Federal Reserve Bank of Boston®

Supervisory Research and Analysis Unit

Working Paper | SRA 26-02 | August 2026

Reciprocal Deposit Networks and Funding Stability

Lina Lu and Daniela Scida

Supervisory Research and Analysis (SRA) Working Papers present economic, financial and policy-related research conducted by staff in the Federal Reserve Bank of Boston's Supervisory Research and Analysis Unit. SRA Working Papers can be downloaded without charge at:
http://www.bostonfed.org/publications/sra/

Reciprocal Deposit Networks and Funding Stability *

Lina Lu[1] and Daniela Scida[2]

[1]Federal Reserve Bank of Boston

[2]Federal Reserve Bank of Richmond

August 2026

Abstract

We study banks' participation in reciprocal deposit networks and their potential financial stability implications. Our results show that banks increasingly participate in these networks, with reciprocal deposit growth positively correlated with lagged uninsured deposits. Using daily Fedwire data, we provide evidence that reciprocal deposits improved overall—not just deposit—funding stability during the 2023 Silicon Valley Bank (SVB) crisis. Using unique multi-network membership data, we identify key drivers of network participation. Our novel data and findings advance understanding of how banks use network-based arrangements to manage funding risk, with implications for both deposit insurance policy and network design.

*We thank Johannes Wasner and Ian Bluth for excellent research analysis support. We are very grateful to Melinda Bowen, Michelle Fitch, Derek Thompson, Christopher J Vanderpool, Luke Waid and Mark Wegner for their collaboration and contributions to this work. Disclaimer: these are views of the authors and not those of the Federal Reserve Bank of Boston, the Federal Reserve Bank of Richmond, or the Federal Reserve System.

1 Introduction

Reciprocal deposits represent a significant financial innovation in deposit management that has transformed how banks and depositors navigate deposit insurance constraints. Unlike traditional deposit arrangements, reciprocal deposits enable banks to exchange deposits through specialized networks, effectively expanding insurance coverage for large depositors while maintaining the bilateral banking relationship.

Reciprocal deposits are deposits that a bank receives through a deposit network in return for placing a matching amount of deposits at other network banks. Specifically, they are deposits placed by one bank (the "placing" bank) through a deposit network at another bank (the "receiving" bank) in exchange for matching deposits with the same amount and the same maturity.[1]

Reciprocal deposits allow customers with cash balances that exceed the Federal Deposit Insurance Corporation's (FDIC) $250,000 deposit insurance limit to break up their deposits among several banks to increase deposit insurance coverage. This innovation has grown substantially in recent years, with adoption accelerating dramatically especially after the Silicon Valley Bank (SVB) collapse. As of 2025Q4, the participation rate is remarkably high at approximately 47% of all banks in the U.S. system participating in such networks. The main depositors in reciprocal deposits are businesses, public entities and nonprofit organizations (all three types representing about 85% of the total amount of reciprocal deposits). There are several deposit networks in the market, including IntraFi, the oldest network, which has been operating for over 20 years.

Given the growing importance of reciprocal deposits, we seek to better understand the following three question: (1) how have reciprocal deposits evolved over time? (2) what characteristics are the main drivers for a bank to participate in a reciprocal deposit network? and (3) whether access to reciprocal deposit networks helps improve a bank's overall funding stability especially during a crisis period.

First, we document the development of the reciprocal deposits market both at aggregate and at dis-aggregate levels by bank size. We find that small (with total assets below $10 billion) and midsize banks (with total assets between $10 and $100 billion) are the main participants in the reciprocal deposit networks (i.e. hold positive amounts of reciprocal deposits on their balance sheets). Moreover, we identify two surges of new banks entering the reciprocal deposits networks: one occurred after a 2018 regulatory reporting rule change - which changed banks' treatment of reciprocal deposits - and the other surge after SVB collapse in March 2023.

[1]For example, if a depositor has $1 million in a single account at his home bank, then the home bank would keep $250,000 and the remaining $750,000 would be distributed through the deposit network in $250,000 increments with other three banks (i.e., Bank 1, 2, and 3). The customer relationship stays with the home bank, and the settlement bank (for example BNY Mellon) will keep a record of the transaction. The home bank will receive matching deposits from Bank 1, 2 and 3 making it reciprocal. Therefore, the whole $1 million is insured.

Second, we find that banks with higher uninsured deposits tend to have higher growth in their reciprocal deposits amount, on average. This relationship was particularly significant for small and midsize banks during the 2023 SVB crisis period.

Third, we examine a critical but understudied question: does access to reciprocal deposits improve banks' overall funding stability during stress periods? Using differences-in-differences and a novel approach to measure overall funding dynamics-using Fedwire payment data—we show that, during the SVB crisis period, banks with prior access to reciprocal deposit networks experienced significantly higher liquidity net-inflows and greater overall funding stability compared to similar banks without such access. This result provides the first evidence that reciprocal deposits enhance overall—not just deposit—funding resilience during periods of financial stress. Importantly, we focus on overall funding rather than just deposit funding. This distinction is crucial: if banks simply substitute reciprocal deposits for other funding sources, then reciprocal deposits would merely shift the composition of funding without improving overall stability.

Our paper contributes to the literature in three ways. First, we provide a more detailed analysis of the historical development of the reciprocal deposits market, at both aggregate and dis-aggregate levels. Our analysis provides additional insights to the existing studies that offer a historical overview at the aggregate level. For example, Ryfe and Saretto (2023) present an overview of reciprocal deposits. Prescott and Rosenberger (2024) study the evolution of reciprocal deposits during the 2023 SVB crisis period, with examples of banks similar to SVB that survived and held substantial amounts of deposits in reciprocal deposit networks.

Second, our paper is closely related to Kim et al. (2024), which shows that reciprocal deposit networks helped improve bank funding following SVB's collapse. However, they focus on just deposit funding, while we examine the impact of such networks on banks' overall funding resilience.

Our paper also adds to the existing literature that has emphasized two principal trade-offs of deposit insurance: on one hand, deposit insurance helps improve financial stability, while on the other hand, it could potentially lead to excessive risk-taking incentives of insured banks (see, for example, Diamond and Dybvig (1983), Kane (1985), Bhattacharya et al. (1998), Goldstein and Pauzner (2005), Calomiris and Jaremski (2019), Jaremski and Schuster (2024), Kim et al. (2024) and Huberdeau-Reid and Pennacchi (2025)). This paper provides evidence on the potential benefits of adopting reciprocal deposits, although we do not examine the net benefits.

Third, to the best of our knowledge, there are few studies on banks' membership in the main deposit networks, due to lack of data and the existence of multiple networks. Based on unique membership data, our analysis fills this gap in the literature by investigating the heterogeneity of banks participating in different networks, and what type of banks are more likely to participate in multiple networks rather than just in a single network.

The remainder of the paper is structured as follows. Section 2 provides background information on reciprocal deposits including the reporting rule change in 2018 and the related main deposit networks. Section 3 introduces the main data sources used in the paper and Section 4 describes the historical trend and evolution of the reciprocal deposits market. Then Section 5 addresses the relationship between a bank's reciprocal deposits and its holding of uninsured deposits. Further we investigate whether access to reciprocal deposit helps banks improve their overall funding stability during stress periods in Section 6. Section 7 studies banks' membership across the main deposit networks and analyzes the heterogeneity of banks that participate in different networks. Finally, Section 8 concludes.

2 Background

This section describes the reporting rule change for reciprocal deposits in 2018, and introduces the main deposit networks and their affiliated products.

2.1 Reporting Rule Change

A significant regulatory change in 2018 transformed the treatment of reciprocal deposits. Specifically, the Economic Growth, Regulatory Relief, and Consumer Protection Act (EGRRCPA), enacted on May 24, 2018, allowed banks to treat some of their reciprocal deposits as non-brokered deposits (up to a specified cap), which have lower regulatory burdens than brokered deposits. The FDIC finalized implementation in early 2019, with the new rules becoming effective on April 1, 2019.

Importantly, EGRRCPA introduced new Call Report requirements that created distinct categories for tracking reciprocal deposits. Before EGRRCPA, banks reported only brokered reciprocal deposits. Following EGRRCPA's implementation, banks began reporting total reciprocal deposits delineated by brokered and non-brokered. This allowed regulators and researchers to distinguish between reciprocal deposits that qualify for non-brokered treatment-and, hence, lower regulatory charges-and those that must be reported as brokered–either because the institution does not qualify for the exemption or because the deposits exceed the applicable caps.[2]

[2]Reporting details: Following EGRRCPA, all banks must report total reciprocal deposits in Schedule RC-E, Memorandum item 1.g (first observed in Call Report data in 2018Q3, as shown in Figure 4, regardless of whether these deposits qualify for non-brokered treatment. Banks that either do not qualify for the non-brokered exemption or hold reciprocal deposits exceeding the applicable cap must additionally report the brokered portion as part of their total brokered deposits in Schedule RC-E (Memorandum items 1.b, 1.c, and 1.d) and separately identify brokered reciprocal deposits in Schedule RC-O, item 9. Before EGRRCPA, banks reported only brokered reciprocal deposits in Schedule RC-O (data available from 2009Q2).

Under the EGRRCPA framework, banks meeting specific criteria may qualify for the non-brokered reciprocal deposit exception up to a general cap. This general cap is defined as the lesser of $5 billion or 20 percent of the institution's total liabilities, provided the bank is both well-capitalized and well-rated (composite CAMELS rating of 1 or 2, where CAMELS is a supervisory rating of bank safety and soundness).[3] Most reciprocal deposits held by participating banks fall within this general cap. Figure 1 illustrates how this cap becomes increasingly binding for larger institutions. While banks with liabilities under $25 billion can utilize up to 20 percent of their liabilities as non-brokered reciprocal deposits, the $5 billion absolute cap becomes binding beyond this threshold. For banks with $100 billion in liabilities, this cap represents 5 percent of their liabilities, and this percentage declines further as liabilities increase—for example, a bank with $200 billion in liabilities is limited to just 2.5 percent. This makes the EGRRCPA exemption substantially more valuable for community and regional banks than for large banking organizations.[4]

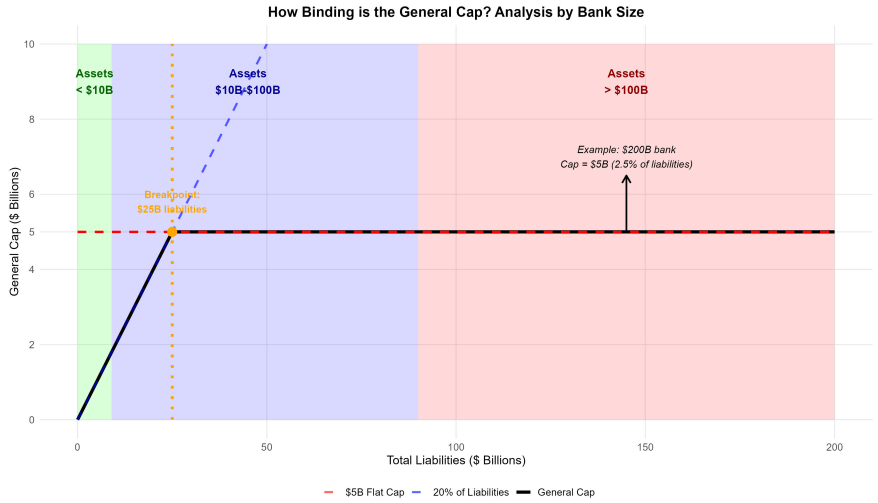

Figure 1: General Cap Constraints Across Bank Size

Notes: The figure illustrates how the EGRRCPA general cap (lesser of $5 billion or 20% of total liabilities) becomes increasingly binding for larger banks. The solid black line shows the effective cap. The blue dashed line represents 20% of liabilities; the red dashed line represents the $5 billion flat cap; the orange dotted line marks the $25 billion breakpoint. Shaded regions represent bank size categories based on total assets: green (< $10 billion), blue ($10 billion–$100 billion), red (> $100 billion), assuming liabilities ≈ 90% of assets. Source: Authors' calculations.

[3]CAMELS stands for Capital adequacy, Asset quality, Management, Earnings, Liquidity, and Sensitivity to market risk. It is a rating system used by U.S. banking regulators to assess the overall condition of financial institutions on a scale from 1 (strongest) to 5 (weakest). Banks rated 1 or 2 are considered well-rated. See Uniform Financial Institutions Rating System, 61 Fed. Reg. 67021 (Dec. 19, 1996).

[4]Recently FDIC is amending its brokered deposit regulations to conform with recent changes to section 29 of the Federal Deposit Insurance Act made by section 902 of the 21st Century ROAD to Housing Act related to reciprocal deposits where the cap of non-brokered reciprocal deposit is increased, which took effect on July 11, 2026. Analysis of the new cap rule is forthcoming and will be incorporated in a subsequent version of this paper.

A more restrictive special cap applies when a bank's status changes–specifically, when it becomes either not well-rated or not well-capitalized. Under the special cap, the institution may continue to qualify for the non-brokered reciprocal deposit based on a historical threshold. Specifically, its reciprocal deposits must not exceed the average amount of it held at quarter-end during the four quarters preceding the quarter in which the institution fell below well-capitalized or well-rated status. This special cap thus serves as a transitional limit that prevents rapid expansion of non-brokered reciprocal deposits following a deterioration in the bank's financial condition.

This reclassification from brokered to non-brokered status carries substantial benefits for banks. Brokered deposits receive heightened regulatory scrutiny during bank examination periods and are subject to higher FDIC insurance assessment rates. Additionally, banks that are less than well-capitalized face restrictions on accepting or renewing brokered deposits, making the non-brokered classification particularly valuable for maintaining funding flexibility.

2.2 Main Deposit Networks

Deposit networks are financial intermediation platforms that connect banks to redistribute deposits across multiple insured depository institutions. They allow customers to obtain FDIC insurance coverage above the standard $250,000 limit through a single banking relationship, while enabling banks to expand deposit-gathering capacity, manage liquidity, and optimize balance sheets. Over time, these platforms have evolved from primarily reciprocal structures—where banks exchange equal-value deposits—to broader product sets that include one-way buy and sell placements and sweep-based allocation mechanisms.

The value proposition operates simultaneously on the customer and the bank side. Customers gain consolidated access to insured deposit capacity without managing multiple banking relationships, while banks—particularly community and regional institutions—use these networks to attract large depositors, retain existing clients, and manage funding conditions. These roles became more salient following the 2018 rule change, which allowed certain reciprocal deposits to be treated as non-brokered, and during the 2023 banking stress, which increased the visibility of insured deposit distribution mechanisms.

During the 2023 banking stress, four providers were most prominent: IntraFi Network, Reich & Tang Deposit Solutions (R&T), American Deposit Management Co., and StoneCastle Partners. ModernFi has since emerged as an additional entrant in the reciprocal deposit segment. While all address the same underlying economic function—extending deposit insurance and reallocating liquidity—they differ in institutional structure, allocation design, and product emphasis.

IntraFi Network, founded in 2002, established the modern reciprocal deposit infrastructure in the United States through the Certificate of Deposit Account Registry Service (CDARS, 2003) and

Insured Cash Sweep (ICS, 2010). These services enable banks to offer expanded FDIC insurance while maintaining depositor relationships. R&T, originating in 1974, and evolved into a deposit platform in the 2010s, operates within a similar bank-centric framework, but engages in broader liquidity management through reciprocal deposits, cash sweeps, and one-way placements for institutional clients. American Deposit Management Co., founded in 2000, centralizes the customer relationship at the platform level, with clients placing funds directly through the intermediary, which allocates deposits across its bank network: this setup makes banks counterparties in a centralized allocation system. StoneCastle Partners, founded in 2003, developed insured deposit placement programs through its interLINK platform, distributing deposits across multiple FDIC-insured banks within a broader institutional cash management framework. ModernFi, founded in 2022 by a former senior executive of IntraFi Network, preserves the reciprocal deposit architecture and has emerged as a direct competitor on reciprocal deposits to IntraFi and R&T, differentiating itself through a technology-intensive implementation layer emphasizing real-time processing, API integration, and system interoperability.

These differences across providers can be understood along three dimensions: the locus of the customer relationship, the allocation mechanism, and the role of the network operator. In IntraFi and R&T, the customer relationship remains anchored at the originating bank, which distributes deposits across participating institutions through a standardized exchange framework. American Deposit Management Co. centralizes the customer relationship at the platform level, directly allocating deposits across its bank network. StoneCastle operates as a centralized institutional deposit allocation platform within a broader cash management framework, emphasizing distribution and allocation of deposits across partner banks rather than reciprocal exchange structures. ModernFi retains the reciprocal structure but embeds it within a more technology-driven infrastructure layer.

Consistent with these structural differences, reciprocal deposit networks and related platforms serve customers seeking large-scale insured liquidity with minimal operational complexity. Although the underlying need is common, access channels differ by structure. In bank-mediated systems such as IntraFi, R&T, and ModernFi, customers remain clients of their originating bank, making these networks particularly relevant for high-net-worth individuals and affluent retail clients who value consolidated banking relationships alongside expanded FDIC insurance coverage. These channels also serve small and medium-sized businesses, whose operating balances are managed through sweep and reciprocal products embedded in commercial banking relationships, enabling automated allocation of excess liquidity.

Institutional and public-sector clients represent a distinct segment within this structure. Municipalities, non-profits, healthcare organizations, and other fiduciary-constrained entities require fully insured deposit solutions for large cash balances and are served through both bank-mediated networks and specialized allocation platforms. In contrast, intermediary-led models such as American

Deposit Management Co. shift the customer relationship to the platform itself, with clients placing funds directly and the intermediary allocating deposits across banks. This structure is particularly relevant for large institutional cash pools managed centrally by treasury functions that prefer direct allocation control rather than bank-by-bank routing.

A critical feature of reciprocal deposit networks is the rate bridge mechanism, which ensures that depositors receive consistent interest rates regardless of the distribution of underlying deposit placements across banks. The mechanism functions as a settlement layer that reconciles differences in interest rates paid by receiving institutions.

In reciprocal structures, the home bank sets the depositor rate, while distributed deposits may be placed at varying rates across network banks. The rate bridge ensures that (1) depositors receive the rate set by their home bank, and (2) the home bank's net interest cost reflects that rate rather than the underlying distribution of rates across receiving banks. More formally, rate bridge payments align the aggregate funding cost of the distributing institution with its stated deposit pricing. For one-way buy products, the mechanism incorporates placement fees and ensures that purchasing institutions pay their contracted all-in cost of funds.

Example: A $1 million deposit is distributed across four $250,000 placements. If the home bank pays 4.00% APY, while receiving banks pay 3.50%, 4.50%, and 4.00%, the rate bridge reallocates differences so that net obligations match the home bank's 4.00% cost of funds.

Bank-level imbalances generate offsetting payments: banks above the reference rate contribute, and those below receive adjustments. These flows net to zero at the system level, while individual institutions experience gains or losses depending on their matched counterparties.

Matching algorithms, particularly those used in proprietary systems such as IntraFi's, influence the distribution of these outcomes. Banks paying above-market rates tend to receive favorable offsets, while those below market incur debits. Because matching is not fully observable, institutions face uncertainty in realized funding costs driven by network-wide rate dispersion.

The mechanism thus supports pricing consistency for depositors, cost predictability for banks, and market-clearing across heterogeneous rate conditions, while introducing basis risk tied to algorithmic matching outcomes rather than bank-specific pricing decisions.

Finally, while reciprocal deposits remain the core organizing product within deposit network platforms, these systems extend into a broader set of liquidity management tools. The following section describes these products in greater detail, including one-way buy and sell functionalities, sweep-based allocation mechanisms, and certificate of deposit structures that complement the core deposit distribution framework.

2.3 Various Products Provided in the Deposit Network

While reciprocal deposits remain the core organizing product within deposit network platforms, these systems extend into a broader set of liquidity management tools that shape how balances are distributed, managed, and optimized across insured depository institutions. These products complement the primary deposit allocation function by addressing different funding, liquidity, and balance sheet needs across participating banks and their clients.

A key distinction across product types lies in their impact on bank balance sheet positions. In reciprocal deposit structures, positions across institutions are exchanged in a manner that leaves each participating bank's net deposit position unchanged. By contrast, one-way buy (OWB) and one-way sell (OWS) transactions adjust net funding positions directly, with OWB increasing a bank's deposit base through purchased funding, and OWS reducing it through the placement of excess deposits into the network. These flows are coordinated through network-level matching systems that intermediate between surplus and deficit funding positions across institutions.

OWB refers to transactions in which a bank acquires deposits through the network to increase funding capacity, typically to meet liquidity needs or support balance sheet expansion. OWS refers to the placement of excess deposits into the network for fee income, allowing banks to reduce funding exposure while maintaining the underlying depositor relationship. Both mechanisms operate in real time through the network provider and represent directional liquidity management within the broader deposit ecosystem.

OWB and OWS mechanics are illustrated in Figure 2. In a stylized OWB/OWS setting, three banks engaging in OWS each place $1 million of excess deposits into the network, which is then redistributed through the network operator (e.g., IntraFi or associated settlement infrastructure) using its matching system. In the corresponding OWB flow, three banks acquire deposits through the network, with Bank 1 receiving $2 million, Bank 2 receiving $500 thousand, and Bank 3 receiving $500 thousand, illustrating net funding expansion through purchased deposits. The figure captures the directional flow of liquidity between surplus and deficit institutions under the network's allocation system.[5]

In addition to these directional funding tools, sweep-based deposit mechanisms automatically allocate customer balances across multiple insured institutions based on predefined thresholds. This ensures continuous FDIC insurance coverage while preserving transactional convenience for end users. Sweep structures are particularly relevant for operating accounts with fluctuating balances, where maintaining full insurance coverage would otherwise require manual allocation across banks.

[5] Analysis of OWB using confidential data is forthcoming and will be incorporated in a subsequent version of this paper.

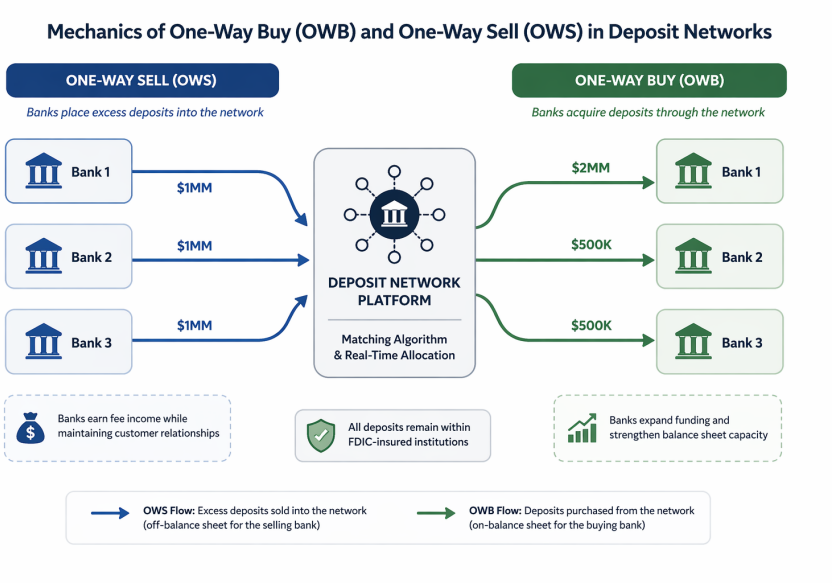

Figure 2: Example: One-Way Buy (OWB) and One-Way Sell (OWS)

Finally, some deposit networks extend their infrastructure to certificate of deposit (CD) structures, enabling term deposits to be distributed across multiple insured institutions. This allows customers to obtain fixed-term yield characteristics while maintaining expanded insurance coverage and operational simplicity through a single banking interface.

3 Data

We use three main datasets in our analysis. First, Call Report data provides banks' balance sheet information, including the key information on the amount of reciprocal deposits. Banks started reporting their holdings of reciprocal deposits from 2009Q1. As detailed in Section 2.1, following the 2018 EGRRCPA rule change, reciprocal deposits are reported in two categories: non-brokered and brokered reciprocal deposits, with this reporting structure change first fully observed in Call Report data in 2018Q3.

The second main dataset is Fedwire payment data, which we use to analyze banks' overall funding stability in Section 6. Fedwire is a confidential transaction-level dataset containing all payment transactions in the Fedwire Funds Service. Specifically, it is a real-time gross settlement system used by the Federal Reserve Banks to electronically settle U.S. dollar payments among member institutions, settling transactions individually on an order-by-order basis without netting. The Fedwire Funds Service was developed in 1918. It is owned and operated by the Federal Reserve Banks, has more than 5,000 participants, and processes trillions of dollars daily across approximately 700,000 transactions. The system operates 21.5 hours each business day, from 9:00pm

Eastern Time on the preceding calendar day to 6:30pm Eastern Time. Settlement is immediate. For each transaction, the data record accounts information for both sender and receiver, the real-time of the transfer (time and date, accurate to the second), payment amount, and transaction type (e.g., customer-initiated or bank-initiated). For our analysis, we focus on customer-initiated transactions, which represent approximately 85% of all transactions by count. We focus on customer-initiated transactions because they are outside the banks' control. Fedwire payment data are often used in the literature for measuring banks' liquidity at a higher frequency. In Section 6, we compute the daily net-inflow (inflow minus outflow) as a proxy for a bank's overall funding stability.

The third dataset consists of bank membership data for the main deposit networks introduced in Section 2.2 and analyzed in Section 7. These data were collected from publicly available information on deposit network websites as of 2023Q2 and identify which banks participate in each of the four major networks: IntraFi, Reich & Tang, StoneCastle, and American Deposit Management Co. This unique dataset allows us to analyze patterns of single versus multi-network membership and examine heterogeneity in bank characteristics across networks.

4 Historical Trend

In this section, we document the historical trend of reciprocal deposits in terms of both the number of banks that participate in the reciprocal deposit programs and banks' usage of reciprocal deposits. We define a bank as participating in a reciprocal deposit program if the bank has a positive amount of reciprocal deposits on its balance sheet.

Figure 3 plots the number of banks participating in reciprocal deposit programs, where we classify banks into four size buckets (based on banks' reported total assets as of 2022Q4): banks with total assets under $1 billion, between $1 billion and $10 billion, between $10 billion and $100 billion, and above $100 billion. As shown in the figure, most participating banks are small banks with assets under $10 billion. There are two notable surges during the period. One surge followed the 2018 rule change (the first vertical dashed line), which allowed most banks to treat some of their reciprocal deposits as non-brokered instead of brokered. This change was beneficial to banks, thus increasing their incentive to participate in reciprocal deposits. Another surge followed the SVB collapse, as depositors sought full FDIC coverage following bank failures and shifted to reciprocal deposits.

Next we show the historical trend in usage, measured as the ratio of reciprocal deposits to total domestic deposits, as shown in Figure 4. In terms of reporting, there is only one category in the Call Report before the 2018 rule change, which is brokered reciprocal deposits (captured in the bottom red line). After the 2018 rule change, reciprocal deposits are split into two categories: brokered and

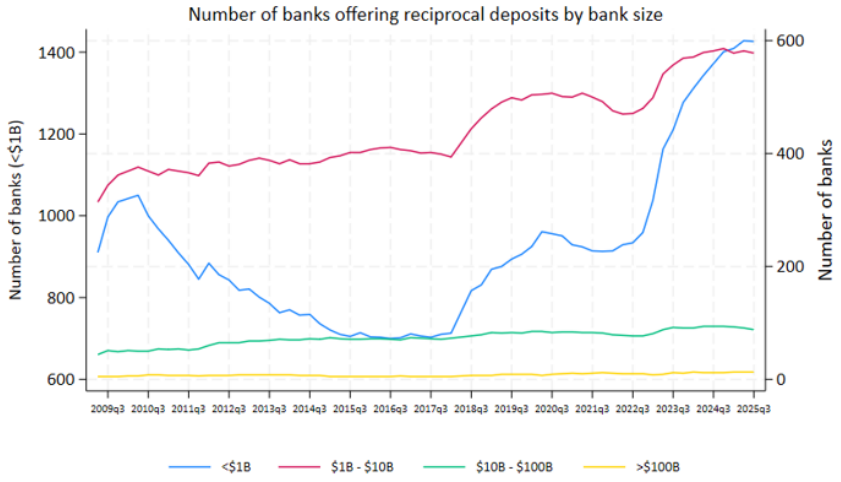

Figure 3: Count of participating banks by bank size bucket.
Notes: The figure plots the number of banks with positive reciprocal deposits. Banks are classified into four buckets based on size: banks with total assets below $1 billion, between $1 and $10 billion, between $10 and $100 billion, and above $100 billion, respectively. The number of small banks with total assets below $1 billion corresponds to the left side scale, while the other three categories follow the right scale. Source: Call Report.

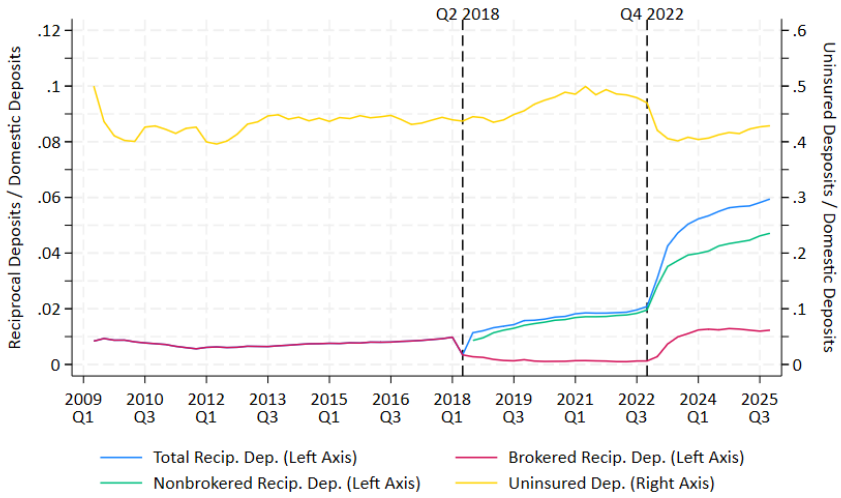

Figure 4: Reciprocal Deposits to Total Domestic Deposits.
Notes: The figure plots the evolution of reciprocal deposits between 2009Q1 and 2025Q4, as a share of total domestic deposits. The figure plots total reciprocal deposits before the EGRRCPA rule change in 2018Q2 and since then the total reciprocal deposit is decomposed into non-brokered reciprocal deposits and brokered reciprocal deposits. The figure also plots uninsured deposits as a share of total domestic deposits. Source: Call Report; Authors' calculations.

non-brokered reciprocal deposits (captured in the red line and green line respectively). The middle blue line represents the total reciprocal deposits. For comparison, we also plot uninsured deposits as a ratio of domestic deposits. From the figure, we can see that before 2018, the usage of reciprocal deposits was relatively stable and at low levels. We observe an increase after the 2018 EGRRCPA rule change (the left vertical dashed line), and another sharp increase following the SVB collapse (the right vertical dashed line).

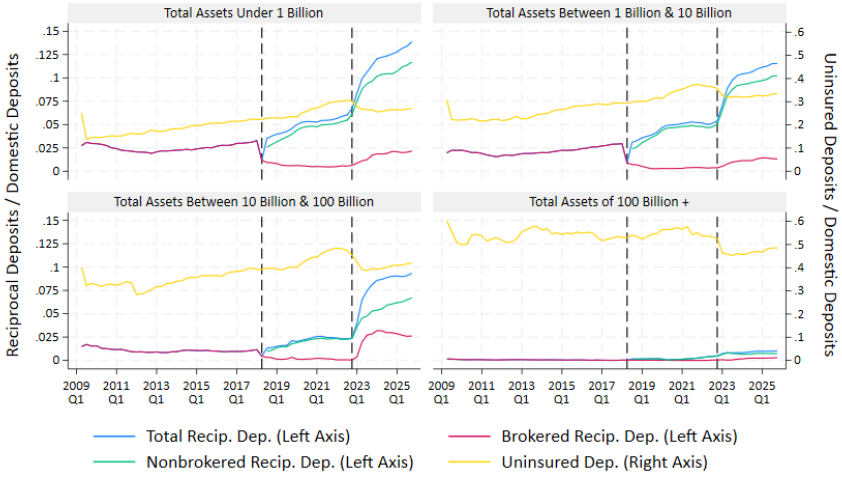

Figure 5: Reciprocal Deposits and Uninsured Deposits as Share of Total Domestic Deposits, by Bank Size. Notes: The figure plots the evolution of reciprocal deposits and uninsured deposits, both as a share of total domestic deposits, between 2009Q1 and 2025Q4, broken down by bank size. Banks are classified into four size categories based on total assets as of 2022Q4: banks with total assets under $1 billion, between $1 billion and $10 billion, between $10 billion and $100 billion, and above $100 billion. The figure shows total reciprocal deposits before the EGRRCPA rule change in 2018Q2 and decomposes them into non-brokered reciprocal deposits (green line) and brokered reciprocal deposits (red line) thereafter. The top yellow line represents uninsured deposits as a share of total domestic deposits for comparison. The two vertical dashed lines mark the 2018 EGRRCPA rule change and the March 2023 SVB collapse. Source: Call Report; Authors' calculations.

We then break down the results by bank size to examine heterogeneity. Figure 5 shows substantial heterogeneity across different bank size buckets. As we can see, before the 2018 rule change, small banks under $10 billion were the most active users of reciprocal deposits. Following the rule change, increased usage is largely driven by banks with assets under $100 billion, while large banks above $100 billion remain relatively inactive as shown in the bottom right chart. Similarly, after the SVB crisis, sudden growth is observed across the board but is more pronounced for banks under $100 billion, while remaining minimal for the large banks.

Notably, uninsured deposits (in the top yellow) line declined across all size cohorts after the SVB failure. This pattern–the decline in uninsured deposits coinciding with a general increase in

reciprocal deposits–motivates our analysis of the relationship between these two variables in the following section.

5 Relationship between Uninsured Deposits and Reciprocal Deposits

To examine the relationship between uninsured deposits and reciprocal deposit growth, we estimate quarterly regressions of reciprocal deposits growth on lagged uninsured deposits. The specification is as follows:

$$\Delta\text{ReciprocalDeposit}_{i,t} = \alpha + \beta \cdot \text{UninsuredDeposit}_{i,t-4} + \varepsilon_{i,t}. \tag{1}$$

where $\Delta\text{ReciprocalDeposit}_{i,t}$ measures the change in reciprocal deposits from time $(t-1)$ to t divided by total deposits at time $(t-1)$; $\text{UninsuredDeposit}_{i,t-4}$ measures the amount of uninsured deposits divided by total deposits at time $(t-4)$, lagged four quarters to capture the relationship between prior uninsured deposit levels and subsequent reciprocal deposit growth.

Figure 6 presents the estimated coefficients β from quarter-by-quarter regressions. During the 2023 SVB crisis period, banks with higher uninsured deposits in the previous year exhibit significantly higher reciprocal deposit growth in the current year. The estimated coefficient of 0.028 during the peak crisis quarter suggests that a one-standard-deviation increase in the uninsured deposit ratio (approximately 14 percentage points) is associated with an increase in reciprocal deposit growth of 0.4 percentage points, representing 36% of the average reciprocal deposit growth during this period.[6] Figure 7 breaks down these results by bank size, showing that they are mainly driven by small banks (under $10 billion). This pattern suggests that reciprocal deposits serve as an important tool for smaller banks to manage uninsured deposit risk. In the next section, we examine whether this relationship translates into improved funding stability during stress periods.

6 Analysis of Overall Funding Stability

In this section, we examine a critical question: did access to reciprocal deposit networks help enhance bank resilience during stress periods by supporting stable liquidity inflows? Importantly, we focus on overall funding stability–measured using Fedwire payment flows–rather than just

[6]To illustrate the economic magnitude, consider a bank at the 75th percentile of uninsured deposits (30% of total deposits). Relative to a bank at the 25th percentile (13%), this bank would experience 0.5 percentage points higher reciprocal deposit growth during the SVB crisis period, translating to approximately $14.07 million in additional reciprocal deposits for a bank with $2.96 billion in total deposits.

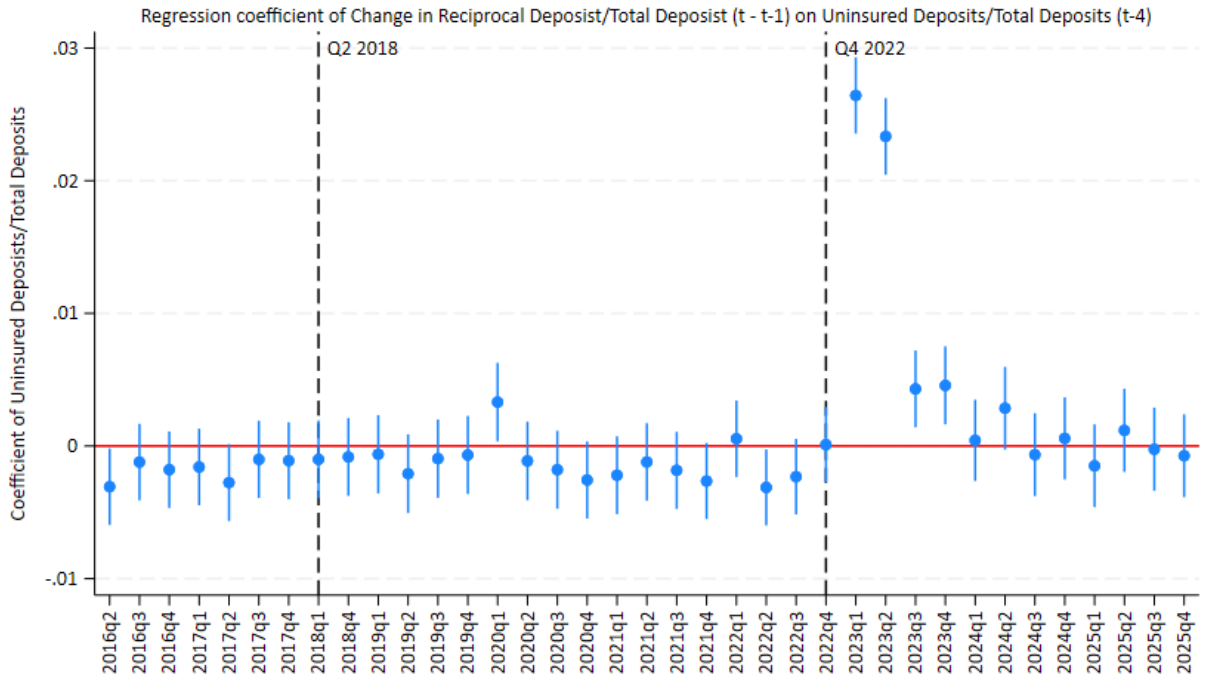

Figure 6: Relationship Between Uninsured Deposits and Reciprocal Deposit Growth.
Notes: The figure plots quarter–by–quarter regression coefficients (β) from equation (1), which estimates the relationship between lagged uninsured deposits (four quarters prior) and the change in reciprocal deposit scaled by total deposits. Each band represents the point estimate together with the 95% confidence interval. The vertical dashed lines mark the 2018 EGRRCPA rule change and the March 2023 SVB collapse. Source: Call Report; Authors' calculations.

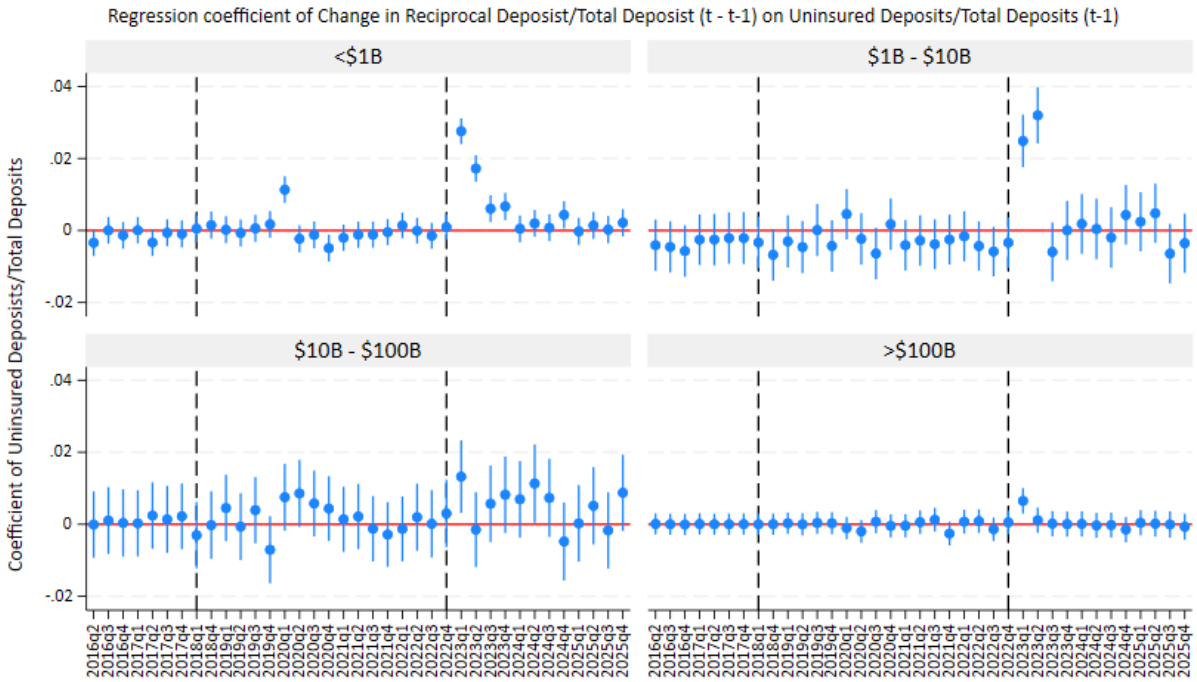

Figure 7: Relationship Between Uninsured Deposits and Reciprocal Deposit Growth, By Bank Size. Notes: The figure plots quarter–by–quarter regression coefficients (β) from equation (1), estimated separately for each bank size category. Banks are classified by total assets as of 2022Q4: under $1 billion, between $1 billion and $10 billion, between $10 billion and $100 billion, and above $100 billion. Each band represents the point estimate together with the 95% confidence interval. The vertical dashed lines mark the 2018 EGRRCPA rule change and the March 2023 SVB collapse. Source: Call Report; Authors' calculations.

deposit funding. This distinction is crucial: if banks simply substitute reciprocal deposits for other funding sources, then reciprocal deposits would merely shift the composition of funding without improving overall stability.

We consider the 2023 SVB crisis period, and compare the liquidity inflows of banks that participated in reciprocal deposit programs before the stress relative to similar banks that did not participate in reciprocal deposit programs. To identify a suitable control group, we employ a propensity score (PS) matching algorithm, which is commonly used in treatment effect studies. PS matching constructs an apples-to-apples comparison by pairing each reciprocal deposit bank ("treatment" group) with a non-reciprocal deposit bank that has similar observable characteristics, differing primarily in reciprocal deposit participation ("control" group). This approach helps us identify the control group and reduce selection bias.

PS matching is based on a broad set of bank characteristics as of 2022Q4, including total assets (in dollars), total deposits divided by total assets, time deposits divided by total deposits, interest-bearing deposits divided by total deposits, brokered deposits divided by total assets, Federal Funds and repo assets divided by total assets, Federal Funds and repo liabilities divided by total assets, and average size of deposit accounts. Table 1 compares the mean bank characteristics between the two groups after matching. The results confirm that the banks in the two groups are similar to each other, supporting the effectiveness of our matching procedure.

Using this matched sample, we first examine the cumulative net-inflows and the share of banks with positive net-inflows between the two groups. As shown in Figure 8, reciprocal deposit banks exhibit higher cumulative net-inflows compared to non-reciprocal deposit banks. Figure 9 further shows that a higher proportion of reciprocal deposit banks experience positive net-inflows.

To formalize these patterns, we estimate the following regression specification to analyze whether access to reciprocal deposits before the SVB collapse helped banks improve their overall funding stability (i.e., experience higher liquidity net-inflows) during the SVB crisis period:

$$\text{CumulativeNetInflow}_{i,t} = \alpha + \beta \cdot \text{ReciprocalDepositDummy}_i + \varepsilon_{i,t}. \tag{2}$$

where $\text{CumulativeNetInflow}_{i,t}$ is the cumulative payment net-inflow (defined as total inflow minus total outflow for bank i) from the starting date of February 1, 2023 (before the SVB crisis), normalized by total deposits as of 2022Q4. We use the payment net-inflow as a proxy for a bank's overall funding stability. The Fedwire payment system captures real-time funding flows among financial institutions and has been widely adopted in the banking literature to measure liquidity and funding conditions at high-frequency.[7] Our main right-hand-side variable is $\text{ReciprocalDepositDummy}_i$, a

[7]See for example, Afonso et al. (2011b,a); Bech and Garratt (2003); Copeland et al. (2021, 2014); Afonso et al. (2020); Afonson et al. (2022), etc.

Table 1: Comparative Results based on the PS Matched Sample.

Bank Characteristic	Treated Group	Control Group
Number of Banks	1,251	765
Total Assets (Thousands of $)	4,063,187.00	3,470,002.00
Total Deposits (Thousands of $)	3,182,057.57	2,711,484.82
Time Deposits (Thousands of $)	405,499.40	271,644.84
Interest Bearing Deposits (Thousands of $)	2,288,227.46	2,063,966.18
Brokered Deposits (Thousands of $)	158,742.08	114,784.04
FF + Repo Assets (Thousands of $)	4,613.62	4,196.19
FF + Repo Liabilities (Thousands of $)	24,552.89	20,712.11
Liabilities (Thousands of $)	3,536,781.92	3,096,799.00
Number of Deposit Accounts (Thousands)	83,791.72	70,707.51
Total Deposits / Assets	0.85	0.85
Time Deposits / Total Deposits	0.18	0.17
Interest Bearing Deposits / Total Deposits	0.73	0.73
Brokered Deposits / Total Deposits	0.04	0.03
FF + Repo Assets / Assets	0.00	0.00
FF + Repo Liabilities / Liabilities	0.01	0.01
Average Size of Deposit Accounts (Thousands of $)	37.98	37.05

Notes: This table compares the average of each bank characteristic between the treated group of reciprocal deposit banks (i.e., banks that participate in reciprocal deposits), and the control group of non-reciprocal deposit banks (i.e., banks that do not participate in reciprocal deposits). Source: Call Report; Authors' calculations.

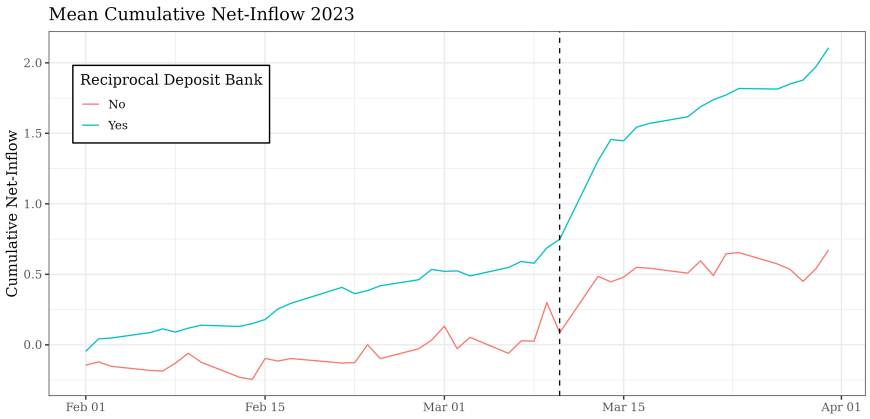

Figure 8: Mean Cumulative Net-Inflow During the 2023 SVB Crisis.
Notes: The figure plots the average cumulative payment net-inflow (total inflow minus total outflow) for two groups of propensity-score-matched banks: those that held positive reciprocal deposits as of 2022Q4 (treated group) and those that did not (control group). The cumulative net-inflow is computed starting February 1, 2023, and is normalized by total deposits as of 2022Q4. The vertical dashed line marks March 10, 2023 (SVB failure). Banks are matched using propensity score methods based on 2022Q4 characteristics including total assets, deposit composition, funding sources, and account structure. Source: Call Report; Fedwire payment data; Authors' calculations.

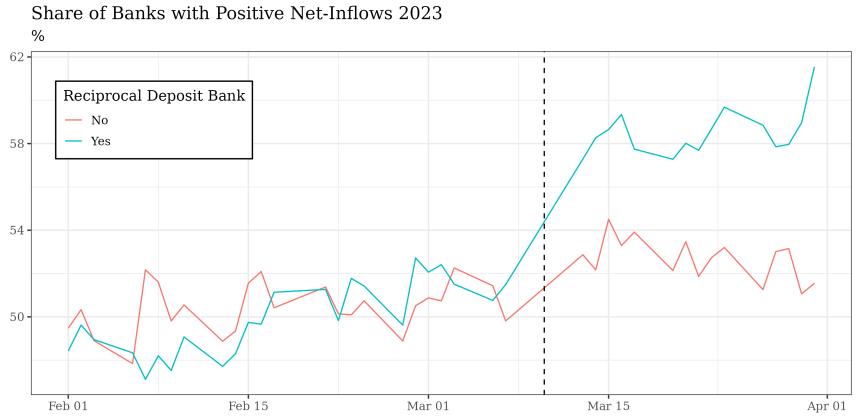

Figure 9: Share of Banks With Positive Net-Inflow During the 2023 SVB Crisis.
Notes: The figure plots the share of banks experiencing positive cumulative net-inflow, separately for banks that held positive reciprocal deposits as of 2022Q4 (treated group) and those that did not (control group). Banks are matched using propensity score methods based on 2022Q4 characteristics including total assets, deposit composition, funding sources, and account structure. The cumulative net-inflow is computed starting February 1, 2023, and is normalized by total deposits as of 2022Q4. The vertical dashed line marks March 10, 2023 (SVB failure). Source: Call Report; Fedwire payment data; Authors' calculations.

dummy variable that equals one if bank *i* has a positive amount of reciprocal deposits in 2022Q4. We run the above regression at both daily and weekly frequencies, with daily regression results provided in Figure 10 (weekly regression results are provided in the Appendix in Figure A.1).

Table 2: Daily Net-inflow Regression Results

Dependent Var:	**Daily Net-Inflow**
PostShockDummy	0.0320**
PostShockDummy*ReciDepDummy	0.0333**
Bank Fixed Effects	Yes
R-square	0.199
Number of Observations	71,706

Notes: The table presents the panel data regression results based on daily net-inflow divided by the lagged total deposits measured in 2022Q4. Significance level: * at 10%, ** at 5%, and *** at 1%.

Figure 10 shows that during the SVB crisis period, banks that had already participated in reciprocal deposit programs experienced significantly higher liquidity net-inflows, indicating greater overall funding stability, compared to banks with similar bank characteristics that did not participate in reciprocal deposit programs. We further run a panel data regression using all days in the SVB crisis period shown in Figure 10, with results presented in Table 2. The estimated coefficient on the interaction term is statistically significant, corroborating the results in Figure 10.

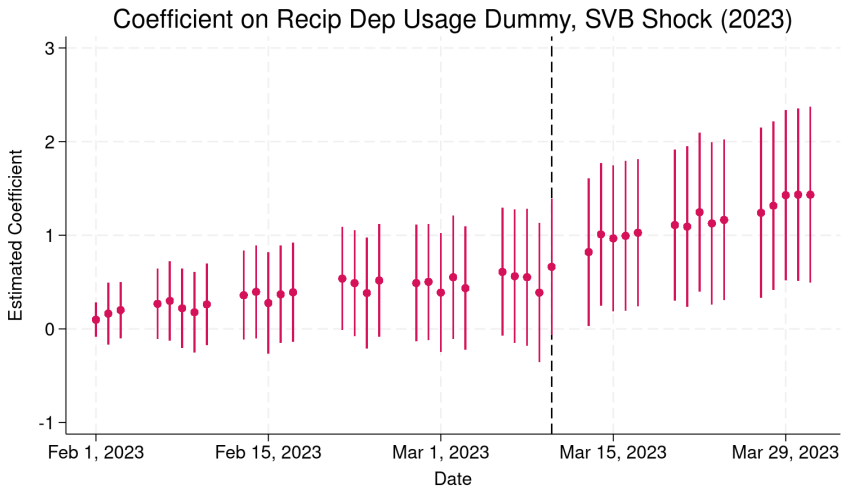

Figure 10: Daily Regression Estimates: Impact of Reciprocal Deposit Access on Cumulative Net-Inflow. Notes: The figure plots daily regression coefficients (β) from equation (2), which estimates the difference in cumulative net-inflow between banks with and without prior reciprocal deposit participation. Each point represents the coefficient estimate with the shaded band showing the 95% confidence interval. The sample consists of propensity-score-matched banks based on 2022Q4 characteristics including total assets, deposit composition, funding sources, and account structure. The vertical dashed line marks March 10, 2023 (SVB failure). Source: Call Report; Fedwire payment data; Authors' calculations.

7 Bank Membership in Deposit Networks

During the 2023 banking turmoil triggered by the SVB collapse, we leveraged a dataset collected from public information that provides a unique snapshot as of 2023Q2 of bank affiliations with deposit networks. This dataset identifies the member banks of the top four deposit networks operating at that time: IntraFi (IF), Reich & Tang (R&T), StoneCastle (SC), and American Deposit Management Co. (ADC). Understanding the structure of these networks and the overlap in bank memberships is particularly important given the absence of a central counterparty in the deposit network space. Unlike many financial market infrastructures where a central entity coordinates and monitors activity, deposit networks operate independently, with banks potentially participating across multiple platforms simultaneously. This fragmented structure means that a bank's total exposure to network-based deposits and its interconnectedness with other institutions can only be understood by examining membership patterns across all networks.

Figure 11 presents a Venn diagram illustrating the membership overlap across the four major deposit networks as of 2023Q2. The visualization reveals several important patterns. These networks are highly intertwined, with substantial membership overlap suggesting that banks strategically maintain multiple network affiliations to maximize their deposit placement capabilities. IntraFi clearly dominates the market with the largest member base—2,734 banks in total, representing

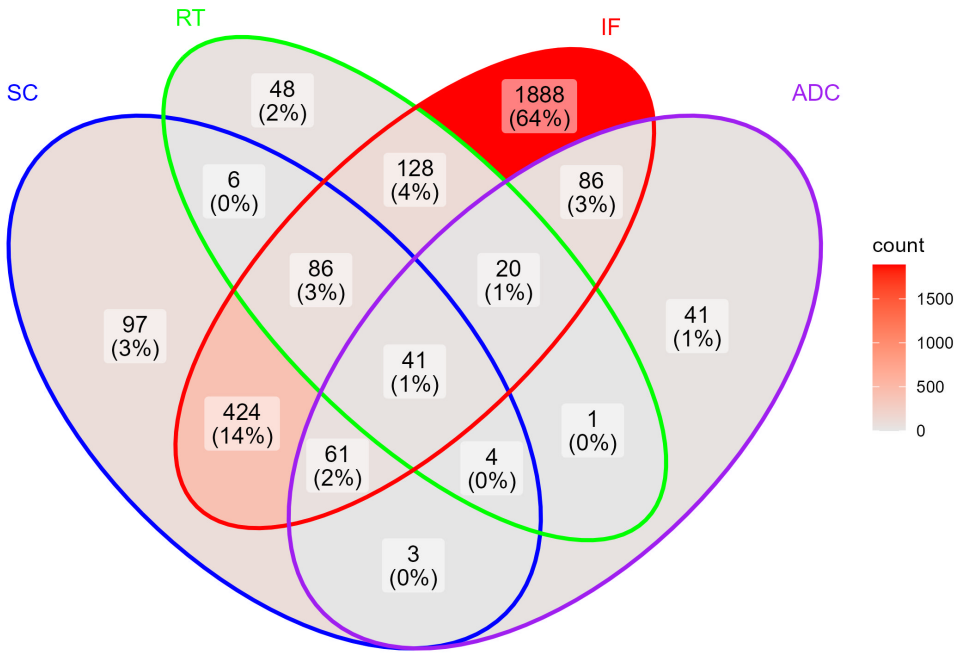

Figure 11: Bank Membership in Main Deposit Networks.
Notes: This Venn diagram shows the number of member banks in each deposit network, based on 2023Q2 data. From left to right, SC stands for StoneCastle, RT for Reich & Tang, IF for IntraFi and ADC for American Deposit Management. Source: Reciprocal deposit providers; Authors' calculations.

approximately 58% of all banks in the Call Report sample at that time. Perhaps most striking is that approximately 80% of banks affiliated with non-IntraFi networks (R&T, StoneCastle, or ADC) are also IntraFi members, indicating IntraFi's role as the primary or foundational network for most participants.

IntraFi's market dominance is not surprising given its position as the oldest deposit network, founded in 2002 (originally as Promontory Interfinancial Network) and introducing reciprocal deposits in 2003. However, the extent of its reach is also driven by its particular focus on serving community banks and smaller institutions. The dark red section of the Venn diagram shows that 1,888 banks are affiliated exclusively with IntraFi—these institutions tend to be very small community banks, reflecting IntraFi's niche in serving this market segment.

Table 3 provides a more detailed breakdown of network affiliation patterns, revealing that a substantial number of banks—approximately 30% (860 out of 2,934)—participate in more than one deposit network. The data shows 648 banks with dual network memberships, 171 banks affiliated with three networks, and 41 banks participating in all four networks simultaneously.

Examining the pattern by bank asset size reveals a clear and striking relationship: larger banks with assets above $10 billion maintain significantly more network affiliations. Among community banks with assets under $1 billion, 77.6% (1,641 out of 2,116) are affiliated with only one network,

Table 3: Distribution of Deposit Network Membership by Asset Size, 2023Q2

	All Banks	< $1B	$1B-$10B	$10B-$100B	$100B+
1	2074	1641	392	37	4
2	648	412	197	28	11
3	171	53	81	25	12
4	41	10	14	16	1
Total	2934	2116	684	106	28
Average	1.38	1.26	1.59	2.19	2.36

Notes: The table shows the distribution of banks by number of network memberships (1-4) across four networks: IntraFi (IF), Reich & Tang (R&T), StoneCastle (S&C), and American Deposit Management Co. (ADC).

with an average of 1.26 network memberships per bank. This pattern shifts dramatically as bank size increases. For banks between $1 billion and $10 billion in assets, only 57.3% maintain a single network relationship, with the average rising to 1.59 networks per bank. The trend becomes even more pronounced for mid-sized regional banks ($10 billion-$100 billion), where only 34.9% remain single-network members and the average climbs to 2.19 networks. Among the largest banks (over $100 billion in assets), only 4 out of 28 banks (14.3%) rely on a single network, with these institutions maintaining an average of 2.36 network relationships—and notably, 42.9% of these large banks participate in three networks simultaneously. This pattern suggests that larger institutions strategically diversify across multiple networks–likely to access deeper liquidity pools–serve diverse client segments with different needs, or maintain operational redundancy and competitive optionality in their funding strategies.

While the previous analysis revealed how banks distribute their memberships across multiple networks, understanding the characteristics of banks that affiliate with each network provides important insights into market segmentation and strategic positioning. Table 4 presents summary statistics comparing member bank characteristics across the four major deposit networks as of 2023Q2.

The networks serve distinctly different market segments. IntraFi has the most member banks (2,722) with an average size in the small-to-medium range ($7.98 billion in assets), consistent with its community bank focus. Reich & Tang (329 banks) serves the largest institutions, averaging $42.78 billion in assets–more than five times IntraFi's average member. StoneCastle (722 banks) occupies a middle position at $12.23 billion, while ADC (255 banks) averages $29.60 billion. Capital positions align with these size differences, with R&T members maintaining the highest tangible common equity ($3.46 billion), followed by ADC ($2.30 billion), StoneCastle ($1.00 billion), and IntraFi ($0.63 billion). The large standard deviations across most metrics reflect substantial heterogeneity within each network's membership, indicating that while average characteristics differ across networks, considerable variation exists among banks within each network.

Table 4: Summary Statistics of Member Bank Characteristics by Deposit Network, 2023Q2

	SC	R&T	IntraFi	ADC
Assets ($)	12.23	42.78	7.98	29.60
	(97.18)	(237.73)	(96.86)	(218.73)
Liabilities ($)	10.99	38.61	7.21	26.73
	(87.59)	(215.11)	(87.67)	(198.31)
Total Domestic Deposits ($)	9.75	33.58	6.33	22.88
	(77.99)	(181.99)	(75.28)	(162.91)
Reciprocal Deposits ($)	0.18	0.43	0.11	0.34
	(0.63)	(1.14)	(0.52)	(1.02)
Usage (%)	3.03	6.40	1.83	5.18
	(8.60)	(15.41)	(7.43)	(14.17)
Uninsured Deposits ($)	4.89	18.03	3.11	11.92
	(53.26)	(117.17)	(44.72)	(98.65)
Uninsured Deposit Ratio (%)	28.73	31.02	27.66	30.02
	(12.63)	(16.07)	(13.17)	(14.69)
Reciprocal Deposit Ratio (%)	5.96	7.70	4.87	6.02
	(8.12)	(9.06)	(7.51)	(8.82)
Tangible Common Equity ($)	1.00	3.46	0.63	2.30
	(8.23)	(19.56)	(7.69)	(17.52)
CET1 ($)	1.12	3.76	0.70	2.54
	(8.51)	(20.08)	(8.00)	(18.10)
Number of Deposit Accts	349.55	1207.00	234.93	0.85
	(3014.40)	(7801.61)	(3587.12)	(7.34)
Value of Deposit Accts ($)	0.07	0.48	0.24	0.15
	(0.17)	(6.26)	(5.15)	(1.11)
Number of Banks	722	329	2722	255

Notes: Table reports mean values with standard deviations in parentheses. Dollar amounts are in billions except for Value of Deposit Accounts (in millions). Usage is defined as the percentage of non-brokered reciprocal deposits relative to the general cap. Number of Deposit Accounts is reported in thousands. CET1 stands for Common Equity Tier 1 capital. Bank membership is irrespective of whether a bank actively participates in reciprocal deposit products or other network services. Networks: IntraFi (IF), Reich & Tang (R&T), StoneCastle (SC), and American Deposit Management Co. (ADC).

Despite substantial size differences, the share of uninsured deposits relative to total deposits (uninsured deposit ratio) is remarkably similar across networks, ranging from 27.66% (IntraFi) to 31.02% (R&T). This consistency suggests uniform demand for extended FDIC coverage across institution sizes. However, the intensity with which banks utilize reciprocal deposits varies considerably across networks. We measure usage as the percentage of non-brokered reciprocal deposits relative to the regulatory general cap (the lesser of $5 billion or 20% of total liabilities). R&T members exhibit the highest usage at 6.40%, meaning they utilize 6.40% of their available regulatory capacity for reciprocal deposits, and also have the highest reciprocal deposit ratio (reciprocal deposits as a share of total deposits) at 7.70%. In contrast, IntraFi members show the lowest usage (1.83%) and reciprocal deposit ratio (4.87%) despite the network's dominant membership. StoneCastle and ADC fall in between, with usage rates of 3.03% and 5.18% respectively. This pattern suggests many IntraFi members–particularly smaller community banks–maintain network access as an option rather than actively utilizing it for funding.

Account structure metrics further differentiate the networks. R&T members maintain the largest deposit base (1.207 million accounts) with the highest average account values ($0.48 million per account), consistent with serving wealthier clientele at larger institutions. StoneCastle members average 349,550 accounts with an average value of $0.07 million per account, reflecting a broader retail base typical of mid-sized regional banks. IntraFi members maintain 234,930 accounts with an average value of $0.24 million per account, reflecting community banks' ability to attract depositors with balances exceeding FDIC limits. ADC shows a more specialized profile with only 850 accounts but higher average values ($0.15 million per account), suggesting focus on fewer, larger deposit relationships.

These network-level differences reveal a tiered ecosystem where bank size correlates with both network diversification and usage intensity, with regional banks maintaining broader network access and higher reciprocal deposit utilization relative to regulatory caps, while community banks rely primarily on single-network affiliations with more limited engagement. The higher reciprocal deposit usage among larger network members admits multiple interpretations. One possibility is that these institutions serve as intermediaries in the broader deposit network ecosystem, though such intermediation would primarily occur through one-way deposit purchases rather than reciprocal exchanges. Alternatively, the pattern may simply reflect that larger banks have client bases with more depositors holding balances exceeding FDIC limits, creating greater demand for network-based insurance solutions. The higher usage could also indicate greater operational sophistication and active balance sheet management among mid-sized and regional institutions. Finally, it is worth noting that network membership does not necessarily imply active reciprocal deposit participation–members may utilize other network services such as one-way buy, one-way sell, or sweep products, or maintain membership primarily for optionality.

8 Conclusion

We study banks' participation in reciprocal deposits, a growing non-traditional deposit arrangement whereby a bank receives deposits through a deposit network in return for placing a matching amount of deposits with the same maturity at other network banks. Our analysis yields several key findings.

First, we document the evolution and historical trend of reciprocal deposit adoption. Banks have increasingly participated in reciprocal deposit programs, particularly following the 2018 EGRRCPA rule change and the 2023 SVB crisis. Both the participation rate and the intensity of reciprocal deposit usage has risen substantially, with small and medium-size banks (under $10 billion in assets) being the most active participants.

Second, our analysis shows that the growth of the amount of reciprocal deposits on a bank's balance sheet is positively correlated with the bank's lagged uninsured deposits, on average. This relationship is stronger for smaller banks during the 2023 SVB crisis period. This pattern suggests that reciprocal deposits serve as an important tool for banks to manage uninsured deposit risk.

Third, and most importantly, using Fedwire payment data, we provide evidence that access to reciprocal deposit networks enhances bank resilience during financial stress periods by supporting stable liquidity inflows. Crucially, we focus on overall funding stability–measured through payment flows–rather than just deposit funding. This distinction is important: our results show that reciprocal deposits improve overall funding resilience, not merely shift the composition of funding sources. Using propensity score matching to compare banks with similar characteristics, we find that banks with access to reciprocal deposit programs before the SVB collapse experienced significantly higher liquidity net-inflows during the crisis period compared to similar banks without such access.

Finally, based on unique banks' membership data, we document that approximately 30% of banks participate in multiple reciprocal deposit networks. Our analysis reveals substantial heterogeneity in bank characteristics across networks, with relatively larger banks (particularly regional banks between $10-100 billion) more likely to maintain multi-network affiliations and exhibiting higher reciprocal deposit utilization rates relative to regulatory caps.

Our findings provide novel evidence on reciprocal deposits and their effects on bank funding stability. We demonstrate that reciprocal deposits enhance overall funding stability through actual liquidity flows during stress periods, rather than merely reshuffling funding sources. Our multi-network membership analysis further reveals important patterns in network participation and utilization. These findings are relevant for assessing the EGRRCPA exemption and evaluating how network-based deposit arrangements may affect financial stability.

References

Afonso, G., Albagli, E., Copeland, A., Yorolmazer, T., 2020. Liquidity shocks and the supply of fed funds. Federal Reserve Bank of New York Staff Report No. 918 .

Afonso, G., Kovner, A., Schoar, A., 2011a. Liquidity hoarding and interbank market rates: The role of counterparty risk. Review of Finance, 15, 279–310.

Afonso, G., Kovner, A., Schoar, A., 2011b. Stressed, not frozen: The federal funds market in the financial crisis. The Journal of Finance, 66, 1109–1139.

Afonson, G., Copeland, A., Eren, E., Narajabad, B., 2022. Anatomy of a repo-market crisis. Federal Reserve Bank of New York Staff Report No. 1020. .

Bech, M.L., Garratt, R., 2003. The intraday liquidity management game. Journal of Economic Theory, 109, 198–219.

Bhattacharya, S., Boot, A.W.A., Thakor, A.V., 1998. The economics of bank regulation. Journal of Money, Credit and Banking, 30, 745–770.

Calomiris, C.W., Jaremski, M., 2019. Stealing deposits: Deposit insurance, risk-taking, and the removal of market discipline in early 20th-century banks. The Journal of Finance, 74, 711–754.

Copeland, A., Duffie, D., Yang, Y.D., 2021. Reserves were not so ample after all. Journal of Finance, 76, 1797–1852.

Copeland, A., Martin, A., Walker, M., 2014. Repo runs: Evidence from the tri-party repo market. Journal of Finance, 69, 2343–2380.

Diamond, D.W., Dybvig, P.H., 1983. Bank runs, deposit insurance, and liquidity. Journal of Political Economy, 91, 401–419.

Goldstein, I., Pauzner, A., 2005. Demand–deposit contracts and the probability of bank runs. The Journal of Finance, 60, 1293–1327.

Huberdeau-Reid, D.A., Pennacchi, G.G., 2025. Adverse selection in deposit insurance and government funding following the 2023 banking crisis. Journal of Financial Intermediation, 63, 101165.

Jaremski, M.S., Schuster, S.S., 2024. Deposit insurance, uninsured depositors, and liquidity risk during panics. National Bureau of Economic Research.

Kane, E.J., 1985. The Gathering Crisis in Federal Deposit Insurance. MIT Press,, Cambridge, MA.

Kim, E.T., Kundu, S., Purnanandam, A., 2024. The economics of network-based deposit insurance. FDIC working paper.

Prescott, E.S., Rosenberger, G., 2024. Reciprocal deposits and the banking turmoil of 2023. Federal Reserve Bank of Cleveland, EC 2024-14, DOI 10.26509/frbc-ec-202414.

Ryfe, D., Saretto, A., 2023. Reciprocal deposit networks provide means to exceed FDIC's $250,000 account cap. Dallas Fed Economics.

Appendix

A Additional Results

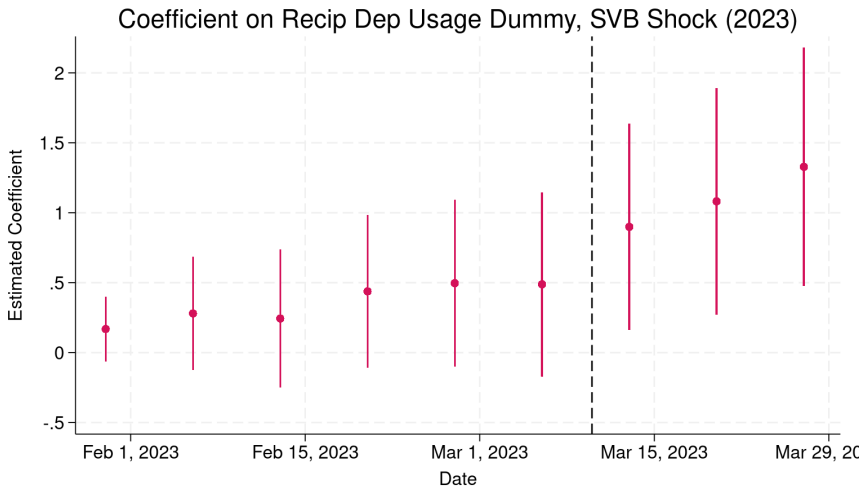

Figure A.1: Weekly Regression Estimates: Impact of Reciprocal Deposit Access on Cumulative Net-Inflow. Notes: The figure plots weekly regression coefficients (β) from equation (2), which estimates the difference in cumulative net-inflow between banks with and without prior reciprocal deposit participation. Each point represents the coefficient estimate with the shaded band showing the 95% confidence interval. The sample consists of propensity-score-matched banks based on 2022Q4 characteristics including total assets, deposit composition, funding sources, and account structure. The vertical dashed line marks the week of March 10, 2023 (SVB failure). Source: Call Report; Fedwire payment data; Authors' calculations.