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The Role of Information in Lending: The Cost of Privacy Restrictions

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Summary

The Fair Credit Reporting Act (FCRA) is the federal law that regulates the collection, use and disclosure of consumer credit information. In an effort to provide a national and uniform standard for sharing credit information, there are a number of FCRA provisions that preempt state law. One of those specific provisions prohibits states from enacting laws that impose additional restrictions on the type of information contained in consumer credit reports. The FCRA preemption provisions were set to expire on January 1, 2004, but the recently enacted Fair and Accurate Credit Transactions Act of 2003 (P.L. 108-159) makes these preemptions permanent. Nevertheless, privacy advocates continue to argue for broader financial privacy laws. They are concerned about the heightened risks to consumers from the widespread availability of an individual's financial information, such as identity theft or other possible means of misuse.

From the perspective of economics, the availability to lenders of complete and accurate data on past consumer borrowing behavior is considered essential to an efficient credit market. The ability of borrowers to access credit at reasonable rates is critical to facilitate investment and commerce, and thereby sustain economic growth. It is claimed that consumers in the United States have more ready access to low-cost credit than consumers anywhere else in the world. This is due in part to public policies, such as the FCRA, that support the pooling and sharing of consumer credit data.

There is a growing body of economic research suggesting that privacy laws that restrict the availability of credit bureau data could impose significant economic costs. These possible costs include higher interest rates, reduced accessibility to credit, and a lower volume of lending activity. Furthermore, some may argue that credit data limitations bestow anti-competitive advantages to lenders, which can also lead to higher loan rates and an increased incidence of default. The disciplinary effect from information sharing may also be diminished, resulting in a higher level of consumer indebtedness and a heightened risk of default. Thus, from an economic perspective, privacy laws that limit the reporting of credit data could impose significant financial costs on consumers and the economy as a whole. How these costs are weighed against the benefits of increased financial privacy is a matter for legislative debate.

This report focuses on the potential economic effects of restricting the type of consumer credit information that is reported between financial institutions and credit reporting agencies. For an economic analysis of the privacy debate related to the sharing of financial information among affiliates of the same corporate group, see CRS Report RL31758, *Financial Privacy: The Economics of Opt-In vs Opt-Out*, by Loretta Nott.

This report will be updated as events warrant.

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"Detailed data obtained from consumers as they seek credit or make product choices help engender the whole set of sensitive price signals that are so essential to the functioning of an advanced information based economy such as ours. Yet ... this very mechanism of information creation runs the risk of breaching personal privacy ... Too little information that can be used in marketing leads to a decline in the quality of the goods and services offered. Too much can be perceived as an inordinate incursion of privacy of person."

- Federal Reserve Chairman Alan Greenspan in a letter to the Honorable Edward J. Markey, July 28, 1998.[1]

Introduction

Money and credit are the lifeblood of the U.S. economy. The ability of borrowers to access credit at reasonable rates is critical to facilitate investment and commerce, and thereby sustain economic growth. It is claimed that consumers in the United States have more ready access to low-cost credit than consumers anywhere else in the world.[2] This is due in part to U.S. public policies that support the pooling and sharing of consumer credit data.

In particular, these policies have promoted the development of one of the most comprehensive credit reporting systems worldwide. There exists at least one credit file for every credit-using individual in the country. Two billion pieces of data are added to these files each month and over two million credit reports are issued each day by U.S. consumer reporting agencies.[3] The availability of complete and accurate data on past consumer borrowing behavior is considered critical for the delivery of an economically efficient allocation of credit.

In this regard, several federal laws pertain to the U.S. credit reporting system, including the Fair Credit Reporting Act (FCRA). The purpose of the FCRA is to "require that consumer reporting agencies adopt reasonable procedures for meeting

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[1] To read this letter in its entirety, see the web site of Representative Edward J. Markey at [www.house.gov/markey/iss_privacy_ltr980728.htm], visited Jan. 29, 2004.

[2] See Fred H. Cate, "Privacy, Consumer Credit and the Regulation of Personal Information," in *The Impact of Public Policy on Consumer Credit*, Thomas A. Durkin and Michael E. Staten, eds. (Boston: Kluwer Academic Publishers, 2002), p. 234.

[3] For more information about the consumer reporting industry, see Robert B. Avery, Paul S. Calem and Glenn B. Canner, "An Overview of Consumer Data and Credit Reporting," *Federal Reserve Bulletin*, February 2003, pp. 47-73.

the needs of commerce for consumer credit, personnel, insurance, and other information in a manner which is fair and equitable to the consumer, with regard to the confidentiality, accuracy, relevancy, and proper utilization of such information."[4]

In an effort to provide a national and uniform standard for sharing credit information, there are a number of FCRA provisions that preempt state law.[5] One of the specific provisions prohibits states from enacting laws that impose additional restrictions on the type of information contained in consumer credit reports.[6] The FCRA preemption provisions were set to expire at the end of 2003, which meant that after January 1, 2004, states would have been able to enact laws that limited the amount and type of information disclosed in consumer reports. However, the recently enacted Fair and Accurate Credit Transactions Act of 2003 (P.L. 108-159) makes the FCRA preemption provisions permanent.

Nevertheless, privacy advocates continue to argue for the enactment of broader financial privacy laws. They are concerned about the heightened risks to consumers from the widespread availability of an individual's financial information, such as identity theft or other possible means of misuse.[7] In addition, there appears to be a general sense of unease among consumers about the potential harms from not being able to control one's own information.[8] These same concerns have been voiced around the world, which is why many countries, including Australia and members of the European Union, have enacted privacy laws that limit the reporting of credit data, including information on account balances and credit limits.[9]

However, supporters of maintaining the current flow of credit information point to a growing body of evidence to suggest that privacy laws that restrict the availability of credit bureau data could impose significant economic costs. These

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[4] 15 U.S.C. § 1681(b)

[5] 15 U.S.C § 1681t. For a detailed overview of these preemptive provisions, see CRS Report RS21449, *Fair Credit Reporting Act: Preemption of State Law*, by Angie A. Welborn.

[6] 15 U.S.C. § 1681c, section 605.

[7] For a comprehensive study on identity theft, see Federal Trade Commission, *Federal Trade Commission - Identity Theft Survey Report*, prepared by Synovate, September 2003, at [http://www.ftc.gov/os/2003/09/synovatereport.pdf], visited on Jan. 29, 2004.

[8] For a detailed overview of privacy concerns related to the sharing of consumer credit information, see Cate, "Privacy, Consumer Credit, and the Regulation of Personal Information," pp. 229-276. For a list of the major advocacy groups, such as Privacy International, U.S. PIRG, and the Privacy Rights Clearinghouse, as well as links to their websites, visit [www.privacyrightsnow.com], visited Jan. 29, 2004.

[9] For a comprehensive survey of European credit reporting systems and their privacy policies, see Tullio Jappelli and Macro Pagano, "Information Sharing in Credit Markets: The European Experience," Working Paper No. 35, Centre for Studies in Economics and Finance, University of Salerno, March 2000. For more information on Australia's privacy policies and the effect on loan rates and credit accessibility, see John M. Barron and Michael Staten, "The Value of Comprehensive Credit Reports: Lessons from U.S. Experience," 2000; online at [www.privacyalliance.org/resources/staten.pdf], visited Jan. 29, 2004.

possible costs include higher interest rates, reduced accessibility to credit, and a lower volume of lending activity. Furthermore, some may argue that credit data limitations bestow anti-competitive advantages to lenders, which can also lead to higher loan rates and an increased incidence of default.[10] The disciplinary effect from information sharing may also be diminished, resulting in a higher level of consumer indebtedness and a heightened risk of default. Thus, from this economic perspective, privacy laws that limit the reporting of credit data could impose significant financial costs on consumers and the economy as a whole. How these economic costs are weighed against the benefits of increased financial privacy is a matter for legislative debate.

This report examines the economics of information sharing in consumer credit markets by (1) explaining the role of information in the lending process; (2) describing the economic effects of credit reporting; and (3) outlining the potential economic benefits forgone by restricting consumer credit information.[11]

The Role of Information in Credit Markets

In general, the price of a loan is based on the lender's cost of funds plus a risk premium. The cost of funds is often linked to a short-term market rate, which represents a common benchmark for all borrowers regardless of their credit history. Lenders will often charge an additional risk premium over the market rate as compensation for bearing the risk of slow, partial, or fully delinquent loan repayments. Some losses are expected in any risk group of loans and are, in effect, paid for by the risk premium. The size of this premium depends on the lender's ability to properly assess the creditworthiness of the borrower. As a result, differences across borrowers in the final interest rate charged are based largely upon the lender's perceived risk of repayment.[12]

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[10] Although the restriction of certain types of credit information may affect the incidence of default, it is also important to note that default rates are a function of several economic, legal and regulatory factors. Therefore, one cannot make conclusions about the efficiency of a credit market based solely on information concerning consumer default rates. A high incidence of consumer loan defaults does not necessarily imply an inefficient credit market.

[11] This report focuses on the potential economic effects of restricting the type of consumer credit information that is reported between financial institutions and credit reporting agencies. For an economic analysis of the privacy debate related to the sharing of financial information among affiliates of the same corporate group, see CRS Report RL31758, *Financial Privacy: The Economics of Opt-In vs Opt-Out*, by Loretta Nott.

[12] The retail credit card market offers an excellent example of how lenders use risk-based pricing. The ready availability of comprehensive credit bureau data has allowed card issuers in the United States to offer their customers an extensive range of products, with different rates and features, according to the creditworthiness of a borrower. Today, low-risk borrowers can choose from a wide array of low-rate credit cards. For a detailed explanation of the evolution of risk-based pricing in the credit card market, see Barron and Staten, "The Value of Comprehensive Credit Reports: Lessons from the U.S. Experience," pp. 283-287.

There are basically two stages to the lender's assessment process. First, a lender will screen a credit applicant to judge creditworthiness by gathering information on the borrower's characteristics, such as past payment behavior and overall indebtedness. Second, once the loan has been granted, the lender will monitor the borrower's behavior as a means of assessing the risk of default over the term of the loan. Both stages crucially depend on the lender's ability to gather accurate and timely information about an applicant's borrowing characteristics.

However, this information is typically not freely available to lenders. Borrowers usually know more than lenders about their willingness and ability to repay a loan. Thus, it is reasonable to assume that there exists some degree of information asymmetry between borrowers and lenders. The more accurate information that is available to lenders, the better they can measure borrower risk and set loan terms accordingly. Therefore, creditworthy borrowers should want to signal to lenders that they represent a good credit risk in order to negotiate better loan terms. In contrast, high-risk borrowers have an incentive to hide their information so as to avoid being denied or charged more for credit.

When lenders lack the necessary information to distinguish between good and bad borrowers, it is said that there exist "adverse selection" and "moral hazard" problems in the market for credit. Adverse selection occurs when a borrower's private information about their own credit risk adversely affects uninformed lenders. For instance, with limited credit information, there are likely to be more bad borrowers taking loans at any given interest rate. Moral hazard entails hidden information following the extension of a loan to a borrower. For instance, if a borrower knows that a lender cannot monitor payment behavior, this can induce the borrower to make a material change in income or spending that affects their ability to repay the loan.

To illustrate, suppose that a bank lacked the necessary data to adequately screen and monitor credit applicants. One possible solution is to raise the interest rate on loans sufficiently that the bank would be compensated for any loss associated with lending to a bad borrower. However, a bad borrower will also be the one most likely to accept a higher interest rate since there is a low probability that the loan will be repaid. Good borrowers are less likely to apply for credit under such a scenario, which means that the average riskiness of the borrowing pool will increase, and the bank will be forced to raise loan rates even more. Furthermore, the higher the interest rate, the more likely borrowers will reduce their effort to repay the loan, which in turn, increases the lender's probability of loss. This will cause the market to "unravel" and perhaps lead to credit rationing, since information asymmetry prevents the loan rate from being matched appropriately to actual credit risk.[13]

There are various ways to mitigate adverse selection and moral hazard problems in the market for credit. For example, collateral can sometimes be required to secure a loan in case of nonpayment, so borrowers' incentives become more aligned with

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[13] For more information, see Joseph E. Stiglitz and Andrew Weiss, "Credit Rationing in Markets with Imperfect Information," *American Economic Review*, Vol. 71, 1981, pp. 393-410.

those of lenders. Indeed, collateral requirements are quite common for high-value consumer loans, such as mortgages. However, this practice can limit the availability of credit to those who do not already have substantial assets built up.

Therefore, in addition to collateral requirements, lenders can use information about a borrower's characteristics to assess the probability of repayment. Yet each lender typically has only a piece of the borrower's overall credit profile. In order to complete the picture, the lender could face significant search costs. But if lenders acquire the information by exchanging and pooling it with other lenders, then the overall picture is allowed to emerge, and each lender has a better means of measuring a borrower's creditworthiness. The cost savings to lenders of pooling borrower information is the motivation for the existence of a credit reporting system.

The Economics of Credit Reporting

Credit bureaus provide the formal mechanism by which lenders can pool and share information about the characteristics of potential borrowers. Economic theory predicts that the sharing of this information can have significant effects on lending activity. First, it mitigates adverse selection problems by improving the lender's ability to accurately assess the creditworthiness of borrowers. Second, it reduces the informational advantages to lenders that can lead to anti-competitive behavior and moral hazard problems. And third, it discourages consumers from becoming over-indebted by obtaining credit from multiple lenders. This section will examine each of these effects in detail.

Mitigates Adverse Selection

Consider a world where banks only have information about the creditworthiness of their own clients, and consumers deal exclusively with their bank for all their credit needs. Now suppose an individual applies for credit at Bank A, after being a previous customer at Bank B. Since Bank A has no information to measure the applicant's ability to repay the loan, the bank faces an adverse selection problem. However, Bank B will have information about the applicant's borrowing characteristics. If Bank A and Bank B committed to share this type of information about their clients, then they would be able to better identify which new applicants were good credit risks. Since lenders reduce the risk premium they charge for borrowers with reliable credit histories, information sharing will generally lower loan rates and the incidence of default at both banks.

Reduces Anti-Competitive Advantages

But why would Bank B want to share this information with Bank A? After all, Bank B took the initial risk to lend to the applicant the first time, and as a result, has acquired valuable private information about the customer's credit risk. Therefore, Bank B *could* offer a more competitive loan rate than Bank A or other lenders who do not possess this information. This informational advantage is said to confer

market power to Bank B in its pricing of its loans, since with no information sharing the borrower is likely to face higher rates elsewhere. Thus, Bank B will be reluctant to lose this competitive advantage by sharing information with Bank A.

Similarly, Bank A has acquired valuable private information about the credit risk profiles of its own customers, and has the same profit incentive to withhold this information from Bank B and other lenders. Therefore, each lender in the market will have a comparative advantage in the pricing of their loans to customers relative to other lenders, since each lender possesses private information about their own customers' borrowing characteristics. In this case, no lender has an incentive to share information with any other lender. But with no information sharing, each lender can exercise their market power by charging an inefficiently high loan rate to their customers, but one that is still below what other lenders are willing to offer to new clients. If borrowers know that their efforts to establish a good credit history might not lower their lending rates in the future, they will have a disincentive to repay their loans in a timely manner today, and in extreme cases, default. As a result, both default and interest rates will rise in the market.

By committing to share information, lenders are no longer able to unfairly profit from informational advantages since all lenders have access to the same information. This commitment is enforced by the development of a formal reporting system, by which credit bureaus are responsible for the collection, distribution and accuracy of the information. In contrast to the case without credit reporting, borrowers have an incentive to signal through their repayment efforts that they are a good credit risk, in hopes of earning better loan terms in the future. This reduces the probability of default, which lowers interest rates and increases the total volume of lending.[14]

Discourages Excessive Consumer Indebtedness

In reality, though, consumers rarely deal with one bank for all their lending needs. Dealing with several types of lenders encourages competition and lowers the cost of borrowing to consumers. It also benefits lenders since they bear a smaller amount of credit risk, which allows them to lower the risk premium included in the interest rate they charge.

But multiple lending relationships mean multiple loans, and from the perspective of a lender, a borrower's ability to repay a loan will also depend on the individual's overall indebtedness at the time of repayment. If lenders do not have information about how much credit a borrower has obtained from various sources, then consumers will have an incentive to over-borrow, posing a moral hazard risk to lenders. In response, lenders will either require a higher interest rate to compensate them for the risk of default, or deny credit altogether. This particular form of moral hazard is eliminated, however, if lenders agree to exchange information regarding the amount of credit loaned to borrowers. By knowing a borrower's total debt burden,

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[14] For more information, see A. Jorge Padilla and Marco Pagano, "Endogenous Communication Among Lenders and Entrepreneurial Incentives," *The Review of Financial Studies*, 10(1), Winter 1997, pp. 205-236.

lenders are able to more accurately measure a borrower's credit risk today and monitor the probability of repayment in the future. This is why it is important, as a matter of economics and finance, for credit bureaus to collect information about how much credit a borrower has obtained from various lenders.[15]

The Economic Costs of Credit Data Restrictions

As the previous section discusses, economic theory predicts that there are distinct benefits from information sharing in credit markets. However, several recent empirical studies have attempted to test these predictions and quantify the benefits. The conclusions from this growing body of literature can be summarized as follows:

Lending Volume. Bank lending volumes are greater in countries that have a greater degree of information sharing.[16] There is significant evidence to suggest that the rapid growth in U.S. credit over the past 35 years is related to public policies that have promoted comprehensive credit reporting.[17] In 2001, U.S. consumer credit equaled 16.7% of gross domestic product, which is the highest percentage among most industrialized countries.[18]

Accessibility. The accuracy and reliability of credit scoring models, the means by which lenders determine a borrower's credit risk, crucially relies upon the amount of consumer credit information available.[19] By providing better risk measuring tools, comprehensive credit data has increased the number of consumers who now qualify for credit. Furthermore, the national availability of credit information greatly increases the potential sources of credit to which consumers have access and offers borrowers a wider array of choice.[20]

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[15] For more information, see Tullio Jappelli and Macro Pagano, "Information Sharing in Credit Markets: A Survey," Working Paper No. 36, Centre for Studies in Economics and Finance, University of Salerno, March 2000.

[16] For more information, see Tullio Japelli and Marco Pagano, "Information Sharing, Lending and Defaults: Cross-Country Evidence," Working Paper No. 22, Centre for Studies in Economics and Finance, University of Salerno, May 1999.

[17] For more information, see John M. Barron and Michael Staten, "The Value of Comprehensive Credit Reports: Lessons from U.S. Experience."

[18] For more comparative credit statistics, see the European Credit Research Institute website at [www.ecri.be/statistics2001.html], visited Jan. 29, 2004.

[19] For more information, see Gary G. Chandler and Lee E. Parker, "Predictive Value of Credit Bureau Reports," *Journal of Retailing Banking*, Volume XI, 1989, pp. 47-54. Also, see Gary G. Chandler and Robert W. Johnson, "The Benefit to Consumers from Generic Scoring Models Based on Credit Reports," *IMA Journal of Mathematics Applied in Business and Industry*, Volume 4, 1992, pp. 61-72, and Information Policy Institute, *The Fair Credit Reporting Act: Access, Efficiency and Opportunity*, June 2003, available online at [http://www.infopolicy.org/pdf/fcra_report.pdf], visited on Jan. 29, 2004.

[20] Cate, "Privacy, Consumer Credit, and the Regulation of Personal Information," pp. 235-236.

Delinquency Rates. One study found the use of credit bureau data in credit scoring models lowers delinquency rates 20-30% more than when lending decisions are based solely on application data.[21] Another study found that delinquencies could increase by as much as 70% when restrictions on the type of consumer credit data contained in credit reports reduces the predictive power of standard credit scoring models.[22]

Cost of Credit. Securitization, a process by which banks pool consumer loans and sell them to investors, is dependent upon the complete and accurate credit information of its clients. Banks use this information to identify and bundle loans that belong to particular risk groups. This common practice reduces the riskiness of the bank's loan portfolio, freeing up capital and reducing the cost of credit.[23] One analyst has estimated that securitization has lowered U.S. mortgage rates by as much as two full percentage points.[24]

Thus, recent empirical research suggests that privacy laws that restrict the reporting of consumer credit data could lead to the potential loss of significant economic benefits. Credit data limitations may increase the cost of consumer credit, reduce accessibility and lower the overall volume of lending.

Conclusion

From an economic perspective, the availability of complete and accurate data on past consumer borrowing behavior is critical for assuring the most efficient allocation of credit. In the absence of this information, there can exist adverse selection and moral hazard problems in the market for credit. These problems are significantly reduced if lenders agree to pool and share information about the characteristics of potential borrowers. Recent empirical evidence suggests that a comprehensive credit reporting system reduces the cost of consumer credit, lowers delinquency rates, improves consumer accessibility to credit, and increases the overall volume of lending. But in order to enjoy these benefits, consumers give up some degree of privacy and are exposed to the risks associated with widespread financial information sharing, such as identity theft. How these risks are weighed against the economic benefits of a comprehensive credit reporting system is a matter for legislative debate.

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[21] For more information, see Peter L. McCorkell, "The Impact of Credit Scoring and Automated Underwriting on Credit Availability," in *The Impact of Public Policy on Consumer Credit*, Thomas A. Durkin and Michael E. Staten, eds. (Boston: Kluwer Academic Publishers, 2002), pp. 209-220.

[22] Information Policy Institute, *The Fair Credit Reporting Act: Access, Efficiency and Opportunity*, p. 9.

[23] Cate, "Privacy, Consumer Credit, and the Regulation of Personal Information," pp. 234-235.

[24] Kitchenman, Walter F., *U.S. Credit Reporting: Perceived Benefits Outweigh Privacy Concerns* (Needham, Massachusetts: TowerGroup, 1999), p. 7.