When Statistics Lie

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On Sept. 21, 1995, 11 blacks whose loan applications had been rejected brought a credit discrimination suit in the U.S. District Court for the District of Columbia against NationsBank, one of the country's largest home mortgage lenders and fastest-growing banks.

Lathern v. NationsBank Corp. alleges that NationsBank systematically discriminates against black applicants in violation of the Fair Housing and Equal Credit Opportunity Acts, as well as §§ 1 and 2 of the Civil Rights Act of 1866. The plaintiffs, who are represented by the Washington Lawyer's Committee for Civil Rights and Urban Affairs, seek to maintain the suit as a class action on behalf of all black residents of the Washington area who have sought or will seek home mortgages from NationsBank and its subsidiaries. The complaint seeks compensatory and punitive damages, and demands a jury trial.

In some circles, NationsBank has a good reputation for combating racism. It has strongly supported the Community Reinvestment Act, which requires banks to provide services to poor neighborhoods, and in February of last year it hosted a major community reinvestment conference. The bank has also devoted substantial resources to publicizing its commitment to serve low-income minority communities.

Nevertheless, a number of recent studies have found NationsBank to have on of the worst records of racial disparities in mortgage rejection rates in its major markets. In December 1994, the Lawyers' Committee itself issued a study of mortgage lenders in the Washington area, finding that, even adjusting for applicant income, NationsBank between 1990 and 1993 denied loans to black applicants 4.5 times as often as to white applicants. That's the greatest disparity for large lenders in the D.C. area. The study also found that at NationsBank black applicants were more than 11 times as likely as white applicants to be denied loans because of poor credit ratings- by far the largest disparity of the banks studied.

The Lawyers' Committee study provides the principal statistical basis for the Lathern suit. Given the size of the racial disparities at NationsBank and the fact that certain disparities appear worse (and sometimes much worse) than at other banks, as well as the potential appeal of the testimony of the plaintiffs and other rejected applicants, the plaintiffs may have a good chance of success. And if they are successful, the damages award could be enormous. The defendant, after all, is a bank and a huge bank at that.

Misleading Findings

Thus, blacks in the Washington area now have two good reasons to seek home loans at NationsBank. First, in the event they are denied loans, they have some chance of participating in a massive damages award. Second, as the Lawyers' Committee study itself suggests, there may be few places, at least among large banks in the D.C. area, where a black applicant has a better chance of receiving a mortgage loan than at NationsBank. Why this should be so will become clear as we consider how misleading are the findings in the Lawyers' Committee study, as well as the finding in all other studies that focus on racial disparities in mortgage rejection rates.

Studies consistently show that the higher and applicant's income, the more likely the applicant will receive a loan. The Lawyers' Committee study attempted to adjust for racial differences in income by grouping applicants into three income categories and weighting the rejection-rate disparity within each category by they number of black applicants within the category. The reductions in rejection-rate disparities effected by this adjustment were quite modest for all banks examined – a result the study's authors interpreted to undermine the banks' claims that large rejection-rate disparities resulted from aggressive marketing in low-income minority neighborhoods. But there are serious problems with the Lawyers' Committee approach.

To begin with, such attempts to control for differences in income by grouping loan applicants into broad categories are almost never adequate. Invariably, the group that is disproportionately concentrated in the lower-income categories tends also to be disproportionately concentrated in the lower ranges within each category. This means that even within each category, blacks have a lower average income than whites.

Further, even among those with exactly the same income, members of the more advantaged group will tend to have more of the other factors that reflect creditworthiness. For example, it has been well-documented that among whites and blacks earning the same income, whites have greater assets.

Thus, it is to be expected that even studies considerably more sophisticated than that performed by the Lawyers' Committee will show some racial disparity, and it is anyone's guess whether the disparity is larger than might be explained by factors not taken into account adequately or at all.

Success, Failure Rates

One might nevertheless ask whether the very size of the racial disparities in rejection rates at NationsBank indicates that something is amiss there, or at least that something is more amiss at NationsBank than at other banks.

This is where things get more complicated. Most people understand that the more two groups differ on average with regard to some characteristic (such as income or assets) related to an outcome (such as securing a loan), the greater will be the disparity in the rates at which the two groups secure the desired outcome (success) and in the rates at which the two groups do not secure the desired outcome (failure).

What few understand, however, is how disparities in success rates and disparities in failure rates are affected by overall failure rates, and how the two disparities tend to vary inversely with one another, depending on the overall failure rates. In particular, when failure rates are high, disparities in failure rates tend to be small, while disparities in success rates tend to be large; when failure rates are low, disparities in failure rates tend to be large, while disparities in success rates tend to be small.

The tendency can be most easily illustrated with hypothetical test scores. Imagine two demographic groups of 100 persons each, where the two groups differ significantly on average test scores and where each group's scores are more or less normally distributed (i.e., they fall under a bell curve). Divide the higher-scoring Group A into three categories according to test scores, with 30 persons in the high categories according to test scores, with 30 persons in the high category, 40 in the middle, and 30 in the low. Given its lower average scores, Group B divides up something like this: 20 in the high category, 30 in the middle, and 50 in the low.

Suppose we set the cutoff score for some desired outcome at a point at which only the high category passes. The failure rate of Group B would be 114 percent of the failure rate of Group A (80 percent vs. 70 percent); and the pass rate of Group B would be 67 percent of the pass rate of Group A (20 percent vs. 30 percent).

If we then reduce the cutoff score to the point where only persons in the low category fail, the disparity between failure rates increases; Group B's failure rate rises from 114 percent to 167 percent of Group A's failure rate (50 percent vs. 30 percent). On the other hand, the disparity between pass rates declines. Group B's pass rate rises from 67 percent to 71 percent of Group A's pass rate (50 percent vs. 70 percent). This tendency operates throughout the distribution, and where disparities in pass rates get very small, disparities in failure rates tend to get very large.

Typically, when courts consider whether a test unfairly discriminates against minorities, they look at disparities in pass rates. And it is universally accepted that one way to lessen a discriminatory effect of a test is to lower the cutoff score, thereby reducing the disparity in pass rates, even though doing so increases the disparity in failure rates.

Banks' lending criteria operate much like tests. At banks that have relatively lenient criteria, the black approval rate will tend to be closer to the white approval rate than at other banks, while the difference in rejection rates will tend to be greater than at other banks. Thus, so long as the focus is on differences in rejection rates, the banks whose creditworthiness "tests" would be considered to have the least discriminatory effect (as that concept usually is understood) may be deemed to have the most discriminatory practices. Those banks also tend to be the places where blacks, like whites, are most likely to be able to secure loans.

Standard Lending Criteria

Recently, there has been increasing recognition of the role of traditional lending criteria in causing racially disparate mortgage rejection rates. In March 1994, 10 federal agencies involved with monitoring fair lending laws issued a policy statement placing greater emphasis on the disparate impact that lenders' policies may have on minorities. The statement noted, for example, that requiring minimum loan amounts may have a greater adverse effect on minorities, and indicated that where a disparate impact of such policies is found, banks will have to justify their use of the criteria causing the impact.

Regardless of how such impact is measured, standard lending criteria would be expected to have a disparate impact on black and other minority loan applicants. And the more banks relax those criteria in response to expressions of concern, the smaller will be the disparity in the rates at which blacks and whites receive loans – the sensible measure of disparate impact. But that easing of criteria will also tend to increase the disparity in rejection rates. Thus, since federal regulators invariably focus on racial disparities in rejection rates, the very banks that are most responsive to the concern about disparate impact will be subjected to the greatest scrutiny.

There is reason to expect that programs like the one that NationsBank and the national Urban League jointly announced in mid-1993 to review contested mortgage rejections in 19 cities will, if evenhandedly applied, increase racial disparities in rejection rates (while reducing disparities in approval rates). Similarly, each of the actions that that Lawyers' Committee complaint suggested that NationsBank ought to have taken to be more flexible in reviewing the applications of the named plaintiffs, such as giving greater attention to compensating factors or being more receptive to explanations for credit problems, may be expected–again, if evenhandedly applied–to increase the racial disparities in rejection rates on which the statistical aspect of the suit is based.

Reduced Interest Rates

The lowering of interest rates, too–by making all applicants somewhat more mortgage-eligible–would be expected to increase disparities in rejection rates while reducing disparities in approval rates. Yet, though the Lawyers' Committee study finds it "significant" that racial disparities in rejection rates increased at NationsBank and other large Washington lenders in 1993, it does so without apparent awareness of the connection between that increase and the fact that in 1993 the interest rates for 30-year fixed-rate mortgages reached their lowest point in 25 years.

The Lawyers' Committee study focused on the 13 home mortgage lenders in the D.C. area that from 1990 to 1993 turned down 100 or more black (or black and Hispanic) applicants. It presented tables showing racial disparities in rejection rates both before and after adjusting for income. NationsBank had the largest ratio of black-to-white rejection rates before adjustment for income (5.3) and the second-largest after adjustment for income (4.5).

Despite the mistaken focus on rejection ratios, the tables provide some information that allows more meaningful comparison of NationsBank with the 12 other banks. Most obvious is the fact, unmentioned in the text of the study, that NationsBank's 17.5 percent rejection rate for black applicants was the third-lowest among the 13 banks studied. And while the unadjusted ratio of NationsBank's black rejection rate (17.5 percent) to its white rejection rate (3.3 percent) was, at 5.3 the largest disparity in rejection rates, NationsBank had the fourth-smallest disparity in approval rates.

Further, while the Lawyers' Committee study did not provide information on the income of each bank's applicants, data in a study recently released by the Teamsters Union indicate that black applicants to

NationsBank had lower incomes than black applicants to either of the two banks with lower black rejection rates. This suggests that blacks may well have a better chance of having their loan approved at NationsBank than at any of the other 12 banks studied.

The Lawyers' Committee study also presented data on rejection-rate disparities where the basis for the rejection was poor credit–the area where, according to the study, the Justice Department has typically found most discrimination to occur. A table presenting data from the four Washington-area banks that provided information on reasons for rejection, and that rejected more than 100 minority applicants because of poor credit, showed that NationsBank had by far the largest racial disparity in rejections on the basis of allegedly poor credit. Controlling for income, the black rejection rate was 11.2 times the white rate; none of the other three banks had a black-white rejection ratio higher than 3.7.

Yet the table also showed that blacks were rejected for poor credit in only 10.2 percent of cases at NationsBank, while they were rejected in no fewer than 24 percent of cases at the other three banks. Thus, NationsBank may not be such a bad place for black applicants to have their credit records reviewed. And, as one would expect, the ratio of black-to-white rates of not being rejected for credit is far higher at NationsBank (90 percent) – i.e., the disparity is far lower-than the other three banks, none of which had a ratio greater than 82 percent.

Although the Lawyers' Committee complaint cites considerable data on rejection disparities from its own and other studies, the bulk of the 96-page document details the facts concerning the denials of loans to the 11 plaintiffs. All had problems in their credit histories. But, in addition, all had claims, for example, that the factors that had caused a bankruptcy were no longer present, that the heath problems that had caused some late payments have been corrected, that certain late payments were not the applicant's fault, or that the bank never allowed the applicant an opportunity to explain why some payments had been late. On information and belief, the complaint maintains that whites in similar circumstances would have received loans.

Assuming that persons of all races with credit histories comparable to those of the plaintiffs had, say, even a mere 10 percent or 20 percent chance of receiving credit, one ought to be able to find among the almost 14,000 whites in the area to whom NationsBank did grant mortgages a fair number whose credit histories appear no better than those of the plaintiffs and many other rejected black applicants. Such comparisons can be appealing even to those who fully recognize that comparisons that can be made regardless of whether a bank discriminates can prove nothing about whether a bank discriminates. Before a jury, these comparisons, along with the testimony of plaintiffs and other rejected loan applicants as to how the denial of credit affected their lives, may prove to be much more important than whether the weight of expert testimony shows that NationsBank is the worst enemy of the Washington area's black community or its best friend.

As to where the Lawyers' Committee found the first 11 plaintiffs, there is a partial possible answer: The complain indicates that six were participants in a program that NationsBank established in

1993 with a community action organization called ACORN (Association for Community Reform Now) to provide loan counseling to applicants for certain subsidized mortgage programs. One more good intention may be coming home to roost, sending a further message to the banking community that the beneficent path chosen by NationsBank is one fraught with perils.