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**WORKING PAPER NO. 02-21
THE DEVELOPMENT AND REGULATION
OF CONSUMER CREDIT REPORTING IN AMERICA**

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November 2002

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Abstract

In the United States today, there is at least one credit bureau file, and probably three, for every credit-using individual in the country. Over 2 billion items of information are added to these files every month, and over 2 million credit reports are issued every day. Real-time access to credit bureau information has reduced the time required to approve a loan from a few weeks to just a few minutes. But credit bureaus have also been criticized for furnishing erroneous information and for compromising privacy. The result has been 30 years of regulation at the state and federal levels.

This paper describes how the consumer credit reporting industry evolved from a few joint ventures of local retailers around 1900 to a high technology industry that plays a supporting role in America's trillion dollar consumer credit market. In many ways the development of the industry reflects the intuition developed in the theoretical literature on information-sharing arrangements. But the story is richer than the models. Credit bureaus have changed as retail and lending markets changed, and the impressive gains in productivity at credit bureaus are the result of their substantial investments in technology.

Credit bureaus obviously benefit when their data are more reliable, but should we expect them to attain the socially efficient degree of accuracy? There are plausible reasons to think not, and this is the principal economic rationale for regulating the industry. An examination of the requirements of the Fair Credit Reporting Act reveals an attempt to attain an appropriate economic balancing of the benefits of a voluntary information-sharing arrangement against the cost of any resulting mistakes.

JEL Codes: D82, G21, G28, N22

Keywords: Consumer credit reporting, credit bureaus, information sharing, Fair Credit Reporting Act

I. Introduction

Consumer credit bureaus are organizations that compile and disseminate reports on the creditworthiness of consumers. Firms that lend to consumers provide the underlying data to the bureaus. In the United States today, there is at least one credit bureau file, and probably three, for every credit-using individual in the country. Over 2 billion items of information are added to these files every month, and over 2 million credit reports are issued every day. In many instances, real-time access to credit bureau information has reduced the time required to approve a loan from a few weeks to just a few minutes.

A consumer credit report typically includes four kinds of information.¹ First, there is identifying information such as the person's name, current and previous addresses, social security number, date of birth, and current and previous employers. Next, there is a list of credit information that includes accounts at banks, retailers, and lenders. The accounts are listed by type, the date opened, the credit limit or loan amount, outstanding balances, and the timeliness of payments on the account. There may also be information gleaned from public records, including bankruptcy filings, tax liens, judgments, and possibly arrests or convictions. The file will typically include a count of the number of inquiries authorized by the consumer but will not contain any information about applications for credit or insurance that were denied.

Today Americans hold more than 1.4 billion credit cards, use them to spend \$1 trillion a year, and maintain balances in excess of \$600 billion.² Information provided by credit bureaus is an important ingredient in the vast expansion of unsecured consumer credit in the U.S. over the last century. This information is used to decide who is offered credit and on what terms. Credit bureau data are used to monitor fraud. The existence of credit bureaus is an inducement to honor one's debts. Information shared through credit bureaus can increase competition among providers of financial services, resulting in more credit offered on better terms.

But this does not mean that private credit bureaus necessarily maximize social welfare. There are plausible reasons why credit bureaus may make more mistakes than would otherwise be efficient. Nor would their choice of the relative frequency of mistakes (including inaccurate derogatory information vs. excluding positive information) necessarily be efficient. In the U.S., credit bureaus have a tarnished reputation and are subject to regulation at the federal and state levels. The regulatory regime adopted in the U.S. was clearly shaped by an attempt to balance the social

¹ This paper focuses on what the Fair Credit Reporting Act (FCRA) calls *consumer reports* and not *investigative* consumer reports. The latter are sometimes used for employment, insurance, and other decisions, are based in part on information gathered from personal interviews, and are governed differently under the FCRA. Investigative reports engendered significant controversy in the late 1960s and early 1970s, in part because consumers were not always informed they were being done or that information based on them was maintained in credit bureau files. See Miller (1971) and the Privacy Protection Study Commission (1977).

² These numbers, for 1999, are from HSN Consultants and *The Nilson Report*, as reprinted in the *Statistical Abstract of the U.S.: 2001*.

benefits and costs of information sharing. Whether that balance can be improved upon is the subject of ongoing debate.

The remainder of this paper is organized as follows. Section II reviews the relevant literature on voluntary information-sharing arrangements. Section III describes how consumer credit reporting evolved in the U.S. over the last century in response to legal, economic, and technological changes. Section IV examines the most commonly articulated rationale for regulation of the industry—inadequate precaution with respect to consumer privacy and the accuracy of data contained in credit files. Section V reviews the American scheme for regulating the industry. Section VI concludes by examining two of the leading challenges facing the industry in the U.S.—the possibility of more stringent regulation and ongoing consolidation in the credit card industry.

II. The Economics of Information Sharing

Adverse selection is an important problem in the market for unsecured credit in the U.S. Ausubel (1999) found that individuals who responded to a given credit card solicitation were, on average, worse credit risks than those who did not respond. Also, customer pools resulting from credit card solicitations offering inferior terms (e.g., higher interest rates) had a higher average risk of default than pools resulting from solicitations offering better terms.³

Ausubel's earlier finding that credit card rates in the U.S. are sticky—i.e., they do not change very much in response to a change in banks' cost of funds—can be interpreted as another indicator of adverse selection (Ausubel 1991). If lenders respond through credit rationing, marginal increases in the supply of loanable funds would not reduce interest rates until the excess demand is entirely eliminated (Stiglitz and Weiss 1981).⁴

The significance of moral hazard in credit card markets is, of course, a central topic in the ongoing debate over bankruptcy reform in the United States. Throughout 2001-02, credit card delinquency and charge-off rates, as well as the consumer bankruptcy rate, were at or near record highs. Empirical research suggests that many factors contribute to bankruptcy filings (Sullivan et al. 2000), and some economists wonder why Americans do not file more than they do (White 1998).⁵

Credit bureaus mitigate adverse selection and moral hazard problems by providing timely information about the characteristics and behavior of potential borrowers. Because that information is retained for a considerable time (seven years for most derogatory credit information in the U.S.), credit bureaus enable the maintenance of reputation effects in a market consisting of millions of otherwise anonymous borrowers

³ Additional empirical evidence is found in Calem and Mester (1995).

⁴ Adverse selection can lead to sticky prices through mechanisms other than credit rationing. For example, Mester (1994) describes how reductions in banks' costs of funds may result in an increase in the average riskiness of credit card borrowers.

⁵ For reviews of the recent literature, see Congressional Budget Office (2000) and Mester (2002). The latter article contains a plain English description of the proposed bankruptcy reform legislation.

(Klein 1997). In the U.S. at least, credit bureau data can be used to generate lists of consumers who are offered pre-approved lines of credit (pre-screening). The availability of data on a universe of credit users also makes it possible to develop sophisticated models to select and price credit risk for unsecured consumer loans.

A. Intuition from Economic Theory

Given the evident benefits to lenders, it seems natural to expect information sharing to emerge as soon as an efficient mechanism for coordinating this process, the credit bureau, was developed. In the U.S. and certain other countries that is exactly what happened. But credit bureaus do not always emerge, and in some instances, they were instead legislated into existence. What explains the emergence of credit bureaus or their failure to emerge?

1. The Severity of the Information Problem

The benefit to a lender of joining a credit bureau depends in part on the unobserved heterogeneity of its potential customers. Information sharing becomes more attractive when good customers are harder to find, which diverts resources toward finding good customers rather than serving them. In that case, it becomes relatively more efficient to pool information than for each firm to generate it (Wilson 1990).

The incentive to join a credit bureau will depend on how frequently lenders expect to encounter new potential borrowers and the nature of competition among lenders. The number of new potential borrowers should clearly depend on the geographic mobility of consumers and possibly the geographic reach of a lender's operations. As for competition, consider two possible lending environments—one in which consumers do all their borrowing from a single lender and one where borrowers are able to obtain loans from many different lenders. In the latter case, lenders would clearly be willing to incur some expense in order to obtain a better idea of a borrower's total indebtedness, both before and after making a loan.

2. Costs

Another obvious factor is the cost associated with establishing and maintaining a credit bureau. These costs may be prohibitive if the fixed costs are high and relatively little lending is going on. But these costs become easier to absorb when lenders are making a higher volume of loans. The volume of consumer lending also affects the information advantage that a credit bureau enjoys over the information held by any given lender.

Another reason that the volume of lending matters is that when there is a high volume of applications for loans of modest size, relative to business loans, for example, lenders cannot afford to invest a lot of resources evaluating each loan application. Once established, a credit bureau can help lenders to substitute more costly screening techniques (credit scoring) with timely credit history information without incurring an unacceptable increase in overall credit risk. These techniques need not depend on the information contained in one lender's files. Rather, they are often refined and calibrated using credit history information gathered from all participating lenders (e.g., FICO scores).

3. Network Effects

There is clearly an element of network effects with credit bureaus. Obviously, credit bureaus become more useful to lenders as the coverage of potential customers increases. A credit bureau with better coverage of lenders is more highly valued because any lender that relies on the bureau's data can be more confident it knows the totality of a borrower's credit activity. Both of these mechanisms can mitigate adverse selection. They may also reduce moral hazard if borrowers are aware that their credit lines and payment history are reported by, and can be disclosed to, a larger share of potential creditors. Finally, additional membership helps to amortize a bureau's fixed costs.

These factors suggest the possibility of multiple equilibria. Without some form of coordination, a credit bureau may not attain a sufficient scale to be self-sustaining. But if a sufficient scale is reached, bandwagon effects might easily lead to universal membership. In that case, when we observe credit bureaus we would expect to observe only a few of them, perhaps only one, serving a particular market.

But network effects may not be so strong as to imply universal participation by creditors or a monopoly credit bureau. For example, there may be a point where increases in credit bureau membership yields relatively little new information but creates more competition for a relatively fixed pool of borrowers (Wilson 1990). Alternatively, a lender that is more worried about moral hazard than adverse selection may be tempted not to join the credit bureau, essentially free-riding on the deterrent effect created by the information sharing of its fellow lenders. This is less likely as the cost of participating in a credit bureau falls. Finally, creditors may choose to share information with more than one bureau in order to stimulate competition and innovation for such services.

4. Market Structure

Suppose for the moment that we can treat market structure and the intensity of bank competition separately. In a more concentrated lending market bank, a given bank will have information about a larger share of the universe of borrowers than would a bank in a less concentrated market (Marquez 2001). That suggests credit bureaus may enjoy a larger informational advantage over individual banks when lending is less concentrated.

Two additional arguments can be made. First, when there are many lenders, they are likely to be more concerned about the current indebtedness of any prospective borrower. To the extent that subsequent indebtedness may reduce the likelihood that existing loans will be repaid, lenders will also be concerned about any additional borrowing done by their existing customers.⁶ That suggests we should expect credit bureaus to emerge more often when there are more lenders, each of whom accounts for a smaller share of the borrowing population.

⁶ Shaffer (1998) posits an another argument that is relevant here—the winner's curse associated with being the lender who grants a loan to a borrower previously rejected by many other banks.

5. Competition

Now we turn to the question of competition among lenders. A number of papers (Wilson 1990, Pagano and Jappelli 1993) suggest that more competition reduces the likelihood that lenders will join a credit bureau because doing so reduces the information asymmetry between a borrower's current lender and its competitors. The question is whether a bank can earn enough profits on customers it attracts from other lenders to offset the decline in profits that results from having to offer more competitive terms to its existing customers. If the only barrier to competition is the lack of information on rivals' customers, establishing a credit bureau might reduce profits. In that case it is less likely that information sharing would be voluntarily adopted by the industry.

Padilla and Pagano (1997) suggest another possible inducement to the formation of credit bureaus. If banks can extract significant rents from borrowers and cannot commit to avoid this, borrowers may have too little incentive to avoid default. In this environment, disclosing information about one's borrowers is a way to commit not to extract too much rent. Banks will agree to share information if they gain more by reducing the default rate than they lose in profits on loans that would otherwise be repaid.

But information sharing need not be a discrete choice. It is possible these tradeoffs could result in an equilibrium where some, but not all, information about customers is shared. For example, lenders might share only negative information about their customers—delinquencies and defaults—but not positive credit information such as the size of a credit line, its utilization, or other information relevant to a customer's ability to repay. It's possible that by sharing some information, lenders could benefit from a reduction in adverse selection without losing too much profit.

A number of papers show that disclosing limited information may be superior to disclosing all available information about borrowers. In Padilla and Pagano (2000) there is a tradeoff between the benefits of reducing adverse selection via full disclosure and reducing moral hazard by limiting disclosure, which induces borrowers to signal their type by avoiding defaults. The result is more lending, at lower interest rates, and with less frequent defaults than a policy of sharing all available information. In Vercammen (1995), a similar intuition can be used to justify limiting the length of borrowers' credit history, a practice regularly observed in the credit reporting industry.⁷

B. Credit Bureaus in the Real World

How well do the preceding theoretical arguments explain what we observe about credit bureaus in the U.S. and abroad? The answer is that, even with the relatively limited empirical evidence available, the theory seems to explain a lot. Credit bureaus tend to emerge in countries where people are relatively mobile and, to a lesser extent, where the ratio of consumer borrowing to consumption is higher (Pagano and Jappelli 1993). The relationship between these variables and the annual per capita volume of consumer credit reports is even stronger.

⁷ Such limitations are usually imposed by law and typically apply only to derogatory credit information.

In most developed countries, only a handful of credit bureaus are responsible for generating the vast majority of credit reports, and at least one of those bureaus will enjoy nearly complete coverage of consumers who borrow money (Jappelli and Pagano 1999). It appears that credit bureaus are more likely to emerge as a joint venture of local retailers or lenders than they are from collaborations of firms with a national reach (Pagano and Jappelli 1993). But once a credit bureau is created, its scope tends to grow with the scope of its members (see section II). In addition, bureaus that evolved in this way tend to share more positive credit information than bureaus initially established to serve lenders with a national reach.

In several developed countries, the sharing of consumer credit information did not exist until it was mandated by law. In these countries, the volume of consumer credit tended to be smaller, and there were fewer regulatory restrictions limiting competition between lenders (Pagano and Jappelli 1993). These patterns are consistent with the argument that voluntary information sharing is more difficult to initiate when doing so might contribute to intense competition among lenders, but that once established, credit bureaus enjoy significant network effects.

Can we quantify the benefits that consumer credit bureaus provide? A lower bound of the gross benefits should be reflected in the revenues earned by credit bureaus and firms such as Fair, Isaac and Co., which develop scorecards for consumer loans. For the U.S., this lower bound is at least several billion dollars (see section II). McCorkell (2002) argues that using scorecards built with data supplied by credit bureaus results in delinquency rates 20-30 percent lower than lending decisions based solely on judgmental evaluation of applications for credit. Conversely, holding the expected default rate constant, using scorecards yields a comparable increase in the acceptance rate.⁸

If we suppose for the moment that this technology disappeared and that lenders did not adjust the volume of their credit card lending, a simple estimate of the resulting increase in loan losses for the U.S. would be about \$5 billion a year. Conversely, suppose that lenders responded to the loss of this technology by trying to hold the delinquency rate constant. The resulting decline in outstanding revolving loans would be about \$120 billion.⁹ These obviously crude calculations bound a region of potential gains, as banks would obviously adjust to any change in their screening technology.

III. The Evolution of the American Consumer Credit Reporting Industry

Consumer credit bureaus emerged in the United States in the late 19th century. Other early adopters include Austria, Sweden, Finland, South Africa, Canada, Germany, and

⁸ See also Chandler and Parker (1989) and Chandler and Johnson (1992).

⁹ This number is 20 percent of the product of the charge-off rate on banks' credit card loans (4.38 percent) times outstanding revolving credit (\$613 billion) in the first quarter of 2000. That was the recent low for delinquencies and chargeoffs on U.S. banks' credit card loans. The delinquency and charge-off rates were nearly identical at the time. See Barron and Staten (2001) for a comparable exercise in which they ask what would be the decline in the discriminatory power of a scorecard when it is constructed only with derogatory credit information. Jappelli and Pagano (1999) use a cross national sample with macroeconomic data to identify some preliminary evidence of the effect of credit bureaus on default rates.

Australia (Jappelli and Pagano 1999). In the U.S., most of the early credit bureaus were cooperatives or nonprofit ventures set up by local merchants to pool the credit histories of their customers and to assist in collections activities. Others were established by local finance companies or the local chamber of commerce (Cole and Mishler 1998).

The next step for this industry was the formation of a mechanism to share consumer credit information in different cities and regions of the country. This was accomplished through a trade association established in 1906. For most of its existence this organization was known as Associated Credit Bureaus, Inc., or ACB.¹⁰ ACB developed the procedures, formats, and definitions that enabled the sharing of credit files between agencies across the country. ACB even introduced a form of scrip, which members purchased from the association, which was used as a currency to pay for credit reports obtained from fellow members in other cities.

Membership in ACB grew rapidly from fewer than 100 bureaus in 1916 to 800 in 1927, and doubling again by 1955. According to ACB, its members *collectively* attained universal coverage of consumer borrowers by 1960. But even in that year, the largest of the credit bureaus maintained files on consumers in at most a handful of cities. At a time when the technology was limited to filing cabinets, the postage meter, and the telephone, American credit bureaus issued 60 million credit reports in a single year.

A. Credit Bureaus Respond to Economic and Technological Change

Credit bureaus emerged at a time when the primary source of consumer credit was offered by retailers; the other important sources were pawnbrokers, small loan companies, and, of course, friends and family. One reason that retailers were so dominant in this period was that state usury laws made it difficult to earn profits on small loans lent at legal rates (Caldor 1999, Gelpi and Julien-Labruyere 2000).

Retailers, on the other hand, were able to earn a profit because they simply charged more for goods purchased on credit. This advantage became less important after 1916 when many states relaxed their usury laws. Even so, in 1929 retailers financed one-third of all retail sales. Among retailers who offered credit, credit sales accounted for a little more than half of their sales.¹¹

The share of retail sales carried on open accounts—a form of revolving credit—ranged from 20-22 percent in the business censuses conducted from 1929 to 1948. In 1935, open account sales represented 21 percent of sales at food stores, 19 percent at clothing stores, 26 percent at department stores, 24 percent at furniture stores, 22 percent at gas stations, and 52 percent at fuel and ice dealers. But the share of sales accounted for

¹⁰ This association was originally called the National Federation of Retail Credit Agencies. Today it is called the Consumer Data Industry Association, or CDIA, but I will refer to its historic name throughout this paper. Some of the information presented in this section is drawn from the organization's web site.

¹¹ These numbers exclude credit arranged through separate finance companies. For details on the historical statistics cited in this section, see the Data Appendix.

by installment contracts financed by retailers declined from 13 percent in 1929 to less than 6 percent in 1948, as finance companies and banks took up more of that business.

Over the course of the last century, credit bureaus benefited from the increasing importance of consumer credit in the economy, but they also had to adapt to changes in the market for consumer credit. In the half-century beginning in 1919, consumer credit grew four times more rapidly than did total consumer spending. But consumer credit held by retailers grew only as rapidly as consumer spending. As a result, the share of consumer credit held by retailers fell by half (from 80 percent to 40 percent) between 1919 and 1941. By 1965, it had fallen by nearly half again (Figures 1 and 2).¹² In 2000, nonfinancial businesses held only 5 percent of outstanding consumer credit. Thus, the rapid growth in consumer debt over this period did not wind up on the books of retailers, but rather on the balance sheets of financial institutions—primarily banks and finance companies.

Another significant change in this period was that retail and consumer credit markets got bigger. At the turn of the century, for all but a handful of retailers and catalogue sellers, the market was limited to a single city or just part of a city. But this gradually changed. For example, regional or national department store chains accounted for less than 15 percent of department store sales in 1929. By 1972, they accounted for nearly 80 percent of sales. If we examine retail sales as a whole, which includes the sales of tens of thousands of independent restaurants and gasoline stations, the share of sales by regional or national chains rose from 13 percent in 1929 to 31 percent in 1972 (Figure 3). Over time, larger chains removed their credit operations from individual stores and consolidated them at the headquarters. Membership and information sharing at the local credit bureau became less important while cooperation with the larger and more comprehensive credit bureaus became more important.

For a long time, banks' geographic expansion was constrained by restrictive branching laws. For consumer credit, however, branching restrictions became less important once bank-issued credit cards were introduced in the late 1950s and widely adopted in the late 1960s (Nocera 1994, Evans and Schmalensee 1999). Eventually, among the banks with the largest number of credit card accounts, the vast majority of these customers were not served through their traditional branch operations.

Once credit cards offered by banks were widely adopted, many retailers opted to accept these cards while dropping their in-house credit programs. Many retailers, especially smaller ones, had offered credit plans simply to compete with other retailers. Merchants paid a price for accepting the bankcards—the merchant discount (6 percent of the purchase price at that time)—but they avoided other expenses, such as bookkeeping and collections activity, to say nothing of the cost of financing these receivables themselves. Larger retailers have maintained their store cards—even today there are more store card accounts than bankcard accounts, and the largest issuers include retailers such as Sears. In other instances, retailers have sub-contracted their store card operations to financial firms and no longer carry the receivables on their own balance sheets.

¹² To span the century, two sets of data are required. See the Data Appendix for details.

These changes occurred rapidly after the late 1960s. In 1968, the amount of revolving credit held by retailers was nearly six times higher than bankcard balances and outstanding check credit. Ten years later (1978), banks and retailers held roughly equal amounts of revolving credit (Figure 4). Another 15 years later (1993), revolving credit held at banks was more than three times higher than balances held by retailers.¹³

The rapid development of the credit card industry presented both opportunities and challenges to credit bureaus in the early 1970s. On the one hand, card-issuing banks were a source of new business to credit bureaus. “Pre-screening services”—the process in which a card issuer would specify a set of characteristics of potential borrowers used to generate a mailing list of people to whom the issuer extends firm offers of credit—became a significant source of revenue to the industry. On the other hand, lenders were interested in offering credit cards on a regional or national scale, which required access to credit files that no single bureau held in the late 1960s. In addition, banks were rapidly automating their systems and soon expected to share and obtain data with credit bureaus through electronic rather than paper means. To meet these changes, credit bureaus had to automate and they had to get larger.

And that is exactly what happened. The largest credit bureaus already enjoyed coverage of one or more large cities, and they soon began to expand their scope by acquiring credit bureaus in other cities. ACB membership declined from a peak of around 2,200 in 1965 to only about 500 today. After rising for decades, the number of credit bureau offices also began to decline, falling 20 percent between 1972 and 1997.

Credit bureaus in the largest cities were automated first, beginning with Los Angeles in 1965, followed by New York and San Francisco in 1967.¹⁴ Shortly thereafter, the largest bureaus established networks to access files in any of their automated bureaus across the country. As member banks and retailers built up national credit franchises, their data made it possible for the largest bureaus to progress toward the goal of in-house universal coverage of borrowers. The three largest credit bureaus (today they are called TransUnion, Experian, and Equifax) attained universal coverage in the 1980s.

Most credit bureaus were simply too small to afford the high fixed cost of automating with the technology then available. In 1975, two-thirds of ACB member bureaus were located in towns with populations of 20,000 or less. As recently as 1989, more than a third of ACB member bureaus had not yet automated and relied upon an ACB service to obtain access to information provided by regional and national creditors. Nearly 500 independent credit bureaus had automated, but they relied on contracts with one or more of the top three bureaus to obtain information provided by larger creditors.

¹³ If we include securitized revolving credit—mostly issued by banks at the time, but not carried on their balance sheets—the ratio would be 5:1 rather than 3:1.

¹⁴ In 1969 only four ACB member bureaus were partially or fully automated. Six years later, 80 member bureaus had automated.

B. The Consumer Credit Reporting Industry Today

In 1997, there were just under 1,000 active consumer credit reporting agencies in the U.S., employing about 22,000 people and generating \$2.8 billion in sales.¹⁵ Virtually all of these revenues are derived from charges for access to consumer credit reports. Controlling for inflation, industry revenues have quadrupled since 1972—twice the increase in the overall economy and the stock of consumer credit outstanding. The number of credit reports issued today is 10 times higher than 30 years ago, yet industry employment is essentially unchanged. Few industries can boast such impressive gains in labor productivity.

The industry is segmented into small and big firms. A typical credit bureau has just one office and employs 10 people. Nine-tenths of all firms have annual sales of less than \$2.5 million. In 1997, only 14 companies had more than five offices. Yet these firms accounted for more than a fifth of all offices, half of industry employment, and two-thirds of industry receipts. The four largest firms alone account for over half of industry receipts. These larger firms concentrate on high volume businesses—those firms seeking credit file information thousands or even millions of times a year. They also conduct most of the pre-screening services that result in the billions of solicitations for credit cards or insurance delivered by mail each year. Smaller firms, on the other hand, concentrate on low volume and one-time customers. For these customers, the automated technology of the large bureaus has been too costly to justify for such a low volume. But with cheap powerful PCs and Internet-based delivery, such costs are falling, and this may put additional pressure on the smaller independent bureaus.

There are also a number of smaller, less well-known credit bureaus that serve particular niche markets. Many personal finance companies participate in associations (called lenders' exchanges) that maintain records of credit extended to an individual from members in the association. There is a medical credit bureau that primarily serves doctors and dentists. Another bureau (the Medical Information Bureau) pools certain health information of applicants for life insurance. There are a number of highly automated credit bureaus that serve retailers that accept personal checks and banks that seek information on customers opening checking accounts (Telecredit, SCAN, and Chexsystems). There are a variety of bureaus that serve landlords evaluating prospective tenants (Landlord Connections, for example), and there is even a bureau that serves telephone companies (the National Consumer Telecommunications Exchange).

Outside the U.S., consumer credit bureaus are on the rise. A recent World Bank survey found at least 25 new private bureaus were created in Europe, Asia, and Latin America during the 1990s (Miller 2000). Quite a few public credit registries were also created, especially in Latin America. The big American bureaus have begun to expand abroad. Experian, now owned by a British firm, has concentrated on Europe, while Equifax has acquired a number of bureaus in Latin America.

¹⁵ These statistics are from the *Census of Service Industries*. See the Data Appendix for details.

IV. Credit Bureaus as Black Sheep

The American consumer credit reporting industry has a poor reputation in the eyes of many consumers. To some degree, credit bureaus are victims of their own success. Few people stop to think about the role a credit bureau played in their successfully obtaining credit, insurance, or even employment. But when they are denied such things on the basis of information contained in a credit report, the credit bureau often gets the blame. Consumers are also concerned about the potential loss of privacy that may result from the sharing of sensitive financial information. Credit bureaus are concerned about these issues too, but it's unlikely they weigh the benefits and costs of greater accuracy, or greater privacy, in the same way most consumers do. It is not surprising, then, that these two concerns have been addressed through regulation.

A. The Quality of Credit Bureau Information

Credit bureaus obtain account history data from member institutions, sort and aggregate these data into personal credit histories, and disseminate this information to members at their request. The benefit to members from sharing this information clearly depends on its accuracy and timeliness. But members also share in the cost of providing information to the bureau. The more costly it is to provide this information, the less attractive it will be for a lender to join a bureau.

1. Economic Intuition

The level of quality maintained by credit bureaus will depend on a balancing of the costs and benefits to their member institutions. This depends, in turn, on the relative costs of making and correcting mistakes. Naturally, lenders wish to minimize the cost of processing and transmitting the information they are obliged to provide to credit bureaus. This is not to say that lenders do not care about the quality of this information—after all, the data are typically a direct output of their own internal information systems.

When using credit bureau data, lenders are concerned about two types of errors: A type I error grants credit to a person based on erroneous information; a type II error denies credit to a person based on erroneous information. For lenders, the expected loss associated with a type I error (the principal lost) is likely to be higher than the expected loss from a type II error (forgone profits on a loan). So given that lenders are both the providers and beneficiaries of credit history information, one might expect that credit bureau files are more likely to contain erroneous references to delinquencies or defaults than they are to mistakenly omit actual delinquencies or defaults. To borrowers, of course, the cost of not being able to obtain a loan could well be higher than the cost to a lender of not being able to make a loan to that person. To the extent that borrowers' losses are not fully reflected in bureaus' decision-making, there could be too many errors and, in particular, too many type II errors.

When potential borrowers become aware of erroneous information in their credit reports, they will have an incentive to dispute it if they can.¹⁶ In fact, borrowers enjoy a

¹⁶ I assume, as current law requires in the U.S., that the borrower would not confront the problem

comparative advantage in identifying such errors. One way to improve the accuracy of credit reports is to encourage consumers to dispute errors in their reports, setting in motion a process for rechecking the source and accuracy of the data reported. Given there is a mutual interest in improving the accuracy of the data, it is not surprising to find that credit bureaus encourage consumers to correct errors in their files and devote considerable resources (customer service staffing, fee waivers, etc.) to the process.¹⁷ In a cross-country survey, Miller (2000) found that 25 of 43 private bureaus offered free credit reports to consumers as a means of correcting errors. Less than half reported using statistical or modeling techniques to identify errors.

Both consumers and lenders share the benefits of any reduction in type II errors that result from an efficient dispute process. Of course, they also share in the costs of that process. But it is likely that consumers enjoy relatively more of the benefits while lenders bear relatively more of the cost of administering the dispute resolution process. As a result, from the standpoint of society, credit bureaus may devote too few resources to the error correction process.¹⁸ What's more, there may be disputes over the extent of proof required in order to reject a consumer's dispute, how rapidly the dispute must be resolved, etc. These issues suggest a possible role for government regulation.

2. Data on the Accuracy of Credit Bureau Files

Perhaps no issue about this industry generates more heated debate than the accuracy of credit reports. For all of this heat, relatively little data are available. But we do know that the volume of activity in this industry is so large that even a small error rate would result in millions of inaccuracies each year.

In 1989, ACB presented some aggregate statistics about its members. In that year, consumers requested some 9 million credit reports, which is about 2 percent of the 450 million reports generated annually at that time. Consumers disputed about 3 million of those reports. About 2 million credit reports were altered in the reverification process. Consumers disputed something in their reports about one-third of the time after they saw them, and about two-thirds of disputed reports were changed in the reverification process. But not all these changes were the result of an error in the report. Some were the result of the routine updating of files with the most current information.¹⁹

Sometimes a credit report will include references to other people and their accounts. These errors occur because creditors do not report information on individuals

of having to dispute an erroneous reference at every credit bureau, nor would the borrower have to deal with the re-appearance of an erroneous reference.

¹⁷ Prior to the passage of the FCRA, some credit bureaus in the U.S. were less receptive to the idea of encouraging consumers to investigate their files. Some bureaus actively discouraged lenders from disclosing to consumers the name of the bureau or even that a credit report had been obtained.

¹⁸ This problem is aggravated if some consumers use the dispute process strategically, i.e., by disputing accurate derogatory information in the hope it will be erroneously removed. In the U.S. this phenomenon has become sufficiently widespread to coin a phrase—the credit repair industry.

¹⁹ At that time, credit bureau files were updated with 2 billion items of information each month.

so much as they do on accounts. The credit bureau assembles a report on an individual by linking the accounts with the same names, addresses, birthdays, social security numbers, and other information that is presumably unique to the individual. But this is not a simple exercise in a country with many thousands of lenders and where consumers move frequently and are also ambivalent about adopting a universal, unique ID number.

Credit bureaus have developed sophisticated processes to aggregate account information into borrower profiles, but they are not perfect. In an older study Williams (1989) was able to identify errors of this sort in credit reports a little over 10 percent of the time.²⁰ Such errors are not always innocuous: if the erroneous information includes someone else's delinquencies, for example, a person's credit rating will be adversely affected. Even if the erroneous accounts are in good standing, they make it appear that the applicant has more open credit lines than he or she actually does. Sometimes these mistakes can affect credit decisions. But how often?

In the early 1990s, ACB released summary statistics from a study based on a sample of nearly 16,000 applicants, all of whom were denied credit (Connelly 1992). Relatively few people requested a copy of their credit report, but a quarter of those who did disputed something in their report. In about 14 percent of the disputed reports, the resulting changes were significant enough to reverse the credit decision. In the study, there were only 36 such instances (0.2 percent of the sample). A simple extrapolation, based on the previously cited statistics provided by ACB, suggests that in the early 1990s, the number of applications for credit mistakenly denied could have been large — in the tens if not hundreds of thousands each year.²¹

B. Privacy

Credit bureaus are information-sharing arrangements that help to reduce the problems of adverse selection and moral hazard in credit, insurance, and other markets. The flip side of information sharing is necessarily a loss of consumer privacy. It is likely that sharing a little information about borrowers, such as their payment history, generates benefits that exceed the losses associated with any loss of privacy, especially if consumers are aware that such information is being shared and access to the information is limited. When access is less well regulated, consumers are less well informed, or information is used for purposes not envisioned by consumers, this case becomes harder to make.

The American credit reporting industry has been embarrassed on several occasions by the ease with which people have obtained credit reports when they should

²⁰ Less scientific reports produced by Consumers Union (in Michelle Meier's 1991 testimony) and the Public Interest Research Group (Golinger and Mierzwinski 1998) found significantly higher error rates. See the Data Appendix.

²¹ 13.5 percent of 3 million disputed reports is 405,000. But that number is likely an over-estimate for two reasons. First, the frequency of the most egregious mistakes is almost certainly higher in a sample of consumers denied credit than for the population as a whole (we don't know how serious the selection problem was because the study, prepared by Arthur Andersen, was never published). Second, not all of the 3 million reports disputed in 1989 occurred after a denial of credit. So the 405,000 number is probably too high. The question is, by how much?

not have. In one study, about a third of the bureaus contacted were willing to provide credit reports without complying with the requirements of the Fair Credit Reporting Act (Green 1991). In 1989, Dan Quayle's credit report was obtained by a reporter under the pretext of making a job offer to the vice president. Certainly some deception was required in order to obtain the reports.²² But it does seem that, at least at the time, a little deception went a long way.

Direct access to the files of the largest credit bureaus is relatively difficult to obtain. These companies operate automated systems that serve high volume customers. Their size makes it possible for them to afford elaborate and expensive security arrangements for their systems. Their customers are primarily lenders who regularly provide information on their customers in addition to being frequent users of information contained in credit bureau reports. It is relatively easy to police this stable customer base.

At many of the smaller bureaus, the clientele consists of infrequent or one-time users of credit reports. These users are less likely to be providers of credit information to the bureau. Some of these bureaus are really just resellers of credit information compiled by one or more of the large bureaus. Those bureaus may have a more difficult time policing their customers and may not have an adequate incentive to do so.

On the other hand, it is the larger bureaus that are more likely to market information products that have little or nothing to do with applications for credit, insurance, or even employment. For example, the largest bureaus offer databases that make it possible to match a person's name or other identifying information to an address or phone number (individual reference services). They also prepare targeted mailing lists of potential customers for nonfinancial products based on a set of characteristics specified by the list buyer, for example, a catalogue company. Credit bureaus are not the only firms offering these services, but they are the most controversial. At a minimum, such activities create at least the impression that a person's personal information and payment history are being used for purposes completely unrelated to evaluating an application for credit.

V. The Regulation of Consumer Credit Bureaus

The primary mechanism for regulating the activities of consumer credit bureaus in the U.S. is the Fair Credit Reporting Act (hereafter FCRA).²³ It was enacted in 1970 and amended several times since, most notably in 1996. The FCRA creates obligations for credit bureaus, users of credit reports, and organizations that provide information to credit bureaus. The principal agency responsible for enforcing the FCRA is the Federal Trade

²² The reporter was writing an article on credit bureaus for *Business Week*, published by McGraw-Hill. In 1998 McGraw-Hill was ordered to pay \$7,500 in damages, resulting from a deliberate breach of contract, to the credit bureau that provided the information.

²³ 15 U.S.C §§ 1681-1681(u). A summary of the major provisions is found in Appendix A. See also Hunt (2002) and the Federal Trade Commission's web site www.ftc.gov.

Commission (FTC), but other federal agencies (including the Federal Reserve Board) are also responsible for enforcing the act among firms they regulate.²⁴

In many ways, this law is an attempt to refine the balance between the obvious benefits credit bureaus generate and consumers' legitimate concerns over accuracy and privacy. The FCRA creates obligations for credit bureaus, users of credit reports, and credit bureau members. The duties of lenders and other information providers are relatively modest — to avoid furnishing information known to be erroneous and to participate in the process of correcting errors identified by consumers. This increases the quality of information provided to credit bureaus without significantly raising the cost of sharing the information. Regulation should not raise these costs to the point where information providers drop out, a situation that would undermine a voluntary mechanism for sharing information.

Similarly, inaccuracies in credit files do not violate the FCRA. Rather, the act requires bureaus to use *reasonable procedures to ensure maximum possible accuracy*. This standard is satisfied if the bureau adopts procedures a reasonably prudent person would use under the circumstances. These procedures, in turn, depend on a balancing of the incremental benefits and costs of attaining higher levels of accuracy.²⁵ This balancing of benefits and costs may change over time as advances in technology make it easier for bureaus to adopt ever more powerful computers and software.

The FCRA also encourages consumers to correct errors in their reports. The cost to consumers of obtaining their own reports is limited by regulation. The cost is free whenever information contained in a credit report has contributed to an adverse decision affecting the consumer — precisely the circumstance in which an error may be more costly. The FCRA requires users of credit bureau information to remind consumers of their right to obtain and, if necessary, correct their credit reports. The act sets a time limit for reinvestigations to be completed, at no cost to the consumer, and includes a number of mechanisms for ensuring that any corrections are disseminated to other credit bureaus and users of the report in question.

This is not to say that the FCRA has attained the ideal balancing of benefits and costs that might be achieved. Consumer groups remain concerned about the problems of accuracy and privacy and, in some areas, question whether the act is adequate (Golinger and Mierzwinski 1998).²⁶ Numerous congressional hearings in the late 1980s and early 1990s culminated in amendments, enacted in 1996, that significantly strengthened consumer protections. Thereafter, the FTC sued a number of credit bureaus, alleging they were devoting inadequate resources to the consumer-dispute process.²⁷ At the same

²⁴ Under the act, state attorneys general may sue on behalf of their residents. In addition, certain state laws provide consumers with additional rights.

²⁵ These interpretations are found in the 1982 case *Bryant v. TRW, Inc.* and the 1989 case *Houston v. TRW Information Services, Inc.*

²⁶ See also Edmund Mierzwinski's 2001 testimony.

²⁷ In January 2000, the FTC announced a settlement, involving the three largest credit bureaus, that requires them to adequately staff the toll-free lines used by consumers seeking information about their credit reports.

time, continued improvements in computer and communications technology have reduced the cost of investigating alleged errors and correcting them when found.²⁸

VI. What Lies Ahead?

In the U.S., the two-tier industry structure — a few giant credit bureaus with national coverage serving high-volume customers and many smaller bureaus serving specific niches or reselling data to low-volume customers — is likely to mature while adapting to new forms of delivery, for example, the Internet. Advances in predictive modeling such as credit scoring will likely increase the value of information contained in credit bureau files. But the industry also faces new challenges from governments as well as their own customers.

A. Challenges from Governments

The industry faces the prospect of more intense scrutiny and possibly regulation. In 2001 the FTC succeeded in restricting the use of certain data in consumer credit reports to generate target-marketing lists used to sell nonfinancial products to consumers. The FTC also succeeded in applying the financial privacy requirements of the Gramm-Leach-Bliley Act to credit bureaus' "look-up" services, whereby a person's name and other identifying information are matched with a current address or phone number contained in credit files.²⁹ And while the 1996 amendments to the Fair Credit Reporting Act limited the ability of states to enact new, more restrictive legislation affecting credit bureaus, those limits expire in 2004. Credit bureaus may also be affected by the European Privacy Directive, which is generally more restrictive than U.S. law (Cate 1997).

B. Challenges from Lenders

For a brief period in the late 1990s, lenders accounting for one-half of all consumer credit ceased reporting certain information (credit limits and high balances) on at least some of their credit card accounts (Fickensher 1999a and 1999b, Lazarony 2000). Financial regulators warned lenders their underwriting systems might be compromised by incomplete credit bureau information (FFIEC 2000). The leading credit bureaus responded by announcing they would limit access to their databases for lenders providing incomplete credit histories. Thereafter, these lenders began to send more complete credit information to the bureaus.

This behavior might be a reaction to a period of relatively intense competition for new customers by credit card lenders. During this period, an increasing share of consumers' unsecured debt was held on the books of a few lenders. In just five years

²⁸ The industry argues that any benefit from the reduction in the unit cost of resolving consumer disputes is being offset by rapid growth in the number of reports being disputed. A conservative estimate of the industry-wide cost of labor devoted to resolving consumer disputes and instances of identity theft would easily exceed \$10 million.

²⁹ See *TransUnion Corp. v. Federal Trade Commission* and *Individual Reference Services Group, Inc. (IRSG), v. Federal Trade Commission et al.*

(1996-2000), the share of bank credit card balances held by only 10 institutions increased from 43 percent to 63 percent (Figure 5).³⁰ These banks are the principal source of information about consumers' payment habits for bankcards, as well as the principal source of potential new customers. And during those five years, consumers were inundated with offers of credit card accounts that carried low introductory interest rates on balances transferred from other banks. This episode is a reminder that, in the U.S. at least, information sharing among lenders is endogenous. This equilibrium need not continue if there are significant changes in the economic or legal environment.

³⁰ These statistics are based on Call Report data. If we added back receivables securitized by these banks, the concentration ratios would likely be higher.

References

Books and Articles

- Annual Statistical Digest*. Washington: Board of Governors of the Federal Reserve System, various years.
- Ausubel, Lawrence M. 1991. "The Failure of Competition in the Credit Card Market," *American Economic Review*, Vol. 81: 50-81.
- Ausubel, Lawrence M. 1999. "Adverse Selection in the Credit Card Market," mimeo, Department of Economics, University of Maryland.
- Banking and Monetary Statistics, 1941-70*. 1976. Washington: Board of Governors of the Federal Reserve System.
- Barron, John M., and Michael Staten. 2001. "The Value of Comprehensive Credit Reports: Lessons from U.S. Experience," mimeo, Credit Research Center, Georgetown University.
- Caldor, Lendol. 1999. *Financing the American Dream: A Cultural History of Consumer Credit*. Princeton, NJ: Princeton University Press.
- Calem, Paul S., and Loretta J. Mester. 1995. "Consumer Behavior and the Stickiness of Credit-Card Interest Rates," *American Economic Review*, Vol. 85: 1327-36.
- Cate, Fred H. 1997. *Privacy in the Information Age*. Washington, DC: Brookings Institutions Press.
- Chandler, Gary G., and Robert W. Johnson. 1992. "The Benefit to Consumers From Generic Scoring Models Based on Credit Reports," *IMA Journal of Mathematics Applied in Business and Industry*, Vol. 4: 61-72.
- Chandler, Gary G., and Lee E. Parker. 1989. "Predictive Value of Credit Bureau Reports," *Journal of Retail Banking*, Vol. XI: 47-54.
- Cole, Robert H., and Lon Mishler. 1998. *Consumer and Commercial Credit Management*, 11th ed. Boston: McGraw-Hill.
- Congressional Budget Office. 2000. *Personal Bankruptcy: A Literature Review*. Washington, D.C.: Congressional Budget Office.
- Connelly, D. Barry. 1992. *Announcement of the Credit Report Reliability Study*, text of speech before the National Press Club (February 4, 1992).
- Consumer Credit (G. 19)*. Washington: Board of Governors of the Federal Reserve System, various years.
- Consumer Installment Credit, Revision Sheets (January 1975-January 1986)*. 1986. Washington: U.S. Department of Commerce, National Technical Information Service.
- Evans, David S., and Richard Schmalensee. 1999. *Paying with Plastic: The Digital Revolution in Buying and Borrowing*. Cambridge, MA: MIT Press.
- Federal Financial Institutions Examination Council Advisory Letter, "Consumer Credit Reporting Practices" (January 18, 2000).

References

- Federal Reserve Bulletin*. Washington: Board of Governors of the Federal Reserve System, various years.
- Fickensher, Lisa. 1999a. "Lenders Hiding Credit Data and Regulators Object," *American Banker*, Vol. 149 (July 7, 1999), pp. 1,7.
- Fickenscher, Lisa. 1999b. "Credit Bureaus Move Against Lenders That Withhold Info," *American Banker*, Vol. 149 (December 30, 1999), p. 1.
- Gelpi, Rosa-Maria, and Francois Julien-Labruyere. 2000. *The History of Consumer Credit: Doctrines and Practices*. New York: St. Martin's Press.
- Golinger, Jon, and Edmund Mierzwinski. 1998. "Mistakes Do Happen: Credit Report Errors Mean Consumers Lose," Washington: Public Interest Research Group, 1998. www.pirg.org/reports/mistakes (accessed 10/15/2001).
- Green, Mark. 1991. "Prying Eyes: An Investigation into Privacy Abuses by Credit Reporting Agencies," mimeo, New York City Department of Consumer Affairs.
- Hunt, Robert 2002. "What's in the File: The Economics and Law of Consumer Credit Reporting," Federal Reserve Bank of Philadelphia *Business Review* (2nd Quarter), pp. 17-24.
- "Is Nothing Private?" *Business Week* (September 4, 1989), pp. 74-82.
- Jappelli, Tulio, and Marco Pagano. 2000. "Information Sharing in Credit Markets: The European Experience," CSEF Working Paper No. 35.
- Jappelli, Tulio, and Marco Pagano. 1999. "Information Sharing, Lending and Defaults: Cross Country Evidence," CEPR Working Paper No. 2184.
- Klein, Daniel B. 1997. "Promise Keeping in the Great Society: A Model of Credit Information Sharing," in Daniel B. Klein, ed. *Reputation: Studies in the Voluntary Elicitation of Good Conduct*. Ann Arbor, MI: University of Michigan Press.
- Lazarony, Lucy. 2000. "Lenders Defy Credit-Reporting Crackdown, Hoarding Data that Could Save You Money," *Bankrate.com*, posted April 28, 2000 (accessed September 28, 2001).
- Marquez, Robert. 2001. "Competition, Adverse Selection, and Information Dispersion in the Banking Industry," mimeo, R. H. Smith School of Business, University of Maryland.
- McCorkell, Peter L. 2002. "The Impact of Credit Scoring and Automated Underwriting on Credit Availability," in Thomas A. Durkin and Michael E. Staten, eds., *The Impact of Public Policy on Consumer Credit*. Boston: Kluwer Academic Publishers.
- Mester, Loretta J. 1994. "Why Are Credit Card Rates Sticky?" *Economic Theory*, Vol. 4: 505-30.
- Mester, Loretta J. 2002. "Is the Personal Bankruptcy System Bankrupt?" Federal Reserve Bank of Philadelphia *Business Review* (1st Quarter), pp. 31-44.
- Miller, Arthur R. 1971. *The Assault on Privacy: Computers, Data Banks, and Dossiers*. Ann Arbor, MI: University of Michigan Press.

References

- Miller, Margaret. 2000. "Credit Reporting Systems Around the Globe: The State of the Art in Public and Private Credit Registries," mimeo, World Bank.
- Nocera, Joseph. 1994. *A Piece of the Action: How the Middle Class Joined the Money Class*. New York: Simon & Schuster.
- Padilla, A. Jorge, and Marco Pagano. 2000. "Sharing Default Information as a Borrower Discipline Device," *European Economic Review*, Vol. 44: 1951-80.
- Padilla, A. Jorge, and Marco Pagano. 1997. "Endogenous Communication Among Lenders and Entrepreneurial Incentives," *The Review of Financial Studies*, Vol. 10: 205-36.
- Pagano, Marco, and Tullio Jappelli. 1993. "Information Sharing in Credit Markets," *Journal of Finance*, Vol. XLVIII: 1693-1718.
- Privacy Protection Study Commission. 1977. *Personal Privacy in an Information Society*. Washington: U.S. Government Printing Office.
- Shaffer Sherill. 1998. "The Winner's Curse in Banking," *Journal of Financial Intermediation*. Vol. 7: 359-92.
- Stiglitz, Joseph E., and Andrew Weiss. 1981. "Credit Rationing in Markets with Imperfect Information," *American Economic Review*, Vol. 71: 393-410.
- Sullivan, Teresa A., Elizabeth Warren, and Jay L. Westbrook. 2000. *The Fragile Middle Class: Americans in Debt*. New Haven: Yale University Press
- U.S. Bureau of the Census. 2001a. *1997 Economic Census, Administrative and Support and Waste Management and Remediation Services*. Washington: U.S. Government Printing Office.
- U.S. Bureau of the Census. 2001b. *Current Business Reports, Service Annual Survey: 1999*. Washington: U.S. Government Printing Office.
- U.S. Bureau of the Census. 2001c. *Statistical Abstract of the United States: 2001*. Washington: U.S. Government Printing Office.
- U.S. Bureau of the Census. 1975. *Historical Statistics of the United States, Colonial Times to 1970, Bicentennial Edition*. Washington: U.S. Government Printing Office.
- U.S. Bureau of the Census. *Census of Service Industries*. Washington: U.S. Government Printing Office, various years.
- Van Cayseele, Patrick, Jan Bouckaert, and Hans Degryse. 1995. "Credit Market Structure and Information Sharing Mechanisms," in Van Witteloostuijn, Arlen, ed. *Market Evolution: Competition and Cooperation*. Boston: Kluwer Academic Publishers.
- Vercammen, James A. 1995. "Credit Bureau Policy and Sustainable Reputation," *Economica*, Vol. 62: 461-78.
- White, Michele J. 1998. "Why Don't More Households File for Bankruptcy?" *Journal of Law, Economics, and Organization*. Vol. 14: 205-31.

References

- Williams, James R. 1989. "Credit File Errors: A Report," mimeo, Consolidated Information Services (dated August 7, 1989).
- Wilson, James A. 1990. "Fishing for Knowledge," *Land Economics*, Vol. 66: 12-29.

Hearings and Testimony

- Statement of Harry C. Jordan, Chairman, TRW Information Services, in U.S. House of Representatives, *Fair Credit Reporting*, Hearings before the Subcommittee on Consumer Affairs of the Committee on Banking and Currency. 91st Congress, 2nd Session (March 19, 1970).
- Statement of Michelle Meier, Counsel for Government Affairs, Consumers Union, in U.S. House of Representatives, *Fair Credit Reporting Act*, Hearings before the Subcommittee on Consumer Affairs and Coinage of the Committee on Banking, Finance and Urban Affairs, 102nd Congress, 1st Session (June 6, 1991).
- Statement of Edmund Mierzwinski, Consumer Program Director, U.S. Public Interest Group, in the U.S. House of Representatives, *An Examination of Existing Federal Statutes Addressing Information Privacy*, Hearings before the Subcommittee on Commerce, Trade, and Consumer Protection of the Committee on Energy and Commerce. 107th Congress, 1st Session, (April 3, 2001).
- Statement of John L. Spafford, President, Associated Credit Bureaus, Inc. in U.S. Senate, *Fair Credit Reporting Amendments of 1975*, Hearings before the Subcommittee on Consumer Affairs of the Committee on Banking, Housing, and Urban Affairs. 94th Congress, 1st Session (October 23, 1975).
- U.S. House of Representatives. *Amendments to the Fair Credit Reporting Act*, Hearings before the Subcommittee on Consumer Affairs and Coinage of the Committee on Banking, Finance and Urban Affairs. 101st Congress, 2nd Session (June 12, 1990).
- U.S. House of Representatives. *Fair Credit Reporting*, Hearings before the Subcommittee on Consumer Affairs of the Committee on Banking and Currency. 91st Congress, 2nd Session, 1970.
- U.S. House of Representatives. *Fair Credit Reporting Act*, Hearings before the Subcommittee on Consumer Affairs and Coinage of the Committee on Banking, Finance and Urban Affairs. 102nd Congress, 1st Session (October 24, 1991).
- U.S. House of Representatives. *Fair Credit Reporting Act*, Hearings before the Subcommittee on Consumer Affairs and Coinage of the Committee on Banking, Finance and Urban Affairs, and Currency. 102nd Congress, 1st Session (June 6, 1991).
- U.S. House of Representatives. *Fair Credit Reporting Act*, Hearings before the Subcommittee on Consumer Affairs and Coinage of the Committee on Banking, Finance and Urban Affairs. 101st Congress, 1st Session (September 13, 1989).

References

Cases

Bryant v. TRW, Inc. 689 F.2d 72 (1982).

Houston v. TRW Information Services, Inc. 707 F. Supp. 689 (1989).

Individual Reference Services Group, Inc. (IRSG), v. Federal Trade Commission et al.,
145 F. Supp. 2d6 (2001).

TransUnion Corp. v. Federal Trade Commission, 245 F.3d 809 (2001).

Web Sites

Consumer Data Industry Association (formally ACB): <http://www.cdiaonline.org>

ChexSystems: <http://www.chexhelp.com>

Equifax: <http://www.equifax.com/>

Experian: <http://www.experian.com>

Fair, Isaac, and Company: <http://www.fairisaac.com>

Federal Trade Commission: <http://www.ftc.gov>

Medical Information Bureau: <http://www.mib.com/>

Public Interest Research Group: <http://www.pirg.org/>.

Shared Check Authorization Network (SCAN): <http://www.arjaydata.com>

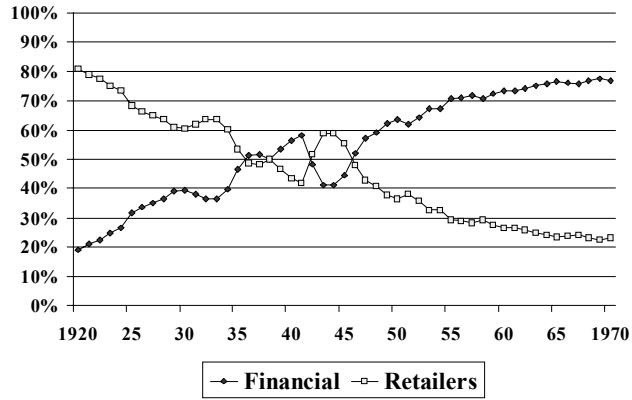
TeleCheck: <http://www.telecheck.com>

TransUnion, LLC: <http://www.tuc.com>

The U.D. registry, Inc.: <http://www.udregistry.com>

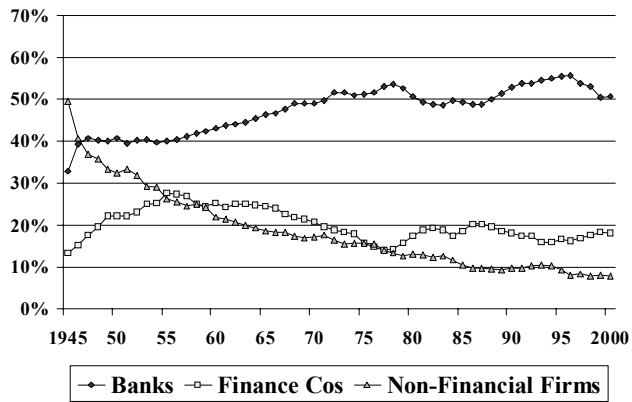
Figures

Figure 1: Shares of Consumer Credit (old series)



Source: Federal Reserve Board, Banking and Monetary Statistics, 1941-70, and author's calculations. See Data Appendix for details.

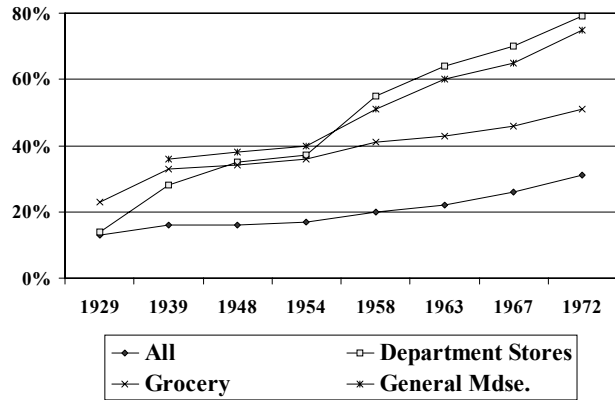
Figure 2: Shares of Consumer Credit



Sources: Federal Reserve Board, Consumer Credit (G 19), and author's calculations. See Data Appendix for details.

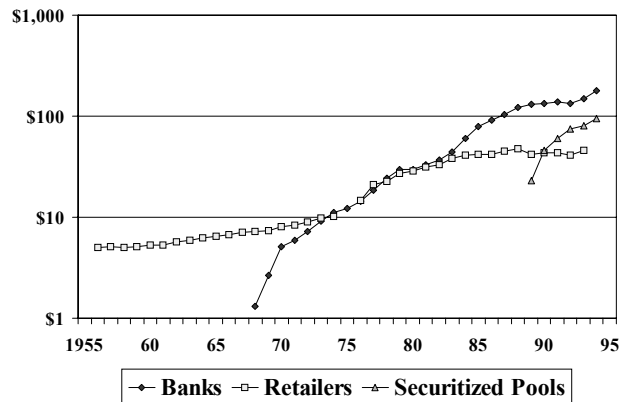
Figures

Figure 3: Share of Retails Sales by Regional or National Chains



Sources: Census of Retail Trade and author's calculations. See Data Appendix for details.

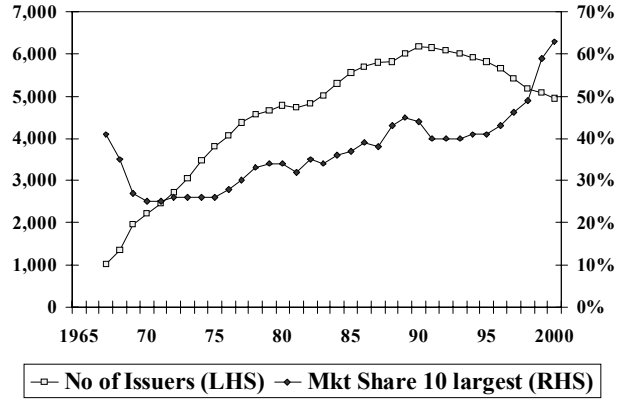
Figure 4: Revolving Credit (\$ billions, log scale)



Sources: Federal Reserve Board, Consumer Installment Credit (G 19), and author's calculations. See Data Appendix for details.

Figures

Figure 5: Consolidation in the U.S. Credit Card Industry



Sources: Call report data and author's calculations.

Appendix A: An Overview of The Fair Credit Reporting Act

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Limitations on Disclosure of Credit Bureau Data

Credit reports may be furnished only for purposes authorized in the act, for example, to lenders making a loan decision, insurers underwriting a policy, or employers considering a person for employment. A credit report may be used in an employment decision but only with the potential employee's prior consent. Medical information about a consumer cannot be shared with creditors, insurers, or employers without the consumer's consent. A credit report may also be issued to any person with a legitimate business need arising from a transaction initiated by the consumer or with an existing account with a consumer. An example might be a credit check performed by a prospective landlord.

The FCRA was initially interpreted and later modified to explicitly permit a process called *prescreening*. This is the process of generating lists of customers to be sent firm offers of credit or insurance, based on criteria specified by a lender or insurance company, without obtaining the prior consent of the consumers. Consumers can call a single 800 number to opt out of prescreening services provided by the three national credit bureaus.

Under the FCRA, credit bureaus must use *reasonable procedures* to prevent disclosures of consumers' information that violate the act. Users of credit bureau information must identify themselves and the reason why a credit report is being sought. Credit bureaus must make a reasonable effort to verify this information when dealing with new customers. When a consumer report is purchased for resale to an end-user, the identity of the end-user and the proposed use of that report must be provided to the credit bureau.

The FCRA specifies penalties for violations of consumers' privacy. A credit bureau or a user of a credit report found to be in negligent noncompliance with the act is responsible for the consumer's actual damages plus his or her reasonable legal expenses. Punitive damages may be awarded in instances of willful noncompliance. Officers or employees of a credit bureau who knowingly or willfully disclose consumer information to a person not authorized to receive it can be prosecuted. Any person who obtains a consumer report under false pretenses is subject to criminal prosecution and can be sued by the credit bureau for actual damages.

Accuracy of Credit Bureau Data

Duties of Credit Bureaus. Credit bureaus must use *reasonable procedures to assure maximum possible accuracy* of the information contained in credit reports. This standard is satisfied if the bureau adopts procedures like those a reasonably prudent person would use under the circumstances.

Appendix A: An Overview of The Fair Credit Reporting Act

Credit reports may not include negative credit information that is more than seven years old or bankruptcies that are more than 10 years old. Suits or unpaid judgments may not be included after seven years unless the relevant statute of limitations runs longer.¹

Duties of Lenders and Other Information Providers. A provider of information to a credit bureau may not be sued by a consumer for noncompliance with the FCRA unless it failed to review all the information provided to it by the credit bureau when reinvestigating a file at the request of the consumer.

A lender may not furnish credit bureaus with information it knows, or consciously avoids knowing, is inaccurate. If it regularly furnishes information to a credit bureau and discovers an inaccuracy, it must notify the bureau of the error and correct the information. Lenders must notify credit bureaus of accounts that are voluntarily closed by a customer. If a consumer has contacted the firm to dispute information it has provided to a credit bureau, the dispute must be noted when that information is subsequently reported to the credit bureau.

Procedures for Dispute Resolution. Anyone who makes an adverse decision—such as denying an application for credit, insurance, or employment—on the basis of information contained in a credit report must inform the consumer and provide the name, address, and phone number of the bureau that furnished the report.² The consumer must also be given a disclosure describing his or her rights under the FCRA.

Consumers may obtain copies of their credit report at any time for a fee that is capped by regulation. If a consumer experiences an adverse decision on the basis of information contained in a credit report, he or she is entitled to a free copy of the report. Consumers must receive all the information in their file, including any medical information, and the sources of the underlying data must also be reported.³ The consumer must also be given the identity of any person who procured his or her credit report in the last year, two years if the purpose was employment related.

Consumers may dispute an item in their credit report simply by writing to the credit bureau and explaining why the information in question is inaccurate. At a minimum, the bureau must forward this complaint to the provider of the information in question, which must then investigate the item. The information provider must report back to the bureau, which in turn informs the consumer of the outcome of the investigation. If the

¹ These limitations do not apply in cases where a credit report is used for the purposes of an application for credit or life insurance exceeding \$150,000 or for a position with a salary that exceeds \$75,000. Also there is no limitation on the reporting of criminal convictions.

² If the adverse decision pertains to an extension of credit but is based on information other than a credit report, the consumer has a right to request an explanation for this decision. The creditor must respond to such a request within 60 days.

³ But the FCRA does not require that credit bureaus include credit scores in their disclosure to consumers who request their reports.

Appendix A: An Overview of The Fair Credit Reporting Act

information provider had previously sent the erroneous information to one of the national credit bureaus, it must also send the corrected information to them.

If the result is a change in the credit report, the consumer receives a free copy of the revised report and may request that it be sent to anyone who recently obtained a copy of his or her report. If the investigation does not resolve the dispute, the consumer may insert a brief statement about the item in his or her file.

A credit bureau must remove or correct inaccurate information from its files within 30 days after it is disputed. The FCRA does not require credit bureaus to remove accurate data from a file unless it is either outdated or cannot be verified. If a dispute results in a change in the credit report, the disputed information cannot be reinserted unless it is reverified by the information source and the consumer is given notice of the change in his or her file.

Preemption of State Law

The FCRA prohibits consumers from suing for defamation, invasion of privacy, or negligence (under state law) resulting from information that is contained in their credit report. This prohibition applies to suits against credit bureaus, users of credit reports, and information providers. This prohibition does not apply, however, where false information is furnished with malice or willful intent to injure a consumer.

The 1996 amendments to the act prohibit states from enacting new legislation related to certain portions of the law until 2004. The prohibition applies to new limits on the amount of time that derogatory information can be retained in credit reports, the amount of time allowed for credit bureaus to respond to a consumer dispute, additional duties of firms that provide information to credit bureaus, or new restrictions on the ability of credit bureaus to offer prescreening services to companies making firm offers of credit or insurance.

Data Appendix

Data Appendix

Consumer Credit Extended by Retailers and Financial Institutions

The share of retail sales financed via retailer credit in 1929 is derived from the 1930 *Census of Business*. This calculation excludes paper, primarily automobile loans, financed or purchased by finance companies. The shares of open account sales for various categories of stores in 1935 are from a reprint of the 1935 survey in the 1939 *Survey of Business*.

Calculations for the growth of consumer credit held by retailers and financial companies and the respective shares of consumer credit held by these categories are based on data contained in *Banking and Monetary Statistics, 1941-70*.

The shares of consumer credit for more recent years are derived from the Federal Reserve statistical release G.19 *Consumer Installment Credit*, published monthly. The edition used, together with the most recent version of the historical series (found at the Board's web site), is from October 2001.

It should be noted that survey coverage, categories of lenders (including retailers), and categories of loans vary depending on the vintage of data being used. For example, consumer credit is sometimes divided into installment credit and other credit, but how that is done varies over time. Also, a separate breakdown for retailers disappears in releases after the mid 1990s. Thereafter, a breakdown for non-financial companies (mostly retailers) is reported.

Comparisons of the growth rate of consumer credit relative to consumer spending rely on the most recent version of the National Income and Product Accounts for years after 1928. For the period 1919 to 1928, these calculations are based on series E 135 (CPI all items) and G 470 (personal consumption expenditures) in the *Historical Statistics of the United States, Colonial Times to 1970*.

The statistics on revolving credit held by retailers and commercial banks (Figure 4) are based on a variety of tabulations published by the Federal Reserve System. These include the *Annual Statistical Digest* (1970-79, 1980-89, 1991, 1992, 1993, 1994), the *Federal Reserve Bulletin* (December 1968, October 1972, and December 1975), and revisions to the *Consumer Installment Credit* series published in April 1986 and May 1993. After 1970, banks' revolving credit includes check credit. Revolving credit at retailers includes gasoline stations. Because of changes in reporting of the series, there is no consistent data for revolving credit at retailers for 1975. The year-end number for 1976 is derived from the January 1977 number for revolving credit at retailers, less the proportionate share of the increase in credit held by retailers.

Shares of Retail Sales Accounted for by Regional and National Chains.

For 1929, the shares are calculated using the Census Bureau's categories of "sectional or national" chains as reported in the 1930 *Census of Business*. Shares for later years are calculated using firms with 26 or more stores, as reported in the 1939 *Census of Business* and the *Census of Retail Trade* thereafter. The 1939 census also reports data categorized

Data Appendix

as sectional or national chains, and for most categories of retailers, these are comparable to the numbers reported for firms with 26 or more stores.

Consumer Credit Reporting Agencies

Data on the number of offices, employment, receipts, and concentration ratios are from the *Census of Service Industries* as reported in 1972 and more recent editions. The numbers for 1997 are for the industry code 5614501 in the new North American Industry Classification System (NAICS). The numbers reported for previous years are based on the old Standard Industrial Classification System (SICS) industry group 7323, but only where information about consumer credit reporting agencies is broken out separately from mercantile credit reporting agencies. Unfortunately, there is not enough publicly available information to calculate concentration ratios in years prior to 1997.

Data on the number of credit reports issued, the number of credit bureaus, and the composition of ACB membership are from testimony provided by the organization in the transcripts of the 1970 and 1975 hearings in the House of Representatives. Information on the organization of credit bureaus and the extent of automation in the late 1980s is from ACB testimony contained in the transcripts of the 1989 hearings in the House of Representatives. The most recent data on the number of members and indicators of activity are from ACB's web site, as reported in October 2001. Information about the major credit bureaus' other lines of businesses were found on the companies' web sites.

Errors in Consumer Credit Reports

The aggregate statistics from ACB are from its response to questions printed in the transcripts of the September 1989 hearings in the House of Representatives (p. 855). The same hearings report statistics for TRW that are comparable (p. 796, pp. 801-2).

The statistic on the frequency of mismerge errors is from the study prepared by James R. Williams in 1989. Williams identified errors in the rating of an account (satisfactory or delinquent, for example) in about 13 percent of 350 credit reports. This report was reprinted in the transcripts to the June 1990 hearings in the House of Representatives (pp. 517-39).

The article refers to surveys conducted by two consumers groups. The Consumers Union survey is reprinted in the transcripts of the June 1991 hearings in the House of Representatives (pp. 425-35). The other is the Public Interest Research Group's 1998 study, which can be found at <http://www.pirg.org/reports/consumer/mistakes/index.htm>. The samples in these surveys are quite small, 57 and 131, respectively, and were not drawn randomly from the population of credit users.

The statistics from the Arthur Andersen study are from the National Press Club speech by D. Barry Connelly, executive vice president of ACB. While the sample size of the Andersen study is quite large—over 15,000 applicants who were denied credit—the results are based on a small set of those applicants. About 1,200 requested copies of their credit report and about 300 of those disputed their reports. In 36 of 267 instances analyzed, the lender reversed the credit decision.