The Passage of the Uniform Small Loan Law

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Abstract

The Uniform Small Loan Law (USLL) allowed specially-licensed lenders to charge much higher interest rates than those allowed by most state usury laws. In return, the small-loan brokers had to adhere to strict standards of transparency. The USLL was the Russell Sage Foundation’s primary device for fighting what it viewed as the scourge of high-rate lending to poor people in the first half of the twentieth century. The Foundation drafted successive versions of the law and then took the lead in fighting for its passage in the several state legislatures. About two-thirds of the states had passed the USLL when the Foundation ended this effort in the 1940s. This paper, which is part of a larger project, describes the USLL and then reports on econometric models of which states passed the USLL and when. We find that the demographic and political factors that occupied much of the Foundation’s own discussion played little role. Measures of state economic structure as well as the presence of credit unions and banks, on the other hand, are powerful correlates of the state’s passage. Surprisingly, there is no evidence of spatial dependence across states in the law’s passage.
The loan shark in his arrogant disregard of human rights continues in most cities to exact unreasonable tribute from the wretched men caught in his net... What is responsible for this system of peonage? What maintains it in a flourishing condition despite the many and varied attempts to remove it? How can men be so reckless as to borrow from these agencies that are everywhere known as sharks, leeches and remorseless extortioners?¹

For the first 40 years of its existence the Russell Sage Foundation (RSF) was heavily involved in efforts to reform the conditions under which poor people obtained credit in the United States. Through its lobbying, publications, and other efforts, the Foundation identified itself as the clearinghouse for information, the leader of several reform proposals, and the primary interlocutor for lenders and industry groups that sought to improve their industry’s image. RSF was also the leader in a national reform group that promoted “remedial loans,” credit extended at relatively low interest rates and intended to compete with allegedly abusive lenders. The foundation’s staff provided intellectual leadership and a seal of approval to remedial loan groups and to other organizations interested in the problem of credit for the poor.

This paper, which is part of a larger project, focuses on one particular initiative, the Uniform Small Loan Law (USLL). The USLL formed the heart of the Russell Sage Foundation’s efforts to improve credit conditions for poor people, and as such was a major activity for the Foundation’s first 35 years of existence. The USLL reflected two central ideas. The law’s supporters thought that making small loans was an inherently expensive business, and that the only way to have it done by legitimate business was to allow capital invested in this way to earn a realistic return. That is, high interest rates had to be allowed. The law also reflected a perception that borrowers were hurt less by high

¹ Arthur Ham, 1912. Although printed by the Russell Sage Foundation this seems to have originally been a speech to the National Federation of Remedial Loan Associations.
interest rates than by other features of the “loan-sharking” business, such as a lack of transparent loan terms. The original version of the USLL was patterned after similar laws already in place, but over time the Foundation took an increasingly central role in writing new drafts of the Uniform Law, coordinating interest groups around its provisions, and organizing state-level lobbying campaigns on its behalf.

This paper focuses on the USLL’s passage: which states passed the law first, and when. Most of the work in our larger project focuses on exploiting the rich archives left by the Foundation and other entities, as well as related studies of the small-loan business as it operated under the USLL. The econometric work that is the focus of the present study should be seen as an effort to understand the “big picture” of the USLL’s acceptance, and our other research as an effort to understand the micro-foundations of the law’s creation, passage, and effects. Our understanding of the business the Russell Sage Foundation sought to suppress is based on the foundation’s own investigations, other research in to this area, and Easterly (2005). The other questions we intend to pursue include why the Foundation settled on the USLL as its main effort; the RSF’s role as a purveyor of expertise in this area; and the role of foundations as legislative agents in an age when state law was often primary.

Section 1 below provides background on the problem of credit for poor people at the time, as well as the evolution of the Russell Sage Foundation’s views on the problem. Section 2 focuses on the Uniform Law itself. Our larger project seeks to identify the intellectual and institutional influences that informed the law’s framing and revision over the years, as well as the challenges the law posed for bank regulators and others charged with overseeing the nation’s financial system. Here we limit ourselves to the bare minimum of background needed. Section 3 describes the data and econometric methods we employ here, and Section 4 discusses our results.
1. Credit for the Poor and the Foundation’s activities

The Russell Sage Foundation was established in April of 1907. The foundation’s early interest in credit reflected the concerns of Mrs. Sage, the founder, and her circle. Starting in the 1890s, reformers in the U.S. came to view credit as a serious problem in causing or exacerbating poverty (see, for example, Calder 1999, pp.112-123). In their eyes, borrowers usually obtained small loans only because of financial necessity: unexpected medical expenses or interrupted income (due to unemployment). Such loans were not used to purchase durable goods on an installment payment system but rather took the form of “salary loans” (i.e., they were made on the “security” of the borrower’s future wages). The dire circumstances surrounding emergency borrowing threatened to drive small debtors into the hands of exploitative usurers, loansharks, and other unscrupulous lenders.²

Credit for poor people remained a major focus of the Foundation’s efforts until World War II. During the period of its involvement, RSF tried several different approaches.³ All of them, including the USLL, built on efforts that preceded the foundation’s incorporation. The first was to publicize the problem and to enlighten potential borrowers about what they might be getting into. The Foundation called these efforts “crusades,” and the metaphor is apt. Ham and others listed two benefits to publicity: borrowers would be more careful about entering into exploitative agreements, and politicians, newspapers, and others could be mobilized. Ham was especially fond of the campaigns against loan sharks.⁴ He gave numerous speeches, wrote articles and letters for newspapers and magazines, and even wrote the screenplay for a movie (“The Usurer’s Grip” was produced by the Edison Company and was something of a hit). In

² Easterly (2005, Chapter 2) traces the evolution of the legal environment that supported salary loans. Chapter 3 of that work documents the origins of the salary-loan business and traces the rise of some of the original large-scale lenders using this model. As he and Olney (1989, 1991) show, the Foundation underestimated the range and extent of consumer lending in the early twentieth century.
³ This discussion is brief; for more detail see Carruthers and Guinnane (2002).
⁴ See, for example, the New York Times January 1, 1911, p.6; January 8, 1991, p.6; and July 12, 1912, p.5
Ham’s first sustained efforts, he led a campaign against loan sharks in New York City. In his investigation, Ham uncovered many illegal loans, or collection methods that violated the borrower’s legal rights. He convinced the *New York Globe* to devote considerable space to exposing these practices, and also got most New York papers to stop carrying advertisements by the lenders. Ham corresponded with a number of individuals who suffered at the hands of loans sharks, offering advice and intervening with employers to prevent further garnishment of the borrower’s salary (LC 41, “1911-1913 Loan Shark Victims” folder). RSF convinced the New York district attorney to set up a special office to prosecute these crimes and also persuaded several employers to back their employee’s efforts to resist repayment of illegal loans. Several lenders went to jail and most others disappeared from the city. Ham took credit for eliminating the “loan shark evil” from New York.

But most of the Russell Sage Foundation’s efforts amounted to trying to create alternative sources of credit for poor people that could drive the high-rate lenders out of business. One such institution was Remedial Loan Societies, many of which preceded the Foundation. These charitable lending institutions provided credit to poor people at rates much lower than those charged by for-profit lenders. Remedial loan societies paid dividends to their investors, but usually capped those dividends at some low figure such as six percent. Several of the Foundations leading figures had been involved with remedial loan funds prior to the Foundation’s establishment, and this interest remained. RSF provided support – financial, organizational, etc – to both a number of specific remedial loan societies, and the national organization of such societies.

The Russell Sage Foundation also played an instrumental role in the very early days of the U.S. credit-union movement. The philosophical, political, and economic underpinnings of the credit-union and USLL approaches are quite different. Credit unions run on a not-for-profit basis, distributing all surplus to members through higher rates on
deposits, lower loan costs, or dividends on membership shares. The entire point of the Uniform Small Loan Laws was to attract private capital into this type of lending with the promise of profits earned through open and honest dealing. The credit union movement, as a matter of fact, experienced little of the legislative opposition that the Uniform Small Loan law encountered. Perhaps the most important difference between credit unions and the small loan law as a solution to credit problems for poor people lay in their implied understanding of why it was hard to lend to poor people. The credit union approach suggests that ordinary commercial lenders faced high costs in dealing with poor people because they did not know enough about them and lacked low-cost ways to compel repayment. By this analysis, the main problems lay with information and enforcement. Credit cooperatives and credit unions overcome these problems by keeping credit relations within groups of similar people likely to know one another. The Uniform Small Loan Law, on the other hand, saw in the high lending costs for poor people the difficulty of advertising and making small loans to people who lacked assets that could serve as collateral for loans. If this is correct, then high interest rates simply reflect the cost conditions in this line of business.

The Russell Sage Foundation’s ardor for credit unions had cooled considerably by the 1920s. The reasons were several. One was the intellectual understanding noted above. Perhaps just as important were institutional and personal conflicts. Edward Filene’s Twentieth Century Fund had staked out credit unions as its turf in the credit arena, and while the Fund tried several times to work out a modus vivendi with the RSF, the relationship was awkward at best. The personal problems stemmed from repeated conflict between Roy Bergengren, who was Filene’s man for the credit-union groups, and various figures at the Russell Sage Foundation.

The RSF also tried to promote consumer lending by ordinary commercial banks, again with an eye to providing market competition that might reduce costs to borrowers.
Commercial banks were late entrants into this field, in part because of legal restrictions on the lending activities of national banks. The first personal loan department in a commercial bank dates to 1924. Russell Sage assisted several New York banks in setting up these new loan departments, providing samples of forms used by credit unions as guides to deal with small loans.\(^5\) It also considered various legislative measures, although these ran aground on the question of whether state laws legalizing personal loans would apply to federally-chartered banks.\(^6\) Evidence exists that the banks themselves objected to the legislation proposed by the foundation.\(^7\) In general and despite some effort on the part of the RSF, commercial banks were slow to make small loans to individuals (see RAC 28/216, p.7).

2. The Uniform Small Loan Law

The Foundation’s most sustained effort went into the creation and promulgation of a uniform law to cover small-loan lenders. The RSF’s involvement in the USLL involved two separate tasks: writing (in consultation with other interested parties) a model law suitable for adoption in multiple jurisdictions, and encouraging its promulgation, passage and enforcement. Obtaining passage of these new laws meant dealing with state legislatures and governors (the relevant law being a state, not a federal, responsibility). This particular uniform law strategy was relatively new to American politics, but was not the invention of the RSF.

Starting in the 1880s, the American legal profession, acting through the newly-established American Bar Association, devised a long-term plan to codify and

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\(^5\) One bank that set up a new loan department was the First National City Bank of New York, whose president, Charles Norton, joined the RSF board of trustees in 1918. See RAC 28/216 “Memoranda of Information Requested by Trustees’ Committee on Small Loan Question” and New York Times May 13, 1928, p.134

\(^6\) LC 101, “Applicability of State Statues to National Banks” folder.

\(^7\) For example, LC 105, “City Bank – Washington DC” folder. Rolf Nugent, in particular, believed that commercial banks were simply afraid to admit publicly how much they would charge for a small loan (see RAC 24/188, “Memorandum April 27, 1943” p.6)
standardize state laws. Given the federal structure of the American polity, legal variability and uncertainty across jurisdictions were an ongoing problem. National legislation to deal with various social and economic problems was simply not an option because of how the U.S. constitution allocated powers between state and national government. And at the state level, various groups opposed certain kinds of ameliorative legislation on the grounds that it would make business in their particular state less competitive (Graebner 1977, p.332). The uniform law strategy seemed to be a way through these constraints. Promulgating law at the state level ensured constitutionality, but at the same time legal uniformity defused the problem of regulatory competition among states.

Uniform legislation allowed the legal profession to apply its expertise and demonstrate its social value. It also bore the hallmarks of “scientific legislation,” a connection valued by foundations in the business of providing non-partisan, expert advice. RSF staff also believed that a decision in one state could establish (political) precedent in other states (LC 4, “Anti-Loan Shark Committee” folder). One of the prime movers behind uniform laws was the National Conference of Commissioners on Uniform State Laws (NCCUSL). This group emerged from the American Bar Association in the late 1880s and was later joined in its efforts by the American Law Institute (ALI), established in 1923 (Grant 1938, p.1086). Together, they devised canonical Restatements of law and promoted model laws, eventually including the Uniform Commercial Code (Frank 1998, White 1997). Not surprisingly, RSF correspondence suggests that the foundation actively coordinated with the NCCUSL on laws pertaining to credit.8

Regional variations existed in the adoption of uniform laws. Southern states, for example, were less generally willing to adopt uniform labor legislation, fearing that it might undercut their labor cost advantages with respect to northern states (Graebner

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8 One letter of 17 November, 1919, was sent to a J. Hansell Merrill, appointed by the NCCUSL to consider anti-loan shark laws. See LC 4, “Anti-Loan Shark Committee” folder
The uniform law strategy generally worked better for commercial rather than social legislation. The first uniform law proposed by the NCCUSL was the Uniform Negotiable Instruments Act of 1896, adopted in thirty-eight states and territories by 1910 (Lapp 1910). This was followed by a uniform warehouse receipts act, uniform sales act, uniform bills of lading act, and so on. Indeed, by 1919 eleven of the thirteen uniform laws adopted by states were commercial in nature (Guild 1920). As a commercial law serving a social purpose, the USLL was something of a hybrid, but it was not the only uniform law that one might view as having a social purpose; there were uniform laws proposed for enabling credit unions and savings banks, for example.

One feature of the uniform-law strategy seems odd for the USLL. As Smythe (2005) emphasizes for the Uniform Sales Act, there are areas of law where legal differences across states impose higher transactions costs. A firm located in New Jersey, for example, might prefer that both its state and all the states in which it does business have identical laws to reduce its legal uncertainty and costs arising from inter-state sales. No such argument can be made for the USLL, at least with the same force. Some of the larger chain lenders that formed to lend under the USLL operated in many states, and might well have preferred that the small-loan law in each state be similar. But they rarely lent across state lines, and in any case small-loan legislation was very simple. We must look elsewhere for the RSF’s emphasis on uniformity.

At first, the RSF’s legislative work consisted largely of pushing state authorities to enforce existing laws. This was a natural outgrowth of the “crusades” of which Ham was so fond. For example, in 1910 he concluded that some chattel loan companies operating in New York were either doing so illegally or had not provided the required report to the state Banking Department. Ham met with Governor Hughes and then worked with the Superintendent of Banks and the Attorney General to bring actions against several lenders. This later expanded into the crusade noted above. A more
consistent line of effort consisted of following legislative proposals and seeking to influence them in a particular direction. Starting in 1910 Ham was involved with state legislatures in their efforts to regulate the small loan business. By 1913 Ham, working with the National Federation’s Committee on Legislation, had worked out eight features that any state law should contain. The several successive drafts of the Uniform Small Loan Law (USLL) negotiated over the next decades all reflected these ideas. They included:

(1) Licenses for lenders who charged more than the legal interest rate for banks
(2) Bonds to ensure observance of the law
(3) A maximum interest rate higher than that allowed for banks, coupled with a prohibition on ancillary fees
(4) Enforcement by public officials
(5) Penalties for violation
(6) Notice to employer and to wife in the case of assignment of wages
(7) Records that can be inspected by supervision officer
(8) Borrowers to receive memorandum of transaction along with relevant sections of state law

In all versions of the RSF small loan law, a small loan was defined as a loan of $300 or less. To put this sum in perspective, in 1925 the average annual earnings of a non-farm worker were $1,434. An even more relevant comparison is with the average hourly wages of unskilled male workers, which in 1925 equaled $0.46. Assuming 3000 hours per year work, this made a small loan worth about 1/4th of an unskilled male worker’s annual wages.

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9 The early legislative efforts also sought to gain charters for remedial lenders; like credit unions, they did not fit comfortably into existing banking law.
The first incarnation of RSF’s Uniform Small Loan law was New Jersey’s Egan Act, passed in 1914.\textsuperscript{10} Ham’s role in passage of the Egan Act was considerable, and went beyond that of technical advisor. He drafted the legislation and helped organize support at each stage of the bill’s legislative career. This pattern continued after Ham left the foundation, with revisions to the Uniform Law and efforts to pass it in all remaining states. Between 1911 and 1915, six states including New Jersey passed versions of the USLL. Political opposition to the measure grew more organized, so in 1917 the law passed on close votes in six more states but failed in California. Internal RSF documents reflect a considerable lobbying effort on the part of the foundation to secure passage. By 1929, RSF staff had made field visits to more than thirty states, meeting with legislators, staffers, and other interested parties to urge adoption of the USLL (RAC 28/216). When Leon Henderson was hired by the Foundation in 1925, his first act was to visit the states where the USLL was in operation. Through 1929 he was heavily involved in organizing support for the Act in the states where it was in play, and defending efforts to weaken the law in states that had enacted it earlier (Glenn et al 1947, pp.342-343).

RSF staffers clear perceived who their political opponents were. In a March 1927 letter to John Glenn (RSF director), Leon Henderson (who then headed the RSF Department of Remedial Loans) discusses the lobbying effort in Missouri: “The loan sharks, particularly from St. Louis, have been doing their work quietly and we may not have located all the possible sources of opposition.”(RAC 24/187, 27 March 1927 letter). Earlier that month, Henderson wrote to Glenn from Topeka, Kansas: “The salary buyers were very active but did not make any progress until last week when they seemed to have connected up with some Republican enemies of the Governor, who has been helping us all the time. ... There is no doubt in my mind that a big bundle of money was used against

\textsuperscript{10} By 1950, the RSF had helped to draft seven versions of the USLL. The second was adopted in 1918 and the seventh in 1942. See RAC 27/211
our bill.” (RAC 24/187, 7 March 1927 letter).\(^{11}\) In state after state, it was the RSF versus
the same “loan sharks” and salary lenders that the RSF hoped to drive out of the small
loan market.\(^ {12}\)

The RSF sought allies in various quarters, including among labor unions whose
members were hurt when they, as delinquent borrowers, had their wages attached. The
strongest alliance, however, was with the “legitimate” small-loan lenders. Over the years,
RSF staff consulted multiple times with organizations like the AILA, its successor the
AAPFC, and with particular firms like Household Finance Corporation (RAC 3/22, p.57).
The RSF recognized that to push the loan-sharks out of credit markets, they would have
to help push in legitimate lenders: “... once the small loan business is established, the
support of a substantial part of the lending fraternity is vital to satisfactory revision of an
existing [small loan] law” (RAC 24/188, p.1-2).\(^ {13}\) In particular, the RSF worked with the
AILA and AAPFC to revise the model USLL through its multiple iterations (see RAC
27/207). At times, RSF staff worried that the foundation worked a little too closely with
so-called “industrial lenders” and ran the risk of being perceived as a mere handmaiden
of the industry. This issue became most acute when the RSF supported high (in its mind,
realistic) statutory interest rates for small loans.

Controversy broke out in 1929, with the onset of the depression. The decline of
interest rates and deflation led some to demand reductions in the maximum interest rates
allowable under the law. RSF did not object to reductions across the board, but did
oppose measures that would have reduced interest rates to unrealistically low levels. By
1932 some 36 states had a small loan law, with most of those laws incorporating the basic

\(^{11}\) The term salary-buyer refers to an evasion some loan sharks used; to escape usury laws they claimed to
be buying future salary payments rather than making a loan.
\(^{12}\) Other RSF documents refer to opposition from “loan sharks” in Kentucky and Alabama. See LC 5
“Opposition to Consumer Credit Legislation, Particularly That of Loan Sharks” folder. On Kentucky, see
\(^{13}\) Elsewhere, RSF staff noted that: “One of the greatest influences for improvement in the small loan field
is the national association of lenders which now numbers four or five hundred members” (RAC 24/187)
elements of the Russell Sage model law. Nugent published a paper in *Harvard Business Review* in 1933 arguing that excessive interest rate reductions reduced the volume of legal lending and increased the activities of illegal lenders. Low statutory interest rates may have been well-intentioned, but their effect was to discourage legal lenders and consequently drive borrowers into the arms of the loan sharks.

The USLL imposed several conditions on lenders, but as with most regulatory efforts the reaction was complex. Some lenders opposed the law and evaded it after its passage. Others welcomed the law, after if not before its passage, because it made lenders more respectable and made it easier for them to enforce their loan terms in court. As Robinson and Nugent pointed out, part of the difference in the lender’s views of the USLL reflected the lender’s efficiency. Some could never survive at any capped interest rate. Others would benefit from the USLL and actually do better:

“...while rates of profit came down under the regulation, operations were more profitable than had been anticipated because losses were reduced, costs were cut, and better borrowers came to the loan offices. Thus, while the conception of a fair interest rate held by the National Federation and the Department of Remedial Loans was tending upward, the rate which chattel lenders were willing to accept was coming down. (P.110)

The passage of small loan laws was made much easier by the formation of the American Association of Small Loan Brokers in 1916, and may also have been helped by the ALI. The former group explained its aims to the National Federation of Remedial Loan Associations as an effort to “standardize, dignify, and police the small loan business.” Starting in 1916, RSF staff met often with representatives of this group and the National Federation to discuss revision to the Uniform Small Loan Law as well as strategy for pushing it through state legislatures.
In pushing passage of the USLL in different states, the RSF had little political clout to use. It could and did build alliances with particular interest groups, but mostly it tried to maintain a “non-partisan” stance and simply deployed its neutral expertise. The latter was maintained by a sustained research program that made the RSF the foremost repository of knowledge about credit and small loans. The foundation’s first effort in the credit field was to support empirical studies, as we have seen, and research remained a major portion of its activities throughout this period. Early studies were tightly focused on specific features of the small-loan problem. Starting in 1922 the trustees authorized financial support for a number of pamphlets on various aspects of the small-loan problem. These included general studies of consumer lending, and a legal analysis of the law regulating small loans and remedial loan societies. Over time, the research program grew more general and elaborate, culminating in the volume *Ten Thousand Small Loans*. This study was based on a survey administered at the offices of several cooperating lenders. Unfortunately, as the authors of the study acknowledge, the survey instrument did not elicit much useful information and the sample itself was badly marred by the refusal of many borrowers to cooperate.

Equally serious were the ongoing efforts (led most likely by Nugent) to collect statistics on small-loan lenders. This material occupies several large boxes in the Library of Congress papers and reflects considerable effort beyond simple acquisition of data. Nugent convinced several large chain lenders, most notably Household Finance, to share internal data and later to provide additional data in a format suggested by him. He also collected the reports of most state authorities responsible for consumer lending. Nugent and his assistants used this data for several purposes, but worksheets in the Library of Congress files suggest that his main concern was to estimate the costs of making small loans as a way of dealing with questions of the maximum interest rate allowable under the Uniform Small Loan Law.
The Logic of the USLL

The core logic of the USLL was unusual for its time, and often put the Foundation at odds with both potential allies and those it ostensibly would assist. Bergengren’s dismissive characterization of the RSF as the “42 percent foundation” is only one example of the political problems this approach entailed. The central feature of the USLL, the high maximum interest rate, sounded bizarre to many at the time, and defending it on some occasions led to the charge that the Foundation was simply a front for high-rate lenders.

In the earlier studies various RSF officials had come to the conclusion that the cost of making small loans was so high that no legitimate lender could cover costs, much less make a profit, if restricted by the usury laws that applied to banks and other lenders. The ceilings imposed by these laws varied across state and over time, but were rarely higher than 6 percent per annum. RSF personnel had also concluded that much of the harm done by small loans did not reflect the costs per se, but the lack of transparency. Lenders had devised a large and complicated set of devices whereby they could conceal the total cost of the loan from the borrower, especially if the borrower was uneducated. The underlying logic of the USLL was, then, simple and direct: in return for stating charges clearly and simply, as an interest rate only, the lender would be allowed to charge an interest rate much higher than allowed to a bank. As noted, in most cases the USLL allowed interest rates as high as 3.5 percent per month, or 42 percent per year.

The precise process by which first Ham, then Leon Henderson, and later Rolf Nugent arrived at this prescription is not entirely clear. But in Nugent’s case especially it is clear that in his view, transparency combined with the chance to earn a realistic profit was both necessary and sufficient to encouraging honest lending in this area. Once adopted, this logic was defended aggressively and tenaciously against all comers. In some
cases RSF bitterly opposed lenders who claimed to be helping poor people, but were charging fees and using other devices that might be interpreted as efforts to conceal the true cost of their loans. One example of this type of lender was the so-called Morris Plan banks. These lenders were quite successful for a period, charging six percent on co-signed loans to working people. The Russell Sage Foundation initially viewed the Morris Plan as anathema because at first the Plan used additional charges, and made their loans at a discount, in effect driving the loan’s total cost above 15 percent per annum. Nugent freely acknowledged that 15 percent was still much cheaper than most similar loans, but he objected strenuously to what he saw as the Morris Plan’s refusal to be frank about its charges.

In working on both successive revisions to the USLL and later proposed changes to banking law that would encourage consumer lending, Nugent stressed simplicity and transparency in pricing. Defending the high rates allowed by the USLL was politically more difficult. Nugent was convinced, based on his cost studies, that in most cases a lower rate would simply drive legitimate lenders out of the business. He also believed that encouraging entry would foster competition and so squeeze out any excess profits that might be there at the maximum rate. But this put the Foundation in the awkward position of defending what seemed to many like unconscionable usury. In several state legislatures RSF was asked to explain its connection to lender’s organizations; was it simply an industry group? In others, the claim was made that the Russell Sage Foundation was simply continuing the activities of its namesake, who died long before the Foundation was established.14

What is curious and instructive about Nugent’s insistence on transparency was that privately he would admit that his approach had its downside. Most lending costs are fixed costs; the revenue necessary to make a $100 loan is not much less than that required

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14 Russell Sage was a financier notorious for his aggressive tactics.
to make a $300 loan. Insisting that the rates be identical for these two loans meant either that the larger loans subsidized the smaller, or that there was opportunity for other lenders to skim off the borrowers seeking larger loans. RSF for many years opposed any system that would recognize this problem either by allowing the lender to charge a fee on a smaller loan, or by charging a higher interest rate on a smaller loan. Only in 1934 is there any evidence of flexibility on this point. In a letter to the Edgar F. Fowler of the American Association of Personal Finance Companies, Nugent noted that RSF was proposing a substantial change in the USLL, this time allowing higher rates for smaller loans.15 Until then the Foundation had always viewed transparency as so important that it would sacrifice other goals, and put itself in politically awkward positions, to preserve it.

Loans made under the USLL were significant, but never loomed large as a proportion of all consumer credit in the U.S. Nugent (1934) estimated the volume of outstanding small-loan debt from the admittedly imperfect reports available to him. According to Nugent, at the end of 1932 total debts outstanding under the USLL were about $258 million, or about 860,000 loans at the $300 maximum. This compares to total short-term household debt of $14.4 billion in that year. Short-term cash loans alone were $1.7 billion; the USLL had made only a small dent in this aspect of consumer lending.16 Thus one could hardly claim that the Russell Sage Foundation’s actions led to dramatic changes in over-all lending, or even lending to households.

3. Data and Methods

In 1943, the RSF took stock of its activities on the matter of small loans.

According to one internal memorandum submitted to the trustees: “In the small loan

15 RAC Box 27/Folder 208, letter Nugent to Fowler, 21 December 1934. “Our studies of the costs of lending are now sufficiently complete for us to draw relatively accurate conclusions as to the desirability of a graduated rate. This evidence is supplemented by the experience of several states which now have graduated rates.”

16 Nugent’s own estimates are reported in Table III of his paper, and he compares his findings to Franklin Ryan’s findings, which he reports in his Table I.
field, the Department’s recommendations for remedial legislation have since been enacted in the great majority of states. Thirty-one states and the Territory of Hawaii have effective small loan laws based closely on the Department’s Uniform Small Loan Law. Six other states have enacted laws which have close resemblance to this draft but which are ineffective for one reason or another.” (RAC 28/216, pp.19-20). The memorandum goes on to observe the geographical distribution of enacting states: “It is significant that, with the exception of Delaware, all the states bounded on the south by North Carolina, Tennessee, and Arkansas; on the west by the Dakotas, Nebraska, and Kansas; as well as the three west-coast states have effective small loan laws based on the Department’s recommendations. These states comprise the great industrial area where the ‘loan shark’ once had things his own way.” (RAC 28/216, p.20). In this declaration of victory, the RSF believed that the industrial north and midwest bore the brunt of loan sharking, and that with the addition of the west coast to these enacting states, small lending had been cleaned up.17 Small loan rates, the RSF declared, were now between 1/3rd and 1/20th of those charged by the loan sharks.

Although in the 1940s the RSF seemed happy to take credit for the widespread adoption of USLL, the peculiar distribution of this law, both temporally and geographically, raises several questions about the causes of adoption. Why did some states adopt early, while others adopted later or not at all? Was it simply that the problem of loan-sharking was greater in some states than in others, and therefore that the law was adopted first in the states with the biggest problem? Or it could be that some kind of institutional process was at work, where states adopted a USLL in order to appear legitimate and progressive in dealing with social and economic problems (Meyer and Rowan 1977, Hironaka 2001). Some kind of diffusion process may have been at work in

17 A similar regional pattern was evident in the repeal or relaxation of usury laws. According to Horwitz (1977: 244), usury laws were altered first in the south and west, and only later in the midwest and northeast. The parallel between usury laws and small loan laws is worth exploring further, although we cannot do so here
which proximity to or influence by an early-adopting state led other states to emulate the innovator.

To begin to address these questions, we estimated a set of econometric models of the law’s passage, asking how the characteristics of the several states “explain” the timing and extent of the USLL’s adoption. Several scholars have pursued similar agendas, seeking to explain the timing of a law’s passage. Our efforts are most similar to those of Fishback and Kantor (1998a, 2000), who studied the adoption of various workmen’s compensation laws in the first half of the twentieth century. Other studies that use similar methods include Mahoney (2003), which investigates the passage of state-level securities regulation, and Smyth (2005)’s analysis of the passage of the Uniform Sales Act. Fishback and Kantor modeled passage of state-level workmen’s-compensation legislation in our period as a function of state-level economic, population, and political characteristics. Some of the variables we use here come directly from their own study. The sources for the others are provided in Table 1, which also provides descriptive statistics. Like Fishback and Kantor, we experimented with several classes of econometric models, including limited-dependent panel models. Here we only report a duration (or “event-history”) model, which seems to us the most natural way to represent the law’s passage.

To date the passage of the USLL we rely on a 1935 publication of the Russell Sage Foundation.18 This document contains an appendix that lists, for each state, a brief history of the USSL’s passage and amendment. We should note that the information given here differs slightly from other sources. The discrepancies seem to reflect two issues. First, in some cases a state passed a law similar but not identical to the USLL and only late adopted the actual USLL. In some sources the first law is considered the USLL and in others, not. Second, in a few states the first incarnations of the USLL conflicted

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18 Russell Sage Foundation (1935).
with some features of the state constitution, usually those dealing with usury. Only an amended version of the law – necessarily passed at a later date – actually came into force.

Our dataset consists of observations for the 48 extant states for the period 1906-1930. We include every state-year pair in our dataset, although some state legislatures did not have a session every year. Some scholars who have used methods similar to ours (for example, Mahoney (2003) exclude state-year pairs in which the legislature did not meet. We do not follow him because in a few states the USLL was passed in a special session called for other purposes. That is, in our view a state could always have a legislative session, and that fact that it did not means it simply had no pressing business to conduct. In any case, following Mahoney would make little difference to our results.

We concluded that the best approach is to model passage as a discrete waiting-time process.19 This approach is now fairly common in the literature, and can be thought of as estimating a binary logit model where the dependent variable is one if the state passed the law in that year. The model rests on Efron (1988), which demonstrates that the model is essentially adding covariates to a Kaplan-Meier estimator. We treat each of the 48 states as “born” without the USLL, and “dying” when they pass the USLL. Some states never passed the USLL. This form of right-truncation poses no problems to this type of model. Several other features of the process pose additional modeling challenges. The over-arching problem is that we have relatively few observations and must adopt parsimonious specifications, whatever the model.

We worked hard to contend with two other, distinct issues. First, there is undoubtedly significant unobserved heterogeneity among the states in ways that affected their chances of passing the law. Unobserved heterogeneity in waiting-time models can produce spurious duration-dependence and, because it is like omitting a relevant

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19 These models go by a variety of names; “hazards model,” “event-history analysis,” “failure analysis,” “duration analysis.” They are all the same, regardless of the name. Lee (2005) provides a more technical exposition of the models discussed in this section.
regressor, can bias all coefficient estimates. There is no simple, universally robust way to contend with the problem, but failing to try would be a serious error. The approach we adopt here is a variant on the semi-parametric approach suggested by Heckman and Singer (1984). We treat the states as differing in one, unobserved dimension that is fixed in time. We assume the distribution of this unobserved heterogeneity has only two points of support, implicitly defining a state as having a high or low propensity to pass the law. The model estimates a parameter that measures how different the two groups of states are as well as another parameter that implies the relative sizes of the two groups. Thus our estimated parameters tell us the probability that a state has a high (unobserved) propensity to pass the law, as well as how much difference that high propensity makes. The strengths and limitations of this treatment of our problem are fairly-well known. Fortunately, nothing in our results depends strongly on the treatment of unobserved heterogeneity.

We also grapple with a second problem that has only recently drawn the attention of empirical researchers: spatial dependence. This issue is a central feature of Smyth (2005)’s analysis of the Uniform Sales Act. As he stresses, the reduction of transactions costs the law could achieve mattered most if neighboring states also passed the Uniform Act. This kind of logic cannot have much force with the USLL, however. But one can think of other ways in which the passage of the USLL in one state would reflect passage of the law in “neighboring” states. A legislative campaign in one state may focus attention on an issue in another. In other cases, spillovers from media outlets (such as newspapers and the radio) would mean the citizens of one state could follow the debate as it unfolded in another state. More subtly, the RSF seemed to believe that once some states had passed the USLL, others would want to pass because they wanted to show that they, too, were progressive states. And sometimes the USLL’s passage in one state directly affected its neighbors; when New Jersey adopted the USLL, for example,
Delaware saw an influx of high-rate lenders who continued to operate in New Jersey markets. Our approach to the spatial dependence issue is a variant on the approach most commonly used in the literature. We model the probability of passage as a function of both observed, state-level variables (such as banking structure) and a term that takes into account the possible effect of other state’s past behavior.

More specifically, we employ a proportional-hazards approach where the baseline hazard rate is piecewise linear. The instantaneous probability (or hazard rate) that a state first passes the USSL in year $t$ is

$$h_i(t | \nu) = h_0(t) \exp(X'_{i,t} \beta + \rho W'_{i} Y_{t-1})\nu_i$$

(1)

Where $h_i(.)$ is the probability that a state passes the law, given that it has not yet so (the discrete hazard rate); $t$ is years since 1906; $X$ is the matrix of covariates, with $i$ indexing states, and $t$ indexing years. $\beta$ is a parameter vector to estimate, and $\nu$ is an “error term” that corresponds to the factor generating the unobserved heterogeneity. The baseline hazard ($h_0$) does not have to be specified, so long as the implicit proportional-hazards assumption holds.

$\rho$ is our spatial correlation coefficient, $W_i$ is the $i$-th row of a (48x48) row-normalized weighting matrix $W$, and $Y_t$ is a vector of zero-one variables that are one if state $i$ has passed the USLL by year $t$. The $W$ matrix can be thought of as assigning the distance dimension to the relationship between states. We experimented with several different specifications of the $W$ matrix. In our model, as in most, the matrix $W$ must be pre-specified, it cannot be estimated. The most natural is also the most widely used; element $i,j$ of (unnormalized) $W$ is one if state $i$ and state $j$ are neighbors. This approach makes sense if we think the spatial dependence reflects overlapping newspaper markets or direct market effects as high-rate lenders flee one state for its neighbor. But other
possible causes of spatial dependence require a different W matrix. States may be more influenced by states that are similar than they are by states that are near them (that is, distance in Blau space may be more important than distances in physical spaces). Michigan may be more influenced by changes in other manufacturing states than by changes in its neighbor Indiana. In some specifications, for example, we constructed a W matrix that reflected some measurable state characteristic, such as industrial structure.

The estimates reported for the hazards models here were all estimated with the EM algorithm. Maximum likelihood is not appropriate in this case because the parameters of the heterogeneity distribution are not guaranteed to lie on the interior of a compact set. Thus our model fails the regularity conditions for ML.

Figure 1 displays the Kaplan-Meier survivor function, or the proportion of states that had not passed the law by that year. The law was not passed in one fell swoop, lending credence to the idea that its diffusion required either the Foundations efforts or cross-state imitation.

4. Results

The right-hand side variables are defined by year, but in some cases are constructed as linear interpolations between two decennial censuses. Table 1 lists all the variables, their definitions, and sources. Table 2 reports econometric results. Given the very small dataset, we were forced to estimate very parsimonious models, and in the end only report specifications with variables that have a significant effect on the probability of the law’s passage. We begin with specification 1, a simple binary-logit model. The dependent variable here is one in the year the law passed, and zero otherwise. Once a state passed the USLL, it was dropped from the data. This model is very similar to the ones we prefer – specifications 2 and 3— and form a useful starting point.
Three variables correspond to forces often mentioned by the RSF in its discussion of legal reforms. More urban states (perurban) were more likely to pass the law, as were states with larger manufacturing firms (largefirms). Holding other effects constant, states with higher wages in manufacturing (manwrat) were less likely to pass the law. The significance of these first two variables largely substantiates the Foundation’s perception that the “problem” the USLL was intended to solve was especially acute among poor, urbanized industrial workers with access to informal credit markets. States where the “problem” was bigger were more likely to adopt the USLL. When wages among the target populations were higher, there was less need for such borrowing by workers and hence less need for the USLL.

Two additional covariates have consistent, strong effects, but were never explicitly mentioned by the Foundation. States with more credit unions (creditunion) were more likely to pass the USLL, while states with more state bank liabilities (statebank) were less likely to so do. The number of credit unions (which is the stock of credit unions in that state in that year) is difficult to interpret. As we saw, at some level credit unions and the USLL were substitute solutions for the same problems, and the credit-union movement displayed more than a bit of hostility to the USLL. The credit union variable may be just a striking proxy for a state’s political culture; states that were willing to support credit unions were also amenable to the USLL. We intend to pursue this hypothesis in future work, by using proxies for a state’s progressive political orientation to see whether the credit-union effect is simply a proxy for something else.

The state bank variable is a most surprising result, and very interesting. Virtually any measure of the size or prevalence of state-chartered banks works the same in our specifications. On the other hand, no measure of federally-chartered banks has any impact on the probability of the USLL’s passage. So whatever this reflects, it is peculiar to state banks, and should not be interpreted as reflecting some overall banker’s hostility.
to the USLL. Two possible interpretations suggest themselves, although at this point our interpretation must be tentative. Given the minimum capitalization for federal banks, state-chartered banks in this period were usually much smaller and more common in relatively remote areas. Our state-bank variable may show that in such areas, state banks either played an indirect role in the lending the USLL intended to drive out (perhaps by financing those in the high-rate loan business), or that state banks were nervous about altering usury laws for fear of generating entry by other financial intermediaries capable of competing in small, rural markets. Usury laws, when they impose a binding constraint, create financial repression that can privilege some financial intermediaries by allowing them to obtain capital at below-market rates. State banks might have feared the alternative investment possibility inherent in the USLL; more likely, they took a hard line on anything that might affect the usury laws that gave them an advantage in the competition for household deposits. Mahoney’s (2003) results for the adoption of state-level securities regulations (“Blue-Sky Laws”) in our period suggests a complementary interpretation. He found that state banks effectively lobbied to prevent regulatory provisions that would enable securities salesmen to compete for deposits. (For more discussion of the political forces Mahoney stresses, see Macey and Miller (1991). Something like this may be at work with the USLL. What is curious is that the Russell Sage Foundation files contain almost no references to opposition by bankers!

We fixed one of the points of support for the unobserved heterogeneity treatment at “1” and thus only estimated the location of the other support, and the probability associated with each. We find that something like 6 percent of states had the higher propensity to pass the USLL. We could not estimate the location parameter very precisely, meaning that we cannot reject the null hypothesis of no difference between the two types of states.

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20 Rockoff (2003) surveys the development of usury laws in the U.S. to 1900.
Despite considerable effort with a variety of specifications, we were unable to find any evidence of spatial dependence in the passage of the USLL. (Put more precisely: our estimated spatial correlation coefficients were never significantly different from zero. As inspection of specifications 2 and 3 shows, however, the estimated regression coefficients are sensitive to the inclusion or redefinition of the spatial correlation effects). This is most surprising, given current discussions and the hints to this effect in the archival material mentioned above. We tried two ways to get at this issue. In some specifications the spatial effect is limited to geographic neighbors. (In a variant on this, we also used a W matrix in which all northern states were neighbors of northern states, and all southern states were neighbors of all southern states, as in specification 2). We also experimented with defining neighbors according to some characteristic; for example, in one specification, states with similar populations, or industrial structure, were viewed as neighbors. We also constructed W matrices out of two different characteristics, for example, states were neighbors if they were both southern and similar populations. (specification 3)

None of our efforts found evidence of spatial effects. Models of spatial dependence are still evolving, and it might be that a different approach would uncover relationships not on display here. But our best efforts suggest that the Foundation exaggerated the spill-overs from state to state. Put differently, the logic that Smyth (2005) identifies for the Uniform Sales Act, which provides strong incentives for states to have the same law as their neighbors, does not apply for small loans. States passed the USLL on the basis of their own lights, and not because what their neighbors, broadly defined, were doing.

_Dogs that don’t bark_
Given the size of our dataset we had to be very judicious in including regressors. The specifications reported in Table 2 do not include several variables that we tried, but removed because they had little explanatory power. Note first that regional dummies, such as a dummy for Southern states, are encapsulated by the heterogeneity treatment we employ. Other results were admittedly a bit surprising. For example, we experimented with the percentage of a state’s population that is foreign-born, or black, or illiterate. None had a strong effect. This was surprising, given the Russell Sage Foundation’s view that high-rate lenders preyed on the vulnerability of the foreign-born, blacks, and the illiterate. Our findings probably reflect the correlation of these variables with variables already included in the model. We also examined whether the partisan affiliation of a state’s governor and legislature affected chances of the law’s passage. Here, again, our results were negative. We should note that these variables are endogenous, and their interpretation must be colored by that observation. But the lack of partisan effect is consistent with the Foundation’s view that opposition to the law had little to do with party affiliation, or more precisely, that the law was backed by coalitions of progressive republicans and some democrats.

We were especially concerned that the credit union variable might be a proxy for something else, perhaps a progressive political culture. Some simple checks do not support that view. The proportional of the presidential vote that went to T.R. Roosevelt in 1912, often used as a measure of progressive tendencies in a state, had no independent effect in an augmented version of specification 1. Inclusion of this additional variable also had little effect on the credit-union variable. We also experimented with the some other progressive indices used by Fishback and Kantor. We constructed dummies that are one if various measures favored by the progressives were in force in that state in the year prior to the USLL’s adoption. These measures include “good government” laws such as the presence of a merit examination system for state government jobs, or direct primaries
for elections. To our great surprise, the only such variable that had any effect – the state
merit examination variable – had a significantly *negative* effect on the USLL’s passage.
We do not include it in the models reported in Table 2 because inclusion of this variable
does not alter the sign or magnitude of the other estimated effects.

5. Conclusions

Regulating credit markets and financial institutions is not an uncommon measure, but doing so for social purposes is unusual. Today, a small number of federal laws like the Truth-in-Lending Act (1968), the Equal Credit Opportunity Act (1974), the Community Reinvestment Act (1977), and the Home Mortgage Disclosure Act (1975), regulate credit markets and mandate disclosure of information that allows for more public oversight of lenders. At first blush, it is easy to assume that these public measures somehow reflected or continued the consumer-protection and anti-discrimination initiatives of the late 1960s. But in fact, this kind of measure is much older. From the early 20th-century and continuing into the late 1930s, the Russell Sage Foundation pursued the idea that uniform laws passed at the state level could materially improve the situation of poor people as debtors by regulating the market for small loans. Effective laws would either force misbehaving lenders to leave the market, or force them to behave properly.

The energy and resources devoted to this project by the RSF over multiple decades were considerable. Partly, this effort reflected the kind of resources the RSF could deploy. A foundation could not deliver votes or other forms of political muscle, nor could it spend tens of millions of dollars, but it could deliver expert knowledge and a legal template. An emerging constellation of major foundations seemed to negotiate among themselves an informal division of expert labor, but one with more fluidity than that which emerged among the professions (Abbott 1988). The Twentieth Century
Foundation had jurisdiction over credit unions, while the RSF focused on small loan laws, and conflict between the two foundations occurred at the boundary between their respective jurisdictions as they devised separate and sometimes competing solutions to credit problems. But however intense the competition between the foundations, this competition did not translate directly into competition between their favorite programs: more credit unions also increased the likelihood of passage for the USLL.

As a type of public policy, uniform small loan laws played to the strengths of the RSF. The RSF appeared not to be pursuing its own self-interests, but rather supporting a law whose ostensible beneficiaries (poor borrowers) almost never acted on their own behalf. Thus, the RSF strategy epitomized foundation-based philanthropy. The design and passage of such a law required expert knowledge, and its conformity with the larger uniform law project of the legal profession simply underscored its timeliness and suitability. Such measures are politically attractive to legislators and governors because passage publicly signals to voters that politicians are “doing something,” and addressing a problem with a law is much cheaper than doing so with an administrative apparatus (particularly if the latter has to be established de novo). And if the supporters (the constituencies of the AILA, AAPFC, and perhaps organized labor) of a small loan law can muster more political pressure than the opponents (the traditional lenders), then so much the better.

The historical evidence clearly demonstrates how hard and how long the RSF pushed the USLL initiative. We do not know, however, whether RSF efforts were causally related to the passage of these laws. Did an RSF push in a particular state increase the chances of passage, or did the RSF exert itself most in states where the conditions for passage were already ripe? Our quantitative results await further refinement, but at this stage it seems that uniform small loan laws passed in states when (and to a lesser extent, where) the problem was greatest. And the problem appears to have
been driven in large part by the structure of employment: salary-lenders operated more vigorously when large manufacturing firms assembled numerous employees in one place. If this result holds up, then it helps to explain the conflict between the RSF and the Twentieth Century Fund, on the one hand, and their corresponding programs, USLL and credit unions, on the other. Large employers may offer the best opportunities for salary-lender and loan sharks (whose activities will be curtailed by a small loan law), but they are also good organizational sites for the establishment of credit unions.

Finally, the possibility of cross-over effects needs to be investigated more thoroughly. We noted above that the geographical distribution of USLLs roughly parallels that of the repeal of usury laws. If, as RSF staff argued, usury laws which unrealistically restricted interest rates forced lenders to evade usury laws and forced borrowers to turn to loan sharks, then the problem would have been greater when the difference between market interest rates and the statutory cap was greatest. Thus, the pattern of usury laws across states may have influenced the passage of USLL’s. In addition, if small loans were typically obtained by low wage workers, unemployed borrowers or disabled workers who needed emergency funds, then the passage of workman’s compensation laws, unemployment insurance laws, or minimum wage laws may also have had an effect on USLL.
Abbreviations:

AAPFC: American Association of Personal Finance Companies (previously the AILA)
AILA: American Industrial Lenders Association
ALI: American Law Institute
CUNEB: Credit Union National Extension Bureau
HFC: Household Finance Corporation
LRB: Legal Reform Bureau
NCCUSL: National Conference of the Commissioners on Uniform State Laws
RSF: Russell Sage Foundation
USLL: Uniform Small Loan Law

References:

Manuscript Collections:

Library of Congress:

The records of Russell Sage’s Department of Remedial Loans are all held in the Library of Congress manuscripts division. They are organized by boxes only. LC x means “Library of Congress collection Box x.”

Rockefeller Archives Center:

Some office correspondence was kept after the material was given to the Library of Congress on the grounds that it contained sensitive materials. This material is organized by folders within boxes, so RAC x/y means Rockefeller Archives Center collection Box x/Folder y.

Credit Union National Association Archives, Madison, WI.

Letters of Roy F. Bergengren 1921-1937 Box B2A/01; and Filene correspondence 1925-32 B4A/03. Referenced with the prefix: CUNA-A.

Published Sources:


National Federation of Remedial Loan Associations, 1912. *Bulletin 1:1*.


Table 1: Sources and descriptive statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
<th>Mean (std. dev.)</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing wages</td>
<td>Ratio of state manufacturing annual earnings to U.S. manufacturing earnings, 1899, 1904, 1909, 1914, 1919, 1921, 1923, 1925, 1927, 1929, 1931 and interpolations in between.</td>
<td>.99 (.23)</td>
<td>Interpolation between census years; from F &amp; K</td>
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<tr>
<td>Large firms</td>
<td>Percentage of Value Added in Establishments with More than $1 million in value added for years 1904, 1909, 1914, 1919, 1929, 1939 with straight-line interpolations for years in between</td>
<td>.43 (.19)</td>
<td>Interpolation between census years; from F &amp; K</td>
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<tr>
<td>Urban</td>
<td>Percentage of state’s residents resident in cities of more than xx thousand</td>
<td>.41 (.21)</td>
<td>Interpolation between census years; from F &amp; K</td>
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<tr>
<td>Credit unions</td>
<td>Number of credit unions formed in that state to that date</td>
<td>.42 (1.59)</td>
<td>Department of Labor reports</td>
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<tr>
<td>State banks</td>
<td>Average state bank liabilities</td>
<td>1.58 (2.88)</td>
<td>Federal Reserve’s All-Bank Statistics</td>
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</tbody>
</table>

Note: F & K is Fishback and Kantor (2000), as posted to the web at http://uaeller.eller.arizona.edu/%7Efishback
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<tr>
<th>Type of model</th>
<th>1</th>
<th>2</th>
<th>3</th>
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<td>Binary logit (with robust standard errors) [dy/dx]</td>
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<td>EM/proportional hazards</td>
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<td></td>
<td>(-3.60)</td>
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<td>(-1.37)</td>
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<td>Large firms</td>
<td>4.800</td>
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<td>Log-likelihood</td>
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Table 2, continued

(standard errors in parentheses)

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<td><strong>Spatial correlation</strong></td>
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<td>South</td>
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<tr>
<td>Border</td>
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<tr>
<td>Population</td>
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<td><strong>Unobserved heterogeneity</strong></td>
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<td>Location of support</td>
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<tr>
<td>Probability</td>
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<td>.062 (&gt;3)</td>
</tr>
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</table>

Notes:

The standard errors from specification one are estimated by White’s method. In specifications 2 and 3, the standard errors are estimated from the inverse observed information matrix.

The information reported in this continuation of Table 2 is not relevant to the first specification.

In specification 2, the W matrix consists of a dummy for Southern states. In specification 3, there are two W matrices, one for whether the states border each other, and the second for their populations. The two spatial correlation coefficients are constrained to sum to one.

The unobserved heterogeneity supports are standardized to have a mean of one. What is reported is the effect on the baseline hazard of being a “likely to pass” state, and the probability of being such.
Figure 1: Kaplan-Meier survivor function