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Haelim Anderson
Federal Deposit Insurance Corporation

Adam Copeland
Federal Reserve Bank of New York

February 2020

FDIC CFR WP 2020-01

fdic.gov/cfr

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Information Management in Times of Crisis*

Haelim Anderson† Adam Copeland‡

December 19, 2019

Abstract

How does information management and control affect bank stability? Following a national bank holiday in 1933, New York state bank regulators suspended the publication of balance sheets of state-charter banks for two years, whereas the national-charter bank regulator did not. We use this divergence in policies to examine how the suspension of bank-specific information affected depositors. We find that state-charter banks experienced significantly less deposit outflows than national-charter banks in 1933. However, the behavior of bank deposits across both types of banks converged in 1934 after the introduction of federal deposit insurance.

Keywords: Information Management, Bank Opacity, Banking Crisis, Great Depression, Depositor Confidence

JEL classification: G21, G28, N22

*We thank Sriya Anbil, Mark Carlson, Thomas Eisenbach, Gary Gorton, Vivian Hwa, Marco Macchiavelli (discussant), Ellis Tallman, Jeff Traczynski, Angela Vossmeyer (discussant), and participants at the 2019 Monetary and Financial History Workshop and 2019 Yale Financial Stability Conference for comments and suggestions. We also thank Jason Harley, Dillon McNeill, Andrew Or, Taylor Sullivan, and Anya Tarascina for excellent research assistance. The views expressed herein are those of the authors and do not necessarily reflect the position of the Federal Reserve Bank of New York, the Federal Reserve System, or the Federal Deposity Insurance Corporation.

†Federal Deposit Insurance Corporation; e-mail: handerson@fdic.gov

‡Federal Reserve Bank of New York; e-mail: adam.copeland@ny.frb.org

1 Introduction

Information management and control often play a central role in ending financial crises. In a crisis characterized as an "*information event*," during which information-insensitive debt becomes information-sensitive, the management of the information environment is especially crucial to restoring confidence in the broader banking sector (Gorton and Ordoñez, forthcoming). In practice, we observe regulators suppressing bank-level information with the goal of restoring the public's confidence in banks; in the national banking era the New York City Clearinghouse Association stopped bank runs on some of its members by suspending the publication of individual bank's balance sheets, and during the Great Depression the federal government suspended the March 1933 Call Report for all banks as part of a suite of policies to stop bank runs. Despite the perceived importance of managing information about individual banks during a financial crisis, we are not aware of any empirical work that quantifies the effect of such policies. This paper is novel then, in that we estimate that in a time of crisis, a policy of suppressing information about banks' balance sheets has a significant and positive effect on deposits.

Several challenges make it difficult to identify how a policy related to managing the information environment affects financial stability. One such challenge is the lack of detailed bank-level data during these times of crisis, because regulators often choose not to collect information or halt regular information dissemination activities in order to protect weak financial institutions from a negative information spillover (Gorton and Tallman, 2018). Another challenge is the difficulty in disentangling the effect of information management policies from other policies that are implemented simultaneously.

In this paper, we overcome these empirical challenges by examining the New York banking system following the banking panics of the Great Depression. To help quell the nationwide bank panics building up at the beginning of 1933, the federal government declared a national four-day bank holiday from March 6th to 9th. During this period, the government implemented two major programs to manage the information environment so as to build public confidence in the banking system.[1] First, it asserted that only solvent banks would be allowed to re-open after the holiday. Second, it suspended the March 1933 call, which allowed banks to avoid publishing statistics about

[1]The federal government's attempt to stop the banking crisis in this manner aligns with the framework described in (Gorton and Ordoñez, forthcoming) of treating the crisis as a type of informational failure.

their balance sheet for public consumption.[2] NY state bank regulators built upon this federal effort by extending the length of time that NY state-charter banks remained opaque.

To convince "panic-stricken" households in New York that their deposits would remain liquid and safe, the NY state bank regulator suppressed bank-specific information by not collecting and mandating the publication of call report data in 1933 and 1934 for those banks under its oversight (banks with a state charter). This policy decision effectively ended the public's ability to observe the balance sheets of state-charter banks for two years. In contrast, following the aforementioned suspension of the March 1933 call, the Office of the Comptroller of the Currency (OCC) went back to collecting and mandating the publication of balance sheet statistics for banks under its oversight (banks with a national charter). Because state-charter and national-charter banks operated side by side in New York, this difference in a households' ability to observe a bank's balance sheet provides a unique opportunity to measure the impact of information suppression on deposits.

Although we collect data from various sources, our main analysis relies on balance sheet data of NY banks. Given the suspension of the call reports by the NY state bank regulator, we use an alternate source of balance sheet data provided by Rand McNally. Using this data source, we construct a semiannual panel data set on all commercial banks and trust companies in New York from 1931 to 1935. Rand McNally published information on banks' portfolio of assets and their capital structure as of June and December of each year. Importantly, local depositors had, at best, limited access to the *Rand McNally Bankers Directory* because it was a subscription service directed at bankers seeking to manage their counterparty risk arising from the check clearing process. As such, we argue that the Rand McNally directory did not undo the information suppression policy of the NY state banking regulator.

We measure the impact of the information suppression policy on deposits using a difference-in-differences approach where state-charter banks are defined as being treated and national-charter banks are the controls. We exclude banks located in New York City as well as those in reserve cities, to arrive at a set of relatively homogeneous banks whose business model is to attract deposits from local households and make loans to small manufacturing and agricultural businesses.[3]

[2] See Silber (2009) for details on this national bank holiday and the immediate aftermath on the banking system.

[3] The National Banking Act of 1863 created three-tiered reserve requirements for national banks based on their location. Small "country" banks could use interbank deposits with "reserve city" banks in major financial centers to meet reserve requirements. Reserve city banks, in turn, could make interbank deposits in larger "central reserve city" banks (those in the nation's money centers of New York, Chicago, and St. Louis) to meet reserve requirements. The central reserve city banks had to keep all their reserves in vault cash. State regulators passed similar laws.

In the regression specification, we allow for the information-suppression policy to have a different effect in 1933 and 1934. This is because at the start of 1934 the Federal Deposit Insurance Corporation (FDIC) was established and began its policy of insuring household deposits. For households with insured deposits, there is no need to monitor the bank's balance sheet. As such, the creation of the FDIC should offset the advantage state-charter banks had over national-charter banks in terms of the degree of opaqueness of their balance sheet. This informational advantage still exists with regard to households with uninsured deposits, but these types of deposits are a small share of total deposits for the set of banks we are studying.[4]

Our first key result is that with the introduction of the NY state banking regulator's policy of information suppression in 1933, state-charter banks attracted deposits to a greater degree relative to national-charter banks. Reflecting the general outflow of deposits during this time period, the estimates imply that state-charter banks stemmed the outflow of deposits to a greater extent than national-charter banks, and so end up with a level of deposits about 4 percent higher.

Our second key result is that this advantage in maintaining deposits disappeared in 1934; there is no longer a statistically significant difference in the level of deposits across state-charter and national-charter banks. Our interpretation of this result is that the introduction of the FDIC reduced household's incentives to monitor the set of banks in our sample to such a degree that the national-charter and state-charter banks are back to an equal footing in terms of the information environment.

The identifying assumption behind our analysis is that deposit growth of national-charter and state-charter banks are on parallel trends prior to the introduction of the information-suppression policy in 1933. Our filtering of the data to only include banks outside of major financial centers results in a set of national-charter and state-charter banks which are similar in observable balance-sheet characteristics. Further, when looking at NY banks by charter type, the aggregate level of deposits track one another quite closely up to 1933. Both these features of the data provide confidence that we are accurately estimating that, relative to national-charter banks, state-charter banks had a significantly higher growth rate in deposits in 1933, but not in 1934.

A potential criticism of our interpretation of the mechanism is that the difference in deposit growth is related to the different charters of the banks, rather than to the NY state banking regulator's policy. Indeed, a major difference between the two is that national-charter banks have access to the Federal Reserve's discount window whereas only those state-charter banks that choose to join the

[4]State-charter banks could also maintain an informational advantage over national-charter banks if households did not believe the FDIC would provide deposit insurance in an effective manner.

Federal Reserve and meet its eligibility requirements, gain access to the discount window.

Fortunately, we observe which state-charter banks are members of the Federal Reserve and find that our results hold for both those state-charter banks that are Federal Reserve members as well as those that are not. Consequently, access to the discount window does not play an important role in our results.

More generally, however, an argument may be made that the other policy initiatives passed in the Banking Act of 1933 could somehow have a differential impact on the depositors of state-charter versus national-charter banks. Our reading of the Banking Act of 1933 and knowledge of the existing regulations that applied to NY banks did not identify any other relevant policy initiatives.[5] Nevertheless, to address this general point we run a placebo test using deposit growth in New Jersey over the same period of time. If the results using NY banks stem from federal regulations introduced by the Banking Act of 1933, then we would expect to see a similar difference in deposit growth across state-charter and national-charter banks in NJ (a neighboring state to New York which is quite similar in terms of the banking environment and economic conditions).

Using the *Rand McNally Bankers Directory* deposit data on NJ banks, we estimate the same difference-in-differences regression and find that state-charter banks in New Jersey did not have significantly different growth in the log level of deposits in 1933 or 1934 compared to national-charter banks in New Jersey. Consequently, the mechanism behind our results does not seem to have originated from other financial reforms.

In addition to quantifying the importance of suppressing information about individual banks in a crisis, our study has important implications for new financial reforms that call for greater transparency in the financial system. Following the financial crisis of 2007-09, policymakers have attempted to enhance public disclosure, with the goal of improving financial stability, by promoting the market discipline of financial institutions. Even with the FDIC's deposit insurance program, public disclosure of the portfolio of assets held by banks is an important tool today because banks issue significant amounts of informationally-insensitive debt.[6] In an information-event crisis effecting a bank or set of banks, our results demonstrate the value of having regulators suppress

[5] Our understanding is that except for those reforms we have already noted, the nationwide financial reforms resulting from the Banking Act of 1933 did not have a meaningful impact on NY commercial banks because similar regulations were already in effect.

[6] For example, in the United States, uninsured deposits were about 40 percent of total deposits in the second quarter of 2019 (FDIC Quarterly, Second Quarter of 2019, p. 24).

bank-specific information as a way to stem runs on those banks by depositors and other types of investors.

Our paper is closely related to the theoretical literature focused on the connections between bank runs and economic fundamentals (e.g., see Goldstein and Pauzner (2005)) because these models best motivate the NY state banking regulator's actions. Perhaps the closest work is Eisenbach (2017), which analyzes run probabilities in a general equilibrium environment where depositors receive a signal about a bank's assets and learn about the aggregate state of the world. In this setting, depositors run on banks when a sufficiently bad signal is received, where the threshold of what is sufficiently bad depends upon the aggregate state. Further, Eisenbach (2017) shows that in the bad aggregate state, a bank is much more susceptible to runs.

During the turmoil of the Great Depression, the NY state banking regulator was trying to decrease run probabilities on state-charter banks by suppressing information about individual banks. As a result, depositors would have only general information about a bank's assets, for example average asset quality, which, as evidenced by the historical record, was encouraging enough to limit runs and stem the outflow of deposits. In other words, by doing so, the regulator can prevent a coordination failure between depositors in a solvent bank.

Our paper is also closely related to the literature focused on the informational view of financial crises. These theoretical studies emphasize information asymmetry regarding debt and show that bank panics are caused by a shift in the information sensitivity of debt (Gorton and Ordoñez, 2014; Dang, Gorton, and Holmström, 2019). As such, one way to manage the information environment during a crisis is to reduce transparency. Indeed, Gorton and Ordoñez (forthcoming) show that reducing transparency of banks' balance sheets can help maintain the information-insensibility of their short-term debt and so avoid a financial crisis. This literature though, focuses on banking systems and considers informational management policies that impact all banks. The policy examined in this paper, in contrast, applied to only a subset of banks. Nevertheless, our results demonstrate the importance of managing information about individual banks in a time of crisis.

Related empirical work includes the study of clearinghouses and how these institutions dealt with runs on their members. In particular, Gorton and Tallman (2018) describe how a New York City clearinghouse in the national banking era successfully stopped a bank run on some of its members by replacing the publication of individual bank balance sheets with an aggregate balance sheet. This change made an individual bank's balance sheet more opaque and also emphasized the solvency of

the clearinghouse and its members. Although the New York City clearinghouse was concerned about coordination failures among depositors in the banking system, the NY state bank regulator was concerned about a coordination failure of depositors in a solvent bank. Our work complements this work, by considering a different crisis and providing a formal econometric analysis to underpin the connection between more opacity and deposit growth.

Other related empirical work focuses on managing information around lender-of-last-resort facilities. Work that is closest to ours also focuses on the Great Depression period and quantifies the effect of publicly releasing the identities of banks that recently accessed an emergency lending facility (Anbil, 2018; Vossmeyer, 2019; Anbil and Vossmeyer, 2017). Although those works and our paper are related at the general level of assessing the importance of bank-level information to households in times of crisis, we differ in our focus. The existing works are focused on measuring the stigma associated with accessing a lender-of-last-resort type of facility, whereas our work considers the value of making the portfolio assets of banks more opaque.

Finally, there is a literature focused on measuring by how much the opaqueness of bank balance sheets helps banks issue deposits in normal times.[7] Empirically, Morgan (2002) establishes that banks are more opaque than other firms and Chen, Goldstein, Huang, and Vashishtha (2019) find links between a bank's opacity and, among other things, deposit flows and rates. Although this paper also considers the importance of opacity on a bank's ability to issue deposits, our work differs in that we focus on the effect of information suppression policies in times of crisis, rather than the effect of opaqueness in normal times.

The remainder of the paper is organized as follows. Section 2 gives a historical background. Section 3 introduces the data and provides summary statistics. Sections 4 describes empirical specifications and present results. Section 5 concludes.

2 Depositors' Access to Information Following a National Bank Holiday

During normal times, regulators have long recognized that disclosure is an important tool that helps the market discipline of banks. As such, there is a history in the United States of banks being re-

[7]For example, see Diamond and Dybvig (1983), Gorton and Pennacchi (1990), Hanson, Shleifer, Stein, and Vishny (2015),and Dang, Gorton, Holmström, and Ordoñez (2017).

quired to report summary statistics of their balance sheet on a periodic basis (aka call reports) since the free banking era. In the 1930s, the United States had a unit banking system, which meant that the vast majority of depositors were local.[8] Hence an effective way to disclose balance sheet information, and what the OCC and NY state banking departments required, was for banks to periodically publish these data in local newspapers (for an example, see online Appendix A).[9]

In March 1933, following the declaration of a national bank holiday, national and state bank regulators did not collect the March call reports. Despite this nationwide effort, the NY state bank regulator determined that depositors and creditors of banks remained "panic-stricken" and likely to withdraw their deposits. As a result, the regulator suspended the rendering and publication of call reports for state-charter banks until 1935. From the Annual Report for the year 1933, p. 41:

> "In the opinion of this Banking Board, the interests of depositors and stockholders and the public generally in banking institutions subject to the supervision of the Banking Department will best be protected by eliminating the rendering and publication of the quarterly reports referred to in the Banking Law..."

In contrast, after the March 1933 bank holiday, the OCC resumed the collection and publication of call reports for national-charter banks. Given this divergence in policy over the call reports, households in New York were placed in a unique situation of being able to choose between banks with starkly different levels of transparency around their balance sheet.

3 Data and Summary Statistics

We construct a semiannual bank-level data set of balance sheet variables from June 1931 to December 1935 using the *Rand McNally Bankers Directory*. Rand McNally collected and disseminated

[8] For the larger banks in central reserve and reserve cities that attract deposits from other banks, local depositors may be less relevant. These larger banks, however, are excluded from our analysis.

[9] Both regulators required the publication of these call reports in local newspapers at roughly the same time (see the online Appendix B for dates). After the passage of the Federal Reserve Act, Federal Reserve member banks (which includes all national-charter and some state-chartered banks) were required to submit financial reports to the appropriate Federal Reserve Bank on dates to be fixed by the Federal Reserve Board. These dates generally coincided with the dates chosen by the OCC. The Federal Reserve Act did not, however, include the requirement to publicly report financial statements.

information about all banks in the United States. The company solicited banks to submit their balance sheet information directly to it or obtained the information from other sources, such as call reports. Fortunately, Rand McNally obtained balance sheet information directly from NY banks, and so was able to publish their balance sheets over 1933 and 1934 in its *Bankers Directory*. As a check on the data, we compared total deposits from the *Bankers Directory* to figures published in regulatory reports and found them roughly equal, attesting to the accuracy of the *Bankers Directory* (see online Appendix C).

It is important to emphasize that bankers, as opposed to households, were the consumers of the *Bankers Directory*.[10] During this period, checks were used as a national payments instrument in the United States. The fragmented nature of the U.S. banking system, however, made it difficult for banks to manage the counterparty risks arising from check clearing. In response, business information publishers such as Rand McNally collected balance sheet information and published the results with a one month lag, on a subscription basis. Bankers subscribed to these directories in order to learn about the health of the banks from which they face exposure as a result of accepting checks from the depositors at those banks. The fact that local depositors did not subscribe or otherwise use these business directories is important for the analysis in this paper, given our focus on the benefits to suppressing information by not requiring the publication of balance sheet information in local newspapers.

We do not use all NY commercial banks listed in the *Bankers Directory*. Rather, in order to compare banks with similar characteristics, we exclude banks in central reserve and reserve cities (New York City, Albany, and Buffalo).[11] This is because banks in these cities were often larger in size and had a different business model with different types of depositors. After excluding banks located in those cities, the remaining banks in our sample are mostly those that accept deposits and issue loans in local markets. In June of 1931, there are 771 banks in our data. The number of banks decreased as the Great Depression deepened. In June of 1933, there are 661 banks in our sample.

For this set of banks, we compute summary statistics of balance sheet items of national-charter and state-charter banks, where we separate those state-charter banks into those with and without Federal Reserve membership (see Table 1). Over 1931 and 1932, national-charter and state-

[10] See online Appendix A for an example of such advertisements.

[11] Albany lost its reserve city status on July 1, 1929, so banks in Albany were considered as country banks thereafter. However, we removed these banks from our analysis because the behavior of Albany banks differed from that of other country banks.

nonmember banks are quite similar in terms of total deposits, whereas state-member banks are substantially larger. Nevertheless, the composition of banks' portfolio of assets are quite similar across all three types of banks. Indeed, the average ratio of cash holdings over total assets falls within a tight range of 8.5 to 9.8 percent. Similarly, the average share of securities held over the sum of securities held and loans originated is slightly less than half across the three bank types.

Mirroring the similarities in the portfolio of assets, banks' capital structures do not vary much across national-charter and state-charter banks. As illustrated in Table 1, deposits and equity make up roughly 80 percent and 14 percent of total liabilities, respectively, for each bank type.

[Insert Table 1]

Before turning to the detailed empirical analysis, we consider the aggregate dynamics of deposits for national-charter and state-charter banks in New York. As highlighted in Figure 1, deposits for both types of banks continued to fall even after the proclamation of the national bank holiday in March 1933 and only began to increase in 1935. The change in deposits was similar for both types of banks up until 1933, when national-charter banks experienced a sharper decline in deposits relative to state-charter banks. Deposit movements then converged again starting in 1934.

[Insert Figure 1]

These aggregate movements foreshadow the empirical analysis detailed in the following section. Up until December 1932, NY national-charter and state-charter banks in our sample were facing similar declines in aggregate deposit outflows. State-charter banks then fared much better in June 1933, an effect we attribute to the NY state bank regulator's policy of information suppression. The difference in deposits lasted through 1933, before disappearing in June 1934. This disappearance aligns with theory, because the introduction of federal deposit insurance provided by the FDIC makes irrelevant the gains from making state-charter banks' balance sheets more opaque.

4 Empirical Analysis and Results

4.1 Empirical Specification

To formally test whether the NY state bank regulator's policy of information suppression had a casual impact on bank deposits, we employ a difference-in-differences estimator. Our sample period

is from 1931 to 1934, and we define the treatment to be the introduction of the policy in 1933.[12] The treated group includes both types of state-charter banks, those that are members of the Federal Reserve (state-member) and those that are not (state-nonmember), and the control group are national-charter banks. We begin by estimating the average effect of the policy in the latter half of the sample. Letting i denote a bank and t a period of time, our specification is:

$$\begin{aligned}\log(Dep_{i,t}) = \alpha &+ \beta_1 * STATE\ MEMBER_i * YEAR\ 1933-1934_t \\ &+ \beta_2 * STATE\ NONMEMBER_i * YEAR\ 1933-1934_t \\ &+ \Omega * X_{i,t-1} + \eta_i + \gamma_t + \varepsilon_{i,t},\end{aligned} \tag{1}$$

where the dependent variable is the log of deposits, which is winsorized at the 1 percent level to avoid outliers driving the estimation results. The dummy variables *STATE MEMBER* and *STATE NONMEMBER* take on the value of one for state member and nonmember banks, and the dummy variable *YEAR 1933-1934* takes on the value of one if the observation is recorded in 1933 or 1934, the period during which the NY state banking department implemented the information suppression policy.[13] The variable $X_{i,t}$, which enters the specification with a lag, represents a vector of bank-level controls that varies over time and across banks, and includes the ratio of the sum of cash to total assets, the ratio of securities to the sum of securities and loans, the sum of capital and surplus, and log of asset size. We include these valuables to control for liquidity, quality of investment, equity, and bank size, respectively. Finally, η is a vector of bank fixed effects to control for unobservable heterogeneity at the bank level which is constant over time and γ is a vector of time fixed effects. In the regression we do not include the *STATE MEMBER*, *STATE NONMEMBER* and *YEAR 1933-1934* dummy variables separately because they are not identified once we include bank and time fixed effects. We cluster error terms at the bank level in order to account for the serial correlation of error terms.

We then build upon the above by examining how the introduction of federal deposit insurance in 1934 affected depositors in conjunction with the information suppression policy. We accomplish this by allowing for separate interaction terms in 1933 and 1934. Let YEAR 1933 be a dummy

[12]The policy was introduced in March 1933 and our data provide balance sheet snapshots as of June and December of each year.

[13]These variables are not indexed by time because none of the banks in our sample changed their charter-status or Federal Reserve membership status over our sample period.

variable equal to 1 when an observation is recorded in 1933, and similarly define YEAR 1934. Our second regression specification is then,

$$\begin{aligned}\log(Dep_{i,t}) = \alpha &+ \beta_1 * STATE\ MEMBER_i * YEAR\ 1933_t \\ &+ \beta_2 * STATE\ NONMEMBER_i * YEAR\ 1933_t \\ &+ \beta_3 * STATE\ MEMBER_i * YEAR\ 1934_t \\ &+ \beta_4 * STATE\ NONMEMBER_i * YEAR\ 1934_t \\ &+ \Omega * X_{i,t-1} + \eta_i + \gamma_t + \varepsilon_{i,t}\end{aligned} \tag{2}$$

In our first specification, the coefficients β_1 and β_2 capture the effect of the information policy on deposits, whereas in the second specification the coefficients β_1, β_2, β_3, and β_4 capture this effect. If the management of the information environment is important to households when they are making deposit decisions, then the NY state banking regulator's information suppression policy should increase depositors' confidence in treated banks, leading to comparatively faster deposit growth. As a result, we expect β_1 and β_2 to have positive signs in both specifications. The introduction of federal deposit insurance, however, should at least partially offset the NY state banking regulator's policy, and so we expect smaller effects in 1934, resulting in $\beta_3 < \beta_1$ and $\beta_4 < \beta_2$ in the second specification.

4.2 Threats to Inference

There are four major concerns about the identification of β_1, β_2 in the first specification and β_1, β_2, β_3, and β_4 in the second. The first concern relates to the non-random nature of banks' charter choices. If banks opt for a national charter rather than a state charter in order to avoid stricter disclosure requirements, the estimates could be biased. Given the call reports were the primary mechanism by which depositors monitor banks, differences in the frequency of reporting could influence depositors' behavior. The NY state banking regulator, however, required the same frequency of reporting as the OCC. Moreover, the NY regulator required that state-charter banks submit balance sheet reports on dates quite close in time to those mandated by the OCC (see online Appendix B). (An exception of course is from 1933 to 1934, when the NY regulator decided not to request call reports.) Given that disclosure regulation did not differ much between national-charter

and state-charter banks in New York, it seems unlikely that banks chose a state charter in order to take advantage of lenient or lax rules regarding disclosure regulation.

The second concern is that the estimated differences in the growth rate of bank deposits between national-charter and state-charter banks may reflect differences in the demand for deposits between the two types of banks. Indeed, a potentially salient difference across the two types of banks is that national-charter banks have access to the Federal Reserve's discount window, whereas only those state-charter banks who are members of the Federal Reserve have access. As indicated in our regression specification, however, we observe which state-charter banks are members of the Federal Reserve. As a result, we can condition on membership and determine whether this feature is important in our analysis.

Another possible difference in demand across the types of banks is pricing. Perhaps national-charter and state-charter banks offered systematically different deposit rates to households. This is unlikely for two reasons: 1) Anderson, Barth, and Choi (2018) demonstrate that during this period when there were steady outflows of deposits from banks, household depositors paid little attention to deposit rates; and 2) the Banking Act of 1933 introduced Regulation Q, which imposed ceilings on the payment of interest on deposit accounts for banks that are Federal Reserve members. As such this concern does not apply to our estimates, which condition on state-member banks. The third concern is that national-charter and state-charter banks may have different compositions of depositors, which may lead to different deposit growth rates between two types of banks. Banks accepted household deposits as well as deposits due to other banks. Hence, changes in bank deposits may be driven by due-to deposits rather than household deposits. Our filtering of the data to remove all banks in reserve and central reserve cities helps alleviate this concern — as it is those banks that attract large due-to deposits. Indeed, when we examine the composition of deposits for both national-charter and state-charter banks in our sample, we find that banks in our sample have only a small amount of due-to deposits (see online Appendix D).

The fourth and last concern is that the growth of bank deposits might have been driven by the introduction of the other financial reforms during the Hoover and Roosevelt administrations, rather than the NY state banking regulator's information suppression policy. To address this point, we compared the new regulations introduced by the Banking Act of 1933 to the existing regulations for NY state-charter banks and national-charter banks and do not see examples of such reforms that have not already been addressed above. Further, we conduct a formal placebo test using data on

banks' deposits in New Jersey.

The NJ state bank regulator did not implement an information suppression policy in our sample period. As such, an analysis of deposit growth in NJ reveals if there were other reforms implemented in 1933 that differentially impacted deposit growth at state-charter and national-charter banks. New Jersey provides an apt comparison because over our sample period, the state had a deposit clientele similar to that of New York, and New Jersey's banking industry was made up of medium-sized banks with active manufacturing and industrial bases and small banks in rural areas. Lastly, like their NY brethren, NJ banks often maintained correspondent relationships with New York City banks.[14] As a result, the behavior of both due-from and due-to deposits was similar for NY and NJ banks. Given all these similarities between NJ and NY banks, if the estimated coefficients using NY banks are being driven by the introduction of new federal regulations, then we would expect see a similar effect when using data on banks in New Jersey.[15]

4.3 Results

In Table 2, we report the results from the difference-in-differences estimation. In column (1) we report the estimates for the specification described in equation (1). We find that both interaction terms, *STATE MEMBER * YEAR 1933-1934* and *STATE NONMEMBER * YEAR 1933-1934*, are positive and significant. Further, the effect of the NY state bank regulator's information suppression policy is similar across both state member and state nonmember banks; both types of state-charter banks experienced about 2.6-2.8 percent increase in the level of deposits compared to national-charter banks.

[Insert Table 2]

In column (2), we report results from the specification described in equation (2), where we allow for different effects in 1933 and 1934. Interestingly, we find the differential growth in deposits only in 1933. Both the interaction terms *STATE MEMBER * YEAR 1933* and *STATE NONMEMBER * YEAR 1933* are positive and significant. The estimates imply that state-charter banks experienced

[14] New Jersey did not have any reserve cities during our sample period.

[15] Prior to 1935 each Federal Reserve Bank implemented its own monetary policy and thus affected local conditions. Although the entire state of New York is in the second district, northern New Jersey is in the second district, and southern NJ is in the third district. Our placebo results are robust to using only banks in northern NJ (contact authors directly for those results).

an increase of about 3.4-4.4 percent in the level of deposits compared to national-charter banks. Further, the interaction terms, *STATE MEMBER * YEAR 1934* and *STATE NONMEMBER * YEAR 1934*, are not significant. State-charter banks, then, were able to increase deposits to a greater degree relative to national-charter banks in 1933, but their advantage disappears in 1934 with the introduction of deposit insurance.

[Insert Table 3]

In Table 3, we report the results of our placebo test, where we estimate the same regression described in equations (1) and (2), but using data on NJ banks. Unlike Table 2, none of the interaction terms are significant. These results suggest that other financial reforms did not cause the divergence in the behavior of deposits between national-charter and state-charter banks in 1933.

Taken together, our study indicates that the NY bank regulator's information policy helped state-charter banks to grow their deposits relative to national-charter banks.[16] The effect was of similar magnitude across both state member and state nonmember banks, and so the gains from the information suppression policy did not depend upon membership in the Federal Reserve and, consequently, access to the discount window.

This positive response by depositors to a policy of information suppression is consistent with the theoretical predictions of the global games with strategic complementarities literature cited earlier (e.g., Eisenbach (2017)); by suppressing information about individual state-charter banks, the NY banking state regulator was able to stem the outflow of deposits from state-charter banks. Further, our results support the theoretical work focused on managing information during a crisis (e.g., Gorton and Ordoñez (2014), and Gorton and Ordoñez (forthcoming)), by demonstrating that policies that suppress information about banks' portfolio of assets have significant effects on deposits, and so the stability of banks. In addition, our results show that the information suppression policy became ineffective after federal deposit insurance was introduced in 1934. Consistent with previous studies, our results show that deposit insurance makes depositors insensitive to information.[17] As a

[16] Reflecting the general outflows of deposits during the early 1930s, the result implies that state-charter banks were better able to stem the outflow of deposits with the result that they ended up with a higher level of deposits.

[17] Several papers document that the introduction of deposit insurance reduces depositors' incentives to monitor bank health (Martinez Peria and Schmukler, 2001; Demirgüç-Kunt and Detragiache, 2002; Demirgüç-Kunt and Huizinga, 2004; Iyer and Puri, 2012; Karas, Pyle, and Schoors, 2013; Iyer, Puri, and Ryan, 2016; Iyer, Jensen, Johannesen, and Sheridan, 2017; Egan, Hortaçsu, and Matvos, 2017).

result, the behavior of deposits between national-charter and state-charter banks converged in 1934 even though the NY state bank regulator's suppression policy was still in effect.

5 Conclusion

Information management plays a crucial role in ending financial crises. In line with that theory, regulators have historically been careful to manage the production and dissemination of information during a crisis in order to restore confidence in the financial system. Despite the perceived importance of managing information to end financial crises, there is little empirical work quantifying the effect of these policies.

In this paper, we study how information management affects depositors. We study how the NY state bank regulator's information suppression affected the behavior of depositors. Between 1933 and 1934, the NY state bank regulator decided not to formally collect call report data, affecting the public's ability to access state-charter banks' balance sheets. In contrast, the Office of the Comptroller of the Currency, the national-charter bank regulator, continued to collect and publish balance sheets of national-charter banks. We exploit this unique opportunity and compare the behavior of banks and depositors of state-charter banks to that of national-charter banks to measure the impact of information suppression on bank deposits. We allow for the information-suppression policy to have a different effect in 1933 and 1934 because at the start of 1934 the Federal Deposit Insurance Corporation as established and began its policy of insuring household deposits.

We find that deposits of state banks grew after state regulators implemented information suppression policy. Even though the proportion of loans against total assets increased for state banks, banks were able to increase deposit funding. In other words, these results imply that whether banks that did not have to reveal their portfolios were able to issue deposits more easily and therefore fund their loans more cheaply than banks that revealed their portfolios.

This paper is novel then, in that we present formal econometric evidence which demonstrates that in a crisis, suppressing information about banks' balance sheets leads to higher rate of deposit growth. Further, we show that this benefit is offset by the introduction of federal deposit insurance. Once again, in line with the theory, households care much less about monitoring banks once deposits are insured.

Our study has important implications for policy today. Following the financial crisis of 2007-

09, policymakers have attempted to enhance public disclosure, with the goal of improving financial stability, by promoting the market discipline of financial institutions. Our work highlights, however, that after implementing rules requiring greater public disclosure during normal times, regulators should bear in the mind the value of suppressing information about individual institutions in times of crisis.

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Table 1: Summary Statistics, 1931-1934.

	National			State member			State nonmember		
	1931-1932	1933	1934	1931-1932	1933	1934	1931-1932	1933	1934
Assets	2,343.2	2,052.5	2,029.1	6,717.3	5,756.9	5,492.3	2,907.7	2,589.9	2,542.4
	(3,042.5)	(2,574.1)	(2,594.6)	(13,472.7)	(11,338.1)	(10,855.2)	(6,821.2)	(6,003.8)	(5,728.6)
ln(Assets)	7.261	7.139	7.109	7.871	7.729	7.707	7.257	7.145	7.155
	(0.956)	(0.95)	(0.971)	(1.257)	(1.262)	(1.248)	(1.026)	(1.012)	(1.004)
Cash / Assets	0.0967	0.117	0.137	0.098	0.106	0.135	0.085	0.087	0.102
	(0.044)	(0.078)	(0.064)	(0.056)	(0.066)	(0.067)	(0.059)	(0.055)	(0.054)
Securities / (Loans and Securities)	0.486	0.523	0.572	0.413	0.433	0.468	0.419	0.456	0.473
	(0.173)	(0.165)	(0.161)	(0.159)	(0.156)	(0.158)	(0.167)	(0.171)	(0.186)
Equity / Liabilities	0.138	0.15	0.154	0.141	0.156	0.17	0.148	0.16	0.201
	(0.058)	(0.062)	(0.059)	(0.043)	(0.054)	(0.059)	(0.054)	(0.061)	(0.073)
Deposit / Liabilities	0.781	0.764	0.787	0.804	0.801	0.82	0.792	0.781	0.785
	(0.091)	(0.097)	(0.084)	(0.073)	(0.075)	(0.063)	(0.084)	(0.091)	(0.083)
ln(Deposits)	7.006	6.861	6.863	7.647	7.503	7.505	7.016	6.89	6.906
	(1.001)	(1.005)	(1.022)	(1.279)	(1.283)	(1.273)	(1.051)	(1.049)	(1.045)

Note: National are banks with national charters; State member are banks with state charters that are members of the Federal Reserve System; State nonmember are banks with state charters that are not members of the Federal Reserve System. Means are reported with standard deviation in parenthesis. Assets and deposits are in thousands of dollars.
Source: Rand McNally Bankers Directory and authors' calculations.

Table 2: Effect of the New York's Information Suppression Policy on New York Banks.

	log of deposits	
	(1)	(2)
State member x Year 1933-1934	0.028**	
	(0.01)	
State nonmember x Year 1933-1934	0.026**	
	(0.008)	
State member x Year 1933		0.044***
		(0.012)
State nonmember x Year 1933		0.034**
		(0.011)
State member x Year 1934		0.013
		(0.013)
State nonmember x Year 1934		
		0.017
		(0.009)
Constant	2.215***	2.193***
	(0.139)	(0.139)
Bank controls	Yes	Yes
Half-year fixed effects	Yes	Yes
Bank fixed effects	Yes	Yes
Observations	6,766	6,766
R-squared	0.6217	0.6220

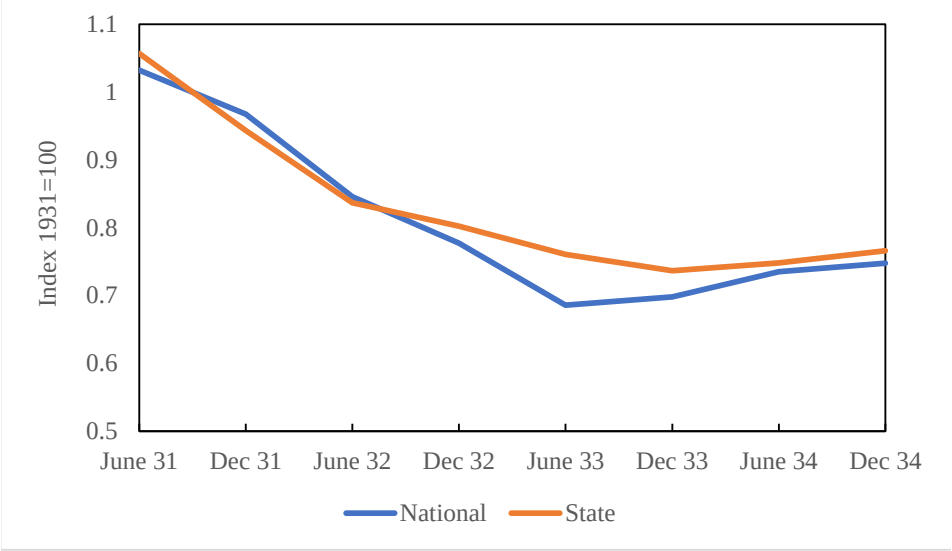
This table presents the DID estimates of the effect of the NY state bank regulators' information suppression policy on log deposits for banks in New York. The dummy variables, State member and State nonmember, take on the value of one for state member and nonmember banks, respectively. The dummy variables, Year 1933 and Year 1934, take on the value of one if the observation is recorded for years 1933 and 1934, respectively. The dummy variable Year 1933-1934 takes on a value of one if the observation is recorded for years 1933 or 1934. The interaction terms capture the effect of the information suppression policy on New York banks. Banks controls include the ratio of the sum of cash to total assets, the ratio of securities to the sum of securities and loans, the sum of capital and surplus, and log of asset size. Standard errors are clustered at the bank level and presented in parenthesis. Log deposit variable is winsorized at the 1% level. ***, **, and * indicate significance at the 1%, 5%, and 10% levels respectively.

Table 3: Placebo Test Results Using New Jersey Banks.

	log of deposits	
	(1)	(2)
State member x Year 1933-1934	-0.025	
	(0.024)	
State nonmember x Year 1933-1934	-0.021	
	(0.022)	
State member x Year 1933		-0.001
		(0.021)
State nonmember x Year 1933		-0.039
		(0.032)
State member x Year 1934		-0.051
		(0.037)
State nonmember x Year 1934		
		-0.003
		(0.022)
Constant	4.539***	4.541***
	-0.537	-0.534
Bank controls	Yes	Yes
Half-year fixed effects	Yes	Yes
Bank fixed effects	Yes	Yes
Observations	4,008	4,008
R-squared	0.3973	0.3983

This table presents the DID estimates of the effect of a treatment introduced in 1933 on log deposits for banks in New Jersey. The dummy variables, *State member* and *State nonmember*, take on the value of one for state member and nonmember banks, respectively. The dummy variables, Year 1933 and Year 1934, take on the value of one if the observation is recorded for years 1933 and 1934, respectively. The dummy variable Year 1933-1934 takes on a value of one if the observation is recorded for years 1933 or 1934. Bank controls include the ratio of the sum of cash to total assets, the ratio of securities to the sum of securities and loans, the sum of capital and surplus, and log of asset size. Standard errors are clustered at the bank level and presented in parenthesis. Log deposit variable is winsorized at the 1% level. ***, **, and * indicate significance at the 1%, 5%, and 10% levels respectively.

Figure 1: Evolution of Deposits of National- and State-Charter Banks in New York, 1931-1934.



Note: Aggregate deposits are indexed to the average of the June 1931 and December 1931 levels.
Source: Rand McNally Bankers Directory and authors' calculations.

Appendices

A Pictures from NY newspapers in the 1930s

In this section we provide examples of how banks published information about their balance sheet in local newspapers (see Figure A1). Further, we provide examples of how *Rand McNally* advertised its banking directory (see Figure A2), with the goal of demonstrating that the banking directory was a service aimed at bankers and not depositors.

Figure A1: Balance Sheets Published in Local Newspapers

THE COUNTY REVIEW, THURSDAY, JANUARY 13, 1927

Record Prosperity Marks Year 1926 In Suffolk; Good Future Expected

Business Growth Regarded as Most Remarkable Ever Seen By County — Real Estate Values Continue Gain.

With real estate selling at record breaking prices in every section of Suffolk county, with bank resources piling up in an almost phenomenal way, with actual construction work in the county at the highest peak ever known, with mortgage companies constantly organizing and doing a flourishing business, with general prosperity on the farms and in the villages, trades at a very high ebb, this county enters a new year with a very comfortable feeling.

There is stability everywhere, and if 1927 proves to be anywhere near as prosperous as did 1926 has been, Suffolk county, for any reason or any other reason, will have the Suffolk county will have the best course to complain.

The strides made in almost every direction in Suffolk county during 1926 are being referred to as little short of amazing. Never before, it is pointed out, has the growth of this as Suffolk is classed with being advanced so tremendously in a single year.

One single concrete item seems to indicate the great prosperity more emphatically than it could be stated in any other way. The Suffolk County National Savings Bank has loaned over $4,000,000 on mortgages and a few days ago when the bank were being checked up it was found that not a cent was owing for the loans. It is likely, too, that from the records of the other banks in the Suffolk newspaper publishers are finding itself with the minority of "local matters," the publication of which is always considered "good picking."

That the value of the real estate in Suffolk county increased considerably profit by the increased assessment values, even if that did not cause an almost consolidated figure for a single year. During 1926 the assessors added 2,000,000 to real figures, the assessors added 2,000,000 to the assessment, and the total assessment substantially $900,000. One doesn't need to be a mathematical genius to see that only a few years—in small that then the assessment will be doubled, or perhaps twice as much as the increase in 1926. Nothing, except possibly the prosperity of the banks, so graphically pictures the county's great commercial advancement as the rapidly soaring assessment values. The assessment value of the county is at least ten times the assessment and the actual value.

Real estate sales have been little short of remarkable. Official figures may be cited. In seven months of 1926—the December figures were not available when the County Clerk's office, at Riverhead, a total of 14,642 conveyances for the entire twelve months. In seven months of 1925—the December figures were available—there were 13,542 conveyances had been 19,262 deeds filed, or almost double in eleven months the number the county had for twelve months in 1925.

During 1925 there were 4,522 mortgages filed. In 11 months of 1926 there were 8,000 mortgages filed, almost double in eleven months the number for the entire year 1925. The great bulk of them are purchase money mortgages, and such mortgages are considered to reflect prosperity.

The mortgages filed in Suffolk county during the eleven months of 1926 aggregated nearly $16,000,000, on which there was paid a mortgage tax of $320,000, which, compared by this county to collect—and all of December is to be added to both the aggregate value of the mortgages and the tax collected.

Banks Highly Prosperous

It doesn't seem strange, looking at these figures, to find mortgage companies and banks highly prosperous. Such is actually the case. And that the mortgage companies are prosperous is being realized by the stockholders at this time, for they are receiving dividend checks. Real estate mortgage companies, Real Estate Mortgage Corporation, Inc., organized only a few months ago, for today it is paying a dividend of 18 cents per share on the preferred stock.

The Patchogue Mortgage Company has been so successful in its first year of business that it already has sought an expansion plan of its own. Its capital will exceed the Suffolk County Mortgage Company, the Huntington Mortgage Corporation, the Amityville Bond and Mortgage Company, these and others are all prosperous and all are seeing to be flourishing.

Figures Not Yet Complete

While the aggregate of the deposits in the banks of the country is the numerous banks in the country was not obtainable when this was writing, it is known that they have compared in a most satisfactory way. The Suffolk County National Bank led with the aggregate a few days ago, for the period ending Sept. 30, shows capital, surplus and profits, according $6,000,000 on which items are based — and this item does not take into consideration the figures for the Bank of Southold, which, if added, would greatly swell the grand total.

Two new banks have been established in the county within the year. The Hampton Bays National is one of these, and although located in a small community, it is doing a commercial business. Opening for business in September with a capital of only $25,000, it already has filed its money of close to $400,000. The Commercial Trust Company has just opened for business at Sayville.

County Proud of Banks

The banks are the pride of the county. Every one of them is said to be unusually secure. Let such cases be the exception, for the fortunate stockholders. Even with collapse of the stock every little while the stockholders still seem to more than double in per in every instance and is most. Not only do the stock brings many times its cost.

Take the Bank of Huntington, for example. That institution has been paying its stockholders 40 per cent each year. Shortly its capital is again to be doubled.

The year 1926 proved to be the greatest year the farmers ever knew. Not only did they reap record crops, but they got high prices for substantially everything sold. This prosperity, of course, is largely reflected in the sales of motorcars and other luxuries, in the addition of better buildings for homes and business, in contemplated trips to Florida and elsewhere; in providing for college educations for the children of the family.

Farms in Demand

The great prosperity of this year, too, has sent numerous new agriculturists seeking to purchase additional farms and in causing farm laborers to decide to go to for themselves. The demand for farms exceeds the supply, with prices soaring to new heights. The price of $1,000 per acre does not seem to scare those who are trying to buy one.

The evidence of prosperity is also reflected in the fact that the county's population increased about 20,000 since the last census, or about 2,000 in every way, it seems to be full. Suffolk is rich and are well afford the luxury (but getting to be considered an economic necessity) of having the best there is in travel facilities.

Millions in Developments

Unknown millions are being poured into a dozen or more of attractive real estate developments, beginning with the tremendous work that Fisher is doing at Montauk and extending to the extreme westerly point of the county. Thousands of people from other parts are visiting Suffolk for the first time. They stand amazed at the evidences of prosperity, and the comforts of home life, the modern towns, and friendliness of the people, and many of them decide to remain permanently. It is such visits as these, plus the ordinary developments of the natural resources, that is causing the county to have added an assessment value of $40,000,000 in a single year.

Many New Public Buildings

Public improvements have run in considerable numbers. New and elaborate schools are being constructed in several different places. In Southold the savings bank there is erecting a building for itself, a structure that is likely to cost $200,000. St. Patrick's Roman Catholic church is building a magnificent place of worship there. Both buildings will be ready next year.

In Riverhead the county seat has started work — the preliminary work — on a new jail, a structure that men know that will cost more than $200,000 on a tract of land for which is paid $120,000. The Title Guarantee and Trust Company is completing a building here for its own use, and the Suffolk County National Bank is building a home for the Suffolk Title and Guarantee Company.

These are just a few of the things that stand out conspicuously in considering the general prosperity of Suffolk county. Everyone seems to be flourishing.

Figures are not the only indication of the prosperity in Suffolk county. The spirit of the people, the general optimism and hopefulness, the willingness to boost and support a belief that the future is just as bright.—Brooklyn Eagle.

BABYLON NATIONAL FOUNDED IN 1893

The Babylon National Bank is an old established institution and has been in existence since 1893, meeting all of the banking needs of its customers. Its original capital was $50,000 and the business started in a small way.

In 1908 it erected its present brick building with a fireproof banking room and vault. It is located on Main street, adjoining the Babylon Town House.

In 1922 in order to provide more room for its increased number of employees and to afford more accommodations for its growing clientele, the Bank took over an attractive room for its money patrons, built additional vaults and enlarged its safe deposit department to 1,000 boxes. The Bank's capital is now $100,000.

The capital was increased in 1923 to $100,000 and a Trust department has been added. The resources have increased to $1,000,000 and the Bank is now equipped to furnish every banking and trust company need.

$136,950 PAID IN CASH DIVIDENDS

The Bank of Port Jefferson was established and commenced business in July 1891, when there were very few people in the village, with a capital of $25,000, which was increased on January 15, 1925, to $100,000 by the declaration of a stock dividend of 100%, and the sale of 500 shares new stock at the price of $200 per share, the offering was over-subscribed seven times.

A semi-annual dividend has recently been declared at 5% regular and 1% extra, making a total of $136,950 paid out in cash dividends.

The Bank of Port Jefferson is a consistent money maker, the original stockholders having received an average of 18% annually in cash dividends in addition to the stock dividend.

The officers are: Frank Naples, president; E. B. Hayden, Vice-president; and cashier, and H. E. Davis, assistant cashier, all of whom are natives of Port Jefferson.

The Bank of Huntington is managed by the same under the supervision of a strong and conservative Board of Directors. When Mr. Dayton was elected cashier in 1912, the capital and surplus stood at $75,000, and resources at about $750,000, which have now grown to $255,000 and $1,750,000 respectively.

BANK OF HUNTINGTON MAKES HIGHWAY BOND PURCHASE

The Bank of Huntington proved to be the successful bidder on two issues of highway improvement bonds, one for $8,150 and the other for $10,000, at a discount of 4.75 per cent, to Superintendent Jay Lewis and the Town Board at the Town Hall. The local bank offered our real account interest to date of delivery for the bonds, same to bear interest at the rate of 4½ per cent per annum. The proposal of the bank was found to be more favorable than the offers of other competitors, received bids ranging from 4.75 per cent to 5 per cent.

The employees of the Suffolk County Bank of the Home Title Guarantee Co., in Riverhead, of which George W. Creighton, Jr., is manager, received bonuses of 21 per cent.

PROGRESS OF THE BANK OF HUNTINGTON

The Bank of Huntington, organized in 1898 with a capital of $30,000, a surplus of $1,000, and resources of $103,931, has paid dividends every year, increased its surplus and increased bank capital and surplus.

The capital was increased to $100,000 in 1920 with $60,000 surplus, and resources of $3,343,000. At this time the officers were as follows:

President, Lewis Ketcham; vice-president, Douglas Conklin, vice-president, William S. Boyle, vice-president, Ross W. Downs, cashier; Addison W. Samuels, Clifton F. Gardner and Harold L. Tuttle, assistant cashiers, Henry S. Brush is chairman of the Board.

NORTHPORT TRUST CO. HAS SPLENDID RECORD

Starting in a plain, wooden frame building in 1891, as the Bank of Northport, and merging with the Northport Trust Company in 1920, under the direction of the Board of Directors, in 1922, 35 years of financial service has been given to the public by this progressive concern.

To-day, the Northport Trust Company occupies a splendid Georgian marble, steel reinforced structure of its own, and is equipped with the most modern fixtures of banking and other financial business every year, and keeps in step with the progress of the times as it has since its inception.

As a trust company the concern can do both National and State Bank service. The building, which this firm now occupies, was built in 1925. A operation from a booklet "Thirty-four Years of Financial Service," published by the Trust Company, which gives a history and of the service which the Northport Trust Company gives.

It cannot only offer the best possible banking and financial facilities to the community, but it can also function as executor, administrator, officer of directors, nor the court, financial agent, trustee, receiver, in trust, guardian, in fiduciary and in many other ways too varied to begin describe. Suffice to say that the Trust company can legally become the veritable *alter ego* of its patrons and clients.

Its staff of officers is now composed of Frank Jacobsen, president; vice-president, Joseph B. Morrell, vice-president; Charles S. Mott, treasurer; Richard Hawkins, vice-president, and assistant secretary; Charles S. Smith, secretary. Other boys of Agriculture, Ithaca, N. Y.

Freeman T. Hulse, Cliff S. Beyer, Edward Ed Lewis and Frank Gardenhuis.

The State College invites undergrad to help promote and other group in debating. The result robust is ob. Inquiry about the trophy, Inquiry addressed to the State College of Agriculture, Ithaca, N. Y.

The Mattituck Bank

MATTITUCK, N. Y.

Established 1905

Capital Stock $75,000

Surplus and Undivided Profits $95,000

OFFICERS

P. R. TUTHILL, President

W. V. DURYEE, Vice-President

E. D. CORWIN, Cashier

H. L. FLEET, JR., Asst. Cashier

DIRECTORS

WILLIAM M. HUDSON, E. D. CORWIN, J. B. HUDSON, H. R. CONKLING, W. V. DURYEE, CHARLES GILDERSLEEVE, HARRY W. PETRIS, N. S. TUTHILL, WILLIAM H. DRUM, J. A. TORREY, C. E. HALLOCK, C. J. McNULTY, G. E. PENNY, P. R. TUTHILL, A. L. DOWNS

Bank of Southold

SOUTHOLD, N. Y.

Established April 13, 1908

Capital $25,000.00

Surplus and Undivided Profits Earned $40,412.95

Interest allowed on Special Deposits

Interest paid on Checking Accounts

Safe Deposit Boxes to Rent

Officers

HOWARD O. TUTHILL ..... President

S. LESTER ALBERTSON, WILLIAM H. GLOVER ..... Vice-Presidents

ALBERT T. DICKERSON ..... Cashier

RICHARD T. MERWIN ..... Assistant Cashier

SILAS A. H. DAYTON ..... Counsel

Suffolk County National Bank

RIVERHEAD, N. Y.

(Organized January 4, 1890)

Capital Stock $100,000

Earned Surplus and Undivided Profits $276,000

Total Resources $3,500,000

Officers

WILLIAM R. DUVALL ..... *Chairman of the Board*

B. FRANK HOWELL ..... *President*

GEORGE H. PERKINS ..... *Vice-President*

ROBERT P. GRIFFING ..... *Vice-President*

ELLIS S. DUVALL ..... *Cashier*

JOHN C. STARK ..... *Assistant Cashier*

JOSEPH A. KAELIN ..... *Assistant Cashier*

Directors

Henry B. Howell, William H. Duvall, Zophar M. Woodhull, Joshua T. Fanning, George H. Perkins, William F. Flanagan, Robert P. Griffing, Frank J. Corwin, B. Frank Howell, Frank C. Cooper, George W. Hildreth, Henry A. Hallock, William C. Salmon, Ellis S. Duvall

Fenimore Mayer

Save Your Savings in a Savings Bank

STATEMENT

of

The Union Savings Bank

Patchogue, New York

January 1, 1927

Amount due 9702 Depositors	$6,467,809.04
Due School Savings Depositors	14,276.09
Due Christmas Club Depositors	5,291.14
TOTAL	$6,487,376.27

THIS MONEY IS HELD OR SAFELY INVESTED AS FOLLOWS

Cash on hand and in Banks and Trust Companies	$ 279,535.27
U. S. Government Bonds (market value)	463,550.00
State, Town, Village, City and School Bonds (market value)	1,400,276.00
First Mortgage Railroad Bonds (market value)	402,500.00
First Mortgages on Real Estate	4,814,965.00
Loans on Savings Bank Pass Books	13,403.00
Interest due and accrued	59,059.78
Banking House and Lot	22,000.00
Other Assets	47.50
TOTAL ASSETS TO MEET INDEBTEDNESS	$7,455,336.55
Deduct what we owe depositors as above	6,487,376.27
LEAVES A SURPLUS AT MARKET VALUE OF	$ 967,960.28
Surplus at Par Value	$887,484.28
Surplus at Investment Value	$900,978.09

INTEREST CREDITED AND PAID QUARTERLY SINCE JULY 1, 1924, AT THE RATE PER ANNUM OF 4½%

Officers

Emerson G. Terrell, President

William A. Hulse, Vice President — Edwin Johnsknecht, Jr., Secretary

Robert S. Pellettreau, Vice President — Robert A. Van Tuyl, Ass't. Secretary

TRUSTEES

(In the Order of their Election)

Walter H. Jayson, Emerson G. Terrell, William A. Hulse, Arthur H. Terry, Nelson McBride, E. Eugene Hawkins, Winfield S. Bennett, Celsten G. Roe, Robert S. Pellettreau, Riley P. Howell, Ralph B. Dayton, Joseph T. Lantz, Arthur M. Swezey, Edwin Johnsknecht, Jr., John E. Roe, John Westerbeke, Joseph J. Robinson, Edgar A. Sharp, Clarence M. Vrooman, J. Robert Bailey, Jeremiah Robbins, Fred M. Roland, John E. King, Willis A. Reeve

Charles O. Dayton

ROBERT S. PELLETREAU, Counsel

TASKER & CO.

MORTGAGE LOANS

REAL ESTATE

SUFFOLK COUNTY TITLES SEARCHED

INSURANCE

GREENPORT, N. Y.

Suffolk County Trust Company

RIVERHEAD, N. Y.

Capital Stock $200,000

Surplus and Undivided Profits $394,243.91

Officers

President ..... ORVIS H. LUCE

Vice-President ..... ERNEST W. TOOKER

Vice-President ..... FRANK W. YOUNG

Secretary ..... TERRY W. TUTHILL

Assistant Secretary ..... EDWARD S. LUCAS

Directors

Ralph C. Bowen, Chauncey W. Davis, James Elton, William R. Fanning, Edwin D. Fishel, David J. Gilmartin, Hudson V. Griffin, James O. Hagen, Samuel Harding, Fred S. Hill, Orvis H. Luce, Charles McCabe, Frank M. Newins, Ernest W. Tooker, Eugene G. Warner, Frank W. Young

SOUTHOLD SAVINGS BANK

SOUTHOLD, SUFFOLK COUNTY, N. Y.

Jan. 1, 1926, this Bank credited its Depositors at the rate of ..... 5% on the first $500 of each account.

On the remainder of larger accounts credited interest at the rate of 4½%

Money deposited on or before April 11, 1927, will draw interest from April 1, 1927.

Blanks for Opening Accounts and Depositing by Mail Sent Upon Request

OFFICERS

CLARENCE C. MILES ..... President

JOSEPH N. HALLOCK, FREDERICK K. TERRY ..... Vice-Presidents

FREDERICK K. TERRY ..... Sec.-Treas.

RENSSELAER C. TERRY, ISRAEL P. TERRY ..... Asst. Treas.

RESOURCES

Total Assets as per value $10,026,855.38

LIABILITIES

Total due Depositors (including interest at 5% and 4½% to date) $8,425,701.64

Surplus (par value) $1,595,134.16

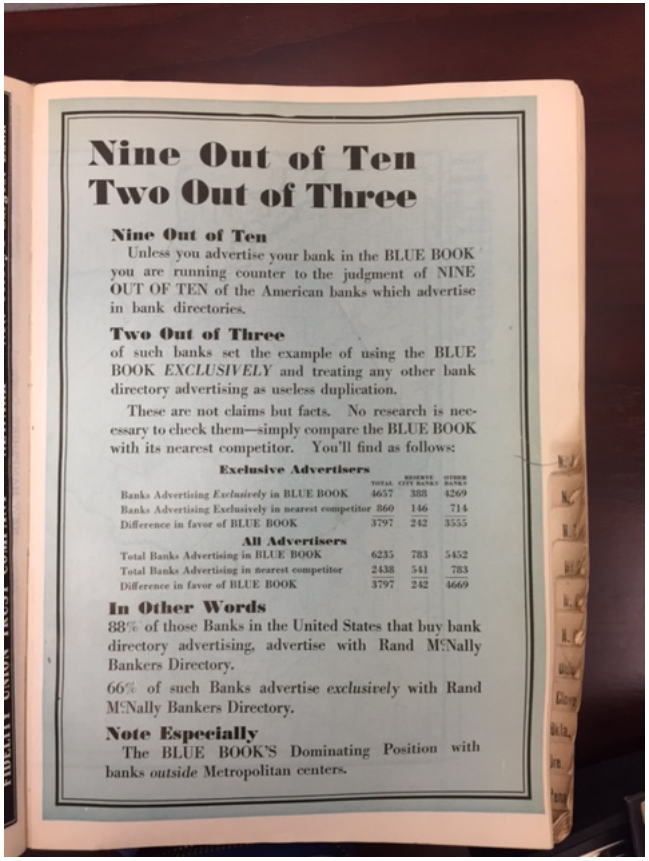
Surplus (market value) 1,602,480.47

Surplus (investment value) 1,847,428.19

Total Assets (market value) 10,188,181.11

Total Assets (investment value) 10,071,129.83

Figure A2: Subscription Advertisements in Rand McNally Directory.



Nine Out of Ten
Two Out of Three

Nine Out of Ten

Unless you advertise your bank in the BLUE BOOK you are running counter to the judgment of NINE OUT OF TEN of the American banks which advertise in bank directories.

Two Out of Three

of such banks set the example of using the BLUE BOOK *EXCLUSIVELY* and treating any other bank directory advertising as useless duplication.

These are not claims but facts. No research is necessary to check them—simply compare the BLUE BOOK with its nearest competitor. You'll find as follows:

Exclusive Advertisers

	TOTAL	RESERVE CITY BANKS	OTHER BANKS
Banks Advertising *Exclusively* in BLUE BOOK	4657	388	4269
Banks Advertising Exclusively in nearest competitor	860	146	714
Difference in favor of BLUE BOOK	3797	242	3555

All Advertisers

Total Banks Advertising in BLUE BOOK	6235	783	5452
Total Banks Advertising in nearest competitor	2438	541	783
Difference in favor of BLUE BOOK	3797	242	4669

In Other Words

88% of those Banks in the United States that buy bank directory advertising, advertise with Rand McNally Bankers Directory.

66% of such Banks advertise *exclusively* with Rand McNally Bankers Directory.

Note Especially

The BLUE BOOK'S Dominating Position with banks *outside* Metropolitan centers.

Before YOU SIGN ~

A contract for bank directory service, give careful consideration to the following facts:

1. The Rand McNally Bankers Directory (The Bankers Blue Book) for more than 60 years has been the standard publication of its kind.
2. It has a paid circulation several times larger than its nearest competitor, and larger than all similar directories combined.
3. 88% of the banks subscribing to bank directories buy the Rand McNally Bankers Blue Book.
4. Based on circulation its rates are one-third that of any similar publication.
5. Thousands of Commercial Banks, Savings, Trust and Investment Banking Houses advertise only in THE BANKERS DIRECTORY.
6. The number of advertisers alone greatly exceeds the number of paid subscribers to any similar work.
7. Its greater prestige, circulation and preference is deserved because it is the most reliable and comprehensive reference book of its kind and the publishers spare no expense in keeping it complete, thorough and up-to-date.
8. The Blue Book is the Official Numbering Agent of the American Bankers Association.

Your next bank directory should be

The RAND McNALLY BANKERS DIRECTORY

The Bankers Blue Book since 1872

RAND McNALLY & CO., *Publishers*, 536 S. Clark St., Chicago

NEW YORK CITY SAN FRANCISCO WASHINGTON, D. C.

B Call Dates for National-Charter and NY State-Charter Banks

In order to alleviate the concern that banks' choice of charters might be driven by disclosure regulation, we show that the frequency of reporting was the same across national-charter and New York state-charter banks. Further, the call dates were close in time. This is illustrated in Table B1, which shows dates for reporting for national- and state-charter banks in Panels A and B, respectively.

Table B1: Dates for Call Reports

	National-Charter Banks)											
	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC
1929			27			29				4		31
1930			27			30			24			31
1931			25			30			29			31
1932						30			30			31
1933						30				25		30
1934			5			30				17		31
1935			4			29					1	31
1936			4			30						31
1937			31			30						31
1938			7			30			28			31
	NY State-Charter Banks											
	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC
1929			22			29			27			31
1930			27			30			24			31
1931			25			30			30			31
1932			28			30			30			31
1933												
1934												
1935			30			29			28			31
1936			27			30			30			31
1937			31			30			30			31
1938			31			30			28			31

Source: National-charter banks: Rand McNally Bankers Directory; State-charter banks: Annual Report of the Superintendent of the Bank.

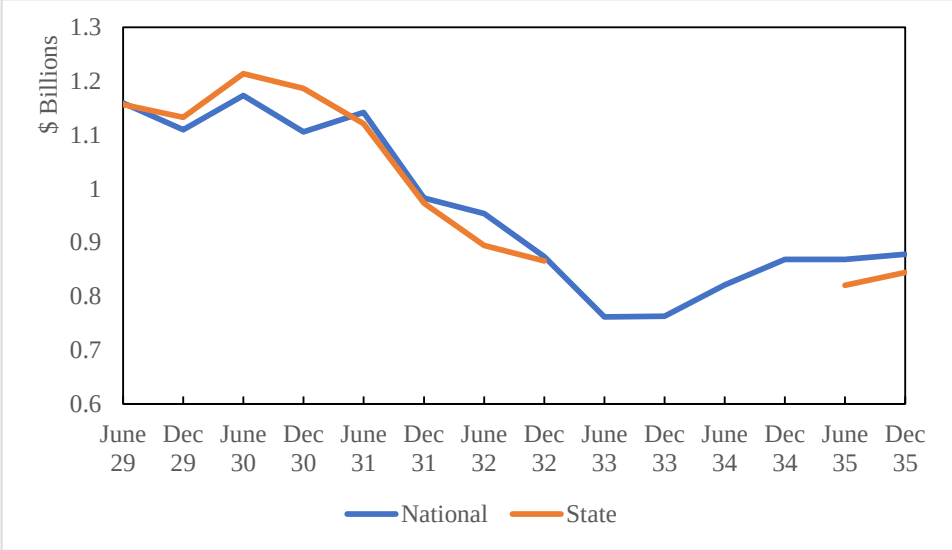
C Accuracy of Bank Balance Sheets from Rand McNally

We check the accuracy of bank balance sheet information from *Rand McNally Bankers Directory* by comparing it to information published in regulatory reports. We use the *Annual Report of the Superintendent of Banks* and the *Annual Report of the Comptroller of the Currency* for state-charter and national-charter banks, respectively. State-charter bank reports provide balance sheet information for individual banks and trust companies at the quarterly frequency. In contrast, national-charter bank reports provide balance sheet information aggregated at the state level as well as information for country banks and reserve city banks separately. Because banks in Albany and Rochester were considered country banks during the period of our study, we include banks in these cities when we create comparable plots for state-charter banks.

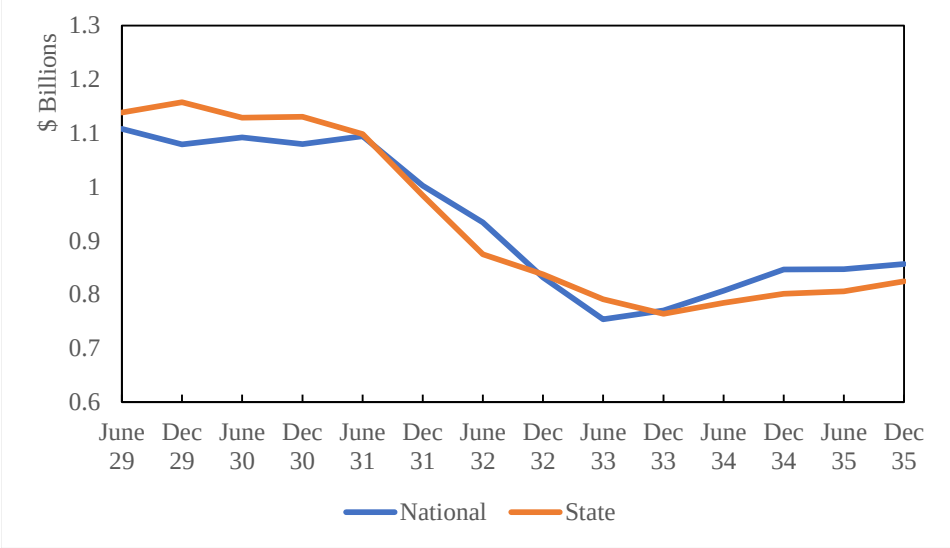
In Figure C3, we plot aggregate deposits at New York national-charter and state-charter banks outside reserve cities from June 1929 to December 1935. We plot data from official reports and Rand McNally in Panels A and B, respectively. Aggregate deposit data from Rand McNally follows the same pattern as the aggregate deposit data from official reports, verifying that Rand McNally collected accurate balance sheet information for banks in New York.

Figure C3: Aggregate Deposits in New York over Time by Bank-Charter Type.

Panel A: Regulatory Data



Panel B: Rand McNally Data



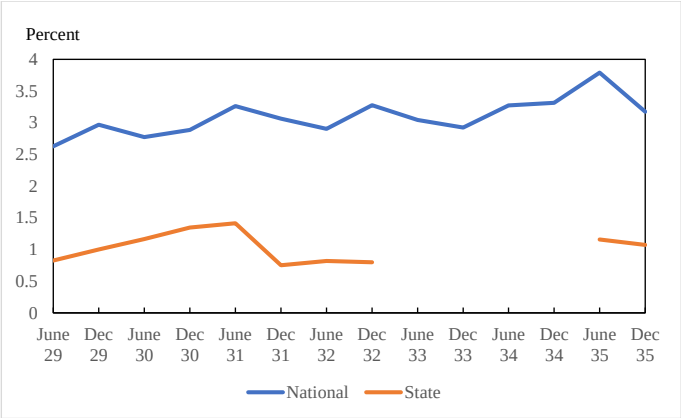
Source: National-charter banks: Annual Report of the Comptroller of the Currency; State-charter banks: Annual Report of the Superintendent of Banks.

D Composition of Deposits

We examine the composition of total deposits for national-charter and state-charter banks from 1929 to 1935. In the *Rand McNally Bankers Directory* data, interbank deposits due to other banks and retail deposits are summed up and so not distinguishable. In the regulatory data, however, these two types of deposits are separately reported. We find these data in the *Annual Report of the Superintendent of Banks* and the *Annual Report of the Comptroller of the Currency* for state-charter and national-charter banks, respectively. In order to rule out the possibility that the changes in deposits highlighted in our paper were driven by interbank deposits due to other banks rather than retail deposits, we use the regulatory data to study the changes of the ratio of interbank deposits due to other banks against total deposits over time for banks.

Figure D4 plots the ratio of interbank deposits due to other banks against total deposits from June 1929 to December 1935 for banks in New York. The first point to note is that interbank deposits due-to other banks did not comprise a large portion of total deposits. For national-charter banks, due-to deposits comprise about 3 percent of total deposits whereas for state-charter banks they comprise about 1 percent. Second, the ratio of interbank deposits to total deposits is quite stable over our sample period. As a result, it is unlikely that changes in deposits highlighted in our paper are driven by the behavior of interbank deposits rather than retail deposits.

Figure D4: Ratio of Interbank Deposits to Total Deposits in New York by Bank-Charter Type



Source: National-charter banks: Annual Report of the Comptroller of the Currency; State-charter banks: Annual Report of the Superintendent of Banks.