Research Consensus Confirms Benefits of Alternative Data

Authors:
Michael A. Turner, Ph.D.
Robin Varghese, Ph.D.
Patrick Walker, M.A.

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Abstract

Tens of millions of Americans, perhaps as many as 1 in 5 or even 1 in 4, have either no credit report, or have insufficient information to generate a traditional credit score. These "no file" and "thin file" persons collectively comprise the Credit Invisibles of America. Their efforts to meet their real credit needs are stymied by a lack of information about their likelihood of repayment, making it harder for them to build assets, which as recent work on inequality notes is crucial for moving up the economic ladder. Credit invisibility makes it hard for many Americans to start a small business or own a home. Actual credit market experience and over a decade of rigorous empirical research by NGOs and the private sector point to an effective solution—namely, that by expanding the set of data used for risk assessment, such as utilizing fully reported non-financial payment histories, Credit Invisibility is nearly stamped out and a significant portion of erstwhile Credit Invisibles qualify for affordable sources of mainstream credit. Unfortunately, non-financial payment data (such as utility and telecom payment histories) are undersupplied to consumer and commercial credit reports owing in part to public policy uncertainty.

Introduction

What's at stake?

Economic inequality in the US has been growing for decades and is at a post-war high. The latest such figures in developed market economies ranked the US as the most unequal after taxes and transfers.[1] Wealth is even more concentrated and, as with income, has also been growing more and more unequal.[2] For instance, Emmanuel Saez and Gabriel Zucman find that the share of total household wealth held by the top 1% richest families rose from 23% in 1978 to 42% in 2012.[3] This trend suggests that there have been major and growing challenges to developing wealth for lower and middle income Americans relative to higher income Americans.

In the US, and in most countries around the world, two key assets that are used to generate wealth are a home and a small business.[4] For almost everyone, ownership of either requires taking on debt, usually from a bank. Beyond simply obtaining credit, the difference in costs between higher priced and lower priced credit for mortgages, auto loans and other consumer credit can be substantial over a lifetime.[5] In today's environment of automated underwriting and ever tighter lending standards, this means that the contents of one's credit report play a significant role in determining your life's financial chances and that of your family. For the Credit Invisibles, this is a steep uphill climb. In fact, because many lenders automatically reject thin-file and no-file applicants who are unscoreable as too risky, this large population of borrowers often have their real credit needs met by a burgeoning industry of pawn shops, pay day lenders, check cashing services, and other high cost lenders. The limits on credit availability and the fees and price of credit for Credit Invisibles make it more difficult for them to make ends meet and begin building wealth.

Unless steps are taken by policy makers to enable market solutions to evolve, America's tens of millions of Credit Invisibles will be disadvantaged in their efforts to improve their economic position. What follows is a brief exposition on one promising solution—using

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[1] "Gini in the Bottle," 26 November 2013. The Economist. Downloaded at http://www.economist.com/blogs/democracyinamerica/2013/11/inequality-america

[2] For more details, please see: Salvatore Babones. "U.S. Income Distribution: Just How Unequal?" Inequality.org. February 14, 2012, Downloaded at http://inequality.org/unequal-americas-income-distribution/#sthash.4wci0BUm.dpuf

[3] Emmanuel Saez and Gabriel Zucman. "Wealth Inequality in the United States since 1913: Evidence from Capitalized Income Tax Data" with Gabriel Zucman, NBER Working Paper, October 2014

[4] Emmanuel Saez and Gabriel Zucman. "Wealth Inequality in the United States since 1913: Evidence from Capitalized Income Tax Data" with Gabriel Zucman, NBER Working Paper, October 2014

[5] As an example of the magnitudes involved, the Asset Funders Network notes that a good credit standing can save a borrower $69,280 on a $100,000 mortgage and save $4,020 on a $10,000 five year auto loan. Consider a larger mortgage closer to the typical amount and/or multiple auto loans and/or credit cards and lifetime savings would be well over $100,000. And this, in turn, would also be much higher if these savings were invested. (see http://assetfunders.org/images/pages/AFN_The_Power_of_Credit_Building.pdf)

richer sets of data, including fully reported non-financial payment histories, in consumer and commercial credit decisions. As will be discussed in more detail below, both economic research and actual experience of borrowers in credit markets provides abundant compelling evidence to support the use of expanded data in credit risk assessment.

Opponents of using fully reported non-financial payment data in credit reports have argued that this would negatively impact some subpopulation of Credit Invisibles by generating a low score. This argument ignores the fact that the real harm comes from preservation of the status quo in which millions of lower income Americans have only the option of high cost, non-mainstream lenders to have their credit needs met.

Alternative Data in US Credit Markets

For over a decade a number of firms have been collecting customer payment data from non-financial services, such as energy utilities, telecoms, pay TV, and rent, as well as other data not typically found in mainstream consumer credit reports. This data has been used to assess risk for both financial and non-financial services. The collection of alternative data has been on a relatively small scale and has been used in narrow ways compared to payment data for financial services, such as for credit cards, auto loans or mortgages have comprised the vast majority of consumers' repayment records used in underwriting traditional loans.

The collection and use of non-financial data or alternative data, which has had a slow start and has been considered a niche area, appears poised for breakout growth for two reasons. First, more data available to lenders improves lending. The inclusion of non-financial payment data in addition to traditional financial data provides a fuller picture of a consumer's likelihood and ability to repay. And with so much recent attention being paid to Big Data and the power of data in general, there are increased efforts to gather and bring to market useful datasets. And these efforts are being aided by IT advances that are improving on the ability to collect data. Second, some consumers may have many non-financial payment histories but very few or no financial payment histories (what we term "Credit Invisible"). For these consumers, the best indicator of their credit risk profiles is their non-financial or alternative data payment histories. It has been becoming increasingly clear that this non-negligible segment of consumers can represent new market opportunities for mainstream lenders.

The current period is an ideal time to expand upon just what constitutes a person's payment history for credit decisions. Consider the case of the so-called "Millennials." This group of younger Americans appears to be eschewing other forms of traditional credit by substituting debit card use for credit card use, and delaying home and car ownership.[6] The CFPB, in a study on the impacts of the CARD Act, reports that the percentage of 18-20 year-olds who have opened a new credit card account has fallen from 33.6% in 2007 to 14.4% in 2012.[7]

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[6] See Derek Thompson and Jordan Weissmann. "The Cheapest Generation: Why Millennials aren't buying cars or houses, and what that means for the economy," The Atlantic. September 2012. Downloaded at http://www.theatlantic.com/magazine/archive/2012/09/the-cheapest-generation/309060

[7] See CFPB. CARD Act Report: A review of the impact of the CARD Act on the consumer credit card market. October 1, 2013. Downloaded at: http://files.consumerfinance.gov/f/201309_cfpb_card-act-report.pdf

A segment of young consumers in large urban areas may simply plan to rent and go without owning a car. The Millennials may not be alone in this regard. Generally, since the financial crisis, the share of consumers renting has rising and the share of consumers owning has fallen. For instance, the rate of home ownership steadily increased for decades, reaching 69.4% in the second quarter of 2004, declined modestly for a few years, and then began falling more rapidly. This downward trend continues today, with the latest figures (third quarter of 2014) at the lowest point in over 20 years (at 64.3%).[8] And around 30% of homes owned have no mortgages, meaning no current payments reported to a credit bureau.[9]

Increased renting and greater use of debit cards along with sensible deleveraging may not be a bad thing, but it will, over time, result in less information in traditional consumer credit reports. Given these trends, a pragmatic way forward would be to enable consumers to build their credit profiles (payment histories) with a broader array of payments (such as utility payments, rental payments, phone payments, and the like) and without having to go into debt. Those consumers who need to rebuild their financial reputations following the economic crisis could do so also without going into debt.

The ability of non-financial data to expand credit access and build better credit profiles for most of the financially excluded has been shown in a variety of research. The following table highlights some of the findings from this research. These and other findings are discussed in greater detail in the next sections.

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[8] See US Census. "Residential Vacancies and Homeownership in the Third Quarter 2014." Press Release. October 28, 2014. Downloaded at http://www.census.gov/housing/hvs/files/qtr314/q314press.pdf

[9] Zillow. "Free and Clear American Homeowners," Posted by Nalina Varanasi. January 9, 2013. Downloaded at: www.zillow.com/research/free-and-clear-american-mortgages-3681/

	PERC[10]	LN[11]	Equifax[12]	Experian[13]	TransUnion[14]	Fico[15]
Size of Credit Invisible	9%-13% of utility/ telecom sample	24% of Total Population	Estimated 64 Million total, 25 million in NCTUE	10% of rental applicants no hits, 15% of subsidized renters no hit/no score		
Data Tested	Utility/ Telecom (Experian, TransUnion Data)	Various: incl. Public Record, property/ asset data	Utility/Telcom/ Pay TV	Rent (positive data only)	Rent (full file)	Various: Incl. Deposit Account, Public Record, Utility, Property/ Asset Data
Share or Number that Became Scorable	8 in 10 become scoreable	40 Million (86% of unscoreable in sample)	25 Million	100% of the previous no-hits		60-75% of traditionally unscoreable consumers
Risk Profile of Credit Invisible With Alt Data Added						
Lower Risk*	43%	64%	46%	59%		
Moderate Risk*	15%		30%	38%		
Higher Risk*	42%	36%	24%	3%		
Description of Credit Invisible / Other	Disproportionately, low income, young, elderly, ethnic minority	Disproportionately ethnic minority	Emerging consumers, young, elderly, consumers, Hispanic		Two-thirds saw score rise or no impact with rent data reporting 8 in 10 subprime consumers had score increases	

* These risk definitions are approximations and are not fully comparable across the research. The figures shown are to demonstrate merely that the unscoreable or credit invisible are not monolithically high risk. In fact, there are sizeable shares that are of lower and moderate risk. A better, more refined understanding of risk profiles that can be gleaned from alternative data will develop as the data is reported and tested in the market. It is recommended that readers explore the underlying research cited in this paper to gain greater insight.

[10] Turner et al., "Give Credit Where Credit is Due" Brookings Institution, 2006
[11] Jeffrey Feinstein "Alternative Data and Fair Lending." Lexis Nexis. 2013. See http://www.lexisnexis.com/risk/downloads/whitepaper/fair_lending.pdf
[12] CFSI Webinar "Uncovering Opportunity: The True Potential of the Underserved Market." September 18th, 2013.
[13] Experian RentBureau. "Credit for renting: The impact of positive rent reporting on subsidized housing residents." See http://www.experian.com/assets/rentbureau/white-papers/experian-rentbureau-credit-for-rent-analysis.pdf
[14] See TransUnion. "TransUnion Analysis Finds Reporting of Rental Payments Could Benefit Renters in Just One Month," June 19, 2014. Downloaded at transunion.mwnewsroom.com/press-releases/transunion-analysis-finds-reporting-of-rental-paym-1125077 (accessed on 11/04/2014) and see http://transunioninsights.com/rentalreporting/ (accessed on 11/04/2014)
[15] FICO. "Secret to Scoring More Consumers? Alternative Data—With A Catch," November 11, 2013. Downloaded at: http://www.fico.com/en/blogs/risk-compliance/secret-to-scoring-more-consumers-alternative-datawith-a-catch/

Market-based Solutions to Credit Invisibility

"Traditional" Alternative Data: Utility, Telecom, and Pay TV

The market has moved in fits and spurts. Before the subprime and Alt A mortgage meltdown in 2008, a number of promising start ups were populating the consumer credit risk value added services terrain. Companies like Pay Rent Build Credit (PRBC), Rent Bridge/Rent Port, and Rent Bureau focused on making rental payment history available for credit eligibility determination. Companies like Link 2 Credit and Lexis-Nexis developed alternative scoring models while traditional credit modelers FICO and VantageScore accounted for non-financial payment data in their generic scoring models. Owing largely to the financial crisis in 2008, this market experienced a dramatic setback and is only just now recovering and even beginning to thrive.

Large traditional players dominate this market. For example, Equifax houses and manages the National Consumer Telecommunications and Utility Exchange (NCTUE), by far the largest database of utility, pay TV, and telecom payment records in the US. The NCTUE database was traditionally "negative-only" and used by utilities and telecom members as a way to check if consumers had any past defaults and delinquencies on these non-financial services when determining deposit amounts and credit/services for which the consumer would be approved. In 2009, the NCTUE expanded to include "positive data," so-called tradeline information like the traditional credit bureaus receive.[16] This tradeline information includes late payments but also on-time payments, open account status, and

payment amounts among other data. Again, using industry parlance, NCTUE now maintains fully reported tradelines on most Americans.

What makes the Equifax/NCTUE data so compelling is its sheer scale and coverage. For instance while PERC was able to analyze around 8 million traditional credit files from TransUnion and Experian that contained fully reported utility or telecom tradelines, the NCTUE claims to house payment data on over 325 million consumer accounts.[17] This confirms that while only a few non-financial service providers fully report to the traditional credit bureaus, many provide data to the NCTUE. Realizing the potential of this vast storehouse of data, Equifax has carried out research on the impacts of this data and has developed and begun marketing products utilizing it for other purposes, such as for lending and in banking. Though, unlike if the data were in the main consumer credit database, the aim for these products appears to be niche in nature, such as focusing on higher risk borrowers.

"Traditional" Alterative Data: Rent and Other Alternative Data

Apart from utility, telecom, and pay-tv services, the other major payment for a non-financial service that has not typically been reported to the nationwide consumer reporting agencies (CRAs including Experian, Equifax, TransUnion) is rent—though this too is gradually changing. Rent is very promising since it can account for payments that are a larger share of income than those for utilities, telecoms, and pay-tv combined for a consumer. Also, rental data covers a segment of consumers who may be in particular need for additional data in their

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16 See NCTUE's website, http://www.nctue.com/history (accessed on 10/29/14)

17 See NCTUE's website, http://www.nctue.com/about-us (accessed on 10/29/14)

credit files, as those with a mortgage already have that important data element and have already secured a key consumer loan that is often a major objective for a having good credit history. Renters, obviously, contain a pool of potential first time homebuyers. While rental data has been traditionally difficult to collect, technological advances combined with innovative approaches have made this data attainable. TransUnion and Experian are leaders in the collection of this data. For businesses with a large number of rental units, software used by the property manager can transmit payment data directly to the CRAs. For smaller businesses or individuals renting one or two houses or room, this could be impractical. For these cases, innovative solutions, such as William Paid, allow renters or the landlords to pay rent through online interfaces and then that payment can be reported to a CRA. Currently Experian is collecting William Paid tradelines and including them in their consumer credit reports.

In addition to these non-financial service payments, other data on consumer assets, education, professional licenses, address stability, to name a few are also being collected. Lexis Nexis is a national leader in the collection of these types of data. These data and solutions built on them are useful in improving on risk assessment based on traditional credit scores and credit bureau data. In addition, these data contain information on consumers that are not scoreable via traditional approaches.

And besides data aggregators, value added service providers, such as FICO (Fair Isaac Corporation) and VantageScore are also testing alternative data and building credit scores that

utilize this data. Since scores developed by FICO, VantageScore, and the major CRAs are key mechanisms in how credit file data impacts lending decisions, the fact that such scores can take account of these new datasets is a major step forward, for instance VantageScore notes that in its score "alternative data is included if it is available on the credit file."[18] And the new FICO Score 9 includes rental data, as does VantageScore 3.0.[19] The next step for score developers is to optimize models for these new types of accounts as more alternative data is reported and becomes available in consumer credit reports.

How Big of an Issue is Credit Invisibility?

Different efforts to measure the Credit Invisible population through varying approaches have produced similar results. The results consistently show the Credit Invisibles are a large group (possibly as many as 1 in 4 or 1 in 5 Americans depending upon the definition used), comprised disproportionately of lower income persons, members of minority communities, younger and elderly Americans, and immigrants.

Using a sample from 2009, PERC found that about 9% of consumers with a utility or telecom account reported to TransUnion or Experian were unscoreable without the utility/telecom data in their credit files.[20] Figures from a 2005 sample showed this to be about 13%. Most of those that were unscoreable become scoreable when alternative data was added to their credit files.

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[18] VantageScore. "VantageScore 3.0: Better predictive ability among sought-after borrowers," December 2013. Downloaded at: http://www.vantagescore.com/images/resources/VantageScore3-0_WhitePaper.pdf

[19] For instance see Creditnet. "All You Need to Know About FICO 9," September 9th, 2014. Downloaded at: http://www.creditnet.com/blog/all-you-need-know-about-fico-9

[20] Turner et al., "A New Pathway to Financial Inclusion: Alternative Data, Credit Building, and Responsible Lending in the Wake of the Great Recession." PERC, 2012

Equifax reports that of the over 171 million unique consumers in their Equifax Consumer Services Database (ECSD), which contains both positive and negative data from telcos, pay tv, and utility services, 25 million consumers are *not* in Equifax's traditional consumer database. That is, 14.6% are Credit Invisible, having no traditional credit score.[21] Given that the ECSD does not cover the entire universe of non-financial service providers, it is safe to say that well over 25 million consumers would gain a credit file and credit score if payments of non-financial services (utilities, telecoms, etc.) were included in consumer credit files.

In a test of the hit rate of credit scores for Demand Deposit Accounts (DDAs), Equifax found that traditional credit scores had a hit rate of 69-72% while their Insight Score for Retail Banking (ISRB), which uses alternative data, had a hit rate of 82-84%.[22] In a 2014 white paper Equifax notes "According to extensive Equifax data testing, ISRB scores 10 percent to 11 percent more DDA accounts (demand deposit accounts) than a traditional risk score alone."[23] In estimating the *total* size of the Credit Invisible population, in the January 2014 white paper Equifax further notes, "…a massive population of Americans— roughly 64 million consumers—simply don't have a traditional credit file due to a variety of circumstances such as age, marital status and immigration status. Without a credit file, consumers are all too often turned away by retail banks."

In a white paper on fair lending and alternative data Lexis Nexis finds that 40 million consumers are scoreable with its Riskview product that are *not* via traditional approaches.[24] Overall, Lexis Nexis found that about 24% of consumers were unscoreable via traditional means, but that 86% of these unscoreable consumers were scoreable with Riskview.

FICO notes that for alternative data to be useful it needs to exhibit regulatory compliance, depth of information, scope of coverage, accuracy, predictiveness, and orthogonality (uniqueness to already collected data).[25] It finds the impact of using alternative data such as utility payment history, property/asset data, and supplemental public record information is that about 60-75% of consumers who were previously unscoreable become scoreable. They note, "For millions of people, it may not be alternative data but the only credit record they have. For these consumers, it would seem it is primary data. Especially if that data can help them qualify for their first mainstream credit or loan."[26]

The FICO blog reveals that by utilizing additional data from CoreLogic that is not found in typical traditional consumer reports, "23.6% of consumers that score below 680 on classic FICO® Scores will score above 680 using the new scoring model. This can enable them to better qualify for a mortgage or home equity loan." Elsewhere FICO notes, "property transaction data, landlord/tenant data,

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[21] CFSI Webinar "Uncovering Opportunity: The True Potential of the Underserved Market." September 18th, 2013. Slide 21.

[22] CFSI Webinar "Uncovering Opportunity: The True Potential of the Underserved Market." September 18th, 2013. Slide 24.

[23] Nancy Conner. "Retail Banking: The Future of Demand Deposit Accounts Alternative data offers fresh strategy and big opportunities." Equifax. January 2014 (http://www.equifax.com/assets/USCIS/retail_banking_alternative_data_wp.pdf)

[24] Jeffrey Feinstein "Alternative Data and Fair Lending." Lexis Nexis. 2013. See http://www.lexisnexis.com/risk/downloads/whitepaper/fair_lending.pdf

[25] FICO. "Secret to Scoring More Consumers? Alternative Data—With A Catch" November 11, 2013. Downloaded at: http://www.fico.com/en/blogs/risk-compliance/secret-to-scoring-more-consumers-alternative-datawith-a-catch/

[26] FICO. "What is "Alternative" Credit Data?" August 30, 2012. Downloaded at: http://www.fico.com/en/blogs/risk-compliance/what-is-alternative-credit-data/

borrower-specific public data, and other alternative credit data."[27] It points out that for a typical top-20 lender, several thousand more mortgage applications could be approved with this new solution. Finally, VantageScore finds that about 30-35 million adults are credit invisible but scoreable by new approaches (such as their VantageScore 3.0). VantageScore also found that both consumers and lenders underestimate the size of the Credit Invisible problem. [28] [29]

Who are the Credit Invisible?

In PERC's 2006 report Give Credit Where Credit Is Due, it was found that the Credit Invisible population was disproportionately made up of low-income households, ethnic minorities, younger consumers, and surprisingly, older consumers.[30]

Similarly, Equifax reports that the 25 million Credit Invisible in their database contains a "High percentage of "emerging" consumers (young and/or Hispanic)." Equifax also found a "Strong presence of elderly consumers that used to be or possibly never were credit active."[31] Lexis Nexis found that while 24% of an overall sample of consumers were unscoreable, the rate was 41% in a sample of

minority consumers (Hispanic and African American).[32] In this sample, the vast majority of the uscoreable (81%) were scoreable with Riskview using an expanded set of data elements. VantageScore found that about 1 in 3 of the Credit Invisible population in their analysis were Hispanic or African-American consumers, a higher rate than the share of those groups in the general adult population.[33]

What is the Risk Profile of the Credit Invisible?

The risk profile of Credit Invisibles is not monolithically high risk or monolithic at all. There are consumers in this group that are low risk and consumers that are high risk. Importantly, from a public policy and lender perspective, there is a sizeable share that are of low to moderate risk. These consumers have reduced access to credit due to a lack of traditional data to assess their risk.

When scored with alternative data the Credit Invisibles are underrepresented in the extremely low-risk or 'super-prime' segment. This super-prime score tier commonly requires a rich credit history, and therefore their absence from this tier is understandable. The Credit Invisibles that become scoreable with just one or two alternative accounts have

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[27] FICO. "FICO and CoreLogic Announce Availability of More Predictive Mortgage Credit Score Designed to Enable Growth in Mortgage Lending Market," July 2010. Press Release. Downloaded at: http://www.fico.com/en/about-us/newsroom/news-releases/fico-and-corelogic-announce-availability-of-more-predictive-mortgage-credit-score-designed-to-enable-growth-in-mortgage-lending-market/

[28] VantageScore. "VantageScore 3.0: Better predictive ability among sought-after borrowers," December 2013. Downloaded at: http://www.vantagescore.com/images/resources/VantageScore3-0_WhitePaper.pdf

[29] VantageScore. "The "Credit Invisible" Dilemma," Infographic. Downloaded at: "http://www.vantagescore.com/pdf/credit-invisible-infographic.pdf

[30] Turner et al., "Give Credit Where Credit is Due: Increasing Access to Affordable Mainstream Credit Using Alternative Data." PERC, 2006

[31] CFSI Webinar "Uncovering Opportunity: The True Potential of the Underserved Market." September 18th, 2013. Slide 22.

[32] Jeffrey Feinstein "Alternative Data and Fair Lending." Lexis Nexis. 2013. See http://www.lexisnexis.com/risk/downloads/whitepaper/fair_lending.pdf

[33] VantageScore. "The "Credit Invisible" Dilemma," Infographic. Downloaded at: "http://www.vantagescore.com/pdf/credit-invisible-infographic.pdf

scores that are more similar to those of consumers with just one or two traditional accounts. That is, a single new utility account will not produce a super prime credit score just as a single new credit card account will not. It is in the context of this caveat we should understand how risk profile skews lower than for the general population.

In terms of details, in the general population roughly two-thirds of consumers have FICO scores of 650 or above, although exact definitions differ, these are generally considered low risk to moderate risk customers. PERC found that roughly two-thirds of scoreable consumers in an analytic sample had VantageScore credit scores of 680 or over. For VantageScores created on consumers with *only* utility tradelines, the share in this category was 43%, with 15% in the 620-679 category, and 42% below 620 and generally considered subprime. But this lower rate for the 680+ category was likely driven not by the *type* of tradeline as much as by the age and thickness of the credit file. For instance, of thin-file *traditional data* only consumers the share in the 680+ category was 35%.

In a webinar hosted by Equifax it was reported that a little less than two-thirds of consumers in general had telco risk scores of over 640. For consumers with only alternative data this was around 46%.[34] These results are very similar to PERC's and the PowerPoint in the webinar noted that "Not surprisingly, risk distribution skews to the lower end but there are plenty of good players." To further demonstrate that the utility and telco data or consumers with only utility or telco data are not radically different than other data or other consumers a table shows that the overall rate of 60+ DPD (days past due) in Equifax's general ACRO database is 1.9%, for the alternative data in general it is

2.0%, for the alternative data for consumers with only alternative data it is 2.4%.

Lexis Nexis found that 64% of consumers unscoreable by traditional means had RiskView scores above 650 and were of moderate to low risk. For minority consumers, 43% of those who were traditionally unscoreable had RiskView scores above 650. Given the size of the unscoreable population in their sample of minority consumers, Lexis Nexis points out, "as many as 1-in-4 of all minority applicants could transition from unscoreable to scoreable and can be eligible for reasonable priced credit."[35] The Lexis Nexis white paper notes, "A disproportionate percentage of low income and historically disadvantaged minority consumers use alternative credit products (like payday loans and prepaid cards) and lack these traditional banking relationships. As a result, these historically underserved consumers may lack traditional credit profiles, are unscorable by credit-data scores, and are often declined opportunities to open credit cards, auto loans, and mortgages."

Experian also found in its analysis of government-subsidized renters that among the traditionally no-hit population (11% of the sample), when positive-only rental data was added to their credit files, 59% become Prime, 38% became nonprime, and just 3% were subprime. The logic behind looking at the impact of positive-only reporting stems from the fact that Experian only migrates positive data from RentBureau to its main consumer credit database. They do this since most of the very negative data already finds its way into the traditional consumer database (this is the status quo of credit reporting for non-financial services, where collections and the like are reported). Therefore, Experian is testing the impact of *adding* the positive data.

[34] CFSI Webinar "Uncovering Opportunity: The True Potential of the Underserved Market." September 18th, 2013. Slide 22.
[35] Jeffrey Feinstein "Alternative Data and Fair Lending." Lexis Nexis. 2013. See http://www.lexisnexis.com/risk/downloads/whitepaper/fair_lending.pdf

As opposed to Experian, TransUnion contains full-file (tradeline) data on rental payment (both positive and negative data). They found that among subprime consumers, 8 in 10 experienced an increase in their VantageScore credit score within the first month of their lease.[36] And in their overall sample, two-thirds experienced either a score rise or no impact.[37]

Again, it should be emphasized the risk profiles discussed above are to demonstrate that the Credit Invisible are not all high risk and not to show definitively that X% are prime and Y% are subprime. The cumulative research appears to show that there are sizeable shares of the Credit Invisible that are of low and moderate risk. This represents millions and millions of Americans no matter the exact shares. A better, more refined understanding of risk profiles that can be gleaned from alternative data will develop as the data is reported and tested in the market.

How Can Alternative Data Help Solve the Problem of Credit Invisibility?

There is considerable evidence that the data is predictive for the previously unscoreable population, as well as for others.

The previously discussed 2014 Equifax white paper shows that for DDA account risk management, origination using the ISRB score (that uses alternative data) instead of a traditional credit score (with no alternative data) results in much better risk assessment.[38] For instance, while the bottom 20% (highest risk) customers based on the traditional score accounted for about 50% of charge offs in total dollar terms, it rose to 60% using the ISRB score. In other words, by including alternative data in the risk model lenders were far better able to differentiate high-risk consumers from low-risk consumers. This responsible and inclusive banking also improves a lender's portfolio performance at a given acceptance rate, or permits growth at a given rate of default.

In a forthcoming 2015 white paper on the predictive power of alternative data, PERC finds that among active bankcard holders, the overall rate of delinquency on bankcards was 11.3% between July 2009 and June 2010.[39] For consumers with a severe delinquency on a utility or telecom account in the year prior to July 2009 the rate was 47.7%. For consumers with no past delinquency reported for utility or telecom accounts that were older than 24 months, this rate is just 4.5%. It also finds that after controlling for credit scores, utility/telecom data is still predictive. Among active bankcard customers with VantageScore credit scores in the 800-899 range, they had a bank card delinquency rate of 2.7% if they had no prior utility/telecom delinquencies reported and a rate of 11.4% if they had a severe delinquency reported on utility/telecom accounts in the prior year.

In an Equifax 2013 white paper examining the

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[36] See TransUnion website, http://transunioninsights.com/rentalreporting/ (accessed on 11/04/2014)

[37] TransUnion. "TransUnion Analysis Finds Reporting of Rental Payments Could Benefit Renters in Just One Month," June 19, 2014. Downloaded at transunion.mwnewsroom.com/press-releases/transunion-analysis-finds-reporting-of-rental-paym-1125077 (accessed on 11/04/2014)

[38] Nancy Conner. "Retail Banking: The Future of Demand Deposit Accounts Alternative data offers fresh strategy and big opportunities." Equifax. January 2014 (http://www.equifax.com/assets/USCIS/retail_banking_alternative_data_wp.pdf)

[39] Walker, Patrick. Predicting Financial Account Delinquencies with Utility and Telecom Payment Data. PERC. 2015. www.perc.net (forthcoming)

benefits of using alternative data in auto lending, Equifax compares the performance of a traditional credit score with no alternative data to the Insight Score for Credit (ISC), which does include alternative payment data.[40] It finds improved performance when taking the alternative data into account. For instance, in the 619 to 590 traditional credit score range, those with the lowest ISC scores had a 90+ DPD bad rate of about 10%, while those with the highest ISC scores had a bad rate of over 20%. The Equifax white paper notes "the Insight Score for Credit (ISC) illustrates the effectiveness of leveraging additional alternative payment data to improve the forecast of credit risk within an auto lending decision in risk bands previously viewed as homogenous." And that the credit score with the alternative data "delivers unique insights for those with little, no or recovering credit."

Experian research finds that among its rental data, in general, those with a good rental history had a future default rate (on rent) of 6%, while those with two or more past rental debts had a future default rate of 35%. And for consumers in the VantageScore range of 600-699, those with a good rental history had a future default rate of 5.9%, while those with a bad history had a future default rate of 18.2%. And among those with no credit scores (no-hits), the respective default rates were 9% and 30%. Future research by TransUnion and Experian will undoubtedly compare rental payment history to future non-rental credit outcomes. Nonetheless, it appears clear that past rental performance is related to future outcomes.

Lexis Nexis demonstrates through its RiskView product that a number of data elements not found in traditional credit reports are very predictive. For instance, among those with no

traditional credit score, those consumers with a very low RiskView score in the 500-530 range see a delinquency rate (defined as 3+ cycles, or 90 days delinquent, within 18 months after an application was scored) of 51%, while those with scores above 770 had delinquency rates of 1% or less.
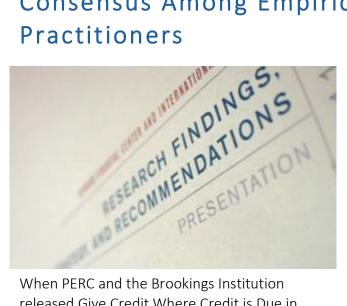
Relating to each of the different sets of findings immediately above, the November 11th, 2013 FICO blog notes that, "Our research has found several types of data that are especially predictive of future repayment behavior, among them: deposit account information, supplemental public record information, utility payment history and property/asset data." Looking at how well such data predicts specific credit outcomes, it finds that a score using alternative data rank ordered credit risk well. Specifically, for consumers with a score of 520-539, the credit card default rate was 42%, the auto default rate was 37%, and the mortgage default rate was 31%. For consumers with scores in the 700-719 range, those rates were 3%, 6%, and 3%, respectively.

The above research provides strong evidence that including non-financial payment data and other alternative data in the loan origination process adds a powerful tool for lenders by significantly increasing their ability to avoid mistakes.

The traditionally unscoreable are clearly not a monolithic group of high-risk consumers, but, as seen, new data and/or new data solutions using alternative data are needed by lenders in order to separate those who are high risk from those who are moderate to low risk. It is worth noting that the two sides of this coin, from the perspective of the borrower, are fairer credit access with risk-based pricing, and protection from over-extension.

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[40]Tom Aliff and Martin O'Connor. Credit scores don't tell the entire story for car buyers: A new approach to the 3 C's offers a deeper, more accurate view of risk for subprime auto lending. Equifax. January 2013. (http://www.equifax.com/pdfs/corp/EFX_CreditScores_WP.pdf)

Consensus Among Empirical Researchers and Practitioners

When PERC and the Brookings Institution released Give Credit Where Credit is Due in 2006, the hope was that it would raise awareness of the great potential of alternative data in making lending more inclusive and responsible. Both organizations believed that the findings in the joint-study would result in changes in federal policy and within the market. Indeed, enthusiastic discussions were had about how pervasive reporting of alternative data could change the lending landscape—and see high cost lenders in lower income neighborhoods replaced by mainstream bank branches. Unfortunately, while some progress occurred (especially in the market), setbacks were experienced in both arenas owing to the financial crisis that began in 2008. Consequently, there remain "Credit Deserts" across America with concentrations of Credit Invisibles and high cost lenders, below average credit scores, and the under-representation of mainstream lenders.

With economic recovery and relative stability in the financial services sector, there is a renewed interest in alternative data as a tool not only to facilitate fairer and more responsible credit access, but also to help the many millions of Americans who suffered as a result of the financial crisis rebuild and repair their credit history.

In the market, solutions continue to proliferate, including those being offered by Equifax, TransUnion, Experian, FICO, L2C, Lexis-Nexis, and a host of boutique solutions providers such as Microbilt's PRBC. This trend is being aided by the current focus on "Big Data" and abundant efforts to mine a variety of data with *potentially* predictive value in eligibility determination.

Efforts in the market are being justified by in-house testing among lenders, as well as a growing body of empirical research from parties able to access credit file and lending performance data. In many real senses, the likely outcome of these efforts will be renewed efforts to include certain among these data assets directly into credit reports, while other data assets will remain outside of the main credit bureau repositories.

There are good reasons for the inclusion of fully reported non-financial payment data like rent, energy utilities, and telecoms in the main credit bureau repositories. It is in the main consumer repositories that these data can have the greatest impact and maximize the social good of greater financial inclusion and fairer lending. These data also fit well with other payment histories, where credit card, auto loan, mortgage payments would be supplemented with utility, telecom and rental payment histories. It is also the case that in limited instances today, these data are already being reported to the main consumer credit databases and included in credit scores. But this generally limited reporting, reporting to niche databases, and use of the data in narrow ways results in a major underutilization of non-financial payment data in credit underwriting, particularly for mainstream credit, thus diminishing consumer benefits.

In addition, the status quo is currently that if a consumer is very delinquent on the non-financial accounts, a collection item is likely to show up in the consumer's credit report. In fact, according a recent CFPB paper on medical collections, the second largest classified collections category behind medical collections, which accounts for 52.1% of collections, is cable or cellular, which accounts for 8.2% of all collections, followed by utilities, which account for 7.3% of collections.[41] The combination of cable, cellular, utilities, rental and leasing together account for 17.1% of total collections found in the main consumer repositories. This is more than all the remaining classified collection categories combined (Retail, Banking, Government, Financial, Insurance, Personal services, Educational, Automotive, Check guarantee, Credit Union, and Oil company). And while 19.4% of all credit reports contained one or more medical collections, second was the cable, cellular, wireless, other telecommunications collections group which were in 8.7% of credit reports, and third was the utilities or energy collections, which were in 7.6% of credit reports. Therefore, the full reporting (that is reporting both positive and negative data) of non-financial payments to the main consumer credit databases is also very much an issue of reporting fairness for consumers. That is, very negative items from these services populate their credit reports but positive data tends not to be reported at all.

On the other hand, other data elements, such as professional license registries, income data, and asset data involve different types of data that are structured differently than payment data and have not been included in credit

reports. These and other non-payment data sets are likely ideally housed in specialty databases.

It is also important to note that we are not calling for the collection of every possible data element to be used in lending, such as Facebook "Likes" and "Tweets", while these may be useful, this has yet to be shown. Instead we are promoting the collection and better use of well-tested data, such as utility payment data, that have been shown to be predictive, are covered by the FCRA, are already reported to various degrees, and are accepted by lenders and by the likes of Fannie Mae. To be sure, not all data tested will be shown to be beneficial to the overall financial system, consumers, and low-income consumers in particular. For instance, the CFPB found little potential benefit from including remittance data in credit scores.[42] However, there are many very useful datasets largely sitting on the sidelines. In addition to alternative data in the form of new types of accounts reported to CRAs or new datasets being brought to bear in underwriting, there are also new data elements on traditional accounts that available to lenders from the National CRAs.[43] These new data elements include historic data for payment amount, current balance, and credit limit, which previously were only reported current, as of the time the credit report was pulled. These elements combined with payment histories will enable time series analyses of consumers. This will, no doubt, improve risk assessment. An example is that a person with their outstanding credit card balance rising from 10% of the limit to 40% of their limit can be viewed as a rising

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[41] CFPB. "Consumer credit reports: A study of medical and non-medical collections," December 2014. Download at: http://files.consumerfinance.gov/f/201412_cfpb_reports_consumer-credit-medical-and-non-medical-collections.pdf
[42] CFPB. "Report on the use of remittance histories in credit scoring," June 2014. Downloaded at: http://files.consumerfinance.gov/f/201407_cfpb_report_remittance-history-and-credit-scoring.pdf
[43] Chet Wiermanski. "New Credit Bureau Data Content Challenges Today's Analytic Approach," BIIA Newsletter, Issue 01 - 2015

risk and different from someone with their revolving ratio falling from 80% to 40%. Even though both may have a 40% revolving ratio, it may not be wise to consider that in the same way. This data adds more context. Since this represents a different type of analysis in many respects of risk, it will likely take some time before these new data elements are fully utilized by lenders. With these data as with alternative data it is important that the data elements are thoroughly tested and rolled out to the market in a careful manner. More refined and optimized solutions will develop as more of the data becomes available and as the data and solutions are tested in the market.

We appeal to lenders to use more data available to them, demand more alternative data and demand more alternative data solutions. We also appeal to utilities, telecoms, property managers, and the like to report payment data to the National CRAs. In addition, there is also a role for policymakers. To help drive financial inclusion, end Credit Invisibility, and eliminate Credit Deserts, policymakers should provide regulatory certainty to the various types of alternative data furnishers that they may fully report to national consumer reporting agencies. This can be accomplished by an act of Congress—such as envisioned in the bi-partisan Credit Access and Inclusion Act—or by a policy letter from the Consumer Financial Protection Bureau, which has regulatory authority over consumer credit reporting.

Policymakers, lenders and consumer advocates should understand the following:

- The time for action is now. Every day millions of Credit Invisible Americans are being harmed by the status quo. Their credit needs are being met at a high price, and they are not on a pathway to building a good credit history that is vital to improve their life's financial chances.
- Alternative data yields systemic benefits. By increasing the amount and types of fully reported non-financial payment data available to lenders, fewer mistakes will be made in the credit granting process. Mainstream lending can become more inclusive. Moreover, with signals that a consumer cannot afford a loan, lenders would have better tools to act more responsibly.
- It is a proven solution. Key alternative data, such as non-financial payment histories has been successfully used for credit eligibility determination by lenders around the world for decades—in countries as diverse as England and China.
- It is an elegant tool. It builds upon and enhances existing financial infrastructure, it can be scaled quickly and rapidly deployed with immediate positive effects. As a solution, it is in demand on the market and widely supported by the asset building community.

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RESULTS AND SOLUTIONS

PERC

6409 Fayetteville Road
Suite 120, #240
Durham, NC 27713

p: +1 (919) 338-2798
f: +1 (919) 640-8881

www.perc.net