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Sources of Credit and the Extent of the Credit Market

A View from Bankruptcy Records in Mississippi, 1929–1936

Mary Eschelbach Hansen

5.1 Introduction

Today banks and other financial institutions are a regular source of credit to firms (US Dept. of the Treasury 2014). The participation of financial institutions in credit markets serving business enterprise is generally believed to be essential for modern economic growth because financial institutions pool savings and channel the funds from low-value uses to high-value ventures.¹ Yet ventures with the highest potential value are often risky, and regulation of banks and other financial institutions has sought to limit risk-taking by banks. Although the success of regulation in this regard has been uneven,² over the course of American economic history the firms that have pushed the frontier of technology or the frontier of business organi-

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1. For a recent summary of the literature on the finance-growth nexus, see Barajas, Chami, and Yousefi (2013).

2. In addition to risky and complicated instruments at the center of the 2008 crisis, the traditional interpretation of the Panic of 1907 emphasizes the failure of regulation to limit risk taking (Hansen, 2014).

zation have seldom been able to obtain start-up funding through financial institutions. Instead, in the absence of family fortunes to invest, owners of innovative firms mainly obtained start-up funds directly from investors (Porter and Livesay 1971; Lamoreaux, Levenstein, and Sokoloff 2006; see also Levenstein 2013). Today, of course, these investors are known as “venture” capitalists.

Once the new frontier of technology or business organization has been established, firms that follow the innovators would seem to be less risky, though still potentially highly profitable. Similarly, firms that carry a known technology into new markets would seem profitable but not very risky. Yet less capital seems to have flowed through financial institutions to the more profitable manufacturing sector than one might expect: rates of return across the manufacturing and agricultural sectors were slow to equalize over the late nineteenth and early twentieth centuries (Atack, Bateman, and Weiss 1982; Epstein and Clark 1934).³ This chapter demonstrates that the balance sheets of relatively few manufacturing firms included liabilities to financial institutions, even as recently as the 1930s. During the 1930s manufacturing firms were less likely to have banks or other financial institutions as creditors than merchants, farmers, or consumers. However, when a bank did provide credit to a manufacturing firm, it held a substantial stake, foreshadowing the patterns in business finance that came to dominate after World War II.

To document the sources of credit of manufacturers, farmers, merchants, and individual consumers, I use data on thousands of debt obligations recorded in the court records of 780 debtors who appeared in bankruptcy proceedings in Mississippi from 1929 to 1936. Under the Bankruptcy Act of 1898, debtors were required to submit to the court a complete and detailed listing of their debts. The court asked for the name of each creditor, the location of each creditor, the purpose of the debt, and the year the debt was contracted. The detail of the data permit a mapping of the sources of credit utilized by consumers and by different types of businesses.

3. Atack, Bateman, and Weiss (1982) use data from samples of the 1850, 1860, and 1870 manuscript censuses of manufactures to compute the ratio of net earnings to gross assets for each firm or farm. They compare rates in manufacturing to rates in agriculture (Bateman and Atack 1979) and in transportation (Atack et al. 1975; Mercer 1970). The rate of return in manufacturing enterprises was highest—higher even than the rate of return to steamboating on treacherous tributary rivers. They demonstrate that higher returns per unit of risk persisted for very small manufacturing firms in all regions, for middle-sized firms in the south, and for firms of all sizes in the east. Finally, they show that investment between census years did not flow toward those excess returns. They conclude that gaps in the rates of return between sectors were caused by differences in northern and southern attitudes toward risk and “the difficulties of small enterprises, particularly sole proprietorships, in obtaining external financing” (Atack et al., 150). Though it is not possible to extend the Atack-Bateman-Weiss methodology into the twentieth century because of the loss to fire of relevant manuscript census data, early tax records provide similar information. In 1928, the rate of return in manufacturing was still 1.6 times the rate in mining; the ratio of rates of return in these two sectors was just as large as the ratio between the rates in eastern manufacturing and agriculture had been seventy years earlier.

The data show the enduring importance of trade credit, and especially book credit, in the balance sheets of businesses of all kinds. They also show that the consumer loans that were new financial instruments in the early twentieth century were commonly held by the 1930s, even in the Deep South where the banking system has generally been considered backward. Much trade credit, including book credit, was offered at great distance. A considerable share of loans from financial institutions to consumers were offered at distances of more than one hundred miles as well.

In contrast, manufacturers had few banks among their creditors and even fewer loans from nonlocal banks. Most of the creditors of manufacturers were private individuals and commercial businesses. In sum, while financial intermediaries appear to have actively moved capital from areas of low to high rates of return *within* the agriculture and distribution sectors, during the 1930s they still did not regularly bring capital into the manufacturing sector.

5.2 A Brief History of Credit Markets

In every sector of the economy, there is a need for long-term capital to finance investment and a need for short-term capital to finance operating costs. Merchants were a key source of both long-term and short-term credit to other businesses throughout the nineteenth century. Banks did not much use the modern tools of business finance, such as term loans to finance equipment and loans on receivables, before World War II.

5.2.1 The Dominance of the Merchant

Throughout the nineteenth century, the source of long-term capital for most manufacturers was the savings of owners and, for successful firms, retained earnings. Partners were recruited from contacts upstream in the production process and, especially, downstream among the merchants who distributed the goods (Porter and Livesay 1971).

Sales of equity to the public did not play much of a role in long-term financing, except for railroads and the largest manufacturing firms, until well after the Civil War (Neal and Davis 2009). In 1860, for example, there were about 8,200 manufacturing firms in Massachusetts (University of Virginia 2004); 5 percent were incorporated, but only about fifty traded on the Boston Stock Exchange. Those fifty firms dominated the capitalization of their industries (Atack and Rousseau 1999). Major increases in listings of industrials did not occur until late in the 1890s (Navin and Sears 1955): Singer stock was not exchanged publicly until the 1890s, and Carnegie's steel operations did not incorporate until 1892. Innovative manufacturing firms in Ohio at the time did not use the Cleveland Stock Exchange to raise capital; instead, the exchange listings were mainly useful to local brokers who from time to time had small lots of these securities to offer the public. Smaller corporations tended to be privately held.

Banks also played a limited role in long-term finance. Scholars describe relations between manufacturers and financial institutions as insular and local (Cull et al. 2006; Lamoreaux 1996; Lamoreaux, Levenstein, and Sokoloff 2006). And, of course, the National Banking Act forbade national banks from issuing mortgages even to businesses, though banks could, and did, reissue debt with real estate as collateral.

The extent to which other financial institutions formed in the early nineteenth century (including savings banks, life insurance companies,⁴ and investment banks) and later (such as trust companies and mortgage banks) stepped in to make long-term loans to manufacturers is not clear, but it is known that these institutions preferred to lend on strong collateral such as real estate (Porter and Livesay 1971; Hansen 2009). It seems unlikely that these firms invested substantially in manufacturing until they began participating in syndicates for the purchase of long-term securities around the turn of the twentieth century.

In the absence of a reliable source of long-term loans, when retained earnings fell short but the rate of return was high, manufacturers used short-term credit for both growth and operating costs. For manufacturers these needs could be substantial because often operating costs were about as large as total capital stock (Porter and Livesay 1971). While a small number of large industrial firms could secure short-term bank credit, direct lending from banks to manufacturers changed little over the course of the nineteenth and early twentieth centuries (Davis 1965; Jacoby and Saulnier 1947). Again, it was merchants—especially wholesalers—who were central to the system of short-term credit that had developed in the previous century.

Throughout the early modern era, general merchants restricted their dealings to well-known and often closed groups, occasionally groups bound by family or religious ties. They used credit instruments such as bills of exchange to finance trade. Between the American Revolution and the Civil War, the industrial revolution and the transportation revolution gave rise to markets in which a high volume of largely unbranded manufactured products were sold across geographically large markets through a system of specialized wholesalers (Chandler 1969; Porter and Livesay 1971). Specialized wholesalers worked closely with a small number of local banks (Richardson and Gou 2013). The short-term “commercial paper” market worked as follows: A wholesaler contracted with a manufacturer for future delivery of a product. The wholesaler’s bank issued a letter of credit, which the manufacturer presented to its own bank. The manufacturer’s bank discounted the letter of credit and provided cash to the manufacturer for operating expenses. To obtain payment, the manufacturer’s bank could present the letter of credit

4. Life insurance companies did not make manufacturing loans: “It is the custom of our company, which has become practically a law with us, that we do not loan on manufacturing establishments” (Union Mutual Life Insurance Executive, quoted in Porter and Livesay 1971, 64).

for payment at the wholesaler's bank, or it could endorse the letter of credit, after which the letter of credit was called a "bankers' acceptance," and sell it on the "acceptance market."⁵ The purchaser bought the bankers' acceptance at a discount (but presumably a smaller discount than the manufacturer's bank took) and redeemed it at maturity. Acceptance markets were widespread by the turn of the twentieth century in the United States, and until 1932 the regional Federal Reserve Banks were allowed to lend only against this sort of "eligible paper." In this system, then, the wholesaler was the debtor to a bank, while the manufacturer was a creditor.

In addition to liquid commercial paper, a large but largely unmeasured source of trade credit was the book account, which was secured only by the business owner's word of honor. The wholesaler would generally send goods ahead to retailers on book account. Suppliers of inputs would also sell to manufacturers on book account. Book accounts increased in importance at the end of the nineteenth century as merchants ceased making buying trips to major cities and bought instead from traveling representatives of wholesalers or the manufacturers who had begun direct-selling their widely used or complex products (Porter and Livesay 1971; Jacoby and Saulnier 1947).⁶

Trading across great a distance, which was made possible for an increasing number of products by a continual reduction in transportation costs, presented new problems for merchants and manufacturers using book accounts. If the debtor failed to pay, collection required the creditor to know the state collection law or to retain the services of a local lawyer who did. Moreover, state collection laws generally included a preference for local creditors. Thus large manufacturers with national markets, as well as specialized wholesalers, became influential as members of the The National Convention of Representatives of Commercial Bodies and were instrumental in the passage of the 1898 Bankruptcy Act, the law that gave rise to the documents used here (Hansen 1998).

5.2.2 Transition to Bank Lending

The banking system that was central to the system of commercial paper described above was highly developed and integrated. Markets in coastal cities were well integrated in the early national period, and the contours of continued integration after the Civil War are well known (Davis 1965; Sylla 1969; James 1976; Binder and Brown 1991). Recent work shows that complete integration may have slowed after the National Bank Acts of 1863

5. Jacoby and Saulnier (1947, 132) claim that in 1900 the single-name promissory note was still more common than the two-name bankers' acceptance. Richardson and Gou (2013) claim the bankers' acceptance was more important.

6. In the early twentieth century, commercial credit companies developed to discount notes and lend on receivables, and factoring companies were formed that bought receivables and lent on inventories. Commercial credit companies served manufacturers, wholesalers, and retailers (Jacoby and Saulnier 1947).

and 1864, which caused a redistribution of bank capital away from rural areas and toward industrial areas in the Old Northwest (Jaremski and Rousseau 2013). However, changes in state banking regulations and the Gold Standard Act of 1900 pushed markets closer to complete integration (Choi and Dupont 2007). The telegraph and telephone enhanced long-distance monitoring of more distant borrowers by banks, which supported increased competition between banks (Rousseau 1998). Though some places may have been left out,⁷ in 1915 almost 30 percent of the loans of eastern reserve city banks were made interregionally (US Comptroller of the Currency 1915).

An integrated system of banks and other financial institutions began regularly lending to farmers and consumers during the late nineteenth and early twentieth centuries. Eastern and European banks and life insurance companies contracted with mortgage companies who provided local monitoring of farm mortgages (Beveridge 1985; Snowden 1995). In urban markets, interstate chains of small loan lenders extended unsecured loans through local agencies. These chains grew quickly over the first decades of the twentieth century, especially in states that passed uniform small loan laws (Easterly 2009; Carruthers, Guinnane, and Lee 2012). At the same time, installment loans became an important source of secured credit for consumers (Olney 1999).

Improvements in standards of accounting and disclosure by borrowers might have increased banks' confidence in loans to "outsiders" late in the nineteenth century (Rousseau 2011). The growth of business lending by banks was also facilitated, ironically, by two pieces of early twentieth-century legislation that were aimed at *limiting* the risks taken by banks. Under the Federal Reserve Act, banks were required to keep credit files on firms that presented notes for rediscounting. The Securities Act of 1933 greatly increased the formality of assessing long-term credit risk. As a result, investment banking departments and credit departments in banks merged and grew. These credit departments developed approval processes for four credit instruments "invented" by banks between 1920 and 1940: term loans, loans on accounts receivable, loans on warehouse receipts, and loans financing the purchase of equipment. At first, these services were offered only to large businesses, but between 1936 and 1941 banks began offering term loans to medium and small businesses. By 1941 more than half of term loans from

7. Dispersion remained between nonreserve cities at the turn of the twentieth century (Smiley 1975). Otherwise unexplained regional differences in bank profits persisted into the 1900s (Sullivan 2009), and local shocks far from New York dominated disturbances to regional interest rates until after World War II (Landon-Lane and Rockoff 2007). Remote areas may have been relatively disconnected: a network of banks was still forming around San Francisco (Odell 1989) and rural banks in the late 1800s had lower rates of return than urban banks (Keehn 1980), quite possibly because of high rates of bank failures in predominantly rural places (Rockoff 1977). The South was not fully integrated into the national system as late as the 1970s (Osborne 1988).

commercial banks were to firms with assets of less than \$5 million (Jacoby and Saulnier 1947).

This chapter considers the sources of credit of firms, farms, and consumers during the years immediately prior to this expansion of bank-to-business lending, and it provides the first systematic comparison of the sources of credit across the various sectors of the economy and including consumers. To make these comparisons, it exploits a previously underused source: documents filed in the federal district courts subsequent to petitions for bankruptcy protection.

5.3 New Data from Bankruptcy Case Files

From 1898 (when the first permanent bankruptcy law was passed) through 1939, nearly 1.3 million petitions for bankruptcy protection were filed; 38 percent were cases in which the petitioner had primarily business debt (US DOJ, various years).⁸ Although the bankruptcy statute required only that the files from certain bankruptcy cases be held permanently (railroad and municipal cases, for example), relatively few files from before 1945 have been destroyed or lost.

The court's file for each case contains detailed information on the assets, debts, incomes, and pre-filing experiences of filers, as well as information on how the case progressed through the court. The case files are a rich source of long-run, microlevel data on the balance sheets of businesses and households. The documents used here are from a sample of 780 cases filed in the federal district courts in Mississippi from 1929 through 1936. The Mississippi sample constitutes a pilot project for a national sample of the bankruptcy case files covering the whole of the twentieth century.⁹ As of this writing, documents have been photographed from more than 19,000 cases filed in eight states and the District of Columbia, and data have been transcribed for more than 7,000 of the cases. The appendix gives more information about the construction of the sample for Mississippi.

Given the rich data that the case files contain, it is surprising how little they have been used. Perhaps best known is the Consumer Bankruptcy Project, which has collected selected petitions filed since 1981 (see Sullivan, Warren, and Westbrook [1989] and their coauthors). As the project's title indicates, the project does not capture business bankruptcy.¹⁰ Historical

8. The Constitution reserves for Congress the power to enact bankruptcy law. There were three temporary laws passed in the nineteenth century. The first permanent law was passed in 1898. Hansen and Hansen (2007) describe how business cases became a less important part of the bankruptcy case load after the Depression.

9. Depression-era Mississippi was chosen for a pilot project because of the possibility of using the natural experiment identified in Richardson and Troost (2009) to explore the impact of bank bailouts on the real economy; see Hansen (2012) and Hansen and Ziebarth (2014).

10. Some Consumer Bankruptcy Project cases do include small business debt, but businesses are not well represented.

samples of business bankruptcies have been collected by scholars in law, business history, and historical geography. Gross, Newman, and Campbell (1996) describe the occupations and circumstances of bankruptcies among women business owners under the laws in effect in the antebellum period. Balleisen (2001) considers antebellum bankruptcy in southern New York state, describing the evolution of credit connections and the tension between the admiration for entrepreneurship and the desire for steady middle-class salary. Cronon (1991) illustrates his hierarchies of cities using maps of the credit connections of 401 bankrupts in midwestern courts in the early 1870s. Of these works, only Cronon's maps of the locations of creditors to the bankrupt in Chicago and St. Louis utilize the details in the case files in a way that is similar to what is done here.

5.3.1 Data on Debtors

The data used here come from three documents: the petition that starts the case, the summary of debts and assets, and the detailed lists of debts, called "schedules." The petition has the name of the debtor, which may be the name of a person, a business, or both. From the name of the debtor I infer whether the case was a business case or a consumer case. For example, a name of "James Smith" indicates that the debts were consumer debts; "Smith's Store, a Corporation" indicates that the debts were entirely business debts; and "James Smith doing business as Smith's Store" indicates that the business was not incorporated and that the debts were mainly, but not exclusively, business debts. Table 5.1 gives the distribution of business and consumer cases in the sample. Business debtors are 59 percent of the entire sample, and nonbusiness debtors are 40 percent. In addition, there are five municipal entities (four drainage districts and one town) and one railway.

The ratio of business to consumer bankruptcy in the sample is consistent with what we know about the use of the bankruptcy law from other sources. The published statistics show that about two-thirds of those appearing in court under the bankruptcy law in Mississippi between 1929 and 1936 had business or professional debt (US DOJ, various years). The rate of consumer bankruptcy in Mississippi was just five per 100,000 in the 1920s and 1930s, compared to about seventeen per 100,000 nationally. This indicates that state laws governing collection from consumers, such as garnishment law, were viewed by many as relatively toothless. Creditors were slow to pursue Mississippi state remedies against individuals because action would not result in a quick collection to ease their own liquidity problems. As a result, debtors in Mississippi were unlikely to rush to federal bankruptcy court. In states with toothless collection laws, the consumer bankruptcy rate was not much affected by the Great Depression (Hansen and Hansen 2012).

To characterize the occupations of consumer debtors and the sector in which business debtors operated as shown in table 5.1, I use information on both the petition and the schedules. Consumer debtors include skilled

Table 5.1 Summary of debtors in the sample

	Number of debtors	Percent	Number of debts ^b	Average size of individual debts (1929\$) ^b
Type of debtor				
Consumer debtor ^c	311	40.0	4,158	2,398
Business debtor	463	59.0	17,850	611
Municipal entity	5	0.6	16	72
Railway	1	0.1	n/a	n/a
Total	780	100.0	22,024	948
Occupation or type of business of debtor				
Not known	269	34.7	7,485	1,306
Unskilled blue collar ^c	37	4.7	479	1,400
Skilled blue collar	69	8.9	915	199
Unskilled white collar	37	4.7	437	766
Skilled white collar	16	2.1	192	637
Merchant	239	30.6	9,606	422
Manufacturer	27	3.5	1,781	1,286
Professional	34	4.4	733	1,724
Farmer	52	6.7	396	5,539
Total	780	100.0	22,024	948

Source: See text.

^a Includes only observations for which amount of debt is reported.

^b An observation is one debt obligation, which represents a debtor-creditor pair.

^c There is an extreme outlier in the “unskilled blue collar” category. It is a mortgage note issued by a private person.

and unskilled blue-collar workers (13.6 percent of the sample), white-collar workers (6.8 percent), and farmers (6.5 percent). Merchants—including both wholesalers and retailers—are the largest group (30 percent of the sample). Professionals (4.9 percent) and manufacturers (3.5 percent) are smaller fractions of debtors in the sample. Insufficient information is available to categorize the occupations of 34.7 percent of the debtors in the sample. Despite the loss of this information, the proportions of merchants, manufacturers, professionals, and farmers in the sample are similar to the proportions reported in the published statistics of bankruptcy cases closed for Mississippi (US DOJ, various years). It is important to note that merchants dominate bankruptcy filings before World War II. Merchants were also a larger share of bankruptcy filers in Mississippi than they were nationwide, likely reflecting the state’s position at the southern end of its eponymous river.

Among the twenty-seven manufacturers, ten milled lumber or made lumber-related materials such as veneer and plywood boxes. Five were food and beverage makers, and three were foundries or machine works. Eight firms were sole representatives of their industries. Examples are a neon sign maker,

a headlight manufacturer (“Holliday Life-Saving Headlight Co.”), a brick maker, and a manufacturer of suspenders.

5.3.2 Data on Debts and Creditors

Particularly critical to the current chapter are the detailed descriptions of debts provided on the documents titled “Schedule A-1” through “Schedule A-4.” The first two schedules give priority debts (mainly taxes and wages owed) and secured debts. The last of the debt schedules lists liabilities on notes discounted; few debtors have any of these liabilities. Most debts owed are listed on Schedule A-3, which describes the unsecured, nonpriority debts owed. Almost all debts that can be discharged through the bankruptcy proceeding are listed on these schedules. Figure 5.1 shows the first page of Schedule A-3 for a proprietor of a retail store in Clarksdale, Mississippi, who filed in 1932.

On this schedule, as on the other detailed debt schedules, each creditor’s name is given. The nature of each debt is described. Debts listed on Schedule A-3 and shown in figure 5.1 include stock purchased on book account, store fixtures purchased on credit, utility bills, and endorsed notes. Similar schedules for consumer debtors show personal loans from financial institutions and from personal acquaintances, doctors’ bills, local open accounts, legal judgments, and the like.

Using the names of creditors and the information on the nature of the debt, I categorize creditors into the following types: private persons, commercial businesses, financial institutions, public entities, and civic associations. A creditor is coded as a commercial business if the creditor’s name is a business name (such as a wholesale or retail store or manufacturer) or the creditor is associated with a debt taken for inventory or household goods. Financial institutions include banks, trust companies, building and loans, mortgage companies, and consumer loan or “small loan” companies. Federal land banks are treated as financial institutions. Public entities are primarily governments to which taxes are owed and court offices through which payments on legal judgments are made. Civic organizations include churches and fraternal organizations. The distribution of debts owed by type of creditor is shown in table 5.2. Just over 3,500 debts (16 percent) were owed to private persons, 16,000 debts (73 percent) were owed to commercial businesses, 729 debts (3 percent) were owed to financial institutions, and a small number of debts were owed to public entities and civic associations. It is not possible to identify the type of creditor for 1,571 of debts (7 percent).

The distribution of the various reasons for debt is also shown in table 5.2. It is not possible to determine the reason for 3,666 debts (17 percent). Twenty-one percent of debts were described only as “miscellaneous.” Of clearly identified debts, the largest number financed the purchase of household goods (but not appliances) and inventory. Debt related to vehicle

Schedule A. (3)

Creditors Whose Claims Are Unsecured.

N. B.—When the name and residence (or either) of any drawer, maker, and indorser, or holder of any bill or note, etc., are unknown, the fact must be stated and also the name and residence of the last holder known to the debtor. The debt due to each creditor must be stated in full, and any claim by way of set-off stated in the schedule of property. This sheet must be signed by the bankrupt at the end of the statement.

Names and residences of Creditors. If Residence Unknown, that fact must be stated.	When and Where Contracted.	Nature and consideration of the debt, and whether any judgment, bond, bill of exchange, promissory note, etc., and whether contract- ed as a partner or joint contractor with any other person; and if so, with whom?	Amount	
Ozark Pencil Co., St. Louis, Mo.	8/21/31 Drew, Miss.	Goods purchased open acct. individually	\$18	70
Fanno & Boesetta Inc. New Orleans, La.	3-5 to 10-14-31 Drew, Miss.	Goods purchased open Acct individually	41	30
Plough Chemical Co., Memphis, Tenn.	10-14-30 to 9-14- 31; Drew, Miss.	Goods purchased open Acct individually	66	16
Frocter & Gamble Dist. Co., Memphis, Tenn.	Aug. 6, 1931 Memphis, Tenn.	Goods purchased open Acct individually	26	20
Rudolph Jacobs & Co. Cincinnati, Ohio	April 21, 1931 Drew, Miss.	Goods purchased open account individually	73	15
Rigo Mfg. Co., Nashville, Tenn.	April, 1930 to July, 1931. Drew, Miss.	Goods purchased open account individually	53	30
Standard Oil Co.	July 7th. to Oct. 3d. 1931; Drew, Miss.	Goods purchased open account individually	46	75
Standard Candy Co., Nashville, Tenn.	Sept. 17., 1931 Drew, Miss.	Goods purchased open account individually	53	79
Taylor Paper Co., Memphis, Tenn.	Aug. 4 to Sept. 22 1931; Drew, Miss.	Goods purchased open account individually	52	61
Yale University Press New York, N.Y.	Feb. 27, 1930 Drew, Miss.	Goods purchased open account individually	20	00
Miss. Power & Lt. Co. Drew, Miss.	Aug. Sept & Oct. 1931; Drew, Miss.	Light & Power for store individually	75	00
Sou. Bell Tel & Tel Co Drew, Miss.	Sept & Oct. 1931 Drew, Miss.	Telephone for store individually	3	50
Miller & Hart, Chicago, Ill.	Aug. 3, 1931 Drew, Miss.	Goods purchased open account individually	23	14
J. O. Lampkin, Receiver Drew, Miss.	December 1930 Drew, Miss.	Note due on demand individually endorsed by S. M. Ruscoe	\$1.000	00
Burroughs Adding Mach. Co., Jackson, Miss.	June 1931 Drew, Miss.	Work on adding machine individually	2	50
Drew Insurance Agency Drew, Miss.	Sept. 1931 Drew, Miss.	Insurance on stock & fixtures; individually	11	92
C. C. Hay Drug Co., Como, Miss.	1930 Drew, Miss.	Goods purchased open account individually	12	36
Bob Cap Co., St. Louis Mo.	1931 Drew, Miss.	Goods purchased open account individually	5	63

Fig. 5.1 Schedule A-3 is an example of one of the detailed "schedules" on which individual debts owed by the bankrupt are listed

Source: MS Northern District, Clarksdale Division 1932, Accession 54A0463, Box 72x, Case no. 1410.

Table 5.2 Summary of debts in the sample

	Number of debts ^a	Average size of individual debts (1929\$) ^a
Debts owed by type of creditor ^b		
Unknown	1,571	754
Private person	3,528	1,682
Commercial business	16,118	429
Financial institution	729	9,360
Public entity	70	191
Civic association	8	1,764
Total	22,024	948
Debts owed by reason for debt ^a		
Unknown (missing or invalid data)	3,666	1,843
Wages owed	560	228
Taxes	350	592
Domestic support	20	226
Total priority debt	436	1,197
Car (vehicle, accessories, repair)	486	350
Home (property, rent)	538	5,079
Household goods	5,506	339
Inventory	3,435	342
Miscellaneous (verbatim response)	4,552	1,113
Adverse judgments/legal settlement	379	1,190
Utilities	691	697
Household appliances	104	459
Fixtures and machinery	67	1,181
Food	194	323
Farm-related debt	33	2,343
Loans or losses in financial markets	23	2,067
Interest	51	1,813
Attorney & court fees	67	2,592
Medical	411	123
Insurance	113	3,619
Fees for other prof. services	140	648
Total	22,024	948

Source: See text.

^a Includes only observations for which amount of debt is reported.

^b An observation is one debt obligation, which represents a debtor-creditor pair.

^c There is an extreme outlier in the “unskilled blue collar” category. It is a mortgage note issued by a private person.

purchase or maintenance and debts for mortgage or rent were each about 2 percent of debts.

Individual debts averaged \$948 (in 1929 dollars); the standard deviation is \$15,303. The largest debt recorded in the sample is \$1.5 million. Debts as small as \$0.10 are reported. The distribution of debts owed is heavily left-skewed: 10 percent are less than \$10, the median is \$68, and the 99th percentile is \$11,880.

The individual debts owed by farmers were the largest of any occupation or business group. Similarly, the average debts owed by consumers were large compared to businesses because consumers owed money to relatively few creditors but tended to have a small number of large debts. In contrast, businesses—especially merchants—owed a large number of creditors but owed each creditor a relatively small amount.

The location of each creditor is noted so that the court could alert the creditor and publish an announcement in the local newspaper; this information is used in the final section below to map long-distance lending. The level of detail on the schedules provides much more information about the importance of different types of debt instruments, about the uses of credit, and about the geographic extent of credit markets than any other data currently available.

5.3.3 Representativeness of the Sample

There are three issues of representativeness to consider: Are the types of business in the sample representative of all businesses? Are the debts and creditors of bankrupts, especially bankrupts during a financial crisis, representative? Is Mississippi a representative state?

Type of business. In order to assess the representativeness of the businesses in the sample for Mississippi, I use information about all firms listed in the R. G. Dun & Co. *Reference Book of American Business* for January 1929 and 1931. Dun & Co. was one of the three major credit-reporting agencies established in the nineteenth century. By 1900, subscribers had access to basic information on the creditworthiness of nearly all business borrowers from across the United States (Sylla 2002). Dun & Co. used employee-reporters to gather and publish a brief description of the type of business (which I recharacterize as one of the major standard industrial classification [SIC] groups), an estimate of assets net of publicly recorded debts such as mortgages (in four categories), and an assessment of general creditworthiness (again in four categories). For additional information on the *Reference Books* and their contents, see Hansen and Ziebarth (2014).

There are 20,061 businesses listed in the 1929 *Reference Book* for Mississippi. In 1931, 18,695 firms are listed. I searched for all bankrupts in Mississippi in the *Reference Books* and successfully linked 54 percent of business cases.¹¹ Table 5.3 shows that the distribution of bankrupt firms across industries, estimated net worth, and credit-rating groups is similar to the distribution of all firms. About 70 percent were retail establishments, about 10 percent were wholesalers or manufacturers, and a small percentage fell into the other major SIC groups. Less than 15 percent of firms had assets valued at more than \$10,000 and about 30 percent of firms had

11. For comparison, the success rate in matching between censuses seldom exceeds 40 percent (Ruggles 2002).

Table 5.3 Comparison of all firms to bankrupt firms

	All	Bankrupt	All	Bankrupt
SIC group				
Retail	70.42	77.22	69.54	76.57
Whole.	9.03	8.31	8.36	8.99
Constr.	1.61	1.57	0.99	1.23
Mfg.	10.62	8.87	10.04	9.54
Mining	0.01	0	0.01	0
AgForFish	3.26	2.36	4.45	1.09
Services	4.94	1.68	6.46	2.45
Transport	0.11	0	0.16	0.14
Assets (net of mortgages)				
More than \$125K	3.62	4.60	3.5	1.63
\$10K–\$125K	9.13	7.74	9.39	9.63
\$2K–\$10K	26.19	33.74	27.46	27.95
Less than \$2K	35.64	19.96	37.15	20.49
Not known	25.42	33.97	22.51	40.30
Credit rating				
High	3.07	2.24	3.04	2.04
Good	7.11	4.37	6.24	2.58
Fair	22.81	25.67	23.31	20.76
Limited	21.08	19.62	20.85	19.00
Not known	45.93	48.09	46.56	55.63

Source: See text.

assets between \$2,000 and \$10,000. The smallest firms are underrepresented among bankrupts, while the proportion of firms for which no estimate of assets is available is overrepresented. If Dun & Co. was unable to provide an estimate of assets, it may be because the firm was newly formed, and therefore likely that it was small. Adjusting for this makes the distribution of net worth more comparable. The *Reference Book* does not contain a judgment of creditworthiness for 45 percent of firms; creditworthiness of 48 percent of the matched bankrupt firms is not known. However, among firms with credit ratings, bankrupt firms are similar to all firms.

At first glance, the representativeness of bankrupt firms may be surprising. However, the extent to which the bankrupts are representative depends on whether the use of the law is “strategic” in the sense that debtors who use the law have knowingly leveraged up in order to take advantage of the discharge and exemptions in bankruptcy. If debtors who use the law are victims of sudden and unfortunate circumstances, representativeness is more likely. The extent of strategic filing in modern times is difficult to estimate (e.g., White 1998; Gan, Sabarwal, and Zhang 2012). Historians generally suspect that most bankrupts came to court because of unfortunate circumstances. For example, Balleisen (2001) notes that fire (especially the major New York City fire of December 1835), shipwreck, and flood were common reasons for

bankruptcy in antebellum New York state. The data for the national project, for which this sample is a part, have the potential to allow for more systematic examination of the subject when the new data are compared to other sources data in addition to the Dun & Co. books. Sources for comparison include household expenditure and credit data collected by the Works Progress Administration (WPA) (US Department of Labor et al. 2009) and early Surveys of Consumer Finances (Economic Behavior Program 1999). Certainly, though, the representativeness of the Mississippi sample is enhanced by the fact that it is drawn from the Depression era: “If one looks at bankruptcies when large numbers of people are finding themselves unexpectedly insolvent because of broader changes in the economy as a whole . . . one might reasonably expect their circumstances to be more typical than at other times” (Cronon 1991, 270). Similarly Balleisen (2001, 26) writes that many of the bankruptcies filed in southern New York in 1842–1843 “stemmed from structural economic faults that were frequently difficult for foresee.” Observers during the 1930s also attributed most consumer bankruptcies to bad luck: consumers filed for bankruptcy mainly because they experienced events such as job loss, medical problems, and automobile accidents (Hansen and Hansen 2012).

Type of debts and creditors. Whether we can expect the types of debts and creditors of the bankrupt to be representative of all debts is unclear.¹² On one hand, the demand for short-term credit is expected to increase as one’s financial condition worsens. On the other hand, the supply of short-term credit might decrease. It seems likely, though, that the accounts of the bankrupt would contain more personal loans from nearby friends and relatives than the randomly selected firm’s or consumer’s. If this is true, then the accounts of the bankrupt would understate the extent of long-term and long-distance credit.

One might still be concerned about using Depression-era data because it is possible that the failure of banks during the credit crises of the 1930s creates a bias against finding banks as creditors in the sample. Figure 5.2

12. The existing literature on bankruptcy is not informative. Correlates of the consumer’s decision to file have mainly been studied using the Panel Study of Income Dynamics (for example, White 1998), which (a) has only about 250 observations of filers for bankruptcy, (b) only separates mortgage debt from other debt, and (c) observes filers in the 1980s, at which time consumers were more like to be homeowners who took advantage of the option to restructure debt through Chapter 13, which the Chandler Act created. Cross-sectional studies, both historical and modern, emphasize that much of the spatial variation in bankruptcy rates is explained by variation in state collection law (Hansen and Hansen 2012; Lefgren and McIntyre 2009).

The correlates of bankruptcy filing among businesses have mainly been studied for modern publicly traded corporations. These studies, mostly of small samples in a single sector, over short-time horizons, and using data from company annual reports, tend to search for critical balance sheet ratios to predict bankruptcy in a one-year time horizon. For firms outside the financial sector, univariate models have nearly as much predictive power as more complicated models (Aziz and Dar 2006), suggesting little that would help us to understand selection biases. In summarizing the state of the literature on bankruptcy among modern unincorporated small business, Berryman (1993) concludes that “although a great deal of work has been done . . . there is not really an overriding theme.”

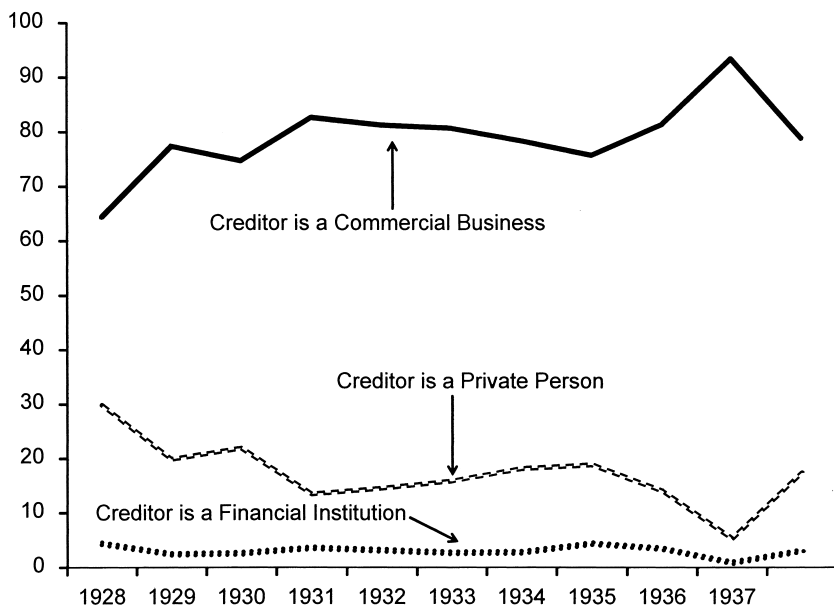


Fig. 5.2 The percent of debts owed to types of creditors, by year of the bankruptcy filing
Source: See text.

shows that this is unlikely to be a major concern: the percentage of all debts owed to financial institutions varied little over the period of the sample. In fact, it was lowest in calendar year 1929, before the start of the Depression, and at one of its higher points in 1935. The biggest change over time in the composition of creditors is from a decline in proportion of private individuals, which is offset by an increase in commercial businesses. A final reason that timing may have minimal impact on the results is that 70 percent of the sample comes from courts in the southern part of Mississippi, where there were fewer bank failures (Richardson and Troost 2009).

Location. The sample is taken from a southern state. It may be that debtors in the South were less likely than debtors elsewhere to have long-distance connections because the South was slow to be integrated into financial markets (Osborne 1988). Again, if this is the case, the results here understate the extent of long-distance credit networks. Future work will utilize samples from courts in a random sample of courts from across the country. The next samples to come online will be from courts in St. Louis and Kansas City.

5.4 Who Borrowed from Whom?

Despite the substantial literature on the development of the financial system and its integration summarized above, our pictures of credit networks

have been biased toward banks and manufacturers. Until now it has not been possible to map fully the set of credit networks. This is a particularly interesting exercise during the first decades of the twentieth century as many of the financial institutions and credit instruments used today were developing. This section considers (a) the relative importance of financial institutions in consumer credit and farm mortgage markets, and (b) the relative importance of bank credit, trade credit, and personal credit for manufacturing firms compared to other businesses and to farmers.

5.4.1 Consumers and Farmers

As discussed above, traditionally most credit was extended to farmers and consumers by local retail merchants. However, by the first decades of the twentieth century, financial institutions began offering mortgages on good terms, finance companies formed to offer installment loans for consumer durables, and small loan companies spread. Table 5.4 shows the cross tabulation of the amount of the debts owed, by type of creditor, for nonbusiness debtors in the sample. Commercial businesses were owed 60 percent of debts, private persons were owed 30 percent of debts, and financial institutions were owed about 7 percent of debts. However, the debts owed to financial institutions were larger than the debts owed to private persons and more than five times the size of debts owed to commercial businesses. Debts owed by nonbusiness debtors to financial institutions averaged \$3,414, at a time when nominal gross domestic product (GDP) per capita was about \$600. Individual transactions between debtors and commercial businesses were just 8 percent of total debts. Individual transactions with financial institutions averaged 23 percent of debt owed by nonbusiness debtors.

Table 5.5 shows that three-quarters of debts owed to financial institutions were owed to traditional banks, trusts, and building and loans, and one quarter were owed to small loan companies. Unskilled blue-collar workers and farmers without any other kind of business debts were the most likely to borrow from a small loan company. The size of the debts owed to banks (\$2,850 on average, in 1929 dollars) was more than five times the size of the debts owed to small loan companies (\$125 on average). Table 5.5 also breaks down the debts owed to the different types of financial institutions by reasons for the debt. Fifty-two percent of debts owed to banks and 58 percent of debts owed to small loan companies are labeled as “miscellaneous” in the bankruptcy documents, indicating that these debts were taken on to consolidate other debt or to pay a variety of regular living expenses. Of course, loans for real estate or housing were more likely to come from banks than small loan companies, but to finance or refinance purchases of vehicles, household goods, and household appliances, or repairs of these items, debtors regularly obtained loans from small loan companies.

Table 5.4 Amount of debt (1929\$) and importance of sources of credit, consumers and farmers only

	Private person	Commercial business	Financial institution	Public entity	Civic association	Total
Amount of debt (1929\$)						
Mean	2,576	638	3,414	5,124	6	1,497
Std. dev.	17,834	5,838	7,307	12,436	0	11,110
This debt as percent of all debt						
Mean	0.12	0.08	0.23	0.24	0.02	0.10
Std. dev.	0.30	0.33	0.26	0.27	0.00	0.32
Number of debts	563	1,157	132	37	1	1,890

Source: See text.

Note: An observation is one debt obligation, which represents a debtor-creditor pair.

Table 5.5 Debts owed to banks and small loan companies, consumers and farmers only

	Percent of obligations to		Amount of debt (1929\$)	
	Banks	Small loan co.	Banks	Small loan co.
Miscellaneous (unknown)	0.52	0.58	2,850	125
Housing & real estate	0.33	0.04	3,231	1,015
Adverse judgments	0.03	0.08	777	121
Attorney or court fees	0.03	0.02	649	16
Loans for financial mkt. trans.	0.03		1,043	
Insurance	0.02		966	
Household goods	0.02	0.08	385	41
Other farm-related debt	0.01		1,212	
Interest	0.01	0.02	3,336	9,785
Vehicles & related expenses	0.01	0.16	4,620	996
Household appliances		0.02		207
Total	1.00	1.00	2,717	486

Source: See text.

Note: An observation is one debt obligation, which represents a debtor-creditor pair.

5.4.2 Manufacturers, Merchants, and other Businesses

As discussed above, manufacturers traditionally obtained both equity and debt through personal relationships. The Mississippi sample demonstrates the enduring importance of personal relationships relative to “relationship banking”: all manufacturers in the sample listed at least one private person among their creditors, but only half of manufacturers listed at least one financial institution among their creditors (table 5.6). Banks were clearly much more critical to merchants than to manufacturers. Just 42 of 265 debts owed to financial institutions (16 percent) are found in the case files of manufacturers. Of the forty-two loans from financial institutions to manufacturers, only five were secured by buildings or real estate. Moreover, this may overstate manufacturing financed by banks because the debtors may be sole proprietors and the mortgages may be for personal residences rather than business structures. Just one loan to a manufacturer—albeit the largest one, for about \$21,000—was made for the purpose of purchasing equipment.

However, the data do indicate that some developments in bank-to-business lending that spread after World War II had already begun during the Depression. Of the forty-two loans between manufacturers and financial institutions, about three-quarters were described as financing “miscellaneous” debts, indicating that the loans covered shortfalls in current operating expenses or facilitated the consolidation of other debts. Two were clearly made to finance the purchase of inventory.

The size of loans to manufacturers by banks was large: more than \$12,000 per loan compared to about \$6,500 per loan to professionals, \$2,900 per loan

Table 5.6 Debts owed by business and farm debtors (1929 dollars)

		Private person	Commercial business	Financial institution	Public entity	Civic association	Total
Merchant	Mean	1,209	224	2,877	1,654	3,155	398
	Std. dev.	8,819	1,107	4,902	3,585	6,230	3,264
	Percent of total	0.06	0.04	0.13	0.10	0.22	0.04
Manufacturer	N	976	7,427	180	35	4	8,622
	Mean	1,519	524	12,475	1,921	23	1,161
	Std. dev.	13,225	2,840	31,275	5,900	4	9,544
Professional	Percent of total	0.02	0.01	0.14	0.05	0.00	0.02
	N	604	1,102	42	18	2	1,768
	Mean	2,438	1,187	6,574	5,340	13	1,815
Farmers	Std. dev.	8,693	6,600	13,000	8,135	3	7,680
	Percent of total	0.06	0.03	0.12	0.06	0.00	0.05
	N	180	536	39	12	2	769
Total	Mean	1,989	2,530	1,714	10,473		2,701
	Std. dev.	4,884	4,953	975	8,712		5,372
	Percent of total	0.09	0.09	0.35	0.27		0.12
Total	N	34	17	4	4		59
	Mean	1,452	321	4,925	2,876	1,586	627
	Std. dev.	10,451	2,158	14,319	5,887	4,410	5,189
Total	Percent of total	0.04	0.03	0.13	0.09	0.11	0.04
	N	1,794	9,082	265	69	8	11,218

Source: See text.

Note: An observation is one debt obligation, which represents a debtor-creditor pair.

to merchants, and \$1,700 per loan to farmers. However, the importance of individual transactions with banks relative to the total of all debts owed was about the same for merchants, manufacturers, and professionals. Each transaction was just 12 to 14 percent of total debts. In contrast, the average debt owed by a farmer to a financial institution was 35 percent of the farmer's total debt.

Prominent in the balance sheets of the business debtors is debt to other commercial businesses—trade credit on book account. Manufacturers owed 1,100 of about 1,800 debts to other businesses. Merchants owed 7,400 of about 8,600 (86 percent) of their debts to other businesses. Even professionals had substantial book credit. While each obligation was small, in total book credit was nearly 30 percent of all credit for manufacturers, 45 percent for professionals, and nearly 50 percent for merchants. A significant portion of this business-to-business lending took place over long distances.

5.4.3 Who Borrowed at Long Distances?

There are 13,535 debts for which the distance between the debtor and creditor can be estimated and the amount of the debt is reported. (Distances are estimated using county centroids.) The average debt was owed to a creditor 130 miles from the debtor (table 5.7); the maximum distance between a debtor and one of his creditors was 1,927 miles. Half of debts were owed to creditors located in the same county as the debtor. Debts owed to out-of-state creditors tended to be smaller than debts owed to in-state creditors, although the standard deviations are large at all distances.

Figure 5.3 maps the locations of the creditors in the sample. The importance of debts, again mostly in the form of book credit, owed to businesses in freshwater and saltwater port cities is clear from the clustering of shaded areas along the Mississippi and the eastern and western seaboards.¹³ Table 5.7 shows the underlying details. Although 28 percent of all debts were owed to creditors more than 100 miles away from the debtor, the average business creditor was just over 150 miles away from the business it lent to. Looking across types of businesses, the average distance between merchants and their creditors was 163 miles—twice the average distance between manufacturers and their creditors. Additionally, 34 percent of the creditors of merchants, but just 20 percent of the creditors of manufacturers, were more than 100 miles away. Manufacturers had credit networks that were similar in geographic scope to the networks of professionals and farmers.

Looking at the right-hand panel of table 5.7, it is evident that that credit extended by private persons, banks, and civic institutions tended to be to nearby debtors. Most consumer debts were owed to nearby creditors; only

13. The 1898 Bankruptcy Act that generated the data used here was the brainchild of trade "credit men" who sought to distribute goods more widely, but who found individual state laws giving in-state creditors preference in collections to be a major barrier to interstate operations (Hansen 1998). One of the areas for further research using the national sample is to explore whether the introduction of the Bankruptcy Act resulted in more interstate credit connections.

Table 5.7 Distance between debtors and creditors

	Average miles to creditor	Percent more than 100 miles	Number of debts
Type of debtor			
Consumer debtor	59	14.3	3,124
Business debtor	152	32.4	10,404
Municipal entity	295	42.8	7
Railway	n/a	n/a	n/a
Total	130	28.2	13,535
Occupation or type of business of debtor			
Not known	141	30.4	4,307
Unskilled blue collar	19	3.9	381
Skilled blue collar	25	7.2	812
Unskilled white collar	47	16.6	352
Skilled white collar	52	11.0	162
Merchant	163	34.4	5,998
Manufacturer	83	19.9	670
Professional	81	19.7	590
Farmer	88	19.0	263
Total	130	28.2	13,535
Debts owed by type of creditor ^a			
Unknown	47	11.1	270
Private person	43	10.6	2,422
Commercial business	158	33.7	10,183
Financial institution	58	17.7	605
Public entity	33	4.0	49
Civic association	63	14.3	6
Total	130	28.2	13,535
Debts owed by reason for debt ^b			
Unknown (missing or invalid data)	166	34.2	2,250
Wages owed	9	0.0	19
Taxes	12	0.0	2
Car (vehicle, accessories, repair)	29	7.1	402
Home (property, rent)	59	16.8	453
Household goods	161	34.2	3,341
Inventory	200	45.1	2,083
Miscellaneous (verbatim response)	90	19.9	3,230
Adverse judgments/legal settlement	107	21.2	269
Utilities	24	5.4	536
Household appliances	53	14.6	89
Fixtures and machinery	169	31.7	41
Food	30	6.2	161
Farm-related debt	116	15.8	19
Loans or losses in financial markets	78	33.3	19
Interest	117	26.5	34
Attorney & court fees	79	19.6	56
Medical	22	9.1	338
Insurance	225	25.0	82
Fees for other prof. services	88	18.0	111
Total	130	28.2	13,535

Source: See text.

Note: An observation is one debt obligation, which represents a debtor-creditor pair.

^a An observation is one debt obligation, which represents a debtor-creditor pair.

^b Includes only observations for which amount of debt is reported.

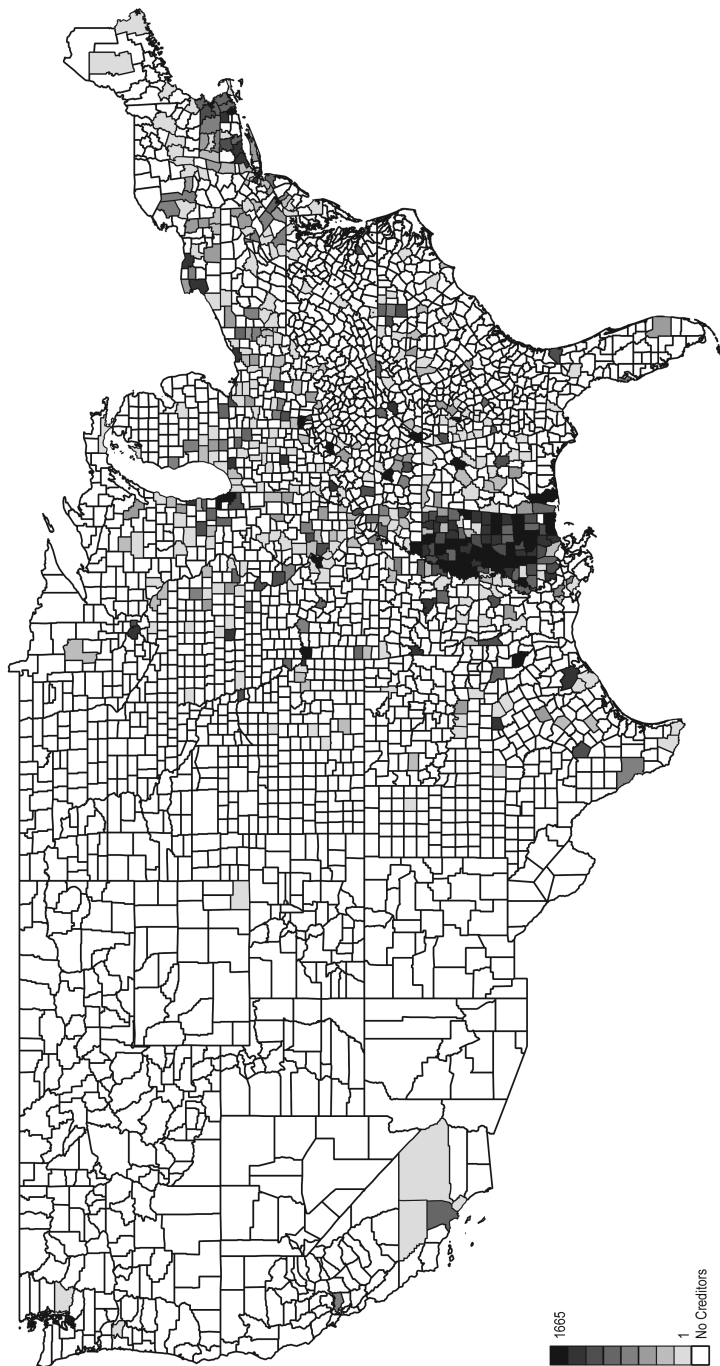


Fig. 5.3 The geographic distribution of creditors in the sample

Source: See text. Shading represents increasing number of creditors: no shading means no creditors, lightest gray means one creditor, and black means 1,665 creditors.

about 14 percent of consumer debts were owed to long-distance creditors. Consumer debts taken on at long distances included loans for household goods (34 percent of debts) and legal judgments or settlements (21 percent). Farmers had long-distance creditors for equipment, fertilizer, and other operating costs (16 percent). The creditors of municipal entities were farthest from their debtors, and municipal entities had the largest share of creditors (almost 43 percent) more than one hundred miles away. However, complete information is available for only seven debts of municipals.

Credit for insurance policies and inventory was extended at more than 200 miles distance on average. Fixtures and machinery for businesses were often bought on credit at long distances. Credit extended for inventory was extended over 200 miles on average, and just over 45 percent of debts owed for inventory were owed to creditors more than 100 miles distant.

Table 5.8 shows the cumulative amount owed by individual debtors to long-distance creditors, broken down by occupation of the debtor. Again, merchants dominate long-distance transactions: 172 merchants had more than eleven long-distance creditors on average, and the average merchant owed those long-distance creditors a cumulative \$3,700. A total of sixteen manufacturers owed at least one creditor more than one hundred miles distant. The average number of long-distance creditors of manufacturers was about eight. The total debt owed to long-distance creditors by manufacturers was about \$8,400, but that was just 18 percent of those manufacturers' total debts.

The long-distance debts to individuals were a larger percent of total debt than the long-distance debts of manufacturers. Fifty-five consumers (35 percent) owed long-distance creditors, but their debts were, naturally, smaller in size and number. The debts owed by twenty-six farmers (50 percent) to long-distance creditors were larger in size and of more importance to the individual debtors, but smaller in number.

If we limit our attention to debts owed to *financial institutions* at least one hundred miles distant from the debtor, there is an even greater difference in long-distance lending by occupation: 42 percent of all long-distance obligations to financial institutions were nonbusiness debt. At long distances, less than 1 percent of obligations (one debt) to a financial institution were owed by a manufacturer, while 38 percent were owed by merchants, and 17 percent by farmers.

Though the growth of small loan companies can be seen in the bankruptcy data, direct lending to farmers in Mississippi from a distance by private farm mortgage banks cannot. This may be explained by the structure of the mortgages: the debts were owed to local firms that were themselves financed from a distance. About six in ten farmers in the sample owed debts to financial institutions. Two-thirds of loans made to farmers by financial institutions were at distances of less than one hundred miles. Most loans to farmers came from local (within-county) banks. Though about one-third of loans made to farmers were at distances of one hundred miles, nearly all (81 percent) were loans from the Federal Land Bank of New Orleans.

Table 5.8 Cumulative debt owed to creditors at least one hundred miles from debtor

	Number of creditors		Cumulative owed (1929\$)		Percent of all debt		Number of debtors
	Mean	Std. dev.	Mean	Std. dev.	Mean	Std. dev.	
	Unskilled blue collar	1.6	0.8	10,161	22,070	0.31	
Skilled blue collar	2.8	2.0	1,378	3,384	0.35	0.32	19
Unskilled white collar	3.3	4.1	3,004	6,307	0.36	0.29	19
Skilled white collar	1.7	1.3	1,602	2,329	0.21	0.35	7
Merchant	11.6	12.3	3,708	9,923	0.23	0.25	172
Manufacturer	7.9	7.2	8,415	17,573	0.18	0.20	16
Professional	5.3	4.3	16,453	25,873	0.23	0.29	25
Farmer	1.7	0.9	27,823	56,377	0.39	0.32	26

Source: See text.

Note: One observation per debtor.

5.5 Conclusion

Detailed data from the new sample of bankruptcy documents from courts in Mississippi document the importance of the interregional network of trade credit well into the twentieth century. Despite the disruptions of the Depression, during the years from 1929 to 1936, merchants in Mississippi continued to rely on long-distance creditors for inventory and fixtures.

The data show that the innovative financial firms that aimed to meet demand for credit of consumers had made inroads into the deep South by the 1930s. Consumer loans from financial institutions were relatively common and included a significant number made through small-loan lenders.

The bank-to-manufacturing lending channel that became important after World War II was only just emerging in the 1930s. While some short-term loans from banks for “miscellaneous” purchases were on the balance sheets of manufacturers, overall, manufacturers in Mississippi were unlikely to have credit from banks or other financial institutions. Although the manufacturers in Mississippi were mostly in well-established industries, their sources of credit were similar to the sources of credit of start-ups: private persons and other businesses. Thus, this study adds to the evidence that banks seldom brought capital into manufacturing, which helps to explain why rates of return across sectors converged only slowly.

This is not to say, of course, that banks are unimportant for economic growth. Though in the Mississippi example bank lending did not mainly support the local economy by funneling capital directly into production, it did support the local economy by facilitating the movement of goods to where they commanded the highest prices and by financing purchases by consumers. In fact, a modern distribution system was critical to manufacturers who hoped to take advantage of the economies of scale of modern industrial techniques and the spillovers associated with regional specialization. Yet cliometricans have focused on manufacturing and banking rather than distribution and trade credit. This production-oriented approach reflects available data. The new data from the bankruptcy documents will support a more balanced approach.

Appendix

Description of the Sample

More than thirty-four million businesses and consumers have used the federal bankruptcy law since the first permanent law was passed in 1898. The national sample of bankruptcy cases will consist of all cases in a random sample of boxes containing about 1 percent of cases from the permanent col-

Table 5A.1 Sample size compared to extant dockets and published statistics

	Published cases filed			Extant dockets			Sample		
	North	South	Total	North	South	Total	North	South	Total
							2	11	13
1929	125	273	398	135	301	436	39	89	128
1930	132	308	440	131	321	452	42	77	119
1931	139	376	515	102	362	464	24	67	91
1932	217	454	671	122	225	347	16	35	51
1933	227	414	641	80	168	248	34	56	90
1934	333	333	521	55	142	197	8	38	46
1935	105	210	315	106	107	213	23	85	108
1936	163	207	370	15	102	117	33	100	133
1937	143	178	321				0	1	1
Total	1,584	2,753	4,192	746	1,728	2,474	221	559	780
Dockets as % of published (1929–1936)				52	67	64			
Sample as % of published (1929–1936)							15	22	20

Sources: Published by United States Department of Justice, *Annual Reports of the Attorney General of the United States*, various years.

lection of the National Archives.¹⁴ The Mississippi pilot contains an oversample to ensure a large enough number of observations for stand-alone analysis; the sample used here contains one box of records from each court selected at random for each year. If the selected box contained fewer than five cases, the next box was also selected.

For this time period in Mississippi, the boxes mostly contained consecutive case numbers; that is, the cases were boxed in the chronological order in which the cases commenced. The sample for each division court is therefore clustered in time, but the overall sample contains observations of cases filed in most months.

Table 5A.1 describes the size of the sample and provides comparisons to the totals in the extant docket sheets and published statistics of the Federal District Courts. The extant dockets include data on 64 percent of cases filed in the two federal court districts of Mississippi. Slightly more docket books have survived for the Southern District. The sample of case files represents 20 percent of all cases reported in the *Annual Report of the Attorney General*. The sample for the courts in the Northern District is 15 percent of cases; the sample for the Southern District is 22 percent of all cases.

There were six division (that is, local) courts in the two federal court districts in Mississippi (see figure 5A.1 for a map). Table 5A.2 shows the distribution

14. There are more than one million cubic feet of bankruptcy case files currently in the permanent collection of the National Archives. Additionally, approximately two million cubic feet of relatively recent case files are stored in the regional Federal Records Centers. Ownership of these records is being transferred from the Administrative Office of the US Courts to the National Archive and Records Administration (NARA). A 3 percent random sample of boxes will be added to the Archives' collection.

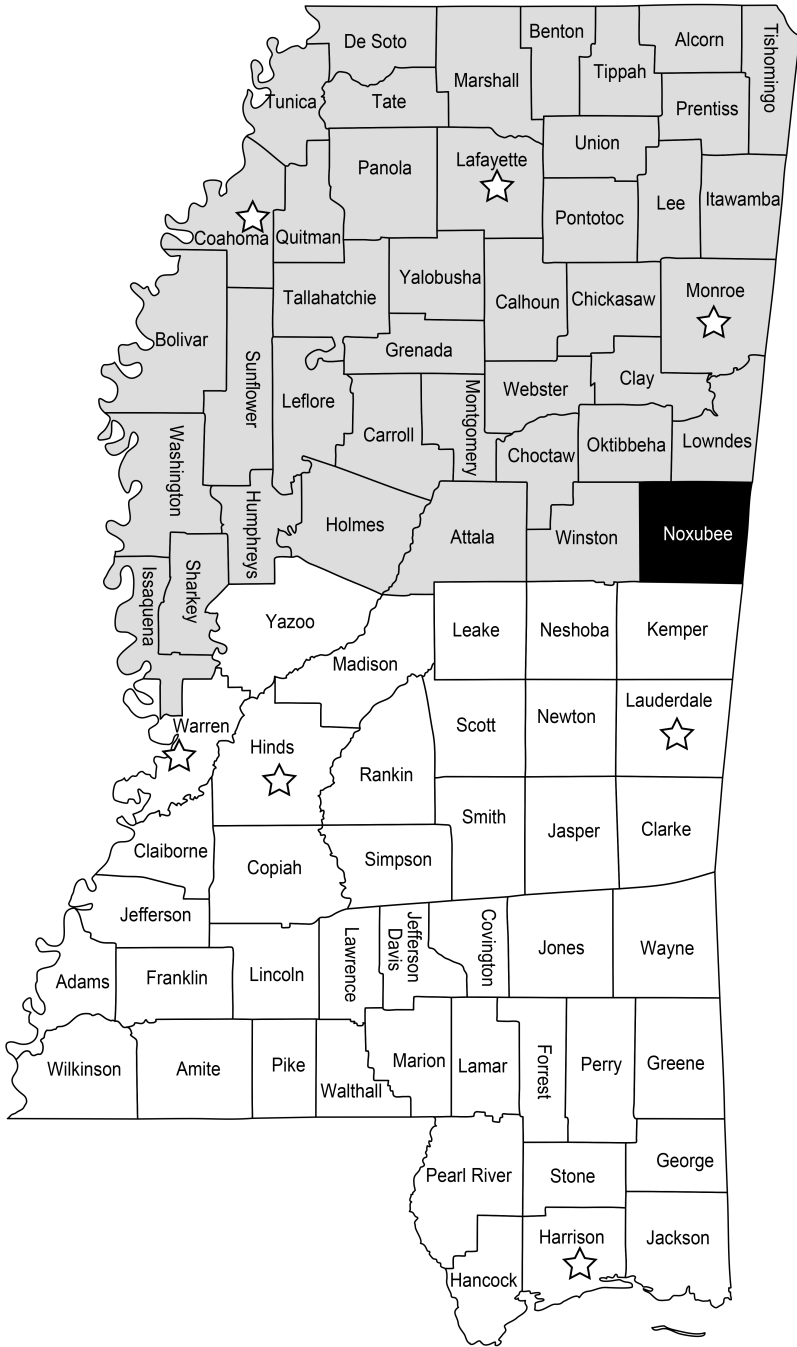


Fig. 5A.1 Map of Mississippi with district border and court locations

Table 5A.2 Distribution of sample across division courts

	Aberdeen	Biloxi	Clarksdale	Jackson	Meridian	Oxford	Vicksburg	Total
1928						2	11	13
1929		17	20	31	31	19	10	128
1930		24	23	23	16	19	14	119
1931		14	14	26	11	10	16	91
1932	1	2	0	10	6	15	17	51
1933		13	16	23	10	18	10	90
1934		9			7	8	22	46
1935		25	19	39	15	4	6	108
1936		18	18	42	23	15	17	133
1937							1	1
Total	1	122	110	194	119	110	124	780
Percent	0	16	14	25	15	14	16	100

Table 5A.3 Cases in sample compared to coverage of extant docket books by quarter

Year	1928				1929				1930				1931				1932			
	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Aberdeen																				
Biloxi			9	8			14	4	5	1	11	2	1		2				1	
Clarksdale			19		1	6	9	4	4				1	13						
Jackson			25	6		2	1	20	25	1	25	1			7	1	1	1	1	
Meridian			12	18	1			1	15				10	1	6					
Oxford	2		8	6	5		6	8	5				1	9		5	4	6	6	
Vicksburg	2	9	10					14	1	1	1	1	6	8	16				1	
Year	1933				1934				1935				1936							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Aberdeen																				
Biloxi				8	5			9	10	3	5	7	3	6	4	5				
Clarksdale			15	1					9	4	5	1	18							
Jackson			23						6	16	16	1	16	21	5					
Meridian			9	1		7		0	1	4	7	3	15	5	1	2				
Oxford			10					2	3	3	1	3	4	6	2	3				
Vicksburg			1	8	1			5	3	14	5	1	4	6	4	3				

Note: Numbers describe the size of the sample for the quarter. Quarters covered by surviving docket books (bold):

Aberdeen, 1929:Q1 through 1935:Q4; Biloxi, 1929:Q1 through 1931:Q4; Clarksdale, 1929:Q1 through 1930:Q1; Jackson, 1929:Q1 through 1936:Q4; Meridian, 1929:Q1 through 1929:Q2; Oxford, 1929:Q1 through 1936:Q4; Vicksburg, 1929:Q1 through 1936:Q4.

of the 780 cases in the sample across the six division courts. The largest portion of the sample, 25 percent, comes from the court at Jackson. Four of the other courts each contribute 14 to 16 percent to the sample. Only one case in the sample comes from the court at Aberdeen. The Clerk of the Court at Aberdeen interfiled bankruptcy cases with civil and criminal cases. Except for one large case that was boxed separately, it was not feasible to separate the bankruptcy cases from the thousands of other cases filed in Aberdeen.

Table 5A.3 shows the overlapping periods covered by the extant docket books and the sample of cases for each division court. The shading represents the quarters for which docket books are available. The number in each cell gives the size of the sample for the quarter. As noted above, it was not feasible to collect a sample of case files for Aberdeen. Docket books for Aberdeen survived, however, as did docket books for Jackson, Oxford, and Vicksburg. Most docket books for Biloxi, Clarksdale, and Meridian, however, did not survive.

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