Motivations for a policymaker intervention during a banking stress episode in the 1920s

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This paper provides a case study of an emergency lending operation by the Federal Reserve to a bank during the 1920s. Using policymakers' own words, the case study describes the motivations that policy makers had for intervening and for the structure of the intervention. The intervention was partly successful. The run on the bank was stopped and a disorderly collapse averted. However, the bank eventually closed with a loan from the Federal Reserve outstanding which caused some complications. That experience, along with other similar experiences, provided lessons that changed how the Federal Reserve approached discount window lending.

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In 1924, officials at the Federal Reserve Bank of Dallas (FRB Dallas) participated in an emergency rescue operation to prevent the failure of the City National Bank of El Paso during a run on the bank. This intervention was unusually large and dramatic; it was also somewhat risky. The City National Bank was experiencing urgent liquidity issues, but there were also serious concerns about its solvency. After a hurried evaluation, banking regulators decided that an intervention was warranted. The intervention proved to be a partial success. The run on the bank ended; however, the solvency troubles proved too much and the bank was closed several months later. Policymakers came away with mixed feelings about what they had accomplished.

This paper explores the thinking of Federal Reserve policymakers regarding three aspects of this intervention: the reasons why the Federal Reserve intervened; the factors shaping the design of this particular intervention; and the lessons learned from this experience. The primary reason for the intervention appears to have been a concern that a sudden failure by this bank would trigger broader financial instability that would have devastated the area. There had already been some bank closures in the area and policymakers considered it likely that the closure of a prominent bank in the major city in the region would have contagious effects.

The design of the intervention was shaped by the facts and circumstances of the episode as well as by the speed of events. A run on the bank depleted its liquid resources and, in the absence of support, it would not have been able to open the following day. As the run was triggered by concerns about the bank's solvency, keeping the bank open meant equity support would be needed as well as liquidity support. The bank's managers sought to raise equity from a variety of sources. The Federal Reserve had to provide ample liquidity but obtain security on its loans in a way that did not undermine the efforts to attract equity investors.

The intervention enabled the bank to reopen and survive the run. Nevertheless, the equity investment proved not to be sufficient and the bank closed its doors and entered receivership a few months later. That closure did not prove disruptive to the local financial markets. However, the bank closed with a loan from the Federal Reserve still outstanding and efforts to realize on the collateral proved difficult. This was not the only troubled bank the Federal Reserve assisted during this time. Concerns about how these support efforts affected the dependence of banks on the Federal Reserve and the distribution of losses for banks that did fail contributed to a tightening of lending policies by Federal Reserve officials.

The remainder of this paper is organized as follows. Section 2 provides some background on the discount window, the main tool available to the Federal Reserve to provide liquidity support. Section 3 reviews this episode while Section 4 describes some of the lessons that policymakers learned. Section 5 concludes.

Section 2. Background on the discount window

The discount window enabled the Federal Reserve to provide liquidity support directly to individual banks that were members of the Federal Reserve System (as opposed to the banking system as a whole through open market operations).[1] This tool was used to provide liquidity during ordinary times, and especially amid seasonal swings in banks' liquidity needs, as noted by Carlson and Wheelock (2018), as well as serving as the primary tool that the Federal Reserve used to provide liquidity in emergency situations. Borrowing was fairly common; Shull (1971) reports that, on average, about 60 percent of member banks borrowed each year during the 1920s while Burgess (1936) notes that banks that borrowed tended to do so multiple times during the year.

The legal authorities related to discount window lending are divided between the Federal Reserve Banks and the Federal Reserve Board (now Board of Governors). The Board sets broad policies with respect to the discount window, such as the eligibility criteria regarding what may serve as collateral for loans. Decisions regarding how much credit to extend to a commercial bank or whether a particular instrument meets the collateral eligibility requirements are made by the individual Reserve Banks. This division of authority encouraged policymakers at the Reserve Banks and at the Board to coordinate when there were questions or concerns.

The authority to extend discount window loans at this time actually utilized two separate authorities: discounting and making advances.[2] The Reserve Banks could "discount" a loan by providing a bank with funds equal to the face value of the loan minus the "discount rate"—this is the practice that gives the discount window its name. The maturity of this credit extension would be equal to the remaining maturity of the underlying loan. The Federal Reserve was only allowed to discount loans with a remaining maturity of at most three months, or nine-months in case of agricultural loans, so lending associated with discounts was fairly short-term (Hackley 1973). Banks were required to guarantee the loans that were being discounted so that the Federal Reserve could seek repayment from the bank in case there were issues with the underlying loan transaction. Advances are loans by the Federal Reserve directly to the commercial bank against collateral. The instruments eligible to serve as collateral for advances included items eligible for discounting and selected other assets, such as long-term Treasury securities. The maturity of advances was limited to 15 days. In the discussion that follows, the term "discount window loan" is used to refer to both discounts and advances.

[1] Not all banks were members of the Federal Reserve System. Banks chartered by the federal government (national banks) were required to become member while banks chartered by state governments (state banks) could join voluntarily. State banks were more numerous, but smaller. Thus, while less than half of the banks in the country joined the Federal Reserve System, more than half of banking system assets were at Federal Reserve member banks. The authority regarding who was eligible to receive a discount window loan was changed with the Depository Institution Deregulation and Monetary Control Act of 1980.

[2] The particulars of these legal authorities changed a number of times, including during the early 1930s and 1980.

As noted above, all discount window loans were required to be collateralized. Collateral consisted of either particular types of loans (often referred to as "eligible paper") or by government securities.[3] Eligible paper was described in the Federal Reserve Act as "notes, drafts, and bills of exchange issued for drawn for agricultural, industrial, or commercial purposes, or the proceeds of which have been used, or are to be used, for such purposes."[4] As detailed by Hackley (1973), the Board offered an interpretation that eligible paper should arise "out of a commercial transaction, for instance to finance inventories, wholesale goods that would be resold, or agricultural products being shipped to market (Hackley, 1973, p. 36)." Because such transactions should provide the borrower with the means to repay their loan, it increased the likelihood that any paper discounted by the Federal Reserve was likely to be repaid. Even with that refinement, the Reserve Banks had considerable discretion about whether a particular piece of paper met the rules to be considered eligible. While the Reserve Banks broadly followed the same approach, as detailed in Congressional Hearings (Senate Hearings, 1931, pp. 708-11), there were some differences in terms of the extent of documentation required to demonstrate eligibility.

The Federal Reserve Banks were also able to take extra collateral when extending a discount window loan.[5] In Congressional Hearings (Senate Hearings 1931, 712-15), the Reserve Banks noted a variety of reasons for doing so including concerns about the creditworthiness of the paper or the member bank that was borrowing. In other cases though, some commercial banks would maintain collateral at their local reserve bank and would take advances as needed against that collateral. To the extent that this extra collateral was not directly collateralizing the discount window loan, it was not necessary that it met the regular eligibility requirements (Westerfield, 1932, p. 47; Hackley, 1973, p. 31). Being able to take as additional collateral assets that were sound even though they were not eligible would likely have been important during periods of stress. In addition, the Reserve Banks sometimes requested that the discount window loans be personally guaranteed by the bank directors (see Joint Commission of Agricultural Inquiry, Vol. 2, p. 417). That provided a further incentive for the directors to be attentive to make sure that the bank repaid the loan.

There was no limit on the amount of credit that a Federal Reserve Bank could extend to any particular bank. (Nor, as noted by Westerfield (1932, p. 44), was there a limit on how much a bank could borrow from the Reserve Bank.) Nevertheless, the Reserve Banks thought it prudent to be watchful about

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[3] The rules regarding eligible collateral were broadened in the early 1930s.

[4] This approach follows from the idea of some of the authors of the Federal Reserve Act that the central bank should support "real bills" arising from commercial transactions as opposed to those that might be related to speculative transactions.

[5] In modern situations, central banks could increase the haircut on the collateral if they had a concern about it. Because the way that discounts worked, where the Federal Reserve was already providing less funds than the face value of the loan by a particular margin (the discount rate), increasing the haircut was effectively increasing the discount rate.

how much credit they extended to any one bank. During the 1920s, the Reserve Banks set an amount, sometimes referred to as a "basic line", that was proportional to the size of a bank's capital that served as a benchmark for whether borrowing was viewed as being considerable. Rather than a hard boundary, it more reflected the point at which scrutiny of the bank would increase. Banks that borrowed less than that amount faced less scrutiny while banks borrowing more than that amount faced additional scrutiny.[6]

Even though discount window loans were collateralized, the Reserve Banks did monitor the condition of their member banks though supervision and examination. The examination process was shared with other regulators. Banks that had national charters were supervised by the Office of the Comptroller of the Currency and banks with state charters were supervised by state authorities. The Federal Reserve was generally able to obtain copies of the examination reports or to send its own examiners to accompany those of the authorities.[7] Federal Reserve officials were also able to make special assessments of banks that were heavy users of discount window credit. The examination reports at the time covered the condition of the bank loan book—importantly including an assessment of any likely losses that could be compared to the equity position of the bank to determine solvency—as well as commentary about larger or insider lending, the quality of the management, and the ability of the bank to monitor the credit quality of its loan customers. The information from the examination process informed the way Reserve Banks approached the extent and maturity of their lending to the member banks.[8] In addition, Reserve Banks paid attention to the historic patterns of discount window use and repayment in assessing the prudence of the borrowing banks.

The rate on discount window loans was an important policy tool for the Federal Reserve to influence monetary and credit conditions. The rate was raised and lowered in order to restrain or promote credit growth in a way that marked the beginnings of a countercyclical monetary policy. While at this time each of the Reserve Banks was able to set its own discount window rate, that rate was the same for all borrowers regardless of their riskiness or the maturity of the lending that was being done.

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[6] At some points in time and at some Reserve Banks, banks borrowing more than their basic line were charged a higher rate than other banks (see Rieder 2020).

[7] As noted by Harding (1925) and White (2013), the cooperation was not always smooth but it did become more aligned over time. In the episode studied here, it appears to have been quite good.

[8] For example, Burgess (1936, pp. 61-62) reports that the Federal Reserve Bank of New York used examinations to maintain a list of banks about which it had concerns and thus where lending received special scrutiny.

Section 3. The intervention during the stress at City National Bank of El Paso

This section reviews the history of the episode including the events leading up to the run on the bank, the intervention, and the aftermath.

Section 3.1 Prelude

During World War I, there was a boom in the price of agricultural (and other) commodities driven by heightened demand during wartime and a decrease in supply as European production declined. A considerable portion of the area around El Paso was dedicated to raising cattle. Cattle prices, shown in Figure 1, reached record highs around this around 1920. Amid the rise in such prices, ranchers increased production, financed in part by loans from local banks.

The high cattle prices didn't last. Once the war in Europe ended and production there started to return to normal, prices of all agricultural commodities declined. Farmers and ranchers that had borrowed when times were booming found themselves struggling to repay their debts. This pattern occurred across the United States (Alston, Grove, and Wheelock 1994; Rajan and Ramcharan (2009); Jaremski and Wheelock 2020). The situation in the region around El Paso was made worse by a drought that made it even more difficult to feed the cattle. Federal Reserve officials surveyed the area in 1922 and characterized them as disastrous with grazing areas dry and cattle too weak to even by moved to greener pastures (Reordan, 1922).

The city of El Paso had its own boom and bust cycle as well. Nearby Fort Bliss was an important base for War Department operations during World War I and its population surged during the conflict. The demand for required logistical support resulted in a population and business boom in El Paso. New houses were built, real estate values soared, and new businesses were started. The banking sector expanded rapidly to support these efforts. Between January 1911 and January 1919, the banks in El Paso grew from 6 banks with $9 million in deposits to 10 banks with $25.4 million in deposits.[9]

Once the war ended, this boom also came to an end. The region as a whole was impacted as the price of cattle fell. El Paso was particular affected as Fort Bliss was downsized. As the need for support services to the base diminished, the population of El Paso retrenched so that the stock of housing exceeded what was needed by the town causing real estate values to fall and new construction to drop.

The banking system had benefitted from the boom and then suffered also from the bust. The banks worked hard to support the community during this time by extending loans. Nevertheless, amid the local economic struggles, troubled loans on banks' books increased. While these challenges were especially notable in the city of El Paso, they were emblematic of issues faced in the region as a whole.

[9] Based on information provided in Rand McNally Banker's Directory.

Federal Reserve officials expressed significant concerns about economic and banking conditions in Western Texas and Southern New Mexico.

As the second largest bank in the city of El Paso, the City National Bank was an important part of the financial community. It had assets of about $9 million; it held deposits of about $5.5 million from about 15,000 depositors, about one-fourth of the deposits in the city (McKinney 1924). It was also an important regional financial institution, holding a significant volume of interbank deposits and serving as a correspondent bank for many banks in the area.[10]

Moreover, City National figured prominently in efforts `by local bankers to preserve the stability of bank community within the city of El Paso. The economic difficulties in the area resulted in the failure of the El Paso Bank and Trust Company in the early 1920s. The Texas banking authorities did not want to have to liquidate that bank and so entered into an agreement to sell part of it to the City National and have the state guarantee fund take over the rest.[11] City National agreed to take over the failing bank as it hoped to increase its own business and to avoid the instability that a bank failure in the city might bring. However, amid the ongoing economic difficulties, the losses on the assets acquired from the El Paso Bank and Trust proved more severe than anticipated. In addition, the ongoing economic challenges meant that the quality of City National's own loan book was deteriorating.

Even so, the national bank examiners had confidence in the management of City National and their ability to manage the acquisition and the general situation. In the May 1923 report, the examiner stated that "The bank acquired quite a burden when they took over the El Paso Bank & Trust. However, the management has been working very hard on this stuff and will work all of this out within a reasonable time (May 1923 examination report)." The management of the bank was considered to be good and attentive to the bank's affairs. Further the bank was assessed as solvent. While there was a sizeable quantity of troubled loans on the bank's books, much of it was secured by collateral and the earnings of City National were expected to be sufficient to allow it to absorb any losses without an impairment of its equity.

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[10] Correspondent banking was an important part of the operation of the banking system. Correspondent banks in major cities provided a variety of services to respondent banks in smaller cities. Those services included providing liquidity through short-term interbank loans or by purchases of commercial loans. Correspondent banks might also provide a connection to the interbank payment and check clearing system. To facilitate the provision of these services, the respondent banks often maintained deposits at their correspondent banks and these interbank deposits served as an important source of funding for the correspondent banks. (For a more detailed description see James, 1978)

[11] Texas was one of a few states at this time that provided insurance for deposits in state chartered banks. As a bank with a national charter, City National was not covered by the insurance program.

The run on the bank

Rising asset problems at banks in the Southwest turned into a spate of bank closures in late 1923 and early 1924. Local newspapers reported that in December 1923 and January 1924, one bank was closed in Pecos, Texas; three banks in Silver City, New Mexico; one bank in Tyrone, New Mexico; and one bank in Roswell, New Mexico (see *Pecos Enterprise* for February 1, 1924, and *Alamogordo Daily News* for January 10, 1924, and January 31, 1924).

As bank failures rose, banking regulators began to express heightened concern about a more general loss of confidence in the solvency of the banking system in the area. In the examination report for City National filed in February 1924, the examiner reported that there were rumors circulating about troubles at several other banks in El Paso. The instability of the situation and potential for it to get further out of hand was also a serious concern of Federal Reserve officials. The concern that the deterioration in confidence was becoming ominous and negatively affecting good banks was supported by the fact that several of the banks that closed were not viewed by bank examiners as particularly leveraged or otherwise in poor shape.

Over the course of January 1924, concerns among El Paso residents that the City National Bank was in trouble became more widespread and withdrawals became persistent (Examination Report, February 1924; Kilman, 1961). A large-scale run on the bank occurred on Saturday, January 26, which the bank only survived because it closed early. There were efforts by leading bankers of the city to arrange a private solution whereby the First National Bank of El Paso would take over the City National Bank; however, these efforts were unsuccessful. Officials on the ground—a national bank examiner who had gone to El Paso as troubled started as well as Federal Reserve staff from the El Paso branch of the Federal Reserve Bank of Dallas, were concerned that the bank would be unable to open on Monday morning without support and that this might trigger a widespread panic in El Paso. The onsite national bank examiner sent a coded message to Chief Examiner Collier, head of the regional office that read:

> Regarding 7514 [charter for City National Bank El Paso] Plan for reorganization thus far has failed and situation serious. Am remaining here to render all possible assistance and await arrival President 2532 [The First National Bank, El Paso, Texas] to obtain assistance for working out. Report of examination will be completed just as soon as possible. Condition very little different now from condition advised my letter. This office feels that there is some way this bank can be saved. Think advisable for you to go to El Paso and take charge situation (Longmore 1924).[12]

[12] The actual telegram sent by Examiner Longmore (1924) read:
"Ratan Quasi jibe plans for regal thus far asylum harp and sermon stop am reader here to redwood and awl pecan jocose joking to obelisk arsenal for work out stop revival weapon closet just as soon as parasol stop cockade very loop distill now from cockade aggrieve my laurel."

The managing director of the El Paso branch of FRB Dallas called Governor McKinney, head of the Reserve Bank, to report that the situation was critical (Kilman 1961, p. 125). Both McKinney and Collier hurried to the scene.

The intervention

It was clear to all stakeholders—the shareholders of City National, the managers of the bank, and bank regulators—that City National needed both equity and liquidity support. The onsite examiner and additional staff that hurried to the scene to provide support made as detailed an inspection of the bank as they could in short order. Based on this inspection, they considered that the losses on the assets of the bank would amount to about $800,000. Those losses notably exceeded the bank's existing equity position of $565,000 (consisting of $500,000 of paid-in capital, and $65,000 of "surplus and undivided profits").

To bolster the position of the bank, its managers reached out to the community for additional resources. These outreach efforts proved reasonably successful in that the citizens of El Paso, mostly local businessmen, agreed to purchase with cash, at face value, and without recourse, $300,000 worth of assets from the City National Bank (Wyatt, 1924). In getting to that agreement, the managers of the bank reportedly told those citizens that the Federal Reserve would be purchasing, also without recourse, $500,000 in bad assets from the bank (Wyatt 1924). The removal of that many bad assets would enable the bank to write off any residual bad assets with its existing resources.

However, Federal Reserve officials had not in fact agreed to purchase any bad assets from the bank. [13] Indeed, even when he arrived in town on Sunday and was presented with agreement and told that only by following through with it would a crisis be averted, Governor McKinney emphatically (and repeatedly) ruled out any purchases of bad assets stating that it was not lawful from him to do so (Wyatt 1924).[14] Nevertheless, the fact that the citizens of El Paso had made their contributions with the understanding that the Federal Reserve would also be making a contribution made Governor McKinney's position even more challenging. The fact that the citizens were providing support demonstrated the community support, provided protection for the Federal Reserve, and may have alleviated some concerns about moral hazard. Not providing any support for the bank would almost certainly have meant its closure and potentially precipitated a city-wide collapse in confidence. However, Governor McKinney

The quote in the text is the translation from the head office.

[13] Consequently, when the bank was closed a few months later, there were accusations of fraud by the citizens against the bank officials and claims that the Federal Reserve had in fact purchased the assets and that it did not have other claims on the bank. The claims against the Federal Reserve were firmly rejected by the courts.

[14] It is also reasonable that the bankers in this area should have been aware of this stance. Kilman (1961, p. 116) reports that, in early 1923, FRB Dallas was pressed by local bankers to support a bank in New Mexico and to take ineligible paper as collateral. FRB Dallas had declined to do so (though it had promised additional liquidity support to that questionably solvent institution if eligible paper could be found).

was quite clear that, while the Federal Reserve was able to provide liquidity support, it was not able to provide equity support.

After lengthy negotiations, an agreement between FRB Dallas and City National Bank was made at around 11 p.m. Sunday night. It was highly unusual. Wyatt (1924) reported it was structured as follows: To ensure there was sufficient cash available in the bank to allow it to open, FRB Dallas agreed to make a deposit of $500,000 in the City National Bank. To provide security for this deposit, FRB Dallas was to receive "full benefit" of a 100 percent assessment against existing shareholders which would amount to $500,000. FRB Dallas would be repaid as the proceeds from that assessment were received. Moreover, additional collateral would be provided to FRB Dallas in the form of $500,000 of paper that had already been charged off but upon which efforts to collect were continuing (i.e. some of the worst quality paper that City National had was used as the additional collateral). As further protection, the directors of the City National Bank also agreed that FRB Dallas would have first and prior lien on the assets of the bank in the event that the bank suspended before all of the assessment was paid in.[15]

Given the unorthodox structure of this support program, Governor McKinney reached out to the Federal Reserve Board to confer. Communications between El Paso and Washington DC were subject to technical issues so Governor Crissinger, head of the Federal Reserve Board, was initially only able to reach Governor Crissinger by sending a message via President McNary of the First National Bank of El Paso to be relayed to FRB Dallas officials.[16] Governor Crissinger's support is clear from his message.

> It is not possible to get the Board together tonight. Several do not answer phone. I am of the opinion that Board will offer no objection to anything Mr McKinney may do in the exercise of his judgement to save the situation. Board will no doubt approved liberality on the part of McKinney that will be helpful. Board has no power to order McKinney to do things requested, but will be highly pleased if by going to the limit dictated by his judgement the situation can be saved. Willing to bring before Board early in morning (Crissinger, 1924).

Subsequently, Governor McKinney and Governor Crissinger were able to speak by phone where Governor McKinney was able to describe the details of the plan for a deposit and provide a warning that the proposal had the potential to result in losses to the Federal Reserve. Reportedly, Governor Crissinger remained supportive of the actions of FRB Dallas even with this warning (McKinney, 1924a).

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[15] The legal arrangement under which the funds were provided is a bit murky. The resolution agreed to by the bank officers and by Governor McKinney refers to this as a deposit (McKinney, 1924a). The bank ended up closing with this arrangement still in place and resulted in some discussions between lawyers for the receiver and the Federal Reserve. It was subsequently determined, and affirmed by the courts, that the funds provided to the bank by FRB Dallas constituted an advance (see Wyatt, 1926).

[16] Earlier in the day, President McNary had sent a telegram requesting that the Federal Reserve Board urge Governor McKinney to be willing to purchase bad assets from the City National Bank.

The amount of support provided was expected to be able to address the problems that the bank faced. The $500,000 proposed equity injection from the assessment on the shareholders, removal of $300,000 of bad assets resulting from the contribution from local citizens, plus various existing loss reserves in the bank were thought to be sufficient to address the solvency problems faced by the bank. The liquidity provided by the Federal Reserve would enable the bank to open and operate as normal and thus provide time for the assessment to be collected.

There was also a change in the management of the bank. A new president was brought in; this individual stepped down as manager of the El Paso Branch of FRB Dallas to take the job (City National Bank of El Paso, 1924). That may have given further comfort to the Federal Reserve regarding their position with respect to the bank. The chair of the bank's board of directors was also replaced.

Finally, a press release was issued to bolster public confidence in the institution. On Monday, a full-page advertisement-style statement appeared in local newspapers expressing the regulator's confidence in the bank. The statement read:

> The national bank examiner has just completed a very careful examination of the City National Bank, El Paso, Texas, and all vital conditions imposed have been met and all assets estimated by the examiner to be of questionable solvency have been eliminated.
>
> As a result of this examination the examiner is wholly satisfied as to the solvency of the bank. It possesses ample cash resources for its current needs.
>
> The examiner expresses gratification of the noble response of the citizenship of El Paso in bringing about an adjustment that insures an institution of value to the community.
>
> Signed,
>
> R.H. Collier
>
> Chief National Bank Examiner
>
> S.A. Longmoor
>
> National Bank Examiner
>
> (*El Paso Times*, Monday, January 28, 1924, p. 7)

Moreover, an article in the newspaper reported that the Federal Reserve System was standing behind the bank and providing it liquidity support. In particular, the newspaper stated that $1 million in cash was being delivered to the bank from the vaults of the Federal Reserve and that City National "is properly entitled to as a member of the great Federal Reserve system (*El Paso Times*, January 28, 1924, p. 1)." [17]

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[17] This amount notably exceeds the deposit to which Governor McKinney agreed. The newspaper may have provided an incorrect figure or it may have joined the Federal Reserve and the citizens contribution and rounded up.

The structure of the intervention by the Federal Reserve can thus be thought of as having a few key features. First, the amount of support was considered to be ample; half a million dollars was believed (and proved) to be more than adequate to address the liquidity needs of the bank, especially as solvency support was also being provided. Second, this support was provided publicly (as it was mentioned in the press release and newspaper story). As a run was generally expected, a public announcement that ample cash was available to meet withdrawal needs was vital in stopping the run dynamic.[18] Third, when providing liquidity, Federal Reserve officials took steps to limit their credit exposures to the bank. While there was clearly some credit risk, steps were taken to manage it. Taking a more senior position in the capital structure, and especially one senior to shareholders, was important for managing moral hazard issues. Finally, the replacement of the management ensured that there was direct accountability for the troubles of the bank.

The reason for the intervention appears to have been importantly related to concerns about the stability of the banking system around El Paso. FRB Dallas officials as well as officials from the Office of the Comptroller of the Currency were convinced that, had they not intervened, instability would have spread and caused a serious regional financial shock. In his summary of the situation, McKinney reported that:

> I realized that upon my decision rested in large measure the welfare of the banks an business interest of El Paso and its surrounding country. For example, the First National Bank of Stanton, Texas, had a balance of $50,000 with the City National Bank. Had the latter institution closed, the Stanton bank would probably have been forced to suspend also. The whole State of New Mexico, as indicated elsewhere herein, is seething with unrest and distrust of banks. The effect of a failure of a large institution like the City National Bank, I felt, would have destroyed the last vestige of confidence that the people of that portion of our district had in all banks (McKinney 1924b).

He was not alone in thinking that there would have been a serious regional event had City National closed at that point. In the opinion of the national bank examiner, FRB Dallas, along with the citizens of El Paso, who provided needed equity, “responded nobly in an emergency and averted a crisis (Longmore 1924)”.

[18] Here a run dynamic refers to a situation where depositors have an incentive to withdraw because they are concerned that withdrawals by other depositors will exhaust the cash supplies of the bank and force its closure and worsen the losses of all remaining depositors (Diamond and Dybvig 1983, Morris and Shin 2001). If all depositors know there is enough cash, and know that all other depositors know there is enough cash, then there is no reason for any depositors to run.

Section 3.3 Immediate aftermath

The intervention was successful in stopping the run on the City National Bank. The bank remained open and does not appear to have faced further significant withdrawal pressures. Indeed, neither newspaper reports nor correspondence amongst banking regulators indicate unusual strains on the banking system in that city during the next few months.

The concerns that about the potential for a more widespread collapse in confidence appear to have been quite plausible. Just a week later, Federal Reserve officials had to respond to a situation in Albuquerque, New Mexico where there was another potential banking collapse.[19] Military planes were used to airlift more than half a million dollars in currency from El Paso to Albuquerque to make sure there was sufficient liquidity available and several press statements were issued noting the support being provided by the Federal Reserve to the banks there (Eddy 1924; Albuquerque Herald Feb. 7, 1924). The fact that there were more runs in the area points to the tenuous nature of the confidence in banks in that region and the possibility of a serious regional panic.

The intervention did not provide for the long-term viability of City National bank. The bank suspended operations and was placed into receivership in May 1924. The total losses of the bank ended up being on the order of $2 million, well in excess of the $800,000 estimated by the examiners just a few months earlier (Wyatt 1924).

This closure appears to have been generally orderly. There was a run on the one other bank, the Border National Bank, but support from the Federal Reserve helped stem the sudden withdrawals (McNary 1924a); that bank was forced to suspend operations temporarily, but was able to reopen and resume operations. The First National Bank reported that in the wake of the closing of City National it had a modest withdrawals amid uneasiness on the part of its savings depositors but there was no general withdrawal (McNary 1924b).[20] McNary (1924b) went on to state that the limited spillovers and orderly nature of the closure occurred as the citizens of El Paso had come to expect the closure of City National; had that bank closed in a disorderly manner in January the officers of the First National Bank believed that the effect would have been disastrous.

Given the severity problems with the bank's assets many of the shareholder and even depositor claimants were exposed to losses. There also turned out to be significant challenges in obtaining assessments from the shareholders who were highly reluctant to contribute money knowing that it would

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[19] The Governor of New Mexico ordered a holiday to commemorate the passing of Woodrow Wilson (who died on February 5, 1924). The banks and regulators reportedly used this time to regroup and plan their response (McKinney 1924b).

[20] To help promote confidence in the City of El Paso amid concerns about access to immediately available funds, the First National Bank reported that it made advances to many of the small depositors of City National (McNary 1924b). The bank reported that this "greatly relieved the tension and had a very reassuring effect on the public mind."

be lost. The receivership involved numerous lawsuits by different parties seeking to minimize their losses. FRB Dallas spent a long time negotiating with the receiver and attempted to smooth his job by writing off some of its claims and foregoing the general prior lien on the banks assets that had been obtained when providing the deposit (Kilman 1961).[21] FRB Dallas reported the losses that it sustained from its exposure to the bank amounted to $100,000 (FRB Dallas 1926).[22] Despite the efforts by Federal Reserve officials, the process of dealing with residuals claims and collateral became bogged down in prolonged litigation and prevented resources at the bank from being usefully redeployed in the community (FRB Dallas, 1926). There was considerable public anger that the Federal Reserve was being (mostly) repaid while locals were bearing significant losses (Wyatt 1924). Hence, despite stopping a potentially serious regional panic, the Reserve Bank viewed this episode as only a partial success.

Aside – the intent of the authors of the Federal Reserve Act

When thinking about the actions taken in this episode, it is worthwhile to have as background some of the thoughts that had been expressed by the authors of the Federal Reserve Act about what they hoped the Federal Reserve would do. As might be expected, there were a wide range of ideas expressed, but responding to financial crises was prominent among them. Indeed, the economic disruptions associated with the Panic of 1907 were one of the main reasons that lawmakers became convinced about the need for a central bank. A member of the House of Representatives expressed his opinion as follows:

> This system increases the safety of banks. No bank can make any money and keep in its vaults money enough to pay all its depositors if they all want their money within a short time. So as times get tight the banks have been in the habit of loaning less and less money and hoarding up more of it to provide for emergencies, thus greatly increasing the very stringency which has caused them alarm. In tight times each bank is looking out for itself and will not rediscount the paper of [lend to] other banks in distress. In the Glass bill [the Federal Reserve Act] we have the regional reserve banks, with means of putting out needed currency, formed for the very purpose of taking care of the local banks in time of stress, where they can quickly turn their good paper into money, and thus can safely loan out more of their deposits. Thus are the bank reserves mobilized for immediate use.
>
> When the regional reserve banks get in full operation the member banks will no longer

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[21] Federal Reserve officials had apparently expected that such a claim was unlikely to be sustained in the event that the bank failed.

[22] In the examination report of February 1924, the examiner reported that, as of November 20, 1923, City National Bank had rediscounted over $1,100,000 of loans with FRB Dallas. The report of the Insolvent Banks Department of FRB Dallas states that, at the time it closed, City National still owed the over $1.1 million (Insolvent Banks Department 1924). (It is not clear whether that includes the $500,000 deposit). The impact on the depositors of all these interventions is less clear, but it is likely that they benefitted, though at the expense of the new equity holders.

fear runs upon them, and as the depositors will know that their deposits will be paid when wanted, there will be no runs on banks in this system (Representative Beakes (1913), p. 4906).

This statement highlights two goals for the central bank. The first is that the Federal Reserve should promote confidence by standing ready to provide liquidity and respond forcefully to stress. Secondly, the statement references "good paper" which implies that the Federal Reserve should focus on rescuing solvent banks.

This episode highlights that achieving both those objectives simultaneously can be quite difficult. In their intervention, Federal Reserve officials focused on the provision of liquidity and on promoting confidence in this bank, but with an eye toward ensuring confidence in the banking system more broadly. They were certainly concerned about a regional banking panic bringing down more banks. The response though came at the expense of the second objective. The paper that the Federal Reserve took as collateral was not "good" and the bank failed shortly in a few months. The Federal Reserve experienced some losses as a result of the intervention and was well aware (due to the number of lawsuits filed in the wake of the failure) about the losses that others were experiencing.

Section 4. Lessons learned

The intervention with respect to the City National Bank of El Paso was only one of the many interventions—albeit one of the more dramatic interventions—by Federal Reserve officials to help banks experiencing difficulties in the 1920s. White (2015) and White and Roberds (2020) describe the actions by the Federal Reserve Bank of Atlanta to support banks in its district affected by the bust in cotton prices. Carlson (forthcoming) describes interventions by a number of other Reserve Banks in agricultural regions of the country. These interventions saved quite a number of banks. Gorton (1988) argues that there would have been a full-blown national panic in the early 1920s had it not been for the Federal Reserve and the availability of the discount window.

Nevertheless, these interventions were not without costs. First, there was a concern about dependency on the central banks. In some cases the Federal Reserve provided financing to banks for an extended period in order to help them get through the stresses of the early 1920s. Some banks appear to have taken advantage of this leniency to borrow from the Federal Reserve continuously, in large amounts, for several years. That led policymakers to be concerned that public financing was inappropriately substituting for private financing and reducing market discipline.

Second, there was a concern about losses. As noted in the El Paso episode, the Federal Reserve Bank of Dallas experienced some losses associated with this intervention. This was not the only such occurrence. Many of the Reserve Banks in the agricultural sections of the country experienced some

losses associated with their discount window lending in the early 1920s. These losses added up and had a noticeable, though modest, impact on Federal Reserve earnings. Federal Reserve officials were quite concerned about whether that meant that the central bank was taking on more risk than the authors of the Federal Reserve Act had intended.

Finally, Federal Reserve officials were concerned that their lending to troubled banks resulted in some of the other depositors bearing more losses than they would have otherwise. Ordinarily during this period, the depositors were effectively secured by all the assets of the bank and if the bank failed and was liquidated, the depositors were all treated more or less equally and payments made on a pro-rata basis. If some depositors withdrew and the bank turned to the Federal Reserve for funding, that changed a bit. The Federal Reserve had a preferred claim on specific bits of collateral—usually the better quality collateral and often for amounts greater than the value of the discount window loan. That enabled the Federal Reserve to be fully protected and repaid, but meant that there were less resources available to the other depositors. While studies of their lending by Federal Reserve staff did not suggest that this dynamic was present to a significant degree, it was something that officials were concerned about and were keenly aware about the public relations aspects.

These were all concerns that arose out of the general lending experience. The episode in El Paso was notable enough that it left a lasting impression on Federal Reserve officials as something that they did not want to repeat. A few years after this episode, the First National Bank of El Paso experienced difficulties and requested aid from the Federal Reserve of the sort that had been provided to City National. FRB Dallas officials responded that they did not view that situation as having had the desired outcome and that their experience had led them to avoid lending in similar situations:

> It was pointed out particularly to Mr. Muchinson [of the First National Bank of El Paso] that what the Federal Reserve Bank of Dallas did and attempted to do in reference to the support of the City National Bank of El Paso was, insofar as results were concerned, wholly ineffective, and even in the attempt of the Federal Reserve Bank to avoid long drawn out and expensive litigation by the sacrifice of $100,000 of its claim in a compromise settlement, litigation ensued notwithstanding, which litigation developed the preference of the Federal Reserve Bank and its right to a full recovery. It was explained that this circumstance, together with similar experienced in lesser degree, had led us to the conclusion that the resources of the Federal Reserve Bank could not be employed for the purpose of attempting to save banks but that they must be reserved and preserved for and employed in the extension of credit as a purely banking function (FRB Dallas, 1926).

There was a shift in policies in the mid-1920s. In the early 1920s, around the time of the episode described here and amid the stresses western Texas/Southern New Mexico, FRB Dallas noted the extent to which it was willing to be liberal in its lending. For instance, when discussing the approach to lending, FRB Dallas stated had been quite generous regarding the collateral it would accept "in applying these rules [regarding collateral eligibility as set by the Federal Reserve Board] to the facts surrounding any note offered to us we have pursued a most liberal policy. Certainly we have at all times resolved any reasonable doubt touching the eligibility of paper offered to us by distressed banks in favor of the offering bank (McKinney 1924b)." Moreover, FRB Dallas noted that the volume of lending to distressed institutions was also substantial. "Certainly in connection with no member bank in New Mexio which has closed was any attempt made to restrict its rediscounts to the amount of its basic line…It will therefore be seen that we were lending to these sixteen banks [in New Mexico] at the time they suspended business a total amount four times the aggregate of their basic lines." These statements point to a fairly expansive lending policy.

In response to the experiences in the early 1920s, including the episode described here, FRB Dallas tightened the conditions associated with its lending. The Reserve Bank detailed these steps in a letter to the Federal Reserve Board in 1926:

> For several years prior to 1923, the credit policies of this bank had been framed with the thought in mind that a Federal reserve bank could best assist a weak and overextended member by liberal advance of credit in the hope that improved conditions would enable the member to recover a position of soundness and strength. It subsequently developed, however, that our attempts to serve the banks involved in this way merely had the effect of further overextending them…several years ago we set about changing in a gradual manner the policies previously followed…
>
> Summed up, the practices of a constructive character that we have developed as a means to this end may be described as follows:
>
> 1. The inauguration of more frequent conferences with officers and directors of weak banks, holding them in an unhurried manner and permitting the member banks' representatives to indicate the termination of the conference instead of doing so ourselves.
> 2. The application of pressure for a closer study and analysis by them of the internal causes of their troubles.

3. The assignment of specially trained analysts from our own staff to visit these banks and assist them to analyze their situation with a view of determining remedial measures, and the best uses of their assets.
4. The policy of volunteering the use of our rediscount facility to assist well-managed member banks in local emergencies arising from suspensions of banks in their community or immediate vicinity. (Acceptances of these proffers have been very few indeed, if any.)
5. A careful and sympathetic consideration of all applications for lines of credit with a view of confining advances to such banks and to such amounts as will safeguard the best interests of both the lending and borrowing institutions. (FRB Dallas, 1927).

These changes make clear that borrowers faced more scrutiny than before. While FRB Dallas made clear that it was still willing to provide credit, especially in stress situations, the shift in tone would likely have made prospective borrowers less willing to use the lending facilities offered by the Reserve Bank.

The tighter approach was intended to produce a "reluctance to borrow" on the part of member banks (Shull 1971). Part of the tighter policy also shows up in a switch in the framing of the purpose of the discount window in official communication from referring to rediscounting short-term paper (i.e. focusing on the collateral) to referring to referencing short-term borrowing (i.e. focusing on the length of borrowing). Shull further reports that the intent of the policy was to limit continuous borrowing and to dissuade excessive use of the discount window. These shifts were apparent to others outside the Federal Reserve; Keynes (1930) and Friedman and Schwartz (1963) report that around 1925 or 1926 the Reserve Banks were asking "inconvenient questions" and otherwise seeking to dissuade member banks from borrowing regularly.

Section 5. Conclusion

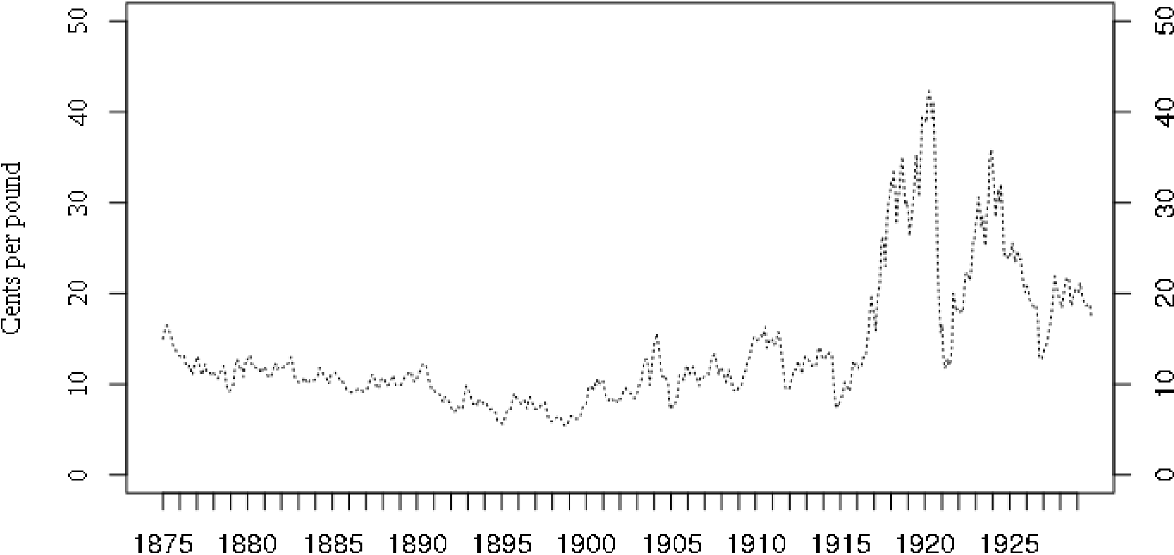
Intense stress at the City National Bank of El Paso in 1924 resulted in FRB Dallas officials having to respond to a complicated situation in a hurry. There were both liquidity and solvency issues at play and only hastily assembled information available on each. Federal Reserve officials agreed to intervene and provide support out of concerns that a disorderly collapse at this institution might have triggered a regional panic. They agreed to a creative plan that provided liquidity but also ensured community support and that credit protection was being provided by others in a way that likely mitigated moral hazard concerns. The intervention accomplished the immediate goal of preventing a regional event, but the bank did fail a short while later. The resolution of that bank was messy and resulted in losses to the Federal Reserve and some public relations challenges. In part reflecting their dissatisfaction

with how this intervention played out, the Federal Reserve Bank of Dallas tightened the conditions surrounding its lending.

This narrative was broadly similar to ones for episodes that took place in other Federal Reserve districts. Some aspects of the episode described in this paper are more dramatic than was typically the case, but many of the Reserve Banks engaged in efforts to support their member banks in the early 1920s. Many of these efforts were successful and the banks saved, but the Reserve Banks were broadly concerned that the costs associated with this support were too high (from the losses borne by the depositors and the detrimental incentives provided to the banks). As a result many Reserve Banks tightened lending standards and discouraged use of the discount window by trying to encourage a "reluctance to borrow" on the part of the member banks.

That shift happened in the mid- to late-1920s. Of course, in the early 1930s, bank runs and large-scale panics caused considerable damage to the U.S. banking system. With the more conservative approach to lending in place, the Federal Reserve Banks were less willing to step in provide the sort of emergency liquidity support that took place in this El Paso episode. Consequently, it is possible that the panics may have been worse than they would otherwise have been had the Federal Reserve been willing to be more expansive. The causes of these panics were numerous and deep and the banking system would have certainly been deeply troubled amid the economic downturn. Still, it seems possible that the Federal Reserve response to these stresses would have been more robust and the negative effects on the banking system less severe had Federal Reserve officials taken different lessons away from the 1920s experiences.

Figure 1. The price of cotton



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