

The Facts of Lending Discrimination Cannot Be Argued Away by Examining Default Rates

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Abstract

This article argues that interracial differentials in mortgage default rates are an unreliable indicator of racial discrimination in mortgage markets.

First, minority applicants may be approved at nondiscriminatory institutions and thereby end up in the pool of mortgagors, even though they were first discriminated against at other institutions. Second, even with no mortgage discrimination, the expected default risk of minority mortgagors overall is probably higher than that of white mortgagors overall. Thus, even if discrimination eliminated some of the riskier minority applicants, it is not necessarily true that the default rate of minority mortgagors will be lower than that of whites.

Introduction

According to a recently released study by the Federal Reserve Bank of Boston (Munnell et al. 1992), the denial rates for whites who apply for mortgages is 6 percentage points lower than the denial rate for comparable minority applicants. This study claims that the difference is due to discrimination, because the study controls for applicant characteristics that lenders consider when deciding whether to approve a mortgage.

In a recent editorial in *Forbes* magazine (January 4, 1993), Peter Brimelow and Leslie Spencer challenge this claim of discrimination, citing the Fed's own finding that the average mortgage default rate for minority neighborhoods is the same as the rate for white neighborhoods.¹ Their argument is that comparable rates for white and minority mortgage holders contradict the finding of discrimination: If underwriters were discriminating, they would be granting mortgages to less qualified, riskier whites while denying them to relatively more

¹ Although Brimelow and Spencer did not notice this fact, note that default rates in minority and white neighborhoods are not equivalent to default rates for individual minority and individual white mortgagees.

credit worthy minorities. We would then observe, the argument goes, a lower default rate for minorities than for whites.

Brimelow and Spencer are wrong on two counts. Default rates are an unreliable indicator of lending discrimination. But even if taken at face value, equal default rates actually support the finding of discrimination.

First, it is perfectly possible that rampant discrimination can exist even though the pools of minority and white mortgage holders are comparable to what they would be in a nondiscriminatory world. It is unlikely that *all* lending officers in all financial institutions discriminate *all* the time. Thus, having been rejected once because of discrimination, minorities can often apply for and be granted a loan elsewhere.

Note that I am not implying that discrimination is not a concern if minorities eventually find a mortgage anyway. On the contrary, “taking that extra step” to get over a discriminatory hurdle clearly imposes human costs in the form of extra time, effort, out-of-pocket expenses, and perhaps humiliation. Also, minorities might settle on a less desirable or less affordable loan, or else the home they seek to buy may no longer be on the market by the time substitute funding is located. The point is that the pool of mortgage holders might not reflect the effects of discrimination even when it is occurring in the lending process.

The second reason Brimelow and Spencer’s conclusion is incorrect is because it erroneously assumes that in a nondiscriminatory world pools of both whites and minorities who were successful in obtaining mortgages will subsequently demonstrate equal rates of default. On the contrary, because of inequality among the races in occupations, income, indebtedness, and assets, in a nondiscriminatory world minority mortgage holders will typically be distributed more heavily in the categories of borrowers with higher risks of default.

Defaults are most likely when the borrower’s income falls, unforeseen expenses occur, or home value declines. Minority borrowers generally have a higher probability of being laid off during recessions, have fewer assets to fall back on in times of financial exigencies, and are more likely to live in inner-city areas with deflated property values. For example, the Fed study found that, compared with whites, minorities approved for loans had higher debt-to-income ratios; lower levels of income, wealth, and liquid

assets; and lower property values relative to the size of their loan.²

In a world devoid of lending discrimination, therefore, minority mortgage holders as a group will tend to have higher default rates than the pool of white mortgage holders. (I am not arguing that an individual minority borrower necessarily has a higher chance of default than an otherwise identical white borrower, merely that the two pools of borrowers have different risk profiles that yield different average default rates.)

A hypothetical example demonstrating this point is presented in table 1.³ Assume for simplicity that the probability of default for mortgage applicants (column A) can be evaluated precisely by underwriters who, given current interest rates, will approve all applicants whose estimated probability of default (over the term of the mortgage) is less than 25 percent.⁴ The hypothetical distribution of white mortgagors is given in column C and the hypothetical distribution of minorities in column E.⁵ Note that, consistent with the argument above, minorities are distributed more heavily than whites in the higher default probability categories, even though all remain “acceptable” risks. The (weighted) average default rate for the pool of white mortgagors here is 9.5 percent (column D), found by multiplying the average probability in a category by the proportion of mortgagors in that category, then summing the total. The analogous computation yields a minority default rate in a nondiscriminatory world of 15.5 percent (see column F).

Brimelow and Spencer’s notion that discrimination would reduce the observed default rates of the minority borrower pool may be correct. However, they neglect to consider that discrimination might simply be lowering minority default rates to a level on a par with that of whites. In other words, what would have been a higher minority default rate in a hypothetical, nondiscriminatory world could have been equalized by the

² This study found that differences in debt-to-income ratios were surprisingly small and that a higher fraction of whites were self-employed, reputedly a riskier situation.

³ I am indebted to Craig Coelen for devising this table.

⁴ Assume also that all mortgages are identical in term, fixed interest rates, and fees.

⁵ Note that in this example the distribution of applicants whose expected probability of default exceeds 25 percent is irrelevant because it is assumed that all will be denied.

Table 1. Hypothetical Example of White and Minority Average Default Rates Observed With and Without Discrimination (In Percents)

A	White				Minority				
	No Discrimination		With Discrimination		No Discrimination		With Discrimination		
	B	C	D=B*C	E	F=B*E	G	H=E*G	I	J=B*I
Probability- of-Default Category	Average Probability	Percent of Mortgagors	Weighted Probability of Default	Percent of Mortgagors	Weighted Probability of Default	% of Minority Applicants Approved	% of Old Mortgagors Base	% of New Mortgagors	Weighted Probability of Default
0-5	2.5	32	0.80	8	0.20	63.2	5.06	26.46	0.66
5-10	7.5	26	1.95	14	1.05	39.9	5.59	29.23	2.19
10-15	12.5	20	2.50	20	2.50	25.2	5.04	26.38	3.30
15-20	17.5	14	2.45	26	4.55	10.1	2.63	13.74	2.41
20-25	22.5	8	1.80	32	7.20	2.5	0.80	4.19	0.94
Average default rate		(100)	9.50	(100)	15.50			(100)	9.50

Source: Craig Coelen and George, the Urban Institute.

offsetting effects of lending discrimination to produce the equal default rates we observe in the actual world.

This point is illustrated in columns G, H, I, and J in table 1. Suppose that, instead of approving 100 percent of all minority applicants whose estimated probabilities of default did not exceed 25 percent, the approval rates for the default categories are as shown in column G. Column H shows that portion of the original distribution approved in a nondiscriminatory world (column E) that would now appear as mortgagors. The distribution of this new, smaller subset of mortgagors is shown in column I. Because discrimination eliminates disproportionately more minority applicants from the 15 to 25 percent categories than the 0 to 10 percent categories, the remaining pool will evince a lower risk profile overall than in a nondiscriminatory world (as Brimelow and Spencer argue).

Hypothetical numbers were selected to generate equal white and minority default rates (columns D and J). Clearly, by altering assumptions about the incidence of discrimination across default categories (i.e., column G), one could generate a minority default rate that was lower, higher, or equal to that of whites. In addition, given that underwriters cannot predict default probabilities perfectly, there may be additional, unknown sources of interracial differences in default rates that are not associated with discrimination.⁶

The point is that default rates are an unreliable indicator of the presence or absence of discrimination. A carefully reasoned argument shows, however, that in the absence of discrimination minority mortgagors would evince higher default rates than whites; any finding to the contrary thus supports the hypothesis of discrimination (although not definitively).

The Boston Federal Reserve study offers powerful evidence that racial discrimination continues to affect the underwriting processes of many financial institutions. In addition, pilot studies employing pairs of testers who pose as mortgage seekers have identified discrimination that discourages minorities from even filing applications at some institutions; dozens of legal suits across the country have uncovered various sorts of illegal acts committed by mortgage lenders. In a particularly prominent case brought against a large Atlanta lender, the Department of Jus-

⁶ I am indebted to Patrick Simmons for this point.

tice (using among others the method employed by the Boston Fed) won a settlement that involved \$1 million in damages (Munnell, Browne, McEneaney, Tootell 1992). Evidence of lending discrimination will be discussed in a forthcoming paper by Cloud and Galster.

The Brimelow and Spencer claim of no discrimination in mortgage markets is not credible. In light of the flaws in their logic and the preponderance of contrary evidence, the discussion needs to move beyond a debate over whether discrimination exists to a discussion of how best to eradicate it.

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