Interest Rate Caps and Bank Loan Supply: Locking out the Small Borrower in the Great Depression

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Abstract

The debate over interest rate caps intensified after legislation establishing a new Annual Percentage Rate (APR) ceiling on credit cards was introduced in 2025 and President Trump later called for a one-year cap beginning in early 2026. Yet the endogeneity of modern rate caps, combined with the limited availability of granular banking data, makes it difficult to cleanly identify their effects on lending and financial stability. To overcome these challenges, we study changes in an interest rate ceiling applied to small-loan brokers in New Jersey during the Great Depression. Using newly assembled archival data, we show that small-loan volumes fell sharply when the cap was lowered and, despite deteriorating macroeconomic conditions, rebounded once the cap was raised. The policy shift had lasting consequences: the initial reduction in the cap triggered widespread broker closures, permanently shrinking the market and increasing concentration. These results underscore a central policy trade-off—while strict rate caps may shield borrowers from high costs, they can also eliminate essential credit options for financially vulnerable households.

JEL classification: G01, G21, G28, N12, N22
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1. Introduction

An interest rate ceiling is a widely used policy tool in both developing and developed countries to lower the overall cost of credit or protect consumers, yet the policy remains controversial. Advocates argue that caps are necessary to shield vulnerable consumers from predatory lending and excessive rates, especially in markets with significant bank market power. Critics contend that caps reduce credit availability, thereby harming lower-income households who rely on these options. In the United States, there has been considerable recent debate over the use of such controls. For instance, lawmakers' arguments for caps to slow the proliferation of payday lenders align with state actions like the 2020 lawsuit by California, Illinois, and New York, which challenged an OCC rule for allegedly undermining state usury limits on loans originated by out-of-state banks and later sold to in-state entities. Most recently, in 2025, bipartisan legislation was introduced to cap credit card interest rates at 10 percent—about half the current average of roughly 21.5 percent—for five years. The legislation seeks to dramatically lower borrowing costs and address concerns over high interest rates that contribute to prolonged consumer debt burdens.[1] When legislation stalled in Congress, President Trump pushed the debate back to the surface by calling for a one-year cap starting on January 20, 2026. However, banks and trade groups oppose an APR cap, with arguments centering on the economics of risk and credit availability.[2]After Trump's demand, for instance, JPMorgan Chase CFO Jeremy Barnum stated to reporters on January 13, 2026: "Our belief is that actions like this will have the exact opposite consequence to what the administration wants for consumers …Instead of

[1] "10 Percent Credit Card Interest Rate Cap Act." H.R. 1944, 119th Congress, 2025, www.congress.gov/bill/119th-congress/house-bill/1944.

[2] Calem, Paul, and Alexander Kim. "The Potential Adverse Consequences of a Credit Card Interest Rate Cap." *BPI Research Note*, May 19, 2025; Joint Trades Opposition Letter to U.S. House of Representatives on H.R. 1944 (10 Percent Credit Card Interest Rate Cap Act). Signed by ABA, BPI, Consumer Bankers Association (CBA), and other financial groups, March 11, 2025; American Bankers Association (ABA). "State Bankers Association Letter Opposing the 10 Percent Credit Card Interest Rate Cap Act as an Amendment to the GENIUS Act," May 22, 2025.

lowering the price of credit, we'll simply reduce the supply of credit, and that will be bad for everyone: consumers, the wider economy, and yes, at the margin, for us".

The debate over the effectiveness of interest rate caps revolves around their effect on bank lending. After the caps are introduced, a decline in overall bank lending may be observed. The consumer welfare effects of interest rate caps hinge on whether this contraction results from a restricted supply of loans or decreased loan demand. If caps are binding, then lenders would reduce the supply of credit, thereby disproportionately harming those most in need of credit. However, even if caps are not binding, a simultaneous decline in loan demand could still lower loans, potentially leading the cap change to protect consumers from excessively high borrowing costs. Assessing the effectiveness of interest rate caps therefore requires examining their impact on loan supply while controlling for loan demand.

Recent studies attempt to overcome these identification challenges by using granular data and quasi-experimental research designs that exploit variation in interest rates across countries (or US states) and over time (e.g., Benmelech and Moskowitz, 2010; Bodenhorn, 2007; Bolen at al, 2023; Fekrazad, 2020; Rigbi, 2013; Zinman, 2010). These studies leverage differences in policy exposure to compare outcome variables before and after policy changes between treated and control locations. However, they face empirical challenges because they cannot adequately control for other location-level factors that may affect loan demand and correlate with endogenous policy changes. Additionally, these studies typically examine individual institutions that provide a range of lending services. It is thus impossible without internal data to examine the loans affected by the cap separate from a bank's other lending. Finally, the lack of loan-level and bank-level data unaffected by interest rate cap changes makes it difficult for researchers to isolate the impact of these caps on loan supply while controlling for loan demand. A recent

working paper by Burga et al.(2024), attempts to overcome this problem by comparing loans of different sizes within banks after the introduction of interest rate caps on small loans.

In this paper, we study the effectiveness of interest rate caps by examining the relationship between the cap, credit supply, and the survival of New Jersey small loan companies during the Great Depression. The brokers exclusively made small loans of less than $300 at high interest rates. Concerned that small loan companies were earning excessive profits and potentially harming borrowers, New Jersey's legislature responded in 1929 by reducing the interest rate ceiling for these companies from 3% to 1.5% per month (42.58% and 19.56% per year respectively). However, just two years later, lawmakers reversed course and raised the ceiling to 2.5% per month (34.49% a year). To study the changes in response to the cap, we collect annual individual-level data on all small loan brokers from the *Annual Report of the Commissioner of Banking and Insurance for the State of New Jersey* and on all commercial banks from the *Rand McNally Bankers' Directory*.

We compare the outcomes of brokers to commercial banks using a difference-in-differences approach. We start by measuring the impact of the changes in interest rate caps on small loan brokers relative to commercial banks that were not subject to the change. Both small loan brokers and commercial banks provided small loans, but only small loan brokers were subject to the cap change. By using the exogenous factor of changing caps, we are able to control for omitted time-varying factors, such as changes in loan demand and macroeconomic conditions. These factors should have influenced the behavior of both small loan companies and commercial banks in the same manner. The use of the difference-in-difference estimators alleviates econometric concerns by controlling for loan demand and profitable investment opportunities.

In addition, the fragmented nature of the banking system helps us control for loan demand driven by local economic conditions. During the period, branching was strictly limited and customers did not travel long distances to bank. Numerous banks existed, with over 500 unique banks and brokers active in 1929 in New Jersey alone. Using balance sheet data at the bank-level mitigates biases arising from tests using aggregated, institutional-level data because these were unit banks that operated locally. We therefore know precisely where demand for loans originated for each bank and where loans were received. This allows us to include town-fixed effects to control for heterogeneous loan demand across these locations.

The fact that the period includes both lowering and raising the cap allows us to better isolate whether the cap was, in fact, binding. We find that the cap played an important role in the ability of small loan brokers to provide credit. After the cap was lowered to 1.5% per month, small loan brokers reduced their lending relative to commercial banks. Conversely, when the cap was raised to 2.5% per month, small loan brokers experienced much larger increases in lending. Therefore, even though commercial banks displayed a downturn in lending throughout the Great Depression, brokers' lending declined much more sharply during 1930 and 1931 and rebounded in 1932 and 1933 even before the Depression had ended. Importantly, we next show that commercial banks did not increase their loans in response to a decline in lending by nearby brokers. These results suggest that borrowers of small loan brokers were unable to obtain credit from banks and were effectively shut out of the market.

Finally, we examine how the cap affected the survival of small loan brokers. To demonstrate that the interest rate cap was responsible for the collapse of small loan brokers (and their lending), we use broker-level information on interest rates charged in 1929. Even after controlling for the broker's balance sheet position, we see that brokers charging higher interest

rates in 1929 were more likely to close by the end of 1930. Among those brokers that survived, those with higher interest rates before the change experienced the largest decline in lending.

To summarize, our study shows that changes in the interest rate cap affected the amount of credit supplied by small loan brokers, even after controlling for loan demand. We find that small loan brokers reduced credit when the cap was lowered and increased credit when the cap was raised. Because brokers that closed did not reopen, the caps permanently altered the degree of competition in the market. Importantly, the cap may have left some consumers without access to credit because they were unable to obtain loans from local banks.

Our research highlights the difficult balance confronting policymakers: comprehensive rate caps offer protection from predatory lending while potentially restricting credit access for populations with limited alternatives. While achieving widespread access to financial services is important, doing so through price controls requires careful consideration. Although interest rate caps are often implemented with good intentions, they can inadvertently harm consumers with lower credit scores or riskier credit profiles by restricting credit availability if ceilings are set below market-clearing levels. Such caps limit lenders' ability to adjust rates based on borrower risk and operational costs. When lenders cannot adequately price for risk, they may stop offering loans to high-risk individuals altogether, effectively shutting them out of the legal credit market. Consequently, the caps may disproportionately affect the very groups they are intended to protect.

This paper is closely related to the literature on the effects of lending caps. Some studies find that interest rate caps typically reduce access to credit, resulting in fewer loans, higher overall borrowing costs, and limited consumer choice (Zinman, 2010; Maimbo and Gallegos, 2014; Lukongo et al., 2022). Other studies focus on the relationship between rate caps and credit reallocation. They find that after rate caps banks reallocate credit away from risky firms towards

safer borrowers. As a result, the cap may contribute to financial stability, but harm those that have limited access to credit (Burga, et al, 2022; Bolen et al., 2023). Lastly, Fekrazad (2020) shows that interest caps can harm low-income households by inducing bad behavior. Excessive borrowing, coupled with a rise in sequential defaults—which impose both financial and non-financial costs on borrowers—can significantly reduce, or even reverse, the net welfare gains.

Our study relates to research on usury laws and their impact on credit. Benmelech and Moskowitz (2010) show that 19th-century usury laws often constrained credit and curtailed economic development. Glaeser and Scheinkman (1998) argue these laws served as a social safety net, balancing borrower protection with reduced credit access, rather than being arbitrary limits. Other studies, however, suggest usury laws do not always reduce credit availability and highlight the trade-off between consumer protection and access. They show stricter caps can exclude riskier borrowers without improving repayment. For instance, Bodenhorn (2007) finds that 19th-century New York usury laws didn't reduce bank lending because lenders and borrowers formed long-term relationships and bypassed legal ceilings when enforcement was weak. Similarly, Rigbi (2013) finds that higher interest rate caps in the online loan market significantly increased loan funding, especially for riskier borrowers. Importantly, this increase did not lead to larger loan requests or higher default rates, challenging concerns about higher rates causing financial distress.

In addition, our paper relates to the literature on the impact of payday lending regulations. Similar to small loan brokers, modern payday lenders provide small value, short term loans at very high costs. These payday loans are typically to marginalized groups that are not able to obtain funds from traditional lenders. One strand of this literature focuses on the welfare effects of restricting access. This body of work examines whether outright bans or restrictive rate caps

(e.g., 36% APR or less) improve or worsen the financial health of borrowers. The results are mixed, indicating complex trade-offs. While some argue that outright bans or restrictive interest rate caps improve the financial health of borrowers and prevent a debt trap (Carrell and Zinman, 2014; Gathergood et al., 2019), others report the negative impact of these regulations, arguing that payday loans fill a crucial need for emergency liquidity for a constrained population and that the regulations would force borrowers to substitute to worse alternatives (Morse, 2011; Melzer, 2011; Bhutta et al., 2016). Another strand of research examines the impact of non-price regulation. This strand focuses on regulations such as disclosures and rollovers that modify the loan structure without banning the product, often drawing on behavioral economics to mitigate the debt trap (Bertrand and Morse, 2011; Wang and Burke, 2022). Our study adds to this literature by providing empirical evidence that rate caps can reduce access to emergency credit entirely.

Lastly, our paper is related to research on financial instability during the Great Depression. Most studies focus on identifying the underlying factors that contributed to the severity of commercial bank failures (e.g., Calomiris and Mason, 2003a, 2003b; Mitchener and Richardson, 2019; Calomiris et al., 2021; Correia et al., 2025). Few studies (e.g., Sprick Schuster et al., 2020 study postal savings banks, and Fletius et al., 2020 study Building and Loan Associations) examine financial institutions other than commercial banks during this period. Our study adds to this literature by examining small loan brokers, a type of financial intermediary that has not previously been studied despite lending to a considerable number of individuals.

The remainder of the paper is organized as follows. Section 2 describes data. Section 3 gives a historical background. We describe small loan companies and legislation that changed interest rate caps during the Great Depression. Section 4 introduces the data and provides

summary statistics. Section 5 describes empirical specifications and presents results. Section 6 concludes.

2. Data

We construct a dataset from two sources. First, data on small loan brokers come from the *Annual Report of the Commissioner of Banking and Insurance of New Jersey*. We collect balance sheets of small loan brokers from 1928 to 1935. Between 1915 and 1927, the state banking department provided a list of all licensed small loan brokers in the annual report. Starting in 1928, the report began publishing detailed information on small loan brokers, including balance sheets as well as other data related to business profitability, such as the receipts from interest on loans, operating expenses, dividends paid to stockholders of incorporated licensees, and profits.

Second, data on commercial banks come from the *Rand McNally Bankers' Directory*. *Rand McNally* collected and disseminated information about all banks in the United States. From this source, we have consistent measures of banks' liabilities and assets. For liabilities, we focus on deposits and surplus capital and for assets we focus on loans, bonds, cash, and other assets. We digitized the balance sheets of all state and national banks operating in the state of New Jersey for each December.

3. Historical Background

During the historical period, most commercial banks issued large loans secured by substantial collateral, and only a few provided small loans to their customers. The most successful commercial banks in the "small loan" sector typically offered installment loans ranging from $2,000 to $5,000 (relatively large amounts for most households). Even these rare

banks limited small loans to established customers, property owners, or borrowers who could pledge liquid collateral such as stocks and bonds. Personal promissory notes required endorsement from creditworthy property owners, and banks typically declined unsecured personal loans except for borrowers with extensive banking relationships and demonstrated reliability. As a result, many consumers without property or established banking relationships found it difficult to secure small loans through the commercial banking sector (King, 1929).

Small loan brokers stepped in to play a vital role as financial intermediaries for individuals who lacked traditional collateral or influential connections. Their loans were typically capped at $300, which often featured longer repayment periods than those offered by commercial banks, resulting in smaller, more manageable payments for borrowers. To manage risk, they conducted personal interviews with borrowers in their homes and consulted with one another to prevent excessive indebtedness. Nevertheless, borrowers tended to present higher credit risks and, as a result, were charged higher interest rates.

In this way, the small loan market displayed a distinct segmentation pattern. Although commercial banks offered small loans alongside specialized small loan brokers, these institutions served different customer bases. Bank borrowers typically had stronger credit profiles compared to small loan company clients. Consequently, bank customers obtained loans at rates capped at 6% per year—substantially lower than the rates permitted for small loan brokers which were often over 40% a year, even accounting for advance interest deductions. Small loan brokers throughout the country were able to charge much higher interest rates for relatively small loans, thereby serving households that lacked financial means and connections. This distinction has important implications for our study. Given that the customers of small loan brokers had worse credit history, it would be difficult for them to borrow from commercial banks. Naturally, any

borrower would have preferred getting a loan from a commercial bank at 6% a year than a broker at 45%.

While brokers were present in most states, New Jersey interest rate changes allow us to better examine how interest rate caps affect lending. In New Jersey, Chapter 49 of the laws of 1914 (known as the Egan Law) was introduced to regulate small loan companies, addressing widespread issues with illegal lending and expanding access to credit for those who lacked commercial bank credit. The act permitted lenders to charge interest on loans at a rate of 3% per month, calculated on the unpaid balance, and strictly prohibited any additional fees or the collection of interest in advance. At any given time, one in every eight families in the state borrowed from a small loan company—an indication that these lenders were meeting a significant need within the financial system (King, 1929).

Examining the records of several brokers in New Jersey, King (1929) shows that the average small loan issued was approximately $170, with an average repayment period of 284 days. The typical interest charge was $29.01, amounting to about 17% of the principal. Panel A of Table 1 shows that most of the borrowers were not employers or self-employed but rather were among the working class (21.0% vs. 79.0% of borrowers). For instance, the largest category of borrowers was manual workers (47.3% of borrowers) and even servants accounted for more borrowers than professionals (7.6% vs. 1.1% of borrowers). Panel B shows that small loans were generally issued to cover current expenses (30.0% of loans), to consolidate and repay existing debts (29.9% of loans), or unexpected emergencies (8.8% of loans). Other accounts of small brokers during the period suggest these patterns were similar in other states as well (Townsend 1932).

Policymakers were concerned that small loan companies were charging excessive rates and harming consumers. In late 1929, the New Jersey Legislature amended the law governing small loan companies to reduce the legal rate on small loans from 3% to 1.5% a month effective February 1930. Because most small loans issued by the brokers were near 3%, they were severely affected by the lower interest rate ceiling. The legislature reversed course and raised the rate to 2.5% a month in April 1932.

Panels A and B of Figure 1 plot the volume of loans provided by small loan brokers and commercial banks as well as the number of these two types of institutions. Between 1929 and 1935, lending activities by small loan brokers and commercial banks declined by 50% and 60%, respectively. However, their lending trends differed over time. Lending by small loan brokers declined by almost 75% between 1929 and 1931, but it rebounded by almost 20% between 1931 and 1935. In contrast, lending by banks saw a steady decline throughout the entire period.[3] While both types of institutions saw a large decline in the number of institutions, the magnitude of the decline is larger for small loan brokers. The number of small loan brokers shrank by 80%, declining from 419 in 1929 to 117 in 1931. Even though the caps were raised in 1932, the number of small loan brokers fell further to 80 in that year and remained at that level until 1935. Alternatively, the number of commercial banks declined by 25%, from 535 in 1929 to 399 in 1935. These findings suggest that the introduction of the cap had a drastic impact on the small loan businesses, permanently changing the degree of competition.

While New Jersey commercial banks provide an immediate geographic comparison point for brokers, small loan brokers in other states did not experience a decline in lending over the Great Depression. For instance, New York brokers (whose rate cap did not change) saw their

[3] Even those brokers that survived the entire period saw their loans decline more than surviving commercial banks between 1929 and 1930.

loans increase over 300% between 1929 and 1931, and 1600% between 1929 and 1935. Even the New York City brokers who were just over the river from New Jersey saw substantial loan increases. Given that many borrowers were shut out of commercial banks at the time, it is unlikely that the decline in New Jersey brokers' loans was driven by a decline in loan demand or a broader problem with the small loan market.

Panel C of Figure 1 plots the changes in the distribution of brokers' loans. Even after the cap was lowered in 1930, brokers were allowed to roll over previously existing loans at their original interest rates.[4] At the end of 1930, for instance, 3% loans still made up nearly half of all outstanding loans even though their value dropped by 80% from 1929. The share of 3% loans declined further in 1931. After the cap was raised to 2.5%, the total outstanding amount of loans increased as more loans were made at 2.5%. Few banks issued loans at 1.5% or rolled over existing one after 1932. The aggregate evidence thus indicates that the interest rate cap was binding.

Figure 1 showed that both the amount of loans and the number of brokers declined after the cap fell below 3%. Given the size of these declines, we decompose the contraction in loans into two components: the reduction in supply by surviving brokers versus the contraction due to broker failures. In Panel A of Figure 2, we calculate the proportion of loans made by brokers that continued to operate versus those that went out of business in the following year. The brokers surviving in 1930 accounted for 48% of total loans in 1929. This implies that 52% of loans in 1929 were made by brokers that went out of business in 1930. Brokers surviving in 1931 accounted for 26% of loans in 1930, those surviving in 1932 held 20% in 1931, and surviving brokers in all other years held less than 10%. These patterns suggest that the closures of small

[4] While New Jersey only separated loans by interest rate starting in 1930, anecdotal evidence as well as the individual balance sheet evidence suggested that most loans were made at 3% in 1929.

loan brokers were a major contributor to the collapse of the small loan market and that they occurred immediately after the lowering of the interest rate cap.

In addition, the closure of small loan brokers permanently altered competition and concentration trends in the loan market. Figure 3 plots the county-level Herfindahl-Hirschman Index (HHI) for small loan brokers for years 1929, 1931, and 1935. The decline in brokers led to a much more concentrated small loan market across various counties. While most had a low HHI before 1929, nearly every county either lost all their brokers or lost enough of them that the HHI reached very high levels. Even by 1935, most counties had no brokers, or all the loans were made by only one or two brokers.

In Panel B of Figure 2, we examine the average HHI at the county level each year for brokers and banks, respectively. Before the increase in the interest rate cap in 1929, local loan markets were highly competitive (below 1800). On average, the HHI of loans made by brokers and that of loans made by commercial banks were 888 and 802, respectively. However, after the increase in the interest rate cap, the HHI for the loan market provided by brokers jumped to 1570 in 1930, then to above 2400 in 1931, and remained at that level for the rest of the period. In contrast, while the HHI for the bank loan market also increased, it stayed below 1800 during the 1930s, indicating that this market remained highly competitive despite numerous bank failures. These patterns suggest that broker closures permanently reduced the degree of competition, resulting in a highly concentrated market.

Due to the segmented nature of credit markets, the failures of small loan brokers could have seriously harmed vulnerable customers. These customers typically could not get credit from commercial banks, even though banks offered lower interest rates, because they did not meet the banks' strict lending rules. Therefore, eliminating small loan brokers would not drive most of

their customers to commercial banks. In other words, a reduction in credit supply by small loan brokers would likely harm the most vulnerable customers because they would not be able to obtain credit from banks.

Table 2 provides summary statistics for small loan companies across the three different interest rate cap periods. The data for all banks in Panel A show that equity as a ratio of total liabilities increased over time from 73.79% in 1928-1929 to 95.6% in 1932-1935, indicating that companies reduced their leverage. Moreover, the ratio of loans to assets also declined from 82.56% in 1928-29 to 75.35% in 1932-1935. Together, these patterns suggest that companies reduced their solvency risk. Looking at performance, ROE shows that lowering the cap reduced profitability, while raising it restored ROE. Higher ROEs before 1930 reveal that brokers used more debt than equity. After experiencing negative ROEs during the 1.5% cap period, ROE turned positive again. However, ROEs during the 2.5% cap were lower than during the 3% cap (21.48% in 1928-1929 versus 3.22% in 1932-1935) due to both reduced leverage and lower profitability.

More than 400 brokers operated in 1928, but the number shrank to 87 by 1935. Not all of the 87 brokers operating in 1935 had been in business in 1928. In Panel B, we restrict our sample to 33 brokers that operated continuously between 1928 and 1935. Equity as a ratio of total liabilities for these brokers exhibited similar patterns as those in the full sample. Interestingly, these brokers had the ratio of loans to assets higher than brokers that did not operate the entire period, and their ROE tended to be lower than those that failed.[5] The pattern that brokers with high ROEs were more likely to fail than those with low ROEs is likely appearing because these brokers were focused on loans at the 3% interest rate cap. When confronted with the lower

[5] As supported by our eventual regression analysis, mean comparison tests in 1929 show that those banks that closed in over 1930 had significantly lower loans to assets ratios and higher ROE than those banks that closed.

interest rate cap, these high interest brokers either had to charge these riskier borrowers less in interest or reduce their loans (either by value or through exit), these brokers seem to have chosen the latter. In this way, the marginal borrowers who relied on the high interest rate loans were largely pushed out.

In the next section, we formally analyze how the changes in interest rate caps affected the supply of credit by brokers and the failure of brokers.

4. Empirical Analysis

The narrative analysis and aggregate statistics suggest that the change in the interest rate cap corresponded to a substantial decline in small broker loans. This section empirically tests whether the interest rate cap was responsible for the decline in credit and the closure of small loan brokers as well as the subsequent rebound in lending.

4.1. Lending Behavior of Small Loan Brokers

We examine whether the changes in interest rate caps affect credit availability by comparing the lending behavior of small loan brokers with that of commercial banks. If the decline in loans was driven by lower interest rate caps, then we would expect to see a significantly larger decline in brokers' loans after the change compared to commercial banks. However, if the decline reflected the broader deterioration of all financial institutions during the Great Depression, then we would expect that brokers' lending patterns would not differ significantly from those of commercial banks. Similarly, we would expect loans at brokers to rise after the interest rate cap was raised back up compared to commercial banks. To do this, we make use of the wide variation in small loan brokers across New Jersey. As shown in Figure 2, small loan brokers were not present in every county and the decline and return in loans varied

greatly across the state. Commercial banks thus serve as a local control for loan demand and other economic conditions.

We, therefore, interact an indicator for whether the institution was a small loan broker with year fixed effects. We include institution fixed effects to capture the average level of loans at each institution and a set of lagged balance sheet controls to capture institutional health. We measure each institution's size using the logarithm of assets, its liquidity position using the ratio of cash to assets, and its leverage using the ratio of equity to liabilities. The model is:

$$\begin{aligned} LnLoans_{i,t} = \; & a + \beta_1 Broker_i * t_t \\ & + \beta_2 LnAssets_{i,t-1} + \beta_3 Cash/Assets_{i,t-1} + \beta_4 Equity/Liab_{i,t-1} \\ & + u_i + t_t + e_{i,t} \; (1) \end{aligned}$$

where $Broker_i$ is an indicator for whether the financial institution is a small loan broker, $LnAssets_i$ is the logarithm of assets of broker *i* in the previous year, $Cash/Assets_i$ is the ratio of cash to assets of broker *i* in the previous year, $Equity/Liab_i$ is the ratio of equity to liabilities of broker *i* in the previous year, u_i is a vector of institution fixed effects, t_t is a vector of year fixed effects, and $e_{i,t}$ is the standard error clustered at the institution level.

Table 3 presents the estimates for equation (1). When the interest rate cap was lowered, brokers lost substantially more loans than commercial banks. Moreover, they provided more loans than commercial banks when the interest rate cap was raised again. The rest of the columns examine whether the overall patterns in the data are generated by mismatches in the data. In column (2) we drop out commercial banks that were not located in a town where a broker operated to make sure that brokers did not select into areas with differential loan behavior. In column (3), we drop out any commercial bank or broker that did not survive from 1928 through 1925 to make sure any differences between surviving and closing institutions are driving the

results. In column (4), we drop out national banks to compare state-chartered commercial banks with state-chartered brokers to make sure there was not some regulatory-based difference. Regardless of the sample selection, the results are similar. Therefore, while commercial banks' loans declined during the Great Depression, the results in Figure 1 are not driven by general business conditions, and are instead tied to the interest rate cap changes.

The key question, however, is whether the decline in brokers' loans was replaced by commercial banks. While the narrative evidence indicates that most commercial banks did not want to make the small loans that brokers did, it is still possible that they helped fill the gap during the Great Depression. We test this by looking at commercial bank loans in locations that saw larger losses of brokers' loans, using either the logarithm change in brokers' loans over the previous year or the logarithm value of brokers loans in the current year. The former captures the exact timing of the decline in loans whereas the latter allows commercial banks to potentially respond with a lag.

Similar to equation (1), the model is:

$$LnCBLoans_{i,t} = a + \beta_1 LnBrokerLoans_{i,t} + \beta_2 LnAssets_{i,t-1} + \beta_3 Cash/Assets_{i,t-1} + \beta_4 Equity/Liab_{i,t-1} + u_i + t_t + e_{i,t} \quad (2)$$

where $LnCBLoans_{i,t}$ is the logarithm of a commercial bank's loans in year *t*, $LnBrokerLoans_{i,t}$ is either the change in the logarithm of brokers' loans in the town over the previous year or the contemporaneous logarithm of brokers' loans in the town, and the remaining variables retain their previous definitions.

The results of equation (2) are presented in Table 4. We begin at the commercial bank level to assess if on average commercial bank loans were negatively associated with small loan

brokers. As before, we estimate the specification when dropping commercial banks that did not have a broker in their town, and again the results are similar to the full sample. Next, we aggregate to the town-level to see if on average towns remained similar in terms of loans.[6] Regardless of aggregation, the estimated coefficients yield similar results. The loans of commercial banks were significantly correlated with the loans of brokers. Not only are the coefficients statistically insignificant but they are also economically small. In other words, we do not find evidence that the consumers that lost access to the loans provided by small loan brokers were able to obtain credit from commercial banks.

Taken together, the results thus indicate that the decrease in the brokers' loans resulting from the lowering of the interest rate cap led to a significant reduction in the amount of credit available to borrowers, particularly small borrowers. Even after the cap was allowed to rise, the number of brokers' loans remained half of its 1929 value.

4.2 Closure of Small Loan Brokers

In this section, we examine whether the closures of brokers in 1930 were a direct result of the interest rate cap because Section 3 shows that the closures of small loan brokers contributed to the size and concentration of the small loan market. Figure 4 presents bin scatter plots of a bank's average monthly interest rate (calculated as the ratio of income from loans to total loans divided by 12) in 1929 relative to whether it exited by the end of 1930. The data show a clear positive relationship: brokers with average interest rates below 1.5% were much less likely to close, and the probability started to rise as interest rates increased.

[6] We adjust the fixed effects, lagged balance sheet controls, and standard error clustering to match the level of aggregation. Appendix Table A1 also shows the results when we drop national banks from the analysis.

While Figure 3 provides strong evidence that the lower interest rate cap was responsible for broker closures, other fundamentals may also have been at play. We thus estimate a regression model that predicts the probability that each broker present in 1929 would close by 1930 based on a variety of characteristics. At the institution-level, we include the balance sheet controls from the previous sections, as well as each broker's profit buffer (measured the ratio of net profit to assets) and its average monthly interest rate received on loans during the year. We also account for competition using the logarithm of the number of brokers and the number of commercial banks at the town-level.

We estimate the following model using ordinary least squares:

$$Closure_i = a + \beta_1 LnAssets_i + \beta_2 Cash/Assets_i + \beta_3 Equity/Liab_i + \beta_4 Profit_i + \beta_5 InterestRate_i + \beta_6 Competition_i + e_i \quad (3)$$

where $Closure_i$ is an indicator variable for whether broker *i*, present in 1929, closed by 1930, $Profit_i$ is the net profit to equity ratio of broker *i* in 1929, $InterestRate_i$ is the average monthly interest rate received on loans of broker *i* in 1929, $Competition_i$ is the logarithm of the number of brokers and the number of commercial banks in the town in 1929, e_i is the White robust standard error term, and the remaining variables retain their previous definitions.

The estimated coefficients of equation (3) are reported in Columns (1) - (4) of Table 5. The results indicate that lowering the interest rate ceiling drove out brokers that were small, more leveraged, or charged higher average interest rates. Interestingly, profit levels had no significant effect on the decision to remain in the market, but the amount of interest received did. This apparent paradox reflects the fact that high interest rate brokers were more profitable but also more likely to exit after the ceiling was lowered.

Next, we narrow the comparison group by focusing on towns with more than five brokers and including town-fixed effects. This narrow comparison helps account for potential differences in economic activity and the effects of the Great Depression. For instance, the prevailing interest rate in some areas might be higher than in others. While the inclusion of town-fixed effects subsumes the town-level competition measures, the rest of the variables provide similar results to the original model.

Taken together, the results strongly suggest that the lower interest rate ceiling was responsible for driving out many brokers. We unpack this finding by examining data for surviving brokers in 1930 in Columns (5) - (8) of Table 5. Specifically, we test whether those brokers with higher average interest rates in 1929 saw larger reductions in lending between 1929 and 1930 and continued to hold more 3% interest loans using a model similar to Equation (2). The coefficients seen in Table 5 show that those surviving brokers with higher average interest rates did experience significantly larger declines in loans over that year and kept a higher proportion of 3% loans.

5. Conclusion

There has been a series of intense policy debates regarding the use of interest rate caps, ranging from payday lenders to large banks that securitize and sell loans across state boundaries. The recent Senate bill proposing to cap the all-in annual percentage rate (APR) for credit cards at 10%—significantly below the current average of 22–24%—has prompted widespread discussion about its effects on both consumers and the broader credit market. President Trump even prompted the discussion by demanding a one-year cap starting in early 2026. Proponents argue that the measure would reduce borrowing costs and mitigate debt burdens, particularly for

households with outstanding balances. Opponents, however, warn that such a restrictive cap could undermine the profitability of lending to certain customer segments, potentially prompting issuers to tighten credit standards, adjust fees, or modify card features. The policy debate centers on balancing protection from high interest rates with maintaining broad credit access, while also considering possible unintended consequences such as diminished credit availability or greater reliance on alternative lending channels.

To gain empirical traction on the issue, this study examines how interest rate caps influenced the supply of credit and the survival of small loan companies in New Jersey during the Great Depression. Alarmed by reports of excessive profits among small loan firms charging high rates, legislators in 1929 reduced the interest ceiling from 3% to 1.5% per month, only to raise it again to 2.5% two years later. Comparing lending activity between small loan brokers and commercial banks, we find that broker loans plummeted after the cap was lowered, but recovered when the ceiling increased—even as broader economic conditions deteriorated. Moreover, there is no evidence indicating that affected borrowers were able to turn to commercial banks for credit, suggesting the cap effectively excluded these consumers from the market. Many small loan companies closed due to reduced profitability and did not return, resulting in greater market concentration.

Our analysis provides valuable insights for ongoing policy debates on interest rate limits, including recent legislative proposals concerning credit card APRs. While such measures often originate from legitimate concerns about excessive lending costs and consumer welfare, historical evidence reveals that rate caps set below market-clearing levels can make lending to high-risk populations unviable, leading to market exits and fewer credit options for those most in need. This may inadvertently drive vulnerable consumers toward unregulated alternatives or

leave them without access to credit. Policymakers should therefore carefully weigh these potential unintended consequences against the intended benefits of consumer protection.

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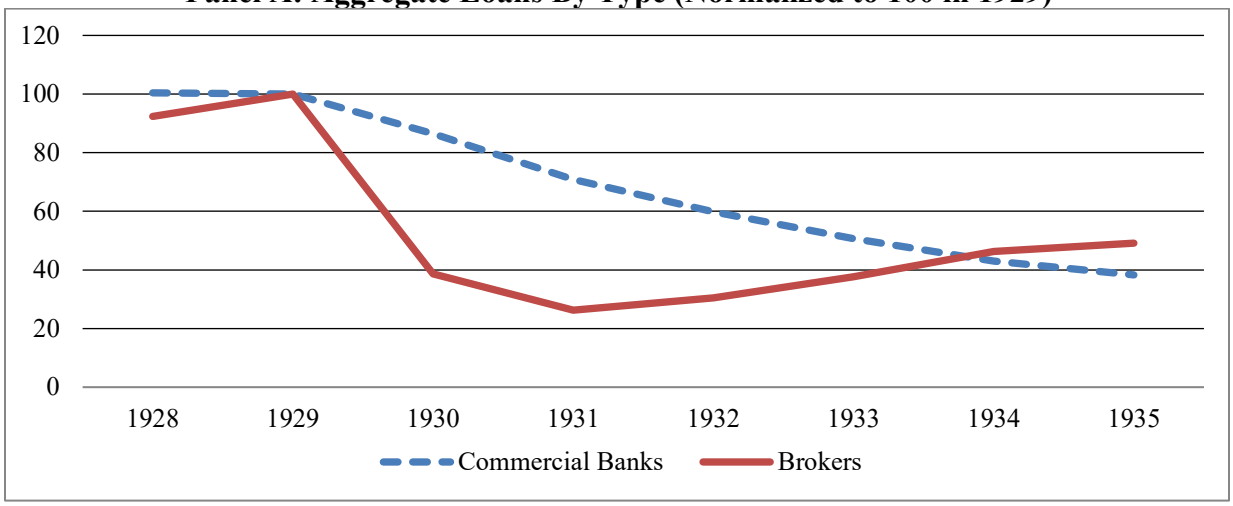
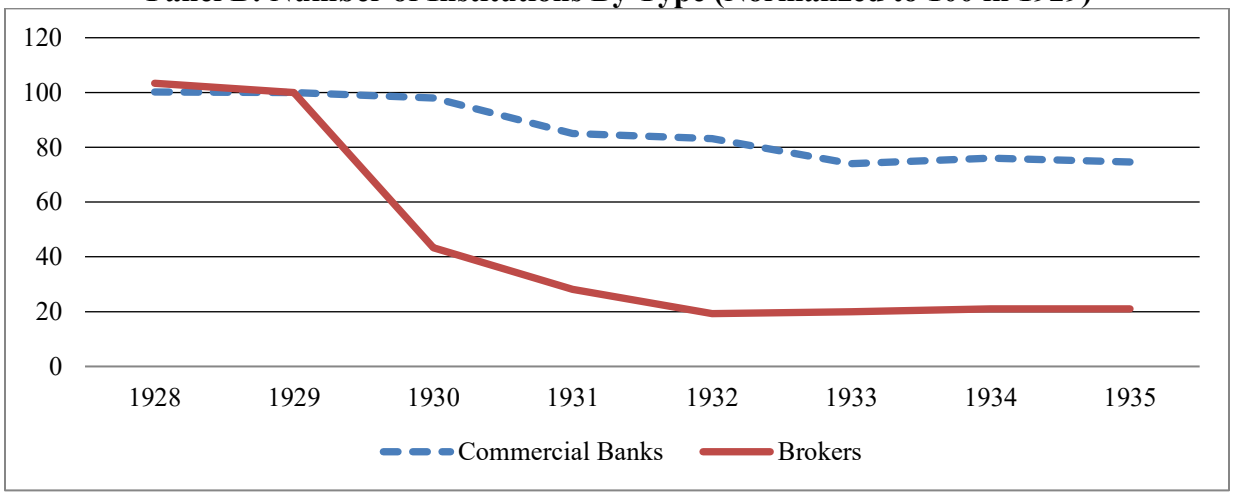
Figure 1: New Jersey Banking Statistics (1928-1935)

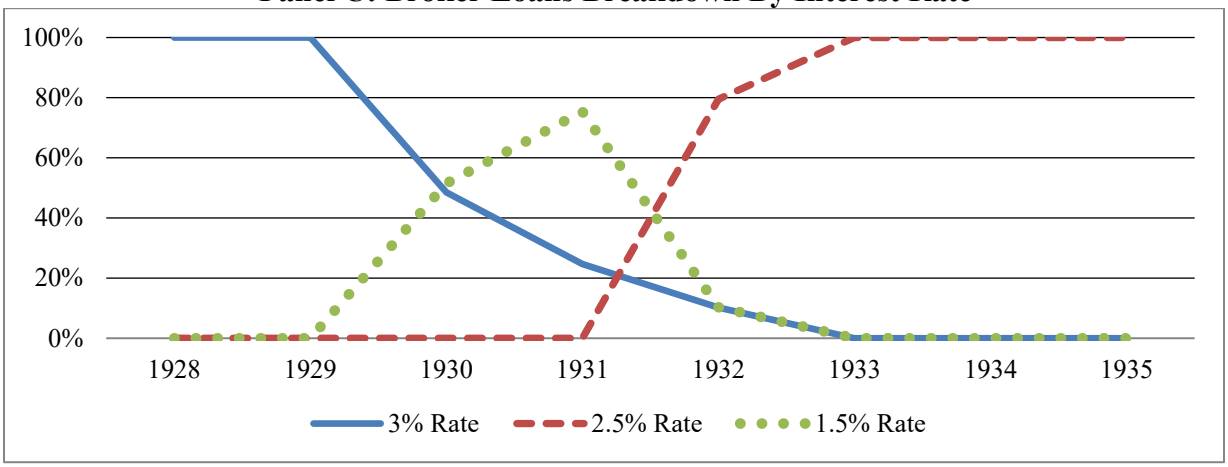
Panel A: Aggregate Loans By Type (Normalized to 100 in 1929)



Panel B: Number of Institutions By Type (Normalized to 100 in 1929)



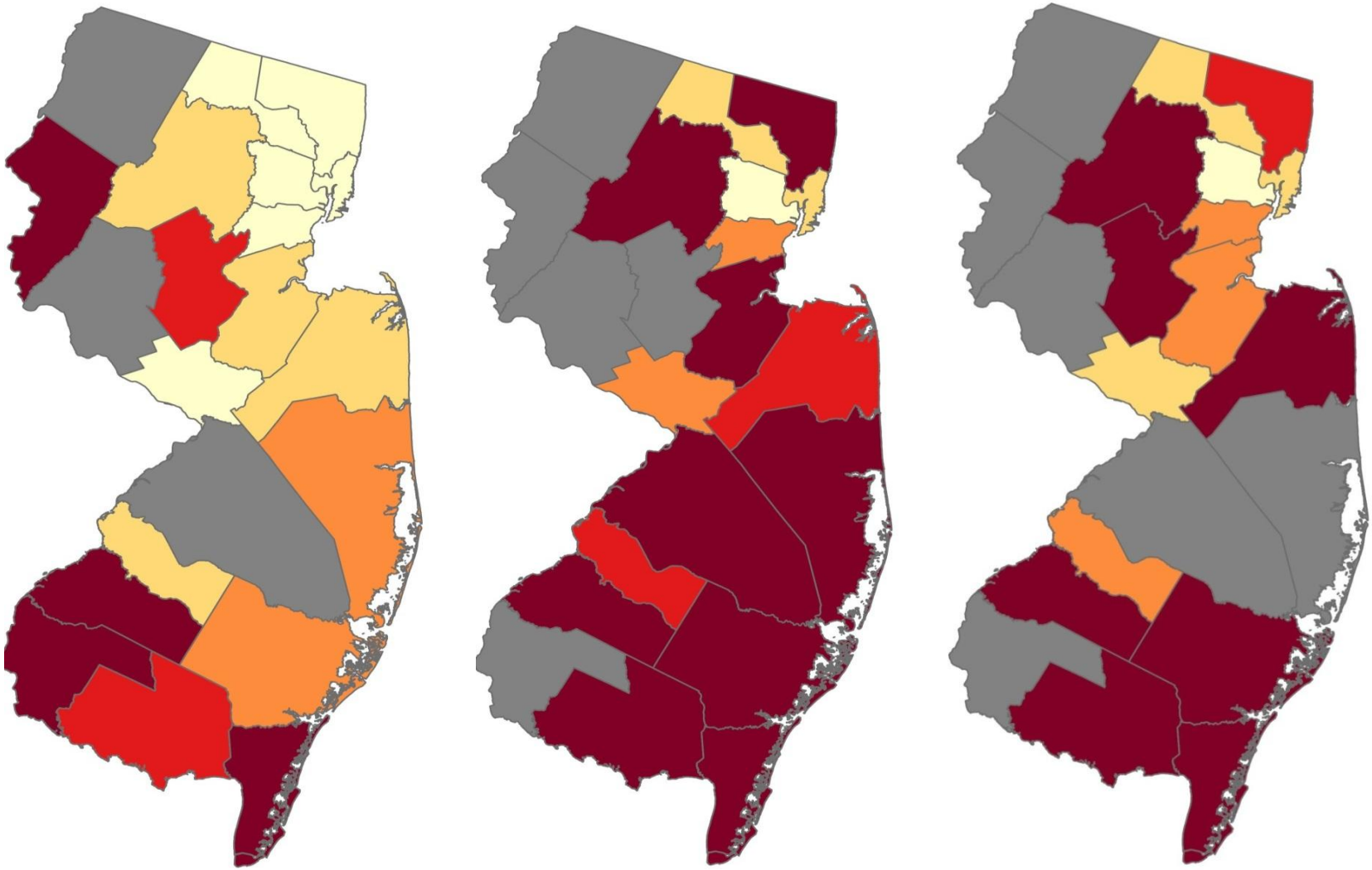
Panel C: Broker Loans Breakdown By Interest Rate



Notes: Panel A reports the total value of loans from commercial banks or small loan brokers in New Jersey in each year. The values are normalized to 100 in 1929. Panel B reports the number of commercial banks or small loan brokers in New Jersey in each year. The values are normalized to 100 in 1929. Panel C reports the fraction of total loans made by small loan brokers of each category in New Jersey in each year.

Figure 2: Geographic Dispersion of Broker Loan Concentration in New Jersey (1929-1935)

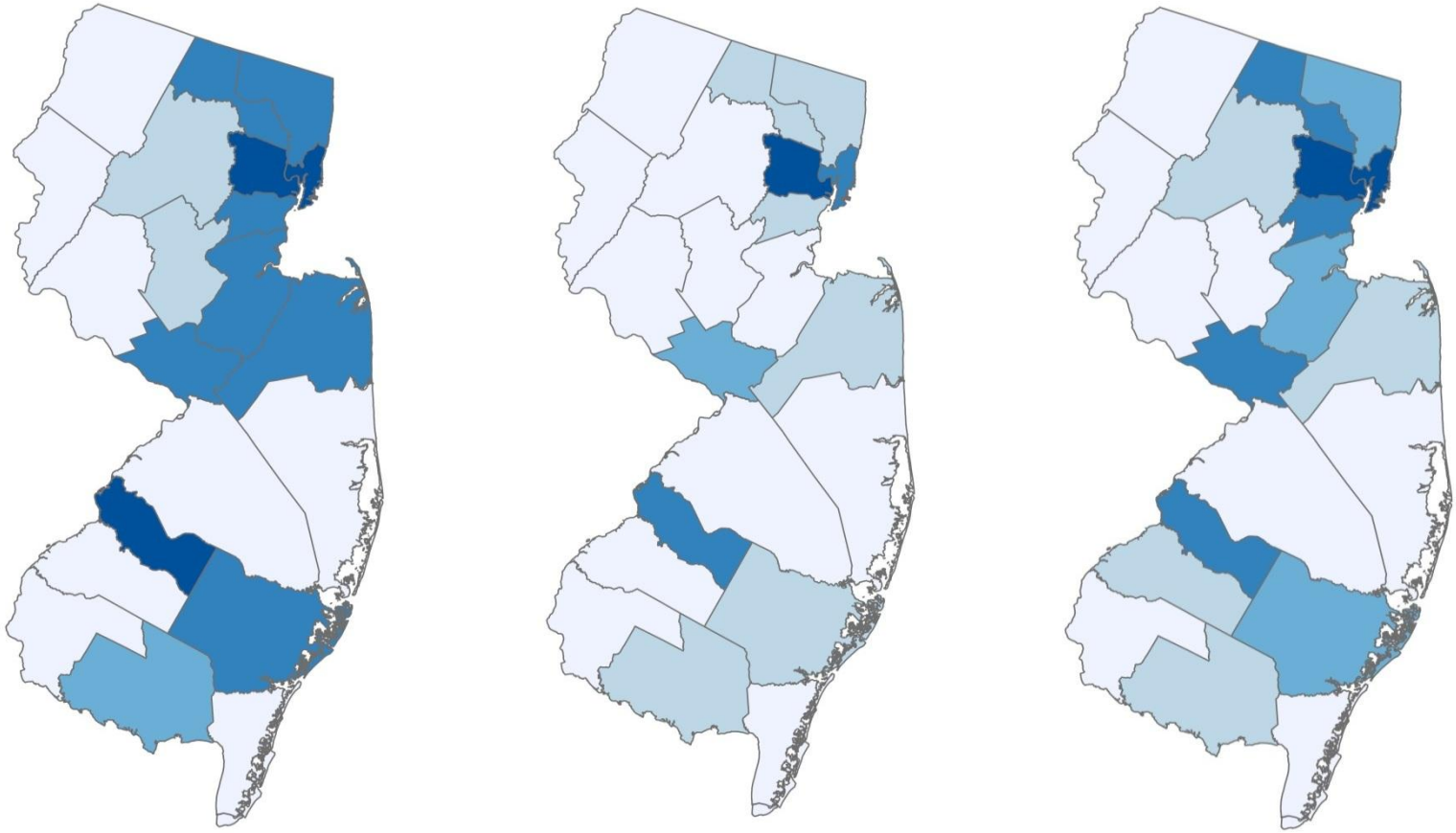
Broker Loan Concentration in 1929 **Broker Loan Concentration in 1931** **Broker Loan Concentration in 1935**



Notes: Maps report the Herfindahl-Hirschman Index (HHI) measures of the loan market for brokers calculated at the county level in each year. Darker shades denote higher HHI values, and the range of shades corresponds to the same values in each map. Grey counties contain no brokers in the specified year.

Figure 3: Geographic Dispersion of Broker Loans in New Jersey (1929-1935)

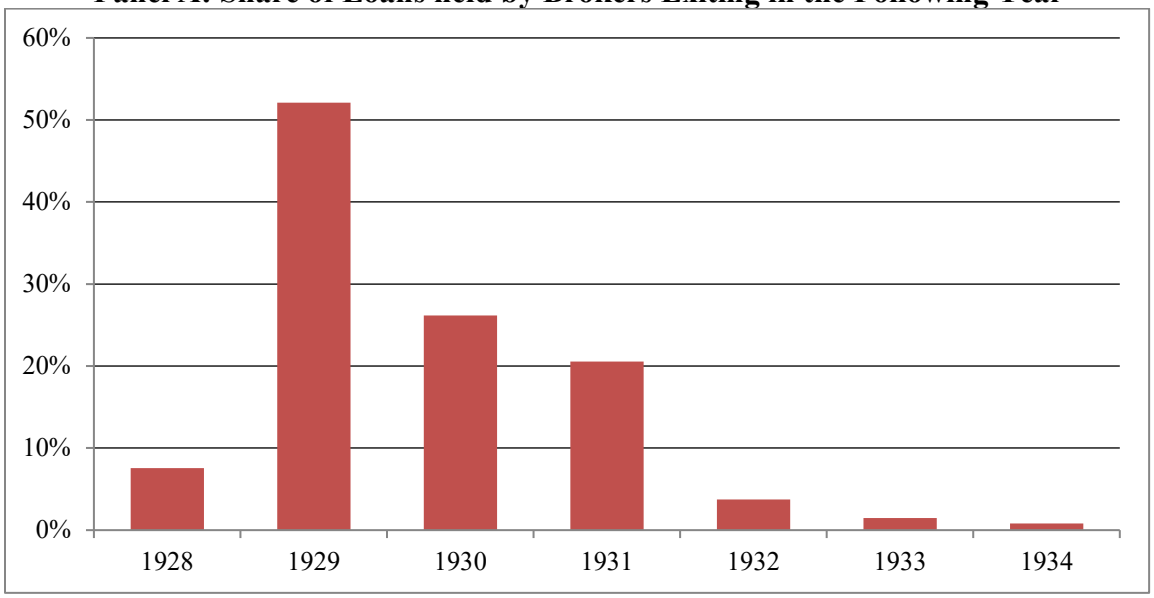
Broker Loans in 1929 **Broker Loans in 1931** **Broker Loans in 1935**



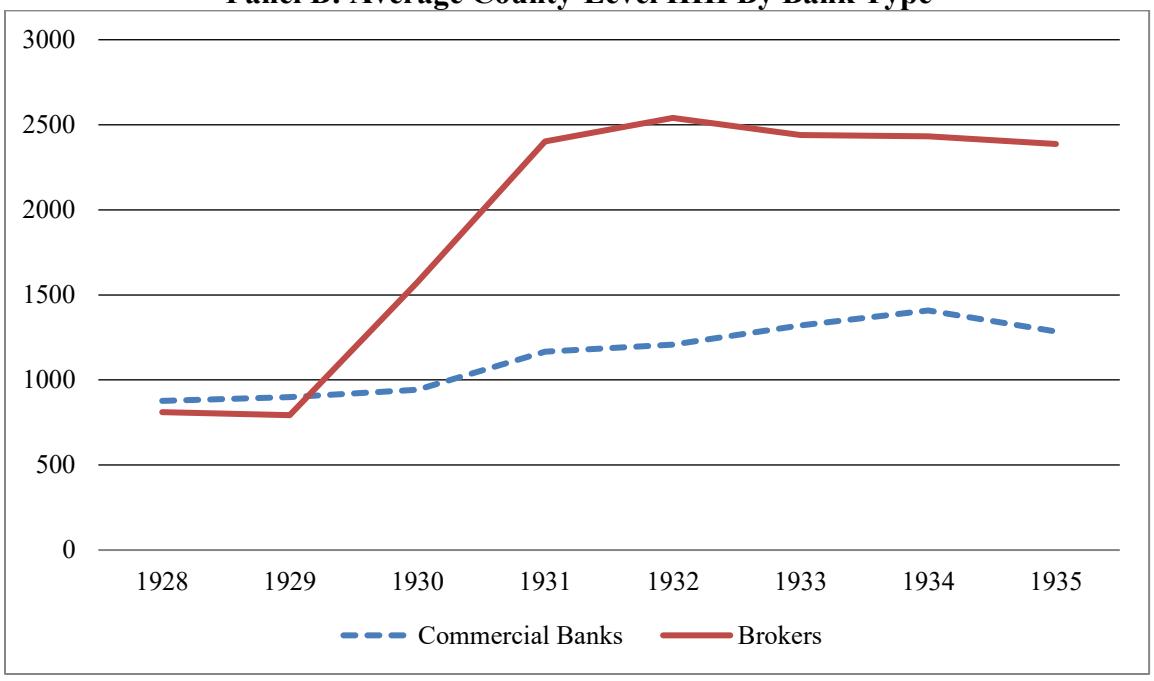
Notes: Maps report value of loans made by brokers in New Jersey in each year. Darker shades denote higher values, and the range of shades corresponds to the same values in each map. White counties contain no brokers in the specified year.

Figure 4: New Jersey Banking Statistics

Panel A: Share of Loans held by Brokers Exiting in the Following Year

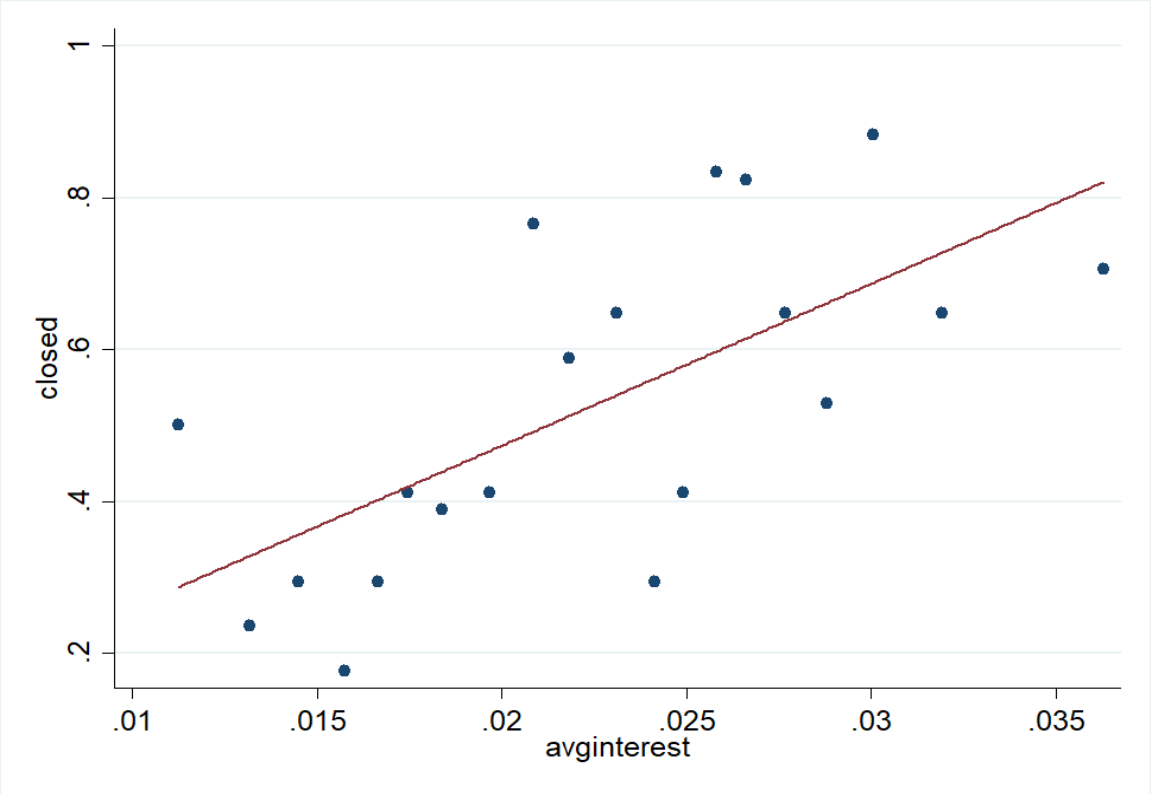


Panel B: Average County-Level HHI By Bank Type



Notes: Panel A presents the proportion of loans made by banks that continued to exist versus banks that went out of business in the following year. Panel B presents the Herfindahl-Hirschman Index (HHI) measures of the loan market calculated at the county level for each institution type in each year.

Figure 5: Bin Scatter Plots of Avg. Monthly Broker Interest Rate in 1929 and Exit in 1930



Notes: The figure presents a bin scatter plot of the average interest rate in 1929 and whether a broker exited in 1930. The figure drops the few outliers with interest rates below 1% or above 5%

Table 1: Statistics on Small Loan Broker Loans in New Jersey

Panel A: Number of Borrowers By Occupational Classes

	Number of Borrowers	Average Sum Borrowed
Employers or Self Employed		
Non-Professional	4,709	200.68
Professional	256	216.66
Employees		
Professional	838	210.32
Managerial	1,350	191.56
Agents, Solicitors and Commercial Travellers	1,132	202.78
Salespeople	341	162.3
Clerical Employees	1,385	171.47
Guardians of Public Safety	682	168.95
Manual Workers	11,229	151.83
Servants	1,794	138.98
Total	23,716	169.81

Panel B: Number of Borrowers Assigning Specified Reason for Making of Loan

	Number of Borrowers
Expenses Arising from Illness or Death	2,130
Liquidation or Consolidation of Other Debts	8,591
Business Expenses	2,090
To Assist Friends or Relatives	294
Current Expenses	7,257
Combination of Purposes	1,502
Miscellaneous	112
Reasons Unknown	2,278
Total	24,254

Notes: Table reports data on New Jersey small loan brokers obtained from King (1929). The top panel comes from Table 1 on pages 24-26, and the bottom panel comes from Table XIIIa on pages 100-102.

Table 2: New Jersey Small Loan Brokers Summary Statistics (1928-1935)

	Panel A: All Brokers			
	1928-1929	**1930-1931**	**1932-1935**	**All Years**
Equity to liabilities	73.79	84.46	95.62	81.13
	(30.43)	(21.66)	(13.21)	(27.13)
Loans to assets	82.56	73.38	75.35	78.97
	(20.16)	(26.07)	(21.08)	(22.09)
3% loans to total loans	100.0	60.93	2.563	69.02
	(0)	(33.52)	(10.05)	(42.95)
2.5% loans to total loans	-	-	94.87	22.31
	-	-	(15.55)	(40.95)
1.5% loans to total loans	-	39.07	2.571	8.674
	-	(33.52)	(8.944)	(22.18)
Return on Equity	21.48	-3.966	3.223	11.93
	(208.8)	(34.76)	(16.22)	(157.3)
	Panel B: Surviving Brokers			
	1928-1929	**1930-1931**	**1932-1935**	**All Years**
Equity to liabilities	73.47	79.12	95.02	85.70
	(23.09)	(24.02)	(13.59)	(21.40)
Loans to assets	86.74	76.43	76.63	79.08
	(15.40)	(25.41)	(21.38)	(21.60)
3% loans to total loans	100.0	43.71	3.823	37.62
	(0)	(34.08)	(12.32)	(43.76)
2.5% loans to total loans	-	-	92.70	46.51
	-	-	(18.56)	(48.25)
1.5% loans to total loans	-	56.29	3.476	15.86
	-	(34.08)	(8.923)	(29.65)
Return on Equity	19.33	-1.169	1.928	5.456
	(126.5)	(17.62)	(9.138)	(64.05)

Notes: Table presents the mean and standard deviation of each variable for small loan brokers in New Jersey by year.

Table 3: Determinants of Loans in New Jersey (1928-1935)

	Ln(Total Loans)			
	All	**Locations With Brokers**	**Surviving Banks and Brokers**	**Only State Chartered Banks and Brokers**
	(1)	(2)	(3)	(4)
Broker x Yr=1930	-0.200***	-0.200***	-0.180**	-0.166***
	[0.048]	[0.048]	[0.090]	[0.052]
Broker x Yr=1931	-0.274***	-0.263***	-0.265**	-0.263***
	[0.068]	[0.069]	[0.130]	[0.071]
Broker x Yr=1932	0.212***	0.209***	0.291***	0.177**
	[0.077]	[0.078]	[0.078]	[0.079]
Broker x Yr=1933	0.336***	0.292***	0.366***	0.244***
	[0.084]	[0.086]	[0.088]	[0.087]
Broker x Yr=1934	0.508***	0.487***	0.623***	0.462***
	[0.101]	[0.104]	[0.134]	[0.106]
Broker x Yr=1935	0.562***	0.531***	0.633***	0.524***
	[0.093]	[0.092]	[0.115]	[0.096]
Fixed Effects?	Bank	Bank	Bank	Bank
Lagged Balance Sheet Controls	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
Observations	3928	2469	2498	2159
R-squared	0.423	0.432	0.426	0.390

Notes: Table presents the estimated coefficients from the bank-level panel regressions in equation (1). Column (1) contains both small loan brokers and commercial banks. Column (2) only contains institutions in locations that had a broker between 1928 and 1935. Column (3) only contains institutions that survived from 1928 to 1935. Column (4) only contains state chartered banks and brokers. Lagged balance sheet controls include each institution's size using the logarithm of assets, its liquidity position using the ratio of cash to assets, and its leverage using the ratio of equity to liabilities. The standard errors are clustered at the institution level.

Table 4: Determinants of Loans in New Jersey (1928-1935)

	Ln(Total Loans)							
	Bank-Level - Dropping Brokers				Town-Level - Combining State and National Banks			
	All Locations		Locations With Brokers		All Locations		Locations With Brokers	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
D.Ln(Brokers Loans+1)	0.008		0.007		-0.010		-0.005	
	[0.009]		[0.010]		[0.013]		[0.011]	
Ln(Brokers Loans+1)		-0.010		-0.012		0.007		-0.004
		[0.009]		[0.011]		[0.014]		[0.017]
Fixed Effects?	Bank	Bank	Bank	Bank	Town	Town	Town	Town
Lagged Balance Sheet Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2991	2991	1532	1532	1614	1614	451	451
R-squared	0.467	0.467	0.524	0.525	0.553	0.553	0.778	0.778

Notes: Table presents the estimated coefficients from the bank-level panel regressions in equation (2). Columns (1) through (4) contain annual observations for each commercial bank in each year, whereas columns (5) through (8) aggregate commercial banks up to the town-year level. Columns (3) and (4) only include banks in a location that had a broker between 1928 and 1935, and columns and (7) and (8) only include locations that had a broker between 1928 and 1935. Lagged balance sheet controls include each institution's size using the logarithm of assets, its liquidity position using the ratio of cash to assets, and its leverage using the ratio of equity to liabilities. The standard errors are clustered at the institution level in columns (1) through (4) and at the town-level in columns (5) through (8).

Table 5: Determinants of New Jersey Broker Exits and Loans (1929-1930)

	Whether Closed 1929-1930				Change in Ln(Total Loans) 1929-1930		3% Loans/Total Loans in 1930	
	All Towns		5+ Brokers in 1929		All Towns	5+ Brokers in 1929	All Towns	5+ Brokers in 1929
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Ln(Assets) in 1929	-0.020	-0.030	-0.039	-0.050*	-0.096**	-0.080	-0.059**	-0.060*
	[0.026]	[0.024]	[0.031]	[0.029]	[0.047]	[0.056]	[0.024]	[0.031]
Cash/Assets in 1929	0.176	0.083	-0.152	-0.224	1.297**	1.337**	-0.679***	-0.669**
	[0.393]	[0.401]	[0.443]	[0.451]	[0.501]	[0.600]	[0.238]	[0.265]
Capital/Liab. in 1929	0.157	0.177*	0.137	0.162	-0.379***	-0.335**	0.176*	0.247**
	[0.106]	[0.100]	[0.121]	[0.114]	[0.130]	[0.139]	[0.098]	[0.102]
Ln(Brokers in Town) in 1929	0.018	0.012			0.147*		0.017	
	[0.052]	[0.050]			[0.081]		[0.041]	
Ln(Banks in Town) in 1929	-0.144	-0.103			-0.270		-0.010	
	[0.109]	[0.105]			[0.166]		[0.086]	
Net Profit/Assets in 1929	0.003		0.002					
	[0.003]		[0.003]					
Average Interest Rate in 1929		11.574***		11.084***	-21.120***	-22.015***	5.743*	8.593**
		[2.208]		[2.666]	[5.917]	[6.605]	[3.080]	[3.727]
Location Fixed Effects	None	None	Town	Town	None	Town	None	Town
Observations	396	394	317	316	175	139	171	135
R-squared	0.036	0.086	0.069	0.111	0.228	0.311	0.125	0.237

Notes: Table presents the estimated coefficients from the bank-level regressions in equation (3). The outcome variables are listed in the column headings. Columns (1), (2), (5), and (7) contain brokers in all towns, whereas Columns (3), (4), (6), and (8) drop brokers in locations that have less than 5 small loan brokers in 1929. White robust standard error terms are reported in brackets.

Table A1: Determinants of Loans in New Jersey (1928-1935) –Only State Chartered Commercial Banks

	Ln(Total Loans)			
	Bank-Level - Only State Chartered Banks		Town-Level - Only State Chartered Banks	
	(1)	(2)	(3)	(4)
D.Ln(Brokers Loans+1)	0.007		0.002	
	[0.012]		[0.012]	
Ln(Brokers Loans+1)		-0.028**		-0.032*
		[0.014]		[0.016]
Fixed Effects?	Bank	Bank	Town	Town
Lagged Balance Sheet Controls	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
Observations	1222	1222	371	371
R-squared	0.491	0.493	0.721	0.724

Notes: Table presents the estimated coefficients from the bank-level panel regressions in equation (2). Columns (1) and (2) contain annual observations for each state-chartered commercial bank in each year, whereas columns (3) and (4) aggregate state banks up to the town-year level. Lagged balance sheet controls include each institution's size using the logarithm of assets, its liquidity position using the ratio of cash to assets, and its leverage using the ratio of equity to liabilities. The standard errors are clustered at the institution level in columns (1) through (4) and at the town-level in columns (5) through (8).