Journal of Financial Crises

Volume 4 | Issue 2

2022

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Recommended Citation
Hoffner, Benjamin (2022) "United States: New York Clearing House Association, the Panic of 1884," *Journal of Financial Crises*: Vol. 4 : Iss. 2, 1278-1299.
Available at: https://elischolar.library.yale.edu/journal-of-financial-crises/vol4/iss2/59

United States: New York Clearing House Association, the Panic of 1884[1]

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Yale Program on Financial Stability Case Study
July 15, 2022

Abstract

The New York Clearing House Association (NYCH), whose membership included most banks in New York, acted as a lender of last resort during the National Banking Era (1863–1913). In the Panic of 1884, following idiosyncratic deposit runs that forced three NYCH member banks to close, the NYCH membership unanimously agreed to issue clearinghouse loan certificates (CLCs) that banks could use as a temporary substitute for currency in the payment of interbank clearinghouse balances. The NYCH required the borrowing bank to post sufficient collateral to secure the loan, subject to a minimum 25% haircut (excluding US government bonds secured at par) and to pay 6% interest. In aggregate, the NYCH issued $24.9 million in CLCs between May 15 and June 6. Outstanding CLCs peaked at $21.9 million on May 24. By July 1, all banks retired their CLCs, except for Metropolitan National Bank. Metropolitan National entered liquidation later that year with more than $5 million in uncanceled CLCs; the NYCH canceled these final CLCs in September 1886. With the exception of Metropolitan National Bank, the NYCH's issuance of CLCs coincided with a short and contained panic in New York City. Unlike in the Panic of 1873, New York banks did not temporarily suspend payments to depositors or pool their cash reserves to meet their liquidity needs. The US Treasury did not intervene by purchasing government bonds but did offer to repay $10 million in debt a month early to provide some relief to the market.

Keywords: clearinghouse loan certificates, National Banking Era, New York Clearing House Association, Panic of 1884, private lender of last resort

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[1] This case study is part of the Yale Program on Financial Stability (YPFS) selection of New Bagehot Project modules considering broad-based emergency lending programs. Cases are available from the *Journal of Financial Crises* at
https://elischolar.library.yale.edu/journal-of-financial-crises/.

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Overview

The New York Clearing House Association (NYCH) was a private organization established in 1854 to simplify and streamline the settlement of interbank transactions in New York City. It had 63 member banks in 1884, including the city's largest banks, which maintained reserves on deposit at the NYCH (Andrew 1910; Fulmer 2022). In the absence of a central bank, the NYCH served as a private lender of last resort for its member banks in crises in the 1860s and throughout the National Banking Era (Cannon 1910a).

Numerous bank failures in 1883 undermined confidence in the banking system, contributing to runs on three large NYCH member banks. Those runs marked the start of the Panic of 1884 (OCC 1907).

On May 6, 1884, the failure of brokerage firm Grant and Ward resulted in the closure of its large creditor, Marine National Bank. On May 13, Second National Bank temporarily closed after news of \$3.2 million in misappropriated funds (Bluedorn and Anderson 2016; OCC 1884). Finally, on May 14, a run on Metropolitan National Bank precipitated its temporary suspension as allegations circulated of fraudulent conduct (OCC 1907).

Although the NYCH opted to allow Marine National Bank to fail following a special examination, the closure of Metropolitan National Bank prompted immediate action by the NYCH on May 14 (Gorton and Tallman 2016).

The NYCH convened that day and unanimously agreed on an emergency plan. As in 1873, it created a five-member interim Loan Committee that would extend credits in the form of clearinghouse loan certificates (CLCs) to member banks. It described the decision as an effort to "protect the reserves of [member] banks" and "prevent suspension of gold and currency payments in New York" (OCC 1884). Member banks that received CLCs (borrowers) could use the certificates

Key Terms

Purpose: "For the purpose of sustaining each other and the business community" and "settling balances at the clearing house" (OCC 1884)	
Launch Dates	Announcement: May 14, 1884 First issue: May 15, 1884
Expiration Dates	Final issue: June 6, 1884 Final cancellation: September 23, 1886
Legal Authority	National Bank of 1864 (disputed)
Peak Outstanding	\$21.9 million on May 24, 1884
Participants	20 of 63 member banks participated in the CLCs
Rate	6%
Collateral	Bills receivable, stocks, bonds, and other securities
Loan Duration	Not applicable
Notable Features	Deployed at the start of the panic when deposit runs were isolated to three member banks
Outcomes	Contained crisis with New York City in a short period, no suspension of convertibility, delayed closure of Metropolitan National Bank

exclusively for the settlement of balances with other members at the NYCH; the NYCH required all member banks to accept CLCs as legitimate substitutes for currency balances. NYCH members jointly guaranteed CLC repayment. If a bank failed and could not repay its CLCs, the NYCH split the cost among the member banks proportional to their shares of capital and surplus (Gorton and Tallman 2018, 42–43). Members' ability to use CLCs as payment within the NYCH freed up currency to lend and pay down loans outside the clearinghouse (Moen and Tallman 2013).

To secure the CLCs, the Loan Committee would "receive from banks members of the association bills receivable and other securities to be approved by said committee" subject to a minimum haircut of 25%, excluding the use of US government bonds (OCC 1884). Borrowing banks paid a 6% interest rate to accepting banks (Cannon 1910a). As a penalty rate, the 6% interest on CLCs exceeded typical market rates for short-term financing, thereby incentivizing borrowers' prompt retirement of their outstanding CLCs (Hoag 2016).

From May 15 to June 6, the Loan Committee issued $24.9 million of CLCs in total, peaking at $21.9 million CLCs outstanding on May 24 (Bluedorn and Anderson 2016; OCC 1884; OCC 1907). Metropolitan National Bank's borrowings constituted one-third of total CLC issues. Metropolitan National Bank along with five other banks represented 89% of all CLCs issued (Moen and Tallman 2013). By October 3, 1884, all but $5.3 million issues were retired. Almost one year later, on October 1, 1885, $2.6 million in CLCs remained outstanding, all of which Metropolitan National Bank borrowed (OCC 1907). The NYCH retired the outstanding CLCs by September 1886 (Bluedorn and Anderson 2016).

As in other National Banking Era panics, the NYCH temporarily suspended publication of individual bank's balance sheet information to ease market concerns. Unlike in the other panics, in 1884 (as well as 1890), banks did not suspend redemptions of deposits (Gorton and Tallman 2016).

Summary Evaluation

The quick actions taken by the NYCH through the provision of CLCs at the onset of the Panic of 1884 were largely effective in managing the crisis. In its 1884 annual report, the Office of the Comptroller of the Currency praised the early rollout of CLCs in contrast to those issued in 1873. The Comptroller remarked that although the 1873 CLCs "could not restore confidence" to banks, in 1884, "there [was] little doubt but that the prompt action of the associated banks in May last in issuing these loan certificates had a most excellent effect not only in the city of New York but throughout the country" (OCC 1884).

The Panic of 1884 is often not labeled a "full-scale banking panic" as its effects were largely limited to New York (Bluedorn and Anderson 2016). Bluedorn and Anderson (2016) attribute such containment to the rapid introduction of CLCs that "prevented the banking difficulties in New York from worsening and from spreading to the interior." Similarly, Wicker (2000, 34) characterizes the NYCH's liquidity support during the 1884 panic as an "unheralded success story" in the clearinghouse's history of crisis management. In contrast with other crises during the National Banking Era, in 1884, the NYCH never resorted to unilateral suspension of convertibility for demand deposits (Bluedorn and Anderson 2016).

Context: NYCH 1884–1885	
Net deposits of NYCH membership (average of weekly data)	\$322.4 million in 1884 \$371.1 million in 1885
Loans held by NYCH membership (average of weekly data)	\$311.0 million in 1884 \$312.7 million in 1885
Capital and surplus of NYCH membership (average of weekly data)	\$101.2 million in 1884 \$97.1 million in 1885
Required reserves held by NYCH membership (average of weekly data)	\$80.5 million in 1884 \$92.6 million in 1885
Number of members in the NYCH	62 in 1884 64 in 1885
NYCH clearing transactions (annual)	\$31.0 billion in 1884 \$28.2 billion in 1885
Number of commercial failures	10,968 failures in 1884 10,637 failures in 1885
Total liabilities of commercial failures	\$226.3 million in 1884 \$124.2 million in 1885
Total individual deposits for the United States (excluding savings banks)	\$1,493 million in 1884 \$1,639 million in 1885
Ratio of aggregate CLC issuance to net deposits of NYCH membership	*Not available*
Source: Andrew 1910.	

Key Design Decisions

1. Purpose: As in earlier panics, the NYCH issued CLCs to provide liquidity to its membership, although in 1884, its support targeted one large, vulnerable bank.

On May 14, following the temporary suspension of Metropolitan National Bank amidst deposit runs, the NYCH membership convened for the purpose of creating a plan to "protect the reserves of the [member] banks and . . . prevent suspension of gold and currency payments in New York" (OCC 1884). In the meeting, NYCH banks unanimously authorized a five-member, interim Loan Committee to issue CLCs against collateral to member banks, as it had in 1873; the CLCs were then accepted as valid payments for interbank balances at the NYCH (OCC 1884). The ability for borrowing banks to cover clearinghouse settlements with CLCs as a substitute for currency freed up additional liquidity to meet deposit withdrawals (Bluedorn and Anderson 2016).

However, several authors note that NYCH lending in 1884 focused on Metropolitan National Bank, a large member bank that was suffering runs by depositors. Bluedorn and Anderson (2016) describe the NYCH's introduction of CLCs in 1884 as a bailout of Metropolitan National Bank. Because many NYCH member banks had large balances with Metropolitan National Bank, CLCs allowed the defaulted bank to remain operational, thereby preventing speculative runs against its exposed counterparties (Bluedorn and Anderson 2016).

2. Legal Authority: The NYCH was a private institution and faced no explicit legal restrictions against issuing CLCs in 1884.

Without a central bank to administer public liquidity assistance during the National Banking Era, the NYCH employed CLCs as a private liquidity tool to manage financial crises (Fulmer 2022). The law at the time effectively banned state-chartered banks from issuing their own notes by applying a steep 10% tax, which the CLCs did not pay and could establish them as illegal (Gorton and Tallman 2016).

However, contemporary sources and scholars tend to agree that CLCs used entirely for interbank transactions—such as those issued in 1873, 1884, and 1890—did not break this law because they did not circulate as currency. The National Bank Act of 1864 appears to sanction CLCs that circulated only between banks: "Clearing-house certificates, representing specie or lawful money specifically deposited for the purpose of any clearing-house association, shall be deemed to be lawful money" (National Bank Act of 1864 1864, 13:109).

A former clearinghouse chairman, James Cannon, wrote in 1910 that the term "clearing-house certificates" used in the act would refer both to the certificates that clearinghouses issued in normal operations, which were backed by gold, and to clearinghouse *loan* certificates that they issued in crises, which were backed by securities (Cannon 1910b). He argued that CLCs were legal debt instruments since they could not circulate as currency outside the clearinghouse. Cannon cited the NYCH's regulator, the Comptroller of the

Currency, which regarded CLCs as "duebills, and their sole function consisted in discharging the single obligation at the clearing house" (Cannon 1910a).

Starting in 1893, some clearinghouses issued CLCs in smaller denominations and encouraged their use as currency, raising more directly the question of their legality under the National Bank Act (Cannon 1910a).

Within the institutional framework of the NYCH, members needed to first vote on the provision of CLCs as to "whether the crisis was significant enough to warrant their use" (Gorton and Tallman 2016). The NYCH members unanimously approved the provision for CLCs immediately as the crisis unfolded in an emergency meeting on May 14, 1884 (OCC 1884).

3. Part of a Package: The NYCH distributed CLCs in concert with other measures of special bank examinations and the suppression of bank information.

As in other crises, the NYCH temporarily suppressed the publication of individual banks' balance sheet information and initiated special examinations of troubled bank's portfolios. Unlike in the Panic of 1873, New York banks did not temporarily suspend payments to depositors or pool their reserves to meet their liquidity needs.

The special examinations by the NYCH in 1884 began with Marine National Bank, which closed on May 6. The NYCH publicly indicated the poor condition of the bank and the refusal of the clearinghouse to extend assistance, forcing Marine National Bank to remain closed. The examination's discovery of malfeasance contributed to the decision by the NYCH to withhold support (Gorton and Tallman 2016). The NYCH also examined Metropolitan National Bank, as described in Key Design Decision No. 6, Eligible Participants.

The NYCH during the Panic of 1884 also temporarily suppressed the balance sheet information of member banks on May 24 for one week. In normal times, NYCH members reported their individual balance sheet figures on a weekly basis. During crises, the NYCH took action to halt the publication of these statistics to protect vulnerable banks most at risk of runs. The one-week suspension in 1884 was relatively brief (Gorton and Tallman 2016).

The US Department of the Treasury did not intervene by purchasing government bonds, as it had in 1873. However, Treasury Secretary Charles Folger did offer on May 14 to repay $10 million in government debt a month early to provide some relief to the market (NYT 1884a). It appears that offer proved unnecessary; an article on May 16 in the *New York Times* titled "Laughing at Secretary Folger" noted that market participants agreed there was no money shortage for the Treasury to address (NYT 1884c).

4. Management: The temporary Loan Committee of the NYCH managed the distribution of CLCs to member banks as well as setting relevant interest and fees on loans.

The NYCH's framework for emergency liquidity assistance called for the creation of the temporary Loan Committee, through which member banks would receive CLCs upon approval of collateral by the committee. The Loan Committee, created on May 14, 1884, consisted of five members appointed by the chair of the NYCH, with the president of the NYCH serving as an ex officio member (Cannon 1910a). The Loan Committee managed the CLC issuances, established the applicable interest rate and any fees, and also monitored the value of collateral placed by banks for receipt of CLCs (Gorton and Tallman 2018, 43). The committee also required that all members accept CLCs as settlement for member debts.

The NYCH also conducted special examinations of banks to supervise and ensure the security of extending credit through the CLC issuance. Before approving CLCs for Metropolitan National Bank on May 14, the NYCH established an examination committee to inspect the bank's assets (Gorton and Tallman 2016).

5. Administration: Member banks applied to the Loan Committee for CLCs by depositing the required collateral with the NYCH; CLCs could then be used to settle balances with other NYCH members.

Banks in need of financing could request CLCs from the Loan Committee by offering sufficient collateral to be approved by the committee. The CLCs historically required borrowing banks to pay out an interest between 5% and 10% annually to whichever NYCH counterparty (accepting bank) received the CLCs in place of a settlement for currency balances (Cannon 1910a); in 1884, the NYCH fixed the interest rate at 6% (OCC 1884). When the borrower received the CLC from the Loan Committee, it could use the CLC to settle a balance with an accepting member bank. Importantly, the NYCH demanded that all members accept the CLCs for settling balances in substitution of currency (Gorton and Tallman 2018, 43). The borrower paid the interest to the NYCH, which paid it to the accepting bank in possession of the CLC (Hoag 2016).

Once the borrowing bank had adequate liquidity to exit from the CLCs, it informed the Loan Committee of its intention to retire the certificates. The Loan Committee then notified accepting banks, which could then redeem for cash from reserves. Finally, the Loan Committee returned the posted collateral to the borrower (Cannon 1910a).

Borrowing banks did not necessarily request CLCs in the exact amount of a settlement gap. Banks could settle balances partially in currency and the remainder in CLCs in whatever proportions they desired. Some banks requested CLCs as a precaution yet settled balances entirely in currency. The Comptroller of the Currency noted that several banks took out CLCs as a precautionary measure and never used them to settle balances (OCC 1884).

6. Eligible Participants: Only members of the NYCH were eligible to receive CLCs.

The Loan Committee distributed CLCs only to member banks. At the start of 1884, the NYCH had 63 members; during the crisis, only 20 members took out CLCs (Andrew 1910; OCC 1884). The NYCH indicated that it could impose solvency tests on participants in CLCs. An NYCH spokesman told the *New York Times* that the Clearing House Committee[3] could inspect

[3] The Clearing House Committee was the permanent executive committee of the NYCH holding "almost absolute power, the direction of practically the whole machinery of the [clearinghouse]" (Cannon 1910b).

the assets of any member bank and use its discretion in the terms used to secure CLCs (NYT 1884d). Excluding Metropolitan National Bank, most CLCs were issued to banks that paid interest and had large bankers' deposits, as in 1873 (Sprague 1910, 118).

According to our research, the examination of Metropolitan National Bank was the only instance of a solvency test performed on an eligible CLC program participant in 1884; the examination of Marine National Bank occurred days before the CLC resolution was introduced. On May 14, following the suspension of Metropolitan National Bank's operations, the NYCH created an examination committee to assess whether the bank held sufficient assets to collateralize CLCs such that it could reopen and remain solvent (OCC 1884); although the examination committee approved of Metropolitan National Bank's reopening and participation in the first issues of CLCs on May 15, the bank continued to suffer withdrawals and became insolvent the following month (Moen and Tallman 2013). Given the operation of the examination committee during the CLC program in 1884, it is possible the NYCH implemented similar solvency tests on other participants on a confidential basis.

7. Funding Source: CLCs were a transferrable liability issued by the NYCH and guaranteed by the entire membership of the NYCH.

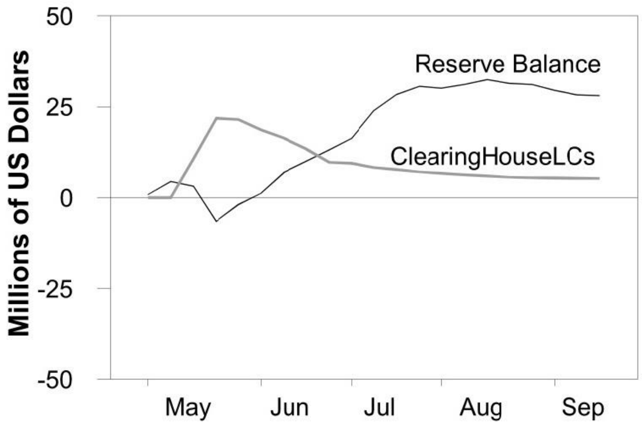
The CLCs were effectively joint liabilities of the NYCH members issued by the Loan Committee at the request of a member bank (Bluedorn and Anderson 2016). According to Gorton and Tallman (2018, 43), CLCs possessed two key characteristics that made these certificates an effective form of liquidity assistance. First, CLC programs required member banks to accept CLCs in place of specie or legal tender for temporarily settling intra-clearinghouse balances; thus, establishing CLCs served as a valid form of payment within the membership (OCC 1873). Second, the NYCH collectively guaranteed the repayment of the CLCs. If a borrowing bank defaulted on its CLCs, the NYCH reimbursed banks, holding the defaulted certificates, by dividing the cost amongst the membership relative to individual members' shares of membership capital and surplus (Gorton and Tallman 2018, 43).

8. Program Size: The issuance of CLCs totaled $24.9 million over the course of the Loan Committee's operations, with $21.9 million in peak outstanding.

It does not appear that the NYCH set a predetermined amount of CLCs that would be issued. Beginning with the first allotment on May 15, 1884, and the last on June 6, the Loan Committee provided a total of $24.9 million CLCs (OCC 1907). Aggregate CLCs outstanding peaked on May 24, 1884, with a total of $21.9 million. Metropolitan National Bank received $7 million of the total issuance of CLCs. By July 1, 1884, all CLCs had been retired and collateral returned, with the exception of Metropolitan National Bank, which still owed $5.3 million at the close of the fiscal year on October 3, 1884 (OCC 1884).

Figure 1 shows the aggregate surplus of reserves among all NYCH members as well as outstanding CLC issues throughout the Panic of 1884; banks borrowed CLCs most heavily during May and June as the membership's surplus reserves turned negative (Gorton and Tallman 2018, 47).

Figure 1: NYCH Reserve Surplus vs. Outstanding CLCs, 1884



Source: Gorton and Tallman 2018, 47.

9. Individual Participation Limits: Aside from the collateral offered by borrowing member banks, there did not appear to be any limits to the participation in CLCs.

The Loan Committee did not set a limit to the amount of CLCs it could issue. As a result, individual members could take out CLCs at the discretion of the Loan Committee as long as they had sufficient securities to collateralize the certificates (Bluedorn and Anderson 2016; OCC 1884). Subject to collateral constraints, the allocation and size of funding largely depended on the availability of reserves to cover interbank settlements. Figure 1 further indicates the relationship between reserves and CLC funding during the Panic of 1884.

The issuance of CLCs during 1884 was largely concentrated in a few borrowing banks out of the 63 eligible NYCH members (Andrew 1910). As noted, only 20 banks took out CLCs, six of which represented 89% of all the certificates issued (OCC 1884). Furthermore, Metropolitan National Bank received $7 million of the total $24.9 million CLCs issued as the largest recipient of the liquidity; these borrowings constituted three times its reserves of legal currency (Moen and Tallman 2013). The significant concentration of CLCs provides little evidence of any potential participation limits in the program. Banks were thus primarily limited by the collateral they had at their disposal to satisfy the collateral policy, which stipulated a minimum 25% haircut on borrowings (Gorton and Tallman 2016).

10. Rate Charged: The NYCH imposed a 6% interest rate on borrowings using CLCs, which accrued to the creditor banks that received that CLCs.

When announcing the authorization of the Loan Committee to issue CLCs on May 14, 1884, the NYCH stipulated a fixed interest on borrowings using the certificates at 6% (OCC 1884). In other CLC programs introduced by the NYCH during crises, loans carried a fixed rate of either 6% or 7% (OCC 1907). After depositing sufficient collateral, borrowing banks received CLCs, paying the fixed 6% interest to any bank for which the borrower needed to settle balances (Cannon 1910a). Accepting banks receiving CLCs could also use the certificates to settle balances with other NYCH counterparties, and the interest payments would be paid out to the new CLC holder (Hoag 2016). The NYCH set interest rates high enough such that banks would opt to retire the CLCs as soon as they came up with ample currency reserves. Because of the high rate, it was not always in the interest of the accepting banks to relinquish CLCs as the crisis subsided; therefore, borrowers largely controlled the process of redeeming CLCs and ceasing interest payments by requesting cancellation through the Loan Committee (Cannon 1910a; Hoag 2016).

The interest rates for CLCs typically mirrored those of commercial paper, excluding the cost of the haircut on collateral. The way the CLCs were structured provided banks a maximum of 75% (minimum 25% haircut) of the collateral they deposited. Gorton and Tallman (2016) go on to describe the heightened cost of using CLCs as opposed to commercial paper, saying "an interest rate charge of six percent on USD 75 generates a cash outflow that will be covered by the interest on the USD 100 collateral of 4.5 percent."

Despite the fixed 6% interest rate stipulated in the 1884 CLC issues, the NYCH reduced the rate charged for Metropolitan National Bank's outstanding CLC's following a request from the bank at the beginning of 1885 (Gorton and Tallman 2016).

11. Eligible Collateral: Member banks could secure CLCs using bills receivable, stocks, bonds, and other securities subject to a minimum haircut of 25%, while the NYCH accepted government bonds at par.

The NYCH Loan Committee accepted "bills receivable, stocks, bonds, and other securities" as collateral for CLCs that "shall not exceed 75% of the market value of collateral" (OCC 1884; OCC 1907). The 75% limit of CLC issuance in exchange of collateral effectively constituted a 25% minimum haircut on such securities (Gorton and Tallman 2016). The haircuts varied from the minimum depending on the form of collateral offered. No details on such variations are available. On May 17, 1884, three days after the NYCH's original announcement, the *New York Times* reported that the NYCH had decided to exempt US government bonds from the 25% minimum haircut for CLC collateral and would lend at par against such securities (NYT 1884e). This was similar to its policy in 1873.

The NYCH's Clearing House Committee also had discretion to petition banks to substitute CLC collateral if the collateral approached maturity or appeared of insufficient value for the loan amount (Gorton and Tallman 2016). On June 4, weeks after the initial rollout of CLCs, the NYCH passed an amendment to its constitution, giving the Clearing House Committee the following authority:

> To examine any bank member of the association, and to require from any member securities of such an amount and character as said committee may deem sufficient for the protection of the balances resulting from the exchanges [at the NYCH]. (NYCH 1895, 4–5)

By the end of the 1884 CLC program, the Comptroller noted that commercial paper had been the most commonly used collateral instrument for CLCs (OCC 1884).

12. Loan Duration: CLCs did not have a set maturity; rather, borrowing banks determined when to retire the CLCs. Most CLCs were retired less than two months after issuance.

The NYCH Loan Committee began issuing CLCs on May 14, 1884, ending with a final issue on June 6 (OCC 1907). Since borrowing banks initiated the retirement of the CLCs by notifying the Loan Committee, the terms of borrowings varied considerably by participant (Cannon 1910a). However, of the $24.9 million total CLCs issued between May 15 and June 6, $9.6 million remained outstanding by July 1, indicating that most borrowings did not extend beyond 1.5 months; the schedule of issuance and outstanding CLC amounts is presented in Figure 2 (OCC 1884).

Figure 2: Aggregate Issuance and Cancellation of CLCs, 1884

Date.	Issued.	Canceled.	Outstanding.
May 15	$3, 820, 000		$3, 820, 000
May 16	6, 885, 000		10, 705, 000
May 17	6, 740, 000		17, 445, 000
May 19	1, 190, 000	$200, 000	18, 435, 000
May 20	1, 950, 000		20, 385, 000
May 21	580, 000	800, 000	20, 165, 000
May 22	1, 560, 000		21, 725, 000
May 23	140, 000		21, 865, 000
May 24	180, 000	160, 000	21, 885, 000
May 26		415, 000	21, 470, 000
May 27	640, 000	460, 000	21, 650, 000
May 28		450, 000	21, 200, 000
May 29	700, 000	400, 000	21, 500, 000
June 2	335, 000	1, 100, 000	20, 735, 000
June 3	70, 000	90, 000	20, 715, 000
June 4	40, 000	1, 030, 000	19, 725, 000
June 5		120, 000	19, 605, 000
June 6	85, 000	1, 050, 000	18, 640, 000
June 6 to July 1		9, 070, 000	9, 570, 000
July 1 to August 1		2, 850, 000	6, 720, 000
August 1 to September 1		1, 220, 000	5, 500, 000
September 1 to October 3		210, 000	5, 290, 000
	24, 915, 000		

Source: OCC 1884.

The insolvency of Metropolitan National Bank accounted for the majority of uncanceled CLCs after July 1; Metropolitan National Bank was eventually liquidated in November 1884 (Moen and Tallman 2013). Consequently, the outstanding CLCs in the NYCH from the 1884 issuance were not retired until more than two years after the operation began, in September 1886 (Bluedorn and Anderson 2016). Hoag (2016) notes that the large gap between the liquidation of Metropolitan National Bank and the eventual redemption of its CLCs indicated that creditor member banks believed that Metropolitan's deposited collateral was insufficient to redeem the loans; the Loan Committee continued to manage the collateral well into 1885, liquidating the securities as prices recovered. After all defaulted CLC collateral had been converted to currency, the NYCH provided a guarantee that the remaining debt owed to creditors would be jointly distributed across the membership in proportion to the share of capital and surplus reserves of each member (Gorton and Tallman 2016). However, the NYCH did not appear to compensate individual members for the cost of holding such illiquid defaulted CLCs in the intermittent period between default and redemption (Hoag 2016). Research could not determine the precise details of the redemption of Metropolitan National Bank's CLCs.

13. Other Conditions: No other conditions were given aside from collateral recourse and solvency tests previously discussed.

Additional conditions on CLCs included possible collateral substitutions mentioned in Key Design Decision No. 11, Eligible Collateral, as well as solvency tests discussed in Key Design Decision No. 6, Eligible Participants.

14. Impact on Monetary Policy Transmission: The NYCH did not preside over a monetary policy objective given their status as a private banking association.

The NYCH did have to consider any monetary policy implications of liquidity injections through CLCs because it remained a private institution, catering to its members' needs and constrained by the regulatory supervision of the Comptroller of the Currency.

15. Other Options: The NYCH members never suspended convertibility or pooled cash reserves in 1884, two actions that were used to halt bank runs in 1873. Although only in 1873 did NYCH utilize reserve pooling, in subsequent panics after 1884, with the exception of 1890, the membership suspended convertibly of deposits.

Although the NYCH did not seem to disclose considerations of other options, two tools used in other crises by the NYCH, convertibility suspension and reserve pooling (only in the Panic of 1873), were never employed in 1884.

In several panics during the National Banking Era, banks facing runs stopped converting demand deposits into currency, thus breaking their contracts with depositors to always honor withdrawals as long as their doors were open (Gorton and Tallman 2018, 181). In 1873, banks that suspended convertibility issued certified checks backed by the NYCH to depositors in place of cash. The absence of unilateral suspensions of convertibility by NYCH members marked the Panic of 1884 (and 1890) in contrast to other crises in which the NYCH issued CLCs. Although the NYCH did not always orchestrate this policy as it directed the issuance of CLCs, the extensive counterparty exposure amongst member banks prompted widespread suspensions of convertibility during bank runs. According to Gorton and Tallman, in 1884, the swift provision of liquidity assistance through CLCs appeared to prevent any need for large-scale convertibility suspension (Gorton and Tallman 2016).

The NYCH also never implemented reserve pooling in 1884, which had been done in 1873. The NYCH, in 1873, made a decision to collectivize legal tenders of member banks to be jointly managed for the mutual security of the membership's reserves (OCC 1873). Reserve pooling aimed to prevent distressed banks from undermining the solvency of other members; however, it was not used again in the panics from 1884 through 1914. Moen and

Tallman (2013) suggest that the NYCH member banks with ample reserves did not want to freely share reserves amongst the membership in the subsequent panics, as reserve pooling lacked compensation, and as such preferred the interest rate compensation provided under the CLC program. The 1884 crisis was also not as severe as the earlier crisis. A banker told the *New York Times* on May 14 that in 1873, "[W]e pooled the bank-notes, but there is no occasion for that now as there is more money than we know what to do with" (NYT 1884b).

16. Similar Programs in Other Countries: The quick provision of CLCs by the NYCH in 1884 contrasted with similar, delayed operations during the Panic of 1873.

Given the uniqueness of the NYCH system, comparisons of interventions related to crises during the National Banking Era are most useful. Specifically, the Comptroller of the Currency contrasted the CLC loans in 1884 with similar operations by the NYCH in 1873 (OCC 1884). Ultimately, the Panic of 1884 was unique in so far as the crisis and bank failures were largely confined to New York City. In other crises, clearinghouses in different cities such as Philadelphia and Boston also issued their own CLCs; however, in 1884, only the NYCH issued CLCs (OCC 1907).

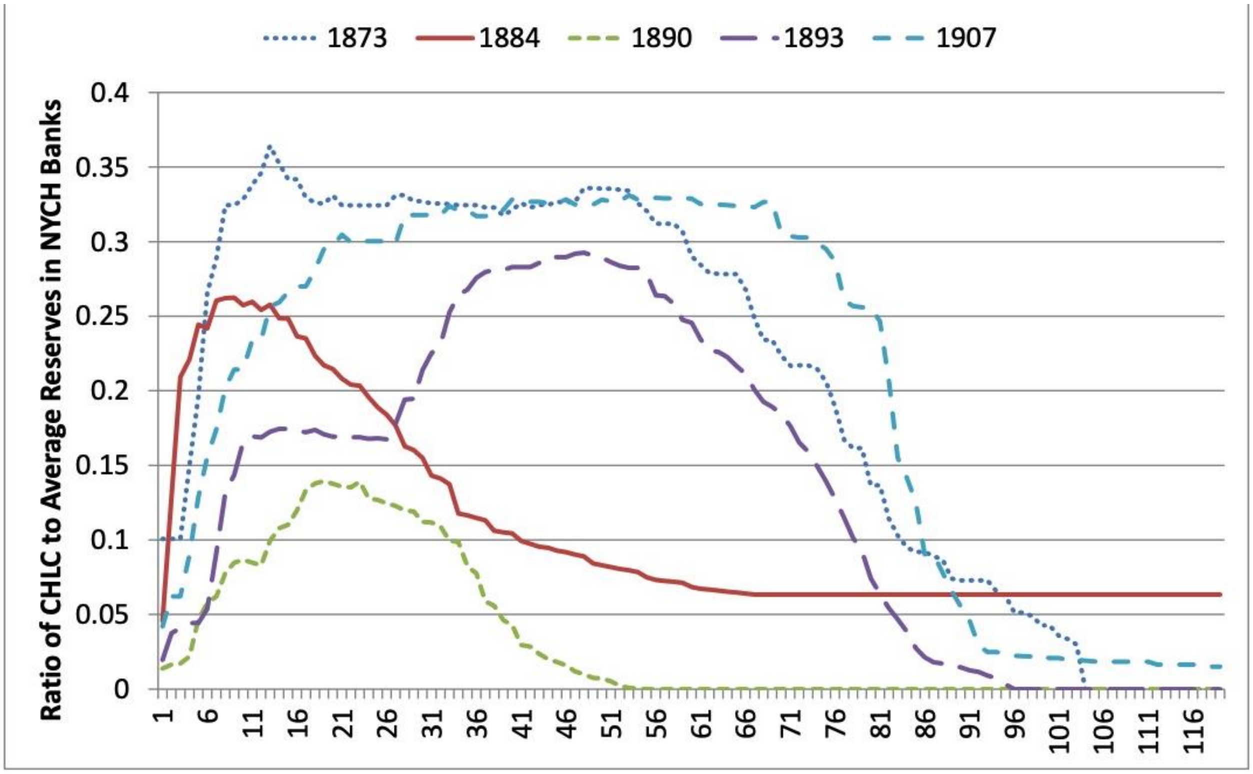
Furthermore, unlike the crisis in 1873 and many others that followed, in 1884, the NYCH members did not find the need to suspend convertibility, because the shortages of cash reserves affected only a handful of banks (Gorton and Tallman 2016). Nevertheless, the Comptroller perceived the Panic of 1884 to be "even more unexpected" than that of 1873 (OCC 1884).

During the Panic of 1873, the NYCH waited to issue CLCs until after the panic had assumed such proportions that their use and the consequent relief to the banks in settling their balances at the clearinghouse could not restore confidence (OCC 1884).

In contrast, the Comptroller attributed the "most excellent effect" of the quick resolution of the 1884 crisis to the "prompt action" of the NYCH in issuing CLCs at the panic's onset (OCC 1884).

Figure 3 helps illustrate the NYCH's successful management of the 1884 crisis through CLC issuance compared to other panics. The scaling of CLC issuance by reserves indicates the relative size of liquidity support over time, with the 1884 figures evidencing rapid support and quick retirement of loans.

Figure 3: Outstanding CLCs (as a % of Average NYCH Reserves in the Prior Two Years) over Each Day into a Panic, 1873–1907



Source: Gorton and Tallman 2016.

17. Communication: The NYCH reported on CLC operations via articles in the *New York Times* and financial market magazines.

The NYCH circulated its announcements for the CLC program in the *New York Times*. On May 15, 1884, the day after the initial CLC announcement, the *New York Times* reported that in an emergency meeting, "the members unanimously adopted a resolution to issue loan certificates" (NYT 1884a). Immediately after deliberations on rescue plans, the NYCH communicated the CLC plan to members of the New York Stock Exchange, who "almost without exception, remained in their offices to await the outcome" of the meeting (NYT 1884a). On the topic of CLCs, the article went on to state that this action brought a "perceptible feeling of relief [to Wall Street]" (NYT 1884a). By emphasizing the unanimous agreement on the provision for CLCs and the positive sentiment around such resolutions, the NYCH's public communication surrounding CLC measures reinforced positive announcement effects amidst the crisis.

The *New York Times* also reported on important changes to the mechanics of the CLCs; for instance, the *New York Times* published, on May 17, 1884, the NYCH's decision to accept US government bonds at par as collateral for CLCs rather than the minimum 25% haircut attributed to all other securities (Gorton and Tallman 2016; NYT 1884e). The decision to lend against government treasuries at par "gave wide-spread satisfaction" according to the *New York Times* article (NYT 1884e).

18. Disclosure: Aside from information about the aggregate size of issuances, the NYCH withheld most information related to CLC lending arrangements.

In addition to announcements relating to the introduction of and changes to the CLC operations, the NYCH disclosed aggregate issuances and outstanding amounts of CLCs in the press, especially through the *New York Times* (NYT 1884a; Gorton and Tallman 2018, 38). From the reporting in the *New York Times* columns, it appears that CLC statistics were reported weekly as aggregate issues outstanding (NYT 1884a; NYT 1884e). Information regarding requests for CLCs, the identity of borrowers, and intrabank settlements using CLCs were kept private (Gorton and Tallman 2018, 38).

Although the NYCH required members to submit weekly balance sheet information for public disclosure, the NYCH often temporarily discontinued these weekly releases during panics and in concert with CLC issuances (Gorton and Tallman 2016; NYCH 1881, 9). The chairman of the Loan Committee announced the suspension of these bank-specific disclosures on May 24, reported the following day in the *New York Times* (NYT 1884f).

Such lack of disclosure helped anonymize weak member banks whose condition would have otherwise invited deposit runs (Gorton and Tallman 2018, 38). In contrast with the lengthier suppression periods in other panics, the NYCH opted to suspend weekly bank statements for only one week in 1884, beginning on May 24 (Gorton and Tallman 2016). Gorton and Tallman (2018, 49) hypothesize that the relatively short suppression period observed in 1884 indicated that the CLCs themselves "appeared to be sufficient to quell the panic."

The *New York Times* article on May 25 quoted the chairman of the NYCH Loan Committee as justifying the suppression of bank information by arguing the following:

> The issue of loan certificates by the Clearing-house Association has so changed the relations of banks to each other that the publication of the statement in detail would give an incorrect impression as to the actual condition of the banks. (NYT 1884f)

Such explanation pointed to potential accounting difficulties presented by CLCs as joint liabilities in substitution of currency balances (Gorton and Tallman 2018, 49–50). However, a later 1893 article in the *New York Times* explained the accounting of CLCs as similar in nature to interbank loans (NYT 1893). Hoag (2016) further clarifies that creditors could transfer CLC liabilities amongst each other, thereby changing the title of the creditor while maintaining the original CLC debtor.

19. Stigma Strategy: The NYCH kept key financial metrics hidden in an effort to prevent banks vulnerable to runs.

As discussed in Key Design Decision Nos. 3, Part of a Package, 17, Communication, and 18, Disclosure, the NYCH withheld specific bank data related to CLCs in order to mitigate potential runs on member banks perceived to be short of liquidity. Consequently, the NYCH reported on aggregate CLC issuances without disclosing the recipients or individual amounts borrowed (Gorton and Tallman 2018, 38).

In the spirit of the CLCs, the NYCH member banks resolved to unify during panics, reducing asymmetric stigmas toward individual banks. The NYCH thus emphasized the need for all members to accept CLCs in settlement of interbank balances "without regard to how strong [borrowing banks] may have been or how easily they might have gotten on without using them" (Cannon 1910a). Cannon (1910a) notes that the NYCH once suspended a member bank from the association for three months after it refused to accept CLCs, although he does not specify in which panic this occurred.

To further eliminate stigma during panics, large banks sometimes took out CLCs without any immediate funding need, to normalize their use without signaling vulnerabilities (Cannon 1910a). Although it is unclear if any large banks took out CLCs for such reasons in 1884, several banks held CLCs as a precaution and never borrowed against them (OCC 1884); it therefore appears that the cost associated with CLC stigma was sufficiently low at the time so as to motivate banks to request certificates despite no urgent need for liquidity.

20. Exit Strategy: The NYCH did not set a predetermined end date to CLC issuance, and due to the insolvency of Metropolitan National Bank, a few certificates remained outstanding more than two years after the final issue.

At the time of the NYCH's announcement on May 14 establishing the Loan Committee, the NYCH did not set a precise end date for CLCs. The Loan Committee of the NYCH decided to stop issuing CLCs after June 6, 1884 (Bluedorn and Anderson 2016). The Comptroller noted that from June 10, 1884, onward, NYCH interbank balances were settled exclusively using legal currency; it is unclear if this was voluntarily done by individual members or mandated the NYCH (OCC 1884). However, by July 1, 1884, all borrowing banks, excluding Metropolitan National Bank, retired their CLCs completely, indicating the increased availability of liquidity (OCC 1884).

Despite the significant support Metropolitan National Bank received in the form of $7 million of CLCs, the bank's deposits fell from $7.4 million on May 17 to only $1.2 million on June 21 (Gorton and Tallman 2016). As a result of the massive liquidation of deposits, Metropolitan National Bank could not retire its outstanding CLCs and collect its collateral in accordance with the other borrowing members. After July 1, 1884, the NYCH membership agreed to carry the outstanding CLCs secured with collateral as temporary loans to Metropolitan National Bank (OCC 1884). The NYCH still held more than $5 million in uncollected CLCs at the time of Metropolitan National Bank's voluntary liquidation in November 1884 (Gorton and Tallman 2016). The NYCH eventually retired the remaining issues in September 1886 (Bluedorn and Anderson 2016). Gorton and Tallman argue that the NYCH strategically allowed Metropolitan National Bank to remain open long after it became insolvent in order prevent its inevitable closure from occurring during the panic period (Gorton and Tallman 2016).

After Metropolitan National Bank's liquidation in November 1884, the Loan Committee did not immediately sell all the loan collateral to pay down defaulted CLCs held by creditor member banks (Hoag 2016; Moen and Tallman 2013). If the cash value of collateral including haircuts had been sufficient to redeem Metropolitan's defaulted CLCs, member banks would have been paid without much delay; however, many of the securities deposited as collateral were illiquid railroad bonds, and therefore, the NYCH waited until late 1885 when the depressed prices had recovered to convert them into cash for the repayment of outstanding CLCs. Any unpaid CLCs after all collateral had been liquidated was covered by the NYCH's guarantee to jointly distribute CLC losses across the membership (Hoag 2016). Accordingly, each member bank shared in the final outstanding loss in proportion to its individual capital and excess reserves relative to the aggregate capital and excess reserves of the NYCH (Gorton and Tallman 2016). However, as Hoag (2016) indicates, the NYCH did not seem to compensate members for individual costs of holding illiquid, defaulted CLCs before all collateral was liquidated and the remaining loss distributed.

References and Key Program Documents

Documents cited in the text are introduced with a parenthetical author-date citation. Documents that are relevant to this case but have not been cited in text do not include this parenthetical reference.

Program Summaries

(Wicker 2000) Wicker, Elmus. 2000. *Banking Panics of the Gilded Age*. Cambridge: Cambridge University Press.
A study of the banking panics during the National Banking Era, with specific focus on bank closures and causes.
https://ypfs.som.yale.edu/library/document/banking-panics-gilded-age

Implementation Documents

(National Bank Act of 1864 1864) *An Act to Provide a National Currency, Secured by a Pledge of United States Bonds, and to Provide for the Circulation and Redemption Thereof (National Bank Act)*. 1864. 13 Stat. 99. 1st session, Congress 38–106.
Law creating the system of national banks and defining (broadly) lawful money and the clearinghouses' role in managing both.
https://ypfs.som.yale.edu/library/document/national-bank-act

(NYCH 1881) New York Clearing House Association (NYCH). 1881. "Constitution of the New York Clearing House Association, with Amendments, January 1, 1881." Columbia University Libraries. 108.
NYCH constitution as amended in 1881 including disclosure requirements for banks.
https://ypfs.som.yale.edu/library/late-19th-and-early-20th-century-new-york-clearing-house-association-constitutions

(NYCH 1895) New York Clearing House Association (NYCH). 1895. "Constitution of the New York Clearing House Association, with Amendments." Columbia University Libraries. 108.
NYCH constitution including an amendment on collateral management passed in 1884.
https://ypfs.som.yale.edu/library/late-19th-and-early-20th-century-new-york-clearing-house-association-constitutions

Media Stories

(NYT 1884a) New York Times (NYT). 1884a. "On the Verge of a Panic." *New York Times*, May 15, 1884.
Article announcing the onset of the Panic of 1884 and subsequent measures approved by the NYCH.
https://ypfs.som.yale.edu/library/document/verge-panic-may-15-1884

(NYT 1884b) New York Times (NYT). 1884b. "Views on the Situation." *New York Times*, May 15, 1884.

Article comparing the severity of the Panic of 1873 to that of 1884.
https://ypfs.som.yale.edu/library/document/views-situation

(NYT 1884c) New York Times (NYT). 1884c. "Laughing at Secretary Folger." *New York Times*, May 16, 1884.
Article describing the ineffective action taken by the Secretary of Treasury during the Panic of 1884.
https://ypfs.som.yale.edu/library/laughing-secretary-folger-may-16-1884

(NYT 1884d) New York Times (NYT). 1884d. "The Storm Not Yet Spent." *New York Times*, May 16, 1884.
Article discussing the NYCH's provisions for examining and requesting additional collateral for CLCs.
https://ypfs.som.yale.edu/library/document/storm-not-yet-spent-may-16-1884

(NYT 1884e) New York Times (NYT). 1884e. "The Ebb of the Panic." *New York Times*, May 17, 1884.
Article announcing the NYCH's decision to remove the 25% haircut from US government bonds for collateral.
https://ypfs.som.yale.edu/library/document/ebb-panic-may-17-1884

(NYT 1884f) New York Times (NYT). 1884f. "Not a Good Bank Showing." *New York Times*, May 25, 1884.
Article reporting on the NYCH's ongoing crisis management, including the temporary suppression of bank-specific disclosures.
https://ypfs.som.yale.edu/library/document/not-good-bank-showing-may-25-1884

(NYT 1893) New York Times (NYT). 1893. "Certificates May Be Issued," June 15, 1893.
Article discussing the New York Clearing House's decision whether to issue clearinghouse loan certificates during the Panic of 1893.
https://ypfs.som.yale.edu/node/20204

Reports/Assessments

(Andrew 1910) Andrew, A. Piatt. 1910. "Statistics for the United States 1867-1909." National Monetary Commission.
Article containing summary statistics for the banking sector in New York City used in the context box.
https://ypfs.som.yale.edu/node/20294

(OCC 1873) Office of the Comptroller of the Currency (OCC). 1873. Eleventh Annual Report of the Comptroller of the Currency for the Year 1873. November 28, 1873.
Report from the OCC on the Panic of 1873 and the response by the NYCH.
https://ypfs.som.yale.edu/library/document/annual-report-comptroller-currency-1873

(OCC 1884) Office of the Comptroller of the Currency (OCC). 1884. Annual Report of the Comptroller of the Currency to the Second Session of the Forty-Eighth Congress of the

United States. December 1, 1884.
Report from the OCC discussing the Panic of 1884 and the response by the NYCH.
https://ypfs.som.yale.edu/library/document/annual-report-comptroller-currency-1884

(OCC 1907) Office of the Comptroller of the Currency (OCC). 1907. Annual Report of the Comptroller of the Currency. December 2, 1907.
Report by the OCC containing information on the Panic of 1907, as well as data on the previous NYCH interventions.
https://ypfs.som.yale.edu/library/document/annual-report-comptroller-currency-1907

Key Academic Papers

(Bluedorn and Anderson 2016) Bluedorn, John C., and Haelim Anderson. 2016. "Stopping Contagion with Bailouts: Microevidence from Pennsylvania Bank Networks during the Panic of 1884." Rochester, NY: Social Science Research Network.
Report evaluating the contagion and overall efficacy of the NYCH's use of CLCs during the Panic of 1884.
https://ypfs.som.yale.edu/library/document/stopping-contagion-bailouts-micro-evidence-pennsylvania-bank-networks-during-panic

(Cannon 1910a) Cannon, James Graham. 1910a. "Clearing House Methods and Practices." 61st Senate Doc. 491. Publications of the National Monetary Commission. Washington, DC: Government Printing Office.
Report for the National Monetary Commission by an individual connected to the clearinghouses that provides detail on their operations and structure.
https://ypfs.som.yale.edu/library/document/clearing-house-methods-and-practices

(Cannon 1910b) Cannon, James Graham. 1910b. "Clearing House Loan Certificates and Substitutes for Money Used During the Panic of 1907: With Suggestions for an Emergency Currency Based upon Such Loan Certificates." Presented at the Finance Forum, New York, March 30, 1910.
Speech surveying CLC features around the US.
https://ypfs.som.yale.edu/node/20249

(Fulmer 2022) Fulmer, Sean. 2022. "New York Clearing House Association: Overview." *Journal of Financial Crises* 4, no. 2.
Overview document that details the New York Clearing House Association.
https://elischolar.library.yale.edu/journal-of-financial-crises/vol4/iss2/32

(Gorton and Tallman 2016) Gorton, Gary, and Ellis W. Tallman. 2016. "How Did Pre-Fed Banking Panics End?" NBER Working Paper 22036, February 2016.
Working paper on the actions committed by the NYCH in response to banking panics in the absence of a central bank.
https://ypfs.som.yale.edu/library/document/how-did-pre-fed-banking-panics-end

(Gorton and Tallman 2018) Gorton, Gary, and Ellis Tallman. 2018. *Fighting Financial Crises: Learning from the Past*. Chicago: University of Chicago Press.

Book documenting how the New York Clearing House Association responded to several banking panics in the National Banking Era.
https://ypfs.som.yale.edu/library/document/fighting-financial-crises-learning-past

(Hoag 2016) Hoag, Christopher. 2016. "Clearinghouse Loan Certificates as Interbank Loans in the United States, 1860–1913." *Financial History Review* 23, no. 3: 303–24.
Article discussing the role and status of CLCs during banking panics in the National Banking Era.
https://ypfs.som.yale.edu/library/clearinghouse-loan-certificates-interbank-loans-united-states-1860-1913

(Moen and Tallman 2013) Moen, Jon R., and Ellis W. Tallman. 2013. "Close but Not a Central Bank: The New York Clearing House and Issues of Clearing House Loan Certificates." 1308. Federal Reserve Bank of Cleveland.
Paper that closely examines the issuance of CLCs by the NYCH during the National Banking Era.
https://ypfs.som.yale.edu/library/document/close-not-central-bank-new-york-clearing-house-and-issues-clearing-house-loan

(Sprague 1910) Sprague, Oliver Mitchell Wentworth. 1910. *History of Crises under the National Banking System*. §National Monetary Commission. 2nd 61st Congress: 538. Washington, DC: US Government Printing Office.
Definitive account of the NYCH crises, leading to the creation of the Federal Reserve.
https://ypfs.som.yale.edu/library/document/history-crises-under-national-banking-system