficient β_3 is positive in both cases and statistically significant for bank suspensions but not for bank closures. The positive coefficient is again consistent with the theoretical prediction that branch banks face a higher probability of liquidity crises during systemic shocks. Overall, tables 3 to 5 suggest that branching is more strongly associated with bank runs than with suspensions or closures in both normal and distress times. The possible reasons behind this result are discussed in Section 5.3.

Table 4: Branch Banking and Suspensions - National Banks

Dependent Variable:	Suspension			
	(1)	(2)	(3)	(4)
<i>Variables</i>				
Number of branches	0.071** (0.033)	-0.009* (0.005)	-0.029** (0.013)	-0.004 (0.008)
1930-33 dummy		12.5*** (0.167)	12.2*** (0.168)	30.1*** (0.428)
Number of branches $\times$ 1930-33 dummy		0.073** (0.031)	0.085** (0.038)	0.071** (0.036)
Share of branches outside city			-3.73*** (1.32)	-4.72*** (1.43)
Log lagged assets			0.652*** (0.054)	0.288*** (0.050)
Lagged liquid assets ratio			-4.48*** (0.544)	-8.16*** (0.524)
Lagged capital-to-assets			7.72*** (0.846)	-3.37*** (0.812)
Lagged surplus-to-equity			-1.22*** (0.106)	-0.730*** (0.074)
Annual GDP growth				0.779*** (0.015)
Annual stock market growth				0.288*** (0.005)
<i>Fixed-effects</i>				
State	Yes	Yes	Yes	Yes
Observations	107,036	107,036	96,219	96,219
Mean dependent variable	3.82	3.82	4.071	4.071

Clustered (charter) standard-errors in parentheses

Significance levels: ***: 0.01, **: 0.05, *: 0.1

5.2 State-Level Regressions

I perform the following regression analysis at the state level:

$$dist_{s,t} = \beta_0 + \beta_1 branch-int_{s,t} + \beta_2 D_t + \beta_3 branch-int_{s,t} \times D_t + X'_{s,t-1} \beta_4 + Z'_t \beta_5 + \varepsilon_{s,t} \quad (3)$$

where $dist_{s,t}$ is the share of banks experiencing a distress event in state s and year t , $branch-int_{s,t}$ is a measure of branching intensity, namely the ratio between the number of branches and the total number of banks and branches, D_t is a dummy variable equal to 1 for the years 1930 and 1933, $X_{s,t-1}$ represent state-level aggregate balance-sheet measures in year $t - 1$, Z_t denote the growth rates of GDP and the stock market, and $\varepsilon_{s,t}$ is

Table 5: Branch Banking and Closures - National Banks

Dependent Variable:	Closure			
	(1)	(2)	(3)	(4)
<i>Variables</i>				
Number of branches	0.011 (0.020)	-0.006** (0.002)	-0.004 (0.005)	-0.002 (0.005)
1930-33 dummy		2.72*** (0.113)	2.53*** (0.114)	3.36*** (0.202)
Number of branches $\times$ 1930-33 dummy		0.015 (0.030)	0.017 (0.031)	0.016 (0.031)
Share of branches outside city			-2.81*** (0.525)	-2.85*** (0.530)
Log lagged assets			0.188*** (0.040)	0.171*** (0.040)
Lagged liquid assets ratio			-8.00*** (0.384)	-8.18*** (0.388)
Lagged capital-to-assets			-2.41*** (0.595)	-2.93*** (0.603)
Lagged surplus-to-equity			-0.621*** (0.056)	-0.597*** (0.054)
Annual GDP growth				0.035*** (0.009)
Annual stock market growth				0.014*** (0.002)
<i>Fixed-effects</i>				
State	Yes	Yes	Yes	Yes
Observations	107,036	107,036	96,219	96,219
Mean dependent variable	1.315	1.315	1.365	1.365
<i>Clustered (charter) standard-errors in parentheses</i>				
<i>Significance levels: ***: 0.01, **: 0.05, *: 0.1</i>				

an error term. I include aggregate balance-sheet measures that mimic those used in the bank-level specifications, namely average asset size (in logs), liquid asset ratio, capital-to-assets ratio, and surplus-to-equity ratio. Note that all the state-level measures reflect aggregates or averages of both state and national banks for the years 1920, 1925, 1930, and 1933 across the 50 states and the District of Columbia.

Table 6 reports the results of the regressions using bank runs as the dependent variable. As in the bank-level regressions, the coefficient of interest β_1 is positive and statistically significant in the specification without controls, while it turns negative when a Depression dummy and an interaction term are included. In this case as well, the coefficient β_3 is positive, statistically significant, and larger in magnitude than β_1 , corroborating the

pattern that the relationship between branching and runs is negative in normal times and positive during systemic shocks.

Table 6: Branch Banking and Runs - State Aggregates

Dependent Variable:	Run			
	(1)	(2)	(3)	(4)
<i>Variables</i>				
Branch intensity	0.048** (0.020)	-0.007** (0.003)	-6.18×10^{-5} (0.006)	-0.0006 (0.007)
1930-33 dummy		0.330 (0.318)	0.359 (0.307)	-4.49 (4.15)
Branch intensity $\times$ 1930-33 dummy		0.067** (0.028)	0.066** (0.027)	0.067** (0.027)
Lagged log of average asset size			-0.061 (0.125)	-0.036 (0.140)
Lagged aggr. liquid assets ratio			0.034 (1.55)	0.756 (1.95)
Lagged aggr. capital-to-assets			-2.29 (3.01)	0.186 (3.76)
Lagged aggr. surplus-to-equity			-0.269* (0.147)	-0.252 (0.155)
Annual GDP growth				-0.652 (0.585)
Annual stock market growth				0.034 (0.032)
Observations	204	204	203	203
Mean dependent variable	0.791	0.791	0.793	0.793

Clustered (state) standard-errors in parentheses

*Significance levels: ***: 0.01, **: 0.05, *: 0.1*

The dependent variable is the share of state and national banks experiencing a run in a given state and year. Branching intensity is defined as the ratio between the total number of branches of state and national banks and the total number of branches and state and national banks.

The regression results for the specifications using suspensions and closures as dependent variables are shown in Appendix B. The coefficients observed in Table 7 and Table 8 display the same sign and similar magnitude as those observed in Table 6. However, the coefficients are not statistically significant in most cases. This is consistent with the results in Section 5.1, where bank runs are the distress event most strongly associated with branching.

5.3 Discussion

Two main results stand out from the empirical analysis. First, branch banking is associated with fewer distress events in normal times, even after controlling for variables such as asset size, liquid assets, and capital ratio. However, this relationship reverses during the Depression years, as having an additional branch is associated with a higher frequency of distress events between 1930 and 1933. Therefore, the empirical analysis seems to reconcile the tension between the benefits of branch banking arising from deposit and asset diversification and the difficulties faced by branch banks in the presence of large systemic shocks, as documented in previous research on the relationship between branch banks and failures during the Depression.

Second, among the distress events, bank runs are the event most strongly associated with branching in both normal times and the Depression years, as its coefficients are typically larger in magnitude and statistically significant across various specifications. A possible explanation can be derived from the theoretical framework in Section 3. In fact, bank runs are the type of distress event that most closely resembles the liquidity crises described in the framework. Therefore, branching is beneficial because it provides deposit diversification that reduces idiosyncratic risk. However, it might become detrimental in the presence of systemic shocks, particularly if branch banks have lower reserve and liquidity ratios and higher leverage. Conversely, suspensions and closures may also be affected by variables such as the availability of clearinghouses and deposit insurance, or other balance-sheet components that are not captured in the specifications.

It is important to reiterate that *interstate branching* was virtually nonexistent until the 1970s. Therefore, the U.S. national bank branch system analyzed in the paper is an *intrastate branching* system where most branches are located within the limits of the main office city. The lack of a system of large interstate branch banks similar to those in Canada, England, and Australia, could be one reason for the relatively mild relationship between branching and distress events during normal times. In fact, the geographic diversification typical of interstate systems reduces the effects of idiosyncratic shocks by enhancing deposit and asset diversification.

6 Conclusion

In this paper, I present a theoretical framework of branching and distress events. I then collect data from the U.S. between 1920 and 1933, and I use the constructed dataset to test the predictions of the theory. Consistent with the theory, the empirical analysis shows that branching is associated with a lower likelihood of distress events such as bank runs in normal times, but with a higher likelihood during periods of highly correlated shocks, such as the Depression. Moreover, among distress events, bank runs appear to be the distress event most strongly associated with branching both before and after the onset of the Depression.

A possible avenue for future research could be to include bank-level data on state banks in the analysis. This paper relies on bank-level data for national banks only, while it uses aggregate variables that include information on state banks for a limited number of years. As discussed, branching was significantly more developed among state banks in states that did not prohibit it. While branch, run, and balance-sheet data for state banks are typically more difficult to retrieve, especially for state banks that were outside the Federal Reserve System, including such data would provide a more comprehensive picture of the role of branching.

References

- Alston, Lee J, Wayne A Grove, and David C Wheelock. 1994. "Why do banks fail? Evidence from the 1920s." *Explorations in Economic History* 31 (4): 409–431.
- Board of Governors of the Federal Reserve System. 1943. *Banking and Monetary Statistics, 1914–1941*. Washington, DC: Board of Governors of the Federal Reserve System.
- Bradford. 1940. *The Legal Status of Bank Branching in the US*. New York, NY: American Economists Council for the Study of Branch Banking.
- Calomiris, Charles W. 1992. "Do vulnerable economies need deposit insurance? Lessons from US agriculture in the 1920s." *If Texas Were Chile: A Primer on Bank Regulation*, 237–349.
- . 2000. *US bank deregulation in historical perspective*. Cambridge University Press.
- Calomiris, Charles W, and Joseph R Mason. 2003. "Fundamentals, panics, and bank distress during the depression." *American Economic Review* 93 (5): 1615–1647.
- Cao, Wenxuan, and Gary Richardson. 2022. *All Bank Statistics, 1896–1955, Digitized*. Ann Arbor, MI. <https://doi.org/10.3886/E182671V1>.
- Carlson, Mark. 2004. "Are branch banks better survivors? Evidence from the Depression era." *Economic Inquiry* 42:111–126.
- Carlson, Mark, and Kris James Mitchener. 2006. "Branch banking, bank competition, and financial stability." *Journal of Money, Credit and Banking* 38 (5): 1293–1328.
- Chapman, John Martin, and Ray Bert Westerfield. 1942. *Branch Banking: Its Historical and Theoretical Position in America and Abroad*. New York: Harper & Brothers.
- Chari, V. V. 1989. "Banking without deposit insurance or bank panics: Lessons from a model of the U.S. national banking system." *Federal Reserve Bank of Minneapolis, Quarterly Review* (Summer):3–19.
- Correia, Sergio, Stephan Luck, and Emil Verner. 2025. "Failing banks." *The Quarterly Journal of Economics*, <https://doi.org/10.1093/qje/qjaf044>.

- Correia, Sergio, Stephan Luck, and Emil Verner. 2026. *Bank runs with and without bank failure*. arXiv: 2601.20285 [econ.GN]. <https://arxiv.org/abs/2601.20285>.
- Dehejia, Rajeev, and Adriana Lleras-Muney. 2007. "Financial development and pathways of growth: State branching and deposit insurance laws in the United States, 1900–1940." *The Journal of Law and Economics* 50 (2): 239–272.
- Grossman, Richard S. 1994. "The shoe that didn't drop: explaining banking stability during the Great Depression." *The Journal of Economic History* 54 (3): 654–682.
- Mengle, David. 1990. "The case for interstate branch banking." *FRB Richmond Economic Review* 76 (6): 3–17.
- Quincy, Sarah, and Chenzi Xu. 2025. "Branching out: Capital mobility and long-run growth." Working Paper.
- Wheelock, David C. 1992. "Regulation and bank failures: New evidence from the agricultural collapse of the 1920s." *The Journal of Economic History* 52 (4): 806–825.
- White, Eugene N. 1983. *The Regulation and Reform of the American Banking System, 1900–1929*. Princeton: Princeton University Press.

Appendices

A Proofs of Propositions

Proof of Proposition 1. As $W_U \sim N(\mu, \sigma^2)$, the withdrawal expectation and variance for a unit bank are μ and σ^2 , respectively. With regard to a bank with two branches located in two locations, each providing one-half of depositors, we have $W_B = \frac{W_1 + W_2}{2}$. The withdrawal expectation is equal to μ , while the withdrawal variance is equal to $\frac{1+\rho}{2}\sigma^2$ for a given cross-correlation of shocks $\rho > 0$. Therefore, the branch bank has a lower withdrawal variance than a unit bank whenever $\rho < 1$. $\square$

Proof of Proposition 2. Recall that

$$W_U \sim N(\mu, \sigma^2), \quad W_B \sim N\left(\mu, \frac{1+\rho}{2}\sigma^2\right).$$

Let $\Phi(\cdot)$ be the density function of the standard normal distribution. Then,

$$\begin{aligned} P[W_U > \theta] &= 1 - \Phi\left(\frac{\theta - \mu}{\sigma}\right). \\ P[W_B > \theta] &= 1 - \Phi\left(\frac{\theta - \mu}{\sqrt{\frac{1+\rho}{2}}\sigma}\right). \end{aligned}$$

Therefore, the probability of illiquidity for the unit bank $P[W_U > \theta]$ is larger than the probability of illiquidity for the branch bank $P[W_B > \theta]$ whenever $\rho < 1$. $\square$

Proof of Proposition 3. Assume that withdrawals $W \sim N(\mu, \sigma^2)$. The optimal reserve ratio is the maximizer of the objective function in (1),

$$\max_{\theta} \{R(1 - \theta) - L\mathbb{E}[(W - \theta)^+]\}.$$

The FOC yields

$$-R - L \frac{\delta}{\delta\theta} \mathbb{E}[(W - \theta)^+] = 0. \tag{4}$$

Note that

$$\frac{\delta}{\delta\theta} \mathbb{E}[(W - \theta)^+] = -P(W > \theta) = -\left(1 - \Phi\left(\frac{\theta - \mu}{\sigma}\right)\right).$$

Then, (4) becomes

$$-R + L \left(1 - \Phi\left(\frac{\theta - \mu}{\sigma}\right)\right) = 0,$$

which yields the optimal reserve ratio θ^* as a function of σ :

$$\theta^* = \mu + \sigma \Phi^{-1}\left(1 - \frac{R}{L}\right). \quad (5)$$

The term $\Phi^{-1}\left(1 - \frac{R}{L}\right)$ is positive as long as

$$\frac{R}{L} < \frac{1}{2},$$

which is given by Assumption 1. □

Proof of Proposition 4. Define

$$\kappa \equiv \Phi^{-1}\left(1 - \frac{R}{L}\right). \quad (6)$$

Using equations (5) and (6), the optimal reserve ratio for the unit bank with withdrawals distributed according to $W_U \sim N(\mu, \sigma^2)$ is

$$\theta_U^* = \mu + \sigma\kappa.$$

Then, the probability of illiquidity for the unit bank is

$$P[W_U > \theta_U^*] = 1 - \Phi\left(\frac{\theta_U^* - \mu}{\sigma}\right) = 1 - \Phi(\kappa) = \frac{R}{L}. \quad (7)$$

Using equations (5) and (6), the optimal reserve ratio for the branch bank when it assumes a cross-correlation of shocks equal to ρ_1 is

$$\theta_B^* = \mu + \sqrt{\frac{1 + \rho_1}{2}} \sigma\kappa.$$

When the realized correlation is $\rho_2 > \rho_1$, the withdrawal distribution follows $W_B \sim N\left(\mu, \frac{1+\rho_2}{2}\sigma^2\right)$. Then, the probability of illiquidity for the branch bank is

$$P[W_B > \theta_B^*] = 1 - \Phi\left(\frac{\theta_B^* - \mu}{\sigma\sqrt{\frac{1+\rho_2}{2}}}\right) = 1 - \Phi\left(\kappa\sqrt{\frac{1+\rho_1}{1+\rho_2}}\right). \quad (8)$$

Comparing (7) to (8), we have

$$P[W_B > \theta_B^*] = 1 - \Phi\left(\kappa\sqrt{\frac{1+\rho_1}{1+\rho_2}}\right) > 1 - \Phi(\kappa) = P[W_U > \theta_U^*].$$

□

B State-Level Regression Results

Table 7: Branch Banking and Suspensions - State Aggregates

Dependent Variable:	Suspension			
	(1)	(2)	(3)	(4)
<i>Variables</i>				
Branch intensity	0.337** (0.139)	-0.019 (0.020)	0.064 (0.048)	0.033 (0.056)
1930-33 dummy		9.06*** (2.01)	10.3*** (1.99)	118.9*** (32.6)
Branch intensity $\times$ 1930-33 dummy		0.368* (0.189)	0.335* (0.181)	0.321* (0.183)
Lagged log of average asset size			-0.065 (1.11)	-0.244 (1.19)
Lagged aggr. liquid assets ratio			20.7 (12.7)	8.62 (15.6)
Lagged aggr. capital-to-assets			69.1* (34.6)	-2.38 (35.9)
Lagged aggr. surplus-to-equity			-1.91 (1.30)	-2.16 (1.32)
Annual GDP growth				14.7*** (4.31)
Annual stock market growth				-0.708*** (0.239)
Observations	204	204	203	203
Mean dependent variable	7.861	7.861	7.898	7.898

Clustered (state) standard-errors in parentheses

*Significance levels: ***: 0.01, **: 0.05, *: 0.1*

The dependent variable is the share of state and national banks experiencing a suspension in a given state and year. Branching intensity is measured as the ratio between the total number of branches of state and national banks and the total number of branches and state and national banks.

Table 8: Branch Banking and Closures - State Aggregates

Dependent Variable:	Closure			
	(1)	(2)	(3)	(4)
<i>Variables</i>				
Branch intensity	0.080 (0.060)	-0.017 (0.020)	0.016 (0.021)	0.009 (0.025)
1930-33 dummy		2.41*** (0.799)	2.51*** (0.743)	17.0 (11.3)
Branch intensity $\times$ 1930-33 dummy		0.101 (0.087)	0.094 (0.084)	0.093 (0.087)
Lagged log of average asset size			-0.289 (0.370)	-0.285 (0.370)
Lagged aggr. liquid assets ratio			0.069 (5.17)	-1.25 (6.62)
Lagged aggr. capital-to-assets			4.56 (10.6)	-6.09 (11.0)
Lagged aggr. surplus-to-equity			-1.04** (0.451)	-1.06** (0.468)
Annual GDP growth				1.97 (1.49)
Annual stock market growth				-0.090 (0.086)
Observations	204	204	203	203
Mean dependent variable	2.733	2.733	2.746	2.746

Clustered (state) standard-errors in parentheses

*Significance levels: ***: 0.01, **: 0.05, *: 0.1*

The dependent variable is the share of state and national banks experiencing a closure in a given state and year. Branching intensity is measured as the ratio between the total number of branches of state and national banks and the total number of branches and state and national banks.

C Sample OCC Reports

Figure 6

DOMESTIC BRANCHES OF NATIONAL BANKS

Under authority of section 5155 of the Revised Statutes of the United States the following national banks, formerly State banks, continue to operate the branches indicated:

California:

Bank of California, National Association, San Francisco; capital, \$8,500,000.
Branch at Portland, Oreg.; capital, \$300,000.
Branch at Seattle, Wash.; capital, \$200,000.
Branch at Tacoma, Wash.; capital, \$200,000.

Louisiana:

Calcasieu National Bank of Southwestern Louisiana, Lake Charles; capital, \$1,000,000.
Branch at De Quincy; capital, \$40,000.
Branch at Jennings; capital, \$120,000.
Branch at Kinder; capital, \$30,000.
Branch at Lake Arthur; capital, \$40,000.
Branch at Oakdale; capital, \$120,000.
Branch at Sulphur; capital, \$40,000.
Branch at Vinton; capital, \$50,000.
Branch at Welsh; capital, \$60,000.

Massachusetts:

Federal National Bank of Boston; capital, \$1,500,000.
Four¹ branches in Boston, with capital of \$50,000 assigned to each.
Safe Deposit National Bank of New Bedford; capital, \$500,000.
Branch in New Bedford; capital, \$50,000.

¹ One of which was acquired by consolidation under act Nov. 7, 1918.

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Federal Reserve Bank of St. Louis

Example of reported existing branches under Section 5155. Source: Annual Report of the Office of the Comptroller of the Currency (1925, p.14).

Figure 7

Under the consolidation act of November 7, 1918, converted State banks having branches were consolidated with the following banks and the branches continued:

California:

The First National Bank of Lemoore; capital, \$150,000.
Branch at Stratford; capital, \$25,000.

District of Columbia:

The Riggs National Bank of Washington, D. C.; capital, \$2,500,000.
Four branches in the city of Washington, with capital of \$10,000 assigned to each.

Georgia:

The Fourth National Bank of Atlanta; capital, \$1,200,000.
Three branches in the city of Atlanta, with capital of \$50,000 assigned to each.
Branch at Decatur; capital, \$25,000.
Atlanta & Lowry National Bank, Atlanta; capital, \$4,000,000.
Two branches in Atlanta, with capital of \$50,000 assigned to each.

Massachusetts:

The Atlantic National Bank of Boston; capital, \$5,000,000.
Three branches in Boston, with capital of \$100,000 assigned to each.
The First National Bank of Boston; capital, \$20,000,000.
Seven branches in Boston, with capital of \$50,000 assigned to each.
Chapin National Bank of Springfield; capital, \$500,000.
Two branches in Springfield, with capital of \$50,000 assigned to each.

Michigan:

Grand Rapids National Bank of Grand Rapids; capital, \$1,000,000.
Nine branches in the city of Grand Rapids, with capital of \$10,000 assigned to each.

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Federal Reserve Bank of St. Louis

Example of reported existing branches under Section 5190. Source: Annual Report of the Office of the Comptroller of the Currency (1925, p.15).

Figure 8

National banks, with number of additional local offices and dates of approval of their establishment, October 31, 1925

Location	Title of bank	Number of additional offices	Date of approval of establishment of additional offices
California:			
Crockett.....	First National Bank.....	1	Nov. 28, 1923
Fresno.....	First National Bank in Fresno.....	1	Dec. 19, 1923
Huntington Park.....	National Bank.....	2	May 3, 1924
Inglewood.....	First National Bank.....	1	Mar. 7, 1923
Long Beach.....	California National Bank.....	1	Nov. 8, 1923
Los Angeles.....	First National Bank.....	1	July 1, 1922
			June 13, 1922
			Oct. 31, 1923
			Jan. 29, 1924
Do.....	Commercial National Trust & Savings Bank.....	16	June 4, 1924
			Dec. 18, 1924
			Mar. 24, 1925
			July 22, 1925
			Oct. 20, 1925
Do.....	Merchants National Bank.....	4	Aug. 1, 1922
			Oct. 11, 1922
			Mar. 15, 1924
			June 4, 1924
			Feb. 5, 1924
Do.....	Pacific National Bank.....	8	Jan. 3, 1925
			Jan. 8, 1925
			Oct. 16, 1925
Do.....	United States National Bank.....	7	Mar. 1, 1924
			July 29, 1924
			Nov. 21, 1924
			Aug. 3, 1925

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Federal Reserve Bank of St. Louis

Example of reported existing in-city offices established after the OCC ruling in 1922. Source: Annual Report of the Office of the Comptroller of the Currency (1925, p.16).

Figure 9

DOMESTIC BRANCHES OF NATIONAL BANKS

Table showing number and manner of acquisition of branches of national banks during the year ended October 31, 1928

Char- ter No.	Title and location	Branches authorized during the year ended Oct. 31, 1928		
		Under act Feb. 25, 1927	By con- version or by consoli- dation under act Feb. 25, 1927	Total number
CALIFORNIA				
5927	Citizens National Trust & Savings Bank of Los Angeles.....	7	24	31
2491	Los Angeles-First National Trust & Savings Bank, Los Angeles..	2		2
3538	Merchants National Trust & Savings Bank of Los Angeles.....	1		1
10167	Security National Bank of Pasadena.....	1		1
13044	Bank of Italy National Trust & Savings Association, San Francisco.....	4		4
INDIANA				
7725	Lincoln National Bank & Trust Co. of Fort Wayne.....		1	
KENTUCKY				
5161	Louisville National Bank and Trust Co., Louisville.....	1		
MARYLAND				
2490	Drovers & Mechanics National Bank of Baltimore.....	1		1
1337	Farmers & Merchants National Bank of Baltimore.....	1		1
1413	First National Bank of Baltimore.....	1		1
MASSACHUSETTS				
11903	Boston National Bank, Boston.....	1		
MICHIGAN				
10527	First National Bank in Detroit.....	8	27	
NEW JERSEY				
374	First National Bank of Jersey City.....	1		1
1182	Hudson County National Bank, Jersey City.....	3		3
9912	New Jersey National Bank & Trust Co. of Newark.....	3		3
1317	Orange National Bank, Orange.....	1		1
329	First National Bank of Paterson.....	1		4
1327	First-Mechanics National Bank of Trenton.....	4		1
9867	National Bank of North Hudson, at Union City.....	1		1

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Federal Reserve Bank of St. Louis

Example of reported branches authorized. Source: Annual Report of the Office of the Comptroller of the Currency (1928, p.7).