Penalties assessed against consumers who defaulted on installment debt evolved in the 1920s and 1930s. Stiff penalties characterized the 1920s when the nascent installment buying phenomenon was booming and defaults were often by “skips” who were attempting to defraud sales finance companies. But in the early Great Depression years, legal and public opinion saw defaulters not as skips but as victims of a brutal economic downturn, unfairly treated by consequences designed without unemployment-induced default in mind. Moreover, some observers recognized that borrower efforts to avoid default was depressing consumer spending. Courts and legislatures subsequently lessened the consequences, perhaps not fully anticipating that consumers would respond with increased frequency of defaults.
From Skip to Hapless Victim:

Interwar Changes in the Cost of Default

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There was a time in this business (I remember it well), fifteen or twenty years ago when all of us thought we had to have some big bruiser or bouncer working for us in the collection department who used those hard-boiled methods, but those things are out of the picture, if we want to assume the position that I think this business has a perfect right to assume. . . .[W]e have got to do things in a manner in which they should be done, in a business-like way, if we want to be recognized as a legitimate business.

Mr. Courtney, President of the National Association of Sales Finance Companies
Speaking at the Annual Meeting, September 1935

An economy that apparently hit bottom nearly three years ago is struggling to recover. The unemployment rate seems stuck above 8 percent, while the rate that includes underemployed and discouraged workers hovers over 15 percent. Outstanding non-mortgage consumer credit is about 21 percent of disposable income. Over one-fourth of homeowners are underwater, owing more on their mortgage than their home is worth. About one-eighth of mortgages are delinquent or in foreclosure.

1National Association of Sales FinanceCompanies. “Fair Practice in Handling Repossessions.”
2Data from FRED, Federal Reserve Bank of St Louis.
Today pundits discuss, and occasionally decry, “strategic default” as if the *choice* to pay or default on debt contracts is somehow new. But in good times and bad, families face choices. Families burdened with debt can choose to pay off the debt as scheduled, default through non-payment or reduced payment, or receive bankruptcy protection that discharges (cancels) the debt. What choice a family makes is influenced by each choice’s costs and benefits.

In good times, fewer families consciously face the choice of pay-or-default. They contracted a debt with full intent to repay. Their income continues as expected. No unexpected large expenses disrupt the family’s plans. The debt is ultimately paid in full.

In bad times, the pay-or-default choice is faced by more families. Unemployment, a cut in pay, unexpected medical expenses: any of these events can place before a family a conscious decision. Do we continue to make these debt payments, or not? Paying down debt following a cut in income may require liquidating some assets, or it may require cutting back on current consumption expenditures. Defaulting on debt will lower a credit score, and if friends and family find out, it may be embarrassing.

“Strategic default” implies that families which could figure out a way to make payments – drawing down assets, or cutting back elsewhere – are instead choosing to default. Have the costs of default fallen? Have the benefits of paying declined? We can gain insight into 21st century consumer behavior by turning our focus to the 1920s and 1930s.

Over the course of the interwar period, the costs of default on consumer debt declined. Not surprisingly, the likelihood of default rose over the same period. Why did the consequences of default change over the interwar period? I believe that three forces combined in the interwar years to lower the cost of default:

• Perceptions of who was borrowing became more favorable
• Perceptions of why borrowers were defaulting shifted from skips out to beat the system to victims of a depressed economy

• Perceptions of the effect of avoiding default began to include the macroeconomic consequences of reduced consumption spending

Although installment plans had first been offered to retail purchasers in the United States in 1856 by Singer Sewing Machines, consumer finance did not become commonplace until the 1920s when thousands of sales finance companies were established, sales financing was extended to an ever-lengthening list of goods, and was used by an ever-increasing number of families.\(^5\) But the penalties assessed upon breach of contract — default — continued to be very severe, reflecting an earlier time when consumers who bought “on time” were perceived as inherent bad risks who required aggressive discouragement from deliberately taking advantage of the sales finance company. The result was as sales finance companies hoped: default rates were quite low in the 1920s.

Families and individuals who once would have been ashamed to use installment credit to finance consumer purchases were, by 1929, hailed in the popular press as wise financial managers. But rapid growth in installment buying made some observers nervous. Were default rates low in the 1920s simply because economic times were good? At the first sign of financial trouble, would indebted households walk away from their installment contracts? The answer came in the early years of the Great Depression. Households did not default en masse. Unemployment rates increased sixfold between 1928 and 1932, but repossession rates only doubled.

Of the four possible ways to avoid default — increasing income, increasing liabilities via borrowing or refinancing, decreasing assets to pay debts, or decreasing other consumption — families in 1930 found the only feasible option was decreasing consumption. Aggregate consumption fell markedly, turning a recession into the Great Depression.\(^6\)

The macroeconomy was taking it on the chin, but the sales finance industry was, in the words of the Census Bureau, “a safer investment in 1933 than cash in banks.”\(^7\) No doubt the sales finance industry was happy but few others were. In the context of the Great Depression’s unprecedented levels of unemployment, severe default penalties were not preventing fraud; they were penalizing those already battered by the economy. Courts, New Deal bureaucrats, and state legislatures combined to lower default penalties.

These changes did not occur away from the public eye nor were they inconsequential. Otherwise obscure legal decisions found their way into the trade publications of the sales finance industry. Popular press articles advised readers they could now walk away from installment contracts and lose nothing. In 1938, as unemployment rose from 14 to 19 percent, repossessions tripled.\(^8\)

In one sense, the interwar years were unique: installment buying as a widespread phenomenon was new and institutions were adapting to changing circumstances. We can hardly argue that home mortgages or credit cards are new in the 21st century. But systems designed to punish creditors who choose to walk away from debts in good times may be excessively punitive — with undesired macroeconomic consequences — in bad times.\(^9\) High costs of default lead to

\(^{6}\) Olney, “Avoiding Default.”


\(^{9}\) The 2005 bankruptcy reform, which made it more costly and more difficult to discharge unsecured debt through bankruptcy, has been linked to greater mortgage defaults. Wenli Li and Michelle J. White, “Mortgage Default, Foreclosure, and Bankruptcy,” NBER Working Paper 15472, November 2009. Li, Wenli, Michelle J. White, and Ning Zhu. “Did Bankruptcy
families trying to avoid default and can help to explain the unusually large drop in consumption spending in the Great Depression. Can the cost of default also help to explain the except-for-the-1930s unprecedented drop in consumer spending in 2008 and 2009, and the sluggish growth of consumer spending since?

The Development of the Retail Sales Finance Industry

Growth in the 1920s in retail installment financing was rapid. Cars symbolized much of the boom: in 1929, 15 percent of households bought a car on installments, triple the percentage that had done so just eight years earlier.\(^{10}\) In 1919, just 25 to 30 percent of furniture, 20 percent of household appliance, and 50 percent of sewing machine purchases had been financed on installments.\(^{11}\) But by the late 1920s, most durable goods were bought on installment; 65 to 70 percent of automobiles, over 70 percent of furniture, 80 percent of household appliances, and up to 90 percent of musical instruments and pianos were purchased on time.\(^{12}\) The number of sales finance companies extending credit to households increased as well, jumping from less than 100 in 1920 to well over 1,000 by 1928.\(^{13}\) Outstanding consumer debt shown in Table 1 and Figure 1 doubled between 1923 and 1929, increasing from $3.9 billion (5.6 percent of income) to $7.6 billion (9.2 percent of income).\(^ {14}\)

\(^{9}\)(...continued)

\(^{10}\)Olney, “Avoiding Default,” Table II.

\(^{11}\)Olney, “When Your Word is Not Enough,” Table 3. Pianos had long been financed on installments and even by 1919 over 80 percent of piano purchases were on installments.

\(^{12}\)Olney, \textit{Buy Now, Pay Later}, p. 95; Seligman, pp. 100-108.


\(^{14}\)Olney, \textit{Buy Now, Pay Later}, Table 4.1.
The products sold to consumers on installments also changed in the 1920s. “Productive” debt characterized the late nineteenth and early twentieth centuries when seamstresses and piano teachers buying sewing machines and pianos on installments used their purchases to generate income with which to make installment payments.15 “The development of a definite consumer or ‘family’ market [for sewing machines], particularly after 1856, increased the number of potential purchasers to whom a cash purchase was an impossibility, but who, if they had a machine could increase their earnings or savings and thus pay for it.”16 By contrast, “consumptive” debt was the hallmark of the 1920s. Families purchased automobiles, furniture, appliances, musical instruments, phonographs and radios, jewelry, and household furnishings — goods that were neither income-generating items nor necessities. Installment buying of the 1920s simply circumvented the need to postpone purchases while saving up the good’s price.

Changing Attitudes

Alongside the expansion of credit-financed consumption was a fundamental change in society's attitudes toward the propriety of incurring household debt. In 1907, William Jennings Bryan wrote an article for the Ladies Home Journal entitled, “The First Rule for a Husband and Wife.”17 Its message – Rule #1: live within your means – was typical of the times. Milan Ayres wrote in a 1926 report commissioned by the American Bankers Association, “During the nineteenth century the things that a self-respecting, thrifty American family would buy on the installment plan were a piano, a sewing machine, some expensive articles of furniture, and perhaps sets of books. People who made such purchases didn't talk about them. Installment

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15Caldor, Financing the American Dream, pp. 100-103 discusses the distinction between “productive” and “consumptive” debt and society’s reactions to each.


buying wasn't considered quite respectable.”18 To convey the general attitude of society toward consumer credit, Clyde Phelps wove together several quotes from articles published in popular and professional journals between 1926 and 1928.19

The use of credit, and particularly the instalment type, by consumers was characterized as “an economic sin,” as “enervating to character because it leads straight to serfdom,” as setting “utterly false standards of living,” causing judgment to become “hopelessly distorted,” and tending to “break down credit morale.” It was attacked as “marking the breakdown of traditional habits of thrift,” as tending to “weaken the moral fiber of the Nation,” and as dangerous to the economy of the United States. It was accused of “breaking down character and resistance to temptations, to extravagance, and to living beyond one's means, breeding dishonesty,” causing “many young people to get their first experience of being dead beats through yielding to temptations that are placed before them,” and “creating a new type of criminal or causing professional dead beats to shift to this new and highly lucrative opportunity.”

Charles Hardy claims “changing notions about economy, frugality, saving, and thrift” are an important factor in the rise of credit.20 He places the beginnings of these changes at the end of the Crisis of the 1890s but notes that “the general collapse of inhibitions against borrowing . . .

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Attitudes changed to such an extent in the first twenty years of this century that, according to Frederick Lewis Allen, by the 1920s “people were getting to consider it old-fashioned to limit their purchases to the amount of their cash balances.” And Rolf Nugent notes that “in the 1920s it became common practice for dealers in durable household goods to assume that each prospective purchaser was a deferred-payment customer.”

The Sales Finance Company Handled Defaults

There were three parties involved in any installment sale: the buyer, the seller, and the sales finance company. In the presence of the good’s seller, the buyer completed a brief credit application, provided a cash or trade-in down payment, and signed a contractual agreement to make regularly scheduled (typically monthly) payments. Possession but not legal title of ownership of the good then transferred to the buyer.

Rather than servicing it in-house, sellers in most industries sold the installment contract to a sales finance company. Buyers sent the monthly payments either directly to the finance company or to the seller who then forwarded the payments to the sales finance company. Enforcing the installment contract was the sales finance company’s responsibility. Figure 2 depicts the relationships.

When a buyer’s payment was late, the sales finance company stepped in. The installment contract spelled out the “creditor remedies”: the actions legally available to the sales finance company. The “big bruiser or bouncer working . . . in the collection department” of the company

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21Hardy, *Consumer Credit and its Uses*, p. 129.
22Allen, *Only Yesterday*, pp. 139-40.
enforced the contract provisions — as well, no doubt, as some provisions not in the contract. Because legal title did not transfer until the contract was completed, the sales finance company could legally repossess the good for nonpayment. In the 1920s it was not uncommon for repossession to occur when payments were as little as ten days late.

When a good was repossessed, the sales finance company stood to lose little. Sales finance companies resold repossessed goods and applied the proceeds, net of transaction costs, to the outstanding balance. The net proceeds could easily cover the balance due — and then some: sales finance companies retained the surplus of the good’s net value over the balance due. Down payments of 25 to 33 percent were common. Contract terms for all but pianos were typically 12 to 18 months. Buyers, as indicated by Table 2, accumulated equity rapidly.

Repossession rates, 1925 to 1939, are given in Table 3 and Figure 3 along with unemployment rates. Repossession and unemployment rates are clearly correlated. Between 1929 and 1932, every 5 point change in the unemployment rate generated an increase in the new car repossession rate of 0.6 percentage points. But the relationship depicted in Figure 3 changes over time. In 1938, when unemployment jumped by 5 points, the new car repossession rate jumped by more than 2 percentage points.

Figure 3 also includes the nonfarm home foreclosure rate. Home foreclosures increased at more than twice the rate of car repossessions. The home foreclosure rate between 1929 and 1932 increased 1.4 percentage points for every 5 point jump in unemployment.

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24The phrase is from the speech of Mr. Courtney, President of the National Association of Sales Finance Companies Speaking at the Annual Meeting, September 1935, as reprinted in National Association of Finance Companies, “Fair Practice in Handling Repossessions.”

25Olney, Buy Now Pay Later, Table 4.8.

26The auto repossession rate is calculated relative to the flow: repossessions per contracts written in that year. The home foreclosure rate is calculated relative to the stock: foreclosures per structures under mortgage in that year. The effect of this difference is minor; auto installment contracts were predominantly 12 months long, and never more than 24 months long.
The industry was concerned in the 1920s with “skips” — dishonest borrowers who “skipped town” to avoid paying their debts. But their concern may have been misplaced even in the 1920s. One sales finance company reported that of its auto repossessions during 1927, 70 percent were attributable to “poor credit risk” and unemployment and just 6 percent were “skips.” The National Association of Finance Company (NAFC) data recounted in Table 3 show relatively low rates of skips from 1928 on, the years for which data are available. A government study of consumer bankruptcies filed between 1920 and 1930 revealed that only 5 percent were attributed to outright dishonesty.

Studies of repossessions demonstrated that those who defaulted in the 1930s were typically victims of unexpected financial change. Of cars repossessed 1933 to 1937, more than 80 percent of repossessions were attributed to financial overextension and “reverses,” but less than 15 percent were due to “moral risk.” A similarly low share of repossessions of appliances, 1937 to 1938, was attributable to irresponsibility or unwillingness to pay.

Most repossessions occurred early in the installment contract. More than 50 percent of car repossessions, as seen in Table 4 and Figure 4, occurred before the third payment. Contemporaries noted “Once past the first few payments, the purchaser will move heaven and earth to protect his ‘equity.’”

Sales finance companies suffered almost no losses, even in the worst of the depression. The loss rate (dollar losses of sales finance companies relative to total dollar volume of contracts

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27 Hanch, “Repossession and Other Experience,” p. 2.
28 Sadd and Williams, Causes of Bankruptcies Among Consumers, pp. 10-11.
29 Plummer and Young, Sales Finance Companies and Their Credit Practices, p. 169-171. “Moral risk . . . includes a variety of sins on the part of the purchaser.” “Financial risk” covered “purchasers who overestimated their ability to pay...” “Reverses” included unexpected “financial reverses (loss of job, reduction of salary, . . .)” as well as “personal reverses (illness, injury, or death . . . in the family).”
30 Plummer and Young, pp. 193-194.
outstanding) shown in Table 5 peaks in 1930 but is below 1 percent throughout the rest of the decade.

**The Likelihood of Default: Theoretical Considerations**

Economic theory of contracts contends that penalties for breach of contract can be devised that are Pareto efficient, leading to decisions regarding fulfillment versus breach of contract – strategic default – that are in the combined best interests of both parties to the contract. At first blush it seems installment contracts for sale of consumer durable goods should conform to the theory. But two aspects of consumer installment financing in the interwar years are relevant: part of the penalty incurred by the debtor was not received by the creditor, and not all costs of preventing breach were borne privately. Changes over the interwar period in the penalty assessed when installment contracts were breached reflected the evolution of these two aspects.

Default penalties are needed because installment contracts are subject to both adverse selection and moral hazard risks. To address adverse selection risk, installment contracts contain penalties triggered upon default to discourage the high risk applicant from entering into a contract. Low risk applicants are unlikely to be dissuaded from entering contracts even when default penalties are severe because they do not expect to incur the penalty. To address moral hazard risk, contracts provide for monitoring of buyer behavior. The promptness of payments is one way to monitor behavior. Early installment contracts, reflecting lenders’ wariness that borrowers would “skip” town, also monitored buyers by requiring notification whenever the chattel good was transported out of the community. Failure to notify was considered breach of contract and could trigger repossession.

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32 An early classic in the field is Shavell, “Design of Contracts.”
Let’s begin with an overview of the formal model that follows. Installment buyers face a tension between two sets of costs, only one of which is under their control. “Damages” refer to the costs buyers incur if they default: What is the penalty assessed by the sales finance company for breach of contract? “Precaution expenditures” refer to the costs buyers incur to avoid defaulting: What are we as a family willing to do to keep the car? The greater the damages, the more buyers will avoid default by incurring precaution expenditures, and the less likely they will be to default. The contemporary concern with “strategic default” may reflect lenders’ beliefs that borrowers are not incurring “enough” precaution expenditures.

We can imagine circumstances that might change the level of precaution expenditures. A decline in future creditworthiness due to default and repossession could increase the damage incurred by the defaulting borrower, but would not change the damage received by the lender. A social stigma attached to repossession would also increase the damage incurred disproportionately by the borrower, again leading to increased precaution expenditures. In either case, relative to what would happen in the absence of creditworthiness or social reputation effects, for the same penalty-upon-default specified in the lender’s contract, buyers would increase their precaution expenditures and be less likely to default.

Now let’s formalize those thoughts. Economic analysis of contracts considers the theoretical properties of remedies for breach of contract — in the present case, default penalties — that result in Pareto efficient decisions regarding fulfillment or breach of contract.33 Presuming the existence of an optimal frequency of default, remedies may be too lax, resulting in fewer defaults than optimal, or may be too severe, resulting in greater than optimal default frequency.

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33 This section draws heavily from Cooter and Ulen, Law and Economics, chapter 7.
Damages are assessed against the buyer to compensate the sales finance company for its lost income following default. “Perfect damages” make the sales finance company indifferent between fulfillment and breach of contract. Repossession with return of the surplus to the buyer would constitute perfect damages. If the repossessed chattel’s net value was insufficient to cover the balance due, then repossession with deficiency judgment, wherein the sales finance company could sue or attach wages for the remaining balance due, would constitute expectation damages. The standard practice of sales finance companies in the 1920s, repossession and retention of the surplus, constituted excessive damages because the company was more than compensated for its expected loss.

Buyers undertake “precaution expenditures” to enhance their likelihood of fulfilling the contract. Precaution expenditures may be pecuniary, such as the cost of borrowing money in order to complete the installment contract, or nonpecuniary, such as lost utility from reducing other consumption or from substituting additional work hours for leisure hours.

The damages and precaution expenditures enter into a game theoretic calculus to determine the likelihood the buyer will default.

Let $x$ measure precaution expenditures undertaken by the buyer to prevent default

$D$ measure damages (default penalty) received by the sales finance company from the buyer following default

$p(x)$ measure the probability the buyer will complete the contract. $p(0) = 0$, $p'(x) > 0$, $p''(x) < 0$

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34 Definitions are from Cooter and Ulen, *Law and Economics*, p. 204.

35 Cooter and Ulen, pp. 225-228.

36 The presentation of the standard model follows Cooter and Ulen, pp. 223-225.
\( R_c \) measure the revenue to the sales finance company if the buyer completes the contract, received with probability \( p(x) \)

\( R_d \) measure the revenue to the sales finance company if the buyer defaults, received with probability \( [1 - p(x)] \). \( R_d \) does not include damages, \( D \).

The relationship between precaution expenditures \( (x) \) and the likelihood of finishing the contract \( (p(x)) \) is shown in Figure 5. At low levels of precaution expenditures, a small increase in what the family will do to avoid default has a relatively large effect on the likelihood they will finish the contract. At high levels of precaution expenditures, further efforts on the family’s part will have little marginal effect on the likelihood they will finish the contract. Or, in math language: first derivative positive, second derivative negative.

Efficiency dictates that the company will choose \( D \) and the buyer will choose \( x \) so as to maximize the sales finance company profit less the buyer’s cost of precaution plus expected damage payments:

\[
\max_{x, D} \left[ p(x) \cdot R_c + [1 - p(x)] \cdot [R_d + D] \right] - [x + [1 - p(x)] \cdot D]
\]

(1)

If damages are perfect so that the finance company is indifferent between whether the buyer does or does not finish the contract, then \( D = R_c - R_d \). Equation (1) is then equivalent to

\[
\min_{x} x + [1 - p(x)] \cdot D
\]

(2)

The optimal level of precaution expenditures, \( x \), is

\[
p'(x) = \frac{1}{D}
\]

(3)

The smaller the damage, the larger is \( p'(x) \), and thus the smaller is the efficient amount of precaution, \( x \). If damage is sufficiently low, the buyer will choose to default.
This standard analysis overlooks two factors relevant to installment financing in the 1930s — the nonpecuniary damage cost incurred by the buyer, and any externalities of the decision to default. When consumers default and have their car repossessed, two “damage” expenses are borne completely by the buyer and not received by the sales finance company: the creditworthiness damage and the social reputation damage. Default on an installment contract lowers the buyer’s creditworthiness. This damage cost to the buyer is not recovered by the sales finance company. Similarly, the appearance of the repo man on one’s doorstep creates an additional damage cost through lowering social reputation, a cost not recovered by the sales finance company.

In this case, efficiency implies the company will choose \( D \) and the buyer will choose \( x \) so as to maximize the sales finance company profit less the buyer’s cost of precaution plus total expected damage payments, which now include the creditworthiness damage (CW) and the social reputation damage (SR):

\[
\max_{x, D} \left[ p(x) \cdot R_C + [1 - p(x)] \cdot [R_D + D] \right] - \left[ x + [1 - p(x)] \cdot (D + CW + SR) \right]
\]  

(4)

If damages are perfect expectation damages, that is, \( D = R_C - R_D \), then the efficiency problem of equation (4) is equivalent to

\[
\min_x \quad x + [1 - p(x)] \cdot (D + CW + SR)
\]

(5)

implying the optimal level of precaution expenditures, \( x \), is

\[
p'(x) = \frac{1}{(D + CW + SR)}
\]

(6)

The greater the creditworthiness, \( CW \), and social reputation, \( SR \), effects, the more precaution will be exercised and the less likely is default.
The historical development of credit bureaus is now relevant. Retail credit bureaus are established first locally and then regionally in the 1920s as use of installment financing increases. The establishment of credit bureaus, all else constant, would lower default rates as buyers choose greater precaution expenditures because default decreases creditworthiness. Indeed *Business Week* reported in 1938 that credit bureaus had exactly this effect:

Instalment men these days are pleased as Punch over the way they have cut down on automobile “skips” — the fellows who buy cars on time, leave the wrong name and address, and skip off to the next county. By instituting rigorous checkups on credit, instalment finance companies brought skips in 1937 to the lowest on record.

A distinction between skips and honest borrowers is also now feasible. Skips attach low value to the social reputation effect. The same level of default penalty, $D$, would therefore elicit greater precaution expenditures and lower levels of default from honest borrowers than from skips.

The standard analysis of optimal default also overlooks the presence of externalities by assuming all costs and benefits are captured completely by the buyer and the sales finance company. But to the extent buyers chose to avoid default by decreasing other consumption expenditures, the “precaution expenditures” are not all borne privately. Certainly the editors of

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37 A 1926 letter from Associated Retail Credit Bureau of Omaha, Nebraska to NAFC describes their regional system of providing sales finance companies with credit information regarding prior repossessions. Rowan, “Letter to C. C. Hanch.” A 1930 letter from the president of the Central Association of Finance Companies of Chicago to NAFC describes the system in place for tracing skips throughout the Chicago metropolitan area, and agrees to a plan worked out between their association and NAFC to allow all NAFC member companies to use their skip reporting service, thus establishing a national network of credit reports on skips. Galloway, “Letter to C. C. Hanch.”


39 Olney, “Avoiding Default.”
Business Week writing in December 1930 believed there were public costs to private decisions to avoid default:

One of the copy-book maxims of the Poor Richard school of economics is ‘In periods of prosperity we make our debts, in hard times we pay them up.’ . . . [W]e don’t see anything in it to be proud of and we doubt that it is a doctrine altogether adequate to the economic system under which we live. . . . [T]he consumer is curtailing buying out of current purchasing power to pay for things bought in the roaring days of 1928 and 1929. This may be ascribed to a high moral purpose, but it is nine-tenths fear, and a great waste of energy . . . The money he is paying off on past debts isn’t doing anybody any good.  

A 1931 article in Harper’s Monthly Magazine referred to a 1926 study of striking mine workers: “Charity workers found many bare cupboards by the side of easy-payment talking machines, furniture, etc.” And in 1937, Charles Ronayne wrote “When the story of the depression is fully told, it will be in large part a story of those who fought valiantly to keep up payments, often denying proper subsistence to their families.”

If the social cost, $SC$, is incurred when the buyer completes the contract rather than defaults, then we have

41 Sprague, “Panics and Time Payments,” p. 615.
43 The formulation is too simple, but captures the argument. Social costs ought to themselves be a function of the share of precaution expenditures that are attributable to reduced consumption spending.
\[
\max_{x, D} \left[ p(x) \cdot R_C + (1 - p(x)) \cdot (R_D + D) \right] - \left[ x + (1 - p(x)) \cdot (D + CW + SR) \right] - p(x) \cdot SC
\]  

(7)

Assuming perfect expectation damages, \( D = R_C - R_D \), yields

\[
\min_x \ x + (1 - p(x)) \cdot (D + CW + SR) + p(x) \cdot SC
\]  

(8)

implying the socially optimal level of precaution expenditures, \( x \), is

\[
p'(x) = \frac{1}{(D + CW + SR - SC)}
\]  

(9)

But buyers would still choose a level of precaution expenditures such that

\[
p'(x) = \frac{1}{(D + CW + SR)} < \frac{1}{(D + CW + SR - SC)}
\]

In the presence of social costs to completing the contract, the socially optimal level of precaution expenditures will be less than the privately optimal level. Buyers would choose to default less often than was socially optimal. A lowering of the damage expense, \( D \), would lower sales finance company profits and increase default rates, lowering the social cost of reducing consumption to complete contracts. This is precisely what happened in the 1930s.

**The Legal Setting**

Two forms of installment contracts were legally available in nearly all states: a chattel mortgage and a conditional sales contract. Most of the differences between the two forms were relatively minor. One contemporary noted, “The theoretical difference between the conditional sale and chattel mortgage transactions is merely formal . . . However, courts and legislators in
most states have classified them separately . . . Needless to say, this effort to distinguish Tweedledum from Tweedledee has been prolific in litigation.”

There was one important difference between a chattel mortgage and a conditional sale: the creditor remedy. Under a chattel mortgage, damages were equal to perfect damages. A defaulting borrower ultimately lost assets equal in value to the balance due on the contract plus reasonable costs of repossession and resale. The good (“chattel”) could be repossessed when a payment was past due, sold, and its proceeds applied to the amount due. If there was a surplus, it was returned to the buyer. If there was a deficiency, the finance company could sue the buyer for the amount of this deficiency.

Under a conditional sales contract, a defaulting borrower could lose more — or less — than the balance due. Upon default the finance company had to choose between suing for deficiency judgment and repossession. If they repossessed, the finance company could not subsequently sue if the repossessed good was worth less than the balance due. But if the repossessed good was worth *more* than the balance due, the finance company retained the surplus. The penalty was in excess of perfect expectation damages. With high down payments and short contracts, conditional sales contracts were potentially quite lucrative to creditors.

In nearly all states it was case law rather than statute law that governed all aspects of the contracts in the 1920s and 1930s, from the applicability of usury limits to creditor remedies. Because the institution was so new in the 1920s, the absence of legislation and established case

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45 Court cases were required to determine if the amount due was the amount due as of the date of default, or the full balance to complete the contract. The National Association of Finance Companies reported in 1929 that a decision by the Arizona Supreme Court was the “first judicial determination” on this matter. In F.M. Street v. CCC and R.D. Roper (Supreme Court of Arizona No. 2792), the court decided that the “full balance due” referred to the amount due to the date of repossession. *NAFC News* (December 1929): 3.

46 Adelson, p. 237; Griffin (1922), pp. 118-120.

47 Adelson, p. 237.
law resulted in much uncertainty regarding how contract provisions would be enforced. Because installment contracts fell under state rather than federal law, national finance companies such as General Motors Acceptance Corporation (GMAC) operated in different legal environments in each state.

Legislation regulating installment contracts was needed. The National Conference of Commissioners on Uniform State Laws drafted in 1916 the Uniform Conditional Sales Act (U.C.S.A.) which individual state legislatures were urged to adopt. In addition to bringing the states into conformity, the U.C.S.A. attempted to eliminate the differences between the creditor remedies of chattel mortgages and conditional sales contracts “upon the theory that in substance a conditional sale is a chattel mortgage, and the remedies of the parties should coincide as nearly as is possible.”48 Under U.C.S.A., the surplus would be returned.49

Yet despite lobbying from the National Conference, only eight states had adopted the U.C.S.A. by 1929: Arizona, Delaware, New Jersey, New York, Pennsylvania, South Dakota, West Virginia, and Wisconsin.50 The National Association of Sales Finance Companies (NASFC) consistently opposed adoption of the U.C.S.A. In a 1938 article, Milan Ayres, chief analyst for the NASFC, argued that the U.C.S.A. was bad law primarily because having been written in 1916, it was written too early in the development of the automobile industry.51 Ayres argued, for example, that provisions requiring notification of the finance company if an automobile was going to be removed from the local area for more than thirty days predated the practice of “motor vacations” sometimes lasting several months. Sales finance companies opposed the U.C.S.A. because it would have limited the damages upon default and because it

50Handbook of the National Conference of Commissioners on Uniform State Laws and Proceedings.
required 20 to 40 days’ notice before repossessing an item, which many sales finance companies feared was sufficient time for the buyer in default to “hide” the chattel.

The NASFC regularly advised its members on legal matters. In an undated memo that appears to be from 1928, the NASFC recommended for all but six states the use of the conditional sales contract.\footnote{National Association of Finance Companies, “Legal Provisions.” The memo was located in a file amidst other memos from 1928. With certainty we know the memo is from sometime between 1925 and 1935 because it shows Pennsylvania but not Indiana as having adopted the U.C.S.A. Pennsylvania adopted the Act in 1925; Indiana was the next state to do so but not until 1935.} In the six states where they recommended use of a chattel mortgage, the state’s courts or legislatures already required return of the surplus.

Figure 6 depicts state-by-state changes in law and practice between 1922 and 1936, as reported by Griffin (1922) and Griffin and Greene (1936). Shading is used to denote population. The smallest states that together had 25 percent of the population are unshaded; the next-larger states that together had the next 25 percent of the population are lightly shaded; the handful of the largest states that together had 50 percent of the population are darkly shaded. The hatch marks are used to indicate states in which sales finance companies were required to return the surplus following repossession. In the most populous states, the law changed between 1922 and 1936, newly requiring return of the surplus.

**The 1930s: Retention of the Surplus Becomes the Issue**

With the onset of the Great Depression, public and legal opinion began to shift. When it had been easy for the public to attribute default and repossession to irresponsible management of family finances or to attempts to defraud the sales finance company by skipping town, there was little outcry against the sales finance companies and their collection practices. But as unemployment rose and families faced with unanticipated loss of income struggled to make
installment payments, attitudes shifted. The 1930 editorial from *Business Week* quoted on page 17 is but one example.

The *American Mercury*, a popular magazine in the 1930s, published the following in 1931.

> Once started on his payments, Jones is not bothered so long as he keeps them up. But let him delay a few days and things start happening to him.

> It is at this point that the pull men--according to a recent want ad they must be ‘over six feet tall and weighing over two hundred pounds’—enter the picture. These men are employed for the purpose of obtaining ‘peaceful repossession’ of the mortgaged property. In practice this repossession may be anything but peaceful... [A]s the pull man is paid only when he shows results, he is likely to do anything. He thinks nothing of wiring around ignition locks, towing away locked cars, breaking the windows to get into a locked house, or using a bolt cutter to remove the padlock from a garage door. Frequently he and the purchaser get into a fist fight, and there are few pull men who don’t tote a gun. That such acts frequently amount to burglary or larceny bothers the pull men but little.\(^{53}\)

*Forum and Century* published an anonymous article in October 1933 that vividly described the tactics employed by finance companies seeking payment.

> One day a moving truck backed up to the door, and two men handed me a scrawled list: ‘One davenport, three chairs, two rugs.’ They had come for them, they said, from the store where they were bought three years ago.

> With immense hauteur and shaking knees, I telephoned to the store, ...  

---

and found that they just wanted another payment. This was the new method of asking for it.\textsuperscript{54}

The anonymous author makes the distinction between 1920s and Great Depression debtors explicitly:

Intimidation methods used against the old dead-beat who skipped town were permissible. Now that they are being turned on the gentlefolk of the land, who are doing their honest and sleepless best, it takes the form of another Reign of Terror, with the credit lenders in the high seats of tyranny saying, ‘Off with his self respect!’\textsuperscript{55}

\textit{The Courts}

Resolutions of conflict in installment contracts were settled in court. The courts’ decisions constitute the case law which determine legal practice in each state. In a series of decisions in the late 1920s and 1930s, the Supreme Courts of several states argued that in fairness to buyers there should be a reduction of harsh default penalties and an end to unfair practices.

In 1930 in Commercial Credit Co. v. Street (291 P. 1003), the Supreme Court of Arizona upheld a 1929 decision in Street v. Commercial Credit Company (281 P. 46). Miss Street missed her June 8, 1927 payment due to unexpected travels out of town. On July 5, CCC repossessed her Chrysler. Street paid the late payment with interest, plus “all expenses of taking, keeping, and storage” that same day. When CCC refused to return her auto, she returned on July 6 with the July 8 payment as well. CCC refused to return the auto unless Street paid the full remaining

\textsuperscript{54}Anonymous, "The Last Drop of Blood," p. 249.

balance of the contract. This was in clear violation of the U.C.S.A.; Street was entitled to ten
days to reclaim her auto, and also was expected to pay only the late payment and not the full
balance of the contract.

With reference to the U.C.S.A., the courts in this case wrote:

There is no doubt that sections 18 and 26 of the [Uniform Conditional
Sales] act were enacted for the express purpose of giving to the buyer
some equity of redemption and preventing unjust, though technically legal,
extortion by the seller. A proviso that the buyer could redeem only on
payment of the full purchase price remaining would generally be
ineffectual to give any real relief, for the principal reason that conditional
sales on the installment plan are made is that the buyer is unable to make
full payment at once. . . . As we have said, the purpose of the law
undoubtedly is to protect the buyer, the seller generally being able to fully
take care of any rights he may have, even in the absence of any statute on
the subject, through the various clauses of the contract of sale, almost
invariably prepared at the instance of the seller by counsel skilled in the
law and seldom explained to, or understood by, the purchaser when he
signs it.\footnote{Street v. Commercial Credit Co. et al (281 P. 48), October 7, 1929. A similar decision was rendered in South Dakota in Cox v. General Motors Acceptance Corporation et al. 241 N.W. 609 (March 22, 1932), and in General Motors Acceptance Corporation v. Sanders, 43 S.W. (2d) 1087 (Supreme Court of Arkansas, December 14, 1931).}

The return of the surplus was the feature of repossession that especially affected the cost
of default, and also the feature of repossession that seemed to especially concern the courts.

Griffin and Greene noted,
It is the forfeiture feature [forcing buyers to forfeit payments already made] of conditional sales that has proved objectionable, and quite a number of the states have passed laws requiring that payments be refunded or a resale of the property be made to determine the buyer’s equity, or that in some other ways steps be taken to protect the buyer from losing the property after he has paid a substantial part of the purchase price.\(^{57}\)

In states that had passed the U.C.S.A., return of the surplus was compelled by law. Ten years after its adoption in New York, the State Supreme Court in Laufer v. Burghard 261 N.Y.S. 364 (December 27, 1932) made clear that this provision of the U.C.S.A. was a radical departure from decades-long practice. First noting that returning a surplus “would work a revolution of the business methods long established in the merchandising of chattels or goods on credit basis,” and further noting that “under the common law, prior to the enactment of the Uniform Conditional Sales Act, the seller was under no obligation upon the retaking of the goods on buyer’s default to make return of partial payments or any part thereof,” the court concluded that the right of the buyer to receive the surplus “must be found in the provisions of the U.C.S.A.”\(^{58}\) The court wrote,

> The Personal Property Law in regard to conditional sales was enacted for the benefit of the purchasers of property under such contract, and the requirements of that act for a resale of the property on a retaking thereof on default of the buyer cannot be waived. The provisions of the statute enacted for the protection of the buyer cannot be waived either in the

\(^{57}\)Griffin and Greene, *Installment Credits and Collections and the Installment Market*, 1936, p. 216.

\(^{58}\)Laufer v. Burghard, 261 N.Y.S. 367-68.
contract, or in the notes given for the purchase price, or after the buyer is
in default.\textsuperscript{59}

In the early 1930s, state courts began ruling that return of the surplus was required. The Third District Court of Appeals in California in 1930 opined, “Forfeitures are never favored by courts of law or equity . . . [F]orfeitures are abhorred . . .”\textsuperscript{60} The Supreme Court of Washington in 1931 wrote, “Forfeitures are not favored in the law, and courts will promptly seize upon any circumstances arising out of the contract or the actions or relations of the parties in order to avoid a forfeiture.”\textsuperscript{61} And in 1933, the Supreme Court of Oregon ruled that even an implication by the sales finance company that it would not retain the surplus upon repossession must be adhered to:

The law has no interests of its own to subserve in insisting upon forfeitures or other results of default. The remedies it gives are for the benefit of the vendor, and he may waive them if he will. He may do this, moreover, either expressly or by implication, and as the results of default more often work hardship to the buyer than to the seller, the law looks with complacence at least upon those acts of the vendor which may fairly be construed as indicative of his intention not to insist upon a forfeiture of the buyer’s rights.\textsuperscript{62}

The activities of the courts did not go unnoticed by sales finance companies. Each monthly issue of \textit{NAFC News} and later \textit{Time-Sales Financing} contained a column of legal updates with implications for sales finance companies, sometimes running to several pages.

\textsuperscript{59}Ibid., p. 368.

\textsuperscript{60}Miller v. Modern Motor Company, 290 P. 124 (3d District Court of Appeals of California, June 30, 1930).

\textsuperscript{61}Pacific Finance Corporation v. Webster 296 P. 809 (Supreme Court of Washington, March 11, 1931).

\textsuperscript{62}Mathers v. Wentworth & Irwin, 26 P. (2d) 1090.
Legislation

Calls for legislation to regulate sales finance companies and protect buyers came in the mid-1930s from many circles. The Harvard Law Review introduced its call for legislation with 

[D]rastic provisions to compel payment are often inserted. Wage assignments and other methods of enforcement, while assented to at the time of bargaining, may work hardship. Again, waiver of legal process for repossession may lead to violence. Even if these provisions are not or cannot be enforced, their in terrorem effect is great. What is worse, exorbitant penalties for delinquency and for repossession, although not provided for in the contract, are sometimes used as threats to coerce buyers in no position to contest them by recourse to the courts.63

Rolf Nugent and Leon Henderson were analysts associated with the Russell Sage Foundation which had successfully led the call for regulation of the “small loan lending” business. Nugent and Henderson called for regulation of installment selling in 1934:

The rise of installment selling has opened wide gaps in this regulatory armor and exposed large groups of consumers to abusive practices. . . . Frequent abuses in installment selling arise out of repossessions. . . . [The finance companies] know that the debtor is usually ignorant of his legal protections and would rarely go to court to contest a charge even if it were known to be illegal.64

The National Association of Sales Finance Companies continued to oppose regulation, with one exception: by 1935 even the NASFC recognized the need to regulate repossessions. In

64Nugent and Henderson, “Installment Selling and the Consumer,” pp. 96, 102.
a written debate published in *The Rotarian*, NASFC Executive Vice President John Walker conceded, “About the only genuine complaint on the part of the buying public against installment credit practices, arises out of the difficult question of repossessions.” Illustrating the ongoing concern of finance companies with the difference between skips and honest buyers, Walker states:

> It is not an easy matter to draw a statute which would require all sales finance companies to conform to the standards of fair trade practice observed by the great majority, and thus assist the honest and unfortunate installment buyer without giving aid and comfort to the unscrupulous one who is only too willing to cheat the finance company. With sufficient study, however, it should be possible to introduce into the statute . . . specific provisions designed to safeguard the equity of the purchaser in the event of repossession.  

By early 1935, state legislatures across the country were considering bills to regulate sales finance companies. A few were voting to adopt the U.C.S.A. Most states were devising their own bills. And most bills required return of the surplus.

*Consent Decree from the Department of Justice*

The most sweeping change in finance company practices came with the November 1938 consent decree issued by the Department of Justice in the antitrust cases against Ford and Chrysler: “Upon consent of the parties a final decree is entered in proceedings under the Sherman Anti-Trust Act prohibiting the manufacturer from engaging in advertising which

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66 The bills are listed and evaluated as simply “good” or “bad” in *NASFC News*, March 1935, pp. 3-4; April 1935, p. 4; and May 1935, pp. 3-4.
burdens competitors of respondent finance companies, and imposing restrictions upon collection methods classified as oppressive in nature.\textsuperscript{67}

The rules that the court required of companies financing Ford or Chrysler products included:

(2) The finance company will not require or accept assignments of wages or salaries, or garnish wages or salaries to collect deficiency judgments in respect of automobiles sold for less than $1,000 and for private and non-commercial use unless, prior to repossession, it has requested the buyer to return the automobile to it and he has not done so;

(3) The finance company will not take any deficiency judgment where the retail purchaser of an automobile, sold for private and non-commercial use, has paid at least 50\% of his note or other obligation, and will not collect from any retail purchaser of an automobile, through deficiency or other judgments, any amount in excess of its actual losses and expenses upon the failure of such purchaser to pay his note or other obligation, and will pay to or credit to the account of such purchaser any surplus over the amount owing by him on his note or other obligation which the finance company or its nominee or its affiliated or subsidiary company may realize on the purchaser’s note or other obligation and the automobile or any other security therefor;\textsuperscript{68}

With this decree, nearly all finance companies in the United States came into conformance: the surplus was to be returned to the buyer following default.


\textsuperscript{68}Ibid.
Awkwardly worded and seemingly obscure legal decisions seem far removed from the day-to-day financial decisions of families. Not so! In late 1936, readers of *The American Magazine* were advised that default was now less expensive than in the past.

When an installment purchaser defaults, his purchase is foreclosed by due process of law and seized. . . As quickly as possible, the repossessed commodity is resold. But even here the installment buyer gets a break these days. Very often the repossessed commodity is resold for a sum large enough to pay the sales financing company the balance due and to partly reimburse the defaulter for the installments he has paid out.\(^{69}\)

The author continues:

Not long ago, in Illinois, a man who had paid about $800 on a $1,000 motorcar over a period of eighteen months . . . could not continue his payments. A sales financing company repossessed the car, which was still in good condition, and resold it for $650. Out of this the company took $200 due on the first purchase and returned $450 to the original buyer. He was out, therefore, only $350 on his purchase. At the same time, he had had the use of a good car for a year and a half. He couldn’t have had it any cheaper.

\(^{69}\)Marcosson, “99% Honest!,” p. 130.
Conclusion

During the interwar period, judicial and legislative actions reduced default penalties on consumer installment contracts. No longer could sales finance companies retain the surplus of the repossessed chattel’s net value over the balance due.

The reduction in default penalties reflected both the growth of the installment credit industry and the course of the Great Depression. Buying on installments was becoming the norm, so borrowers were less likely to be perceived as inherently risky. And the economy’s collapse meant that buyers in default were no longer perceived as “skips” deserving of harsh penalties, but were instead viewed as victims of a depressed economy.

The consequence of less punitive default penalties was an increase in default. The advantage: consumption spending was not unusually low during the economy’s second dip of 1937-1938. There are times – and perhaps today is one – when defaulting on consumer debt can be good for the macroeconomy.
References


<table>
<thead>
<tr>
<th>Year</th>
<th>Consumer nonmortgage debt as a percentage of income (1)</th>
<th>Nominal consumer nonmortgage debt (Thousands $) (2)</th>
<th>Nominal installment debt (Thousands $) (3)</th>
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<td>$1,867</td>
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<td>5.5</td>
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**Sources:** Column 1: Olney [1991, Table 4.1]. Column 2: Goldsmith [1955, Table D-4, column 1]. Column 3: Goldsmith [1955, Table D-4, sum of columns 2 through 9].
Table 2. Typical Terms and Implied Accumulation of Equity

<table>
<thead>
<tr>
<th>Product</th>
<th>Typical Down Payment</th>
<th>Typical Contract Length</th>
<th>Percent of Equity Acquired by...</th>
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<tr>
<td></td>
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<td>Purchase</td>
</tr>
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<td>New cars (1924 standard)</td>
<td>33 %</td>
<td>12 months</td>
<td>33 %</td>
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<td>New cars (mid-1930s standard)</td>
<td>33 %</td>
<td>18 months</td>
<td>33 %</td>
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<tr>
<td>Used cars (1924 standard)</td>
<td>40 %</td>
<td>12 months</td>
<td>40 %</td>
</tr>
<tr>
<td>Sewing machines</td>
<td>10 %</td>
<td>12 months</td>
<td>10 %</td>
</tr>
<tr>
<td>Radios</td>
<td>25 %</td>
<td>6 months</td>
<td>25 %</td>
</tr>
<tr>
<td>Furniture</td>
<td>20 %</td>
<td>18 months</td>
<td>20 %</td>
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<table>
<thead>
<tr>
<th>Year</th>
<th>Repossession Rates</th>
<th>Unemployment Rate</th>
<th>Skips per 1,000 Transactions</th>
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<tr>
<td></td>
<td>New Cars</td>
<td>New &amp; Used Cars</td>
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</tr>
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<td>1925</td>
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<th>Table 4. Timing of Repossessions, mid-1930s</th>
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<tr>
<td>Number of installments paid:</td>
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<tr>
<td>Percent of Total Repossessions completed in period:</td>
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<tr>
<td>Cars (1927)</td>
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<tr>
<td>Cars (1936-37)</td>
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<tr>
<td>New Cars (1933-37)</td>
</tr>
<tr>
<td>Used Cars (1933-37)</td>
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<tr>
<td>Appliances (1937-38)</td>
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<tr>
<td>Cumulative Percent of Total Repossessions completed by end of period:</td>
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<td>Cars (1927)</td>
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<td>Cars (1936-37)</td>
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<tr>
<td>New Cars (1933-37)</td>
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<tr>
<td>Used Cars (1933-37)</td>
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<td>Appliances (1937-38)</td>
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</table>

Source: 1927 car data are from Hanch, C.C. “Repossession and Other Experience,” p. 2. The data cover just one company which repossessed nearly 4,600 cars, 11.5 percent of its contracts. 1936-37 car data are from Ayres, “When Repossessions Occur,” p. 3, and cover one company’s activity for January 1936 to June 1937. 1933-37 car data and 1937-38 appliance data are from Plummer and Young, *Sales Finance Companies*, Table 34 (cars) and Table 42 (appliances). Their car data cover 1933-1937 and include 57,739 new car and 354,052 used car repossessions. Their appliance data cover January 1937-June 1938 and include 1,049 repossessions.
Table 5. Repossession and Loss Rates, 1925-1939

<table>
<thead>
<tr>
<th>Year</th>
<th>Repossession Rates</th>
<th>Loss Rates Against Total Volume</th>
<th>Loss Rates Against Outstandings</th>
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<tr>
<td></td>
<td>New Cars</td>
<td>New &amp; Used Cars</td>
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<tr>
<td>1925</td>
<td>2.1</td>
<td>---</td>
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<td>1935</td>
<td>2.7</td>
<td>7.3</td>
<td>0.33</td>
</tr>
<tr>
<td>1936</td>
<td>2.2</td>
<td>5.1</td>
<td>0.27</td>
</tr>
<tr>
<td>1937</td>
<td>4.1</td>
<td>9.4</td>
<td>0.40</td>
</tr>
<tr>
<td>1938</td>
<td>6.3</td>
<td>15.1</td>
<td>0.69</td>
</tr>
<tr>
<td>1939</td>
<td>2.7</td>
<td>7.5</td>
<td>0.32</td>
</tr>
</tbody>
</table>

Figure 1: Consumer non-mortgage debt, 1919-1939

Source: Olney, *Buy Now Pay Later*, Table 4.1
Figure 1a: Consumer Debt-to-Income Ratio, 1919 - 2011 (for comparison)

Sources: For 1919-1929, Olney (1991), Table 4.1
For 1929-1942, Consumer debt from Goldsmith (1955), Vol. 1, Table D-1, column (1) divided by disposable personal income from BEA, National Income and Product Account data, Table 2.1.
For 1943-2011, Credit Outstanding (annual) from FRED, Federal Reserve Bank of St Louis divided by disposable personal income from BEA, NIPA, Table 2.1
Figure 2: Who’s Who

Buyer – Seller – Sales Finance Co. and the Big Bruiser
Figure 3: Repossession, Foreclosure, and Unemployment Rates, 1925-1939

In case colors don’t come through:
- Top line (blue, solid) is unemployment rate
- Second solid line from top (purple) is nonfarm foreclosure rate
- Dashed line is repossession rate for new & used cars
- Thick bottom line is repossession rate for new cars
Early repossessions

Cumulative % of Total Repossessions completed by end of period

Figure 4: After How Many Months Did Repossessions Occur?
Figure 5: The Relationship between Precaution Expenditures and the Likelihood of Finishing an Installment Contract
Figure 6: Changes in State Laws & Practices between 1922 and 1936

Cross hatching X X X indicates both forms of contract required return of the surplus. Diagonal hatching \ \ \ indicates one form of contract required return of the surplus but the other did not.

25% of population lived in unshaded states. Next 25% of population in light-shaded states. 50% of population in dark-shaded states.