Alternative Data and Its Use in Credit Scoring Thin- and No-File Consumers

PAYMENT CARDS CENTER

Julia S. Cheney*

February 2008

Summary: On November 27, 2007, the Payment Cards Center of the Federal Reserve Bank of Philadelphia invited Jennifer Tescher, director, and Arjan Schütte, associate director, of the Center for Financial Services Innovation, to present a workshop. The Center asked Tescher and Schütte to share CFSI's research on the developing role played by alternative payment data in evaluating risk for consumers with thin- and no-credit histories. After a discussion of thinand no-file consumers and the challenges they face accessing credit, the speakers addressed aspects of supply and demand that are influencing the development of the market for alternative data. Several additional factors acting on this market were also examined: the costs and complexity of changes to IT infrastructure, legal and regulatory hurdles, and the broader economic impacts of extending the market for consumer credit.

* Payment Cards Center, Federal Reserve Bank of Philadelphia, Ten Independence Mall, Philadelphia, PA 19106. E-mail: julia.cheney@phil.frb.org. The views expressed here are not necessarily those of this Reserve Bank or of the Federal Reserve System.

FEDERAL RESERVE BANK OF PHILADELPHIA

Ten Independence Mall, Philadelphia, PA 19106-1574 • (215) 574-7220 • www.philadelphiafed.org/pcc

I. Introduction

On November 27, 2007, the Payment Cards Center of the Federal Reserve Bank of Philadelphia invited Jennifer Tescher, director, and Arjan Schütte, associate director, of the Center for Financial Services Innovation (CFSI)¹ to present a workshop. The Center asked Tescher and Schütte to share CFSI's research on the developing role played by alternative payment data² in evaluating risk for consumers with thin- and no-credit histories. Under Tescher's leadership, CFSI was founded in 2004 as a nonprofit affiliate of ShoreBank Corporation and has become a well-recognized leader in the study of the underserved consumer market for financial products and services. In addition, CFSI has been instrumental in bringing together mainstream financial services firms and innovators developing solutions aimed at better serving the financial needs of the unbanked and underbanked communities. Part of CFSI's recent research has focused on examining the opportunities and challenges to incorporating alternative data into credit risk scores for underserved consumers. Arjan Schütte has been a significant contributor to this effort and, therefore, led the presentation by CFSI.³ CFSI's research served as the framework for the ensuing workshop discussion.⁴

To examine the market for alternative data, Schütte began his remarks by defining the terms thin-file and no-file in the context of consumer credit reports used by lenders. He also discussed challenges that thin- and no-file consumers face in accessing traditional

² "Alternative data" refers to payment-related information that is not typically reported to credit reporting agencies. Examples include rent, telecommunication, utility, and insurance payments.

¹ For more information on the Center for Financial Services Innovation, see its website at www.cfsinnovation.com/about.php.

³ Arjan Schütte presented in person at the Federal Reserve Bank of Philadelphia while Jennifer Tescher provided assistance via teleconference.

⁴ During the workshop, the speakers referenced three papers published by the Center for Financial Services Innovation (CFSI): Katy Jacob, "Reaching Deeper: Using Alternative Data Sources to Increase the Efficacy of Credit Scoring," CFSI (March 2006); Katy Jacob and Rachel Schneider, "Market Interest in Alternative Data Sources and Credit Scoring," CFSI (December 2006); and Rachel Schneider and Arjan Schütte, "The Predictive Value of Alternative Credit Scores," CFSI (November 2007).

financial products and services.⁵ Tescher and Schütte commented that, historically, these consumers, as a group, were generally assumed to be bad risks because of their limited or nonexistent credit histories and were routinely denied access to traditional forms of credit. On the contrary, Schütte argued that CFSI's research suggests that, in fact, a significant portion of these consumers regularly meet their financial obligations and can be profitable bank customers. He characterized the promise of alternative data as an opportunity to better differentiate between those thin- and no-file consumers who are truly bad risks from those who may, in fact, resemble a more typical bank customer. If alternative data can be shown to effectively predict risk for such consumers, traditional lenders may be able to build credit scores that more accurately reflect default and delinquency risks for this population and thereby safely make more loans to a broader population. Schütte stressed that such analysis will also help move underserved, yet creditworthy, individuals into the financial mainstream with better access to lower priced traditional credit products.

While there is much excitement about using credit scoring to expand markets, Schütte acknowledged that, in today's financial institutions, the use of alternative data in credit scoring is still evolving and has yet to be widely adopted. To provide an understanding of how the market for alternative data is developing, Schütte examined aspects of both the demand and supply sides that are acting as incentives in the current marketplace. He also noted several additional factors affecting the development of the market for alternative data: the costs and complexity of changes to IT infrastructure, legal and regulatory hurdles, and the broader economic impacts of extending the market for

⁵ The phrase "traditional financial products and services" refers to those products offered by mainstream financial institutions. This is different from products that might be offered in the alternative financial sector, for example, by payday lenders or check cashers.

consumer credit. In concluding his remarks, Schütte noted that incorporating alternative data into credit scoring models will not necessarily benefit all consumers. At the same time, he emphasized that there is evidence that some alternative payment data when applied to consumers with thin- or no-credit files can improve lenders' ability to differentiate between high- and low-risk profiles in these historically harder-to-score populations.

II. Thin- and No-File Consumers

In the United States, risk-based pricing of credit is built upon a foundation of voluntary information-sharing among firms that extend credit to consumers. This information helps form a credit report – a history of a consumer's experience using and managing his or her credit accounts – and is composed of individual identifying information, account data, money-related public records, collection agency reports, and credit inquiries. The data are compiled by credit reporting agencies (CRAs), the largest of which are national agencies, including TransUnion, Experian, and Equifax.⁶ According to CFSI, the CRAs maintain credit reports on over 180 million U.S. consumers, more than 83 percent of the total U.S. adult population as of July 2003. CRAs provide credit reports to those entities with a permissible purpose to access these reports, under the Fair Credit Reporting Act (FCRA). Permissible purposes include: 1) in response to a court order or subpoena; 2) with the written permission of the consumer; 3) to extend credit or review or collection of an existing credit account; 4) for employment purposes; 5) for insurance underwriting; 6) in compliance with government financial responsibility laws;

⁶ Robert B. Avery, Paul S. Calem, and Glenn B. Canner, "An Overview of Consumer Data and Credit Reporting," Federal Reserve Board of Governors *Federal Reserve Bulletin* (February 2003), p.48.

and 7) for legitimate business needs.⁷ Credit scoring models that leverage individuals' credit histories are intrinsic to today's consumer lending markets. Without such histories, thin- and no-file consumers are more often relegated to financial products and services offered outside mainstream banking. As a result, Schütte noted that these consumers, in most cases, pay higher fees and are less likely to have financial relationships that contribute data to credit reporting agencies, data that are necessary to build a record of payment performance that can be used in future lending decisions.

To have a credit report with one of the three national reporting agencies, an individual must have some experience with credit that can be reported by lenders to the agencies. Without such "history," a search for a credit report would result in a "no hit," and the individual would be considered a "no-file" consumer. Other individuals may have very limited experience with credit and fewer "trade lines" (or accounts) entered in their credit report. While there remains variation in the definition, generally individuals with three or fewer trade lines are considered to be "thin-file" consumers. Thin-file consumers may have a credit score, but these scores are generally disregarded by lenders if the consumer has an insufficient history of trade lines. Importantly, Schütte emphasized that many of these thin- and no-file consumers may have other records of payment performance on bills that are not typically reported to the credit reporting agencies and that these performance histories can have value in terms of predicting how likely it will be for a certain individual to repay his debts.

Schütte shared several estimates of the size of the thin- and no-file population. These estimates varied somewhat depending on the definition applied to this consumer

⁷ The Fair Credit Reporting Act may be found on the Federal Trade Commission's website at www.ftc.gov/os/statutes/fcradoc.pdf. For permissible purposes, see section 604.

segment. For example, Experian⁸ estimates that more than 35 million individuals are classified as "not credit active," including a variety of sub-cohorts such as youth age 18-21 (8.8 million); Hispanics over age 21 (6.7 million); other immigrants (2.9 million); other underserved (5.8 million); and noncredit targets⁹ (11 million). Fair Isaac¹⁰ estimates that 54 million consumers are unable to be scored because they have no credit history or they have thin files. Finally, the National Credit Reporting Association (NCRA)¹¹ estimates that 70 million consumers either have no credit score or a lower score than their financial history and payment potential warrants when other data are included.¹² By any of these estimates, Schütte argued, thin- and no-file consumers represent a sizable market segment and one that is currently underserved by traditional credit markets.

Examining the wide variety of payments consumers make, Schütte acknowledged that it is not yet clear which are best suited for inclusion in credit scoring models. Examples of alternative types of payments include utilities, telecommunications, insurance, rent, check cashing activity, payday loans, prepaid cards, and remittances, among others.¹³ To determine which of these may be most useful to lenders' risk analysis, Schütte suggested that alternative data be analyzed along three specific

⁹ Noncredit targets were defined as individuals who would not qualify to receive an offer of credit.

⁸ Experian is one of the three national credit reporting agencies. To learn more, visit Experian's website at www.experian.com/consumer/index_om_h.html.

¹⁰ Fair Isaac Corporation developed the FICO credit bureau score, which is, according to its website, the most used credit score in the world. (See www.fairisaac.com/fic/en/company/.)

¹¹ The NCRA is a trade organization of consumer reporting agencies. For more information, see the NCRA website at www.ncrainc.org.

¹² See Katy Jacob, "Reaching Deeper: Using Alternative Data Sources to Increase the Efficiency of Credit Scoring," Center for Financial Services Innovation (March 2006), p. 3.

¹³ There is a distinction between data reporting that includes only derogatory information and full-file reporting, when both positive and negative payment performance is reported by lenders. Lenders reporting traditional trade lines generally report full-file information. Alternative data furnishers and collections agencies dealing with alternative payments typically report only derogatory information to CRAs.

dimensions in accordance with a framework proposed by the Information Policy Institute.¹⁴

First, he suggests that analysts should consider whether the underlying transaction is "cash-like" or "credit-like": in essence this means whether a consumer is paying for a service before or at the time of receipt or, instead, receives the product or service first and pays for it later. Utility and telecommunication consumer contracts are good examples of credit-like payments, whereby a person receives the good, that is, water, electricity, or phone service, and then pays the bill for such service later, typically at the end of a monthly billing period. The premise is that transactions that are more credit-like will be more helpful in determining the likelihood of whether a thin- or no-file consumer will make future payments on traditional credit products.

The second dimension relates to coverage or the extent to which an underlying transaction is conducted by the population at large, the assumption being that if coverage is extensive, data analysis standards can be efficiently applied across a large population. Otherwise, if coverage is limited, the incremental benefit associated with gathering the data may be less than needed to justify the costs associated with doing so.

The third dimension relates to the concentration of data furnishers. For example, rent payments are an example of a quasi-credit-like transaction, but such payments are also made to a multitude of individual landlords without an existing universal mechanism for consolidating the reporting of such data. Comprehensive reporting of rent payments would require thousands of small landlords to report payment data. On the other hand, if

¹⁴ The Information Policy Institute, "Giving Underserved Consumers Better Access to the Credit System: The Promise of Non-Traditional Data" (July 2005).

the concentration of furnishers is high, scale efficiencies are gained, making it more likely that the effort to report the alternative payment data can be economically justified.

Based on these three criteria, Schütte noted that the Information Policy Institute's report identified utility and telecommunication payments as two types of credit-like alternative transactions that have characteristics that would allow for a broad application at a potentially reasonable cost.

Finally, as an introduction to how alternative data are currently gathered and shared with lenders, Schütte described several types of organizations that are focusing on the market for alternative data. Such firms fall into three broad categories: data furnishers, data repositories, and data scoring firms.¹⁵ Schütte used PRBC¹⁶ as one example of a firm that, to some extent, is performing each of these functions. PRBC gathers and consolidates full-file information using only alternative data supplied by consumers or third parties such as bill-pay companies and check cashers with the express purpose of helping individuals build more robust credit profiles. The data are then used to create a score¹⁷ that can be used when consumers are in the market for credit, for example, when applying for a mortgage or an auto loan. Schütte also cited the Fair Isaac FICO Expansion Score as a scoring method based on alternative data that can help

¹⁵ Data furnishers are those companies that report alternative data to repositories that warehouse and manage the databases storing the data. Data scoring firms provide the analysis necessary to rank consumer risk based on the consumer payment information held in the data repository. Tescher and Schütte noted that, by their count, there are at least 20 companies operating in the market for alternative data in one or more of these capacities.

¹⁶ As described on its website, PRBC is "an FCRA compliant credit repository that enables consumers and small business owners to build a credit file and score, based on their history of making rent and other recurring bill payments, that can be used to demonstrate creditworthiness when applying for housing, credit, insurance, and employment." For more information, visit www.prbc.com/main/about.php.

¹⁷ PRBC uses the FICO Expansion Score for mortgage lending, but otherwise does not have an in-house predictive score. Lenders are able to apply their own scores to PRBC consumer data.

lenders determine a risk score for thin- and no-file consumers.¹⁸ As described by Schütte, the data furnisher or the supply side of the market for alternative data is evolving, with many new and well-established companies contributing data or analytics to scoring methods that incorporate at least some elements of alternative data in order to improve underwriting decisions. As more research is undertaken to determine the predictability of alternative data and as lenders show more interest in better evaluating risk for underserved consumers, Schütte believes that the supply-side market will also mature.

III. Key Influences on Supply and Demand for Alternative Data

The development of a market for alternative data is contingent on demand by lenders and supply by data furnishers. Lender demand hinges on the incremental benefit gained by incorporating alternative data into credit underwriting and other business decision models. While obstacles remain, several of which are described in more detail in the next section, lender demand will grow as it becomes evident that such data will allow profitable portfolio expansion. On the other hand, supply of alternative data will expand as the benefits to sharing full-file information with data repositories is determined to outweigh the costs of reporting.

Central to increasing demand for alternative data is its usefulness in risk assessment, particularly for thin- and no-file individuals. Schütte discussed several recent studies that have been or are being undertaken to analyze whether alternative data can, indeed, be shown to improve estimates of default and delinquency risk. He referenced a study by the Policy and Economic Research Council (PERC) and the Brookings Institution Urban Markets Initiative that examined over 8 million credit records

¹⁸ For more information on the FICO Expansion Score, visit www.fairisaac.com.

containing at least one alternative trade line reported on a full-file basis, that is, both positive and negative data. These files included thick-, thin-, and no-file consumers. The treatment sample, along with a control group, was examined at two points in time to determine, among other things, whether the inclusion of the alternative data improved estimates of risk probability.¹⁹ As Schütte described, the results of this study indicated that the addition of even one trade line related to either a utility or telecommunications payment proved useful. In particular, Schütte noted that the results showed improved predictive power for several commercial scoring models.²⁰ This result was primarily tied to an ability to newly score those individuals who couldn't previously be scored because they had either thin- or no-credit files, rather than an improvement in predicting risk for those who already had credit scores based solely on traditional data.

CFSI has also examined the results of separate, but similar, tests using alternative data conducted by risk-modeling firms Fair Isaac, LexisNexis, and L2C. As described by Schütte, the results showed that by using alternative data, these firms were able to 1) score a significant portion of loan applicants without a traditional credit score and 2) effectively measure risk among thin- and no-file applicants. Using Fair Isaac's FICO Expansion Score, LexisNexis' Risk View, or L2C's Link2Credit or First Score Direct products, 70 to 100 percent of the sample applicants without traditional credit scores could be effectively scored by incorporating alternative data. These companies also performed retro-tests on lenders' existing loan portfolios. These tests generated credit

¹⁹ Michael A. Turner, Alyssa Stewart Lee, Ann Schnare, Robin Varghese, and Patrick D. Walker, "Give Credit Where Credit is Due: Increasing Access to Affordable Mainstream Credit Using Alternative Data," Policy and Economic Research Council and The Brookings Institution Urban Markets Initiative (2006). To view the full report, visit www.infopolicy.org/pdf/alt-data.pdf.

²⁰ Turner, et al., pp. 24-26. According to the report, the models included the VantageScore; a generic new account model; two bankruptcy models; and a mortgage screening model.

scores incorporating alternative data for loan customers at the time their application was received, ranging from 12 to 24 months prior, and then examined performance during the ensuing period. Based on the subsequent actual payment performance, these tests allowed an analysis of the effectiveness with which credit scores incorporating alternative data would have predicted future default and delinquency risk at the time of the loan application. According to Schütte, the tests affirmed that alternative data strengthen a lender's ability to predict risk associated with thin- and no-file borrowers and, thereby, facilitate lending to lower risk borrowers in this consumer segment who otherwise may be denied credit or priced out of the market.²¹ However, these tests did not use alternative trade lines to assign risk scores for those individuals who were originally denied credit and, therefore, did not become customers of the lenders. To better understand how alternative data might affect risk prediction for this population, Schütte noted that future research on these consumers' payment performance should also be followed over time and examined in the context of a risk profile incorporating alternative data.

On the supply side, Schütte examined the incentives that exist for furnishers of alternative data to voluntarily share information with data repositories, such as CRAs. For traditional lenders, CRAs have expressed an expectation that lenders agree to share full-file consumer payment data in order to gain access to credit reports and thereby more information on which to base underwriting decisions.²² With regard to alternative data

²¹ Rachel Schneider and Arjan Schütte, "The Predictive Value of Alternative Credit Scores," Center for Financial Services Innovation, pp. 7-9, 17.

²² This condition does not appear to be an explicit rule but rather represents an expectation that CRAs have of traditional lenders that voluntarily share consumer payment data. In recent years, there have been cases where lenders omitted terms associated with an account. For example, before a policy change announced in August 2007, Capital One did not report account credit limits. Instead, they reported highest balance, which consumer groups and others argued artificially increased debt utilization rates for consumers and made them appear more risky to other lenders. See www.washingtonpost.com/wp-

dyn/content/article/2007/08/03/AR2007080300890_pf.html. In a second example, Sally Mae stopped

furnishers, CRAs have been less likely to call for the sharing of full-file payment data in exchange for access to credit reports. Both concerns about data privacy and regulatory restrictions on data-sharing combined with limited and inconsistent use of credit reports by alternative billers have made this flexibility necessary on the part of CRAs.

Aside from potential constraints related to data privacy and data-sharing, businesses with scale and credit-like attributes, such as utility and telecommunication billers, may be more likely than businesses that do not have such attributes to benefit from reporting full-file data, ultimately because such reporting may help to reduce default risk. Utility or telecommunications companies can reduce default risk either by 1) lowering defaults by current customers or 2) better screening of new applicants, when possible.²³ In cases where a utility is unable to deny service to new customers who may present higher default risk, benefits may still stem from reducing defaults by current customers.

Schütte argued that consumers will have more incentive to pay utility bills consistently and on time if they know that negative payment performance will be reported to CRAs and will affect their credit scores. Similarly, consumers who know that positive data will also be reported may be motivated by the opportunity to build positive payment histories with CRAs. In both cases, these incentives should lead to reduced

reporting student loan payment data to two of the three national CRAs. See Robert B. Avery, Paul S. Calem, and Glenn B. Canner, "Credit Report Accuracy and Access to Credit," *Federal Reserve Bulletin* (Summer 2004), p. 310. The CRAs have responded to instances where lenders provide incomplete credit histories by announcing that they would limit access to their databases. See Robert M. Hunt, "A Century of Consumer Credit Reporting in America," Federal Reserve Bank of Philadelphia Working Paper 05-13 June 2005, p. 36.

²³ Many state public utilities operate under a common law "duty to serve" all residential customers in a particular geographic market under certain conditions. This "duty to serve" limits utilities' ability to screen new customers based solely on creditworthiness. For further reference, see 64 Am. Jur. 2d Public Utilities, § 21. See also Jim Rossi, *Regulatory Bargaining and Public Law* (Cambridge University Press, 2005), p. 45.

delinquencies and fewer defaults. A recent report from the Brookings Institution's Metropolitan Policy Program noted estimates that the cost of payment defaults and delinquencies in the utility industry equals \$8.50 per customer, or \$1.7 billion annually. On the surface, any meaningful reduction of these costs should serve as a significant incentive for sharing customer payment data by utility companies. Ultimately, the strength of this incentive will hinge on whether sharing full-file data with credit reporting agencies truly leads to changes in consumers' payment behavior. Unfortunately, the report's survey population was relatively small given utility companies' continued concerns regarding existing data-sharing regulation. As a result, there is little empirical evidence to date to measure effects on consumer behavior.²⁴ To overcome these hurdles and encourage some alternative data furnishers to voluntarily share full-file payment data, Schütte acknowledged that a form of monetary payment may be necessary by those on the demand side of the market.

IV. Other Factors Affecting the Developing Market for Alternative Data

Schütte touched on several additional factors affecting the development of the market for alternative data: the costs and complexity of changes to IT infrastructure, legal and regulatory hurdles, and the broader economic impacts of extending the market for consumer credit.

Many operational adjustments are required by both data furnishers and lenders in order to make available and incorporate alterative data into the credit risk analysis process. In many cases, costly up-front investments need to be made to modify legacy

²⁴ Sara Burr and Virginia Carlson, "Utility Payments as Alternative Credit Data: A Reality Check," The Brookings Institution Metropolitan Policy Program (March 2007), pp. 5, 12-20.

data systems. On the supply side, while alternative data furnishers may have high fixed costs to set up an automated process to send payment information to data repositories, Schütte noted that the monthly recurring costs should be much lower. In support, the earlier report by the Brookings Institution's Metropolitan Policy Program (Burr and Carlson) noted that utility companies classified monthly operational costs associated with full-file reporting as "minimal."²⁵ At the same time, even automated monthly data transmissions will incur some additional and ongoing technical and servicing costs for data furnishers. As described in the previous section, data furnishers must see an associated benefit to justify these costs, preferably in the form of reduced default and delinquency by customers rather than less attractive options such as stricter control of access to credit reports or simple monetary incentives.

Lenders will also face costs associated with incorporating alternative data into large and complex automated lending systems. Much of these costs are associated with modifications to IT systems, for example, file formatting changes necessary to set up and maintain systems to receive alternative data. Costs may also arise to the extent that incorporating alternative data into existing loan decision models reduces the level of automation in this process. A much less obvious but critical obstacle for lenders may occur in the area of credit portfolio securitizations. Very generally, lenders are able to securitize loan pools that are valued and assigned risk ratings by credit rating agencies. These agencies have less experience evaluating portfolios that leverage alternative data in

²⁵Burr and Carlson, p. 4.

risk analyses and, as a result, may find it challenging to apply ratings to these portfolios.²⁶

In the legal and regulatory environment, Schütte identified several potential obstacles, particularly for data furnishers in the area of data privacy. At the state level, some state laws restrict or remain silent on utilities' right to share full-file consumer data with national data repositories. Without clear regulatory direction, utilities, including telecommunications companies, have been hesitant to report full-file consumer data.²⁷ Additionally, data furnishers will be subject to requirements and obligations set forth in the Fair Credit Reporting Act (FCRA) and, as amended, by the Fair and Accurate Credit Transactions Act of 2003 (FACTA), adding often unfamiliar compliance responsibilities. For example, under the FCRA, data furnishers are required to develop safeguards to ensure accuracy and integrity in the reporting of consumer payment data and, if errors are discovered, to correct such information within a specified time. Moreover, data furnishers must investigate, review, and report findings when a CRA informs them of a consumerinitiated dispute regarding the accuracy of data contained in a credit report. Failure to comply with these provisions may subject the data furnisher to fines and other financial liabilities.²⁸

²⁶ Katy Jacob and Rachel Schneider, "Market Interest in Alternative Data Sources and Credit Scoring," Center for Financial Services Innovation (December 2006), p. 14.

²⁷ Burr and Carlson, p. 7.

²⁸ On December 13, 2007, the federal banking agencies issued a Notice of Proposed Rulemaking: Procedures to Enhance the Accuracy and Integrity of Information Furnished to Consumer Reporting Agencies Under Section 312 of the Fair and Accurate Credit Transactions Act, FR Vol. 72, No. 239. As part of this NPRM, regulations and guidelines "would implement the requirement that the Agencies issue guidelines for use by furnishers regarding the accuracy and integrity of the information about consumers that they furnish to consumer reporting agencies…" The NPRM outlines two approaches – the regulatory definition approach and the guidelines definition approach – to defining the terms "accuracy" and "integrity." The regulatory definition approach calls for the definition of "integrity" to mean "that any information that a furnisher provides to a CRA about an account or other relationship with the consumer does not omit any term, such as a credit limit or opening date, of that account or other relationship, the absence of which can reasonably be expected to contribute to an incorrect evaluation by a user of a

To the extent that using alternative data to underwrite new loans is successful, lenders are introducing a new and unfamiliar segment of borrowers into their portfolios. By definition, these thin- and no-file borrowers have limited histories with traditional financial institutions. These factors in themselves argue for closer monitoring than might be the case with individuals who have more extensive credit histories. They also call for more attention in order to guard against the potential effects of *adverse selection* and *moral hazard*.

In a 2005 working paper, Federal Reserve Bank of Philadelphia senior economist Robert M. Hunt describes these two terms and associated risks.²⁹ *Adverse selection* can occur when lenders have limited knowledge of borrowers, as has been the case with thinor no-file consumers, that makes it difficult to differentiate risk and, therefore pricing, among these borrowers. As a result, loans to this population will generally carry a high cost and uniformly strict terms. If a lender is not careful, riskier borrowers with limited lower-cost borrowing alternatives will be more likely to "select" the higher-priced loan, exposing that lender to greater than expected default risk. Interestingly, using alternative data for risk scoring for thin- and no-file consumers can help mitigate adverse selection to a point where lenders may engage these borrowers. But adverse selection will remain more of a concern with this population than it is with those who have long histories of traditional payment performance on which to base lending decisions.

consumer report of a consumer's creditworthiness, credit standing, credit capacity, character, general reputation, personal characteristics, or mode of living." If this definition, which includes an expectation of completeness, is adopted in the final rule, it may have implications for furnishers of alternative data that report to CRAs.

²⁹ Robert M. Hunt, "A Century of Consumer Credit Reporting in America," Federal Reserve Bank of Philadelphia Working Paper 05-13 (June 2005); www.philadelphiafed.org/files/wps/2005/wp05-13.pdf.

As explained by Hunt, *moral hazard* occurs when a party that is insulated from risk behaves differently than it would if it were fully exposed to the risk. When alternative payment data are reported to CRAs — for example, utility or telecommunications payment information as described in the earlier discussion — lenders will have more information about borrowers, and lenders can then use these data when deciding with whom and at what price they do business. Consequently, thin- and no-file consumers will be less able to avoid reputational costs associated with not paying alternative-type billers. Hence, these consumers are no longer as insulated from risk as they once were, and therefore, the problem of moral hazard may lessen for this population.

As lenders move toward incorporating alternative data into their risk scoring models and building bridges for thin- and no-file consumers to traditional credit products and services, the broader economic impacts — such as those described above — are important considerations. Developing a better understanding of these impacts will require continued and focused attention not only in the financial services industry but also among community development organizations, alternative data furnishers and repositories, and policymakers.

V. Conclusion

In summary, the continued evolution of supply and demand for alternative data in the credit information markets will center on crucial factors such as whether there is a business case motivating furnishers of alternative data to voluntarily share payment information with data repositories and whether the data can help to predict default and

17

delinquency risk for those consumers with thin- and no-credit files. While obstacles remain in moving toward incorporating alterative data into lending decisions by traditional financial institutions, there also seem to be real social and economic incentives for doing so.