

Financial System Liquidity and Bankruptcy: Mississippi 1929-31

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Abstract

The debate over the responses of central banks and government agencies to recent credit crises underscores the importance of understanding how bank bailouts affect firms, their owners, and their employees. The no-bailout policy followed by the St. Louis Fed from 1929-31 is known to have led to the failure of many banks in northern Mississippi relative to southern Mississippi, where banks were associated with the Atlanta Fed. This paper uses a new data set drawn from original bankruptcy court case files to identify two ways in which the no-bailout policy appears to have caused unnecessary distress. Petitioners in northern Mississippi had lower debt-to-asset ratios than petitioners in the south, particularly during the most severe crisis period of November 1930 to July 1931. Merchants were more adversely affected than wage earners. Further, the proportion of a petitioner's creditors that were in the no-bailout Fed districts was negatively correlated with the asset-to-debt ratio.

Acknowledgements

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Introduction

Economists have collected a great deal of information about the relationship between monetary policy and aggregate economic performance. Correlations are generated by (a) comparing outcomes of changing policies over time in a single country (the most-cited for the Depression era are Friedman and Swartz (1963) and Temin (1976), or (b) comparing outcomes of policies being pursued at one time in different countries (for example Clarida, Gali, and Gertler 1998). Mechanisms of causation are implied by economic theory (for a summary, see Walsh 2010) but seldom investigated in detail (Bernanke and Gertler 1995).

Of course, a problem thwarting the investigation of mechanisms is that it is difficult to determine empirically that a particular change in monetary policy caused a change in economic outcomes because so many other things can affect outcomes over time and across countries. What is needed to more firmly establish causality is a “natural” experiment in which different parts of the same economy are “treated” with different monetary policies. As Richardson and Troost (2009) demonstrate, such a natural experiment occurred during the early part of the Great Depression. The Atlanta Fed, which covered the southern half of Mississippi, was much more aggressive in bailing out banks to stem bank runs and prevent bank failure. The St. Louis Fed, which covered the northern half of the state, believed that bailouts were not appropriate. Until July 1931 the St. Louis Fed rarely extended loans to banks in trouble. Richardson and Troost show that the bank failure rate in northern Mississippi was much higher than in the southern part

of the state before July 1931. They further show that after the St. Louis Fed started lending to struggling banks after July 1931 the stresses on banks in the north were relieved.¹

This paper builds on Richardson and Troost by investigating the extent to which the differences in bailouts and bank failures spilled over to create economic distress for firms, their owners, and their workers. It uses a new data set drawn from original court files in federal bankruptcy cases. Petitioners for bankruptcy in northern Mississippi—especially merchants—were less leveraged than their peers in the southern part of the state, particularly during the period of November 1930 to July 1931 when the St. Louis and Atlanta Feds pursued radically different policies in response to the common credit crisis. Further, petitioners who had creditors located in the St. Louis Federal Reserve District or the other conservative districts of Chicago and Cleveland were less leveraged than their peers whose creditors were located in the other districts.

I argue that these differences are evidence of two paths of transmission of the St. Louis Fed’s no-bailout policy into the real economy. First, withholding loans from banks likely forced some debtors to liquidate. Merchant-debtors, whose debts were primarily short-term, were almost immediately affected. Second, when creditors in the most credit-scarce districts tried to

¹ In using the “natural experiment” identified by Richardson and Troost, I implicitly consider Mississippi to be a limited economic area upon which “treatments” are randomly imposed by the regional Feds. But it is not precise to claim that all of Mississippi has a homogenous economic base. There were (and are) three geographically distinct economies in Mississippi: (1) the Mississippi-Yazoo delta in the west and the lowlands in the east were fertile cotton-growing areas, (2) the “upland” spine of the state was home to an active forestry industry that is linked to paper-milling in the more eastern states and lumber and plywood industries in the state and its westward neighbors (Flick 1985), and the Gulf Coast had active fisheries. The regions are visible in figure 2. Except for the fisheries, though, the variation in the economic base runs from east to west; northern and southern parts of the state have similar shares of cotton and forestry. It is reasonable to expect that the outlook upon which loans were contracted during the period was similar north to south. One difference between north and south that is reflected in the data used here is that the cities in the south are larger and host more businesses. The volume of bankruptcy cases in the south is greater than in the north.

collect debts owed to them, their efforts sent sound but illiquid debtors into bankruptcy court to halt collection proceedings.

The Course of Events

This section briefly reviews the Fed policy history discussed at length in Richardson (2007) and Richardson and Troost (2009) in order to establish a timeline for use in examining the data from the bankruptcy court case files.

Immediately following the passage of the Federal Reserve Act, regional Federal Reserve Banks had substantial autonomy. They pursued divergent policies in response to credit crises. The St. Louis district bank, along with the Chicago and Cleveland banks, believed banks should be discouraged from using the discount window. It reasoned that allowing bank failures should strengthen the financial system in the long run. In contrast, the Federal Reserve Bank of Atlanta held an activist philosophy. It believed that central banks should act as lenders of last resort and extend credit to all financial institutions, and possibly even to illiquid but sound merchants and firms.

The archival data presented by Richardson (2007) show that the stock market crash in October 1929 did not immediately cause bank-related credit problems. During the year after the crash, patterns of distress in banks were similar to what they had been throughout the 1920s. It was the failure of Caldwell and Company in November of 1930 that set off the first major banking crisis of the Depression. The Nashville firm controlled many southern banks, including large, urban ones that held the deposits of small, rural banks.

When Caldwell failed, the Atlanta Fed rushed to extend loans to banks while the St. Louis Fed carefully examined banks that presented notes for discounting. About 20 percent of banks in the Atlanta district ceased operations in the weeks following the Caldwell collapse,

while over 30 percent of Mississippi banks in the St. Louis district ceased operations (Richardson and Troost 2009, figure 3). Banks in the Atlanta district reopened more quickly. In July 1931, the St. Louis Fed switched course and began to make loans—but not before the number of banks in business had fallen by 20 percent.

Thus there are four periods to consider here:

1. Before the stock market crash of 1929 (before November 1929),
2. From the crash to the failure of Caldwell (November 1929 – October 1930),
3. From the failure of Caldwell to the switch in St. Louis Fed policy (November 1930-July 1931), and
4. After the switch in St. Louis policy (August 1931 and later).

If differences are evident in the third period, *immediately* following the failure of Caldwell, then it indicates that withholding liquidity from the banking system had rapid effects on everyday business.

A View into Transmission of Policy through Bankruptcy

Although filing for bankruptcy is often treated as an economic outcome in itself, it is better viewed as an option for dealing with the outcome of default. Once in default, using the federal bankruptcy law can provide relief through the discharge of unsecured debt. But not everyone in default uses the law. Across states, bankruptcy rates are driven by the state-to-state variations in the laws governing traditional creditors' remedies (Hansen and Hansen 2012). This pattern exists because a primary reason that people decide to use the bankruptcy law—and a factor often driving the specific timing of the filing a petition—is to stop creditors' pursuit of claims in local court under the traditional creditor's remedies (White 2006).

Bankruptcy, then, provides views into two paths of transmission of a credit crisis into the real economy. The first path is *direct*: During a credit crisis a sound debtor with an unexpected interruption in income will be less likely to be able to secure short-term credit and may be more

likely to seek discharge through bankruptcy than in a non-crisis period. The second path is *indirect*: During a credit crisis, creditors may be more likely to take legal action to collect on loans or lines of credit previously extended to the debtor. Further, they could be especially likely to take action against debtors believed to be most able to pay. As a response to these collection efforts, sound but illiquid debtors may seek bankruptcy protection in federal court.

The effect of credit crises might be detectable in the bankruptcy rate, but the statistics on bankruptcy are available only annually, which is not a high enough frequency to be useful here. Also, aggregate statistics could not be used to investigate the two paths separately. In this paper, evidence regarding each path comes from one of the richest sources of micro-level data on the balance sheets of businesses and individuals: the court files of bankruptcy cases.

Evidence regarding the direct path comes from the summary statements by debtors that are attached to petitions for bankruptcy. A sound debtor with a short-term liquidity problem will have a debt-to-asset ratio that is lower than an unsound debtor. If the average debt-to-asset ratio of bankrupts in northern Mississippi is significantly lower than the debt-to-asset ratio in the southern part of the state during the Caldwell crisis of November 1930-July 1931 but not in the months before, then there is evidence that the no-bailout policy of the St. Louis Fed had an immediate adverse effect on debtors in the north.

Evidence regarding the indirect path comes from the detailed schedules of debts and assets attached to petitions. If the no-bailout policy followed by the St. Louis, Chicago, and Cleveland Feds created widespread liquidity problems in those districts, then creditors may have used traditional creditors' remedies to force debtors to pay. Petitioners (regardless of where they reside themselves) who have creditors in those three districts are expected to have lower ratios of debts-to-assets than petitions who have creditors only in the other Federal Reserve districts.

New Data from Bankruptcy Case Files

Although the bankruptcy statute requires only that certain bankruptcy case files be held permanently (railroad and municipal cases, for example), nearly all files resulting from petitions under the temporary laws of the nineteenth century, the first permanent law passed in 1898, and the reforms of 1978 have been retained. Except for studies by Gross, Newman, and Campbell (1996), who consider bankruptcy among women in the nineteenth century, and Ballestein (2001), who considers antebellum commercial bankruptcy, there has been little work using the case files.

Bankruptcy in Mississippi

Table 1 shows the annual distribution of the 1,405 bankruptcy filings in Mississippi for the period. The number of bankruptcies rose 40 percent in the state over the period. Two-thirds

Table 1. Bankruptcy Filings in Mississippi

| | <i>Non-Business</i> | <i>Business & Professional</i> | <i>Total</i> |
|------|---------------------|------------------------------------|--------------|
| 1929 | 108 | 256 | 364 |
| 1930 | 162 | 367 | 529 |
| 1931 | 106 | 388 | 512 |

Source: US Dept. of Justice, various years

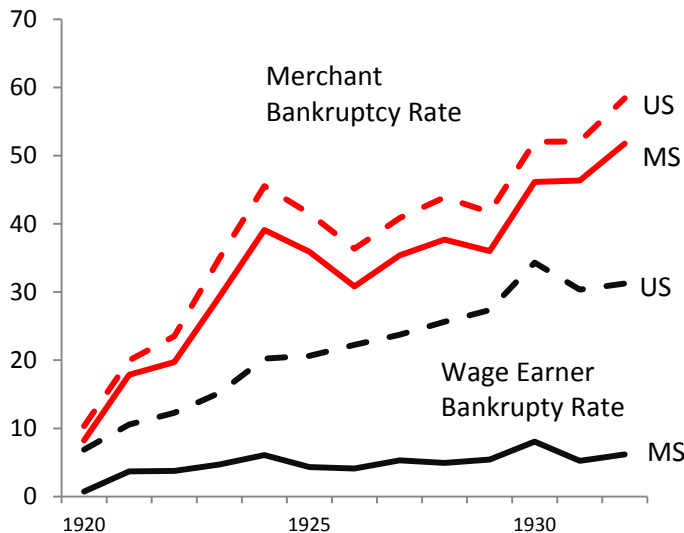


Figure 1. Mississippi and US Bankruptcy Rates
Sources: Wage earner bankruptcy: United States Department of Justice, Annual Reports of the Attorney General of the United States, various years. State population: U.S. Bureau of the Census, Statistical Abstracts [online].

of those seeking bankruptcy protection had business or professional debt.

Figure 1 shows the bankruptcy rates for wage earners (wage earners bankruptcies per 100,000 persons) and merchants (merchant bankruptcies per 1,000 business concerns) in the state compared to these rates in the US. The rate of wage earner bankruptcy in

Mississippi was lower than the national

average. This indicates that state collection laws were viewed by many debtors as relatively ineffective. In typical times then, debtors were unlikely to rush to federal bankruptcy court because of a minor problem with liquidity. Similarly, creditors may have been slow to pursue state remedies if it would not result in a quick collection to ease their own liquidity problems. This makes it more likely that any difference in debt-to-asset ratios between the north and south are due to substantial differences in the impact of the credit crisis on the real economy.

Comparing Boundaries of the Federal Reserve Districts and Federal District Courts

There were (and are) two federal district courts in Mississippi: Northern and Southern. In the north, there were three division courts in operation during this period. They met at Aberdeen, Clarksdale, and Oxford. In the south, there were four division courts: Biloxi, Meridian, Jackson, and Vicksburg. The cities in which the courts met are marked with hexagons in figure 2. The boundaries between the northern and southern districts correspond closely to the Federal Reserve district boundaries as shown in figure 2. The only exception is the east-central county of Noxubee, which was part of a Southern District Court, Meridian Division, but part of the St. Louis Federal Reserve District.

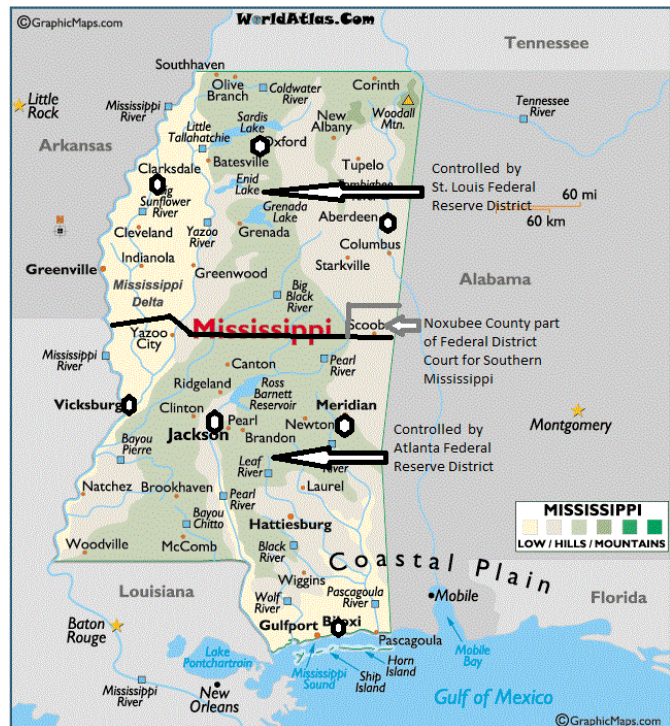


Figure 2. Division Court Locations, District Court & Fed Boundaries

New Sample

I have collected a sample of 321 (23 percent) in six of the seven local (division) courts of the two federal court districts of Mississippi from 1929 through 1932.² Table 2 describes the size of the sample used here and its distribution across the division courts. This version of the paper uses a subset of the 321 cases because all the data have been entered, but not all has been cleaned.

Table 2. Size of Sample of Mississippi Bankruptcy Case Files*

| | | <i>North</i> | | <i>South</i> | | | | <i>Total</i> |
|-------------------------|--------------------|-------------------------------|---------------------------|---------------------------|-----------------------------|----------------------------|------------------------------|--------------|
| | | Clarksdale^a | Oxford^b | Biloxi^c | Meridian^d | Jackson^e | Vicksburg^f | |
| 1929 | <i># of cases</i> | 19 | 21 | 15 | 31 | 30 | 20 | 136 |
| | <i># of photos</i> | 683 | 396 | 330 | 1874 | 585 | 1986 | 5854 |
| 1930 | <i># of cases</i> | 17 | 18 | 19 | 16 | 20 | 14 | 104 |
| | <i># of photos</i> | 473 | 341 | 406 | 368 | 390 | 1536 | 3514 |
| 1931 | <i># of cases</i> | 13 | 12 | 10 | 12 | 23 | 11 | 81 |
| | <i># of photos</i> | 574 | 457 | 220 | 324 | 534 | 232 | 1767 |
| Total # of cases | | 49 | 70 | 44 | 67 | 80 | 60 | 370 |

*Not all data from the photographs has been entered; therefore the number of observations in subsequent tables differs from the sample sizes given here.

Sources:

- ^a National Archives and Records Administration (NARA) accession number 54A0463 boxes 58, 62-x, 72
- ^b NARA accession number 54A0464 boxes 143, 145, 147; 149
- ^c NARA accession number 54A0303 boxes 45, 49, 52
- ^d NARA accession number 53A0090 boxes 64, 71,76; 68A0423 boxes 80, 81
- ^e NARA accession number 53A0089 boxes 240, 253, 255, 264, 265
- ^f NARA accession number 53A0086 boxes 39, 45, 50, 52

The Mississippi data constitute a pilot project for a national sample of the bankruptcy case files from 1898 onwards. There are more than one million cubic feet of bankruptcy case files, making it infeasible to open each box to retrieve, say, every 100th case. Instead, we sample boxes. We used court dockets to identify boxes of cases filed each year in each division court of

² I have also collected 1932-36. The total number of cases is 739. Virtually all court Clerks numbered and stored civil, criminal, and bankruptcy cases separately. However, the Clerk of the Court at Aberdeen (in the Northern District) numbered all types of cases sequentially and stored them together. It was not feasible to separate the bankruptcy cases from the civil and criminal cases.

Mississippi. One box was selected at random for each year. If the box contained fewer than five cases, the next box was also selected. For this time period in Mississippi, the boxes contained cases in the order that they were filed. The sample for each division court is therefore clustered in time, though the sample overall contains observations for most months in 1929-1931 as shown in figure 3.

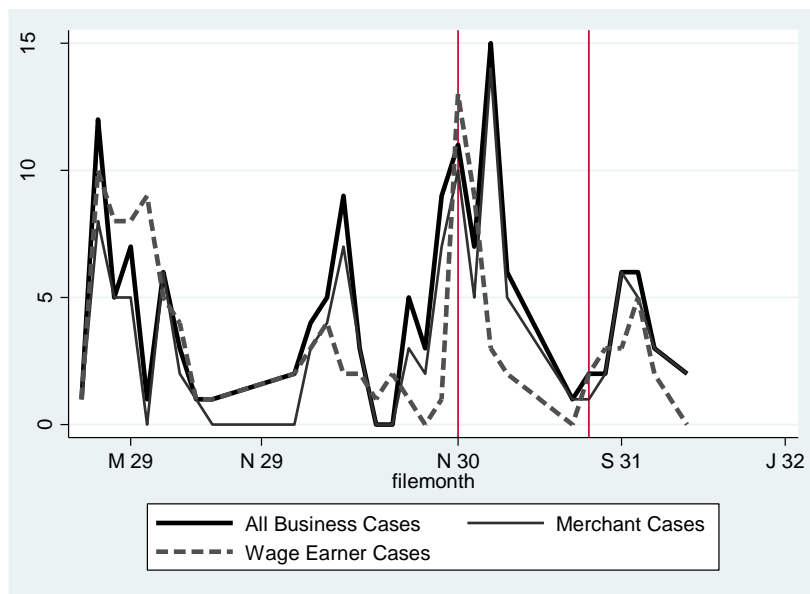


Figure 3. Number of Observations in Sample by Month

For each case, we digitized the petition, the schedules of assets and debts, the report of the Referee, the report of the Trustee, and the document that closed the case (usually an order of discharge of debt). Data elements subsequently encoded from the documents include name

of the petitioner,³ occupation, county of residence, chapter of bankruptcy used (more relevant in later periods), whether the bankruptcy was initiated by the debtor or by creditors,⁴ and, of course, information about the assets and debts of the bankrupt. From the summary schedules we transcribed totals in the following categories of debt: priority unsecured debts (mostly taxes and wages due), secured debts (mortgages, for example), non-priority unsecured debts (personal

³ The court documents contain no demographic information. An initial attempt at linkage of a subsample to the 1930 census yielded a 60% match rate. Many thanks to Marianne Wannamaker for assistance with the linkage. The demographic data are not used in this version of the paper.

⁴ There are only seven creditor-initiated petitions in the sample.

loans, lines of credit), and other debts. Categories of assets are: real, personal, choses in action, and other assets. From the detailed schedules of assets we have an enumeration of assets and their reported market values. From the detailed schedules of debt we transcribed the name of the creditor, the city and state where the creditor is located, the date the debt was contracted, the description of the debt, the amount owed, and the value of the asset securing the debt if relevant.

Evidence on the Direct Path of Transmission

Recall that the evidence for the direct path of transmission (in which the no-bailout policy prevented sound debtors from obtaining short-term loans so some filed for bankruptcy) comes from the ratio of liabilities to assets of the bankrupt. Particularly, if short-term loans

were harder to get in the northern part of the state (where banks were controlled by the St. Louis Fed) than in the southern part of the state (where banks were controlled by the Atlanta Fed) then the average ratio of debts to assets is expected to be lower in the northern part of the state during the crisis period of November 1930 through July 1931. Table 3 confirms that this is true: the ratio in the Northern District

| | | <u>So.</u> | <u>No.</u> | <u>Total</u> |
|---------------------|-----------------|------------|------------|--------------|
| Dec. 1928-Oct. 1929 | <i>Mean</i> | 4.85 | 4.52 | 4.13 |
| | <i>St. Dev.</i> | 8.71 | 3.47 | 7.54 |
| | <i>n</i> | 60.00 | 27.00 | 87.00 |
| Nov. 1929-Oct. 1930 | <i>Mean</i> | 4.10 | 4.70 | 4.43 |
| | <i>St. Dev.</i> | 6.39 | 9.12 | 7.93 |
| | <i>n</i> | 27.00 | 32.00 | 59.00 |
| Nov. 1930-July 1931 | <i>Mean</i> | 4.12 | 2.23 | 4.04 |
| | <i>St. Dev.</i> | 8.12 | 2.50 | 7.96 |
| | <i>n</i> | 69.00 | 3.00 | 72.00 |
| Aug. 1931-Jan. 1932 | <i>Mean</i> | 1.70 | 8.11 | 3.90 |
| | <i>St. Dev.</i> | 1.62 | 20.02 | 11.86 |
| | <i>n</i> | 21.00 | 11.00 | 32.00 |
| Total | <i>Mean</i> | 4.08 | 4.31 | 4.14 |
| | <i>St. Dev.</i> | 7.62 | 9.98 | 8.36 |
| | <i>n</i> | 177.00 | 73.00 | 250.00 |

courts is 2.23 during this period while it is 4.12 in the Southern District. Unfortunately, as noted above, the cleaning of the summary data is not complete so for this draft there are only three observations for the Northern District during this period.

Table 4 shows that the two merchants in the sample who sought bankruptcy protection in the north during the height of the crisis had just 79 cents in debt for each dollar in assets. These merchants were not just sound, they were solvent. Yet it seems they could not pay their debts by either selling their stock of merchandise or using their assets to secure credit. The wage earner who petitioned for bankruptcy in the north between November 1930 and July 1931 also had fewer outstanding liabilities per dollar of assets than the average petitioner in the south.

Table 4 also shows that, prior to the stock market crash, the debt-to-asset ratio of bankrupts was higher in the north than in the south across all categories of business and personal bankruptcy. This tends to indicate that credit was generally scarcer in the north even in non-crisis periods. The pattern reverses during the year after the crash, although the difference between the average ratios in north and south is not statistically significant.

After July 1931 the ratio of assets to liabilities falls everywhere and for all occupations, with the exception of one outlier in the wage-earner category.⁵ Very likely this is due to the deepening Depression rather than to credit shortages caused by differences in regional Fed policy. That the ratios are lower in the south than in the north is perhaps because retail sales in

⁵My attempts to explain the determinants of the (log of) liabilities/assets in a regression framework have been unsuccessful in the sense that none of my specifications have overall significance (i.e., I get tiny F-stats). Nonetheless, I do get do get right-signed coefficients in the following OLS regression explaining the natural log of the ratio for merchants:

| | <i>Coef.</i> | <i>St. Err.</i> |
|----------------------------|--------------|-----------------|
| Nov. 1929-Oct. 1930 | 0.269 | 0.24 |
| Caldwell Crisis | -0.09 | 0.23 |
| Aug. 1931-Jan. 1932 | -0.33 | 0.26 |
| Northern | -0.01 | 0.22 |
| Caldwell Crisis * Northern | -0.58 | 0.66 |
| R2 | 0.09 | |
| n | 111 | |

the Atlanta District fell more quickly at the end of 1931 than did retail sales in the St. Louis District (Park and Richardson 2010).

| | | <i>In Business</i> | | <i>Merchant</i> | | <i>Professional & Manufacturing</i> | | <i>Wage Earner</i> | | <i>Farmer</i> | |
|-------------------------|-----------------|--------------------|------------|-----------------|------------|---|------------|--------------------|------------|---------------|------------|
| | | So. | No. | So. | No. | So. | No. | So. | No. | So. | No. |
| Dec. 1928- Oct. 1929 | <i>Mean</i> | 3.86 | 1.44 | 2.08 | 1.55 | 8.61 | 0.96 | 5.61 | 3.24 | 5.71 | 3.60 |
| | <i>St. Dev.</i> | 7.90 | 0.79 | 1.40 | 0.82 | 14.77 | 0.51 | 9.59 | 4.51 | 4.56 | 0.00 |
| | <i>n</i> | 26.00 | 11.00 | 19.00 | 9.00 | 7.00 | 2.00 | 32.00 | 15.00 | 2.00 | 1.00 |
| Nov. 1929- Oct. 1930 | <i>Mean</i> | 3.19 | 5.48 | 3.06 | 5.42 | 3.20 | 6.09 | 6.54 | 2.98 | 0.95 | |
| | <i>St. Dev.</i> | 3.99 | 10.83 | 4.45 | 11.37 | 3.98 | 1.90 | 10.14 | 2.88 | 0.00 | |
| | <i>n</i> | 18.00 | 22.00 | 9.00 | 20.00 | 8.00 | 2.00 | 8.00 | 10.00 | 1.00 | |
| Nov. 1930- July 1931 | <i>Mean</i> | 2.16 | 0.79 | 2.21 | 0.79 | 2.10 | | 6.88 | 5.11 | 5.20 | |
| | <i>St. Dev.</i> | 3.03 | 0.18 | 3.24 | 0.18 | 1.46 | | 11.79 | 0.00 | 0.00 | |
| | <i>n</i> | 40.00 | 2.00 | 34.00 | 2.00 | 5.00 | 0.00 | 28.00 | 1.00 | 1.00 | |
| Aug. 1931- Jan. 1932 | <i>Mean</i> | 1.28 | 1.51 | 1.28 | 1.58 | | 1.20 | 2.38 | 16.02 | | |
| | <i>St. Dev.</i> | 1.03 | 0.86 | 1.03 | 0.95 | | 0.00 | 2.20 | 29.28 | | |
| | <i>n</i> | 13.00 | 6.00 | 13.00 | 5.00 | 0.00 | 1.00 | 8.00 | 5.00 | | |
| Total | <i>Mean</i> | 2.69 | 3.59 | 2.12 | 3.66 | 4.82 | 3.06 | 5.83 | 5.28 | 4.39 | 3.60 |
| | <i>St. Dev.</i> | 4.87 | 8.13 | 2.78 | 8.63 | 9.14 | 2.94 | 9.99 | 12.22 | 3.50 | 0.00 |
| | <i>n</i> | 97.00 | 41.00 | 75.00 | 36.00 | 20.00 | 5.00 | 76.00 | 31.00 | 4.00 | 1.00 |

Evidence: Indirect Path

Evidence for the direct path of transmission (in which the credit shortage created by the no-bailout policy led creditors to try to collect debts, which in turn led some debtors to file to obtain the stay on collection efforts) comes from differences in the ratio of liabilities to assets of the bankrupts depending not on their own location, *but on the locations of their creditors*. The locations of the creditors of each petitioner are given in the detailed “A” schedules attached to the petition. (The court uses these locations to call meetings of the creditors and to announce bankruptcy proceedings in the newspapers in cities where the petitioner is known to have

creditors.) Table 5 shows the locations of the approximately 2,000 creditors owed money by 80 petitioners who filed in Biloxi, Clarksdale, and Oxford. All Federal Reserve districts were

Table 5. Locations of Creditors

| <i>Federal Reserve District</i> | <i>No. of Creditors</i> | <i>Percent</i> |
|---------------------------------|-------------------------|----------------|
| Boston | 23 | 1.14 |
| New York | 81 | 4.02 |
| Philadelphia | 19 | 0.94 |
| Cleveland | 50 | 2.48 |
| Richmond | 19 | 0.94 |
| Atlanta | 726 | 36.01 |
| Chicago | 100 | 4.96 |
| St. Louis | 931 | 46.18 |
| Minneapolis | 7 | 0.35 |
| Kansas City | 25 | 1.24 |
| Dallas | 31 | 1.54 |
| San Francisco | 4 | 0.2 |
| Total | 2,016 | 100 |
| In No-Bailout Districts | 1,081 | 53.62 |
| In Other Districts | 935 | 46.38 |

represented. Almost half the creditors are located within the territory of the St. Louis Fed and 54 percent were in one of the three no-bailout districts. About one quarter of creditors was located in the territory of the Atlanta Fed. Just under half of creditors were in Mississippi.

Again, because not all the data have been cleaned, table 5 includes only a subset of what will be available. And, unfortunately, this subset only partly overlaps with the subset of the summary schedules. The cases used to produce the tables and

figures in this section are not the same cases used to produce the tables in the previous section, and the number of observations also differs.

The average bankrupt listed 32 creditors, though one bankrupt listed 214 (table 6). Total liabilities averaged \$15,760. Individual debts ranged from less than \$1 to almost \$40,000 and averaged \$513. The average bankrupt had 15 creditors located in the St. Louis, Chicago, or Cleveland Federal Reserve Districts, representing 51 percent of creditors on average. The average debt owed to creditors in the three no-bailout districts was \$8,731, representing 56 percent of debts listed in the average case.⁶

⁶ Although these tables are based on a subset of cases, the key finding of the previous section are evident in the sample: the financial health of filers in the north is better at the height of the Caldwell crisis than before or after.

| | <i>Mean</i> | <i>St. Dev</i> | <i>Min</i> | <i>Max</i> |
|--|-------------|----------------|------------|------------|
| Number of Creditors | 32.2 | 33.3 | 1 | 214 |
| Number of Creditors from No-Bailout Districts | 15.3 | 15.3 | 0 | 57 |
| Percent of Creditors in No-Bailout Districts | 51 | 31 | 0 | 96 |
| Liabilities to All Creditors | \$15,760 | \$31,815 | 5 | \$209,184 |
| Average Size of Individual Debts | \$513 | \$2,374 | 1 | \$39,907 |
| Liabilities to Creditors in No-Bailout States | \$8,731 | \$18,527 | 0 | \$108,870 |
| Average Size of Individual Debts to Creditors in No-Bailout States | \$506 | \$2,249 | 1 | \$39907 |
| Percent of Debt Owed to Creditors in No-Bailout Districts | 56 | 36 | 0 | 100 |

Figure 4 graphs the logarithm of the ratio of liabilities to assets against the percentage of the debt owed in no-bailout states. While any conclusion is tempered by the small number of observations, the negative slope indicates that the larger the share of debt owed to creditors the more sound the petitioner. The relationship throughout the time period studied here. This may

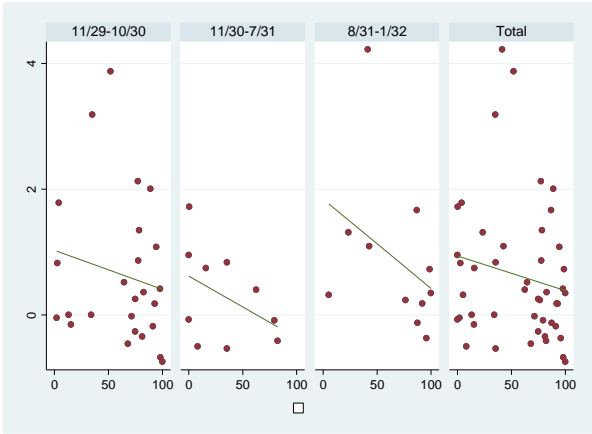


Figure 4. Ln(Liabilities/Assets) Negatively Associated with Percent of Debt Owed to Creditors in No-Bailout States

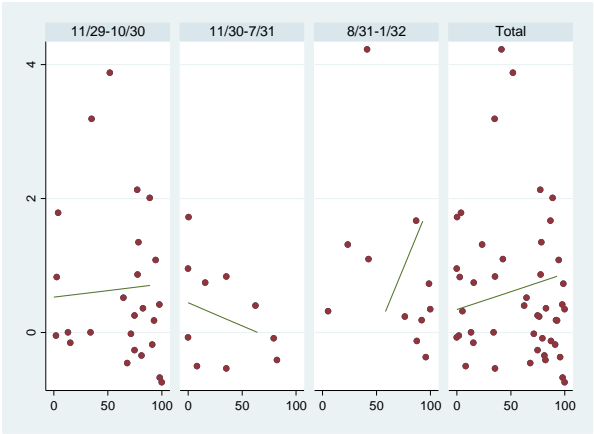


Figure 5. Ln(Liabilities/Assets) Negatively Associated with Percent of Creditors in No-Bailout States Only at Peak of Crisis

indicate that creditors in no-bailout districts were less tolerant of non-payment from debtors with geographically extensive sources of credit. Figure 5 graphs the log of the ratio against the percentage of creditors in no-bailout states. Here the negative association between soundness of the debtor and exposure to the no-bailout policy is evident only at during the period immediately following the Caldwell failure.

In a future draft of the paper, additional evidence regarding the indirect path will be included. This evidence will come from the “Statement of Financial Affairs,” which, like the schedules, is a supplement to the petition. On the Statement the debtor is asked to report events leading up to the filing, including whether any creditors have taken action in court.

Conclusion

The scarcity of extant, detailed financial records on businesses and individuals has made it difficult to trace the ways in which monetary policy impacts everyday transactions. This paper presents preliminary findings from new court records that illustrate the ways in which bank failures, particularly bank failures during systemic credit crises, affect the operations of businesses and households. Documents submitted in federal court by petitioners for bankruptcy show that, during the peak of the first credit crisis of the Depression, relatively sound businesses and households located within the boundaries of the St. Louis Federal Reserve District sought liquidation through bankruptcy. Within the boundaries of the Atlanta Federal Reserve District, the soundness of businesses filing for bankruptcy did not change. I argue that the distress experienced by those who were not as leveraged as their peers in the south was caused by the adherence of the St. Louis Fed to its no-bailout policy, which restricted the ability of these sound businesses and individuals to obtain short-term credit.

The inaction of the St. Louis Fed, along with the Chicago and Cleveland Feds, also brought a second group of relatively sound business to court. Sound debtors with greater exposure to the credit collapse in the upper Midwest were more likely to find that their creditors tried to use creditor's remedies to collect. Unable to pay, the debtors sought protection from the collection efforts by using the federal bankruptcy law. This evidence makes it clear that the channels through which monetary policy act are geographically far-reaching and may not necessary cleanse the economic system of the weakest firms.

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