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Community Affairs Department of the Federal Res

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Credit scoring has brought increased efficiency in the mortgage lending industry. It has also raised concerns about fair mortgage lending practices given the increasing use of credit scores in the underwriting process. In order to better understand the potential impact of credit scoring on mortgage applicants, The Federal Reserve System's Mortgage Credit Partnership Credit Scoring Committee is producing a five-part article series. The series is designed to provide the mortgage lending industry, and concerned groups and individuals, the opportunity to present their perspectives on credit scoring and its relation to fair mortgage lending. The first article in this series appears in this issue. It includes the viewpoints of representatives from Freddie Mac, The American Bankers Association, Calvin Bradford and Associates, and Fair, Isaac and Company, Inc.

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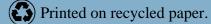
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Readers interested in having community development programs or projects described in *Communities and Banking* should contact:

#### Luxman Nathan

Editor, *Communities and Banking* Public and Community Affairs Federal Reserve Bank of Boston PO Box 2076 Boston MA 02106-2076 phone:(617) 973-3997 e-mail: Luxman.Nathan@bos.frb.org



### FEATURE STORY

### Perspectives on Credit Scoring and Fair Lending: A Five-Part Article Series

Credit scoring is an underwriting tool used to evaluate the creditworthiness of prospective borrowers. Utilized for several decades with respect to certain forms of consumer credit, scoring has come into common use in the mortgage lending industry only within the last ten years. Scoring brings a high level of efficiency to the underwriting process, but it has also raised concerns about fair lending with regard to historically underserved populations.

In order to explore the potential impact of credit scoring on mortgage applicants, the Federal Reserve System's Mortgage Credit Partnership Credit Scoring Committee is producing a five-part article series. This is the first article in the series.

#### Background

An important set of initiatives in the Federal Reserve System known collectively as the Mortgage Credit Projects (MCPs) was launched in 1996 by the Reserve Banks of Boston, Chicago, New York, St. Louis, and San Francisco. The Federal Reserve Bank of Cleveland launched its MCP in 1993 and had a follow-up project in Cincinnati beginning in 1996. The MCP programs were designed to identify and address barriers to both mortgage credit and fair housing, within traditionally underserved market demographic profiles and communities.

The MCPs engaged a cross-section of housing industry professionals to examine various aspects of the home-buying process. The purpose was to identify areas or steps that might give rise to, or create the potential for, disparities between majority and minority homebuyers and borrowers in the home search or credit application process. With each project, and around each topic, complex and often heated dialogue arose. Topics such as racial steering, the effect of a neighborhood's racial makeup on appraisals, and the effect (or lack) of affinity between borrower and lender were confronted by a cross-section of practitioners in the various housing-related industries. In each program, task groups were formed to address specific issues, such as access to homeowners' insurance, fair appraisal practices, fair lending practices, and the impact of specific policies on communities.

#### **MCP** Methodology

Each of the Reserve Banks recruited housing and mortgage industry organizations as partners in the MCP process. The design was to have practitioners discuss the home purchase and financing process, to break the process into steps and determine where the potential for unequal treatment or discrimination arises. From within the partnering organizations, practitioners — those making line decisions on a daily basis — were recruited to participate in task groups. These task groups were formed around particular issues and key steps in the homebuying process (such as obtaining hazard insurance) where concerns had been identified. The task groups met over a period of months to develop recommendations, which were issued in publications from each Reserve Bank. MCP reports from the individual Reserve Banks are available upon request.

Some important results were achieved in each of the markets where MCPs were conducted. For example, in Boston, practitioners, regulators, and advocates worked on several educational and outreach efforts. The Boston-based Citizens Housing and Planning Association (CHAPA) worked with the Boston Reserve Bank and the Fannie Mae Foundation to develop a standardized homebuyer education curriculum for use throughout the Boston metropolitan area. The Boston MCP also created a web site (www.baystatehomebuyer.com) for first-time homebuyers, lenders, and realtors to access information on affordable mortgage prod-

ucts and other homeownership resources. In St. Louis, two insurance agents opened offices in lower-income communities. In Cleveland, real estate boards, historically divided by race, now share listings and other key information on a systematic basis for the first time. In Chicago, a foreclosure intervention program, targeted to low-income communities disproportionately affected by FHA mortgage defaults, has kept well over 200 families out of foreclosure to date. In New York state, fair lending training is now required in the licensing process for appraisers. And in San Francisco, revised fair lending "best practices" agreements were initiated between lenders and HUD.

#### **Issues Identified in the MCP Process of National Concern**

As an added step to these projects, representatives from the Reserve Banks that conducted MCPs met to exchange their individual findings and experiences and also to discuss areas of common concern. Among the issues of common concern were access to home-owner's insurance, appraisals in redeveloping communities, steering by real estate agents, and the use of credit-scoring technology in the mortgage underwriting process. The last is the subject of this article, which will provide the context for a series of articles to follow on the issue of fair mortgage lending practices involving the use of credit-scoring technology. The Federal Reserve Banks of Boston, Chicago, San Francisco, Cleveland, and the Federal Reserve Board have representatives on the research committee and are participating in the series.

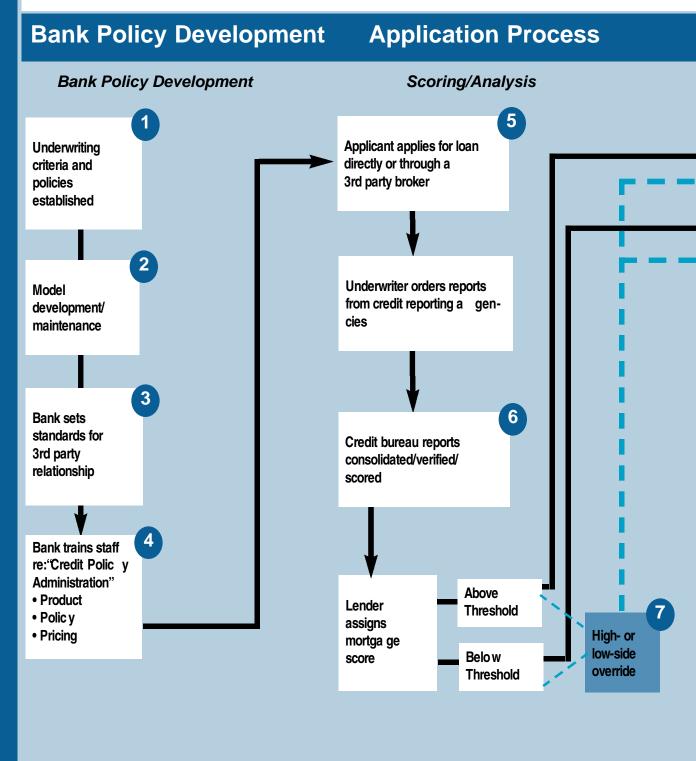
#### **Background on Credit Scoring Issues Examined**

To gain an understanding of industry, advocacy group, and regulator concerns, the Federal Reserve Banks of Boston, Chicago, and San Francisco conducted focus groups in their home cities in the winter of 1998. The findings of these focus groups were then written up and used by the committee members to develop nine issue statements that encapsulated the findings of the focus groups. The nine issue statements follow.

- 1. In developing credit scoring policies, a lender may neglect to:
  - a) establish clear risk-tolerance policies and consistent guidelines for how scoring cutoffs are determined and loans are priced;
  - b) ensure that the model accurately reflects the characteristics/ demographics of its applicant pool.



The flow chart below offers a basic interpretation of a credit-scored mortgage loan. This chart does n those steps where poorly crafted or managed credit scoring policies/practices could result in j



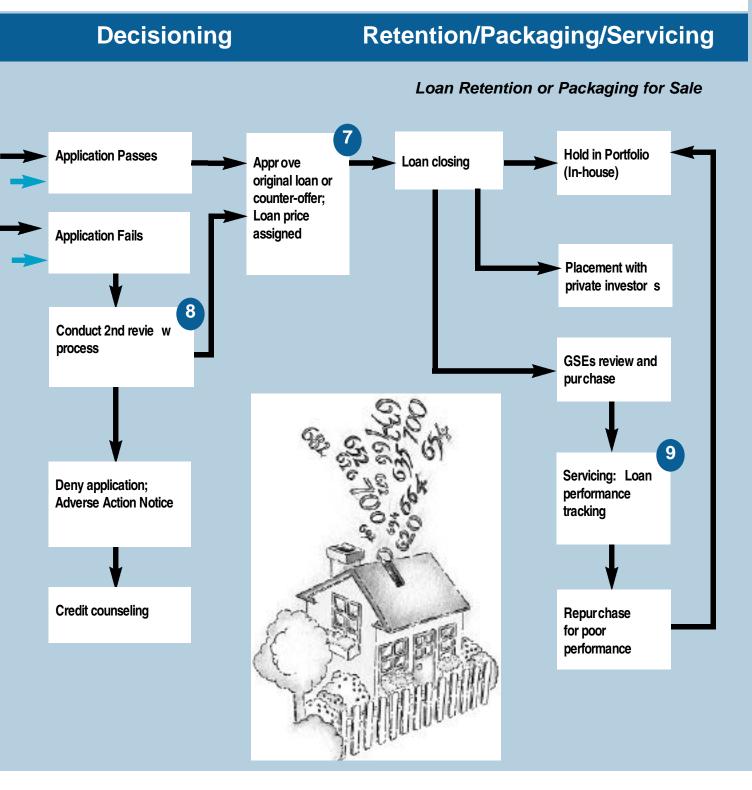
2. New models are unlikely to include prohibited basis factors in their programs. However, if models are not well-constructed and updated over time, they could:

- a) produce unjustifiable disparate impact; or
- b) become based on a pool of borrowers that is incompatible with a lender's market demographics.

3. Some third-party brokers who fail to comply with fair lending laws may be censured or have their lending licenses placed in jeopardy. It is important that lenders monitor the practices of their third-party brokers, especially for compliance with fair lending laws, pricing policies, and the use of credit-scoring models. Lenders who knowingly work with noncompliant brokers (and take no action) may be liable as co-creditors.

4. Inadequate staff training and oversight regarding bank credit policy and fair lending guidelines may lead to inconsistent and unlawful treatment of loan applicants.

not attempt to provide a comprehensive view of all the steps in the loan process. Rather, it is intended to illustrate fair lending violations. The numbers correspond to the nine issue statements from the 1998 focus groups.



5. Lack of information regarding the credit (application) process and available loan options could dissuade an applicant from completing the application process. Loan officers who fail to notify the applicant of the nature of a credit rating, and the important role it plays in the approval and pricing of a loan, could unfairly deny or overcharge an otherwise worthy applicant.

6. Credit/mortgage scoring systems are only as effective as the data fed into them. Inaccurate or incomplete data regarding an applicant's income or credit history may adversely affect the applicant's mortgage score. In the process of ensuring accurate data, lenders must treat all applicants consistently. For example, assistance with credit (report) corrections or accounting for protected or nontaxable income must be offered and applied uniformly to all applicants. 7. Credit scoring and counteroffers can serve as important functions to maximize access to credit. However, their nature and usage could result in unlawful discrimination. The need for frequent score overrides could indicate a larger problem with the scoring system. Furthermore, inconsistency in utilizing either "high-side" or "low-side" overrides to alter a credit decision may result in disparate treatment. Finally, inconsistent counteroffers made to applicants who received essentially identical scores may also result in disparate treatment on a prohibited basis as defined in fair lending regulations.

8. If a lender engages in a subjective second review process, inconsistent practices could result in disparate treatment of applicants. Discriminatory disparities may result from the absence of established and carefully observed second review guidelines that specify:

- a) the bottom-level mortgage score of applications subject to second review; and b) explicit procedures and explanations of judgmental factors, covering most or all
  - contingencies.

9. Lenders who do not track loan performance based on their established credit scoring model characteristics may rely on risk limits that are unnecessarily restrictive and may also produce an unjustifiable disparate impact on prohibited basis group applicants.

The chart on pages 4 and 5 illustrates the process a credit-scored mortgage typically goes through; it also includes the development of a risk management policy. The issues identified in the 1998 focus groups, and the flow chart, were used as exhibits in a survey of industry leaders conducted in 1999. Among the survey responses were the following.

In developing policy:

- Changes over a business cycle in the environment of a lender can affect the predictive ability of a credit-scoring model; a bank should have a clear methodology for changing its cutoff scores.
- Banks should have a clear plan for handling applicants who do not have established credit and would therefore score poorly with most credit-scoring models.

In dealing with loan applicants:

- Some lenders may provide advice to an applicant, such as closing or paying down credit lines, with the intent of improving the applicant's credit score, which may actually affect the credit score negatively.
- Accuracy of credit reports may vary among population segments; lenders should be cognizant of the potential need to verify credit report information when the information will be used to score the applicant.

Two additional focus groups, using the findings of the survey as a basis for further discussion, were conducted in Washington D.C. in the spring of 1999. Based on the findings of this research, the Credit Scoring Committee elected to develop a five-part article series to highlight some of the key issues identified with respect to credit scoring and fair lending. Each article will appear on a quarterly basis in this magazine and other Reserve Bank publications. An important goal of this series is to provide the industry, and concerned groups and individuals, the opportunity to comment on their own related concerns. This introductory article incorporates statements that we requested from the following organizations, selected because of their interest in and differing perspectives on credit scoring and fair lending.

- Freddie Mac;
- The American Bankers Association;
- Calvin Bradford and Associates;
- Fair, Isaac and Company, Inc.

Representatives from each of these organizations received a request to comment on the following statement:

A variety of research studies, emanating from the Federal Reserve System, other regulatory and government institutions, and private research organizations, have suggested unexplained variances in mortgage acceptance rates and pricing between majority and minority mortgage applicants. Though not uniformly the focus of these studies, credit scoring is now a commonly used tool in the mortgage underwriting process. Credit-scoring advocates maintain that as an underwriting tool, credit scoring has allowed the underwriting function to be streamlined for highly creditworthy applicants, allowing human under writers to allot more time to applications where credit issues are present, and has reduced overall costs of underwriting. Detractors claim that factors considered within statistical credit-scoring models, even if not intended, favor majority applicants and create a new barrier to homeownership for minority mortgage applicants. Please describe, from your perspective, fair lending issues that might arise as a result of the use of credit-scoring technology in the mortgage underwriting process and what your organization does to address these issues.

Once the comments were received, committee members edited them to capture the key points made and to bring some level of uniformity to the length of each response. The original respondents then approved the edited versions of their comments. These edited comments are presented in the next section.

As a further exercise the respondents were then given the opportunity to comment on each other's responses and to provide further insights. The second round produced additional comments from both Freddie Mac and Calvin Bradford and Associates.

--by Michael V. Berry Federal Reserve Bank of Chicago

The Federal Reserve System's Mortgage Credit Partnership Credit Scoring Committee members are as follows:

Michael V. Berry Federal Reserve Bank of Chicago

Robert E. Cook Board of Governors of the Federal Reserve System

Nisreen H. Darwish Federal Reserve Bank of Chicago

Joy Hoffman-Molloy Federal Reserve Bank of San Francisco

Jacqueline King Federal Reserve Bank of Cleveland

Luxman R. Nathan Federal Reserve Bank of Boston

Alicia Williams Federal Reserve Bank of Chicago



#### **Statement of Ellen P. Roche Director of Corporate Relations, Freddie Mac**

An increasing number of consumers have benefited from the speed, accuracy, and fair treatment provided by the use of credit scoring and automated underwriting over the last several years. In addition to summarizing these benefits, we describe how automated underwriting and credit scoring benefit the consumer during the mortgage application process.

American families now enjoy more choice and opportunity in the mortgage market than ever. Homebuying families can choose a mortgage product that meets their specific financing needs and they can do so by telephone, on the Internet, or in a face-to-face transaction. Loan approval procedures, which once took many weeks, now take days. The once time-consuming credit review process now takes place in minutes, thanks to technologies that have automated the underwriting process.

Manual underwriting characterized the mortgage market before the 1990s. This slow process provided only a limited ability to analyze multiple risk factors and sift through layered risks. Without the ability to precisely measure distinctions in risk with speed and accuracy, lenders and investors developed guidelines that broadly defined creditworthiness. For decades these guidelines served well the vast majority of mortgage borrowers in what came to be known as the prime market.

Over the years, easier access to credit and a rising bankruptcy rate meant that an increasing number of borrowers with blemished credit histories fell outside the mainstream that the industry's typical guidelines were able to address. Some did not get mortgages. Some resorted to the subprime market. In either case, potential borrowers could not take advantage of the efficiencies available in the prime sector.

Now, powerful tools are fundamentally changing the market's ability to assess and manage credit risk. Automated underwriting now makes it possible to extend the efficiency of the prime market to those who have until now been beyond its reach.

#### Instantaneous and Accurate Risk Assessment

Automated underwriting is one of the keys to opening new doors of opportunity, because it allows for the instantaneous and accurate assessment of a multitude of risk factors. Freddie Mac has led the development of this critical tool, introducing the state-of-the-art automated underwriting service, Loan Prospector, in 1995.

The predictive power of automated underwriting helps lenders and borrowers alike. It gives lenders the tools they need to make more mortgages and reach out to new borrowers. It gives consumers confidence that mortgages are evaluated the same way, every time, for every borrower, encouraging more borrowers to enter the housing finance system.

#### **Automated Underwriting Revealed**

Automated underwriting is necessary to provide a full picture of mortgage eligibility. Automated underwriting is faster and fairer than manual underwriting and provides a more precise evaluation of risk. Credit is a very important part, but just a part, of the evaluation process. Credit scoring is the fastest and fairest way to evaluate credit. It has been proved predictive for all population groups. Credit scores evaluate previous credit performance, the current level of indebtedness, the length of credit history, the types of credit in use, and the pursuit of new credit.

Automated underwriting benefits consumers when applying for a mortgage in several different ways.

Access to the system: Consumers should not be rejected during a quick pre-application screening. Lenders should conduct a full analysis of their homeownership potential. Freddie Mac discourages lenders from using credit scores as a screening device because it does not provide a full picture of the borrower's ability to pay a mortgage. Loan Prospector considers credit, collateral, and capacity but does not consider race, age, or marital status, and thus it can provide a fair and thorough evaluation of the mortgage in a few minutes.

The proof of any underwriting system lies in its ability to assess risk — and Loan Prospector has proved to be highly predictive of default for borrowers from all racial and ethnic groups and all types of neighborhoods. Whether a borrower is African-American, Hispanic, or white, loans in the lowest-risk groups performed significantly better over time than those in higher-risk groups. Because it is blind to an applicant's race and ethnicity, Loan Prospector promotes fair and consistent mortgage lending decisions. Moreover, Loan Prospector predicts well across income groups and neighborhoods as well. Automated underwriting reduces the need to pre-screen mortgage applicants.

*Objective sources of information:* Consumers should have access to credit counseling to help them understand the risks and rewards of homeownership and to assist them in getting their mortgage application approved. Freddie Mac supports AHECI, NAACP, and the national Urban League as well as other organizations that provide homeownership and financial literacy counseling. Consumers can request their credit reports before applying for a mortgage to check the accuracy of their credit information. Consumers have the right to correct the credit information Loan Prospector uses in evaluating credit history.

*Full and fair information:* Interest rate, payment amount, adjustable rates, late fees, and prepayment penalties need to be explained and understood. Freddie Mac requires lenders to follow fair credit and fair lending laws and also requires lenders to report when borrowers do pay their bills on time, so borrowers can get credit for a job well done.

*Fair lending practices:* If borrowers are eligible for "A" mortgages, lenders should charge "A" mortgage rates. Freddie Mac's Loan Prospector provides the lender with the lowest-risk mortgage rate regardless of the lenders' classification of the mortgage.

*Explanation for mortgage denial:* Lenders should provide borrowers with information that can guide them to improving their chances for acceptance. Loan Prospector does not deny a mortgage application. On higher-risk loans, Loan Prospector requests additional support documentation and requires the lender to share some of the higher risk. Alternatively, Loan Prospector offers to purchase the loan with additional fees to compensate for the additional risk. In any case, Loan Prospector provides the lenders with feedback to guide them in improving their application. For example:

- If tax returns are used to document source of income or to verify income, obtain signed IRS form from borrower; or
- Use stated income for qualification and obtain most recent year-to-date paystub to verify employment for borrower.

In addition Fair, Isaac scoring products also provide up to four reason codes, in order of importance, that indicate why a score is not higher. For example, "derogatory public record or collection filed," or "amount owed on accounts is too high."

While the techniques for evaluating risk have advanced, the general rules for improving your credit and your ability to obtain a mortgage remain the same:

- Pay your bills on time;
- Keep your credit card balances low; and
- Make sure your credit records are accurate.

Using credit scoring as part of automated underwriting helps more borrowers get mortgages because of the speed, accuracy, and fair treatment inherent in these tools. If the alternative is manual underwriting, there is no comparison.

#### Statement of Paul Smith Senior Counsel, The American Bankers Association

Actually, our bankers tell us that credit scoring in fact gives greater access to mortgage credit rather than creating new barriers for minority mortgage applicants. The use of credit-scoring models to better predict whether an applicant might default allows the lender more flex-ibility in making traditional home loans. In the last 10 years, the banking industry has greatly expanded its efforts to make credit available to less qualified applicants. For example, the housing mortgage secondary market agencies, Fannie Mae and Freddie Mac, have broadened their underwriting criteria to accept alternatives to the traditional qualifications. Banks have started lower-interest-rate or no-fee affordable housing programs, created first-time home-buyer programs in which borrower training replaces some of the missing qualifications of the borrower, and expanded the list of qualifications for potential borrowers.

Many bankers have also said that credit-scoring models have been crucial in permitting banks to approve more borrowers' applications than traditional underwriting criteria would have. All of them said that today they make home loans with the use of credit-scoring systems that they could not have made or sold to the secondary mortgage market in the past. None of the bankers consulted for this comment reported using a credit-scoring system exclusively, but only as part of the overall mortgage underwriting process. In a home mortgage loan, the property's appraised value, the loan-to-value ratio, the available resources for closing costs and down payment, the applicant's disposable income, and other underwriting standards must all be factored into the credit decision. Nonetheless, use of a credit scoring system in the mortgage process is increasing, not only because of the customers' demand for faster underwriting decisions but also because of bankers' interest in expanding credit availability. For example, a higher than required credit score might allow the bank to accept a higher loan-to-value ratio than its general lending policy permits. This would permit the applicant to make a lower down payment and thus make up for having fewer financial resources than the traditional applicant. This kind of increased flexibility in underwriting by bankers and the secondary market agencies has led to a significant expansion in the access to mortgage credit in the 1990s.

Bank compliance officers have also said that the use of a validated credit-scoring system by the bank reduces the subjectivity of the final credit decision and allows compliance officers to better monitor fair lending compliance. One example of that is described in the 1999 settlement between the Department of Justice and Deposit Guaranty Bank (www.usdoj.gov/crt/housing/caselist.htm#lending). Although the bank was said to be using credit scoring, the crux of the case was that lending officers were allowed to freely override the credit score, that is, either granting a loan that should not have been granted according to the score (a low-side override) or not granting a loan that should have been granted according to the score (a high-side override). Thus, the fair lending violations were not in the credit-scoring model but in not considering the credit score in the lending decision. The settlement also describes in detail how the successor bank to Deposit Guaranty ensures fair lending compliance through several mechanisms, including using a credit-scoring system. Key to that bank's program (and many other banks' programs) is the use of credit scoring to ensure standard treatment of applicants, the limitation of authority to override credit scores, and reviews of any such overrides as well as reviews of many of the denied applications to determine if the bank has an alternative loan product or program for which the applicant could be qualified.

Besides these and many other steps by banks to ensure fair lending and fair use of credit scores, the bank regulatory agencies have detailed Fair Lending Examination Procedures that require bankers and examiners to review credit-scoring models for validity and fairness. These examination procedures are available for review by the public at www.ffiec.gov/fairlend.pdf with the Appendix on Credit Scoring Analysis at www.ffiec.gov/fairappx.pdf . All of these steps and others have been taken to address issues of the fairness of credit scoring and to

enlarge the access to mortgage credit for low- and moderate-income individuals. And we believe that these steps have succeeded.

#### Statement of Calvin Bradford President, Calvin Bradford and Associates, Ltd.

The wide-scale use of credit scoring represents a significant efficiency in the competitive world of mortgage finance. Both the Federal Reserve, in its regulations, and lenders who use credit scoring refer to it as an objective process as opposed to judgmental systems. The largest purveyor of credit scores, Fair, Isaac and Company, has continually maintained that its scores could not be discriminatory because they do not contain race as an explicit variable. All of these statements appear to support a confidence in the fairness and equality in the use of credit scoring that is, in fact, unwarranted.

Credit scoring has not been intentionally discriminatory in its typical uses. Nonetheless, regulators, researchers, and the developers of credit-scoring systems have all recognized that, on average, minorities have lower credit scores than majority populations. Therefore, the use of credit-scoring systems will frequently have an overall discriminatory effect. Such an effect, however, is not illegal if it is based on an overriding business necessity and if there is no less discriminatory way to achieve the underwriting goal.

With the understanding that all credit-scoring systems need to be calibrated to the particular population of each individual lender and reevaluated periodically, I offer several representative examples of fair lending issues.

#### Most Rejected Applicants Are Not Expected to Default

Consider the example, which I have made extreme for the sake of clarity, of a lender who finds that 100 percent of the loans predicted to go into default under its scoring system fall below the score of 620. This lender would assume that using this scoring model is a great business benefit because he could be reasonably confident that the system would exclude all borrowers who might default. Therefore, let us assume that the lender rejects, or "cuts off," all applicants with scores under 620.

A scoring system is able to predict, for any cutoff score, the percentage of applicants at or below that score who are likely to go into default (the odds of defaulting), but it is *not* able to precisely identify which specific individuals will default. While 100 percent of those predicted to default may have scores under 620, there are also many other applicants with scores under 620 as well. Indeed, in our example and in reality, whenever a lender chooses a particular cutoff score, *most* of the applicants with scores below the cutoff are, in fact, not predicted to default. In fact, in our example, it is fair to assume that the odds of any particular applicant with a score below 620 defaulting might be only 10 percent. That is, 90 percent of those with scores below 620 would *not* be predicted to default.

#### **Credit-Scoring Systems Disproportionately Reject Minority Applicants**

Most lenders and secondary investors, as well as those who develop and market scoring systems, agree that, overall, minorities do have lower credit scores than whites. Suppose that all minority applicants in a given market, but only some whites, have scores that fall below 620. Obviously, all minority applicants would be excluded by a 620 cutoff. The lender, however, would argue that this clearly disproportionate impact on minorities is not unlawfully discriminatory because it is a justifiable business necessity.

To clarify further, let us suppose that 3 percent of all people with any score will default. Out of 100,000 applicants, this would be 3,000 applicants. Now suppose that, of those 100,000 applicants, 30,000 had scores under 620. If our system predicts that 10 percent of all applicants under 620 will default, then these 30,000 applicants would include the 3,000 who will default, as well as 27,000 others who will not.

In our example, if the entire population of applicants included 10,000 minorities, all 10,000 would have scores under 620. There would also be 90,000 whites in the population. Of these, 20,000 would have scores under 620, making up the total of 30,000 applicants with these scores that we have specified in our example. There would also be 70,000 whites with scores at or above 620. If the 3,000 borrowers who will default were spread proportionately between whites and minorities in the group with scores under 620, then 2,000 whites (10 percent) and 1,000 minorities (10 percent) would be predicted to default. There would also be 18,000 whites and 9,000 minorities with scores under 620 who would not be predicted to default.

In this case, 90 percent of all minorities would be rejected even though the scoring system predicted that they would not default. But, of the total of 90,000 whites, only 18,000 with scores under 620 will be rejected, even though the model predicts that they will not default. The disparate impact is clear. If all applicants under 620 are rejected, 90 percent of the minority population, but only 20 percent of the white population, will be rejected when the model predicts that they will not default on their loans.

Summary of Calvin Bradford's Example					
	Total Borrowers	Rejects (scores<620)	10% Will Default	90% Not Default (score<620)	% Rejected Due to Score but Not Default
Whites Minorities	90,000 10,000	20,000 10,000	2,000 1,000	18,000 9,000	20% 90%

Obviously this is an extreme example, but in reality, the difference is only one of degree. If the Equal Credit Opportunity Act regulations permit using a credit-scoring system if it is statistically reliable, but prohibit a discriminatory impact, absent a clear business necessity, then where should the "necessity" threshold be set? In other words, what level of differential impact of rejected good minority applicants to rejected good white applicants is acceptable and what level crosses over into discrimination? Would it be acceptable in our example to reject all applicants with a score below 620 because of the ability to weed out all applicants expected to default, even if 90 percent of the rejected minorities would not be expected to default? Or, on the other hand, do we decide that unless a credit score can achieve a less discriminatory impact, it has not achieved enough validity to be accepted? Should we, for example, disallow systems having a discriminatory impact unless they at least predicted that more than 50 percent of those with scores below the cutoff would be likely to default? At present, in the real world of credit scoring, the cutoffs used in prime lending are nowhere near that level of separation; they are much closer to the 90 percent rejection of predictably good loans used in our example.

#### **Current Systems Measure Default in Discriminatory Ways**

Credit systems are actually based on the prediction of early default, not lifetime default. While early default is important, it generally does not explain most of the loans that go into default over the life of the loan because most defaults and foreclosures take place several years into the loan, not in the first 6 to 18 months. Therefore, not only do the present scoring systems have a discriminatory effect, but they are based on a default of only a few months against loans that typically last for several years — and that last even longer for minorities who buy, sell, and refinance less often than whites.

As a measure of early default, credit scores do not incorporate many of the factors that research suggests cause most defaults: job loss, temporary or long-term unemployment, divorce, and so on. Because these factors are rarely part of credit bureau databases used in scoring models, such factors are not part of the scoring process. Of course, these events and

factors are often not items that could be used in a score at the time of application because they are events and activities that have not yet happened. The result is that the

scoring models are not actually predicting default altogether, but only that part of default that can be related to data stored in credit bureaus, and then only inasmuch as the defaults show up very early in the life of the loan.

#### Many "Predictive" Factors Used in Systems May Have No Causal Connection with Default

In social science research, the critical issue of the explanatory power of statistical models relates to the linkage between correlation and causation. Credit-score developers try to squeeze all the correlation they can out of the limited set of factors stored at credit bureaus. In a general sense, they may seem to match correlation with causation, such as in the apparent logic between linking future credit performance to past performance. Still, many correlations raise serious questions of causal relationships. For example, where there is a correlation between the number of inquiries and later default, for some applicants, this may reflect attempts by a person with poor credit habits searching for an acceptance. For others, numerous inquiries may represent the impact of discrimination that forces borrowers to contact more lenders in a search of a fair loan.

In one historical file, I saw an applicant with a low score where the main factor was listed as too many open lines of credit. After the person had consolidated his debts, credit bureaus continued to generate low scores on the basis that he now had too *few* credit lines. Although debt consolidation is often recommended by credit counselors, the result in this case was lower scores, even though this applicant had never had a delinquent account. Credit-scoring companies, lenders, and investors often respond to such examples by insisting that their models are complex and not subject to simple understanding. We need to ask, however, as a matter of policy whether, if we accept a scoring system because of its claimed statistical reliability, we really are accepting correlation without requiring a sound basis for causation. Why should we accept a process with a clearly discriminatory effect when it fails to meet the social science test of having a demonstrable linkage to causation?

#### Scoring Models Based on Non-Mortgage Credit Are Not Likely to Predict Mortgagor Behavior as Well

Most credit-scoring models are not geared to mortgage loans but to all credit. Minorities stay in their homes longer than whites. Many lenders, counselors, and other players in the home sales market have perceived that a home is treated differently by many moderateincome and lower-income buyers — who are also disproportionately minority — than by higher-income buyers. The home is more than a commodity that can be replaced, for these buyers. More sacrifice may be made to keep the home than to protect other forms of credit from default. This is an example of just one aspect of lending that may separate the treatment of home loan credit from other forms of credit for minorities. Credit scoring used in mortgage loans needs to be based on mortgage loans, and perhaps even loans for the same type of mortgage product, in order to develop patterns that truly reflect mortgage risk.

#### **Credit Scoring Ignores Change in Borrower Behavior**

Scoring systems do not account for the ability of interventions to change behavior. For example, many lenders and special loan programs have discovered that pre-purchase counsel ing (when done well) and post-default counseling or interventions (when done rapidly at the point of first delinquency) can substantially reduce the likelihood of default or the likelihood that a default will result in foreclosure. Since these types of programs have been disproportion-ately targeted to minorities (usually either by the effect of geographic area or income targets), the failure to account for this ability to change predicted behavior results in credit scores imposing a discriminatory effect when less discriminatory alternatives exist. This undermines the business necessity argument for the use of credit scores in an environment where they have a discriminatory effect.

#### Industry Claims That Scoring Frees Time to Spend on Applicants with Problems Are Unrealistic

The speed and economy of using credit scores is alleged to free up lenders to spend more time with those whose credit histories need more work. But, in a market of extreme competition and with a growing range of products for all credit scores, lenders are less likely to use the system to devote real time to problem scores than they are to simply divert those with low scores to higher-cost loan programs. They are, for example, not as likely as in the past to review the accuracy and basis of credit issues or even to ask borrowers to verify that derogatory information in their accounts are, indeed, the applicant's accounts and that they are correct. Lenders also are not as likely as with non-scoring underwriting to ask for explanations of credit issues. Therefore, credit blemishes that in the past were considered acceptable because they were not the fault of the borrower or were considered temporary — such as a death in the family, medical bills, or temporary unemployment — may now simply be counted against the borrower in the same way that a voluntary disregard for credit would tarnish the borrower's credit history. We know from socioeconomic studies and health studies, for example, that minorities suffer loss of job and serious medical bills more often than the majority population.

Correcting bad information can be hard and time-consuming. The lender may also be concerned that the investor purchasing the loan will not have access to the corrected information or may secure a score from another credit bureau that does not contain the corrected information. Therefore, in a random quality control audit or in a review if the loan goes into default, the lender may face negative ratings or even the requirement to repurchase the loan. Inasmuch as the need to deal with derogatory credit is more likely to come about for minorities, the lender may want to find ways to respond to the application that avoid the effort of verifying and correcting bad credit. This may lead to rejection or to encouraging the applicant to withdraw the loan at the earliest time in the application process. Alternatively, when faced with low credit scores, a lender may introduce a judgmental system of overrides, which can introduce discrimination into the system.

Rather than reject a loan with credit issues, a lender may steer the borrower away from prime conventional products toward FHA or subprime products, rather than try to deal with investigating a low credit score or correcting bad information. This would have the effect of imposing higher rates or more onerous terms on the borrower, or it could contribute to concentrations of FHA loans in minority areas — which have historically been shown to have an adverse effect on both the borrowers and the community. Recent studies indicate a similar concentration of subprime lending in minority communities, with similar adverse impacts.

These are some examples of how credit scores, both directly and indirectly, may have a discriminatory impact or may lead to differential treatment. The potential for discrimination and liability should not be ignored, either as an internal part of the scoring system or in the manner in which it is applied.

#### Ellen Roche: Response to Statement of Calvin Bradford

In his essay, Calvin Bradford poses an important question when he asks where the line should be drawn between approval and rejection. However, we must be careful not to oversimplify our consideration of this important issue.

Credit scores represent a leap forward in efficiency and access to the mortgage market compared to manual or judgmental underwriting. We should not be satisfied with our current achievements and should continue to work to increase the speed and fairness. However, in our efforts to critique the current arrangements, we should consider the alternatives. If we set an arbitrary standard for scoring systems, lenders might be forced to return to manual underwriting — a slower and more subjective approach to underwriting. We want to move forward and improve the current systems. Fortunately, scoring systems will improve over time, because competition will drive lenders and investors to develop more accurate risk assessments.

#### Statement of Peter L. McCorkell Executive Vice President & General Counsel, Fair, Isaac and Company, Inc.

During the 1970s and 1980s, credit scoring and automated underwriting became widely accepted for most forms of consumer lending, other than mortgages. Mortgage lenders began using credit scoring much later, starting around 1995. Lenders have widely accepted scoring technology because it allows for expanded lending while maintaining or even reducing loss rates. In the years that credit-scoring technology was being developed, there were few, if any, serious concerns on the part of regulators or consumer activists that scoring might somehow restrict access to credit for any significant subset of the population. However, in the past four or five years, such concerns have been raised more and more frequently.

#### **Consumer and Regulatory Concerns**

Most regulators and consumer activists accept the claims of lenders and scoring-system developers that credit scoring provides an effective and cost-efficient decision tool for the general population of borrowers. But, when it comes to traditionally underserved segments of the population, they may become very skeptical. Most of these concerns can be grouped into a few broad categories:

### How can a statistically based system deal with segments of the population that are unrepresented or underrepresented in the historical data?

This is a reasonable question, but it is premised on a hidden assumption. The assumption is that when underrepresented groups seek mainstream credit, the factors that predict good and bad performance will be different for them than what has proved predictive for past borrowers. Clearly, there are some differences in what is predictive for various sub-populations. However, more than 40 years of experience in developing credit-scoring systems for lenders in 60 countries have demonstrated that the similarities in what is predictive of credit performance outweigh the differences. The same question can be applied to individual applicants: "If an applicant has little or no mainstream credit history, how can a scoring system evaluate such an applicant?" Again, the question has a hidden premise that satisfactory performance with non-traditional obligations will predict satisfactory performance with traditional credit obligations. Since there is little, if any, systematic collection of nontraditional credit histories, no one really knows whether that premise is correct.

Credit bureau-based scoring systems require a minimum amount of reported credit history in order to produce a score. An "unable to score" code should trigger a judgmental evaluation, but that may not always happen. Bureau scoring systems may also employ separate scorecards for "thin file" populations, and special application scorecards have been developed for "no hit" populations — those with no credit bureau history.

#### Don't inaccuracies in credit bureau data result in inaccurate scores?

Of course inaccurate data will cause inaccurate scores, but inaccurate data also affect judgmental credit decisions. However, the current use of scoring in mortgage lending does produce some real differences. For example, prior to the use of credit scores in mortgage origination, when an applicant disputed information in the credit report the underwriter could choose to disregard that information. Alternatively, the provider of the merged credit report usually used in mortgage lending might have been willing to change the data in that report, even though the credit repositories had not made a corresponding change.

Now that the credit bureau-based score is the primary tool for evaluating the credit history of mortgage applicants, the score will not change unless and until the data in the underlying repository report are changed. The major secondary market lenders — principally Fannie Mae and Freddie Mac — as well as scoring developers have advised originators that they can and should ignore scores based on inaccurate data. However, some underwriters may not make the effort needed to document such cases to satisfy a potential investor.

#### Aren't there inequities in overrides, quality of assistance, and so on?

Even in a situation where a scoring system encompasses substantially all of the available information and can account for most of the final decisions, there is still room for human intervention. An *override* occurs when the final decision is contrary to that indicated by the scoring system. Scoring developers would argue that overrides are not a scoring problem but rather a problem caused by ignoring the scoring system. The September 1999 complaint and consent decree by the U.S. Department of Justice against Deposit Guaranty National Bank supports the argument of scoring developers that overrides — that is, judgmental decisions — may be more vulnerable to discrimination claims than decisions that follow the scoring system.

Similarly, there have been many claims that the "quality of assistance" offered to minority borrowers is systematically inferior to the assistance offered to white borrowers. While substantively that issue is no different in a scored environment than in a judgmental environment, the scoring system may nevertheless be perceived as the culprit by rejected minority borrowers.

### Don't scoring systems reject many applicants who would have performed well and accept many who go delinquent?

The short answer to the question is, "Yes." But the question should be whether credit scoring or human judgment does a better job of accepting "good" borrowers and turning away those who would, if accepted, eventually perform badly. Here the evidence is clear: The use of scoring consistently produces 20 to 30 percent improvements — either in reduced delinquency rates or increased acceptance rates — compared with judgmental evaluation. In addition, the available data suggest that similar or even greater improvements can be obtained by applying scoring to traditionally underserved segments of the population.

#### Doesn't scoring result in higher reject rates for certain minorities than for whites?

Again, the short answer is, "Yes," but it is the wrong question. The question ought to be: "Does credit scoring produce an accurate assessment of credit risk regardless of race, national origin, etc.?" Studies conducted by Fair, Isaac, and Company, Inc. (discussed in more detail below) strongly suggest that scoring is both fair and effective in assessing the credit risk of lower-income and/or minority applicants.

Unfortunately, income, property, education, and employment are not equally distributed by race/national origin in the United States. Since all of these factors influence a borrower's ability to meet financial obligations, it is unreasonable to expect an objective assessment of credit risk to result in equal acceptance and rejection rates across socioeconomic or race/national origin lines. By definition, low-income borrowers are economically disadvantaged, so one would not expect their score distributions to mirror those of higher-income borrowers.

#### Is Scoring "Fair" to Minority and Low-Income Borrowers?

Since scoring systems are designed to provide the most accurate possible assessment of credit risk — regardless of race, national origin, and so on — they will never satisfy critics who believe "fair" means the elimination of all discrepancies in both acceptance and rejection rates. If, however, "fair" is defined as "assesses credit risk consistently regardless of race, national origin, or income" then the available data strongly suggest that credit-scoring systems are fair when applied to these borrowers. Two research studies conducted by Fair, Isaac and Company, Inc. early in 1996 support this finding.

The first study used data from more than 20 credit portfolios to look at score distributions and differences in characteristics between low- and moderate-income ("LMI") applicants and the general population. This study (hereinafter, the "LMI study") also compared the acceptance rates and default rates for LMI segments resulting from actual judgmental underwriting on eight of these portfolios with the results that could have been obtained using scoring. Not surprisingly, the score distribution of the LMI segment was lower than that of the general population. Thus, at any given cut-off score, the LMI population would have a lower acceptance rate. However, the *score-to-odds relationships*\* of the LMI and general populations were virtually identical (especially in the range where most cutoff scores would be set). To the extent there were any differences in the score-to-odds relationships, those discrepancies consistently *favored* the LMI applicants. That is, at any given score, the risk for LMI applicants is the same as or slightly greater than the risk for other applicants.

The second half of the LMI study produced some very interesting results. For the eight different portfolios, we compared acceptance and delinquency rates for LMI borrowers that had resulted from judgmental underwriting with the results that would have been obtained if credit scoring had been used to evaluate the same applicants. In every case, scoring could have produced a significant increase in the acceptance rate for LMI applicants if the bad rate were held constant, or a significant decrease in the bad rate if the acceptance rate were held constant.

The second study (hereinafter, the "HMA study") compared credit bureau scores and characteristics of consumers living in zip codes with high concentrations of blacks and Hispanics (the "HMA zip codes") against those of consumers living in other zip codes. Zip code was used as a surrogate for race/national origin simply because direct race/national origin information was not available. The average household income (as indicated by census data) in HMA zip codes was only about two-thirds that for the non-HMA zip codes. Once again, while the score distribution for the HMA zip codes was lower than for the non-HMA zip codes, the score-to-odds relationships were very similar across populations. As in the LMI study, what discrepancies did exist in the score-to-odds relationships consistently favored the HMA population: At any given score, HMA borrowers present the same or greater risk as non-HMA borrowers receiving the same score.

#### Conclusion

In short, these studies indicate that scoring is both fair and effective when applied to LMI and minority populations. These findings are consistent with results reported by others, including Fannie Mae and Freddie Mac (where direct race/national origin information is available from HMDA data). Moreover, the LMI study indicates that scoring can produce substantial improvements in the quality of decisions when compared with judgmental underwriting.

Despite guidance from secondary market investors and scoring developers, at least some mortgage lenders are overly reliant on credit scores. The scores most often used in mortgage lending are "generic" bureau-based scores that consider only credit history information, and were not designed specifically to assess mortgage risk. Ignoring other relevant information in the mortgage decision process is not in the best interests of either borrowers or lenders. And in cases where the lender is satisfied that inaccuracies exist in the underlying credit information on which the score is based, it is irrational to continue to rely on the score. But there is evidence that many lenders do not make the effort to manually review and document these cases.

These problems may be exacerbated if overrides and assistance are also not dispensed evenly; higher-income white borrowers may be approved despite marginal credit scores, while low-income and minority borrowers with similar scores are turned away. Such practices would better be described as the *misuse* of scoring, but the rejected applicant is still left with the perception that the credit scoring system is unfair.

\*<u>Editor's Note:</u> The term *score-to-odds relationship* refers to the relationship between any given credit score and the degree to which applicants with that score are likely to exhibit the risk that the scoring system is designed to predict. For example, in a system designed to predict the likelihood – or "odds" – that an applicant will default on a loan within two years, a score of 700 might relate to or predict a 1 percent likelihood of default, while a score of 660 might relate to a 3 percent likelihood of default. In such an example, the default risk "odds" would be 1 in 100 for a score of 700 and 3 in 100 for a score of 660.



#### Calvin Bradford: Response to Statement of Peter L. McCorkell

The response from Fair, Isaac and Company, Inc. made reference to specific studies that supported its claim that minorities were not unfairly disadvantaged by credit scoring systems. Since Fair, Isaac is asserting that their research is sound in a statistical and social science context, one needs to assess whether their studies measure up by these standards.

For example, in the above-referenced LMI study, we are told only that the data are from several unnamed lenders for some unnamed type of installment loans from 1992 to 1994. Are these mortgage loans, auto loans, personal loans, home equity loans, student loans? Different loan types attract different types of applicants. The study reviews characteristics taken from credit applications and credit bureau information, but it provides no definitions of any of these characteristics. We are not told if all the lenders used compatible application forms with common definitions for each characteristic. We are provided with tables (in the referenced LMI study) that indicate which applicant and credit bureau characteristics made "large differences," "moderate differences," and "negligible differences." We are given numbers, but we do not know if these numbers are from tests of significance, differences in raw percentages, or some other collection of measures.

The comparison of the outcomes for the judgmental and credit scoring system was actually done in a separate study based on data from lenders seeking to replace their judgmental system. This is a clearly biased sample. Were these judgmental systems among the most subjective and least structured in the industry? The indication is that the lenders already saw them as failures.

The above-referenced HMA study of minority differences was based on ZIP codes, where all residents of the ZIP code were treated as either minority or not. Yet the minority composition of the ZIP codes ranged from 40 percent to 90 percent, with the report data based on ZIP codes more than 70 percent black and Hispanic. We are not told what percent of all minorities live in such ZIP codes. Such a grouping is not specific with respect to the race of individuals. Only large segregated minority populations would be included in such definitions. This is likely to exclude the majority of Hispanics and most higher-income minorities. We are not told the time period for the data in this study. The markets are constantly changing. Subprime lending, which was seen in these studies as related to personal finance companies, now relates to a large and rapidly growing industry of subprime lenders providing everything from home purchase loans to auto title loans. Therefore, one historical study is not adequate, even if it was sound at the time.

Fair, Isaac's response emphasizes the need for a broad range of studies by researchers from different perspectives and disciplines. Until this happens, the Fair, Isaac claims of a neutral, or even favorable, treatment of minorities should be treated with skepticism. Fair, Isaac, like Freddie Mac, needs to seek out a broader range of perspectives for its own reviews. The true test for credit scoring, however, will lie in the continuing review of many different systems by many different researchers.



This concludes the introductory installment of *Perspectives on Credit Scoring and Fair Lending: A Five-Part Article Series*. The Federal Reserve System's Mortgage Credit Partnership Credit Scoring Committee would like to thank the respondents for their participation. In the next article we will explore the interrelated issues of lending policy, credit-scoring model development, and model maintenance.

## **AROUND NEW ENGLAND**

### Cohousing: A New Kind of Old Neighborhood

America has sometimes found the idea of community stifling. The United States has grown committed to the ideal of individual privacy. In real estate, the American Dream is a single-family house on a large lot. However, the dream does not fit the new American reality. A nuclear family with one working parent, one stay-at-home parent and 2.6 children is no longer the norm. Many adults, with and without families, find suburban living an isolating experience. They yearn for a more connected community as in days gone by.

Cohousing addresses that need. Cohousing is a term coined by the husband and wife architectural team, Kathryn McCamant and Charles Durett. The cohousing movement in the U.S. began when McCamant and Durett wrote a book called Cohousing: A Contemporary Approach to Housing Ourselves after visiting similar projects developed in Denmark. In Denmark, bofoellesskabers or living communities began in the 1970s in response to sterile suburban developments.

#### **Description of Cohousing**

The cohousing concept is similar to a condominium complex with more advanced bylaws. A typical cohousing community contains about three dozen individual homes. In addition to the homes, there is a central facility with a community kitchen and dining area called the common house. The common house may also contain playrooms, a workshop, a gym, shared laundry facilities, guestrooms, or anything else the community decides upon. The homes are generally built close together, allowing for larger open spaces. Instead of individual postage-stamp yards, there is one large shared yard. Many cohouses also have community gardens.

Living in cohousing requires a commitment to the community. At least three nights per week, dinner is served in the main dining room. Community members are expected to make a couple of meals per month and to help clean up periodically. Cohousing has lower maintenance fees because residents participate in maintaining the lawn and grounds.

During the planning stage, cohousing communities decide how many families with children and how many older and single people will be part of the community. The group attempts to create a balance. In addition, the groups seeks economic diversity by subsidizing the cost of some units and spreading the cost among the market rate units.

The community functions as an almost pure democracy. The group holds monthly meetings and must reach consensus to make major decisions. Residents join committees based on their interests, such as planning and design, programming, or social life.

#### Starting a Cohousing Development

A cohousing group usually begins when several individuals or families decide to live together in an organized manner. However, many members, such as Gwen Noyes of Cambridge Cohousing, say they were always interested in living this way. The cohousing book gave it a name and legitimacy.

The Cohousing Network, a national organization based in Colorado, supports the movement. The Network has a quarterly newsletter and a web site (www.cohousing.org). In the Boston area, the network holds periodic informational sessions.

Building the bricks and mortar community of a cohousing group generally requires two to three years. The group must find land that is usable and acceptable, pay for the land, hire a developer, decide on the layout, and execute construction. Many cohousing groups have a developer or architect as part of their cohousing community.



Artist rendering of the proposed Cornerstone Village Cohousing development in North Cambridge, Massachusetts. Construction is set to begin in September of 2000. Courtesy of Elton & Associates, Architects.

The development of other cohousing groups, especially in the western United States, is often "streamlined." For example, a developer presents a plan for the community, which a group may accept or reject. Since the group does not participate in site selection or design, the time required to develop a cohousing community is greatly reduced.

In a non-streamlined cohousing development, members must contribute a substantial amount of time and money to the project, before it is in operation. Many groups pay up to 30 percent of the estimated value of their unit to fund land acquisition and development costs. Lenders for the construction loan require alternative security. Finally, lenders require that over 90 percent of the units be sold prior to construction.

#### **Cohousing in New England**

Despite the time and money needed to create a cohousing community, several have been completed in Massachusetts. The first urban cohousing community on the East Coast was completed last year in Cambridge, Massachusetts. Two established communities are also in western Massachusetts. There is also a cohousing community in Acton, Massachusetts called New View.

The Cambridge project provides an excellent example of both how cohousing is created and some of the problems it faces. A developer and architect, Gwen Noyes, formed the Cambridge group in 1997. She contacted her church, Cambridge Friends Meeting, and received permission to hold meetings at the church. Noyes used the Cohousing Network's mailing list to invite interested participants. When enough qualified buyers began to attend regular meetings, the project got under way.

The first challenge that the cohouse faced was finding a piece of land large enough to accommodate a 40-unit development in an urban setting. The group settled on a parcel of land abutting railroad tracks in a rundown area outside Porter Square. Before closing on their land, the cohousing group met their neighbors, showed them the plans for the community, answered their questions, and listened closely to the neighbors' concerns.

Many members of the cohousing movement believe that the general public views them with suspicion because of misconceptions. As Gwen Noyes states, people wonder "who are these people who like to cooperate?" Others have been more blunt, labeling cohousing participants as communists and worrying about religious zealots, communes, and drug users. When the Cambridge cohousing group met their neighbors, they were able to dispel some of the myths of cohousing. The group has an 80-year-old member, children, working professionals, a handicapped person — in short, a wide variety residents.

The group marketed themselves to neighbors by providing a human face to development. They pointed out that the cohouse was less dense than a proposed condominium development. The developer used a plan that did not require any special zoning to keep the process as short as possible.

Once the group received approval for the plans, construction began. The developers used prefabricated modules assembled at the site to keep costs down and quality high. However, even with attempts at economy, construction was expensive. The final cost of the project was over \$9 million. This posed a problem for another cohousing goal, that of economic diversity. In other cohousing developments, the community provided some affordable units by raising the price of the other units. For example, if 30 market rate units paid \$3,000 more, \$90,000 was available to decrease the cost of affordable units. In the case of Cambridge, however, this was not possible. The cost of acquiring land and constructing units was so high that members could not subsidize affordable units. A creative solution was needed.

The City of Cambridge's Housing Authority solved the problem by purchasing two units. The Housing Authority rents the units at subsidized rates to eligible low-income households. In addition to the two rental units, one limited equity apartment is subsidized by the City. Another two units are owned by a group of mentally-challenged men living with care providers.

The Cohousing group committed itself to family diversity as well. One-third of the units are reserved for families with children, one-third are reserved for couples, and one-third are designated for single people.

The result is a beautiful new set of buildings, which has turned a vacant lot that once collected trash into a new community asset. After one year, a unit resold to a new family. The owner was allowed by the community to sell at market rate. The seller received \$450,000 for a unit with a construction cost of \$375,000. While this is a significant profit, the seller also worked for as many as 20 hours per week to assist in the development process.

Another Cambridge project, which began in 1993, has not been quite so successful. Cornerstone Village is a group trying to build a cohousing development in North Cambridge. However, unlike Cambridge Cohousing, the group has met with stiff opposition from neighbors who objected to the density of the development. Recently, however, the group and their neighbors have agreed to drop their lawsuit, and construction on the 32-unit site is expected to begin in the fall.

#### Conclusion

Cohousing is a lifestyle choice for individuals seeking more social interaction within their neighborhoods. However, while cohousing communities seek diversity, they are predominantly the bastion of upper-middle-class homeowners. In Denmark, the cohousing movement has been able to establish limited equity cohouses and to mix more rentals with ownership opportunities. In the United States, the experiment of cohousing will need time to gather more supporters before this next step is taken. Perhaps as the trend catches on, there will be more opportunities for lower-income individuals to participate in these cohousing developments.

#### --by Kathleen Gill Public & Community Affairs Federal Reserve Bank of Boston

#### Sources

Banerji, Chritrita, "The House of Ecooperation," in Conservation Matters, Winter 1998-99.

Brown, Patricia Leigh, "Honk if You Like Ecological Housing," The New York Times, April 16, 1998.

Grillo, Thomas, "N. Cambridge Cohousing to Break Ground," The Boston Globe, March 4, 2000.

McCamant, Kathryn & Charles Durrett, *Cohousing: A Contemporary Approach to Housing Ourselves*, Ten Speed Press, Berkeley, 1994.

Miller, Amy, "Cohousing Creators Have Lots in Common," Cambridge Chronicle, January 8, 1998.

Streisand, Betsy, "Creating an Instant Extended Family," U.S. News & World Report, April 6, 1992.

## **COMPLIANCE CORNER**

### Regulatory Q & A

The answers to the following commonly asked questions are based on federal law. Readers should refer to their own state law as well.

#### **Regulation Z: Truth in Lending Act (TILA)**

## Q. Are transactions commonly known as "payday loans" considered credit for purposes of Regulation Z?

A. Yes. Payday loans, which are short-term cash advances, are considered credit and are covered under Regulation Z. The regulation defines credit as the right to defer payment of debt or the right to incur debt and defer its payment. When a payday loan is extended, the consumer typically receives a short-term cash advance in exchange for his/her personal check and a fee, or in exchange for the consumer's authorization to debit his/her checking account for the amount of the advance plus a fee. In both cases, the parties agree that the check will not be cashed or the account will not be debited until a future designated date. Accordingly, payday loans and similar transactions where there is an agreement to defer payment of a debt constitute credit for purposes of Regulation Z. Note that extending payday loans is illegal in some states, including Massachusetts.

#### Q. Are lien discharge fees considered finance charges under Regulation Z?

A. Yes. Lien discharge fees generally fall within the definition of a finance charge under the regulation. A finance charge is the cost of consumer credit as a dollar amount. It includes any charge payable directly or indirectly by the consumer and imposed directly or indirectly by the creditor as an incident to or condition of the extension of credit. A finance charge is a fee that would not be paid in a comparable cash transaction.

A lien discharge fee is a condition of an extension of credit. It would not be assessed in a cash transaction. A lien discharge fee, however, can be excluded from the finance charge as a security interest charge, if the fee is itemized and disclosed and is paid to a public official to release the security interest.

## Q. If a person obtains a business loan secured by his principal dwelling, is the loan rescindable under Regulation Z?

A. No. The protections under Regulation Z generally apply to *consumer credit* — credit offered or extended to a consumer primarily for personal, family, or household purposes. Extensions of credit primarily for business or commercial purposes are specifically exempted from the scope of the regulations. Accordingly, a business-purpose loan does not fall within this definition, and therefore Regulation Z does not apply. Credit extensions that are not subject to Regulation Z are not covered by the rescission provisions even if the customer's principal dwelling is the collateral securing the credit.

#### **Homeowners Protection Act:**

Q. The Homeowners Protection Act of 1998 requires that lenders provide certain disclosures and notifications concerning private mortgage insurance (PMI) on loans consummated on or after July 29, 1999. Do the provisions apply to loans extended prior to July 29, 1999?

A. The Homeowners Protection Act of 1998 requires that borrowers receive initial amortization schedules and disclosures concerning cancellation of PMI at the time of loan consummation and additional disclosures annually for loans secured by the consumer's primary residence consummated on or after July 29, 1999. The law requires banks to disclose the date at which borrowers can expect automatic termination of their PMI. In addition, bank customers can request PMI cancellation at 80 percent loan-to-value, provided certain conditions are met.

There are no provisions requiring automatic termination of PMI for loans consummated prior to July 29, 1999. The Act does contain disclosure provisions for residential mort-gages consummated before July 29, 1999. If PMI was required, the servicer must disclose the following to the borrower in an annual statement:

- That the PMI may be canceled by the borrower under certain circumstances with consent of the lender or in accordance with state law; and
- An address and telephone number that the borrower may use to contact the servicer to determine whether the borrower may cancel the PMI.

#### Regulation C: Home Mortgage Disclosure Act (HMDA)

### Q. For purposes of HMDA reporting, are structures such as nursing homes, dormitories, or timeshares considered dwellings?

*A.* With respect to nursing homes and dormitories, the institution need not treat these structures as dwellings for HMDA reporting purposes. If, however, the institution wants to report these transactions, it must determine that the structure is a residential structure under state or federal law. The purchase of a timeshare, however, is the purchase of a "use" of the property. It is therefore not considered a dwelling for HMDA purposes.

#### Q. How should a bank report the property location for the purchase of three separate twounit dwellings?

*A.* When the loan is to purchase multiple properties and is secured by multiple properties, the institution reports the location of one of the properties or reports the loan using multiple entries on its HMDA-LAR, allocating the loan amount among the properties.

#### **Regulation H: Flood Hazard Determination**

### Q. How would a consumer contest a lender's determination that his property is located in a special flood hazard area?

A. The consumer can verify a lender's flood hazard determination by contacting his/her local government department that has the Flood Insurance Rate Maps (FIRMs) available for viewing. Departments having these maps available may include building permit, public works, engineering or planning departments. If the consumer's building is located in a special flood hazard area (zones A or V), flood hazard insurance is required. The borrower should ask the community official if there has been a Letter of Map Amendment (LOMA) or Letter of Map Revision (LOMR).

If the consumer believes there is adequate documentation indicating that the property is not in a flood zone, he/she can request a LOMA application by calling FEMA ((415) 923-7177); the National Flood Insurance Program Map Service Center ((800) 480-2520); or by accessing the FEMA web site (www.fema.gov). The consumer may include with his/her application a copy of the lender's letter indicating that the building is in a special flood hazard area.

#### **Regulation BB: Community Reinvestment Act (CRA)**

# Q. Under the CRA, what type of credit would a depository institution receive for its involvement in either the promotion or provision of individual development accounts (IDAs)?

A. IDAs are basically savings programs, matched by government funds, for low- and moderate-income (LMI) individuals who are saving for a defined purpose. Usually this is limited to saving for a down payment on a home, for educational expenses, or for capitalizing a small business venture. Most financial institutions involved in IDAs work in conjunction with a nonprofit community-based organization that will recruit IDA participants and monitor their progress. The bank may also match the participant's deposit up to a certain amount (depending on the structure of the IDA program), and then receive federal tax credits for all matching funds provided.

The extent of financial institutions' involvement in IDAs and the products and services they offer in connection with the accounts will vary. Thus, subject to s. 345.23(b), examiners evaluate the actual services and products provided by an institution in connection with IDA programs as one or more of the following: community development services, retail banking services, qualified investments, home mortgage loans, small business loans, consumer loans, or community development loans. For further information see the *Interagency Questions and Answers Regarding Community Reinvestment*.

#### **Regulation E: Electronic Fund Transfers**

- Q. A consumer purchased a one year magazine subscription with her debit card. At the end of the subscription period, the magazine company withdrew payment electronically for a second year without her authorization. The consumer requested that the bank reverse the debit. What is the bank's responsibility?
- A. Essentially, the consumer is asserting an unauthorized electronic fund transfer, and as such, the bank is required to comply with the procedures for resolving errors under s. 205.11. Provided that the consumer brought the error to the bank's attention within 60 days after the periodic statement on which the alleged error is reflected, the bank is required to investigate and determine whether an error occurred within ten business days of having received notice. If the bank is unable to complete its investigation within those ten days, it must provisionally credit the account and has 45 days from notice to investigate and make a determination.

#### **<u>Regulation D: Reserve Requirements of Depository Institutions</u>**

- Q. According to Regulation D, a depositor is permitted to make no more than 6 transfers and withdrawals per calendar month or statement cycle from a savings account, a passbook savings account or a money market deposit account. Do ATM withdrawals count toward the six transactions?
- *A.* No. Withdrawals or transfers by ATM, mail, messenger, or in person, or withdrawals made by telephone (provided that the funds withdrawn are mailed via check to the depositor), are not counted toward the six-transaction maximum.

--by Carol Lewis Bank Examination Federal Reserve Bank of Boston