

Chapter 6

Inside a Lender: A Case Study of the Mortgage Application Process

KENNETH TEMKIN
DIANE K. LEVY
DAVID LEVINE

Although fair lending laws mandate that all loan applicants receive equal treatment, all of the evidence reveals wide disparities in origination outcomes between white and minority loan applicants. Some of these differences are attributable to income and wealth differences between minorities and whites. Rigorous statistical analysis, however, continues to find loan denial disparities between minority and white loan applicants, even when differences in applicant creditworthiness and loan characteristics have been controlled for, and even when lenders appear to believe that no disparate treatment exists.

This case study examines the loan application process of one lender in detail, to shed light on the relationship between a lender's organizational practices and staff perceptions and its loan outcomes as reflected in its HMDA scores.¹ While the results of a case study of one lender have no statistical generalizability, the case study approach is valuable because it “allows an investigation to retain the holistic and meaningful characteristics of real-life events—such as...managerial processes” (Yin 1989, p.14).

The research team conducted interviews with seven employees over a two-day period and conducted follow-up interviews with the lender's president and two loan counselors. The initial interviews, following the discussion guides

presented in annex A (which appears at the end of chapter 2), were conducted to determine if employees were aware of fair lending requirements, had received fair lending training, and had had their performance monitored for compliance with fair lending requirements. In addition, each employee was asked to describe his or her role in the lender's loan origination process. Interviewees were assured anonymity; therefore, neither the lender nor any employee is named.

The case study is followed by a discussion of specific managerial practices that will affect fair lending performance. We also discuss the challenges associated with instituting such policies.

Description of Case Study Lender

The lender analyzed in this case study is a mortgage company, fully owned by a builder who develops housing for low- and moderate-, middle- and upper-income households. Founded in 1991, the company has grown from 2 to 31 employees and currently originates roughly 1,000 mortgages per year worth about \$70 million. Nearly all mortgages originated by the company are for a home purchase, rather than to refinance an existing mortgage. The lender operates in a large city that has substantial numbers of black and Hispanic residents. It processes more minority applications, as a proportion of its total volume, than the average for its metropolitan statistical area (MSA).

About three-quarters of the loans originated by the company are underwritten according to government (Federal Housing Administration [FHA], Veterans Administration [VA], and Farmers Home Administration [FmHA]) guidelines that have more flexible underwriting standards than conventional mortgages. As a result, the lender is able to qualify applicants with less-than-perfect credit and fewer resources for a down payment than associated with conventional mortgage standards.

The lender does not service any of the mortgages it originates. Its conventional loans are sold to the company that underwrites the loan. Its government loans are sold to one of two financial organizations. The first requires a four-month recourse period, during which the lender is responsible for the loan balance in the event of a borrower's default. The second requires a one-month recourse period. Because of the recourse terms of its loan sales, the lender has an incentive to apply conservative underwriting guidelines.

The lender submits all FHA-insured loan files for post-close audits. FHA audits a sample of loan files submitted to ensure that underwriters comply with its standards. In the event of a questionable underwriting judgment, FHA contacts the lender and informs the company about its concern. Lenders who continue to make loans with features that are unacceptable to FHA underwriters risk sanctions, including being dropped from the FHA program.

The lender employs six loan counselors, who work in one of three offices and who are responsible for meeting prospective customers and taking applications. Unlike many mortgage companies, loan counselors do not take applications in the field. The loan counselors all report to the branch manager of the company, who also supervises a team of four loan processors responsible for



collecting the documentation needed to complete a loan application. The company employs an underwriter who is responsible for determining the creditworthiness of all mortgage applicants. The underwriter and the branch manager report directly to the president. The company also has staff who work on closings and quality control. However, these staff are not involved in the origination decision process.

Four of the six loan counselors are white and two are Hispanic. The company had a black loan counselor, but she recently left to relocate to another part of the state. The president, underwriter, and processors are all white. The president was employed by another mortgage company before she moved to her present position. Her previous employer went bankrupt, and she was hired for her current position in 1991. Most of the people interviewed by the research team had worked for the president's previous employer, and found out about job openings through conversations with her. One Hispanic loan counselor, however, was hired after two rounds of interviews following his response to a local newspaper advertisement asking explicitly for a Spanish speaker.

The president estimates that 85 percent of the customers served by the company are referred by the builder's sales representatives after potential home buyers complete sales contracts. The remaining 15 percent are referred by real estate agents familiar with the company. Home purchase applications from blacks account for 25.2 percent of the lender's total home purchase application volume, almost three times the MSA figure of 8.9 percent. Hispanics account for 17.6 percent of the lender's purchase mortgage applications, higher than the MSA figure of 13.3 percent.

As mentioned earlier, roughly three-quarters (73.6 percent) of mortgages originated by the company are FHA, VA, or FmHA loans, compared with 16.3 percent of all mortgages originated in the MSA. Blacks account for slightly more than 30 percent of the lender's government loan applications, Hispanics for another 21.4 percent. These proportions are higher than for the MSA as a whole, where blacks account for 13.4 percent and Hispanics 17 percent of government loan applications.

The lender's applicants are disproportionately middle-income. Almost 40 percent of them have incomes that fall between 80 and 120 percent of the MSA median, compared with 22.9 percent of all loan applicants in the MSA. Only 28.9 percent have incomes 120 percent above the MSA median, compared with 39.6 percent of all applicants in the MSA. And 31.2 percent have incomes less than 80 percent of the MSA median, compared with 37.3 percent of all applicants in the MSA.

Lender's Origination Process

The lender's origination process is designed, according to respondents, to qualify as many applicants as possible, irrespective of race or ethnicity. Most applicants are referred to the lender with a contract on a house built by the owner of the mortgage company. The whole purpose of the company, according to one employee, is to get people into homes. As a result, the lender does not conduct prequalification assessments. Every customer completes a hard-copy loan



application, and all the information from it is entered into an electronic version of the application form located on the lender's computer system.

Overview

All respondents said they have a very strong commitment to treat every customer fairly, based on their personal conviction that discrimination is wrong and must not be tolerated. The lender does not provide any specific fair lending

"We originated a mortgage to a lady that had three jobs, two child support payments, and SSI for her nephew; so we had six different sources of income. Anybody else would have looked to only one source. We were able to tie in all three jobs, and we used the child support. She got a \$101,500 loan. She had been to another mortgage company and been denied. She works at the Wal-Mart down the street and gives me a big hug every time she sees me."

—A loan counselor

training, however, and has only a one-paragraph discussion of fair lending in its procedures manual. Respondents also said that it does not make business sense to turn away potential business based on an applicant's race. Nevertheless, the company has been subject to discrimination claims by minority customers who were denied loans. Staff said these claims were baseless, and the company has never been found liable.

In order to accomplish its mission, the lender's origination process, detailed below and outlined in figure 1, includes multiple reviews so that no employee can make a unilateral decision about a particular application. The lender uses a "team" approach, whereby a loan counselor, a processor, the branch manager, and the underwriter or president use as much creativity as possible to qualify applicants. The status of every loan application is discussed at the weekly staff meeting attended by loan counselors, processors, and the branch manager. One purpose of these meetings is to have staff brainstorm about strategies that can be used to qualify marginal applicants.

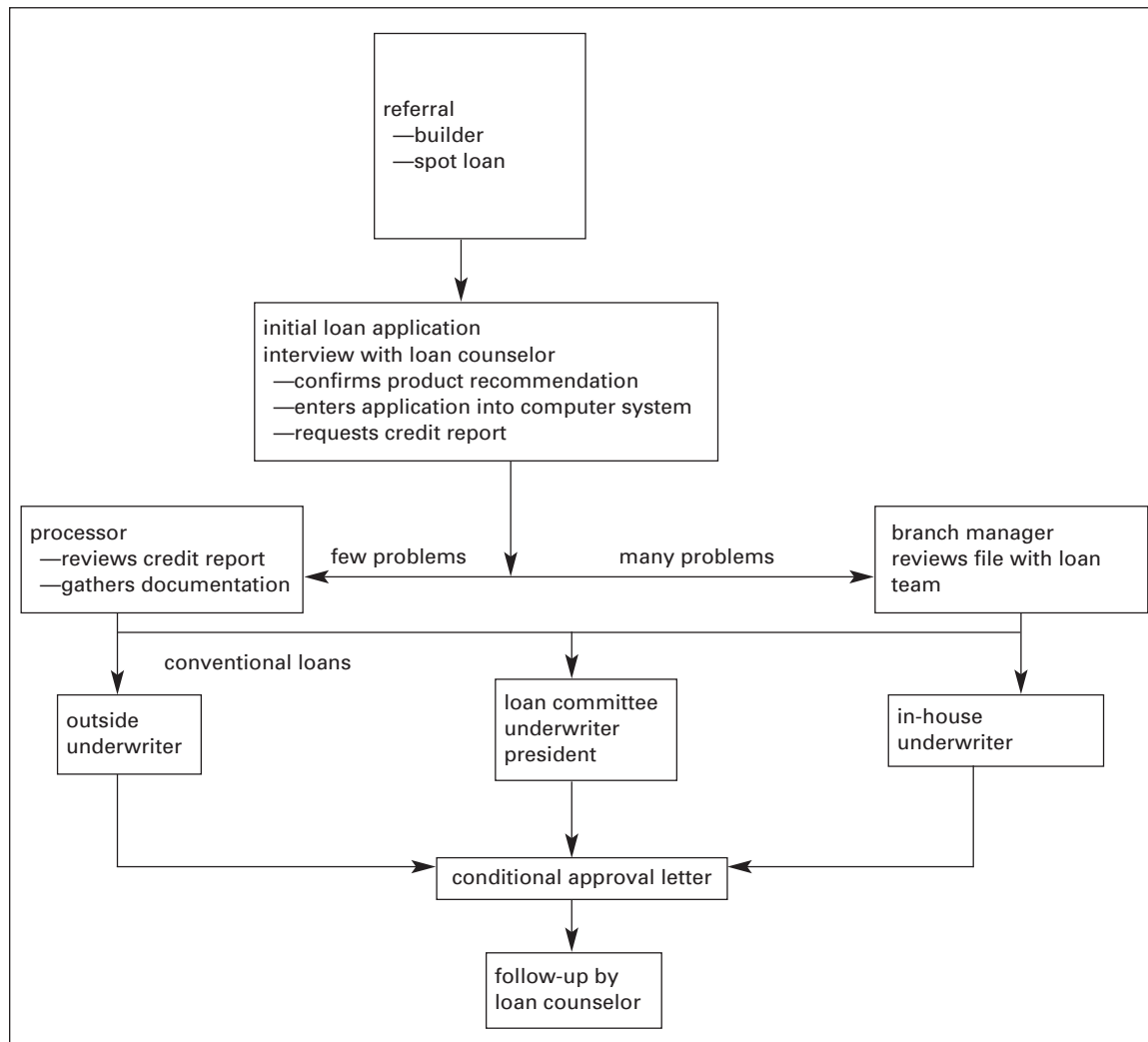
The lender's origination process never results in an outright denial. Rather, every applicant receives a conditional approval, with a mortgage originated once the specified conditions are met. These conditions are based on the perceived underlying risk associated with the potential borrower and are tailored to meet the needs of that customer. An applicant who meets all the guidelines will receive a mortgage subject only to receipt of an appraisal report. This is a relatively straightforward and rapid process. Borrowers who fail a greater number of underwriting guidelines may have to pay past due debts, or lower their overall monthly financial obligations. A more complex conditional approval does not preclude the applicant from receiving a mortgage from the lender. Indeed, the lender sometimes originates mortgages to applicants one year after the application was initially processed.

Some applicants decide they will be unable to meet the conditions set forth by the lender and tell the lender to withdraw their application. In these cases the lender sends the applicant an adverse action letter, and the loan application is classified as a denial.

All of the lender's staff interviewed by the research team expressed great pride in their ability to work with borrowers, even with borrowers whose loan



Figure 1. Lender's origination process



applications have multiple problems. Indeed, many staff members said the company originates loans to many customers who would not receive mortgages from other companies where staff are not as dedicated to working with marginal applicants.

Referral

Since most of the lender's customers are referred by a sales representative of the builder that owns the company, loan applicants typically have already signed a contract for a house before they contact the lender. After signing the contract, customers from a particular subdivision are referred to a particular loan counselor, with each loan counselor servicing about 10 subdivisions. These customers are encouraged to use the mortgage company, and are given the loan counselor's business card, which contains contact information as well as the documentation needed to complete a loan application. In addition, customers



are offered a discount on closing costs if they choose to use the lender. According to one respondent, the sales representative says to the customer, “Why don’t you give [loan counselor’s name] a call. Here’s [his/her] card. They can help you with the financing.”

The builder has three types of subdivisions: entry-level homes priced between \$70,000 and \$90,000; trade-up homes between \$90,000 and \$120,000; and luxury homes that start at \$150,000. Loan counselors are assigned a mix of subdivisions to ensure that each loan counselor serves a variety of applicants. This mix is important, because a portion of the loan counselor’s compensation is based on the dollar volume of mortgages originated. Loan counselors receive a base pay plus a commission of 10 basis points once the mortgage closes.

“We had a woman; she had been denied by two other mortgage companies. I looked at her credit report. She seemed to have \$17,000 in collections. It took nine months to sort through it all. Some of the information was wrong. She got a mortgage from us.”

—A loan counselor

Most customers make initial contact with the company via a telephone call to the loan counselor, whose name they have been given. Because many of the lender’s customers have signed a contract for a specific house, they are highly motivated to provide as much information as possible in the initial

interview. One respondent said, “Our customers have seen the house, or walked through a model. They have this picture in their mind already.” The loan counselor tells the customer to bring the documentation described on the business card to the initial loan application interview. The two then agree on a mutually convenient time for that interview.

Initial Application Interview

The lender has a corporate headquarters and two branch offices. A small number of applications are completed via mail or over the telephone. Almost all applicants complete the initial application interview at either the corporate headquarters or the main branch because the other branch is staffed by a loan counselor only one morning a week. Both the corporate headquarters and the main branch are located far from the city center, off major roads in commercial areas approximately 30 miles apart. Because the city is quite spread out, most area businesses are not located in the central business district.

Every customer completes a hard-copy loan application, which asks the customer about his/her income, employment history, existing debts, and other relevant information. This information is entered by the loan counselor into an electronic version of the form, which has a field for each item on the hard-copy loan application. In addition, customers must indicate their race, which is entered on a separate field that is visible only to readers who scroll down several screens. This information is never used in the origination decision process, according to the lender’s staff. It is required for disclosure purposes,² however, and most of the staff refer to it as “disclosure information.” The loan counselors ask for the disclosure information at the end of the initial application interview. One loan counselor said she turns the computer screen toward the customer so that the customer can type in the appropriate category. She said she does this



because she does not want to guess which category is appropriate, and most customers type in their own choice.

The initial loan application takes about two hours to complete. In most cases, the customer's contract already indicates whether the borrower should receive a government or conventional loan. Since government loans allow for higher loan-to-value (LTV) ratios, the builder's sales representative recommends government loans for customers who do not have sufficient funds for a conventional down payment. According to the lender's president, conventional loans are most suitable for middle-income applicants with good credit, and most of the lender's customers have problematic credit and few resources for a down payment. While the loan counselors review the suggestion made by the sales representative, and can make a different decision, respondents said it was very unusual for an FHA-eligible customer to receive a conventional mortgage.

At the end of the initial application interview, the loan counselor explains the next steps in the process. At this point the applicant also has to provide \$75 to pay for a credit report and is told that the loan counselor will be in touch once the credit report is received. All four loan counselors interviewed by the research team said they never forecast outcomes with the customer. According to one counselor, "You don't want to get anybody's hopes up. You also don't want to be too discouraging."

Once the customer leaves, the loan counselor adds comments to the computer version of the loan application. None of the respondents said it was acceptable to add subjective feelings about an applicant. Instead, they said, comments are factual and relate the applicant's employment history, credit history, income, and whether the loan is government or conventional. Because these comments are on the electronic version of the application, they are accessible to everyone in the company and meant to provide information to the underwriter and branch manager about any financial issues that warrant attention.

After completing the comments, the loan counselor sends the file, with the completed hard-copy application, to either a processor or the branch manager. The processors receive relatively problem-free applications. They then secure the documentation needed to complete the file before submitting it to the underwriter. A completed loan application file has information collected during the application interview, a full credit report, an appraisal, and documentation of the customer's employment and financial statements.

The branch manager receives the applications that have a high front-end (house-expense-to-income) and/or back-end (total-monthly-debt-to-income) ratio or information customers have volunteered about past credit problems. She works with the processor to develop a plan to handle each application referred to her. She then forwards the applications to the underwriter after the questions have been answered. Applications that fail more than one underwriting guideline are sent by the branch manager directly to the president of the company. These applications are said to have gone to "loan committee," which means they will be reviewed by the underwriter and the president.

Completed conventional mortgage applications are sent to outside underwriters. The company uses three, but most of its conventional application busi-



ness is sent to a mortgage insurance company. Completed government mortgage applications that are sent to the loan committee by the branch manager are assessed by the committee. Applications sent directly to the underwriter may also be referred to the loan committee.

Underwriting

The underwriter does not use an automated underwriting system or credit scores to measure a borrower's creditworthiness. Rather, she judges the application by evaluating all relevant information in the file. According to her own responses to us, she applies the underwriting guidelines in as flexible a manner as possible and starts with a review of the credit report. In addition, she judges whether the applicant's income and current rental payment performance offset instances of derogatory credit.

The underwriter prefers to approve applications where the front-end ratio is less than 31 percent. She also likes to see applicants with back-end ratios below 43 percent, although she will approve applications with a back-end ratio of 46 percent so long as the applicant has a good credit history. In addition, the underwriter looks to see if the applicant's income is increasing over time, and will calculate a second set of ratios to include payments for overtime work.

The underwriter said the applicant's race never enters into her decisions and she could not imagine not being fair to different people. She does not receive any information about the race of the people who actually receive loans from the company, and could only provide a guess as to the percentage of minorities who receive them. In addition, the underwriter expressed great pride in the company's ability to qualify marginal applicants. She told us that it can be quite moving when new homeowners come into the office to make their first payment.

The underwriter also shared with us some of the letters submitted by applicants to explain past instances of derogatory credit. She said these letters indicated the level of credit problems she had to evaluate in her underwriting decisions. She reads every credit explanation letter to see if derogatory credit episodes resulted from a one-time illness or other family crisis, or represent a pattern. She read a few letters aloud that detailed stories of family illnesses and job losses and that contained many spelling and grammatical errors. The research team noticed that some of the letters were typewritten and asked the underwriter: Who sends handwritten credit letters? In a stage whisper, she said, "Mainly the minorities." She also said that poorly written credit letters did not invalidate an applicant's reasons for a derogatory credit episode.

Post-Underwriting

The underwriter's review of an application never results in an outright denial or an unconditional approval. All conditional approvals are transmitted by letters reviewed and signed by the president. Therefore, no customers receive conditions before the underwriter, the president, and often the branch manager have reviewed their files. Thus, no single person in the company unilaterally can reject a loan application or impose a condition without another employee's review.



For each conditional approval, the loan counselor calls once the conditions are finalized, to tell the customer to expect the president's letter in the mail with the conditional approval, and to explain the steps needed to meet each of the conditions that will be contained in the letter. In addition to the detailed information about the steps needed to secure approval, the conditional approval letter contains a timetable to complete these steps. The loan counselors are expected to assist customers with meeting conditions.

Conclusions

The loan origination process used by the lender ensures that all applications receive a careful review by at least two staff members. The lender's staff take great pride in their commitment to qualify borrowers who seem, at first, to be unacceptable credit risks. This commitment, according to the lender's staff, is provided to both minority and white applicants. Every staff member interviewed said the entire process was "race-blind." None of the staff could think of a reason why minorities would be treated differently from whites. Although a customer's application contains information about his/her race, the underwriter

"We're currently closing an application from a lady in a homeless shelter. I'm working with her. She had judgments and a repossession and we got her approved. She has worked in the same job for the past 15 years. She takes care of her grandson. She has no transportation, but her application is workable."

—A loan counselor

and the president, who actually evaluate applications, say they are unaware of an applicant's race. The point of the application process, according to everyone interviewed at the company, is to get customers into homes, and staff seemed bewildered by the suggestion that race could be a factor in the lender's origination decisions. Finally, the lender's presi-

dent expressed a high level of enthusiasm for this research project, was eager to participate and answer questions about fair lending, and scheduled interviews for the research team.

Over the course of the site visit, the research team scrutinized the process used by the lender to assess applications. The combination of a highly transparent review process and a seemingly genuine commitment to fair lending suggested to us that minorities were *not* receiving differential treatment from anybody on the lender's staff. We also were impressed with the high level of personal satisfaction the lender's staff received from working in the mortgage finance industry. Specifically, many staff members expressed a sense of pride in helping people who would probably be denied mortgages from other companies achieve their dream of homeownership. We left with the expectation that the lender's HMDA data would show little denial disparity between white and minority applicants.

The Lender's HMDA Performance

We were wrong. The HMDA data indicate that the case study company denies minority loan applicants at a rate lower than other MSA lenders. This suggests



THE URBAN
INSTITUTE

that the lender is doing a better job than other area lenders in qualifying marginal minority applicants and is consistent with the statements of all interviewees that they work hard to qualify problematic applicants irrespective of race. But the lender’s HMDA data also reveal large disparities in denial rates for minority versus white loan applicants. Disparities that are wider than MSA averages persist even after controlling for the applicant’s income and loan product type.³ As noted in previous chapters of the report, HMDA data alone cannot prove either differential treatment or disparate impact discrimination. When corrected for applicant income and loan product, however, they certainly raise questions.

Overall HMDA Performance

The lender’s overall HMDA performance for a representative recent year,⁴ as summarized in table 1, indicates that the lender’s denial rate for black and Hispanic applicants is below MSA averages. This finding is consistent with many respondents’ statements that the lender makes an extra effort to qualify marginal applicants irrespective of race or ethnicity.

The lender’s denial disparity index (DDI),⁵ however, which is the ratio of minority-to-white denial rates, is much higher than the MSA average. This is due to the lender’s lower-than-average denial rate of white applicants. Applications submitted to the lender by black applicants are rejected 2.73 times as often as those submitted by white applicants. Applications from Hispanics are rejected 2.5 times as often as those from whites. The area DDIs for blacks and Hispanics are 1.58 and 1.36, respectively.

HMDA Performance Controlling for Applicant Income

The company’s high black and Hispanic DDIs do not necessarily mean the lender is treating minorities differently from whites. They may reflect differences in the ability of minority applicants to meet underwriting guidelines. HMDA data do not include all of the information used by an underwriter in making origination decisions. The data, however, do provide information about an applicant’s income. Since income correlates with creditworthiness (Avery et al. 1998) and wealth (Simmons 1997), analyzing denial rates and DDIs by applicant income at least partially controls for the quality of an individual’s application.

Table 2 presents denial rates for the case study lender and the MSA, controlling for income. In interpreting this and other tables that categorize appli-

	Lender Denial Rates			MSA Denial Rates		
	Black	Hispanic	White	Black	Hispanic	White
Denial Rate	28.0%	25.6%	10.3%	38.9%	33.4%	24.6%
Denial Disparity Index (DDI)	2.73	2.50	n/a	1.58	1.36	n/a

Source: HMDA.

Note: n/a = not available.



Table 2. Comparison of Denial Rates by Race and Ethnicity by Applicant Income

	Lender Denial Rates			MSA Denial Rates		
	Black	Hispanic	White	Black	Hispanic	White
Low	56.3%	53.6%	71.4%	55.3%	42.6%	54.1%
Moderate	28.6%	21.3%	10.6%	42.3%	32.7%	39.6%
Middle	27.4%	22.7%	8.8%	32.0%	31.5%	26.0%
Upper	22.2%	15.6%	9.5%	28.7%	22.0%	12.0%
Weighted Average	28.3%	25.3%	10.2%	39.3%	33.4%	24.6%

Source: HMDA

Note: Low-income applicants have incomes less than 50 percent of the MSA median; moderate-income applicants have incomes between 50 and 80 percent of MSA median; middle-income applicants have incomes between 80 and 120 percent of MSA median; and upper-income applicants have incomes above 120 percent of MSA median.

cants by income, it is important to remember that nearly three-quarters (70 percent) of all black and Hispanic applicants processed by the lender are in the moderate- and middle-income groups.

The lender's denial rates for minorities are below MSA averages for moderate- and middle-income applicants. Only low-income Hispanic applicants are denied by the lender at a higher rate than similar applicants in the MSA, but the lender only processed 15 such applications. The lender also denies a much smaller proportion of moderate-, middle-, and upper-income white applicants compared with MSA averages. Low-income white applicants are more likely to be denied by the lender compared with MSA lenders, but this figure is based on only 7 applications.

However, the DDI data show that the lender's relative denial rates for minorities versus whites, controlling for income differences, tend to favor whites more than is true for the area as a whole. The lender's DDIs for moderate- and middle-income black and Hispanic applicants are higher than MSA averages. The lender's DDIs for low- and upper-income black and Hispanic applicants are lower than MSA averages. As already noted, data for these income groups need to be interpreted with caution because they represent only small numbers of applicants.

Table 3. Comparison of DDIs by Race and Ethnicity by Applicant Income

	Lender's DDIs			MSA DDIs		
	Black	Hispanic	White	Black	Hispanic	White
Low	0.79	0.75	n/a	1.02	0.79	n/a
Moderate	2.70**	2.02**	n/a	1.07	0.83	n/a
Middle	3.11**	2.58**	n/a	1.23	1.21	n/a
Upper	2.34	1.65	n/a	2.40	1.85	n/a
Weighted Average	2.67	1.96		1.41	1.06	

Source: HMDA

**Significant difference from MSA DDI at the .01 level

Note: Low-income applicants have incomes less than 50 percent of the MSA median; moderate-income applicants have incomes between 50 and 80 percent of MSA median; middle-income applicants have incomes between 80 and 120 percent of MSA median; and upper-income applicants have incomes above 120 percent of MSA median.



THE URBAN
INSTITUTE

Table 4. Comparison of Denial Rates by Race and Ethnicity by Applicant Income for Government Loans

	Lender Denial Rates			MSA Denial Rates		
	Black	Hispanic	White	Black	Hispanic	White
Low	60.0%	53.6%	75.0%	42.4%	21.8%	24.0%
Moderate	27.1%	22.4%	10.8%	24.0%	15.1%	12.3%
Middle	24.2%	23.6%	10.6%	20.9%	14.2%	9.6%
Upper	27.3%	15.8%	8.5%	19.3%	14.5%	9.4%
Overall	27.9%	27.5%	11.2%	24.1%	16.1%	10.9%
Weighted Average	28.1%	27.2%	10.9%	24.9%	16.4%	11.2%

Source: HMDA

Note: Low-income applicants have incomes less than 50 percent of the MSA median; moderate-income applicants have incomes between 50 and 80 percent of MSA median; middle-income applicants have incomes between 80 and 120 percent of MSA median; and upper-income applicants have incomes above 120 percent of MSA median.

HMDA Analysis for Government Loans

As discussed earlier, most of the lender’s originations are government loans because so many customers served by the company combine less-than-spotless credit with few resources for a down payment. In addition, the lender’s underwriter only examines government loans. These factors indicate that government loans better reflect the company’s treatment of loan applications because they are the only loans processed entirely by the company; therefore, tables 4 and 5 show denial rates and DDIs for government loan applications controlling for applicant income.

The picture is even clearer. The lender’s denial rates for minority government loan applicants at all income levels are higher than MSA rates for such borrowers (see table 4). This pattern contrasts with the lender’s white denial rates, which are lower than MSA levels for moderate- and upper-income and virtually the same for middle-income white government loan applicants. The lender’s DDIs for black and Hispanic applicants (except for those with low incomes) are also higher than MSA averages (see table 5). This pattern reflects

Table 5. Comparison of DDIs by Race and Ethnicity by Applicant Income for Government Loans

	Lender’s DDIs			MSA DDIs		
	Black	Hispanic	White	Black	Hispanic	White
Low	0.80	0.71	n/a	1.77	0.91	n/a
Moderate	2.50**	2.06**	n/a	1.86	1.17	n/a
Middle	2.28	2.22**	n/a	2.18	1.49	n/a
Upper	3.19	1.85	n/a	2.05	1.54	n/a
Overall	2.50**	2.46**	n/a	2.22	1.48	n/a
Weighted Average	2.43	1.86	n/a	2.28	1.77	n/a

Source: HMDA

**Significant difference with MSA DDI at the .01 level

Note: Low-income applicants have incomes less than 50 percent of the MSA median; moderate-income applicants have incomes between 50 and 80 percent of MSA median; middle-income applicants have incomes between 80 and 120 percent of MSA median; and upper-income applicants have incomes above 120 percent of MSA median.



the lender's higher minority and lower white denial rates compared with other lenders in the MSA. It is difficult to reconcile these results with the lender's belief that the origination process contains absolutely no differential treatment of minority borrowers.

Conclusions

The lender's higher denial disparities surprised the research team members who were unaware of the lender's HMDA performance before the site visit and, on the basis of site visit observations, expected the lender to have a very low denial disparity.

There are three potential explanations for the differences identified with the HMDA data, only the third of which implies that minority borrowers receive differential treatment. First, the DDI values may result from a higher number of minority applicants, relative to whites, failing to meet underwriting guidelines. As discussed earlier, the lender is fully owned by a builder. It may be that the builder's sales staff refer as many applicants as possible in order to increase the potential for a sale. As a result, the lender may be evaluating a large number of applicants who would not be processed by lenders not owned by a builder. To the extent that minority applicants have problematic applications, the DDIs may reflect racial differences in the creditworthiness of different applicants, rather than differential treatment of minority applicants.

A second possibility is that the HMDA-generated DDI figures are imprecise measures of discrimination, and may represent a "false positive." However, because the company has not instituted any of the management practices identified by Listokin and Wyly (1998) that may promote fair lending, discussed in the next section, a third possibility is that the case study represents a "false negative." The company's staff may assume they are carrying out a race-blind application process, but there is no training and monitoring, and staff are unaware of differential outcomes. Good intentions among staff without good monitoring and feedback may not lead to good (nondiscriminatory) outcomes. It may be, for example, that the lender's staff are unwittingly providing more assistance to marginal white applicants, despite a high level of assistance to minority customers. Such a result would be consistent with the Boston Fed Study's findings described in chapter 3 of this report.⁶

What the Lender Isn't Doing and Should Do

Of the managerial practices and procedures identified by fair lending experts as reducing the possibility of differential treatment of minority loan applications, the lender has implemented none completely and two only nominally. The lender's management does not see the need for specific fair lending training or monitoring, believing that the company's origination process contains sufficient checks to eliminate the potential for differential treatment. Without proper monitoring, however, differential treatment cannot be ruled out.

There is a growing literature about managerial and organizational procedures that help companies comply with fair lending laws.⁷ These strategies pre-



scribe specific training, monitoring, compensation, and managerial strategies to lenders who want to guarantee all customers equal treatment (Listokin and Wily 1998). This section contrasts the recommended activities with the current practices of the lender.

Develop a Formal Mission Statement

Recommended Activities

Include goal of fostering minority lending in institutions' overall mission statement, lending policy statement, or similar defining document.

Lender's Activities

The lender posts a description of fair lending laws in its office. In addition, the lender has a one-paragraph fair lending statement in its procedures manual. This statement was developed in 1994 in response to a HUD letter defining fair lending. The policy statement says, "All...employees are to be knowledgeable of and comply with existing fair lending related laws and requirements." Employees are also asked to keep current on fair lending requirements and discuss any concerns with management.

Monitor Fair Lending Performance

Recommended Activities

Involve senior-level management in developing, implementing, and monitoring goal of minority lending.

Lender's Activities

Company staff, from the president on down, all said that any race-specific monitoring would compromise the lender's race-blind mortgage application process.

Compensate Staff in a Manner Consistent with Fair Lending Objectives

Recommended Activities

Provide compensation practices that reward, or at least do not indirectly penalize, employees working to foster minority lending.

Lender's Activities

The loan counselors and processors receive base salaries along with a small commission based on the dollar volume of loans they help to close. The other employees receive a base salary and a profit-sharing bonus. These compensation policies do not discourage employees from working on loans that are small and/or take time to process, but they are not explicitly linked to employees' fair lending performance.



Develop a Diverse Workforce

Recommended Activities

Practice staff recruitment and promotion to foster minority lending through the racial diversity of employees.

Lender's Activities

At the time of the research team's site visit, none of the lender's loan origination staff were black, although two of the six loan counselors were Hispanic. All of the staff with whom we met except one heard about their current job through a personal contact. The exception was one Hispanic loan counselor, who was hired after responding to an advertised solicitation for a Spanish-speaking loan counselor. He said he was interested in working for the lender because its compensation was in the form of a straight salary, rather than commissions.

Provide Training in Fair Lending

Recommended Activities

Provide staff training in multicultural interactions generally and fair lending practices specifically.

Lender's Activities

The lender does not provide multicultural training or any specific training in fair lending practices. The lender uses "on-the-job" training for its employees. Newly hired loan counselors, with little previous experience, work in the processing department first, and then observe loan application interviews. After this stage, newly hired loan counselors conduct initial application interviews jointly with the branch manager. When considered ready, they are allowed to take applications without direct supervision. New employees also receive a procedures manual for the company, which contains the fair lending statement discussed above. However, most of the staff interviewed by the research team had not read the statement, although they were able to define fair lending.

Employees hired within the last year received general customer service training conducted by a consulting company hired by the lender's owner. This training took place in three half-day sessions. Attendees received training about treating customers courteously and putting people at their ease. However, as one employee put it, "The training didn't say 'treat black people like this, white people like this, and Hispanics like this.'"

Conduct Outreach to Minorities

Recommended Activities

Work with third parties committed to fostering minority lending.



Lender's Activities

Almost all of the lender's customers are referred by a sales representative of the builder who owns the lender. The research team does not know whether the builder is making formal outreach efforts to minorities.

Self-Monitor Fair Lending Performance

Recommended Activities

Systematically test for fairness, so that at all stages of the lending process minorities are treated equally.

Lender's Activities

The lender does not monitor its fair lending performance. All of the employees said they never receive any reports or information about how the lender treats minorities. The lender's staff saw no reason to track outcomes by race and said such information would take away from its race-blind origination process.

Designate an Employee to Receive Fair Lending Complaints

Recommended Activities

Appoint an ombudsman or comparable official to receive complaints from customers.

Lender's Activities

All customer complaints, including those alleging discrimination, are directed to the lender's president. The president is responsible for follow-up and resolution of complaints. In addition, loan recipients are asked to complete a customer satisfaction survey after the closing that asks about their experience with the process. The lender has a sample of these surveys in a loose-leaf binder for review in the lobby. Only customers who receive mortgages provide feedback to the company, so it is not surprising that these surveys contain highly favorable comments.

The lender has not instituted a number of strategies recommended to promote fair lending. Two of the most serious omissions by the lender are: (1) a complete lack of internal tracking and monitoring by the lender of its fair lending performance; and (2) no specific fair lending training for staff. While respondents said they treat all customers in the same manner, none of the respondents said they receive information that verifies that they are, in fact, conducting business in a race-blind manner. In addition, the president said the company's monitoring system is incapable of identifying instances in which staff inadvertently discriminate against minority applicants, although overtly negative comments entered into the company's electronic application system would generate attention. In a follow-up interview, the president told us that she had given more thought to the question about inadvertent discrimination, and had come to the conclusion that the lender's internal controls would not detect such behavior.



She hastened to add, however, that nobody employed by the lender would inadvertently discriminate, because everybody who works for the lender is committed to fair lending.

The lender has received complaints about discriminatory treatment, and is currently under investigation in connection with a suit filed by a minority applicant who was denied a mortgage. The president said she occasionally receives a phone call from a customer who claims he or she was denied due to race. The president said she reviews the loan application files to see why the customer's application was denied. In all cases, she said, the loan applications contained serious problems, such as a poor credit or income history.⁸ She said it upset her when allegations of discrimination were made because the company qualifies so many marginal applicants and has no reason to discriminate. Two other employees said that one of the discrimination suits was filed by a black customer who was working with a black loan counselor. This story was related to the research team to indicate the weakness of discrimination suits filed against the company.

The lender does not provide any specific fair lending training, although most employees could define fair lending. Employees said fair lending meant that "You treat everybody equally." The lender's staff said fair lending training was not necessary because discrimination is wrong, and they would never do it.

Implementation Strategies

The research team asked representatives of CLC Compliance Technologies, Inc. (a consulting firm that provides technical assistance to lenders seeking to improve fair lending performance), to identify specific strategies the lender should implement to assess whether or not the denial discrepancies result from differential treatment.⁹

CLC Compliance Technologies staff have several recommendations for the lender. First, the lender's quality assurance staff should expand its activities to include fair lending enforcement. Currently, the lender's quality assurance staff ensure that loan applications contain accurate documentation. CLC Compliance Technologies staff said they should also review origination decisions for similarly qualified applicants of different races. A staff member should be assigned to identify a number of loan applications that are similar in income, credit history, front- and back-end ratios, and so forth, but differ by race. He/she should then compare the number and types of conditions transmitted to marginal white, black, and Hispanic applicants and look for systematic differences. If differences exist and sample size is large enough, it is worthwhile assessing whether particular staff members have systematic disparities in treatment of similar files.

To the extent that borrowers are fairly randomly assigned to loan counselors, the lender can identify loan counselors with potential problems by computing DDIs by loan counselor for each subdivision where he or she has dealt with a substantial number of loans. A loan counselor with consistently high DDIs should then be given further scrutiny to determine the sources of the persistent racial gaps.

Second, the lender should institute fair lending training for its staff. This training would focus attention on the subtle ways in which white employees



can discriminate against minority applicants. Annex B (which appears at the end of this chapter) outlines the topics covered in a fair lending training seminar offered by CLC Compliance Technologies. This training seminar includes discussions of scenarios where differential treatment inadvertently occurs and proposes actions to avoid such behavior. For example, seminar participants analyze the following scenario in which two applicants call one lender. In the first case, the teleservice representative greets the applicant in the usual way, then mentions that he lives in Forsythe County, Georgia, where the teleservice representative grew up. The representative proceeds to take the phone application while striking up a great conversation about people they both know. After the representative collects all the information, the applicant asks, “Well, how do I look? Will I get the loan?” The representative responds, “You need to get a cosigner so you can show more income. Or, you could reduce your monthly expense by \$150 a month.” The applicant responds, “Great! My brother lives with me, he can cosign.” The loan was approved. In the second case, a similarly qualified applicant from central city Atlanta calls, is greeted in the usual way, has the information taken, and has the application denied without even being notified.¹⁰ Although employees may not believe such a scenario represents outright discrimination, it does underscore for them the subtle nature of differential treatment that may occur in the loan origination process.

Third, the company should develop quantitative fair lending objectives. Previous CLC Compliance Technologies customers have committed to reducing minority denial rates, and the consultants recommend that the company create similar measurable goals. Once these goals are developed, the lender should use internal data, as well as HMDA data, to assess its progress in meeting these goals. Such a system would provide the lender with the means to measure its fair lending performance relative to its stated quantitative goals.

Finally, the lender should hire white, black, and Hispanic “mystery shoppers” to see if the lender’s origination process is, in fact, race-blind. These mystery shoppers would go to different subdivisions and pose as interested buyers. The lender would be able to use the results of these audits to see if minority customers are receiving differential treatment by the builder’s sales representative or the lender’s loan counselor.

According to the consulting firm, none of these recommended strategies is very complex or costly for the lender to implement, given its size and origination volume. Moreover, the results of these activities would allow the lender to detect the presence of differential treatment and take effective measures to reduce the possibility it will occur in the future.

Implementation Steps

A number of steps would be needed for a lender to implement changes such as these. For each recommended change, we briefly identify advantages and likely obstacles.

Identify whether a problem exists. Before starting any change process, management and front-line employees must understand that a problem exists.

There is a “chicken and egg” problem concerning the data-gathering needed to identify whether a lender discriminates. To the extent a lender does not



believe it has a problem, it has no incentive to gather more data or perform more analysis on existing data. In addition, organizations face disincentives to gather data because any findings might be subpoenaed or leaked to the press. (Subpoenas are most likely not a problem if a lender's law firm carries out the analysis, because then the research may be protected by lawyer-client privilege. This alternative does raise costs.) At the same time, without detailed data it is difficult to identify discrimination.

Fortunately, HMDA data that present race-specific denial rates by income can be used for a first look; this approach has low costs and the data are based on public information. The first set of suggestions noted above, looking at differential treatment of very similar files, and sending out "mystery shoppers" that differ by race, can indicate or rule out race as a factor in explaining differential DDIs. Even if no problem is identified, the lender's large HMDA data discrepancy makes it prudent for management to institutionalize some ongoing monitoring. Only then can the lender be sure discrimination does not arise, reduce the risks of lawsuits, and be prepared to counter bad publicity based on HMDA data.

Create the case for change. If the more detailed analyses do indicate a problem with (presumably inadvertent) discrimination, management must take the next step of making a business case for change.

The need for a business case is not part of the typical "best practice" advice on fair lending (e.g., Listokin and Wyly 1998, Vartanian et al. 1995). However, fair lending (or other) changes proposed without a business case are likely to be viewed as something alien to good business and "tacked on" to an otherwise profit-maximizing concern. That is, many employees and managers may feel that fair lending initiatives are implemented for "feel-good" reasons. They will expect the initiatives to hurt their measured bottom-line performance and not to last very long. Such employees and managers are likely merely to go through the motions of compliance. Even if the changes are tied to compensation, they will be perceived as not likely to remain after the sponsoring executive moves on.

The business case must clearly link the objective data on differential treatment to three issues—law, ethics, and profits—and must emphasize that discrimination is illegal and is perceived as unethical by management. It must also make the point that discrimination increases the lender's potential to be sued or face (deserved) bad publicity. Finally, it must highlight that discrimination can lead the lender to deny loans to qualified applicants and thus lose business.

The business case must then identify actions to address the problems identified. A sensible starting point is to go through a list of fair lending practices (e.g., the list in Listokin and Wyly 1998, summarized above) and identify policies that are both cost-effective and tied to the problems identified in the self-analysis. The proposals discussed above for the case study lender to increase fair lending training and to create fair lending goals are examples of such changes.

Ideally, the business case would be based on objective data describing the situation and clearly explaining the discrimination findings. The key is not to place blame but to create a shared understanding of the problem. Unfortunately, a lender that circulates its own analysis indicating likely discrimination increases the likelihood that it will be sued. Thus, the lender may need to



describe the situation on paper in terms that are both vague and less severe than would be ideal, other things equal.

At a minimum, circulating the HMDA data internally should alert employees to the possibility and the appearance of discrimination. Unfortunately, because employees will be able to identify the weaknesses of HMDA data and many employees will discount “feel-good” messages that diversity will increase profits, the business case will probably be weaker than if it could lay out the true scope of the problem.

Create an integrated fair lending plan. A recurring theme in the literature on organizational change is the necessity of creating a coherent strategy, whereby the various management policies of the organization reinforce each other. (See, e.g., Milgrom and Roberts 1995 for theoretical exposition, and the literature review in Ichniowski et al. 1996 for empirical evidence concerning one set of human resource practices.) The standard fair lending best practice list follows this precept by including a coherent list of practices to support fair lending. Within the firm the emphasis includes: management leadership; training that both increases awareness of problems and gives skills to address them; pay systems that reinforce fair behaviors; and information systems that provide feedback on fair lending outcomes to both employees and their managers. Policies that interact with the environment of the enterprise also support the fair lending goal: recruitment of a diverse workforce; partnerships with organizations that can assist in achieving fair lending goals; and learning from customers (e.g., with an impartial complaint system).

Two additional sets of policies that are not in the Listokin and Wyly checklist of good practices also appear in the standard literature on organizational change. First, many successful change efforts involve front-line employees in identifying and solving problems. In many organizational change efforts, front-line employees, such as loan counselors, have insights into why the data turn out the way they do. Employees often have insights into successful strategies for change as well (Levine 1995). Finally, any change effort will involve changes in the behavior of front-line staff. They are more likely to implement the changes if they perceive that their views were incorporated into the change effort.

Second, successful change efforts often include means for organizational learning across subunits performing similar tasks. Unlike the case study above, the majority of mortgages are originated by very large lenders or mortgage companies, not a local lender. Such organizations face the challenge of implementing good practices in many different workplaces, while still retaining flexibility to learn and to adapt to local conditions. Best practice companies will be those that identify means to give all employees the skills, technology, organizational structures (e.g., cross-functional teams), and incentives both to share their good ideas, and to learn and adapt good ideas from elsewhere in the organization (Gilbert and Levine 1998). In the fair lending setting, organizations should identify subunits with impressive and consistent success in lending to underrepresented groups, and benchmark their practices for use in other parts of the organization.

Implement new pay systems. As with any change effort, the move to promote fair lending will face many barriers. For example, if loans to minorities are disproportionately for smaller amounts and require more assistance than loans to white applicants, minority loan applicants may not receive the same treat-



ment as whites for that reason alone. Consistent with profit maximization, pay systems at many lenders reward the dollar volume of loans. Such a practice aligns incentives with a lender's costs and benefits of loans. A fair lending initiative that weakens the relationship between total lending amounts and compensation will face problems in the short run from employees who were compensated highly based on a high volume of loans processed and whose expected compensation will be cut if the fair lending initiative is implemented.

Some lenders put only a subset of their loan officers on salary or on lower-stakes commissions. This avoids the demotivating effects of cuts in expected compensation. But it ensures that low-income loans are ghettoized into a subset of lender employees. Moreover, because a pay system such as salary or paying per loan (rather than compensation based on loan size) does not align employee incentives with profit maximization, it may present particular challenges to implement.

Change decisionmaking. Fair lending programs often involve “second look” and other additional reviews for marginal mortgage applications, especially those of minorities. These programs can be quite important if, as some recent research suggests, marginal minority borrowers receive less attention than marginal whites (Yinger 1995). At the same time, multiple reviews of loans that front-line employees feel should be denied can reduce front-line employees' perceived power. This can increase their resistance to change. Permitting front-line employees more flexibility in finding creative ways to show ability to repay a loan can increase front-line employees' decisionmaking power. In this case, however, the reduced power of those who established the (formerly) rigid guidelines can lead to resistance to change. More generally, employees may feel that “fair lending” is mainly just more oversight by uninformed outsiders.

Individual-specific monitoring of denial rates by race and incentives for lending to underrepresented groups can lead to resentment among front-line employees, particularly if they feel pressure to meet a (reverse) discriminatory quota of loans. This resentment can be mitigated by technology that provides employees with feedback on their fair lending performance and the skills and other tools needed to identify the sources of any problems and implement effective solutions. In this case, fair lending initiatives can be integrated with a general effort to increase front-line empowerment. That fair lending goals and monitoring can be either oppressive or empowering is an instance of a more general capability of technology to be used in ways either that automate decisions or that create tools for front-line employees to use (Zuboff 1984).

Implement fair lending and diversity training. The fair lending program should be tied to the business plan of the lending institution. Thus, training should be presented in terms of satisfying the needs of a diverse clientele and complying with existing fair lending laws. Each initiative is more likely to succeed if it is tied to making good loans than if it is solely motivated by legal or “do-gooder” perspectives. At the same time, programs that are not tied to profitability goals typically do not flourish in organizations. To the extent that a lack of understanding of other cultures is a barrier to judging marginal minority applicants accurately, the cost of serving these populations is actually higher. Thus, it is appropriate for lenders to pay for fair lending training of employees as well as homebuyer counseling



and education for applicants who may not be familiar with the mortgage lending process (Longhofer 1995).

Recruit and promote a diverse workforce. A lender can enhance its fair lending performance by practicing staff recruitment and promotion to create a racially diverse workforce. It may be that seeing an all-white office may make minority borrowers feel unwelcome. (Kim and Squires [1995] provide some evidence of lower minority denial rates at banks with more minority employees.) At the same time, recruiting people based on the color of their skin, even if it makes customers more comfortable, is not always allowed by law. That is, customer discrimination is not an excuse for an employer to discriminate on the basis of race or ethnicity in hiring or promotions. Particularly for language minorities, having bilingual staff can be helpful. Fortunately for diversity efforts, hiring based partly on language skills is legal. Interestingly, employees at the lender in this case study claimed language was not a barrier even for the many borrowers born in other countries. Non-English speakers almost always came to a branch with a bilingual friend or relative.

Policy and Research Conclusions

The employees of the lender analyzed in this case study strongly believe that they participate in a race-blind origination process. Moreover, the research team, unaware of the lender's HMDA data at the time of the field visit, also believed the lender was acting in a race-blind manner based on its discussions with employees and review of the lender's origination process. The HMDA data, however, reveal that origination outcomes are different for whites, blacks, and Hispanics—differences that are not eliminated by controlling for the applicant's income or type of loan. This outcome suggests that the lender may not be acting in a race-blind manner, although other explanations are possible.

Although the lender denies only a relatively small proportion of minority applications, it denies an even smaller proportion of white applications. This may result from the lender's staff making greater efforts to qualify marginal white applicants compared with marginal black and Hispanic applicants. Because the lender does not monitor its fair lending performance, it is impossible to rule out the possibility that staff are inadvertently treating whites differently from minority customers.

These results indicate that lenders cannot simply assume they are using a race-blind origination process. It may be that all of the racial differences in origination outcome result from lower income, poorer credit, and other factors among minority applicants that predict loan payment performance. If so, none of the racial differences constitutes differential treatment. However, the lender's lack of a monitoring system precludes ruling out the possibility of differential treatment. The only way the case study lender could distinguish between outcomes that result from valid underwriting standards and those from differential treatment is to conduct a side-by-side review of origination outcomes for similarly qualified minority and white applicants. Such a review should be supplemented with more extensive fair lending training for staff and an enhanced internal monitoring and control system that tracks outcomes and reports information about racial differences in origination outcomes.



It cannot be assumed that fair lending can only be enhanced through voluntary lender self-assessments. As discussed earlier, institutional inertia will prevent many lenders from undertaking strategies that promote fair lending. In addition, some lenders have no idea that they may be treating minorities differently from whites. Therefore, regulators must ensure that lenders comply with fair lending laws and provide data to lenders in a form that assists lenders in monitoring fair lending performance.

At a minimum, lenders should be given HMDA data that show the company's denial rates for different types of borrowers as well as racial denial rate discrepancies. Lenders should also receive the same information for other lenders in the MSA in order to provide a sense of their relative performance. The data analysis software used in this case study, HMDAware®, could be provided to lenders, perhaps on the internet, in order to allow for analyses of HMDA data, and so provide an opportunity for all lenders to start evaluating their fair lending performance.

These data, however, only provide information about the possibility that a lender is not treating minorities the same as white applicants. As discussed earlier, implementing organizational change is difficult and will be a challenge for most companies. Therefore, lenders may require substantial technical assistance from HUD, as well as other organizations and agencies, to identify and implement new managerial processes.

Notes

1. The lender was one of eight companies invited to participate in the study. Lenders were chosen because they had processed a minimum of 100 minority applications in a recent year. Such lenders were then categorized as having a high or low Denial Disparity Index, a measure used by CLC Compliance Technologies that measures the extent to which minority applicants are more likely than whites to be denied a loan. Each lender was contacted in writing and by telephone by a member of the research team. Some lenders gave no reason for their decision not to participate. Other lenders said they could not dedicate staff time to participate in discussions with the research team. Future research projects based on in-depth case studies of lenders will have to be designed cognizant of the potential for poor cooperation among potential respondents.
2. The lender reports origination outcome data for HMDA. Since the lender is a mortgage company, however, it is not subject to CRA regulations.
3. Other important underwriting factors, such as credit history, are not included in this analysis, however.
4. We omit the actual year in order to protect the lender's anonymity.
5. The Denial Disparity Index is a measure of loan outcomes developed by CLC Compliance Technologies and used with permission.
6. Some attribute such behavior to a "cultural affinity" between white lending staff and white customers (Hunter and Walker 1996). As a result, white loan officers and underwriters are more likely to help marginal white applicants qualify for a mortgage (Lindsey 1997). Another body of literature, however, posits that affinity can develop between people of different races because such connections are not solely based on race (Harrison 1991).
7. Indeed, Listokin and Wyly (1998, p. 23) identified 12 such studies, issued by organizations ranging from the Neighborhood Reinvestment Coalition to the Federal Reserve Bank of Boston to HUD. They argue "[t]here is now a broad body of knowledge in the lending indus-



try and among regulators regarding strategies that are successful in expanding the availability of mortgage credit to traditionally underserved markets.”

8. The president, however, does not look for applications with similar characteristics filed by whites to see if such applications were approved. Therefore, the president’s review does not rule out the possibility that white marginal applicants receive different treatment.
9. All of the HMDA analyses presented in this case study were conducted using CLC Compliance Technologies’ HMDAware® software package. In addition, CLC Compliance Technologies staff assisted the research team in developing discussion guides used during the site visit, reviewed the research team’s field notes (with identifying information removed), and were briefed by the research team after the site visits were completed.
10. CLC Compliance Technologies.



References

- Ambrose, Brent, William Hughes, and Patrick Simmons. 1995. "Policy Issues Concerning Racial and Ethnic Differences in Home Loan Rejection Rates." *Journal of Housing Research* 6 (1):115–136.
- Amemiya, Takeshi. 1974. "Multivariate Regression and Simultaneous Equations When the Dependent Variables Are Truncated Normal." *Econometrica* 42: 999–1012.
- Arrow, Kenneth. 1973. "The Theory of Discrimination." In *Discrimination in Labor Markets*, edited by Orley Ashenfelter and Albert Rees (Princeton: Princeton University Press), pp. 3–42.
- Avery, Robert B., and Patricia E. Beeson. 1998. "Neighborhood, Race, and the Mortgage Market: Evidence from HMDA Data." Paper presented at the annual AEA/NEA meetings. Chicago, January.
- Avery, Robert B., Patricia E. Beeson, and Paul D. Calem. 1996. "Using HMDA Data as a Regulatory Screen for Fair Lending Compliance." *Journal of Financial Services Research* 11 (February/April): 9–42.
- Avery, Robert B., Patricia E. Beeson, and Mark S. Sniderman. 1996. "Accounting for Racial Differences in Housing Credit Markets." In *Mortgage Lending, Racial Discrimination, and Federal Policy*, edited by John Goering and Ron Wienk (Washington: Urban Institute Press), pp. 75–142.
- Avery, Robert B., Raphael W. Bostic, Paul S. Calem, and Glenn B. Canner. 1998. *Credit Scoring: Issues and Evidence from Credit Bureau Files*. Washington: Board of Governors of the Federal Reserve System.
- Ayres, Ian, and Peter Siegelman. 1995. "Race and Gender Discrimination in Bargaining for a New Car." *American Economic Review* 85 (June): 304–321.
- Becker, Gary S. 1993. "The Evidence Against Banks Doesn't Prove Bias." *Business Week*, April 19, p. 18.
- _____. 1971. *The Economics of Discrimination*, 2d ed. Chicago: University of Chicago Press.

- Berkovec, James A., Glenn B. Canner, Stuart A. Gabriel, and Timothy H. Hannan. 1998. Discrimination, Competition, and Loan Performance in FHA Mortgage Lending. *Review of Economics and Statistics* 80: 241–250.
- _____. 1996. “Response to Critiques of ‘Mortgage Discrimination and FHA Loan Performance’.” *Cityscape: A Journal of Policy Research* 2 (1): 49–54.
- _____. 1994. “Race, Redlining, and Residential Mortgage Loan Performance.” *Journal of Real Estate Finance and Economics* 9 (3): 263–294.
- Berkovec, James A., and Peter Zorn. 1996. “How Complete Is HMDA? HMDA Coverage of Freddie Mac Purchases.” *Journal of Real Estate Research* 11: 39–56
- Black, Harold A. 1995. “HMDA Data and Regulatory Inquiries Regarding Discrimination.” In *Fair Lending Analysis: A Compendium of Essays on the Use of Statistics*, edited by Anthony M. Yezer (Washington: American Bankers Association), pp. 147–154.
- Black, Harold A., M. Cary Collins, Ken B. Cyree. 1997. “Do Black-Owned Banks Discriminate against Black Borrowers?” *Journal of Financial Services Research* 11 (February/April): 189–204.
- Bostic, Raphael W., and Glenn B. Canner. 1997. “Do Minority-Owned Banks Treat Minorities Better? An Empirical Test of the Cultural Affinity Hypothesis.” Unpublished manuscript, December.
- Boyes, William J., Dennis L. Hoffman, and Stuart A. Low. 1989. “An Econometric Analysis of the Bank Credit Scoring Problem.” *Journal of Econometrics* 40: 3–14.
- Bradford, Calvin. 1979. “Financing Home Ownership: The Federal Role in Neighborhood Decline.” *Urban Affairs Quarterly* 14: 313.
- Brimelow, Peter. 1993. “Racism at Work?” *National Review*, April 12, p. 42.
- Brimelow, Peter, and Leslie Spencer. 1993. “The Hidden Clue.” *Forbes*, January 4, p. 48.
- Browne, Lynn E., and Gregory M. Tootell. 1995. “Mortgage Lending in Boston: A Response to the Critics.” *New England Economic Review* (September/October): 53–78.
- Buist, Henry, Peter Linneman, and Isaac F. Megbolugbe. 1997. “Residential Lending Discrimination and Lender Compensation Policies.” Unpublished manuscript.
- CLC Compliance Technologies, Inc. *CLC Compliance Technologies Fair Lending Training Program outline*. [<http://www.compliancetech.com/floutln.htm>].
- Calomiris, Charles W., Charles M. Kahn, and Stanley Longhofer. 1994. “Housing Finance Intervention and Private Incentives: Helping Minorities and the Poor.” *Journal of Money and Banking* 26 (3) August: 634–74.
- Canner, Glenn B., and Wayne Passmore. 1994. “Residential Lending to Low-Income and Minority Families: Evidence from the 1992 HMDA Data.” *Federal Reserve Bulletin* (February): 79–108.



- Carr, James H., and Isaac F. Megbolugbe. 1993. "The Federal Reserve Bank of Boston Study on Mortgage Lending Revisited." *Journal of Housing Research* 4 (2): 277–314.
- Courchane, Marsha, and David Nickerson. 1997. "Discrimination Resulting from Overage Practices." *Journal of Financial Services Research* 11 (1997): 133–152.
- Crawford, Gordon W., and Eric Rosenblatt. 1997. "Differences in the Cost of Mortgage Credit: Implications for Discrimination." Unpublished manuscript.
- Day, T., and Stanley J. Liebowitz. 1996. "Mortgages, Minorities, and HMDA." Paper presented at the Federal Reserve Bank of Chicago, April.
- Federal Financial Institutions Examination Council. 1998. "Press Release, August 6, 1998." [<http://www.ffiec.gov/pr080698.htm>].
- Ferguson, Michael F., and Stephen R. Peters. 1995. "What Constitutes Evidence of Discrimination in Lending?" *Journal of Finance* 50: 739–748.
- Fix, Michael, George Galster, and Raymond Struyk. 1993. "An Overview of Auditing for Discrimination." In *Clear and Convincing Evidence*, edited by Michael Fix and Raymond Struyk (Washington: Urban Institute Press), pp. 1–68.
- Gabriel, Stuart A. 1996. "The Role of FHA in the Provision of Credit to Minorities." In *Mortgage Lending, Racial Discrimination, and Federal Policy*, edited by John Goering and Ron Wienk (Washington: Urban Institute Press), pp. 183–250.
- Galster, George. 1993. "Use of Testers in Investigating Discrimination in Mortgage Lending and Insurance." In *Clear and Convincing Evidence*, edited by Michael Fix and Raymond Struyk (Washington: Urban Institute Press), pp. 287–334.
- Galster, George C. 1996. "Comparing Loan Performance between Races as a Test for Discrimination." *Cityscape: A Journal of Policy Development and Research* 2 (2): 33–40.
- _____. 1993. "The Facts of Lending Discrimination Cannot Be Argued Away by Examining Default Rates." *Housing Policy Debate* 4 (1): 141–146.
- Gilbert, April, and David I. Levine. 1998. "Knowledge Transfer: Managerial Practices Underlying One Piece of the Learning Organization." COHRE briefing paper, University of California at Berkeley [<http://socrates.berkeley.edu/~iir/cohre/knowledge.html>].
- Glennon, Dennis, and Mitchell Stengel. 1995. "Evaluating Statistical Models of Mortgage Lending Discrimination: A Bank-Specific Analysis." Economic and Policy Analysis Working Paper 95-3. Washington: Office of the Comptroller of the Currency.
- Glennon, Dennis, and Mitchell Stengel. 1994. "An Evaluation of the Federal Reserve Bank of Boston's Study of Racial Discrimination in Mortgage Lending." Economic and Policy Analysis Working Paper 94-2. Washington: Office of the Comptroller of the Currency.
- Goering, John M., ed. 1996. "Race and Default in Credit Markets: A Colloquy." *Cityscape: A Journal of Policy Development and Research* 2 (1).



- Goering, John M., and Ron Wienk, eds. 1996. *Mortgage Lending, Racial Discrimination, and Federal Policy*. Washington: Urban Institute Press.
- Goldberger, Arthur D. 1984. "Reverse Regression and Salary Discrimination." *Journal of Human Resources* 18 (3): 294–318.
- Greene, William. 1993. *Econometric Analysis*, 2d ed. New York: Macmillan.
- Harrison, Faye. 1991. "Ethnography as Politics." In *Decolonizing Anthropology: Moving Further toward an Anthropology of Liberation*, edited by Faye Harrison (Washington: Association of Black Anthropologists), pp. 88–109.
- Heckman, James H. 1976. "The Common Structure of Statistical Models of Truncation, Sample Selection and Limited Dependent Variables and a Simple Estimator of Such Models." *Annals of Economic and Social Measurement* 5: 475–92.
- Heckman, James, and Peter Siegelman. 1993. "The Urban Institute Audit Studies: Their Methods and Findings." In *Clear and Convincing Evidence*, edited by Michael Fix and Raymond Struyk (Washington: Urban Institute Press), pp. 187–258.
- Hendershott, Patrick, W. LaFayette, and David Haurin. 1997. "Debt Usage and Mortgage Choice: The FHA-Conventional Decision." *Journal of Urban Economics* 41: 202–217.
- Herzog, J.P., and J.S. Earley. 1970. *Home Mortgage Delinquency and Foreclosure*. New York: National Bureau of Economic Research.
- Horne, David K. 1997. "Mortgage Lending, Race, and Model Specification." *Journal of Financial Services Research* 11 (February/April): 43–68.
- _____. 1994. "Evaluating the Role of Race in Mortgage Lending." *FDIC Banking Review* (Spring/Summer): 1–15.
- Hunter, William C., and Mary Beth Walker. 1996. "The Cultural Affinity Hypothesis and Mortgage Lending Decisions." *Journal of Real Estate Finance and Economics* 13 (July): 57–70.
- Ichniowski, Casey, et al. 1996. "What Works at Work: A Critical Review." *Industrial Relations* 35, (3): 299–333.
- Judy, Nancy Ness. 1996. "Fair Lending: Telling Your Story through the Media." *ABA Bank Compliance* 17 (11): 14–18.
- Kim, Sunwoong, and Gregory Squires. 1995. "Lender Characteristics and Racial Disparities in Mortgage Lending." *Journal of Housing Research* 6 (1): 99–113.
- Kohn, Earnest, Cyclic E. Foster, Bernard Kaye, and Nancy J. Terris. 1992. "Are Mortgage Lending Policies Discriminatory? A Study of 10 Savings Banks." New York State Banking Department, March.
- LaCour-Little, Michael. 1998. "Application of Reverse Regression to Boston Federal Reserve Data Refutes Claims of Discrimination." *Journal of Real Estate Research* 11: 1–12.



- _____. 1996. "Race Differences in Demand and Supply of Mortgage Credit." Unpublished manuscript.
- Ladd, Helen F. 1998. "Evidence on Discrimination in Credit Markets." *Journal of Economic Perspectives* 12 (Spring): 41–62.
- Lang, William W., and Leonard I. Nakamura. 1993. "A Model of Redlining." *Journal of Urban Economics* 33 (March): 223–234.
- Laitila, Thomas. 1993. "A Pseudo-R² Measure for Limited and Qualitative Dependent Variable Models." *Journal of Econometrics* 53 (3): 341–356
- Levine, David I. 1995. *Reinventing the Workplace: How Business and Employees Can Both Win*. Washington: Brookings Institution.
- Liebowitz, Stanley. 1993. "A Study That Deserves No Credit." *Wall Street Journal*, September 1, p. A14.
- Lindsey, Debby. 1997. "The Mortgage Industry's Attitude on Race, Culture, and Discrimination in Lending," Paper presented at the annual meeting of the Eastern Economic Association, Arlington, Va., April.
- Lindsey, Lawrence B. 1995. "Foreword." In *Fair Lending Analysis: A Compendium of Essays on the Use of Statistics*, edited by Anthony M. Yezer (Washington: American Bankers Association), pp. ix–xiv.
- Ling, David C., and Susan M. Wachter. 1998. "Information Externalities and Home Mortgage Underwriting." *Journal of Urban Economics* 44 (November): 317–332.
- Listokin, David, and Elvin Wyly. 1998. *Successful Lending Industry Strategies, Volume 1: Successful Strategies* (New Brunswick, N.J.: Center for Urban Policy Research).
- Longhofer, Stanley D. 1996a. "Cultural Affinity and Mortgage Discrimination." *Economic Review* 32 (3): 12–24.
- _____. 1996b. "Discrimination in Mortgage Lending: What Have We Learned?" *Economic Commentary* (Federal Reserve Bank of Cleveland), August 15.
- _____. 1995. "Rooting Out Discrimination in Home Mortgage Lending." *Economic Commentary* (Federal Reserve Bank of Cleveland): 1–4.
- Maddala, George S., and Robert P. Trost. 1982. "On Measuring Discrimination in Loan Markets." *Housing Finance Review* 1: 245–268.
- Meyers, Samuel L., Jr., and Tsze Chan. 1995. "Racial Discrimination in Housing Markets: Accounting for Credit Risk." *Social Science Quarterly* 76 (September): 543–561.
- Milgrom, Paul, and John Roberts. 1995. "Complementarities and Fit: Strategy, Structure, and Organizational Change in Manufacturing." *Journal of Accounting and Economics* 19 (2, 3): 179–208.



- Munnell, Alicia H., Geoffrey M.B. Tootell, Lynn E. Browne, and James McEneaney. 1996. "Mortgage Lending in Boston: Interpreting HMDA Data." *American Economic Review* 86 (March): 25–53.
- Peterson, Richard L. 1981. "An Investigation of Sex Discrimination in Commercial Banks' Direct Consumer Lending." *Bell Journal of Economics* 12 (2): 547–561.
- Phillips, Robert F., and Anthony M. Yezer. 1995. "Self Selection and the Measurement of Bias and Risk in Mortgage Lending: Can You Price the Mortgage If You Don't Know the Process?" Paper presented at the American Real Estate and Urban Economics Association meetings, Washington, January.
- Phillips-Patrick, Fred J., and Clifford V. Rossi. 1996. "Statistical Evidence of Mortgage Redlining? A Cautionary Tale." *Journal of Real Estate Research* 11: 13–24.
- Policy Statement on Discrimination in Lending. 1994. *Federal Register*, Vol. 59, no. 73. April 15, 1994: 18266–18274.
- Quercia, Roberto G., and Michael A. Stegman. 1992. "Residential Mortgage Default: A Review of the Literature." *Journal of Housing Research* 3: 341–380.
- Rachlis, Mitchell B., and Anthony M. Yezer. 1993. "Serious Flaws in Statistical Tests for Discrimination in Mortgage Markets." *Journal of Housing Research* 4 (2): 315–336.
- Ritter, Richard. 1996. "The Decatur Federal Case: A Summary Report." In *Mortgage Lending, Racial Discrimination, and Federal Policy*, edited by John Goering and Ron Wienk (Washington: Urban Institute Press), pp. 445–450.
- Rodda, David, and James E. Wallace. 1996. "Fair Lending Management: Using Influence Statistics to Identify Critical Mortgage Loan Applications." In *Mortgage Lending, Racial Discrimination, and Federal Policy*, edited by John Goering and Ron Wienk (Washington: Urban Institute Press), pp. 531–560.
- Rosenblatt, Eric. 1997. "A Reconsideration of Discrimination in Mortgage Underwriting with Data from a National Mortgage Bank." *Journal of Financial Services* 11: 109–132.
- Ross, Stephen L. 1998. "Mortgage Lending, Sample Selection, and Default." Working paper, University of Connecticut.
- Ross, Stephen L., and Geoffrey M.B. Tootell. 1998. "Redlining, the Community Reinvestment Act, and Private Mortgage Insurance." Unpublished manuscript.
- _____. 1997. "Mortgage Lending Discrimination and Racial Differences in Loan Default: A Simulation Approach." *Journal of Housing Research* 8 (2): 277–297.
- _____. 1996a. "Mortgage Lending Discrimination and Racial Differences in Loan Default." *Journal of Housing Research* 7 (1): 117–126.
- _____. 1996b. "Flaws in the Use of Loan Defaults to Test for Mortgage Lending Discrimination." *Cityscape: A Journal of Policy Development and Research* 2 (1): 41–48.
- Schafer, Robert, and Helen F. Ladd. 1981. *Discrimination in Mortgage Lending*. Cambridge: MIT Press.



- Schill, Michael H., and Susan M. Wachter. 1993. "A Tale of Two Cities: Racial and Ethnic Geographic Disparities in Home Mortgage Lending in Boston and Philadelphia." *Journal of Housing Research* 4 (2): 245–275.
- Schwemm, Robert G. 1992. *Housing Discrimination: Law and Litigation*. Deerfield, Ill.: Clark, Boardman, Callaghan.
- Sickles, Robin C., and Peter Schmidt, 1978. "Simultaneous Equation Models with Truncated Dependent Variables: A Simultaneous Tobit Model." *Journal of Economics and Business* 31: 11–21.
- Siegelman, Peter. 1998. "Racial Discrimination in 'Everyday' Commercial Transactions: What Do We Know, What Do We Need to Know, and How Can We Find Out?" Paper presented at the Urban Institute Conference on Testing for Racial and Ethnic Discrimination in American Economic Life. Washington, March.
- Simmons, Pat. 1997. *Housing Statistics of the United States*. Lanham, Md.: Bernan Press.
- Siskin, Bernard R., and Leonard A. Cupingood. 1996. "Use of Statistical Models to Provide Statistical Evidence of Discrimination in the Treatment of Mortgage Loan Applicants: A Study of One Lending Institution." In *Mortgage Lending, Racial Discrimination, and Federal Policy*, edited by John Goering and Ron Wienk (Washington: Urban Institute Press), pp. 451–468
- Smith, Shanna, and Cathy Cloud. 1996. "The Role of Private, Nonprofit Fair Housing Enforcement Organizations in Lending Testing." In *Mortgage Lending, Racial Discrimination, and Federal Policy*, edited by John Goering and Ron Wienk (Washington: Urban Institute Press), pp. 589–610.
- Temkin, Kenneth, et al. 1998. *A Study of GSEs' Single Family Underwriting Guidelines*. Report prepared for U.S. Department of Housing and Urban Development (Washington: Urban Institute), October.
- Tootell, Geoffrey M.B. 1996a. "Redlining in Boston: Do Mortgage Lenders Discriminate against Neighborhoods?" *Quarterly Journal of Economics* 111: 1049–1079.
- Tootel, Geoffrey M.B. 1996b. "Turning a Critical Eye on the Critics." In *Mortgage Lending, Racial Discrimination, and Federal Policy*, edited by John Goering and Ron Wienk (Washington: Urban Institute Press), pp. 143–182.
- Turner, Margery Austin, Michael Fix, and Raymond Struyk. 1991. *Opportunities Denied, Opportunities Diminished*. Washington: Urban Institute Press.
- _____. 1996. "Turning a Critical Eye on the Critics." In *Mortgage Lending, Racial Discrimination, and Federal Policy*, edited by John Goering and Ron Wienk (Washington: Urban Institute Press), pp. 143–182.
- Van Order, Robert, and Peter Zorn. 1995. "Testing for Discrimination: Combining Default and Rejection Data." In *Fair Lending Analysis: A Compendium of Essays on the Use of Statistics*, edited by Anthony M. Yezer (Washington: American Bankers Association), pp. 105–112.



- Vartanian, Thomas, Robert Ledig, Alisa Babitz, William Browning, and James Pitzer. 1995. *The Fair Lending Guide*. Little Falls N.J.: Glasser Legal Works.
- Williams, Alex O., William Beranek, and James J. Kenkel. 1974. "Default Risk in Urban Mortgages: A Pittsburgh Prototype Analysis." *AREUEA Journal* 2: 101–112.
- Yatchew, Adonis, and Zvi Griliches. 1985. "Specification Error in Probit Models." *Review of Economics and Statistics* 67 (1): 134–139.
- Yezer, Anthony M. 1995. "Editor's Notes." In *Fair Lending Analysis: A Compendium of Essays on the Use of Statistics*, edited by Anthony M. Yezer (Washington: American Bankers Association), pp. iii–vi.
- Yezer, Anthony M., R. Phillips, and R. Trost. 1994. "Bias in Estimates of Discrimination and Default in Mortgage Lending: The Effects of Simultaneity and Self-Selection." *Journal of Real Estate Finance and Economics* 9: 197–216.
- Yin, Robert. 1989. *Case Study Research: Design and Methods*. Newbury Park, Calif.: Sage Publications.
- Yinger, John. 1998. "Evidence on Discrimination in Consumer Markets." *Journal of Economic Perspectives* 12 (Spring): 23–40.
- _____. 1996. "Discrimination in Mortgage Lending: A Literature Review." In *Mortgage Lending, Racial Discrimination, and Federal Policy*, edited by John Goering and Ron Wienk (Washington: Urban Institute Press), pp. 29–74.
- _____. 1995. *Closed Doors, Opportunities Lost: The Continuing Costs of Housing Discrimination*. New York: Russell Sage Foundation.
- _____. 1986. "Measuring Discrimination with Fair Housing Audits: Caught in the Act." *American Economic Review* 76 (December): 881–893.
- Zandi, M. 1993. "Boston Fed's Study Was Deeply Flawed." *American Banker*, August 19, p. 13.
- Zuboff, Shoshana. 1984. *In the Age of the Smart Machine*. New York: Basic Books.



About the Editors

Margery Austin Turner directs the Metropolitan Housing and Communities Policy Center at the Urban Institute, where her research focuses on spatial and racial dimensions of anti-poverty policies within urban regions. Ms. Turner served as deputy assistant secretary for research at the Department of Housing and Urban Development from 1993 through 1996, where she focused HUD's research agenda on the problems of racial discrimination, concentrated poverty, and economic opportunity in America's metropolitan areas. She co-authored a national housing discrimination study, which used paired testing to determine the incidence of discrimination against African-American and Hispanic home-seekers, and applied the paired testing methodology to employment, producing the first direct statistical evidence of discrimination against young African-American jobseekers. Ms. Turner also directed research on racial and ethnic steering and conducted an exploratory study of differential real estate marketing practices in minority and white neighborhoods.

Felicity Skidmore is senior research editor for the Urban Institute, and has edited and produced a number of books on social policy reform. She served as the director of the Urban Institute Press from 1988 to 1998, supervising the writing, editing, and production of books, reports, and briefs for the Institute. She also coedited *Rethinking Employment Policy* with D. Lee Bawden (Urban Institute Press, 1989). Before joining the Urban Institute, Ms. Skidmore worked as a writing and manuscript consultant for a number of social research organizations, including Abt Associates, Mathematica Policy Research, and the National Institute of Child Health and Human Development.

About the Contributors

Michelle DeLair is a research assistant with the Urban Institute's Metropolitan Housing and Community Policy Center. She is currently assisting in studies on fair lending analysis and welfare geography analysis. Prior to joining the Urban Institute, Ms. DeLair served as an economic and financial analyst in the housing group at Price Waterhouse LLP, where she worked on econometric and financial cost models for Ginnie Mae, Fannie Mae, and Freddie Mac.

David Levine is an associate professor at the Haas School Business at the University of California, Berkeley. He is also editor of the journal *Industrial Relations*, associate director of the Institute of *Industrial Relations*, and director of Research at U.C. Berkeley's Center for Organization and Human Resource Effectiveness. His research examines how management policies, such as training and quality control, contribute to high-skill/high-performance workplaces and on the role and design of public policies in promoting such workplaces.

Diane Levy, a research associate at the Urban Institute's Metropolitan Housing and Community Policy Center, has over five years of experience in housing and community-related research and a background in social anthropology and city planning. Since joining the Urban Institute in 1998, she has built upon past experiences in housing and community economic development research by studying public housing desegregation efforts and fair lending practices among mortgage lenders.

Steven Ross is an assistant professor at the University of Connecticut and is considered an expert on the use of defaults in testing for discrimination in mortgage markets. His other research interests include discrimination in hous-

ing markets, urban labor markets, urban public finance, and general equilibrium models of urban economies.

Robin Smith, a research associate in the Urban Institute's Metropolitan Housing and Communities Center, has studied federal housing programs, fair housing, neighborhood revitalization, community building, employment and training, and child welfare. She is currently involved in several of the center's research projects for the U.S. Department of Housing and Urban Development (HUD), including a baseline assessment of the impact of HUD's major public housing desegregation cases and an evaluation of the Neighborhood Networks program.

Kenneth Temkin, a research associate with the Urban Institute's Metropolitan Housing and Communities Center, has written on segregation in public housing, fair lending practices, Fannie Mae's and Freddie Mac's underwriting guidelines, neighborhood change, social capital and other housing market-related issues. His current research interests include fair lending and the impacts of community development activities on lower income urban neighborhoods.

John Yinger is professor of economics and public administration and associate director of the Center for Policy Research at the Maxwell School, Syracuse University. He is a specialist in racial and ethnic discrimination in housing, state and local public finance, and urban economics. His most recent book, *Closed Doors, Opportunities Lost: The Continuing Costs of Housing Discrimination*, won the Myers Center Award for the Study of Human Rights in North America.

