# FEDERAL RESERVE BANK OF SAN FRANCISCO

## Community Investments Vol. 10, Issue 3 Credit Scoring and the Secondary Market: Perceptions, Policies, Practices

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When you think of the secondary mortgage market, it is likely Freddie Mac and Fannie Mae come to mind. As two of the largest sources of home mortgage funds in the nation, Freddie Mac and Fannie Mae purchase mortgages from lenders, package them into securities, and sell them to investors. In doing so, they replenish the pool of funds available for new mortgages. Chartered by Congress to increase the supply of capital for housing, Freddie Mac and Fannie Mae provide continuous, low-cost funds for our nation's homebuyers and renters.

With credit scoring here to stay, many wonder how it will affect the flow of capital for our nation's housing. This article addresses how the secondary mortgage market is handling credit scoring. In a series of questions posed by Community Investments, experts Henry Cassidy from Freddie Mac and Robert Engelstad from Fannie Mae discuss how credit scored loans are treated, highlighting policies and practices for loan buy-backs and loan pricing. They also address common perceptions and misperceptions about the processing and purchasing of credit scored loans. Sharing the lessons they have learned about credit scoring, Mr. Cassidy and Mr. Engelstad offer suggestions on how new underwriting services and credit scoring

instruments can help lenders find good loans and increase the flow of low-cost capital for our nation's housing needs.

### **Loan Purchases and Buy-Back Policies**

To what extent does a credit score affect the purchase of a loan and the possibility of a buy-back?

**Fannie Mae** - Fannie Mae's quality control underwriting reviews include an assessment of the borrower's credit history and score in the very same manner that we advise lenders--as just one part of a comprehensive analysis of the mortgage application. The evaluation of a borrower's management of credit--whether this evaluation includes a credit score or not--is only one factor in a mortgage underwriting decision. Fannie Mae's underwriting review also considers the loan terms, the borrower's ability to repay the loan, the value of the property and other factors to determine whether or not the loan meets Fannie Mae guidelines.

Loan repurchases are rare; last year we had approximately one repurchase for every one thousand mortgages that Fannie Mae purchased. Also, we do not require repurchases of mortgages for underwriting reasons as long as the mortgage is not delinquent.

**Freddie Mac** - Freddie Mac maintains standards for our mortgage purchases through our published underwriting guidelines and Seller/Servicer contracts. These standards typically are the same whether or not credit scores are used in underwriting.

We require our lenders to represent that every loan sold to Freddie Mac using traditional, "manual" under-writing techniques meets the standards set forth in the underwriting guidelines we agree to in our purchase contracts. To ensure the accuracy of these representations, Freddie Mac conducts a post-purchase quality control review of a sample of the loans sold to us. The

sample is drawn from a number of mortgage purchase categories, including loans randomly drawn from total purchases, loans with high-risk attributes, and loans sold by lenders whose recent performance is poor. Among the many tools we use to define "high-risk" are credit bureau scores indicating extremely poor credit histories.

We're taking steps that hold the promise of largely eliminating the risk of repurchase requests for the vast majority of loans. When lenders sell us mortgages using Loan Prospector, our automated underwriting service, Freddie Mac typically waives most representations and warranties associated with a borrower's credit worthiness, thus largely eliminating the prospect of a loan buy-back in these cases. Freddie Mac is currently launching pilot initiatives that will permit lenders to sell us more loans under these favorable conditions.

What quality control mechanisms should lenders use to avoid repurchases of credit-scored loans?

**Fannie Mae** - The quality control efforts that work best do so regardless of the use of credit scores. They include: the commitment of senior management, accountability of all employees, clear and measurable standards of quality, ongoing assessment against the standards, and constant feedback to eliminate the causes of errors to improve the performance.

Credit scoring can help an underwriter perform a more consistent, objective and accurate evaluation of credit report information but it should *never* be used in isolation for making underwriting decisions. Credit scores should be used *as part* of a comprehensive analysis of the unique characteristics of each individual mortgage application and should complement an underwriter's judgement, not replace it. Fannie Mae sees credit scoring as

another tool that helps the industry make more mortgages, not as an excuse to do less.

If credit report errors or discrepancies surface when re-scoring loans, how will these errors affect the purchase price of the loan and the possibility of a buy-back?

**Fannie Mae** - For some cases, we obtain a new credit report and independent verifications of income and assets during our underwriting review. If the new credit report contains information that is different from the report obtained by the lender--which would not be unusual--we consider whether or not the additional information would warrant a different underwriting decision. We also consider whether or not the information would have been available to the lender at the time the underwriting decision was made.

Standard "score migration" would have no effect on the purchase price of a mortgage or its eligibility for sale to Fannie Mae. Fannie Mae understands that it is not unusual for a borrower's credit score to change from the time when the lender underwrites the application to the time when the mortgage is sold to Fannie Mae. This is one reason we offer lenders the option of providing us with the credit score they used as part of their underwriting decision.

**Freddie Mac** - If a lender concludes that a credit score is based on significantly inaccurate information, the lender is free to ignore the credit score and sell us the mortgage based on the lender's documentation of the borrower's overall credit history. This policy ensures that borrowers obtain an "A" rate when there is inaccurate information in their credit reports. In terms of re-scored loans being subject to the possibility of a buy-back, there is no difference in the way Freddie Mac treats these loans from any other loans we purchase.

What types of credit errors are significant to warrant a possible score override?

**Fannie Mae** - Whenever an underwriter has reason to believe that the credit score may be compromised by inaccurate information, the underwriter should disregard the credit score associated with the repository file that had the inaccurate information. This is particularly important when significant items of credit information are involved --such as any reported accounts that do not belong to the applicant and any derogatory information that is reported in error.

**Freddie Mac** - Freddie Mac's experience indicates that minor discrepancies in the balances owed or payment amounts on open accounts belonging to the borrower are typically not significant to the predictiveness of the credit score. The following inaccurate information, however, may significantly undermine the usefulness of a credit score:

- Public records information on a bankruptcy, foreclosure, judgment or collection that does not belong to the borrower;
- Delinquencies that are reported in error; and,
- One or more tradelines that do not belong to the borrower.

How do you respond to the notion that score thresholds (e.g., 620) exist in practice, and that the threat of buy-backs dissuades some lenders from conducting more time-consuming, manual reviews of marginal or low-scoring loan applications?

**Fannie Mae** - Fannie Mae constantly and consistently communicates to our lenders that we will purchase mortgages with credit scores below 620. We make this clear through our underwriting policies, our underwriting training, our meetings with lenders, and most important--through the way we

conduct business. We do purchase loans with lower credit scores. We do not prevent lenders from delivering these loans to us, nor do we ask for repurchases simply based on lower scores.

**Freddie Mac** - Freddie Mac has repeatedly advised lenders that a credit score of 620 should not be viewed as an absolute threshold. Second, the fact that a loan has a score below 620 or, for that matter, any other number does not make a loan subject to repurchase. Our advice on using credit scores is that they can be used to quickly process the vast majority of borrowers, freeing up resources and time for lenders to focus on the more difficult loan files.

What products and services do you offer that encourage lending to borrowers with all levels of credit scores?

**Fannie Mae** - Fannie Mae's Desktop Underwriter underwrites and approves loans with credit scores below 620. In our letters to lenders about credit scoring, we provide specific examples of situations in which it would be acceptable to sell us loans with lower credit scores. We are currently piloting and developing new products for Desktop Underwriter designed to provide even more approval options for lower-scoring, higher risk loans.

**Freddie Mac** - Traditionally, mortgages purchased by Freddie Mac have been characterized as "A" quality loans. Loans deemed to be higher risk often were originated in the subprime market--a higher-cost source of mortgage financing. Most subprime borrowers have a variety of past credit problems--some minor and others serious. Borrowers who need to consolidate debt or refinance often turn to the subprime market when they cannot qualify for conventional financing.

Freddie Mac currently has a series of pilot initiatives that will bring former subprime borrowers into the lower-cost prime market. Most notably, Freddie

Mac has expanded the loans it will purchase to include "A-minus" loans. "A-minus" loans have risk attributes that place them close to "A" quality standards. Borrowers usually fall into this category rather than "A" category because of a few additional blemishes on their credit records.

Additionally, by more accurately measuring risk, Freddie Mac's Loan Prospector can identify borrowers who should be in the prime market already, but are unnecessarily relegated to the more expensive subprime market. This enables them to benefit from the lower-cost financing available from lenders selling loans to Freddie Mac - in other words, taking advantage of current products. Freddie Mac estimates indicate that 10 to 30 percent of borrowers who obtained mortgages in the subprime market could have qualified for a conventional loan through Loan Prospector.<sup>1</sup>

Access to developing and current products, through the use of better statistical tools promises to benefit minority and low-income families. The subprime portion of the mortgage market finances a significantly higher percentage of minority borrowers, particularly African-American households. It also finances a significantly higher percentage of low-higher percentage of low-income borrowers and a higher share of borrowers living in underserved areas.<sup>2</sup>

## **Pricing and Fees**

Do you base the price of loan purchases on credit scores? If so, how?

**Fannie Mae** - We have always based the prices we charge for credit risk on the mortgage characteristics most strongly correlated to default risk, such as product type, mortgage term, and loan-to-value (LTV) ratio. Credit scoring represents a more efficient and accurate way to reflect borrower credit risk in our pricing and provides additional insight about relationships between risk factors such as a credit score and LTV on defaults. We have incorporated this credit scoring information into our pricing system. Although credit scores

are now used in our loan pricing, they are not used alone or as the sole factor in the pricing of any mortgage.

We work with our lenders on a variety of pricing structures. The variations reflect an individual customer's preferences related to operational capability, changing market conditions, and changing profiles or risk characteristics. We typically base our credit risk pricing on the expected risk profiles of future loan sales to Fannie Mae. Some lenders prefer to have their pricing reflect the risk profile of actual deliveries.

**Freddie Mac** - Credit scores are only one of several factors we use to assess credit quality and are one element in pricing for all customers.

In the past, conforming mortgages in the market were priced based on the average price of a group of loans, such as 30-year mortgages. While this type of pricing was useful, it limited the number of high-risk mortgages that the conforming market could bear or it would increase the pricing on the mortgage pool with higher percentages of riskier loans, represented in part by low credit scores.

With the advent of new technology and increased credit expertise, the mortgage market is moving to risk-based pricing, which prices each loan according to its specific risk attributes. In response to these developments in the mortgage market, we have begun to provide lenders with the option to price mortgages on a loan-level basis using risk-based pricing. In a number of these limited pricing initiatives, we use credit bureau scores as one of the elements used to establish a loan-level price. Our effort to set loan-level prices for mortgages or packages of mortgages up-front is in a pilot stage, but we expect it to become the predominant method for almost all lenders to establish their mortgage rates. Risk-based pricing is a tool that Freddie Mac will use to provide the lowest-cost mortgage financing available today to as many borrowers as possible.

#### The Bottom Line

In terms of loan performance, have the predictive factors of the credit scores proven to be accurate?

**Fannie Mae** - Yes. The research we have done indicates that, holding all other risk factors constant including the amount of the downpayment, a borrower with a lower credit score, below 620, is 2 1/2 times more likely to default than someone with a credit score between 660 and 699. The actual default rate for loans in the score range between 660 and 699 is similar to the average default rate for all Fannie Mae loans.

Our credit scoring research has also taught us an important lesson about the predictive factors of a borrower's income. It is just as likely for a low-income homebuyer to have a high credit score as a high-income homebuyer. A borrower's management of credit, as measured by credit score, has little correlation with the borrower's income.

Our analysis has also provided us with a more dynamic view of the relationship between credit risk, as measured by credit scores, and downpayment. For example, a borrower who makes only a 5% downpayment but has a high credit score (e.g., over 740) would be less likely to default than a borrower who put 30% down but had a weak credit profile (e.g., a credit score under 620). If we only looked at downpayment as the primary risk factor for default, we would overstate the real risk of many homebuyers.

These lessons learned from our research on credit scoring should help lenders use credit scoring to find more good loans. They should also improve access to credit for low-income borrowers. For example, a low-income homebuyer who might not have been able to save a downpayment could still

get a mortgage, with a strong credit profile compensating for the lack of a downpayment from the borrower's own funds.

**Freddie Mac** - In 1996, we became the first (and, we believe, to date, the only) industry participant to publish evidence that the custom mortgage scoring model we use in Loan Prospector is validated against important borrower population groups, including minority and low-income borrowers. In a report to Senator Carol Moseley-Braun, we reported that, based on a statistical review of one-unit, newly originated mortgages purchased by Freddie Mac during 1994 (totaling over a million loans), measuring incidence of foreclosure through April 1996, Loan Prospector's risk classifications predicted likelihood of foreclosure in a statistically significant and powerful manner. We also reported that Loan Prospector's risk classifications provided a comparable and statistically significant prediction of the likelihood of foreclosure for the group of African-American, Hispanic and non-minority borrowers in the sample of mortgages reviewed.

Additionally, the U.S. Department of Housing and Urban Development (HUD) recently approved Freddie Mac's Loan Prospector as the first automated underwriting system for FHA loans. HUD adopted Loan Prospector after a 18 month pilot (with 15,000 loans) which validated our long-standing findings that Loan Prospector is a fair and objective tool for evaluating borrowers and expands homeownership opportunities for America's families, including minorities.

The use of credit bureau scores must be kept in perspective. Technological advances such as credit scores, automated underwriting and risk-based pricing are merely tools, not ends in themselves. Freddie Mac believes that these tools will enable us to finance homes for borrowers who were clearly on the fringe of the conventional conforming market in the past. Freddie Mac's vision is to make the lowest cost of mortgage financing available to as many Americans as possible. We are working diligently to achieve that vision

and to keep concerns about fairness foremost in our thinking. We welcome the opportunity to engage in dialogue about ways to improve the world's best housing finance system.

For more information about the products and services of Freddie Mac and Fannie Mae, please visit their Web sites at: www.fanniemae.com or www.freddiemac.com.

#### **Credit Scoring: Tool for Secondary Market Small Business Loans**

Selling mortgage loans in the secondary market is now common practice and credit scoring is one of the tools that has helped sales to top \$1.7 trillion. Although less common, there is growth in the securitization of business loans, which in the last two years reached \$34 billion. This growth has occurred as financial institutions are seeking to increase non-interest income while retaining relationships with their small business borrowers. The Riegle Community Development and Regulatory Act (1994) paved the way by reducing capital requirements to apply only to the unsold portion of a securitized small business loan. As with selling mortgage loans, securitization can help to reduce exposure to interest rate fluctuations and concentration risk. Securitizing a loan portfolio requires standardized underwriting, loan documentation and monitoring. To ensure consistent underwriting, when pooling small business loans with similar risk profiles, some banks are looking to credit scoring. Fair, Isaac and Company, Inc. pioneered the use of credit scoring to assess the risk of small business credit applicants. By using their Small Business Scoring Service<sup>SM</sup> (SBSS) banks can standardize their small business loan application process to both increase efficiency and facilitate potential future sales.

For more information contact Fair, Isaac at 1-800-999-2955.

<sup>1</sup> The benefits of our tools are described in more detail in Freddie Mac's report, Automated Under-writing: Making Mortgage Lending Simpler and Fairer for America's Families (available at Freddie Mac's Web site: http://www.freddiemac.com).

<sup>2</sup> Based on an analysis of home-purchase borrowers in the primary market versus the subprime market done by researchers in the U.S. Department of Housing and Urban Development's (HUD) Office of Policy Development and Research, 5.3 percent of primary market borrowers were African-American borrowers, compared to 13.5 percent in the subprime market, and 6.2 percent of primary market borrowers were Hispanic borrowers compared to 9.2 percent in the subprime market; 10 percent of borrowers in the primary market had incomes at or below 60 percent of area median income, compared to 14 percent in the subprime market; 23 percent of borrowers in the primary market had incomes at or below 80 percent area median income compared to 29.5 percent in the subprime market; and 24 percent of borrowers in the primary market were living in "Underserved Areas" (as defined by HUD) compared to 36 percent of borrowers in the subprime market. See HUD's Office of Policy Development and Research, Working Paper No. HF-001, Table B-1 (12/96).

#### **About the Authors**

Henry Cassidy is the senior vice president of single-family risk management for Freddie Mac. Having served in this role since January 1996, he is responsible for promulgating mortgage underwriting

policies, the quantitative development of automated underwriting and collateral evaluation systems and their associated policies, and for quality control. He acts as secretary to the Credit Policy Committee.

Previously, Mr. Cassidy served as vice president of mortgage credit policy from February 1990 to 1996. Prior to joining Freddie Mac, he was director of the General Research Division at Federal Home Loan Bank Board from 1971-1984. Mr. Cassidy holds a Ph.D. in Economics and a M.A. in Mathematical Statistics from the University of Illinois, and a B.S. from Carroll College in economics and mathematics.

Robert J. Engelstad is the senior vice president for credit policy at Fannie Mae. In this position, he is responsible for the policies relating to loan underwriting, performing loan servicing, and counter-party risk. Since joining Fannie Mae in 1984, Mr. Engelstad has also served as manager of appraisal standards and assistant director of real estate sales. Prior to coming to Fannie Mae, he worked in the Office of Single-Family Housing at HUD/FHA and with the Ginnie Mae Mortgage Backed Security Program. Mr. Engelstad is a graduate of the School of Public and International Affairs at George Washington University in Washington, D.C.