White Paper

Evaluating The Viability Of Alternative Credit Decisioning Tools

A $3.6 billion opportunity for the auto- and credit card-lending markets

May 2013

LexisNexis®

Javelin Strategy & Research

Abstract

An emerging category of credit-risk decisioning tools leverage consumer information that does not appear on a bureau credit report to predict repayment behavior. While independent studies have attested to the predictive capacity of these tools, known as "alternative credit decisioning tools," there has not been a comprehensive, 360-degree view into the societal, economic, and regulatory effect of their implementation. To fill this gap, LexisNexis retained Javelin Strategy & Research to conduct an independent research study using a consumer survey, in-depth interviews with lending executives and regulators, and industry-wide revenue impact models to capture a panoptic view of the market. This report explores the acceptability of such tools in the auto- and credit card-lending industries. Along with showing an effect on revenue for the auto and credit card lenders, the report also explores consumers' and regulators' receptivity to such tools.

The views expressed by Javelin Strategy & Research are not necessarily those of LexisNexis.

The opinions and quotes expressed in this paper are those of the interviewees and do not necessarily reflect the positions of LexisNexis.

Table of contents

Table of figures

Executive Summary

Background and market overview

Traditional underwriting is insufficient for underserved markets (including underbanked, low-income, and young consumers). Lending is currently rebounding from a great backlash brought about by the recession.[1] At the same time, traditional measures of creditworthiness are falling short as customers defy prerecession risk categories. Underbanked, low-income, and young consumers (who are newly embarking into their financial lives) are more difficult to evaluate through traditional methods and encounter greater obstacles to obtaining credit than all other consumers. They present a lucrative market for lenders, yet the risk they entail, and the challenges of determining risk for those with a thin file or no file,[2] is sufficient that they are denied credit and loans at higher rates.

Lenders express a need for greater predictive capability in credit-risk decisioning through automated tools. To compensate for the deficiencies of traditional bureau credit scores, lenders undergo an intensive manual underwriting process to gather supplemental information for consumers with blemished or insubstantial credit histories. Manual underwriting typically places the burden on consumers to procure documents and provide information, making the loan application process difficult and cumbersome. This process also allows for a high degree of subjectivity on the part of loan officers, particularly within small or decentralized lending institutions. Additional burden is placed on consumers when traditional bureau scores provide insufficient information to predict an applicant's repayment behavior.

Vendors leverage nontraditional data to bridge the gap and assist lenders to make more informed risk decisions through a class of products called alternative credit decisioning tools (referred to in this report as 'ACDTs'). The goal of ACDTs is to improve predictability when used to supplement traditional credit scores. The umbrella term of ACDTs encompasses a broad array of products that provide lenders with consumer information absent from traditional credit reports, which promises to be correlated with repayment behavior. Examples of inputs leveraged by these ACDTs include, but are not limited to, property assessments, rent and utility payments, bankruptcies, and educational attainment.

The nascent ACDT industry offers enhanced predictive power for lenders. ACDTs have been shown to offer enhanced predictive value, especially when used in conjunction with traditional bureau credit scores. A 2007 study by the Center for Financial Services Innovation (CFSI) retroactively applied three ACDTs to historical records of portfolio performance in the consumer credit industry. The study found that all three ACDTs were successful at providing increased separation of the most risky approvals from the least risky.[3] Interviews with credit-issuing and auto-lending executives confirm that ACDTs are capable of improving credit decisioning on key metrics including overall portfolio lift, increased approvals of thin- and no-file customers and charge-off reductions (see ACDT User Experience section, pg. 31).

Stakeholder perspectives on ACDTs

Consumers are familiar with the use of alternative data and may find third-party provision a relief. Consumers are largely amenable to the use of alternative data in loan decisioning, and they have come to expect that underwriters will request information beyond what is used in a traditional credit report. Many consumers find a lengthy underwriting process burdensome. Furthermore, underserved segments who are required to provide the most additional information when applying for a loan, unsurprisingly, find the process more difficult. ACDTs alleviate some of the burden on consumers of procuring documents and other information that loan officers request to supplement credit scores. However, familiarity with ACDT providers is decidedly low and trust in these vendors to handle consumer data would need to be established.

Lenders see value in ACDTs but express emerging-market concerns. Lenders believe that ACDTs improve their ability to decide approvals and price loans. Given the improvements lenders have reported as a result of using ACDTs, this study projects that their universal implementation in 2012 would have generated an additional $1.67 billion to the credit card industry and $1.91 billion in revenue and savings to the auto industry. However, concerns over compliance, hesitation to invest in an emerging industry, and prime-customer pushback surface as obstacles to adoption by lenders.

Regulators are optimistic that ACDTs will increase access to credit and loans but are wary of compliance issues. Regulators believe in ACDTs' potential to improve the economic inclusion of underserved segments, but not without apprehension. Assurance of the fairness and permissibility of data collection and reporting will be requisite to regulators' acceptance of these services in loan decisioning, and they may be demonstrated through compliance with the Fair Credit Reporting Act (FCRA) and the Equal Credit Opportunity Act (ECOA).

Key takeaways and implications

This paper provides a panoptic view of the current market for ACDTs. Our analysis suggests a set of actionable implications for stakeholders, founded on the premise that sound lending decisions rely on two main factors:

- An understanding of the potential risks presented by both the applicant and the regulatory landscape.
- Possession of the means by which to accurately and fairly assess those risks.

The following takeaways and implications should be considered when evaluating the need for ACDTs, informing a strategic approach to their implementation, or formulating a response to their growing presence in lending markets. These implications are based on the research findings from throughout this report, in consideration of these above-mentioned factors.

Alternative decisioning tools can assist lenders by:

- **Increasing their ability to accurately assess risk for a prime borrower, while keeping documentation requirements for applicants unchanged.** In 2012, 0.8% of prime auto loans were charge-offs. In order to remain competitive with prime applicants, lenders and dealers limit the supporting documentation required for determining creditworthiness.
- **Reassessing the need for stipulations.** In an effort to properly identify the risk posed by each subprime auto loan applicant, tools such as applicant interviews, income worksheets, and employment or income verification are used, but charge-off rates remain three times higher than prime (2.5% in 2012). (See The Current Lending Environment section, pg 11.) The use of ACDTs may limit the amount of additional information required of the applicant, reducing inconvenience and cost.
- **Enabling valuation of thin-file applicants as potential customers.** Lenders requiring larger down payments, shorter loan terms, or co-signers are most common in auto lending for thin-file applicants (see The Current Lending Environment section, pg 11). Such requirements could prove to be too onerous for some applicants, resulting in lost business for the lender and dealer (see Consumer Perceptions and Experiences section, pg, 15). Alternative decisioning tools may provide data on applicant character and ability to pay when conventional credit indicators are unavailable or severely limited.
- **Enabling the valuation of no-file applicants as potential customers.** Younger consumers (aged 18 to 24) experience the catch-22 of traditional credit scoring as they are more likely to have little or no credit history, and thus may not have a score — but they need to be approved for credit in order to build credit (see Consumer Perceptions and Experiences section, pg, 15). In addition to starter -programs with lower limits or lower loan amounts and shorter terms, ACDTs can help to determine propensity to repay despite the common lack of credit history among this age segment.

- **Broadening the pool of pre-screened credit card applicants.** Credit report data is ineffective in prescreening for potential applicants with little or no credit history, effectively leaving them untapped without the use of additional predictive data, such as that provided by ACDTs (see The Current Lending Environment section, pg 11).
- **Improving risk assessment.** The enactment of the Credit CARD Act restricted the circumstances in which issuers could change interest rates. Improving the ability to assess risk is critical to ensuring that the rate offered to a prime applicant is competitive but does not expose the institution to excessive risk. And with the ability to raise post-origination interest rates now also restricted, properly assessing risk is especially important for nonprime loans (see The Current Lending Environment section, pg 11).
- **Expanding the market to include the excluded.** Underbanked consumers represent an underserved market of 50 million who are highly active in the financial products market, but who require intensive underwriting — as a result, they consider the application process to be more difficult (see Consumer Perceptions and Experiences section, pg, 15). ACDTs have the potential to simplify the risk assessment process for this group while reducing the burden on the consumer to provide additional information.

In order to achieve the above-mentioned goals through the use of ACDTs, lenders will need to:

- **Be transparent and gain consumer trust.** Consumers are comfortable with sharing personal information, outside of the credit report being used, to assess their creditworthiness, but they are highly unfamiliar with ACDTs vendors. They may be skeptical of such ACDTs at first because they have not been taught by experience to expect them. Nonetheless, lenders should be transparent with consumers about the vendors they use and the information they are being scored on. If any of this information was previously used in manual underwriting, they should make that clear as well — familiarity will breed confidence (see Consumer Perceptions and Experiences section, pg, 15).
- **Thoroughly appraise solutions' predictive capability through post hoc tests before investing.** Test the predictive capability of solutions by applying them to historical data and comparing the predictions of the solution with actual performance. Proper statistical testing procedures, such as the removal of personally identifying data associated with the cases being tested, should be implemented in order to limit regulatory risk. Several solutions should be compared before active use of any one solution that is optimized for improving the metrics most important to your institution. Confirm that the provider has a reliable and consistent data source (see ACDT Users' Experience section, pg 31).
- **Investigate compliance status.** Ensuring that an ACDT is in full compliance with FCRA and ECOA is a necessity for any lender considering such tools, as compliance is a legitimate regulatory concern. Lender disclosure to consumers of how, why, and which data is used in rendering a credit decision, and ensuring that the data is non-discriminatory, is standard practice for conventional credit data, and ACDTs are held to the same regulatory standard (see Regulator Perspectives on ACDTs section, pg. 39).
- **Understand and evaluate the risk of losing prime borrowers with fluctuating scores.** Just as consumers qualifying for subprime loans based on their bureau credit report alone may see their terms improve with the use of ACDTs, customers with prime-category credit scores may be offered less desirable terms than what they have come to expect. Lenders have found it difficult to explain to their prime borrowers that they have been downgraded on account of nontraditional information. It is important for lenders to evaluate the risk of losing potential customers and weight it against the gain from other consumer segments before adopting ACDTs.

Regulators may influence the market for ACDTs and protect consumers' interests by:

- **Exploring and understanding consumer credit requirements.** Underserved consumers need more access to credit. Facilitate the inclusion of these segments of the population by working with lenders to establish best practices and compliance requirements so consumers and lenders both benefit (see Regulator Perspectives on ACDTs section, pg. 39).

Consumer reporting agencies can help inform consumers of the potential effect of ACDT adoption on evaluations of their creditworthiness by:

- **Educating consumers on how alternative credit scores are derived.** Addressing the lack of familiarity with what data is collected, and the means by which this is done, will serve to increase acceptance of its use (see Consumer Perceptions and Experiences section, pg, 15).
- **Touting the potential benefits of ACDTs with regulators, lenders, and consumers to underserved demographic segments.** These groups may now qualify for credit with those lenders that use ACDTs.

The current lending environment

The next two sections provide background on the changes in the lending ecosystem that have led to the need to supplement traditional credit decisioning tools. We will examine the challenges lenders are confronting due to the limitations of existing tools amid changes in the credit card and auto loan markets and the regulatory environment.

The challenges of traditional auto loan underwriting

The economic recession of the past decade caused significant changes in the auto-lending market. Lenders sought to protect capital through risk reduction, resulting in an increased focus on lending to prime borrowers.[4] However, fierce competition and diminishing margins in the prime segment, along with an improving national economy and loose monetary policy, have spurred renewed interest in lending to those with less-than-perfect credit.[5] Manual underwriting tools invariably impose a trade-off between a clear impression of the borrower's ability to pay and a convenient experience for that potential customer. Properly identifying risk represents the greatest challenge — as well as the greatest opportunity — for lenders seeking to improve their bottom line. While the vetting process for prime and subprime borrowers can differ significantly, assessing consumers who lack credit history is especially challenging as traditional tools and methodologies often fail to separate the wheat from the chaff.

The good-but-not-perfect prime borrower

Bolstered by their pristine credit history, prime borrowers enjoy low rates as lenders compete for what are traditionally considered to be low-risk customers. These borrowers have been conditioned to expect lenders to determine their creditworthiness in an expedited manner using minimal information. However, such tools are ineffective at separating the best prime borrowers from those that could pose trouble down the line.

Auto lending for the prime segment

- Automated underwriting and a limited need for collection activities keep servicing costs low. Nonetheless, competition for these borrowers drives down rates and has resulted in tight profit margins.[6]
- Numerous lenders agree that while credit scores are primarily a pricing tool, digging into credit reports to consider a borrower's history is standard practice in rendering a lending decision.
- A closer examination of a credit history, though, may not be enough, as a prime borrower is not always a perfect customer — 0.8% of prime loans in 2012 were charge-offs.[7]
- While lenders benefit from some loss insulation as a result of low average loan-to-values (LTVs), charge-offs of prime loans are of serious concern because the margins are already low.[8]

Feast or famine: Subprime, thin file, and no file

Traditional credit reports alone are wholly inadequate performance indicators when it comes to determining the creditworthiness of subprime borrowers. The delinquencies that typically riddle the credit reports of individuals in this segment necessitate a deeper dive in order to make a sound lending decision. With a charge-off rate nearly three times greater than that of prime loans (2.5% in 2012), and higher average LTVs (which can result in the lender holding the bag for a loan worth substantially more than the underlying collateral), subprime auto lending is undeniably risky.[9]

Auto lending for the subprime, thin-file, and no-file segment

- To identify the risk posed by each subprime applicant, lenders use applicant interviews, income worksheets, and employment or income verification — undesirably adding time and cost to the process.[10]
- Subprime lenders rely on larger down payments, shorter loan terms, and discount fees charged to dealers for partial loss insulation, especially when lending to thin- and no-file borrowers.[11] Unfortunately, these techniques may turn a profitable loan into a missed opportunity.[12]
- In some instances, existing deposit relationships can be considered for applicants with negligible credit histories, but nonbank lenders are not afforded this option.
- Deals may be lost when the borrower is asked to return with a co-signer or when a co-signer is not available.

The bottom line

An optimal balance is achieved when a loan is priced competitively yet properly for the risk it represents, and also remains current for the entire term. With prime borrowers, the correct spread is not always apparent given the limited amount of information provided by the applicant during the underwriting process. Subprime, thin-file, and no-file borrowers are even more difficult to paint with the same brush. These difficult-to-assess applicants could represent significantly profitable lending relationships, but they are far more likely to be very expensive lending mistakes. Underwriting auto loans in the current lending environment can be prone to errors and unnecessary costs as traditional credit reports have proven suboptimal in predicting the behavior of a diverse borrower population. ACDTs may provide the added degree of certainty that is needed to minimize risk and maximize profitability.

Auto loan underwriting challenges

- The use of a only loan application and traditional credit history in assessing a prime borrower limits the information available to the lender when rendering a decision.
- In 2012, 0.8% of prime auto loans were charged off. Servicing costs on these loans are typically low, but so are profit margins.
- The amount of documentation that is often required for a subprime loan, increases cost for the lender and inconvenience for the borrower.
- When subprime loans go bad, lenders are saddled with loans with average LTVs higher than those of prime loans — 2.5% of subprime loans were charged off in 2012.
- Financial tools designed to reduce risk or limit losses can dissuade dealers and applicants from completing the loan.
- Existing deposit relationships are not always available or helpful.

The new rules of credit card underwriting

As a result of economic and legislative upheaval, credit card issuers are experiencing a "new normal" in which tighter regulation and market volatility affect every decision. The Credit CARD Act of 2009 changed the way issuers generated a significant portion of their profit, affecting limits on risk control and revenue-generating mechanisms. To be successful, issuers must adapt their risk analysis capabilities to maximize profitability in a lending environment that operates under a new set of rules.

Competing for prime borrowers after the CARD act

The Credit CARD Act affected a change in introductory rates for prime cards, 30.7 million of which were issued in 2012 (see methodology section for details).[13] To stay competitive after the CARD Act was enacted, issuers had to adjust their scoring models to account for less pricing variability during both origination and post-origination. Rates that remain steady over longer periods increase issuer risk, as the back-loaded costs to consumers are effectively reduced.[14] After origination, the terms under which a rate could be raised have also been restricted, making it even more difficult for issuers to maintain reasonable margins in the event of a default.[15] The pressure to accurately assess risk when assigning rates to prime cardholders has grown substantially as a result.

Credit card issuing for the prime segment

- Limiting prime cardholder attrition is a top-of-mind concern for issuers, as these sought-after borrowers are continuously bombarded with offers for other issuers' products.
- The size of the credit line extended can be a key differentiator, affecting product retention and use by cardholders.[16] Granting credit-line increases to the right customers at the right time positively impacts profitability.
- To determine when, and for whom, credit limits should be incremented, issuers consider payment and transaction histories and third-party data (including credit bureaus).
- For issuers, success is highly dependent on the predictive capabilities of the data and the quality of the subsequent analysis.

Assessing risk in a lower-fee environment: Subprime, thin-file, and no-file borrowers

Assessing a subprime applicant means wading through a litany of delinquent loan records. Lenders must consider the frequency, severity, and recency of those delinquencies or other major derogatory items to establish the applicant's ability to pay and to assess the amount of credit that can be maintained.[17] Because the CARD Act restricts fees that were once typical of the subprime card industry and helped to compensate for increased risk, an accurate assessment of an applicant's risk profile is essential. This is especially true for credit unions, whose rates are capped at 18% by the National Credit Union Administration (NCUA); credit unions cannot use higher rates to offset that risk.[18]

Credit card issuing for the subprime, thin-file, and no-file segment

- Once-prime applicants who slipped into the subprime tier due to a negative credit event related to the recession were likely among the recipients of the 12.9 million newly originated subprime cards in 2012 (see methodology section for details).
- Issuers who rely on traditional credit data may be unable to place recession-related credit events into the context of a borrower's overall repayment history — potentially forfeiting members of this valuable segment to competitors.
- Thin- and no-file applicants represent opportunities for issuers in search of new borrowers, but efforts to both prescreen and underwrite these applicants are often hamstrung by the absence of traditional credit data.[19]
- The CARD Act restricts credit card lending to consumers under the age of 21 as it requires a demonstration of an independent ability to pay, or a co-signer.

The new normal

Scoring models that once proved highly predictive were rendered ineffective after the recession and sweeping regulatory changes. Distinguishing viable cardholders from those that present an unacceptable level of risk is more difficult for issuers than it has been in decades. To best predict the performance of prime, subprime, and thin- and no-file consumers, issuers must move beyond traditional credit data. The "new normal" in which card issuers find themselves is not without opportunity, but seizing it will mean approaching lending decisions with an eye to a new regulatory and economic landscape.

Credit card underwriting challenges

- The dynamics of the economy and regulatory changes have dramatically altered credit card lending.
- To remain competitive after the CARD Act, issuers rely on longer-term rates that increase risk and reduce profitability.
- Accurately assigning and increasing limits is vital to retaining prime borrowers.
- Fees were heavily curtailed in subprime card lending as a result of the CARD Act, increasing pressure on subprime issuers to render a proper risk assessment.
- Separating once-prime applicants with the ability to pay from those that will continue to falter can be hampered by a reliance on traditional credit data.
- Traditional credit data can prove suboptimal when attempting to prescreen thin- and no-file consumers.

Consumer perceptions and experiences

Lenders are increasingly struggling to determine the level of risk posed by a diverse array of customers. Tough financial circumstances take their toll on the credit reports of otherwise responsible consumers, in some cases forcing consumers outside the traditional financial system to obtain credit. Lenders find themselves requiring more information to separate the applicants with genuinely risky behavior patterns from those whose blemished records may be anomalous. Lenders also hesitate to approve applicants with thin credit files, though thin files may simply indicate a consumer's stage of life; many are younger consumers who are just entering financial maturity. These consumers may be just as reliable as those with a long credit history, but they need credit in order to build a history.

ACDTs show the potential to benefit consumers who may be more responsible than what their credit files depict. Additionally, ACDTs may help lenders expand their portfolios by providing a window into customers with no traditional credit score. ACDTs are well-suited to addressing the uncertainty associated with thin- and no-file customers, because they provide lenders with information that may be similarly correlated with repayment behavior without depending on the presence of a credit file. These tools may also provide additional insight into customers with low credit scores; a solid history of on-time rent and utilities payments and a high level of educational attainment, for example, may offset a marred credit score from charging off the consumer's first credit card.

However, for ACDTs to gain acceptance as enhancements to traditional bureau credit scores, consumers' buy-in is important. The following section is an exploration of the characteristics and behaviors of three underserved segments: underbanked consumers, low-income consumers, and consumers aged 18 to 24. These segments are not mutually exclusive, but each shows distinct perceptual and behavioral patterns of key interest to lenders who would like to do business with them, and to regulators hoping to promote their inclusion in financial markets. This deep dive into consumers' perceptions of traditional underwriting and the use of nonbureau data to make credit decisions reveals both the need for enhanced scoring tools and the high potential for acceptance of the use of ACDTs among consumers.

Underserved segment profiles

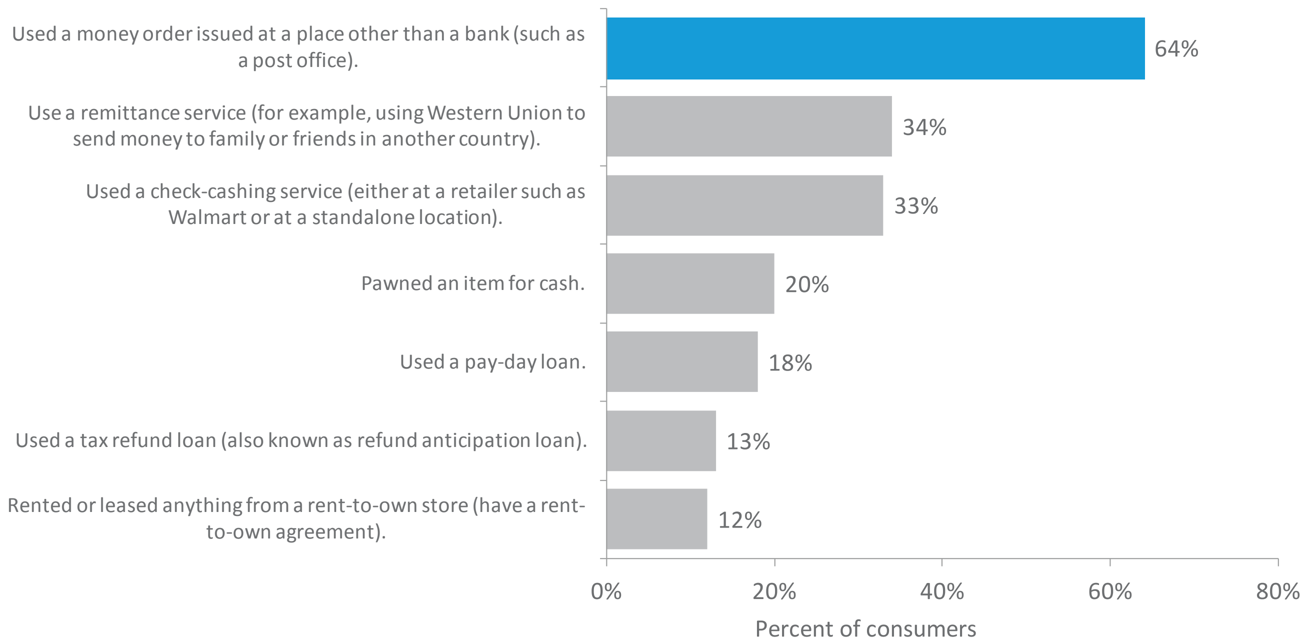
Underbanked consumers

The Federal Deposit Insurance Corporation (FDIC) classifies consumers as underbanked if they hold a checking or savings account and have also gone outside the traditional banking system to use an alternative financial service (AFS) at least once in a 12-month period.[20] The underbanked represent 21% of U.S. adults, or more than 50 million consumers. Underbanked consumers are generally quite active in the traditional financial system, although the use of AFS products suggests that these consumers have financial needs that are not met by traditional banking and lending institutions. This may be due to reduced access as a result of the difficulty they pose in risk assessment.

Underbanked consumers apply for loans and credit cards at higher rates than all consumers, but they undergo a more intensive underwriting process, find the process more difficult, and are more frequently denied credit (see appendix, figure 45). While they demonstrate understanding of underwriting procedures, these consumers are more likely to have a traditional credit score that would qualify them for only subprime loans. They present a great deal of value to lenders in their sheer numbers and in the interest they promise to generate. However, this group is exceptionally risky for lenders precisely because they are prone to late payments — and possibly a high rate of default.

Nearly Two-Thirds of the Underbanked Use Money Orders Issued by Nonbank Service Providers

Figure 1.Underbanked Consumers' Use of Alternative Financial Services



Q: Please indicate the last time you conducted each of the following activities.
In the past 12 months

January 2013, n = 332
Base: Underbanked consumers.

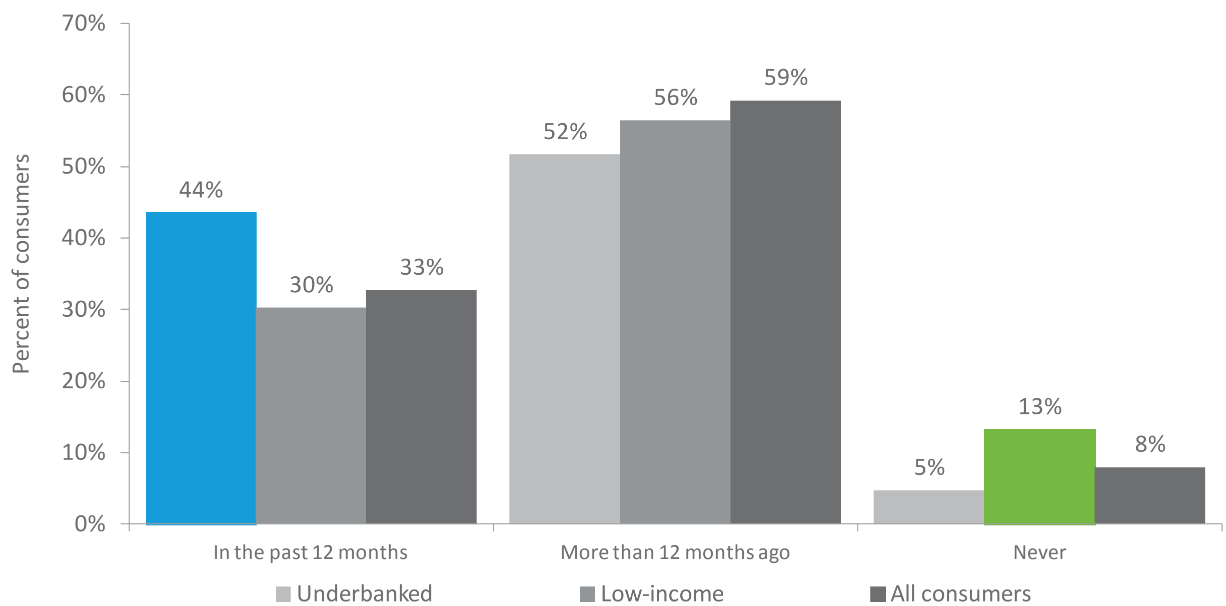
The underbanked are a high-value market — and a high-risk one

Engagement with traditional financial services. Despite conducting some portion of their financial activities outside the traditional banking system, the underbanked do not show a reluctance to engage with traditional financial channels. They own a comparable number of financial products to all consumers (six, on average, for both groups). The underbanked are more likely to have applied for a credit card in the past 12 months (44% vs. 33%) compared with all consumers.

Not only are the underbanked a large and eager market, they're also a fast-growing one. A 2012 CFSI study revealed the volume of revenue from fees and interest in the underbanked market for credit, payments, deposit, and other financial products grew 7% to $78 billion from 2010 to 2011. In the same year, the volume of business conducted by the underbanked grew 5% to $649 billion. Underbanked consumers can become good customers for lenders, provided that the lenders are able to accurately assess and place them in appropriate risk pools. [21]

Underbanked Consumers Are One-Third More Likely to Have Applied for a Credit Card in the Past Year

Figure 2: How Recently Underbanked, Low- Income, and All Consumers Have Applied for a Credit Card



Q: When was the last time you applied for a credit card?

January 2013, n = 1,308, 332, 532
Base: All consumers, underbanked consumers, low-income consumers.

Underbanked consumers' experience with credit and scorability

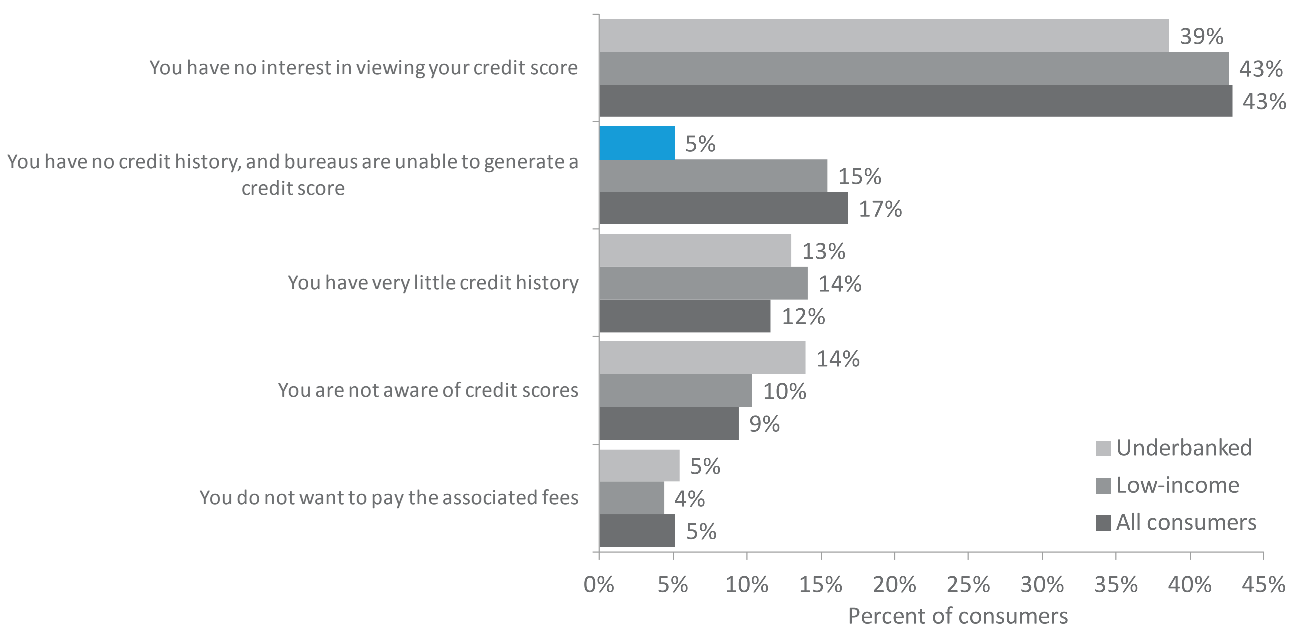
The obstacles faced by the underbanked in accessing credit may stem more from the quality of their credit histories than their length. Because the underbanked are not typically younger than 25 (see appendix figure 45), and given their use of an array of financial products that's comparable with all consumers (see appendix figure 45), the vast majority of underbanked consumers are able to be scored based on a traditional credit file. Fourteen percent of underbanked consumers said they had never seen their credit score (compared with 17% of all consumers), and those who hadn't were significantly less likely to say this was because the length of their credit file was insufficient to generate a score (5% compared with 17% of all consumers). (See figure 3.) Despite the shallow depth of underbanked consumers' credit files, they are often marred by records that raise red flags to lenders.

Almost half of underbanked consumers who have viewed their credit score in the past 12 months scored below 680 (46%, compared with 26% of all consumers). When asked why they believed their credit score was low, underbanked consumers were more likely to cite late payments (33% vs. 28%), and bills having gone to collections (31% vs. 25%), compared with all consumers (see appendix figure 17). Underbanked consumers, regardless of credit score, were also more than twice as likely to say they had made more late payments in the past six months (20% vs. 8%) compared with all consumers.

Their propensity to lapse on repayment is a likely reason why underbanked consumers were nearly twice as likely to see their credit card limits decreased (16% vs. 9%), and over 1.5 times as likely to have their interest rates increased (22% vs. 14%) in the past six months, compared with all consumers. Beyond higher rates and lower limits, underbanked consumers have more difficulty accessing credit altogether. They are twice as likely to be denied both credit cards (27% vs. 15%) and auto loans (8% vs. 4%) compared with all consumers (see figures 21 and 22).

Underbanked Consumers Are Less Likely to Cite Having No File as a Reason for Not Viewing Their Score

Figure 3.Underbanked, Low-Income, and All Consumers' Reasons for Not Viewing Their Credit Score



January 2013, n = 219, 146, 46
Base: All consumers, underbanked and low-income consumers who have never seen their credit score.

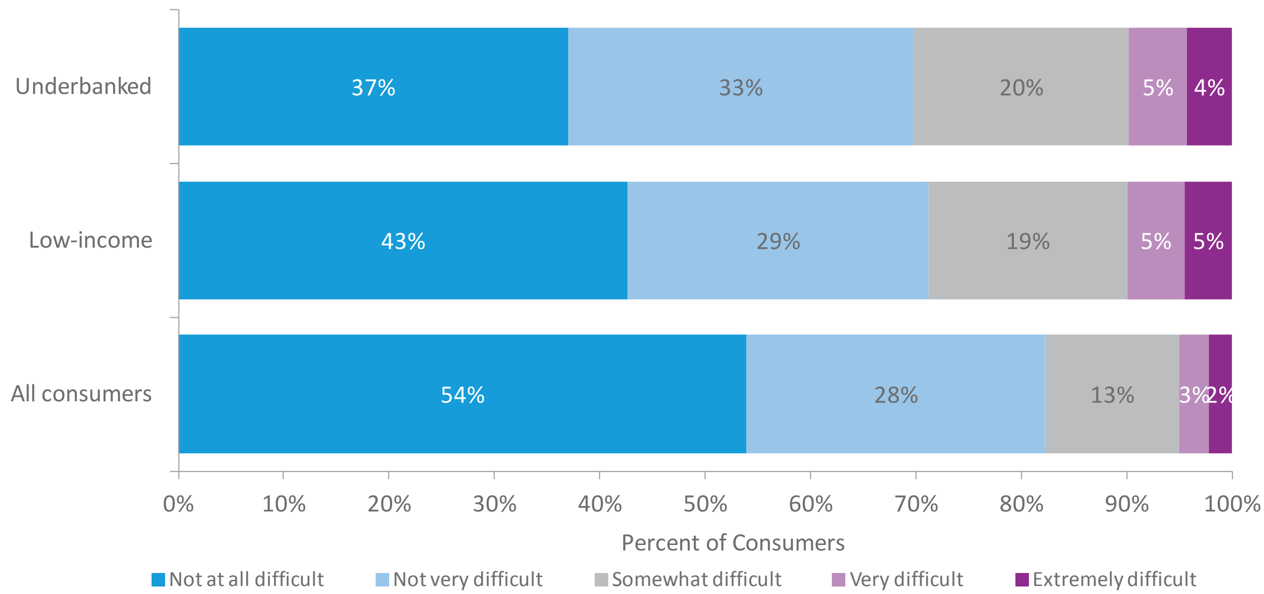
Q: You mentioned that you have never seen your credit score. Why is that?

Intensive underwriting complicates the application process for underbanked consumers
Underbanked consumers face a more intensive underwriting process, as evidenced by the elevated frequency with which lenders request information outside a traditional credit score. The underbanked are more frequently asked for a variety of information and documents, such as employment status (71% vs. 63%), duration at their current job (53% vs. 41%), pay stubs (32% vs. 19%), and bank statements (23% vs. 12%) compared with all consumers (see appendix figures 31).

A meticulous underwriting process may be necessary, but the additional rigor to assess the risk presented by underbanked consumers may negatively affect their perception of the process. Underbanked consumers who had applied for either credit cards or auto loans found the application process more difficult (29% rated the process at least somewhat difficult vs. 18% of all consumers). (See figure 4.) Requesting the additional information and documents required to properly evaluate the creditworthiness of the underbanked shifts the burden to the consumer for procuring these items, and it may add to processing time. ACDTs may be able to reduce the burden to both loan officers and underbanked consumers by providing additional information on behalf of the consumer.

Underbanked Consumers Find the Loan Application Process Most Difficult

Figure 4.Difficulty of the Loan Application Process by Underbanked, Low-Income, and All Consumers



January 2013, n = 1,203, 316, 462
Base: All consumers, underbanked, and low-income consumers who have applied for a credit card.

Q: On a scale of 1-5, please rate the level of difficulty in getting your loan application processed.

Underbanked consumer profile summary

- More than 50 million U.S. consumers are underbanked.
- The underbanked are highly engaged in financial products markets.
  - Underbanked consumers own a number of financial products that's comparable with all consumers (six, on average, for both groups).
  - Underbanked consumers are 33% more likely to have applied for a credit card in the past 12 months.
- Underbanked consumers are often high-risk consumers due to inconsistent repayment behaviors.
  - The underbanked are more than twice as likely to have made more late payments in the past six months compared with all consumers (20% vs. 8%).
  - Underbanked consumers with a low credit score are more likely to cite late payments (33% vs. 28%) and going into collections (31% vs. 25%) compared with all consumers.
- Intensive manual underwriting makes the credit and loan application process more cumbersome for the underbanked, who are 61% more likely to find the process difficult.
- Lenders and underbanked consumers stand to benefit from the use of tools that increase precision in risk assessment without burdening the customer to supply information.

Low-income consumers

Low-income consumers show signs of being underserved and disengaged. Low-income consumers exhibit several indications of exclusion from the traditional financial products market. In contrast to underbanked consumers, who own and apply for products both inside and outside the traditional financial system, low-income consumers display more signs of having rejected or given up on traditional financial service providers. Low-income consumers own significantly fewer financial products (4 vs. 6; see appendix figure 16) compared with all consumers, and they are less likely to have ever applied for credit cards or auto loans (87% vs. 92% for credit cards, and 56% vs. 72% for auto loans, compared with all consumers). (See appendix figure 18.)

When low-income consumers apply for credit and loans, they find the process more difficult. Twenty-nine percent said the process was at least somewhat difficult, compared with 18% of all consumers (see figure 4). Low-income consumers are also more likely to be denied both credit cards and auto loans compared with all consumers (26% vs. 15% for credit cards, and 9% vs. 4% for auto loans). (See appendix figures 21 and 22.) Given these signs of exclusion from traditional financial service markets, it is no surprise that low-income consumers use several AFS products more frequently than all other consumers. Low-income consumers were more likely to have taken out a money order at a location other than a bank (8% vs. 4%) and used a check-cashing service (4% vs. 2%), compared with all consumers.

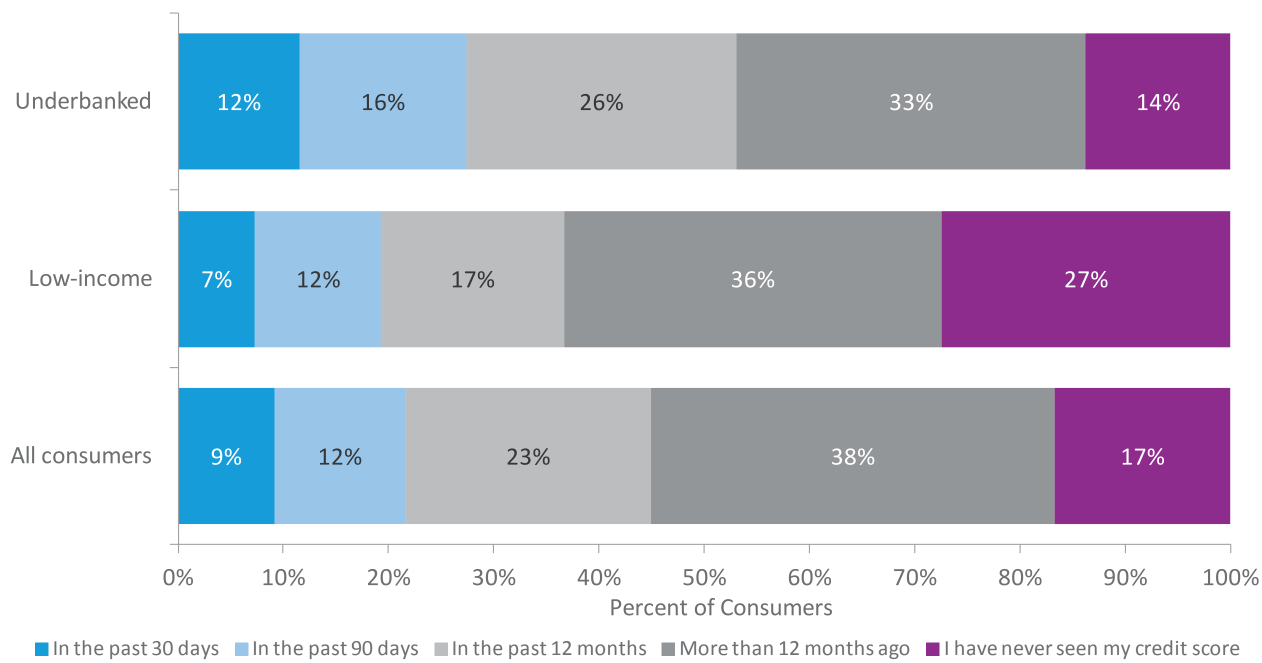
Perhaps a result of their low engagement with the financial products market, low-income consumers demonstrate a more limited understanding of credit scoring. More than a quarter of low-income consumers have never seen their credit score (see figure 5). Similar to underbanked consumers, low-income consumers are nearly twice as likely to have a credit score below 680 compared with all consumers. Furthermore, low-income consumers with a low credit score often have a fallacious perception about the causes of their flawed credit; 16% believe their low credit score is actually a result of their low income. Of course, low income may be a root cause of a low credit score, because strapped consumers may be unable to make timely payments of the full amount due on each of their bills. However, because income itself is not considered in traditional credit score generation, this response does not indicate knowledge of the direct causes of a low credit score. This misconception could complicate low-income consumers' efforts to rebuild their credit in order to qualify for more affordable rates.

Low-income consumer profile summary

- Low-income consumers are alienated from financial products markets.
  - Low-income consumers own 33% fewer financial products compared with all consumers (4 vs. 6)
  - Low-income consumers are less likely to have ever applied for credit cards (87% vs. 92%) and auto loans (56% vs. 72%) compared with all consumers.
- When they do apply for credit cards and auto loans, members of this group are more likely to be denied compared with all consumers (26% vs. 15% for credit cards, and 9% vs. 4% for auto loans).
- Low-income consumers demonstrate an incomplete understanding of traditional credit scoring.
- This knowledge deficit leaves low-income consumers less prepared to target efforts toward building a positive credit history.
- Additional information may be required to assess low-income consumers' repayment potential given the high likelihood that they have never before applied for credit or loans.

Low-Income Consumers Are Less Likely to Have Ever Checked Their Credit Score

Figure 5.How Recently Low-Income, Underbanked, and All Consumers Have Checked Their Credit Score



Q: When was the last time you viewed your credit score generated through standard credit bureaus, that is, using a credit report from Equifax, Experian or Transunion?

January 2013, n = 1,308, 332, 532
Base: All consumers, underbanked consumers, low-income consumers.
© 2013 Javelin Strategy & Research

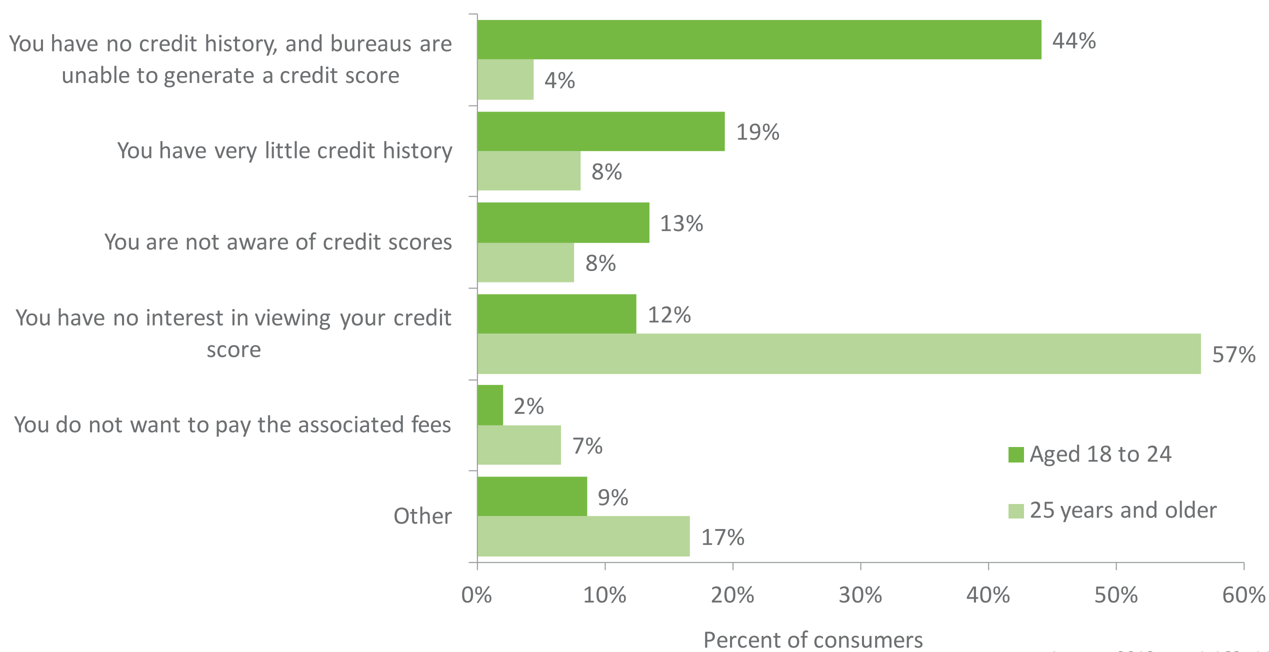
Youth (consumers aged 18 to 24)

Younger consumers face a credit catch-22. Consumers aged 18 to 24 present lenders with a unique dilemma. Because these consumers are unlikely to have a substantial credit history — or in many cases any at all — it is frequently impossible to use a traditional credit score to assess the risk they pose. Nearly half of 18- to 24-year-olds have never seen their credit score (47%, compared with 13% of those aged 25 and over), and they tend to cite having little or no credit history as the reason.

Eighteen- to 24-year-olds typically do not yet face many of the financial responsibilities that characterize adulthood. This group owns fewer financial products (4 vs. 7) and is less likely to have ever applied for credit cards (70% vs. 95%) or auto loans (15% vs. 79%) compared with consumers aged 25 and over (see appendix figures 16, 19, and 20). This group is more likely to still be in school (55% are students, compared with 2.3% aged 25 and over), less likely to be employed full time (20% vs. 51%), and less likely to be the primary financial manager in their household (27% vs. 60%). However, in order to build a credit history (and hopefully a profitable long-term relationship with a lender), 18- to 24-year-olds will need to apply for and be extended credit.

63% of Young Consumers Who Have Never Seen Their Credit Score Cite Having a Thin File or No File as the Reason

Figure 6.Reasons Consumers Have Never Seen Their Credit Score by Age Segment



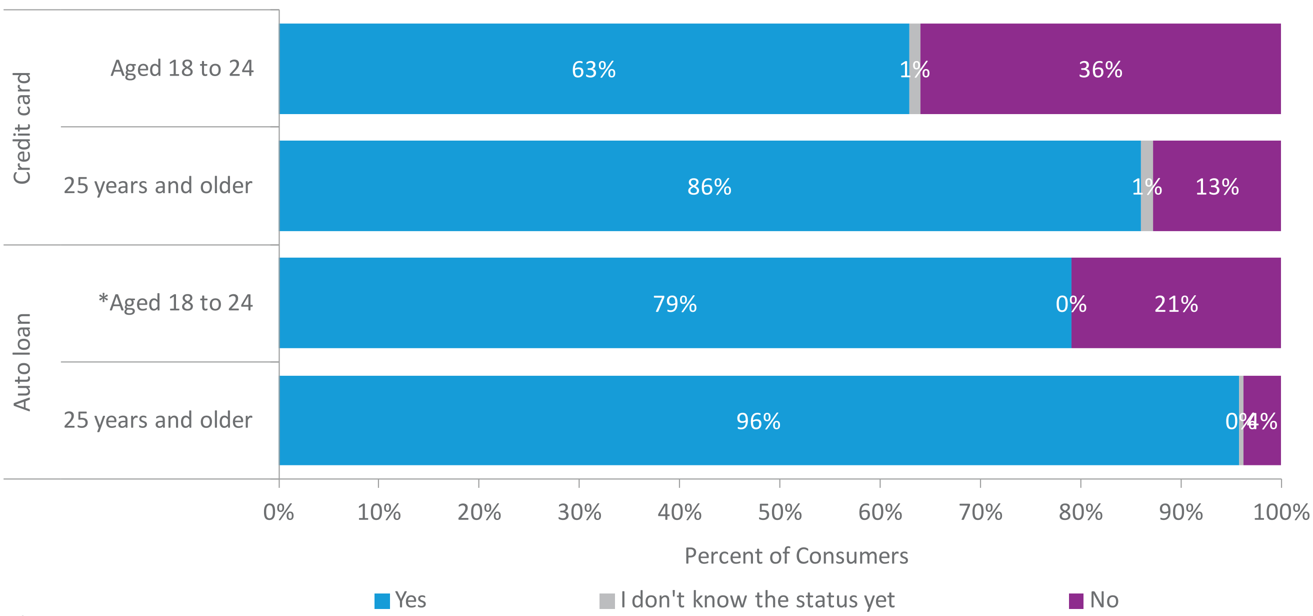
January 2013, n = 1,162, 146.
Base: Consumers who have never seen their credit score by age
© 2013 Javelin Strategy & Research

Q:You mentioned that you have never seen your credit score. Why is that?

These younger consumers are just beginning their financial lives but may be a gamble for lenders who would like to help them do so. Younger consumers who were able to generate and view a credit score within the past 12 months were nearly 2.5 times as likely as those aged 25 and older to have a credit score below 680 (see appendix figure 23). Younger consumers who had applied for credit cards or auto loans found the application to be more difficult (33% said the process was at least somewhat difficult, compared with 16% of consumers aged 25 and older; see appendix figure 24), an indication that the underwriting process is more intensive for this group. Younger applicants are also more likely to be denied credit: Nearly three times as many consumers aged 18 to 24 were denied credit cards and more than five times as many were denied auto loans compared with consumers aged 25 and older. All of this signals that younger consumers are likely to get off to a rough start during their first experiences with borrowing, and lenders need more information beyond a traditional credit score to determine the level of risk they entail.

Consumers Aged 18 to 24 Are Significantly More Likely to Be Denied Credit Cards and Auto Loans

Figure 7.Credit Card and Auto Loan Approval Status by Age



*Caution: Low base

Q: The last time you applied for a credit card, was your application approved? Q: The last time you applied for an auto loan, was your application approved?

January 2013, n = varies, 22 to 1,101.
Base: Consumers who have applied for a credit card or auto loan by age.
© 2013 Javelin Strategy & Research

Youth profile summary

- Younger consumers are frequently impossible to score based on bureau credit reports due to insufficient credit history.
  - 44% of 18- to 24-year-olds who have never seen their credit score say it is because they have no credit history.
  - They are less likely to have ever applied for credit cards (70% vs. 95%) or auto loans (15% vs. 79%) compared with consumers aged 25 and over.
- Youth are nearly three times as likely to be denied credit cards and more than five times as likely to be denied auto loans compared with consumers aged 25 and older.
- This is likely due to the difficulty of assessing the risk this group poses without a thick-enough credit file. Yet, this group needs to be approved for credit in order to build a positive credit history.
- Lenders may be able to predict younger consumers' repayment behavior using alternative credit decisioning tools. This is especially important for credit card issuers, as establishing the independent ability to pay is a key stipulation of the CARD Act.

Consumer perceptions and experiences with credit and lending

Alternative data is already ingrained in consumers' concept of underwriting

An appraisal of consumers' openness to nontraditional measures of creditworthiness begins with an exploration of their experiences and understandings of the underwriting process as a whole. Ninety-three percent of all consumers have applied for a credit card and/or auto loan at some point in their lives, and 88% of these applicants were engaged in an underwriting process in which they were asked to actively provide information — not including basic identifiers such as Social Security number, address, and date of birth — beyond what the lender pulled from credit score providers or public records.

Consumers' experiences with lending guide their expectations of what information will be used to inform the decisioning process, and they may affect the perceptions of the importance and usefulness of this information as well as the difficulty of the application process. Consumers clearly expect that lenders will use information beyond the factors contained on a traditional credit report during the underwriting process. Not only are consumers used to being asked to provide this information directly to lenders, but a large portion also recognizes the use of alternative data as inputs into a credit score. Consumers are also aware that lenders seek publicly available information outside a traditional credit score when evaluating risk.

It is important that consumers are familiar with the use of alternative data, because the consumer survey results showed a correlation between familiarity with the use of information and the amount of credence consumers afforded it as an underwriting input. The items with which consumers showed the greatest familiarity were also frequently ranked as being of comparable or greater importance to lenders in evaluating customer creditworthiness than items composing a traditional credit score. Interestingly, these same factors were also reported as being useful to the consumers personally and they preferred that the lender considered these items in evaluating their creditworthiness.

Intensive manual underwriting frustrates the underbanked

Consumers' expectations and the value they place on alternative data do not negate the fact that underbanked consumers — who are most likely to be asked to provide additional information during the underwriting process — also find it the most difficult. The underbanked are asked to provide significantly more information during the underwriting process (6 vs. 3 items), and they are 29% more likely to find the process difficult. This level of perceived difficulty may be a factor in pushing the underbanked toward AFS providers and away from the traditional financial system.
The use of an alternative credit score provider could potentially alleviate the burden to consumers of providing additional information and documents. However, given their extremely low awareness of alternative credit score providers (only 7% of consumers identified an alternative provider as a source of credit scores), these consumers' degree of comfort with the sharing of different types of information among additional parties is inconclusive.

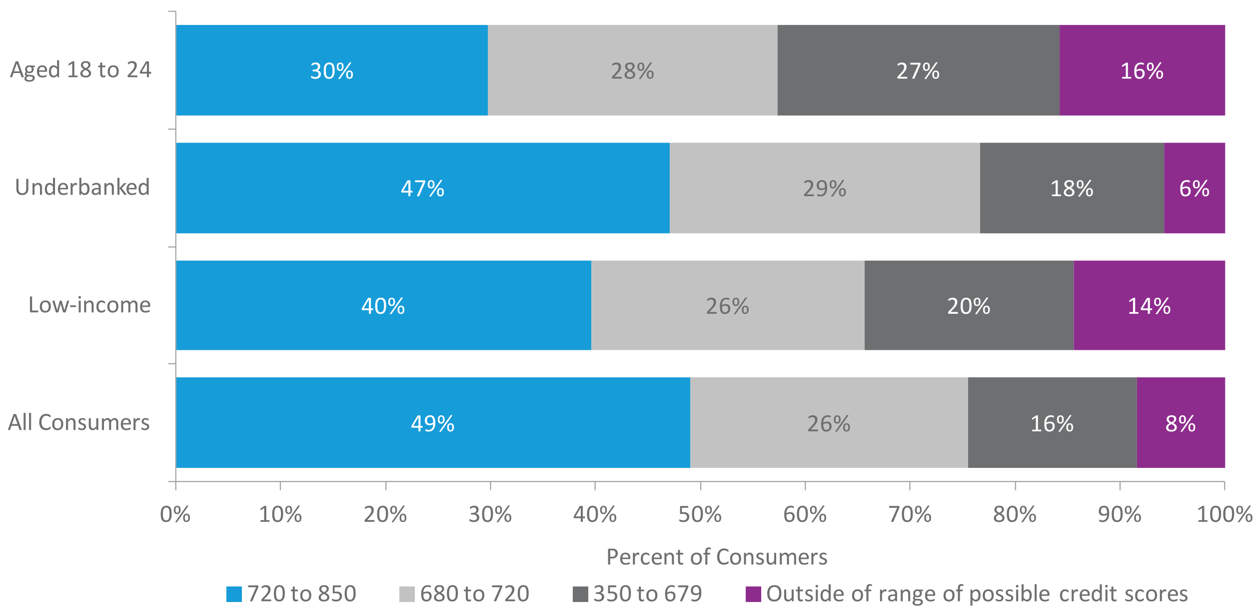
Understanding of traditional credit scores

Consumers show varying degrees of clarity when it comes to their understanding of traditional credit scores, their components, and how they are generated. Not surprisingly, consumers are more likely to demonstrate knowledge of the aspects of traditional credit scoring with which they actually interact, such as the numerical score itself, and the three major credit bureaus providing the scores, compared with the more abstruse aspects of how the score is generated. When asked what they believed constituted a good credit score, nearly 50% of consumers gave an estimate in the superprime range of FICO credit scores, 720 to 850. Twenty-six percent provided a response in the prime range of 680 to 719. And 16% gave an estimate in the subprime to deep subprime range. Fully 92% of consumers were able to provide an estimate in the range of possible traditional FICO credit scores.

The level of understanding of traditional credit scores is not constant across all consumer segments, however. The less experience consumers have with FICO credit scores as a tool for risk assessment, the more likely that their perceptions of their own creditworthiness will diverge from those of lenders. The consumer segments least likely to have ever requested a credit score or applied for a credit card or auto loan provided lower estimates of what constitutes a good credit score. A higher proportion of these groups also lacked knowledge of the range of possible FICO credit scores (see figure 8). This knowledge deficit has a detrimental effect on the consumers who are least integrated in the financial products market. The implication of their poor understanding of their own creditworthiness is that it may perpetuate their exclusion from the market and harm their efforts to build or rebuild credit.

Youth and Low-income Consumers Have Less Knowledge and Lower Estimates of a Good Credit Score

Figure 8.Young, Low-Income, Underbanked, and All Consumers' Estimates of a Good FICO Credit Score



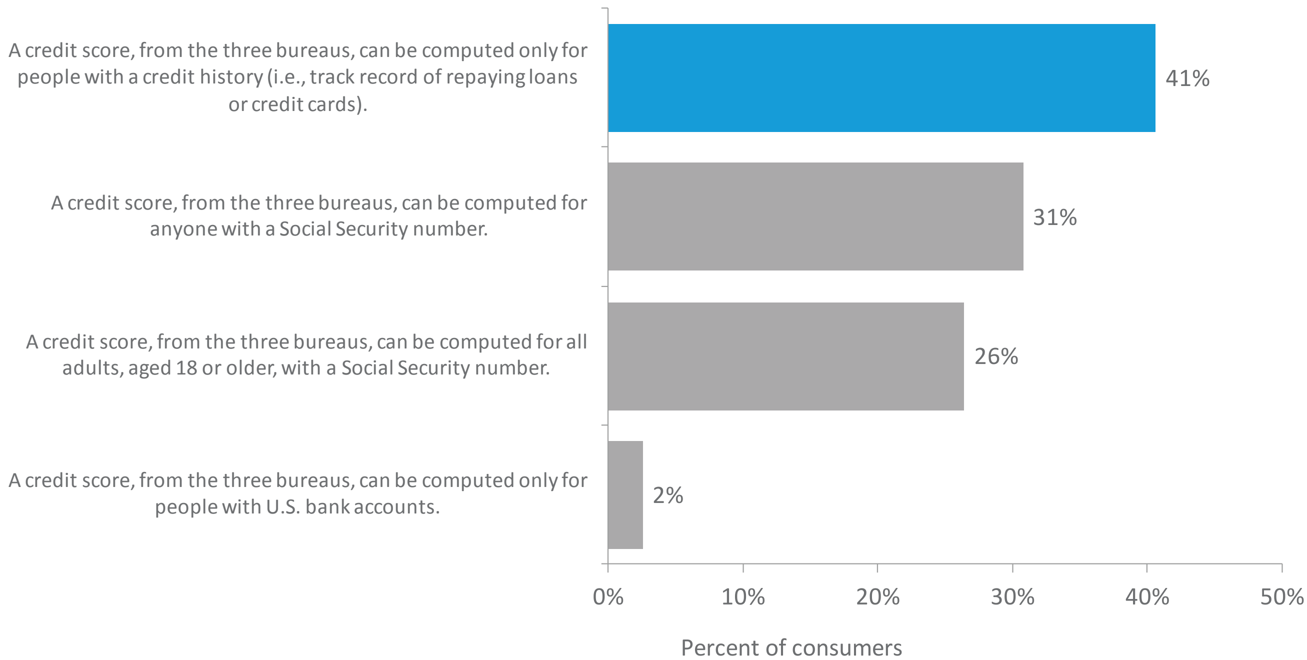
January 2013, n = varies 146 to 1,308
Base: All consumers, underbanked consumers, low-income consumers, consumers aged 18 to 24 years.

Q: To the best of your knowledge, what is a good credit score?

While consumers are generally aware of the range of credit scores that would qualify them to borrow at a prime rate, consumers show more confusion about how a credit score is generated and which population segments are able to be scored. Less than half of consumers know a credit score can be generated only for people with a credit history (see figure 8). It is reassuring, though, that the majority of consumers are able to identify each of the factors comprising a traditional credit score, as this knowledge empowers them to take the necessary steps to build or maintain a healthy credit score. However, younger and low-income consumers are consistently less likely to identify these factors (see appendix figure 25), again putting them at a disadvantage when it comes to decision-making targeted toward improving their score.

Nearly Three-Fifths of Consumers Do Not Know for Whom a Credit Score Can Be Generated

Figure 9.Population Segments for Whom Consumers Believe a Credit Score Can Be Generated



January 2013, n = 1,308
Base: All consumers.

Q: To the best of your knowledge, which of the following statements is true?

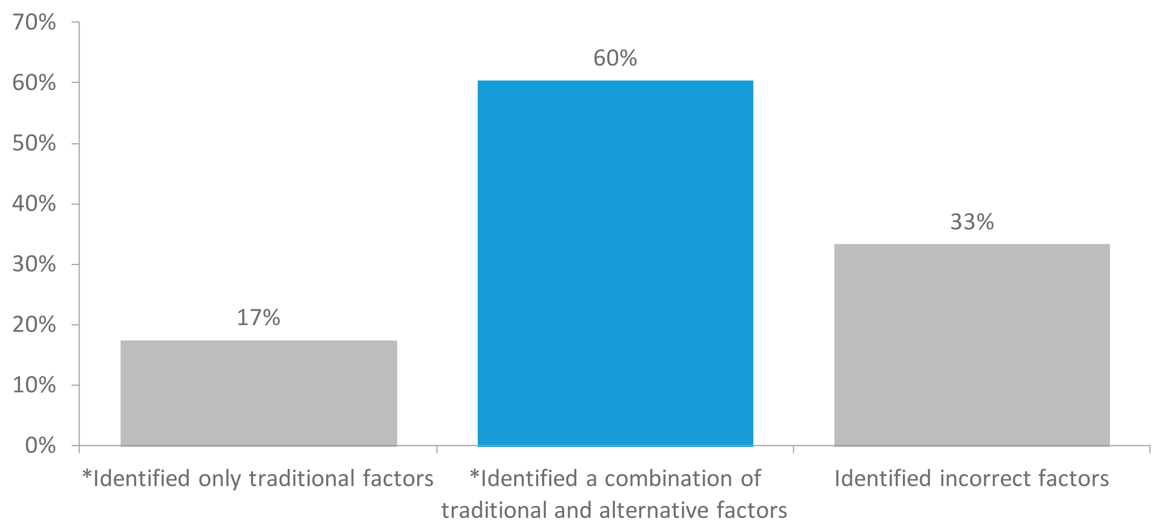
Consumers' conception of a credit score includes alternative data

When asked to identify the components of a credit score, three-fifths of consumers selected a combination of traditional and alternative credit-scoring factors. The most common elements of alternative data consumers identified were records of making household payments such as rent and utilities (53%), personal income from all sources (52%), and length of residence (44%). (See figure 26.) Consumers are likely cognizant of the use of this information, because they are explicitly asked to divulge it during the underwriting process. The same alternative factors that were most commonly perceived to comprise a credit score were also evaluated as being of comparable importance and usefulness to traditional factors (see appendix figures 27 and 28).

Notably, consumers considered nearly all factors to be more important to lenders than they were useful to the consumer, with the exception of two alternative factors. While low-ranking in both, perceived importance and usefulness, educational attainment and voter registration were considered to be more useful to consumers than they were important to lenders (14% vs. 7% for voter registration, and 25% vs. 12% for education history). This gap suggests that consumers consider these factors to be undervalued by lenders, and they may be amenable to their increasing use in credit and loan decisioning (see appendix figure 29).

Sixty Percent of Consumers Identified Both Traditional and Alternative Credit-Scoring Factors

Figure 10.Types of Credit-Scoring Factors Identified by All Consumers



*Bankruptcies may be considered in both traditional and alternative credit scores. In traditional scores they are factored indirectly through their affect on specific records.

Q: When consumers apply for any kind of loan, the lenders often pull up their credit scores. To the best of your knowledge, which of the following factors are included when computing a person's credit score?

January 2013, n = 1,308

Base: All consumers.

Consumers' awareness of alternative credit score providers is decidedly low

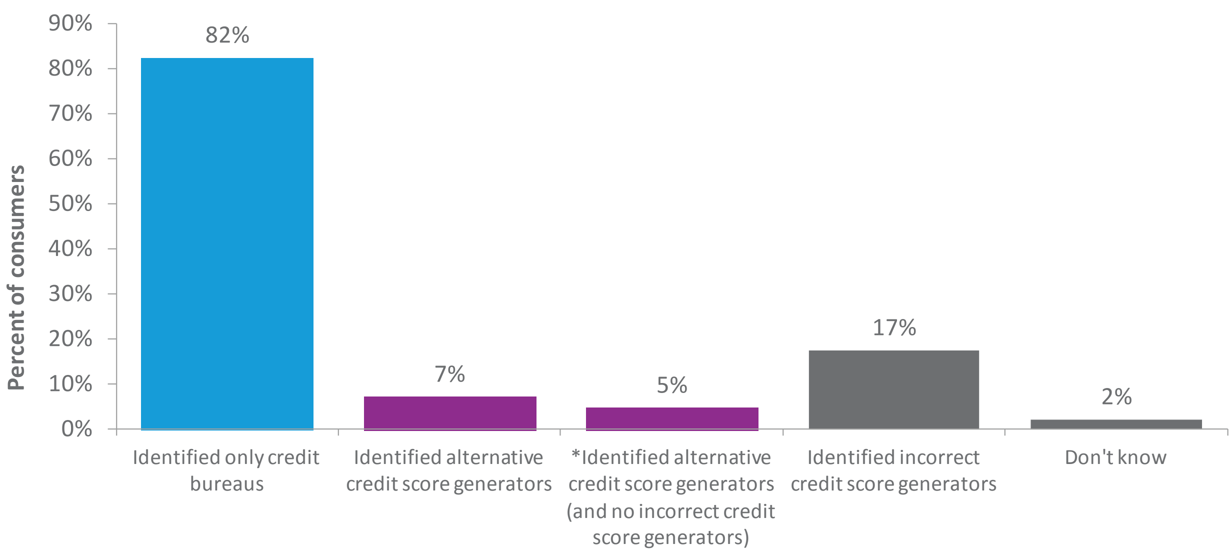
Despite being well acquainted with the application of data used by ACDTs, consumers are much less familiar with ACDT providers. In fact, consumers were more likely to believe erroneously that their primary bank or credit union was responsible for generating their credit score (14%) than to identify any ACDT provider — the highest identification rate for any provider was 3% (see appendix figure 30). While 82% of consumers were able to identify at least one of the three major credit bureaus, only 5% identified at least one ACDT provider without also identifying an incorrect source.

The simplest explanation for this disparity in awareness is a combination of the low market penetration and behind-the-scenes operation of most ACDT providers. Consumers are familiar with the use of alternative data because they encounter requests during a manual underwriting process, and not necessarily because these factors are used in an alternative credit-scoring tool. Lenders using ACDTs may not make their applicants privy to the inputs to their particular solution. With the exception of providers whose business model requires consumers to enroll and supply their own information to report to creditors, information secured from ACDT providers and public resources is obscured from consumers' subjective experience of the underwriting process.

A demonstrated positive relationship exists among experience, familiarity, and perceptions of the importance and usefulness of credit-scoring factors. However, consumers may not be entirely averse to the use of data without their explicit awareness. Seventy-six percent of consumers know lenders access publically available information as a part of credit decisioning. To avoid blindsiding consumers, however, special attention may need to be given to making the role, and the nature of the information reported by ACDT providers, transparent.

Consumers Are Relatively Unaware of Alternative Credit Score Providers

Figure 11.Credit Score Generators Identified by All Consumers



*Subset of the 7% who identified alternative credit score generators
**Those who selected FICO were excluded ONLY from "Identified only credit bureaus" and "don't know" categories

Q: When consumers apply for any kind of loan, the lenders often pull up their credit scores. To the best of your knowledge, which of the following organizations generate credit scores?

January 2013, n = 1,308
Base: All consumers.

Summary of consumer perceptions and experiences with credit and lending

- Consumers expect that lenders will consider information beyond a traditional credit score during the underwriting process.
- Consumers are more likely to believe that information used in underwriting is more useful to them personally, and more important to lenders in loan decisioning, the more familiar they are with the use of this information.
- Youth and low-income consumers are less likely to identify a prime or super prime FICO credit score as a good credit score, placing them at a disadvantage in knowing for what credit card and loan terms they are qualified.
- Three-fifths of consumers identified a combination of traditional and alternative data as factors comprising a credit score, indicating that consumers already believe they are being assessed based on alternative data.
- Consumers are largely unfamiliar with the providers of alternative credit decisioning tools, indicating that their familiarity with alternative data is a product of its use during a manual underwriting process.

ACDT user experience

The market for ACDTs is young but not without momentum. This section explores lenders' receptiveness to ACDTs and the benefits they see from adopting them. We evaluate the reasons lenders cite for adopting or not adopting ACDTs, the factors they consider when choosing a provider, and the results they have realized from using these products.

Reasons for adopting ACDTs

The primary reason cited by all categories of auto and credit card lenders for adopting alternative credit-scoring solutions is to increase the precision of their risk assessment methods and generate lift on their portfolios. Whether the additional data is used as an input in approval, pricing decisions, or reducing charge-offs, users of ACDTs unanimously agree that more data is better when it comes to credit and loan decisioning.

> "The different data components of it ... ultimately help us fine-tune our risk estimate and how we think that our consumers are ultimately going to [perform]. So, what we found is, we can squeeze additional performance out of those decisions by looking at things that were not historically typical to the credit bureau." – Large subprime auto lender, ACDT user[22]

> "We're always trying to find additional data that isn't present on the credit bureau report." –Large prime credit card issuer, ACDT user[23]

> "One of the key benefits is being able to look into the information that normally we can't have through the credit bureau. This helps us make better informed decisions and enables us to get better odds in terms of identifying who is going to pay and who is not going to pay within the subprime [segment]." – Medium-size subprime auto lender, ACDT user[24]

Differences in the objectives for seeking increased precision are pronounced and driven both by industry and the risk category of target borrowers. How alternative credit scores are weighed and used in decisioning also differs according to these lender categories; it tends to mirror trends in the use of all underwriting inputs. For instance, lenders who use underwriting processes to inform "yes/no" decisions tend to use alternative credit scores to inform approval decisions, whereas lenders who use underwriting primarily for pricing, rather than approvals, tend to use alternative credit scores for the same reason.

> "We are actually 100% approval. [We] come up with our overall risk estimate of the consumer, and then we'll make the call back to the dealer." – Large subprime auto lender, ACDT user[25]

Prime lenders in both the credit and auto categories had lower approval rates than subprime lenders, and they were more likely to say they hoped to increase their approval rates by reaching into thin- and no-file populations whose risk had previously been impossible to ascertain.

> "It is a big improvement. ... No-hit rates at prescreen tend to be very large, with no-hit rates at the time of application much lower, but it represents a substantial increase in the number of consumers we can look into." – Large prime credit card issuer, ACDT user[26]

Both prime and subprime lenders hoped to reduce their "bad rates"[27] either by avoiding poor approval decisions or by more appropriately pricing loans. Auto lenders in both the prime and subprime categories sought to reduce charge-offs in addition to expanding their reach. Credit card issuers did not measure charge-off reductions, and one credit card executive said charge-off reductions were not a goal of using ACDTs. Rather, they measured lift from increased approvals due to an enhanced ability to assess the risk of previously untapped segments:

> "We haven't really used it to [reduce charge-offs], because we're using alternative data to go after incremental universe that previously we wouldn't market to because the charge-off rate was too high. Now we're able to identify a subpopulation for whom the charge-off rate is within acceptable range." – Large prime credit card issuer, ACDT user[28]

Considerations in choosing an ACDT provider

ACDT users showed several commonalities in their reasons for choosing one provider over another. The nascent state of the market for alternative credit-scoring products amid tumult in the regulatory environment leads lenders to proceed with caution when deciding which ACDT tool to add or if it should be added at all. While the majority of lenders — users or not — were enthusiastic about the potential predictive advantage these products may afford them, they uniformly showed an inclination toward risk aversion surrounding regulatory and emerging-market concerns.

While several of the executives interviewed said their enterprise used more than one alternative credit score provider, all executives gravitated toward larger providers with a longer history in the industry. The primary reason lenders preferred larger, more established providers was concern about compliance. FCRA compliance surfaced as a salient concern for lenders, most of whom expressed hesitation to invest in a solution that might complicate compliance efforts.

> "We've been working with scores that have FCRA compliance, so we want something that can be compliant. … We're very conservative when it comes to following credit laws, so we tend to shove away from things that don't offer that level of scrutiny." – Large credit card issuer, ACDT user[29]

> "Part of our due diligence is to make sure that if we go with one of those models, that we feel confident that any type of compliance — anything we might be concerned about — has been embedded beforehand, which we do with any product that we bring on." – Large credit card issuer and auto lender, non-ACDT user[30]

> "If they're not FCRA-compliant, then I wouldn't want to deal with them." – Medium-size subprime auto lender, ACDT user[31]

Another factor in pushing lenders toward larger providers is consistency of the data provided as inputs to the model. While an increasing number of smaller providers are emerging and presenting a diverse array of inputs that promise predictive value, lenders want to know that the data they will receive — including variable definitions and sources — will remain constant. As vendors grow, they may strive to improve their products and offerings, but changing sources poses challenges for lenders who would like to track progress with consistent archive data.

> "We've had a couple of problems with [providers] changing sources or changing definitions of a variable. If you have something baked into your calculation and you're expecting one thing and it changes, obviously that's a problem." – Large subprime auto lender, ACDT user[32]

> "A lot of it, just from my understanding, comes from [the fact that] they're trying to develop a massive lot of data that's coming from many different vendors, and so keeping the data contributions stable over time is difficult." – Large prime credit card issuer, ACDT user[33]

Beyond data consistency, lenders need a degree of assurance in the long-term viability of their provider. An obvious concern, and one espoused by several lenders, is the risk associated with the fragility of start-ups. No lender wants to take a chance on a provider that may not survive until market maturity. Vendors with a long history of working with regulators and source data suppliers are more likely to weather changes to the regulatory environment, and those with a longer client list are more likely to benefit from market solidification. All these factors convey a strong advantage to early movers in the market for ACDTs.

> "There have been a few that we have talked to and looked at the information, and even though their information looks interesting, you didn't get a good feeling that the company had either been around for very long or that they were going to be around for much longer. ... So, there have been a couple of times when we've just kind of walked away from some stuff that looked like it might be interesting just because we weren't comfortable with the long term." – Large subprime auto lender, ACDT user[34]

Results of using ACDTs

In general, lenders have experienced measurable benefits to their bottom line as a result of using ACDTs. While many executives were unable to share a detailed breakdown of their operational data, the data points they were able to provide painted a remarkably positive picture of the effect of ACDTs on portfolio profitability. As lenders have different goals for using ACDTs, the metrics they use to track improvement toward these goals also varied. Lenders using ACDTs saw measurable results in their desired areas regardless of industry or target-customer risk category. However, several lenders saw limitations to the alternative scores as well.

The majority of interviews with ACDT users were with subprime lenders who either are involved exclusively in auto lending or dealt in both the auto- and credit card-lending industries. Due to this industry bias and the fact that individual lenders used different metrics to evaluate performance, the points presented below should not be generalized to reflect industry trends, but should be understood as a qualitative overview of users' experiences.

Highlights of users' reported results

- One large lender targeting both prime and subprime customers hoped to expand its subprime portfolio by reaching into the thin and no-file segment. This lender was able to increase the proportion of subprime loans in its portfolio from 8% to 15% since adopting an ACDT.[35]
- A large, exclusively subprime auto lender increased overall K-S lift[36] on its portfolio by 10% to 15% but was unable to identify the areas driving this lift.[37]
- A large subprime auto lender targeting thin-file customers was able to reduce "bad rates" by at least 1% and reduce portfolio charge-offs from 7% to 5%.[38]
- Another large subprime auto lender saw a 30% reduction in delinquent first payments, a 7% increase in the approval rate, and a 2% to 3% improvement in its look-to-book ratio.[39] This lender reported that the ACDT accounted for between 5% and 15% of the predictive value in a typical scorecard.[40]
- Another large auto lender was able to increase its subprime approval rate from less than 30% to 50%.[41]
- Another large subprime auto lender saw overall portfolio growth of 0.2% to 0.3%, along with a 4% increase in approvals.[42]
- A large credit card issuer targeting prime customers was able to score 25% of the thin- and no-file customers who were not scorable by traditional methods, with the caveat that a small percentage of the newly scorable population met approval criteria.[43]
- A large credit card issuer was unable to provide concrete data points but believed the ACDT had allowed it to achieve K-S lift on "low to moderate" thin-file customers.[44]

While all current ACDT users expressed a broadly positive view of the product, several lenders encountered challenges in implementing the solution. In two cases this led to the abandonment of the product. Only one lender interviewed discontinued the product due to a lack of demonstrated performance on profitability measures; no other lender considered discontinuing use due to poor performance on key metrics. However, some lenders cited poor systems integration and pushback from prime customers who were offered inferior rates to what they expected on account of negative alternative scores.

> "We tried to use an alternative credit-scoring method ... but we found that it was a model that didn't really work for us, and the consumers were getting more and more savvy about their credit scores. Somebody who is maybe an 'A' FICO score and was given a different rate based on this other scoring model wasn't happy. So, we went back to a way where basically these pricing decisions are priced on FICO decision with old-fashioned underwriting." – Medium-size prime and subprime credit card issuer and auto lender, former ACDT user[45]

> "I think [the] only [drawback] is some of our origination systems that we're using are a little bit slow to accommodate different versions of [the alternative credit decisioning product's] score." – Medium-size subprime auto lender, ACDT user

Nonusers' perspectives on alternative credit-scoring solutions

Lenders who were not using alternative credit-scoring products expressed a similar profile of needs to those that prompted ACDT users to adopt the products. Several nonusers looking to expand their reach indicated difficulties assessing the risk of underserved populations such as the underbanked, and thin- and no-file applicants. Several also expressed a need to reduce the burden of an intensive manual underwriting process. All nonusers interviewed saw value in alternative data to enhance precision beyond traditional credit bureau scores, though openness to using an ACDT for this purpose was dependent on an executive's evaluation of the fit for the institution.

> "We are looking at that right now. Whether we are going to implement them or not, we haven't decided yet. But we do see the value in being able to do that because it brings basically another layer to our decisioning that would allow us to be able to potentially approve some people that maybe [we would] right now or not." – Large prime credit card issuer and auto lender, non-ACDT user[46]

> "We are going to be looking to expand our membership to some of the underserved areas ... that will add some more lower-graded paper I should say." – Small prime credit card issuer and auto lender, former ACDT user[47]

> "Accuracy, timeliness, and the ability to work with our systems simplified — it is always nice if you can use something and just click a button and it's done for you." – Small prime credit card issuer and auto lender, non-ACDT user[48]

However, despite these needs, nonusers often had reasons for skepticism about the fit of ACDTs to their business model. Small and medium-size lenders in particular strove for a culture of personal interaction with customers and preferred to conserve the element of human discretion in the underwriting process.

> "We find a lot of times that our underwriters disagree with that tool, because it can't take in a bad character or good conversation you have. So, it's just not our culture to apply a lot of that technology to make decisions for us." – Medium-size credit card issuer and auto lender, former ACDT user[49]

Summary of lender experiences with ACDTs

- Lenders who use ACDTs do so to increase precision in risk estimation in order to more accurately price loans, separate "good" from "bad" approvals, and generate lift on portfolios.
- Emerging-market concerns dominated lenders' hesitation on using alternative data.
  - Lenders prefer ACDT providers with a record of FCRA and ECOA compliance.
  - Poor systems integration and inconsistency in source data and variable definitions surfaced as the primary drawbacks to using ACDTs.
- While lenders used a variety of metrics to track performance, all users interviewed saw improvement in key areas, including the following:
  - Increased approvals (particularly among subprime and thin and no-file applicants)
  - Overall K-S lift
  - Reductions in charge-offs and delinquent payments
  - Enhanced predictive value
- Lenders who discontinued using ACDTs cited two reasons for abandoning the product:
  - Dissatisfaction among customers who would have qualified for prime terms based on a traditional credit score but were judged to be riskier based on their alternative score.
  - Poor fit with a company culture valuing the element of human discretion in manual underwriting.
- Lenders who had never used ACDTs were optimistic that the solutions would add predictive capability.

Potential industrywide effect of implementing ACDTS

An increase in the percent of subprime originations in both the auto loan and credit card industries in the past several years has created a necessity for enhanced precision in risk assessment that is no longer afforded by traditional credit scores.[50] Lenders have a demonstrated need to accurately place applicants in appropriate risk pools in order to set terms and limits that may hedge the risk of charge-offs. At the same time, many lenders would like to expand their portfolios in both the prime and subprime categories but are limited by an inability to score thin- and no-file populations. Several ACDTs have a demonstrated ability to improve the separation of the least risky and most risky approval decision and to score thin- and no-file applicants.[51] The effect that this increased predictive capacity will have on industry revenue, however, has yet to be seen.

Using information from lenders who have used and currently use alternative credit-scoring solutions, and inputs from industry sources, Javelin established a revenue opportunity that would have accrued to credit card issuers and auto lenders if these tools had been universally implemented by the beginning of 2012. Because the market penetration of ACDTs is unknown, this model assumes the use of ACDTs had a negligible effect on the 2012 industry figures. The revenue gain as a percent of industry revenue should be taken as a reflection of the difference between a market without these tools and one in which they are universally used. For both industries, the models estimate the incremental revenue on new loans that originated in 2012, which would result from additional fees and interest due to portfolio expansion. For the purposes of this paper, Javelin's ROI determination is restricted to auto and credit card industries. Both the credit card and auto industry models assume the net movement of customers between the prime and subprime groups is null, and the increase in the rate of approvals is the same for prime and subprime applicants. Please see methodology for details.

Auto-lending industry

Of the 19.9 million auto loans originated in 2012,[52] subprime loans made up 30.7%, which is up 18% from 2011.[53] If this trend continues, the benefits of ACDTs to lenders may be even more pronounced. The average revenue per customer from interest and late-payment fees totals $9,400 over the lifetime of a subprime loan, compared with $2,500 for a prime loan. The high delinquency and charge-off rates associated with subprime customers deter many lenders from expanding their reach into this category, but enhanced separation of the least risky from the most risky applicants may help lenders hedge risks and minimize charge-offs while approving more applicants with low traditional credit scores.

The value of expected interest revenue over the lifetime of auto loans originated in 2012 is $90 billion, but $11.6 billion will be lost to charge-offs. Javelin estimates a potential industrywide revenue gain to auto lenders from the implementation of alternative credit-scoring tools totaling $1.91 billion. The majority of this revenue can be attributed to savings from charge-off reductions, in the amount of $500 million for prime customers and $700 million for subprime customers. Revenue from interest and late-payment fees from additional approvals constitutes a large minority, at $405 million from prime customers and $301 from subprime customers. As mentioned by the lenders, these subprime customers would not have been otherwise approved before the use of ACDTs. Furthermore, savings may be derived in some cases by reducing the burden of manual underwriting on lenders. Because costs related to underwriting, as well as the costs of implementing ACDTs, are unknown and likely highly variable, this model does not attempt to measure costs or savings in this area.

Auto Industry's Potential Net Gain From ACDT Implementation Is $1.91 Billion

Figure 12.Auto Industry Projected Revenue Metrics

Projected Auto Industry Impact of Alternative Decisioning Solutions: Key Metrics	
Overall Percent Increase in Loan Approval Rate	7%
Overall Percent Reduction in Chargeoffs	11%
Number of Additional Loans Booked (Prime)	162,000
Number of Additional Loans Booked (Subprime)	32,000
Revenue gain from increase in approvals (Prime)	$ 405,000,000
Revenue gain from increase in approvals (Subprime)	$ 301,000,000
Savings from reduced chargeoffs (Prime)	500,000,000
Savings from reduced chargeoffs (Subprime)	$ 700,000,000
Overall Potential Net Gain	**$ 1,906,000,000**

Credit card industry

Credit card issuers generated $17.2 billion from interest revenue and annual, late-payment, and merchant processing fees from cards originated in 2012. Had ACDTs been implemented throughout the credit card industry at the onset of the year, Javelin estimates a potential industrywide gain of $1.67 billion, or nearly 10%. In contrast to the auto industry, where incremental revenue from interest and fees is more comparable between the prime and subprime categories, nearly 94% of additional revenue to credit card lenders would be generated by additional prime customers ($1.56 billion vs. $109 million from subprime customers).

While the difference in average interest rates between prime and subprime credit cards is even more dramatic than that of the auto industry, one way credit card issuers hedge their losses on subprime cards is to set low limits, which drives down the total interest amount on these cards. In one year, the average subprime card generates only $191, whereas a prime card — despite low interest rates — generates $480 on account of the balance it is possible to carry due to higher limits. Because no credit card lender interviewed tracked the effect of ACDTs on charge-off rates, savings associated with reduced charge-offs are unknown. Thus, the greatest benefits of alternative decisoning tools to credit card lenders lie in the increased reach they provide into unscorable populations, which allows them to approve more applicants and more accurately place them in the appropriate risk pools.

Credit Card Industry Potential Net Gain Is $1.67 Billion

Figure 13.Credit Card Industry Projected Revenue Metrics

Projected Credit Card Industry Impact of Alternative Decisioning Solutions: Key Metrics	
Overall Percent Increase in Loan Approval Rate	15%
Number of Additional Credit Cards Issued (Prime)	3,243,000
Number of Additional Credit Cards Issued (Subprime)	573,000
Revenue gain from increase in approvals (Prime)	1,558,000,000
Revenue gain from increase in approvals (Subprime)	$109,000,000
Overall Potential Net Gain	$1,667,000,000

Regulator perspectives on ACDTS

Given the state of regulatory oversight, any consideration of ACDTs must include a discussion of how regulators themselves view these tools. While there is a degree of concern about certain aspects of their use, the regulators interviewed for this report also shared a number of positive thoughts about how both lenders and consumers could benefit from including alternative credit data in assessing creditworthiness.

Regulator understanding of tools and their effectiveness

The degree of familiarity with ACDTs varied among the regulators interviewed, but all were in agreement that issuers could make better-informed decisions when it came to lending to borrowers with little to no credit histories.

> "They are simply a tool, but their effectiveness depends on the creditor and the decisioning models that they have in place. CBRs (credit bureau reports) can be wrong. The tools may work, or they may not work. For consumers, they could help in decisioning the no-file folks." – Regulator A[54]

> "There is value, if it is predictive. Thin files are better off with these solutions than no files." – Regulator B[55]

> "It helps to supplement what is available … where thin files are apt to be declined; this gives organizations the opportunity to extend credit." – Regulator C[56]

Agency guidance and use by supervised institutions

Regulators' primary concerns focused on whether or not ACDTs complied with existing regulations, such as the Fair Credit Reporting Act and the Equal Credit Opportunity Act, and if they were fair indicators of creditworthiness. At this time, regulators have yet to render guidance on ACDTs, but the use of such solutions would be reviewed during an examination.

> "If a lender uses it, we will review it during an exam. Lenders should determine whether or not there is value to consumers and if it is a good gauge of ability to pay." – Regulator A[57]

> "The FTC has enforcement authority for FCRA. … Their focus so far has been on accuracy and the mechanism by which they can dispute … also ease of access. Alternative data can also raise ECOA questions, as discrimination in lending is a concern. It raises questions about obligations on adverse actions and risk-based pricing notices." – Regulator B[58]

Segments and products best suited for alternative credit data

Beyond thin- and no-file consumers, regulators identified other consumer segments that could benefit from lenders using alternative data in credit issuance, such as the underbanked and those with prior foreclosures and bankruptcies. According to regulators, credit card issuers and auto lenders can improve their ability to render a lending decision through the use of ACDTs.

> "Underbanked could be helped as they have limited records. Nontraditional lenders could use alternative information, as can second-tier auto lenders." – Regulator A[59]

> "Absolutely for card and auto, there are card issuers using this now." – Regulator B[60]

> "Consumers who underwent foreclosure or bankruptcy can benefit. Credit card and auto are probably the best fit, especially … subprime and no or thin file. Gives a more accurate picture of their ability to pay than you would with a credit bureau report … especially given the recession. Consumers with credit problems can only be helped." – Regulator C[61]

The future of ACDTs and potential roadblocks

For lenders seeking to ensure regulator acceptance, being able to communicate the benefit of such solutions is critical. Regulators are open to the use of alternative data, but scrutiny may remain for certain sources of data until issues surrounding their predictive value are established.

> "As long as it proves to be a good gauge of risk, regulators would be more likely to accept it. And does it harm or help consumers?" – Regulator A[62]

> "There is a very slow trajectory on phone, utility, and rental data … cannot say if that will pick up any time soon." – Regulator B[63]

> "There is a future (benefit) for the public as to how these tools are being used, and there is great benefit to lenders. They (lenders and ACDT vendors) need to educate regulators to help shape perceptions." – Regulator C[64]

Methodology

In October 2012, LexisNexis retained Javelin Strategy & Research to conduct an independent, comprehensive research study on the economic and societal benefits of ACDTs in the United States. Javelin took a three-tier approach to the research. The first tranche was to assess lender and regulator perspectives on ACDTs. The second involved a survey to understand consumers' experiences with lending and gauge their receptiveness to the use of alternative data. The third measured the overall effect on the industry of implementing ACDTs with a revenue model for each of the credit-issuing and auto-lending industries.

Executive interviews

Javelin interviewed 16 executives who oversee lending operations at 14 separate financial institutions in the auto-lending and credit card-issuing industries. In addition, Javelin interviewed two high-ranking executives and one mid-level officer from departments involved with consumer lending at Federal regulatory institutions. Javelin also interviewed two executives regarding industry trends specific to the industry revenue model. To protect the regulators' anonymity, no further description will be given of their departments or duties.

Lender interviews

- Eight were current users of ACDTs, two had previously used ACDTs but discontinued using them, and four had never used an ACDT.
- Of the current users of ACDTs:
  - Six operated in the auto- lending industry and two were credit card issuers.
  - Seven represented large lending institutions, and one represented a medium-size institution.
- Of the former users of ACDTs:
  - Both institutions operated in both the auto-lending and credit card-issuing industries.
  - One represented a medium-size institution, and the other represented a small institution.
- Of the non-ACDT users:
  - All four institutions operated in both the auto-lending and credit card-issuing industries.
  - Three represented small institutions, and one represented a medium-size institution.

The two supplementary industry-trend interviews were with large credit card issuers.

Consumer survey

Javelin conducted an online survey that targeted population representative of the overall U.S. adult population in proportions of gender, age, and income. The consumer data in this report is segmented by general population, underbanked consumers, and low-income consumers. General population and low-income segment data are weighted to reflect the most current U.S. Census demographic proportions for consumers aged 18 and older. Underbanked segment data is weighted to reflect demographic proportions published by the FDIC in its "2011 Survey of Unbanked and Underbanked Households." Analysis for different consumer segment groups such as 'underbanked', 'low-income' and 'young consumers' are compared with general population of consumers, referred to as "all consumers" in this report.

- General population data is based on a random sample of 1,308 respondents collected online in January 2013. The overall margin of sampling error is 12.71 percentage points at the 95% confidence level.
- Underbanked segment data is based on a random sample of 332 respondents collected online in January 2013. The overall margin of sampling error is 15.38 percentage points at the 95% confidence level.
- Low-income segment data is based on a random sample of 532 respondents collected online in January 2013. The overall margin of sampling error is 14.25 percentage points at the 95% confidence level.

Revenue models

Javelin sought to estimate the potential economic effect of ACDTs on the auto-lending and credit card-issuing industries. To do this, we constructed a model for each industry, retroactively applying the changes to key performance metrics reported by lenders to published measures of industry performance in 2012.

Auto industry revenue model

The model of potential incremental revenue to the auto industry applies the metrics presented by users of ACDTs in executive interviews with auto lenders to published figures representing the performance of the auto industry in 2012. Revenue was calculated two ways: 1) as a function of earnings from interest, late fees, and discount fees from additional approvals, and 2) as a function of savings from charge-off reductions. Where the optimal granularity of data could not be obtained, assumptions were made in order to specify the conditions for which the results of the model hold:

Assumptions

1) The model assumes the published 2012 industry metrics were not affected by the current use of ACDTs. Another way to state this is that the projected revenue gain and charge-off reductions as a percent of current revenue and charge-offs represent the difference between a market with zero ACDT penetration and a market in which they are universally used.
2) The model assumes the net movement of approvals between the prime and subprime categories as a result of ACDTs is zero. The number who would have qualified for a prime loan using traditional scoring but were approved for subprime on account of ACDTs is equal to the number who were moved from the subprime into the prime category using ACDTs.
3) The model assumes the increase in approval rates due to the use of ACDTs is constant across the prime and subprime categories.
4) The model assumes, in the case of charge-offs, lenders do not recoup any portion of the remaining debt and interest on the loan.
5) The model does not account for the tax implications of charge-offs.
6) The model assumes the quarterly rate of delinquencies among all existing loans is the same as the rate of delinquencies among loans originated in 2012.
7) The model assumes the rate of delinquencies is equivalent for prime and subprime loans.

Data and sources

To estimate overall revenue gain to auto lenders from an increase in approvals due to the use of ACDTs, Javelin calculated the following:

- Average monthly payment on prime and subprime loans
- Cumulative interest revenue per loan
- Cumulative total interest earnings
- Cumulative charge-off losses
- Total amount of discount fees on subprime loans
- Total annual late-payment fees on prime and subprime loans

Inputs into these calculations were provided by a variety of sources and included the following:

- Number of prime and subprime loans booked in 2012[65]
- Look-to-book ratio for prime[66] and subprime loans[67]
- Average prime and subprime interest rates[68]
- Average prime and subprime loan amount[69]
- Average prime and subprime charge-off rates[70]
- Average discount fee on subprime loans[71]
- Rate of delinquencies of 90 days and longer on all auto loans[72]

Notes:

Javelin acknowledges the estimates presented in this paper depend on the validity of source data. The number of prime and subprime loans in this model are given as a point estimate published by Equifax. Figures have been published by other institutions that may contradict these figures. However, Javelin chose to use Equifax's estimate as it is a widely cited article throughout the industry on loan originations.

Credit card industry revenue model

Similar to the auto industry revenue model, this model used executive interview data to project the additional revenue that would have accrued to credit card issuers in 2012 if ACDTs had been universally implemented at the start of the year. Incremental revenue for the credit card industry was calculated as a function of increased interest, annual fees, late-payment fees, and merchant processing fees generated from additional approvals resulting from the implementation of ACDTs. As in the auto model, a number of assumptions apply:

Assumptions

1) The model assumes the published 2012 industry metrics were not affected by the current use of ACDTs. Another way to state this is that the projected revenue gain as a percent of current revenue represents the difference between a market with zero ACDT penetration and a market in which they are universally used.
2) The model assumes the net movement of approvals between the prime and subprime categories as a result of ACDTs is zero. The number who would have qualified for a prime loan but were approved for subprime on account of alternative data is equal to the number who were moved from the subprime to the prime category.
3) The model assumes the increase in approval rates due to the use of ACDTs is constant across the prime and subprime categories.
4) The model assumes all deposits on secured subprime cards are returned.
5) The model does not account for any limited-term benefits or fees outside annual and late fees. The model considers only regular rates associated with cards.

6) The model assumes the delinquent payment rate is equal between prime and subprime customers.

7) The model assumes 100% of approved applicants are issued a card.

Data and sources

To estimate overall revenue gain to credit card issuers from an increase in approvals due to the use of ACDTs, Javelin calculated the following:

- Number of prime and subprime cards issued in 2012
- Annual interest revenue per card for prime and subprime cards
- Revenue from annual fees for prime and subprime cards
- Revenue from merchant processing fees for prime and subprime cards
- Revenue from late payments for prime and subprime cards

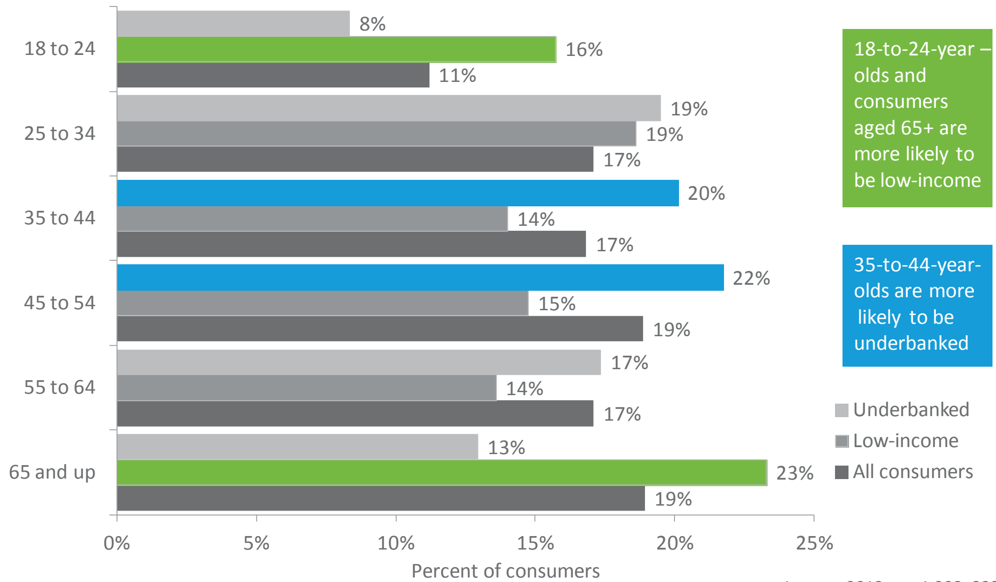
Inputs into these calculations were provided by a variety of sources and included the following:

- Typical approval rate for credit card applications[73]
- Average prime and subprime interest rates on credit cards[74]
- Average outstanding balance on prime credit cards[75]
- Average limit on subprime credit cards[76]
- Average annual fee on prime and subprime credit cards[77]
- Average merchant processing fees as a percent of transaction amount for in-person and card-not-present purchases[78]
- Percent of in-person and card-not-present purchases in total credit card spend[79]
- Average monthly spend on prime credit cards[80]
- Percent increase in approval rate as a result of using ACDTs[81]

Appendix

Underbanked and Low-Income Consumers Show Distinctive Age Patterns

Figure 14.Underbanked, Low-Income, and All Consumers by Age

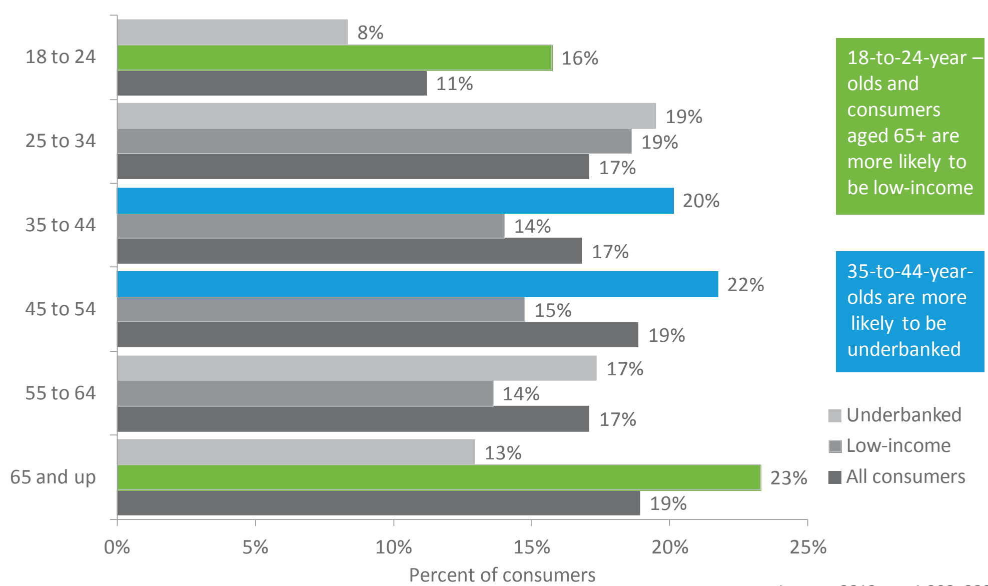


Q: Please provide your age

January 2013, n = 1,308, 332, 532
Base: All consumers, underbanked consumers, low-income consumers.

Low-Income Consumers Own Fewer Financial Products; Underbanked Own as Many as All Consumers Do

Figure 15.Number of Financial Products Owned by Underbanked, Low-Income, and All Consumers

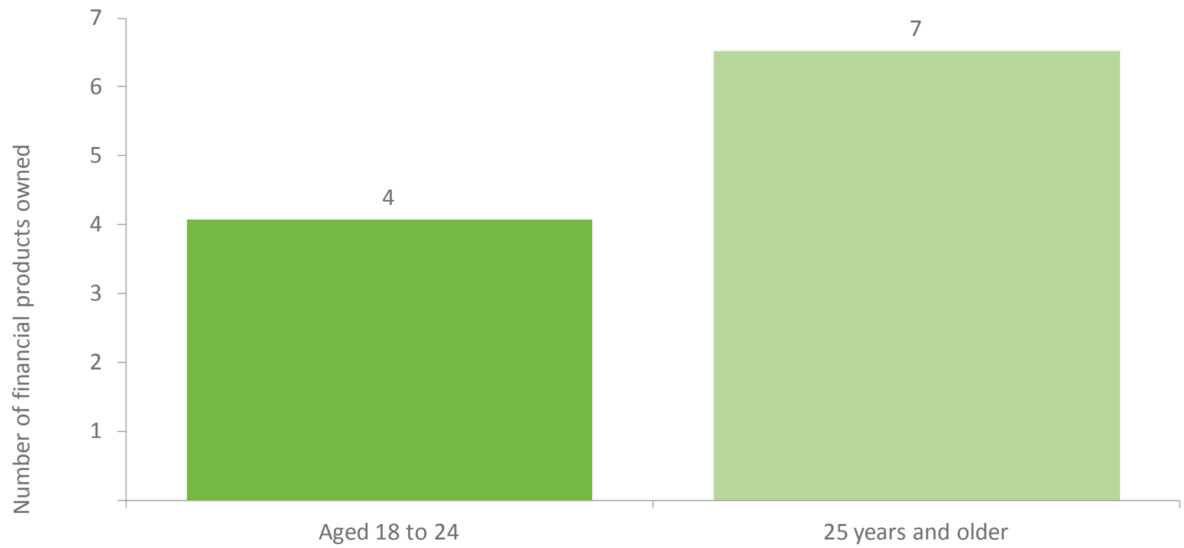


Q: Please provide your age

January 2013, n = 1,308, 332, 532
Base: All consumers, underbanked consumers, low-income consumers.

Consumers Aged 18 to 24 Own Fewer Financial Products Than Consumers Aged 25 and Older

Figure 16: Number of Financial Products Owned by Age Range

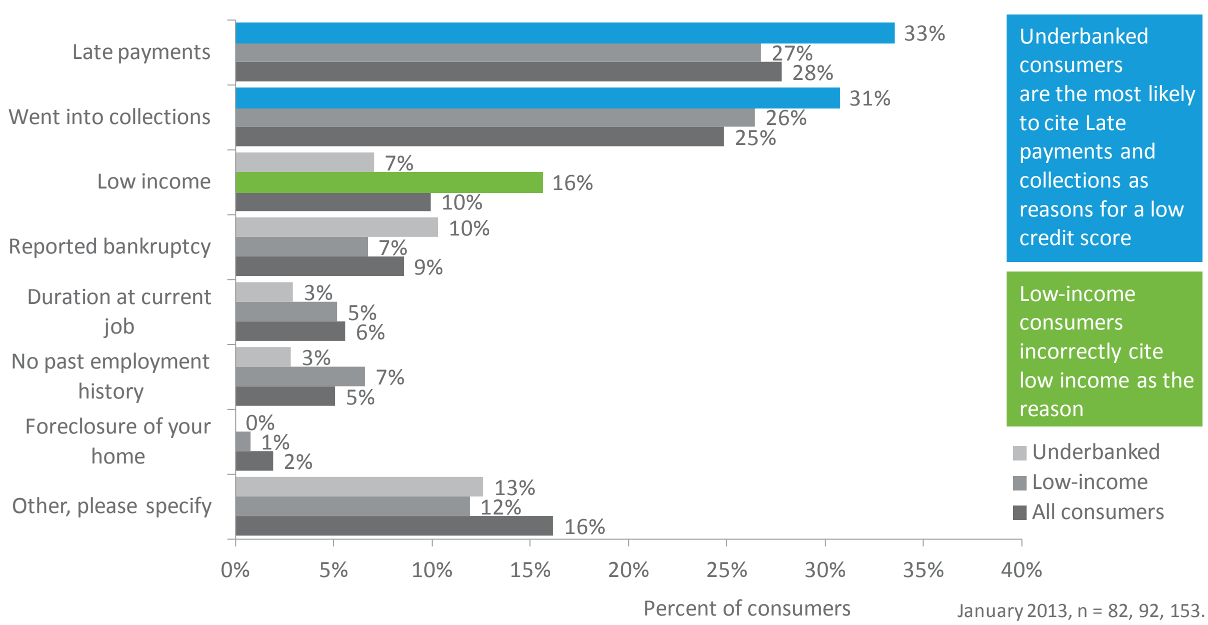


Q: When was the last time you applied for a credit card?

January 2013, n = 1,162, 146.
Base: Consumers aged 18 to 24, consumers aged 25 and older

Underbanked Consumers Cite Late Payments and Collections as Reasons for Having a Low Credit Score

Figure 17.Underbanked, Low-Income, and All Consumers' Reasons for Having a Low Credit Score

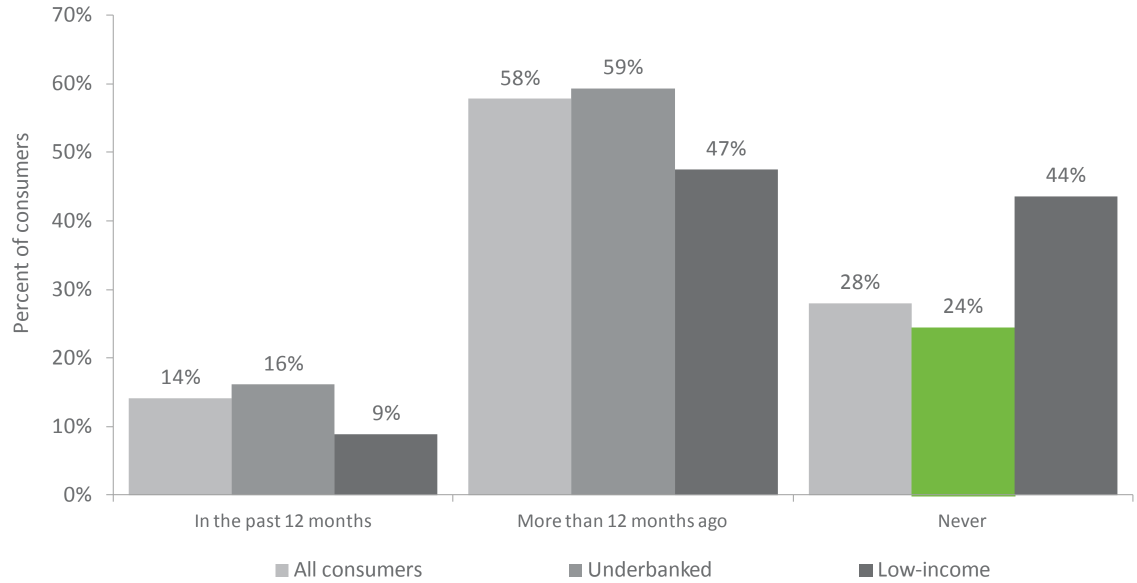


Q: What, according to you, has resulted in a low credit score the last time you viewed your credit score?

January 2013, n = 82, 92, 153.
Base: All consumers, underbanked, and Low-income consumers with a credit score below 680.

Low-Income Consumers Are Less Likely to Have Ever Applied for an Auto Loan

Figure 18.How Recently Underbanked, Low-Income, and All Consumers Have Applied for an Auto Loan

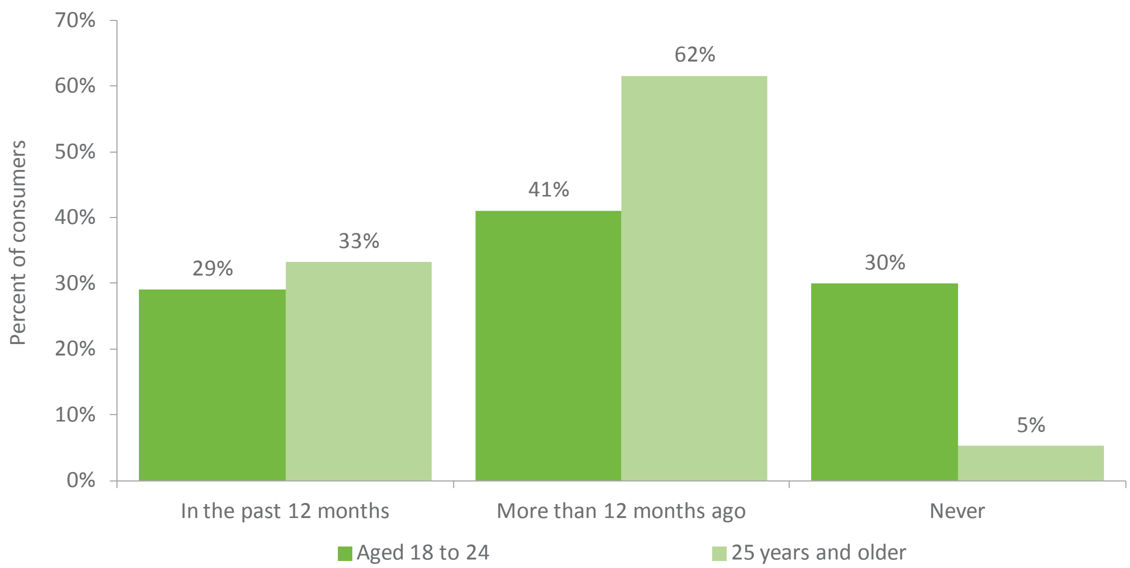


January 2013, n = 1,308, 332, 532
Base: All consumers, underbanked consumers, low-income consumers.

Q: When was the last time you applied for an auto loan?

Eighteen- to 24-Year-Old Consumers Are Over 25% Less Likely to Have Ever Applied for a Credit Card

Figure 19.How Recently Consumers Have Applied for Credit Cards by Age Range

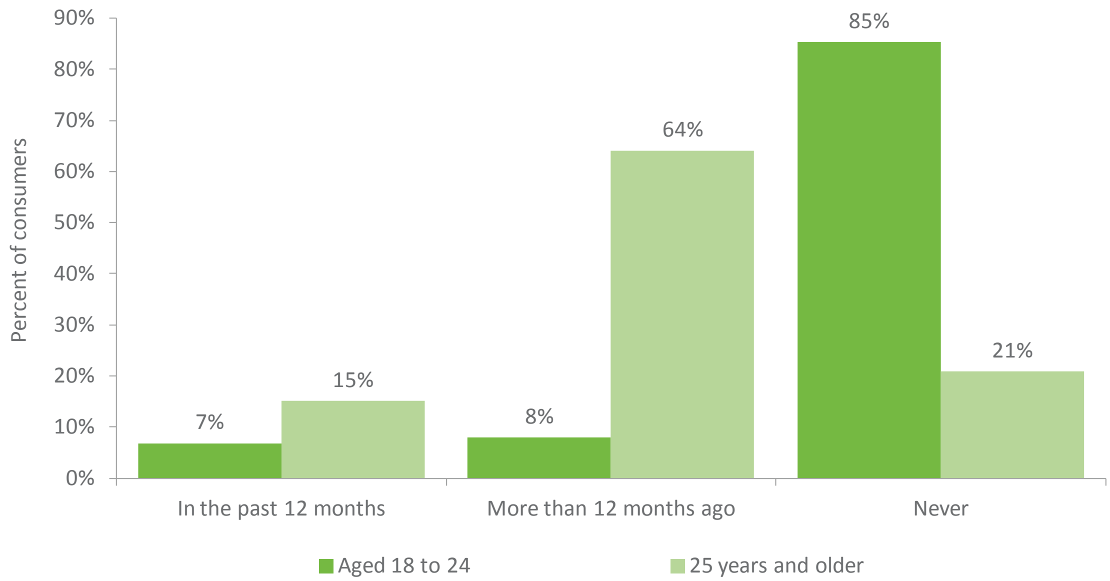


January 2013, n = 1,162, 146.
Base: Consumers aged 18 to 24, consumers aged 25 and older

Q: When was the last time you applied for a credit card?

Only 15% of 18- to 24-Year-Olds Have Ever Applied for an Auto Loan

Figure 20.How Recently Consumers Have Applied for Auto Loans by Age Range

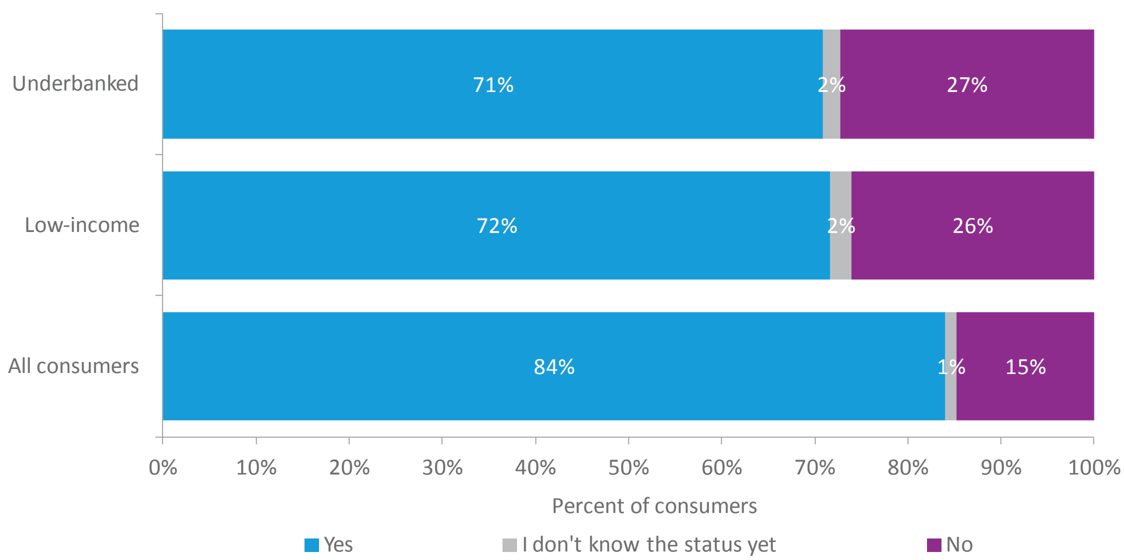


January 2013, n = 1,162, 146.
Base: Consumers aged 18 to 24,
consumers aged 25 and older
© 2013 Javelin Strategy & Research

Q: When was the last time you applied for an auto loan?

Underbanked and Low-Income Consumers Are Approximately 80% More Likely to Be Denied a Credit Card Than All Consumers

Figure 21.Approval Status of Credit Card Applications by Underbanked, Low-Income, and All Consumers

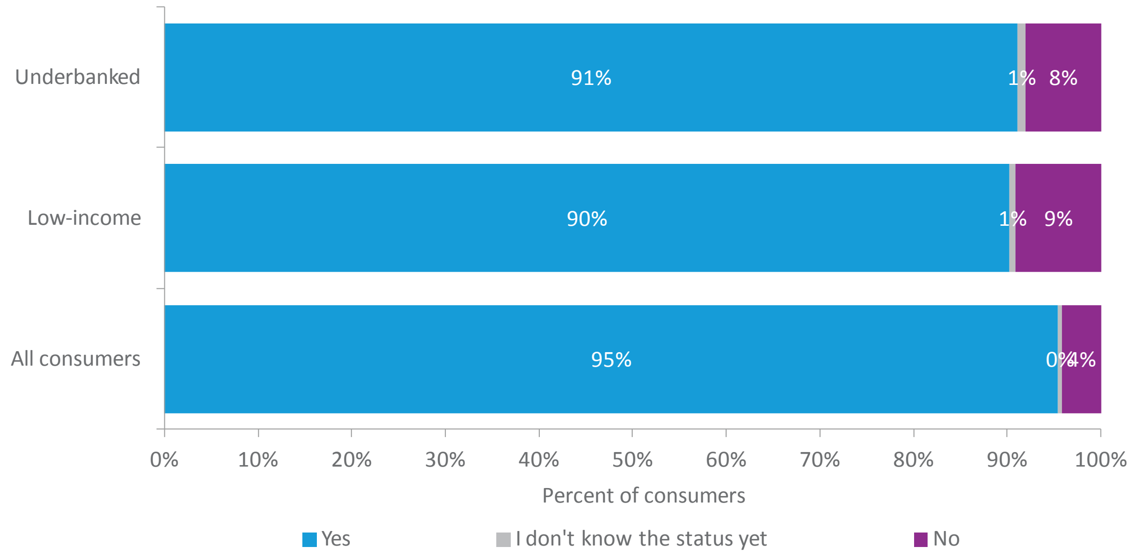


January 2013, n = 1,203, 316, 462
Base: All consumers, underbanked and low-income
consumers who have applied for a credit card.
© 2013 Javelin Strategy & Research

Q: The last time you applied for a credit card, was your application approved?

The Majority Are Approved for Auto Loans, But Low-Income and Underbanked Consumers Are Rejected Twice as Often

Figure 22. Approval Status of Auto Loans by Underbanked, Low-Income, and All Consumers

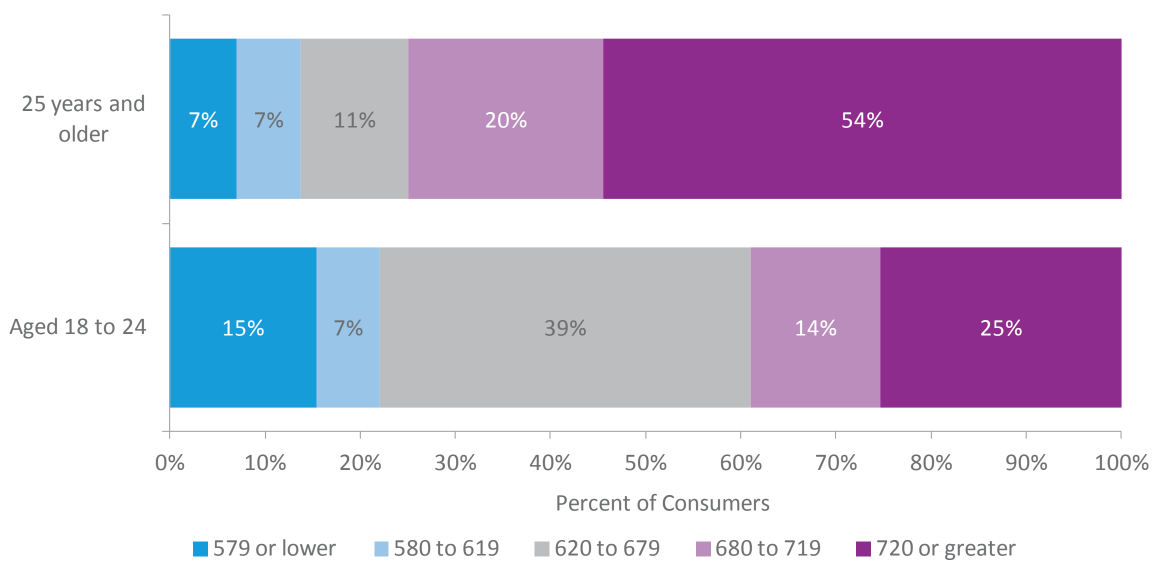


January 2013, n = 941, 250, 300
Base: All consumers, underbanked, and low-income consumers who have applied for an auto loan.

Q: The last time you applied for an auto loan, was your application approved?

Consumers Aged 18 to 24 Are Nearly 2.5 Times as Likely as Those 25 and Older to Have a Low Credit Score

Figure 23. Consumers' Most Recent Credit Scores by Age Range

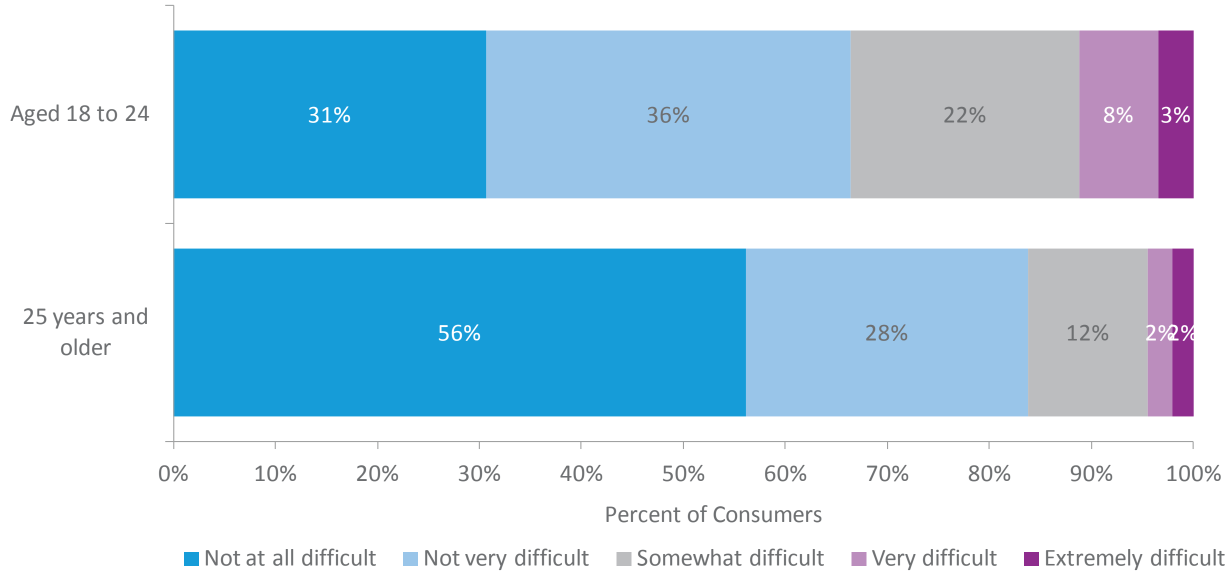


January 2013, n = 55, 533.
Base: Consumers who have seen their credit score in the past 12 months by age

Q: Please select the range that includes your most recent credit score.

Younger Consumers Find the Loan Application Process to Be More Difficult Than Those 25 and Over

Figure 24.Perceived Difficulty of the Loan Application Process by Age Range

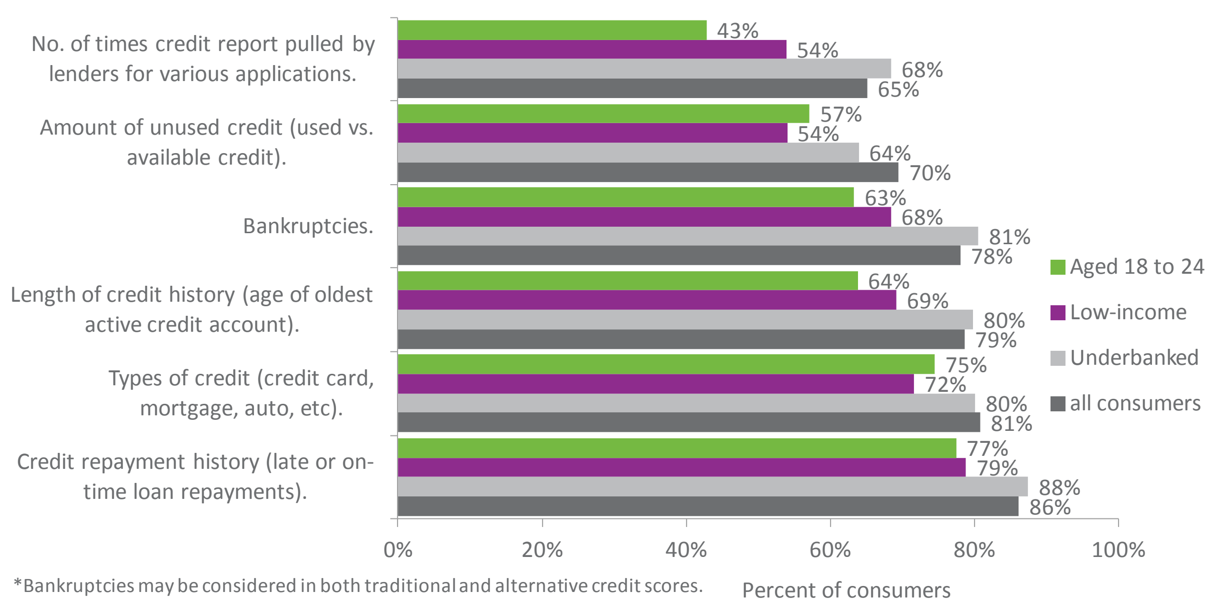


Q: On a scale of 1-5, please rate the level of difficulty in getting your loan application processed

January 2013, n = 104,1,109.
Base: Consumers who applied for a credit card or auto loan by age

Younger and Low-Income Consumers Are Less Likely to Identify Traditional Scoring Factors

Figure 25.Identification of Factors in a Traditional Credit Score by Population Segment



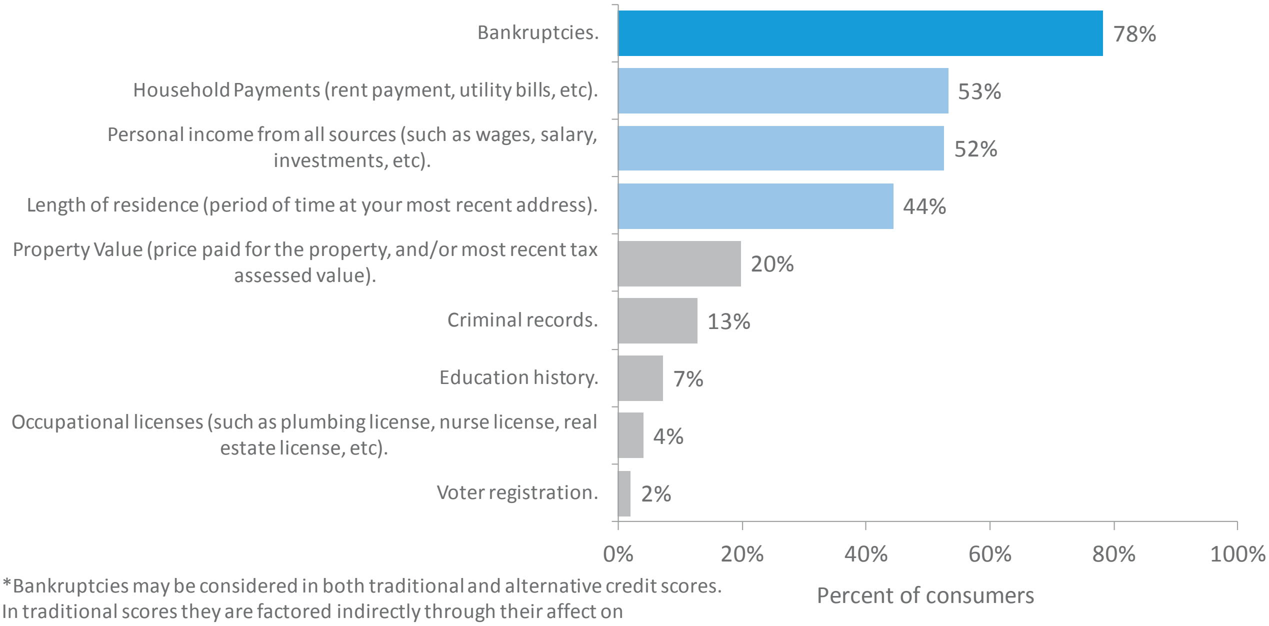
*Bankruptcies may be considered in both traditional and alternative credit scores. In traditional scores they are factored indirectly through their affect on specific records.

Q: When consumers apply for any kind of loan, the lenders often pull up their credit scores. To the best of your knowledge, which of the following factors are included when computing a person's credit score? (Traditional factors)

January 2013, n = varies 146 to 1,308
Base: All consumers, underbanked consumers, low-income consumers, consumers aged 18 to 24.

Consumers Identify Several Alternative Factors as Inputs into a Credit Score

Figure 26.Identification of Factors in a Credit Score



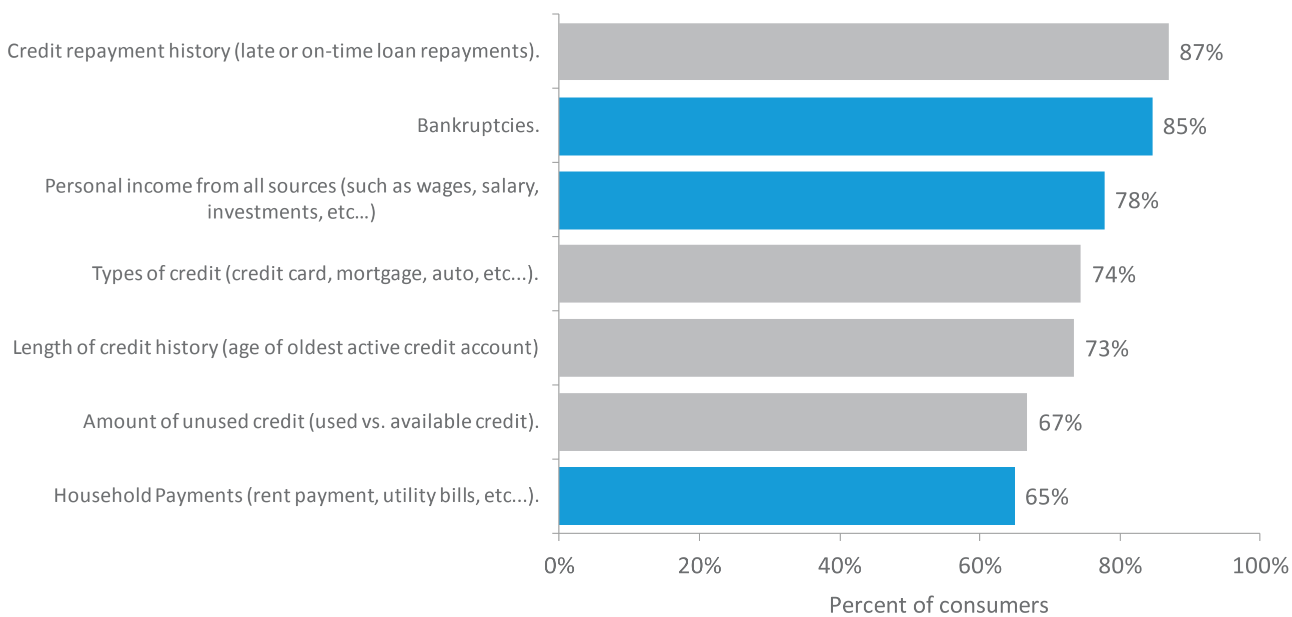
*Bankruptcies may be considered in both traditional and alternative credit scores. In traditional scores they are factored indirectly through their affect on specific records

Q: When consumers apply for any kind of loan, the lenders often pull up their credit scores. To the best of your knowledge, which of the following factors are included when computing a person's credit score? (Alternative factors)

January 2013, n = 1,308
Base: All consumers
© 2013 Javelin Strategy & Research

Consumers Consider Alternative Factors to be as Important to Lenders as Traditional Factors

Figure 27.Consumer Perceptions of the Importance of Credit Decisioning Factors to Lenders

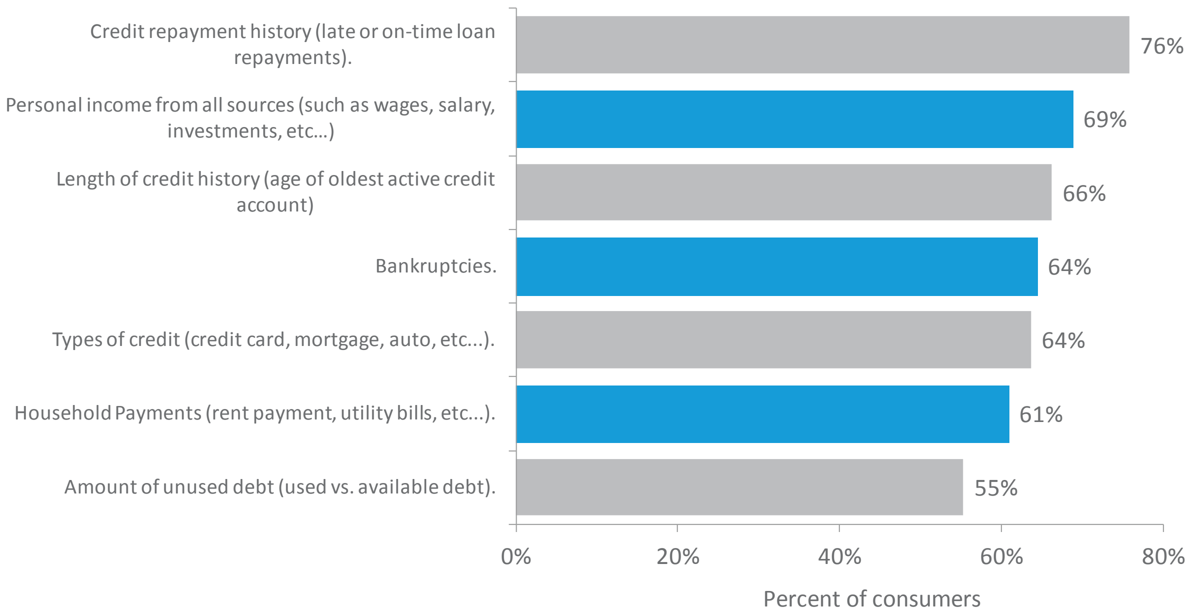


Q: Lenders are able to use numerous factors to determine credit worthiness. Please tell us how important are the following factors to a lender when evaluating consumer credit worthiness: (Very to Extremely important—Top rated seven items).

January 2013, n = 1,308
Base: All consumers.
© 2013 Javelin Strategy & Research

Consumers Believe that Several Alternative Factors are as Useful to them as Traditional Factors

Figure 28.Consumer Perceptions of the Usefulness of Credit Decisioning Factors to Them Personally

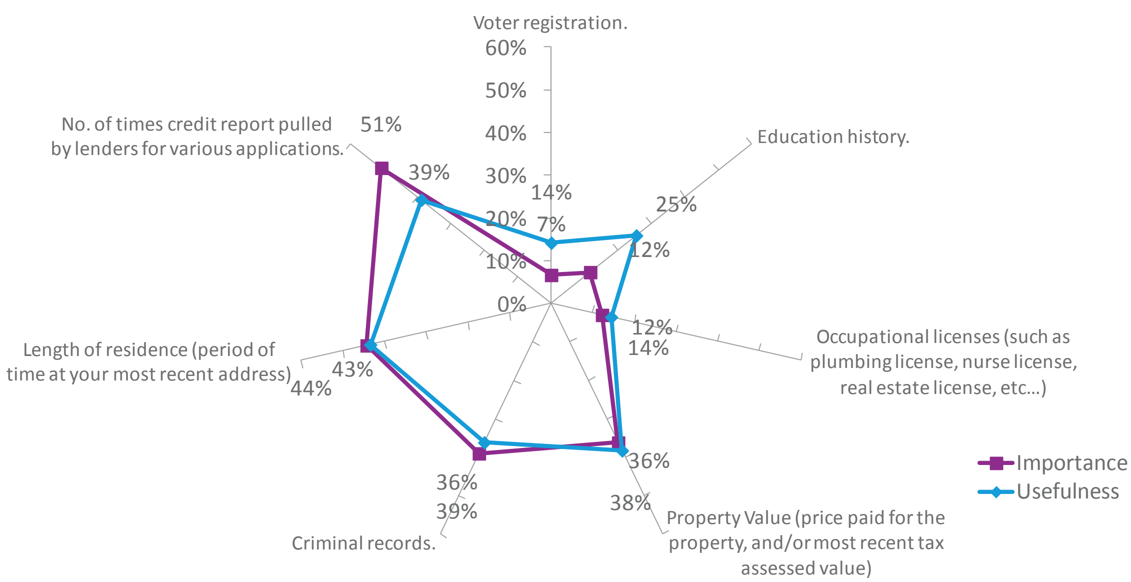


Q: Based on your current needs, and understanding of credit scores and a loan evaluation process, please tell us how useful is it to you that lenders consider the following factors when evaluating your loan application, next time you apply for a credit card or an auto loan: (Very to extremely useful - Top seven items shown).

January 2013, n = 1,308
Base: All consumers.
© 2013 Javelin Strategy & Research

Consumers Believe that Lenders Undervalue Education History and Voter Registration

Figure 29.Consumer Perceptions of Factors' Usefulness to them and Importance to Lenders

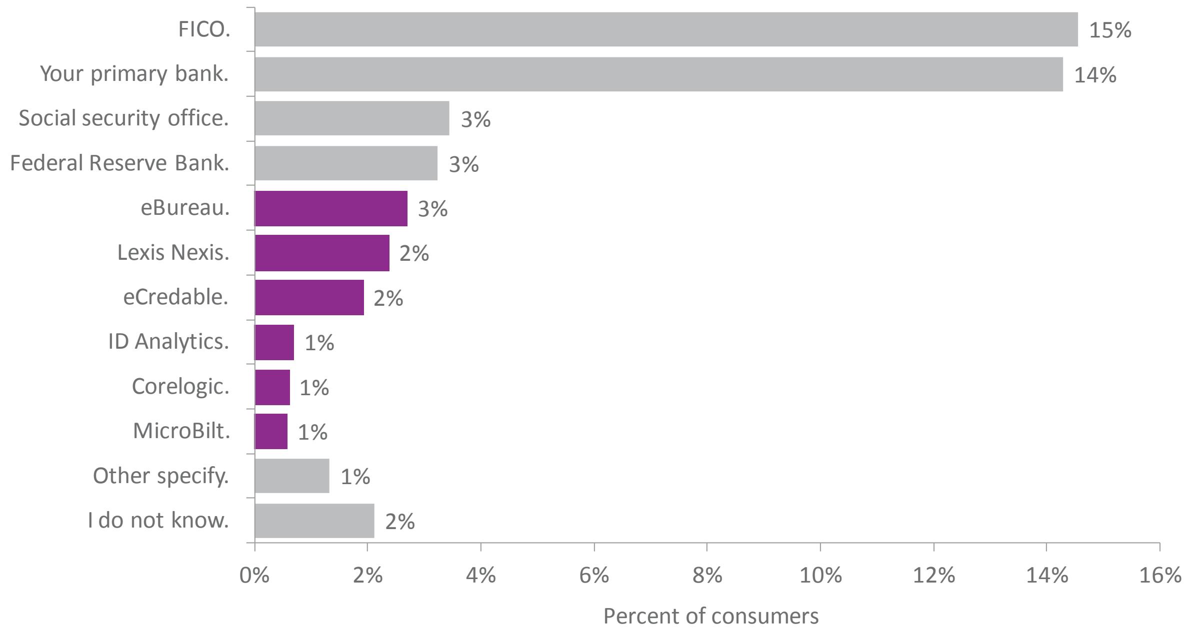


Q: How important are the following factors when evaluating consumer credit worthiness.
Q: Please tell us how useful is it to you that lenders consider the following factors when evaluating your loan application, next time you apply for a credit card or an auto loan: (Lowest rated items shown).

January 2013, n = 1,308.
Base: All consumers.
© 2013 Javelin Strategy & Research

Consumers are Relatively Unaware of ACDT Providers

Figure 30. Consumers' Identification of Credit Score Providers

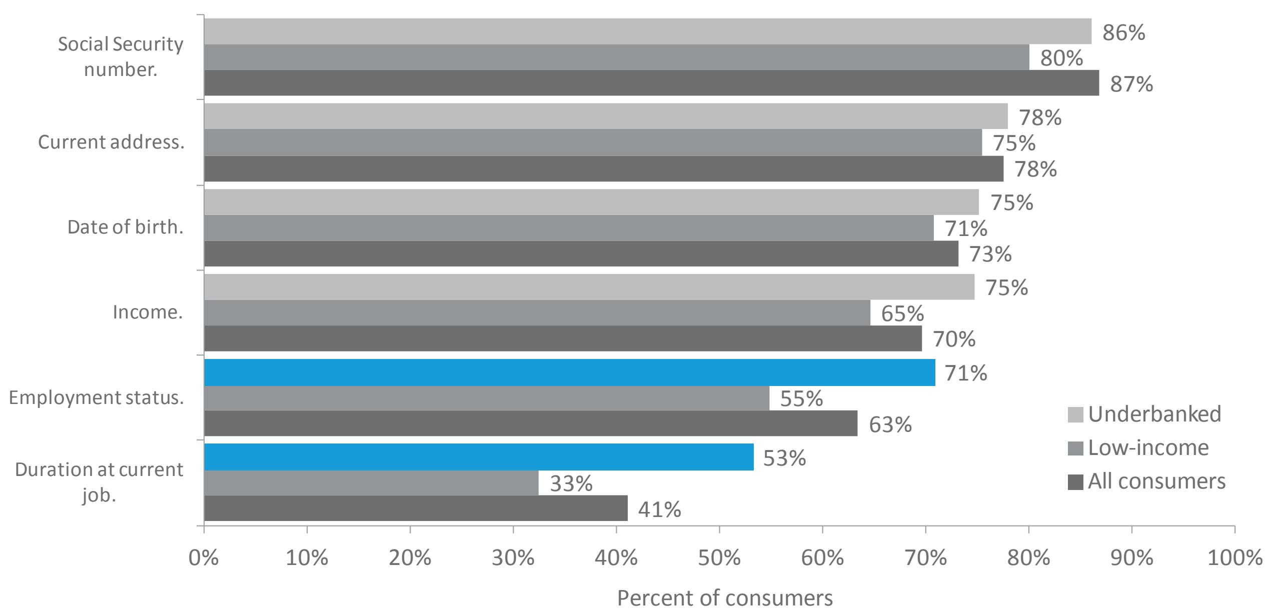


Q:When consumers apply for any kind of loan, the lenders often pull up their credit scores. To the best of your knowledge, which of the following organizations generate credit scores? (Selections other than major credit bureaus)

January 2013, n = 1,308
Base: All consumers.

Underbanked Consumers Are More Frequently Asked for Additional Information for Loan Applications

Figure 31. Top Six Pieces of Information Requested of Underbanked, Low-Income and All Consumers

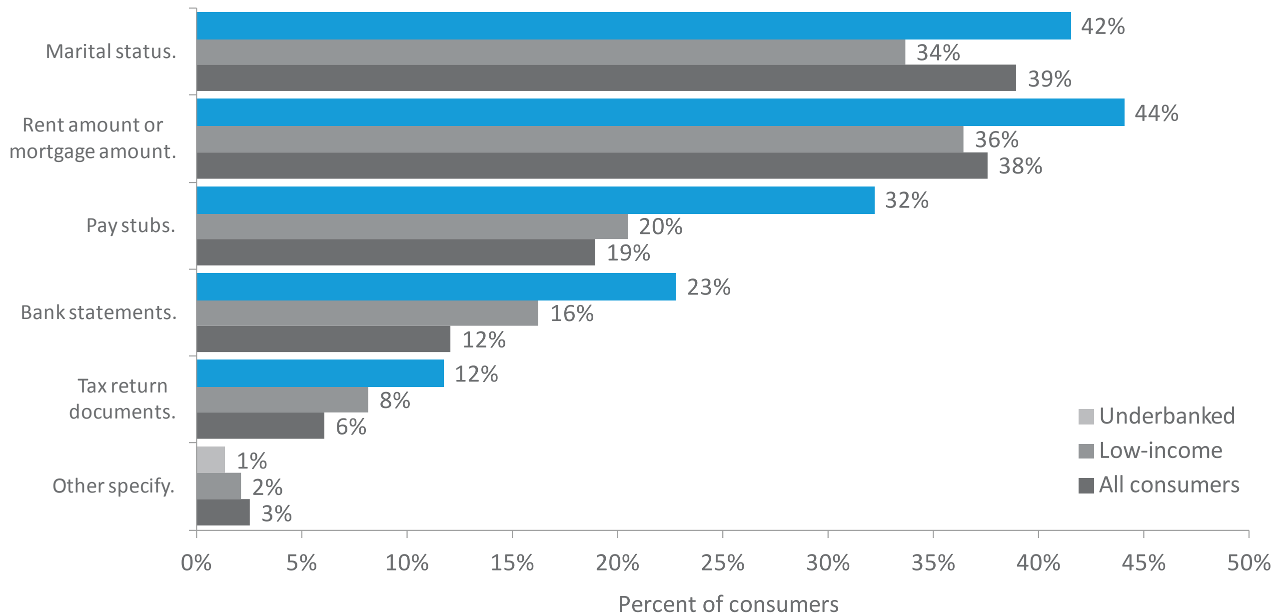


January 2013, n = 1,308, 332, 532
Base: All consumers, underbanked consumers, low-income consumers.

Q: Which of the following information or documents did you provide for your application to be processed? (Six most common pieces of information or documents)

Underbanked Consumers Are More Frequently Asked for Additional Information for Loan Applications (Continued)

Figure 31.Bottom Six Pieces of Information Requested of Underbanked, Low-Income and All Consumers



Q: Which of the following information or documents did you provide for your application to be processed? (Six least common pieces of information or documents)

January 2013, n = 1,308, 332, 532
Base: All consumers, underbanked consumers, low-income consumers.

Sources

[1] http://www.reuters.com/article/2013/04/03/us-usa-qe3-subprimeauto-special-report-idUSBRE9320ES20130403, accessed April 21, 2013.

[2] "Thin file" and "no file" refer to consumers with a scant or nonexistent credit history. Traditional bureau credit scores cannot be generated when a consumer's credit file contains insufficient information.

[3] http://www.cfsinnovation.com/system/files/imported/managed_documents/cfsi_valuealtcreditscore_nov07.pdf, accessed April 9, 2013.

[4] http://www.forbes.com/sites/jimhenry/2013/02/28/why-more-late-payments-on-auto-loans-are-actually-a-good-thing, accessed April 3, 2013.

[5] http://www.reuters.com/article/2013/04/03/us-usa-qe3-subprimeauto-special-report-idUSBRE9320ES20130403, accessed April 21, 2013.

[6] Executive at large subprime auto-lending institution, qualitative interview, Javelin Strategy & Research, March 2013.

[7] http://www.experian.com/assets/consumer-information/white-papers/auto-vision-wp.pdf, accessed April 3, 2013.

[8] Ibid.

[9] Ibid.

[10] Executive at large subprime auto-lending institution, qualitative interview, Javelin Strategy & Research, March 2013.

[11] http://www.americanbanker.com/issues/178_52/banks-brace-for-looming-crackdown-in-auto-lending-1057591-1.html, accessed April 4, 2013.

[12] Executive at small credit union, qualitative interview, Javelin Strategy & Research, February 2013.

[13] http://filene.org/assets/pdf-reports/202_Levitin_CARD_Act.pdf, accessed April 6, 2013.

[14] Ibid.

[15] Ibid.

[16] http://www.occ.gov/publications/publications-by-type/comptrollers-handbook/credit.pdf, accessed April 6, 2013.

[17] http://www.fdic.gov/regulations/examinations/credit_card/pdf_version/ch7.pdf, accessed April 6, 2013.

[18] http://filene.org/assets/pdf-reports/202_Levitin_CARD_Act.pdf, accessed April 6, 2013.

[19] Executive at midsize credit union, qualitative interview, Javelin Strategy & Research, February 2013.

[20] http://www.fdic.gov/householdsurvey/2012_unbankedreport.pdf, accessed April 9, 2013.

[21] 2011 Underbanked Market Sizing Study, Center for Financial Services Innoivation, November 2012.

[22] Large auto-lending corporation, qualitative interview, Javelin Strategy & Research, January 2013.

[23] Large credit issuer, qualitative interview, Javelin Strategy & Research, January 2013.

[24] Medium-size auto lender, qualitative interview, Javelin Strategy & Research, January 2013.

[25] Large auto-lending corporation, qualitative interview, Javelin Strategy & Research, January 2013.

[26] Large credit issuer, qualitative interview, Javelin Strategy & Research, January 2013.

[27] A "bad rate" in lending is defined as the ratio of "bad performing" to "good performing" borrowers, where "bad performance" indicates a payment is delinquent by 90 days or more.

[28] Large credit issuer, qualitative interview, Javelin Strategy & Research, January 2013.

[29] Ibid.

[30] Medium-size credit union, qualitative interview, Javelin Strategy & Research, December 2012.

[31] Medium-size auto lender, qualitative interview, Javelin Strategy & Research, January 2013.

[32] Large auto-lending corporation, qualitative interview, Javelin Strategy & Research, January 2013.

[33] Large credit issuer, qualitative interview, Javelin Strategy & Research, January 2013.

[34] Large auto-lending corporation, qualitative interview, Javelin Strategy & Research, January 2013.

[35] Large auto lender, qualitative interview, Javelin Strategy & Research, January 2013.

[36] The K-S, or Kolmogorov-Smirnov statistic, is a measure of goodness-of-fit commonly used to test actual against expected performance on lending portfolios.

[37] Large auto-lending corporation, qualitative interview, Javelin Strategy & Research, January 2013.

[38] Large bank, qualitative interview, Javelin Strategy & Research, January 2013.

[39] The "look-to-book ratio" is the ratio of the number of applicants for whom an underwriting process is begun to the number for whom a loan is eventually originated. Improving the look-to-book ratio reduces or offsets underwriting costs to lenders.

[40] Large auto lender, qualitative interview, Javelin Strategy & Research, January 2013.

[41] Large credit union, qualitative interview, Javelin Strategy & Research, January 2013.

[42] Large auto lender, qualitative interview, Javelin Strategy & Research, January 2013.

[43] Large credit issuer, qualitative interview, Javelin Strategy & Research, January 2013.

[44] Large bank, qualitative interview, Javelin Strategy & Research, January 2013.

[45] Medium-size credit union, qualitative interview, Javelin Strategy & Research, December 2012.

[46] Large credit union, qualitative interview, Javelin Strategy & Research, February 2012.

[47] Small credit union, qualitative interview, Javelin Strategy & Research, December 2012.

[48] Ibid.

[49] Medium-size credit union, qualitative interview, Javelin Strategy & Research, December 2012.

[50] Executive at large credit union, qualitative interview, Javelin Strategy & Research, February 2013.

[51] http://www.cfsinnovation.com/system/files/imported/managed_documents/cfsi_valuealtcreditscore_nov07.pdf, accessed April 9, 2013.

[52] http://news.equifax.com/2013-02-08-Equifax-Reports-Total-Auto-Loans-Balances-at-Highest-Levels-in-More-Than-40-Months, accessed April 9, 2013.

[53] http://uk.reuters.com/article/2013/04/03/us-usa-qe3-subprimeauto-special-report-idUKBRE9320ES20130403, accessed April 9, 2013.

[54] Regulator, qualitative interview, Javelin Strategy & Research, February 2012.

[55] Ibid.

[56] Ibid.

[57] Ibid.

[58] Ibid.

[59] Ibid.

[60] Ibid.

[61] Ibid.

[62] Ibid.

[63] Ibid.

[64] Ibid.

[65] Equifax: http://news.equifax.com/2013-02-08-Equifax-Reports-Total-Auto-Loans-Balances-at-Highest-Levels-in-More-Than-40-Months, accessed April 9, 2013.

[66] http://www.ftc.gov/os/comments/motorvehicleroundtable/00105-82872.pdf, accessed April 9, 2013.

[67] Executive at large bank, qualitative interview, Javelin Strategy & Research, January 2013.

[68] http://www.bankrate.com/finance/auto/rate-roundup.aspx, accessed February 14, 2013.

[69] http://www.experian.com/assets/automotive/white-papers/2012-q3-state-of-automotive-financing.pdf, accessed April 9, 2013.

[70] http://www.experian.com/assets/consumer-information/white-papers/auto-vision-wp.pdf, accessed April 9, 2013.

[71] Executive at large bank, qualitative interview, Javelin Strategy & Research, January 2013.

[72] http://data.newyorkfed.org/creditconditions, accessed April 9, 2013.

[73] Javelin consumer survey data, qualitative interview, Javelin Strategy & Research, January 2013.

[74] Range of estimates gathered from various credit card issuers' websites, qualitative interview, Javelin Strategy & Research, March 2013.

[75] Executive at large bank, qualitative interview, Javelin Strategy & Research, March 2013.

[76] Range of estimates gathered from various credit card issuers' websites, qualitative interview, Javelin Strategy & Research, March 2013.

[77] Ibid.

[78] http://www.cardfellow.com/blog/average-fees-for-credit-card-processing/, accessed April 9, 2013.

[79] 2013 Retail Point of Sale (POS) Update and Forecast: Mobile and Prepaid Open New Possibilities, Javelin Strategy & Research, April 2013.

[80] Executive at large bank, qualitative interview, Javelin Strategy & Research, March 2013.

[81] http://www.cfsinnovation.com/system/files/imported/managed_documents/cfsi_valuealtcreditscore_nov07.pdf, accessed April 9, 2013.

About Javelin Strategy & Research

Javelin Strategy & Research, a division of Greenwich Associates, provides strategic insights into customer transactions, increasing sustainable profits for financial institutions, government, payments companies, merchants and other technology providers.

The views expressed by Javelin Strategy & Research are not necessarily those of LexisNexis.

The opinions and quotes expressed in this paper are those of the interviewees and do not necessarily reflect the positions of LexisNexis.

For more information:

Call: 800-869-0751
Visit: lexisnexis.com/risk/credit-risk-management
Or email creditrisk@lexisnexis.com

About LexisNexis Risk Solutions

LexisNexis Risk Solutions (www.lexisnexis.com/risk) is a leader in providing essential information that helps customers across all industries and government predict, assess and manage risk. Combining cutting-edge technology, unique data and advanced scoring analytics, we provide products and services that address evolving client needs in the risk sector while upholding the highest standards of security and privacy. LexisNexis Risk Solutions is part of Reed Elsevier, a leading publisher and information provider that serves customers in more than 100 countries with more than 30,000 employees worldwide.

LexisNexis®

NXR02048-0 0513