Reaching Deeper: Using Alternative Data Sources to Increase the Efficacy of Credit Scoring
Introduction

With consumer debt levels at an all-time high and the credit card and mortgage markets heavily saturated, the financial services industry has begun to turn its attention to the vast untapped pool of consumers who have minimal credit histories but aren’t necessarily poor credit risks. While estimates vary, as many as 70 million Americans are believed to have “thin files,” or no credit files at all, making it difficult to use traditional credit scoring to underwrite them. These consumers tend to be grouped in minority, poor and other low income populations; the elderly, recent widows and new immigrants are also important segments within this “thin file” group of underbanked consumers.¹

This issue is a challenge for both financial institutions and for thin-file customers themselves. Without adequate access to credit, the underbanked are hampered from purchasing products such as personal or auto loans, mortgages and other asset-building vehicles. Credit scores play an increasingly significant role in consumers’ financial lives and can have a critical impact on their economic security. Lacking a formal credit history can affect consumers’ ability to get competitive mortgage and non-mortgage credit. In addition, credit scores are used increasingly for other purposes, such as determining auto and home insurance rates, hiring employees, and approving rental applicants. The negative consequences of an absent credit history can mean loss of access to a new job, apartment, or low-cost insurance. And ultimately, not having a credit history seriously impairs consumers’ ability to access the most popular road to asset-building in America today—homeownership. In 2004, for the whole of the American population, home equity accounted for 42% of all assets of those who owned their homes. However, this share increases as household income decreases, with home equity representing 80% of all assets for the lowest income quintile.²

With an eye on new markets, innovation in the financial services industry has led to the creation of products, delivery channels and providers that fall outside the traditional credit reporting system, including prepaid debit cards, remittances, and electronic bill payment solutions. A variety of industry players are beginning to collect and experiment with this and other alternative data sources to understand their predictive value and how to integrate them into automated underwriting models. This work is in its infancy and results are not yet clear or even available in many cases. Even so, a significant number of innovative pilots and studies are providing the needed momentum to catapult this issue to the top of the financial service industry’s agenda. This report describes the current credit reporting system, why it doesn’t work for everyone, and efforts underway to improve it with the addition of new data sources.

² Ibid, p. 4.
How the Current Credit Reporting System Works

While third-party credit data collection has been part of American business since the mid-1800s, it wasn’t until the 1950s that financial service companies were able to leverage its benefits. That’s when two mathematicians—Fair and Isaac—developed models to predict risk, uncovering which factors were actually reliable predictors of a consumer’s performance after the credit was approved. The result of their work is the familiar FICO® scores. Under the Equal Credit Opportunity Act (ECOA), a credit scoring system may not use certain characteristics - like race, sex, marital status, national origin, or religion - as factors. Creditors are allowed to use age in properly designed scoring systems, but any such scoring system must give equal treatment to elderly applicants. Because credit scoring is based on real data and statistics, it is perceived to be more reliable than subjective or judgmental methods. Currently, financial service companies can make automated decisions on credit approvals. Credit scores advanced the salability of loans to the secondary market, and accelerated monetary transactions with fewer losses.

While credit score modeling transformed the market, it is the day-to-day collection of data that remains the foundation of the system. Third-party companies, or credit bureaus, routinely collect individual consumer information that includes information on loan payment history, the number, age and type of accounts, late payments, collection actions, and outstanding debt. The data is then processed through a statistical program that compares this information to the credit performance of consumers with similar profiles. A credit scoring system awards points for each factor that helps predict who is most likely to repay a debt. A total number of points — a credit score — helps predict how creditworthy an individual is, that is, how likely it is that they will repay a loan and make the payments when due.

Today, there are three major credit bureaus - TransUnion, Experian, and Equifax. Together they collect data on more than 200 million U.S. residents. There are also smaller local credit reporting agencies that focus on regional markets. Most credit grantors report to one or more of the major credit bureaus. In general, the credit reporting agencies don't pass information amongst themselves, so most consumers have at least three separate credit records.

Decision-making Factors and Repercussions

Another way that financial services companies make decisions about offering credit to consumers is the extensive use of ChexSystems to enable consumers to open bank accounts. ChexSystems, a subsidiary of eFunds Inc., is the largest specialized collector of information on consumers’ checking account activity. Founded in 1971, 80% of U.S. banks, including all of the major banks, employ ChexSystems to deter fraud and evaluate risk in opening checking accounts. Some banks have also employed ChexSystems as part of their approval process for loans, credit applications, and opening savings accounts. ChexSystems incorporates

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information on past bank account activity to help banks mitigate risk. Participating banks report information on forced closures, non-sufficient funds activity, bounced checks and similar items. This information is linked to a consumer’s name in the ChexSystems database, and depending on the risk model developed by the financial institution, can trigger denial or approval of bank accounts and other financial services.

In 1999, the company introduced a new product, QualiFile, to integrate other kinds of indicators, such as check printing history, retail scans of checks, and credit report data, in order to make decisions about offering specific services to customers. The premise behind QualiFile is that credit is not the only factor in determining acceptable risk; debit and credit information together provide a more detailed consumer picture expanding opportunities to open accounts and offer more products. But the product is only as good as the data available for inclusion in the model.

Despite all of the information that is being collected by credit bureaus and factored into credit scoring models, millions of consumers are effectively left out of the system, though estimates vary. On the high end, the National Credit Reporting Association (NCRA) estimates that more than 70 million Americans have either no credit score, or a lower credit score than their financial history and payment potential warrants. On the low end, Experian estimates that traditional credit reporting methods do not address the needs of 35 million consumers, including 8.8 million youth, 6.7 million Hispanic consumers, and 2.9 million non-Hispanic immigrants (see figure 1).

Finally, Fair Isaac estimates that 20% of Americans lack credit files that can be scored. That translates to 54 million people: 22 million with no credit history, and an additional 32 million with relatively short or little history, or thin files. By serving just 3% of this market, Fair Isaac estimates that lenders could generate $2.3 billion in the mortgage market, $750 million in the auto market, and $113 million in the credit card market.

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4 http://www.riskworld.com/PressRel/1999/PR99a104.htm
A Changing Industry

While consumers make regular payments for a variety of goods and services, such as rent, child care, health care, and automobile liability insurance, lenders and credit bureaus have been reluctant to incorporate this data into their systems. These types of “non-traditional” credit scoring data are gaining exposure and interest in the industry. However, they have not been incorporated into credit scoring models to date because of both the difficulty of data collection and the uncertainty of whether the data is predictive of a consumer’s probability of future payment. For example, a growing number of consumers are using prepaid cards as an alternative to checking accounts to make payments to a wide variety of merchants and service providers, but even this product with high-tech underpinnings has not been embraced by the credit industry because of uncertainty of the predictive nature of the data. Likewise, the secondary market has been cautious about these new forms of scoring and currently does not purchase loans using alternative scores. Finally, legislative and regulatory prohibitions enacted to protect consumers’ identities, particularly state regulations related to disclosure of utility payments, can also inhibit the reporting of alternative sources.

Today’s competitive financial services climate has the credit reporting industry changing the way it views its role and the opportunities that it can provide its clients to attain new customers. What are the options for consumers who fall out of traditional credit reporting profiles? By defining “credit-like” as a service or good that is provided in advance of the receipt of payment, there is an opportunity to expand the universe of credit-worthy consumers. The majority of those with unscorable thin-files or without files at all do engage in activities that can be thought of as “credit-like.” While these transactions are not traditional credit agreements, they mirror the essential elements of traditional credit agreements in that they are recurring relationships that entail regular payments. In fact, the vast majority of people in the thin-file segment of the population do demonstrate a sense of responsibility through various agreements to pay for regular service – for example, rent, utilities, and auto insurance. Even basic checking account data on balances and deposits, which looks nothing like credit, may have some value in predicting repayment behavior for smaller, shorter-term credit products like lines of credit.

A Work in Progress: How the Traditional Credit Bureau and Reporting System is Responding to a Changing Marketplace

The traditional credit scoring industry has begun to experiment with different strategies to accept non-traditional data and incorporate it into consumers’ credit scores. For example, Fair Isaac Corporation developed the FICO Expansion score for credit applicants with little-to-no traditional credit histories. The FICO Expansion score uses non-traditional data including utility payments, insurance payments and others to assess the risk of consumers who lack sufficient data in their credit files to generate a classic FICO score. Fair Isaac estimates that an Expansion score can

7 Ibid
8 Ibid
9 Information Policy Institute, 2005.
be generated for more than 60% of applicants that are “thin file” or “no hit” based on traditional credit data.\textsuperscript{10}

In addition, one of the three major credit bureaus, Experian, is moving forward with the development of an alternative data solution through a pilot program with Los Angeles-area companies by actively acquiring alternative data on underserved consumers in the market.\textsuperscript{11} The objective is to acquire enough information from a wide variety of sources to be able to establish a complete profile of the underserved consumer. The pilot will incorporate checking account history, payday loans, property rental history, rent-to-own transactions and other kinds of data. Once enough data has been collected, selected lenders will begin testing its predictive value.

First American Corporation, a credit reporting agency, is another company that sees opportunities in expanding the credit reporting system. The Anthem (Assisting Nontraditional Homebuyers in Emerging Markets) Report is specifically designed to address mortgage lender and investor needs of a reliable way to assess the credit risk of loan applicants with little or no traditional credit history. The Anthem Score takes into consideration both positive information and negative factors such as rent, insurance, utility bills and child care expenses – along with any traditional credit information that is available – to generate a credit score that can be used by lenders to rate a person’s creditworthiness. This helps mortgage lenders address many of the credit challenges these potential homebuyers face, while sufficiently managing the risk to the lender and the secondary market/investment community.

In generating an Anthem Score, the consumer is asked to provide information such as canceled checks or receipts for rent, utility and phone bills, insurance premiums and other appropriate expenses. First American verifies the data, generates the report and accompanying score, and sends it to the lender. Anthem Scores range from 300 and 850, and take into consideration the type of non-traditional data used to generate the score, and how it was verified.

**Alternative Providers Stress Innovation in Data Collection**

A variety of alternative providers are developing options that will make the credit reporting system more inclusive. Meanwhile, financial institutions, seeing a large, untapped market of potentially lucrative customers, are beginning to accept non-traditional forms of data to make credit decisions for mortgages and other lines of credit.

For many underbanked consumers with limited access to credit, the only option for immediate short-term credit is to apply for a payday loan. Despite high interest rates and fees, many consumers do repay their loans on time, but do not receive the advantage of building a formal credit history. In 2005, the Community Financial Services Association of America (CFSA) and

\textsuperscript{10} http://www.fairisaac.com/NR/exeres/3277CC55-8F48-4F18-919B-3E363B1B4EF8,frameless.htm

\textsuperscript{11} Jennifer Tescher, “Expanded Credit Data Will Help Banks, Poor,” American Banker, February 24, 2006, Vol. 171, Iss. 37, Pg. 8.
PRBC (formerly Pay Rent Build Credit) began a pilot program to help short-term borrowers build credit by voluntarily reporting their loan repayments. Currently, traditional credit reporting agencies do not track or score payday loan payments, and payday lenders tend to report only poor payment history to Teletrack, an alternative credit bureau. As a result, payday loan users have difficulty graduating to more mainstream and less expensive credit.

CFSA, the largest association of payday loan companies representing more than half of the payday advance locations nationwide, determined that payday advance companies could provide their customers an additional service by reporting repayment data to credit bureaus. The focus of PRBC’s business model is to develop systems and relationships to obtain large amounts of bill payment information, primarily from previously untapped sources. CFSA and PRBC collaborated to enable payday advance customers to use their payment histories to gain access to more traditional financial services and asset-building opportunities.12

The pilot was rolled out during the summer of 2005 through CFSA member companies Advance America, Check into Cash and Valued Services, at locations in Chicago, Texas and North Carolina. Specially-developed marketing and educational materials in English and Spanish were provided to all loan applicants at these locations. The brochures explained the concepts of credit histories and scoring as well as the advantages of opting-in to have repayment information reported to PRBC. Approximately 80% of applicants agreed to participate. The data has been added to the PRBC database that is used to produce a Bill Payment Score. The score can be used to supplement a traditional credit score, or be used in the absence of one, to gain a more complete and accurate risk assessment of an applicant.

CFSA members’ use of the PRBC service helps their customers to demonstrate the ability and willingness to pay their financial obligations as agreed, and it helps both financial institutions and other service providers to more accurately and fairly assess their creditworthiness. Advance America is continuing its participation in the project, and all CFSA members are now eligible to use the PRBC service. As the effort grows, it will be important to revisit existing credit scoring models to ensure that they don’t downgrade consumers who use payday loans, regardless of their payment history.

Expanding the role of CDFIs and Micro-lenders

Community Development Financial Institutions (CDFIs) and micro-lenders also are demonstrating an increasing interest in credit reporting for their customers. While some of these organizations report payment history data on their borrowers to national credit bureaus, many do not have the resources to do so, while others do not have a large enough volume of loans to report. While the clients of these organizations benefit with access to credit that they may not have accessed otherwise, community lending programs see the benefit of providing their borrowers with an opportunity to develop positive credit histories with higher scores that will position them to access mainstream financing over time.

While a variety of issues prevent microfinance and housing loan funds from participating in the national system of credit reporting, two critical barriers stand out – cost and minimum account requirements instituted by the three big credit reporting agencies. In recent years, Experian, TransUnion, and Equifax have required minimum account volumes, sometimes as high as 500 accounts or more. Only a handful of nonprofit lenders have sizable enough portfolios to meet this threshold.

To address the significant issues related to data collection, report batching and reporting cost, the Central Vermont Community Action Council, a 40-year-old community development corporation, has recently launched Credit Builders of America (CBA). With the support of the Association for Enterprise Opportunity (AEO), a trade group representing U.S. microenterprise organizations, CBA will serve as an intermediary to assist CDFIs and other nonprofit lenders to report borrower credit history by collecting data in the required format and creating scale to meet volume thresholds. CBA’s vision is to become a one-stop shop where members can also pull credit reports for their potential and current borrowers, as well as report repayment. The ultimate goal is to assist borrowers in establishing credit relationships with conventional financial institutions. In addition, CBA hopes to provide an affinity card for member borrowers to access small lines of credit. 

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13 The creation and development of CBA was funded in part by a grant from the Center for Financial Services Innovation in 2005.
Conclusion

Extensive innovation is occurring in the collection, analysis and use of alternative data sources to reach untapped credit markets. If successful, these efforts can help bring millions of underbanked consumers into the credit mainstream, enabling them to both improve the terms of existing credit obligations and access new products and services. It is unclear at present how the industry will deal with the predictive nature of non-traditional data and how many consumers will gain access to positive credit through these new channels, but the innovations and experiments described here offer promising opportunities to move in that direction.
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The Center for Financial Services Innovation (CFSI) assists the financial services industry to identify, develop, and implement innovative ways of delivering asset-building opportunities to the underbanked market that are profitable for both company and customer.

CFSI, an affiliate of ShoreBank Corporation with support from the Ford Foundation, was founded in 2004 to encourage the financial services industry’s efforts to serve un- and underbanked consumers. The Center provides funding for innovative solutions, a meeting place for interested parties, resources for testing products and services, and identifies, develops and distributes authoritative information on how to respond to the needs of the underbanked profitably and responsibly. Banks, credit unions, technology vendors, alternative service providers, consumer advocates, and policy makers all can find support here to forge the new relationships, products, and strategies that will transform industry practice and people’s lives. For more on CFSI, visit www.cfsinnovation.com.

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