CREDIT SCORES AND MORTGAGE LENDING

Credit scores are numbers calculated to measure the risk of delinquency or default posed by a consumer seeking credit. They are used by potential lenders to rank consumers and determine whether a consumer qualifies for a loan, how much the consumer will be loaned, and at what rate. While credit scores have been used for decades, their use has increased dramatically in recent years.

More than 10 billion credit scores calculated using credit-scoring models developed by the primary national credit scoring company have been sold.[1] The company estimates that these credit scores are a determining factor in 90 percent of all consumer credit decisions in the United States.[2]

Credit scores[*] are widely used in the mortgage lending industry. By one estimate, over 75 percent of all home mortgage loan decisions use credit scores as a significant factor in the decision-making process.[3] Bureau scores are generally used in mortgage lending as an initial screen for mortgage applicants and, in many cases, become the foundation of the mortgage decision.[4]

This Issue Brief describes the growth in credit score use and how credit scores are calculated. It also discusses issues associated with the use of credit scores such as access, cost, the consistency, and the accuracy of credit scores.

Growth in the Use of Credit Scores

The increasing use of credit scores results from several factors including technological advances, the increasing use of risk-based pricing by lenders, the expanding number of industries using credit scores, and recent decisions by the credit-scoring industry to provide consumers with access to their credit scores for the first time.

Technological Advances

Increasingly, technological advances have allowed lenders to automate many steps of the mortgage loan process. These advances have increased the speed and efficiency of lending decisions, and decreased the cost of the loan origination process.[5] According to one estimate, these advances allow many lenders to make 80 percent or more of their lending decisions without the involvement of a loan officer.[6]

Today, credit scores can be calculated rapidly using complex statistical formulas. For example, one company that develops credit-scoring models indicates that their credit scores can evaluate over 80 predictive variables, depending on the scoring model used.[7] Such credit scores can be immediately transmitted to the lender by computer, providing nearly instantaneous analysis of a consumer's credit record.[8]

Another important technological advance now widely used by the mortgage lending industry is automated underwriting (AU). Using AU systems, lenders quickly evaluate a wide range of information including consumer credit history, property information, and loan type to determine the likelihood of a consumer's repaying a mortgage loan as agreed.[9] Generally, bureau credit scores are used in AU to indicate consumer credit history, and thus are a primary factor in the evaluation of mortgage applications.[10]

AU systems are used both by secondary market institutions and lenders. In the secondary market, the two largest Government Sponsored Enterprises (GSEs), the Federal Home Loan Mortgage Corporation (Freddie Mac) and the

[*] Credit scores are based either solely on consumer credit reports (bureau scores), or on a number of factors in addition to credit reports such as income and employment history (application scores). This paper will focus on bureau scores as these are the scores generally used by mortgage lenders.

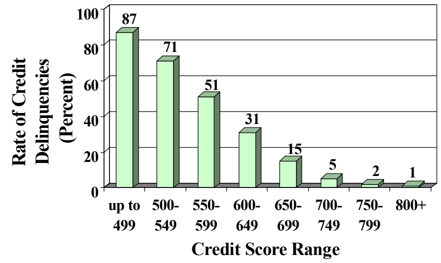
Federal National Mortgage Association (Fannie Mae) have each developed AU systems.[11] In 2000, the Freddie Mac AU system processed 3.8 million loans.[12] Because Freddie Mac and Fannie Mae purchase, on average, 58 percent of all residential conforming mortgages,[13] lenders often model their practices to meet the GSEs' standards. Most large mortgage lending companies use AU systems; it is currently estimated that approximately 60 to 70 percent of all mortgages are underwritten using an AU system.[14]

Increase in Risk-Based Pricing

Increasingly, lenders are using risk-based pricing to make loan decisions in both the prime and subprime mortgage markets.[15] In risk-based pricing, a consumer's credit risk determines how much credit he or she will receive, and the terms and features of the loan.[*] Credit scores are a significant factor in risk-based pricing since they are a key predictor of credit risk.[16] While different credit-scoring models use diverse scales, most credit scores use a score range between 300 and 900 with lower scores indicating greater credit risk.

Figure 1 shows that borrowers with lower credit scores have higher delinquency rates.

Figure 1
Delinquency* Rates by Credit Score



Source: Fair, Isaac and Company, Inc. (2001).

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* Delinquencies are payments that are at least 90 days late on any credit accounts.

Similarly, a recent industry study found that consumers with low credit scores are more likely to have been delinquent in mortgage payments (Figure 2).[17]

Figure 2
Credit Scores and Mortgage Loan Performance Ratio

Credit Score	Loans Non-Delinquent : Delinquent*
Under 600	**8 : 1**
700-719	**123 : 1**
Over 800	**1292 : 1**

Source: D. Shellenberger. (1998).

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* Delinquent loans are those that result in payments that are at least 90 days late, or result in foreclosure.

While generally applied to higher-risk borrowers, risk-based pricing has also been applied to lower-risk applicants. Some lenders use risk-based pricing to offer consumers with very high credit scores an interest rate that is below the advertised prime rate, allowing these consumers to borrow greater amounts of money.[18] Some lenders may also individualize the interest rate charged to a borrower based upon a number of factors including credit scores.[19]

Expanding Uses of Credit Scores

Credit scores are increasingly being used by non credit-related industries to evaluate risk. For example, some insurance companies charge

[*] However, some studies have shown that many borrowers qualifying for low-risk loans have higher-cost subprime loans. For example, see Federal Home Loan Mortgage Corporation, "Automated Underwriting Report: Making Mortgage Lending Simpler and Fairer for America's Families." (September 1996).

higher premiums on automobile and home policies to consumers with low credit scores.[20] Many employers use credit scores to evaluate job applicants and current employees, and some landlords use credit scores to evaluate prospective tenants.[21]

Increasing Direct Consumer Access to Credit Scores

Until recently, consumers were unable to access their credit scores directly. However, increased consumer interest in obtaining credit scores has, in part, led to changes in industry practices.[22] One company that recently began selling credit scores and associated explanatory information to consumers received more than 40 million consumer inquiries in the first 90 days of their offer.[23] A number of companies now offer to disclose credit scores and explanatory information to consumers, which has resulted in strong consumer response and increased sales of credit scores.[24]

How Credit Scores are Calculated

A variety of credit-scoring statistical models are used to generate credit scores, each using unique algorithms. The primary source for credit scores used in mortgage lending decisions are the three national Credit Reporting Agencies (bureaus)[25] which collectively store over 450 million files on individual consumers and process over 2 billion pieces of consumer credit data each month.[26] Each bureau has a number of exclusive proprietary credit-scoring models that generate unique credit scores, and consequently, consumers can have more than one credit score.

Credit-scoring models are based upon credit reports of consumers who have acquired credit in the past. These credit reports are statistically analyzed to identify characteristics that predict the likelihood of debt repayment. Each of these characteristics is then assigned a weight based on how well it predicts the likelihood of repayment.

Four categories of data are collected and reported in a credit report:[27] personal information, credit information, public record information, and inquiries.[*] The three bureaus independently collect data used to build a consumer credit report.[28]

Five general categories of data[29] are gathered from credit reports and used in credit-scoring models:[30] previous payment history, amount of money owed, length of credit history, amount of new credit sought, and types of credit in use. In accordance with the Equal Credit Opportunity Act (ECOA), factors including gender, income, race, religion, marital status, and national origin may not be used in credit-scoring models.

Credit scores represent a snapshot of the consumer's credit history at the time the credit score is generated.[31] Bureaus continually receive new information and update credit report files, and, therefore, consumers' credit scores can change frequently.

Credit Score Issues

The increased reliance upon credit scores in lending decisions, especially among mortgage lenders[32] has raised a number of issues: access, cost, consistency, and accuracy.

Access

While consumers now have greater access to their credit scores, the scores they receive are often different from the scores used by lenders. Thus, unless the consumer sees the actual credit score used in the lending decision, the consumer cannot be sure what credit score the lender is using.

In fact, two of the bureaus release credit scores to consumers that are based on credit-scoring models not typically used by lenders. This prevents consumers from comparing such scores with credit scores used by lenders since they do not have access to information about the precise differences among the models. Another bureau is releasing credit scores produced by an older, less sophisticated credit-scoring model to

[*] An inquiry is a request by a creditor for a copy of a consumer's credit report.

consumers,* while offering credit scores generated by a more advanced credit-scoring model to *lenders*. Lenders have the option to reveal to consumers the credit score used during the mortgage application process; however, this requires that the consumer first apply for a mortgage.

In addition, consumers do not have access to the specific variables being evaluated and their relative importance (i.e., weight). Without access to these data, consumers do not know how financial transactions such as closing credit accounts impact their credit scores.

Cost

Consumers are often charged a fee to obtain their credit scores. Many businesses release both the credit score and the credit report from which the credit score was calculated. Under the Fair Credit Reporting Act (FCRA), bureaus can charge a fee of up to $8.50[33] for credit reports, and can also charge additional fees for credit scores.[34] Currently, most mortgage lenders examine credit scores from each of the three bureaus and select the middle score for use in their lending decision. Thus, consumers need to examine their credit scores and credit reports from the three bureaus. Even so, each of the three scores may differ from the score used by the lender.

Consistency

There are often inconsistencies among credit scores generated by the three bureaus. According to the National Credit Reporting Association, consumer credit score variances of 100 points or more for the same consumer from different credit repositories are not uncommon.[35]

A major source of inconsistency among bureau scores is the information that bureaus receive from creditors. Creditor information may be incorrect, incomplete, or missing positive credit information.[36] Creditors are not required to report account payment information to any of the bureaus, and creditors may choose to report to none, one, two, or all three bureaus.

One reason inconsistencies are an increasingly important issue is that Fannie Mae and Freddie Mac are considering using a single credit report and credit score to evaluate a consumer's credit history instead of obtaining credit reports and scores from each of the three bureaus.[37] Given the variances in scores generated by the bureaus, there is concern that reliance on a single credit report and credit score will place consumers at a disadvantage.[38]

Accuracy

Methodological issues regarding the accuracy of credit scores have been raised based upon the procedures used to develop credit-scoring models. A national study concludes that developing bureau credit-scoring models through national population samples may omit potentially important variables relating to local and regional economic conditions.[39] The study suggests that credit scores calculated from samples not adjusted for local and regional economic conditions could result in inaccurate credit scores.

The analysis also suggests that some segments of the population, (the very poor, the less educated, and persons living in central city areas) may be underrepresented in bureau files. As a result, individuals from underrepresented populations may be excluded from the samples used in the development of credit-scoring models. Credit-scoring models derived from such samples may not provide an accurate indication of credit risk for consumers from these underrepresented populations, resulting in inappropriate credit scores.[40]

Questions have been raised by consumer groups concerning whether minorities are appropriately represented in credit bureau files. A study completed by the primary national credit score company examining high-minority area (HMA) populations found that while residents of HMAs accounted for 8 percent of the U.S. adult population, they only accounted for 7 percent of

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* This credit score is only available online and, therefore, requires the consumer to have computer access.

credit bureau files.[41] A second study found that 22 percent of Hispanic mortgage borrowers had no credit score due to the lack of credit history, compared to 3 percent of African-Americans and 4 percent of white borrowers.[42]

Finally, there are long-standing concerns about the accuracy of information contained in consumer credit reports. One study examining credit reports found that over half of the credit reports examined contained errors.[43] A second study found that 70 percent of credit reports investigated contained incorrect information; 29 percent contained errors significant enough to have serious adverse consequences on the consumer's credit.[44] Credit reports with erroneous negative information will result in lower credit scores for the consumer, and could potentially result in the consumer being denied credit, or being forced to accept less favorable terms than his or her credit merits.

Policy Options

As credit scores have become an increasingly important factor in consumer credit decisions, policymakers have made efforts to address the following concerns:

Access

<u>Increasing consumer access to credit scores and accompanying information</u>

Both federal and state policymakers are seeking to increase consumer access to credit score information. California is currently the only state to entitle consumers to their credit scores.[45] Californians have the right to request credit scores and related information directly from credit bureaus. The credit bureau is permitted to charge a fee for both the credit score and credit report.

When a credit score is requested, California law requires credit bureaus to provide the consumer with:

- *The consumer's current credit score or the consumer's most recent credit score that was previously calculated by the credit reporting agency for a purpose related to the extension of credit.*
- *The range of possible credit scores under the model used.*
- *All the key factors that adversely affected the consumer's credit score in the model used, the total number of which shall not exceed four.*
- *The date the credit score was created.*
- *The name of the person or entity that provided the credit score or credit file upon which the credit score was created.*

Similar federal legislation has been proposed.[46] Additionally, several states have recently proposed comparable legislation.[47]

<u>Providing consumers with credit scores during the lending decision-making process</u>

Both federal and state policymakers are seeking to require lenders to show consumers a credit score the lender used in connection with the mortgage decision-making process.

Currently, California is the only state that requires this disclosure. In the process of a mortgage application, the lender is required to disclose either a credit score supplied by a bureau or a credit score developed by the lender, if that score is used in the decision-making process. In addition, the lender must provide the same explanatory information as is required for credit score disclosure by the bureaus.

Legislation similar to the California law has been proposed both at the state[48] and federal levels.[49]

Cost

<u>Providing free or reduced cost credit reports to consumers</u>

Several states have sought to limit the cost to consumers of obtaining copies of their credit reports. Currently, six states entitle consumers to receive free annual credit reports from credit bureaus upon request.[50] Proposed legislation at both the federal and state levels would similarly entitle consumers to free annual credit reports.[51]

Additionally, five states cap the cost of credit reports below the federally mandated level of $8.50.[52]

Consistency and Accuracy

Reporting consumer credit information to each bureau

Credit information, both good and bad, needs to be disseminated to all three bureaus. Non-reporting of positive credit information can prevent consumers from moving out of high-cost loans into lower-cost loans despite a good payment history. In a recent speech, the Comptroller of the Currency suggested that corrective legislation may be necessary to require the reporting of credit information to credit bureaus to protect consumers in the subprime market.[53] In addition, credit information needs to be submitted to each of the bureaus to minimize discrepancies between the bureau credit files.

Ensuring credit-scoring models accurately measure the credit risk of all consumers

Studies examining credit scores suggest that certain populations are underrepresented in the credit bureau files used to create credit-scoring models. Individuals in these underrepresented populations may not have their credit accurately assessed based upon credit-scoring models created under such circumstances. For this reason, it is important that the accuracy of credit-scoring models be tested and verified to ensure that the models accurately evaluate the credit risk of all segments of the population. It is possible for credit-scoring models to be adjusted and take into account local and regional conditions to strengthen the predictive capabilities of credit scores.

Providing stronger enforcement of consumers' rights to correct inaccurate credit report information

Recently, the Federal Trade Commission (FTC) fined the three bureaus for failing to provide consumers with adequate access to credit bureau personnel as required under FCRA.[54] In addition, the FTC found that millions of consumers seeking to discuss the contents of their credit reports had their calls blocked or were kept on hold for unreasonably long periods of time.[55] Enhanced enforcement of consumer rights under FCRA would help consumers to maintain accurate credit reports.

Summary

Credit scores have become an important tool in measuring consumer credit risk. Consumer credit risk is an important factor in how much credit consumers qualify for, as well as the terms and features of the credit. The use of credit scores has allowed the decision-making process of the lender to be much quicker, thereby allowing more rapid access to credit for the consumer. However, as the use of credit scores continues to expand, issues relating to consumer access to credit scores, the cost to consumers for this access, the consistency of credit scores, and the accuracy of credit scores will continue to be raised.

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[46] H.R. 2856, and H.R. 4644 were introduced in the 106th Congress. H.R. 1176 was introduced in the 107th Congress.

[47] Similar legislation was introduced in the 2001 state legislative sessions in: Hawaii (H.B. 55), Illinois (S.B. 0594), Kansas (H.B. 2254), Massachusetts (S. No. 24), Tennessee (H.B. 1452), and Washington (S.B. 5196).

[48] Similar legislation was introduced in the 2001 state legislative sessions in: Colorado (H.B.01-1072), Hawaii (H.B. 55), Illinois (S.B. 0594), Kansas (H.B. 2254), and Tennessee (H.B. 1452).

[49] S. 3063 was proposed in the 106th Congress and S. 1242 was introduced in the 107th Congress.

[50] The states are: Colorado, Georgia, Maryland, Massachusetts, New Jersey, and Vermont. <http://acb.cyberserv.com/qs/qspage.cfm?>

[51] H.R. 1176 was introduced in the 107th Congress. Louisiana (S.B. 313) and Oregon (H.B. 2350) each introduced similar bills in the 2001 state legislative sessions.

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