

# Anticipated Discrimination in the Home Lending Market

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*Racial discrimination in the housing market has been a topic of research for at least three decades. The present study extends this line of research by exploring how a newly considered factor, anticipated discrimination in the home lending market, differs by race and affects the probability of owning a home. Using data from a sample of households in Memphis, Tennessee, we show that significant differences in anticipated discrimination by race exist and that, *certis paribus*, these expectations help to explain racial differences in home ownership. Combining our results with the findings of two homeownership preference studies, the implication is that anticipated discrimination reduces the demand for homes by creating a situation where blacks are less likely to apply for home loans because they feel that credit will be denied.*

Racial discrimination in the U.S. housing market has been a general topic of concern to numerous urban researchers over the past three decades. The overall focus of these inquiries in recent years has been to determine if and to what extent blacks and other racial and ethnic minorities are discriminated against in obtaining housing. Kain and Quigley (1970, 1972) were among the first to document that (1) blacks pay more than whites for comparable housing — about seven percent more and (2) the probability of homeownership is substantially less for blacks than for whites with similar social and economic characteristics. Taking a sample of 1185 households in the St. Louis

area (401 black and 784 white), Kain and Quigley (1972) examined the decision to purchase or rent for a subsample of 466 households which had changed residence in the preceding three years. Of the original sample of households, 32 percent of the blacks and 41 percent of the whites owned homes. Of the 466 who had moved, eight percent of the blacks purchased homes compared to 20 percent of the whites.

Since the Kain and Quigley studies, researchers have attempted to update and refine the findings. Expanding the analysis to the national level by using data from the Panel Survey of Income Dynamics, Roistacher and Goodman (1976) found

no significant racial difference in ownership rates for recent movers in the early 1970s. Berry's (1976) study of Chicago as well as Schnare's (1975) analysis of Boston generated the same general conclusion. In contrast, Schafer's (1979) followup of the Roistacher and Goodman study concluded that while racial differences in homeownership did narrow in the early 1970s due to the HUD section 235 program, suspension of the program led to the reappearance of discrimination by the mid-1970s in Boston. Schafer's conclusion was substantiated by Weinberg (1978) who showed that given a move, black male household head renters were 28 percent less likely to purchase a housing unit than whites with similar characteristics in the San Francisco Bay area.<sup>1</sup>

Racial discrimination in the housing market has also been viewed from the perspective of redlining and disinvestment. Devine, Winston and Sims (1973) found for Bronx County, New York, that as the number of blacks and Puerto Ricans increased in a given community planning district, the dollar amount and number of mortgages decreased. Similar results were reported in a study of Baltimore (City of Baltimore, 1973) where black neighborhoods were found to be generally neglected by conventional lending institutions even when the incomes of the potential borrowers were held constant. A time series analysis of two sections of Philadelphia lends support to the above observations (Northwest Community Housing Association, 1973). Two areas with similar economic and housing characteristics (e.g., vacancy rates, income, housing values) were analyzed for 1960 and 1970. Conventional mortgage investment declined in one of the areas over the 1960s but remained stable in the other. This discrepancy in investment was explained by the increasing proportion of blacks in the "investment decline area" during the 1960s.<sup>2</sup> In contrast, the results of a study of Chicago by Hauser and Elkhani (1978) were at odds with the findings of the New York, Baltimore, and Philadelphia studies. Using census and bank lending disclosure data and employing a partial correlation analysis, they found that while there are great differences in

the mortgage lending practices between black and white areas, when the effects of economic and social conditions are controlled, the effect of race is minimized. Similarly, Benston and Horsky (1979) found no evidence of redlining by race in a survey of Rochester, New York homeowners.

A common but untested assumption underlying much of this research is the notion that preferences for homeownership are equal across racial groups. In the absence of direct information, one has to assume that preferences for homeownership are the same for eligible black and white families if one is to conclude that differential ownership rates are a product of racial discrimination. A second underlying assumption found throughout this research is that blacks and whites with similar social and economic characteristics apply for conventional mortgage loans at the same rate. That is, assuming equal preferences and the requisite resources, people attempt to obtain what they desire. Therefore, equal demand must also be assumed. Not only must blacks and whites express an equal desire for homeownership, they must also attempt to obtain homeownership in equal proportions in order to demonstrate the presence of discrimination.

Most of the literature on housing preferences by race has looked at whether or not blacks and whites desire to live in integrated/segregated neighborhoods (Sheatsley, 1966; National Opinion Research Center, 1972; Pettigrew, 1973; Farley et al., 1978). The Farley study (1978) found that, contrary to popular belief, blacks do not prefer to live in segregated neighborhoods. Eighty-two percent of the blacks in their study selected an integrated neighborhood (with two out of the four closest neighbors being white) as their first or second preference for the most desirable neighborhood. It was also found that whites prefer a much higher degree of segregation.

Nevertheless, a limited amount of research has been directed toward specific homeownership preferences for blacks and whites. Although blacks live in considerably inferior housing in comparison to whites, controlling for available resources and family composition, their struc-

tural and ownership preferences do not vary from those of whites in a sample of households in Montgomery, Alabama (Hanna and Lindamood, 1979). Corroboration is found in Morris and Winter (1978) who observe that American housing norms are widely shared among cultural subgroups.

Although one may argue that ownership preference studies are far from conclusive, they do offer preliminary evidence that lower black ownership rates, *ceteris paribus*, do not result from less desire for ownership. Nor can lower black ownership be attributed to a desire to live in segregated neighborhoods (Farley et al., 1978). This paper addresses a question which remains: Are black ownership rates lower than those of whites because of anticipated discrimination which functions to reduce demand in the home lending market? If indeed past patterns of racial discrimination have discouraged ownership among certain groups of persons, the result may be that blacks, who would prefer to own and can afford a home, choose not to apply for mortgages because they think that they will be denied credit. Verification of this scenario could question the conclusions of some previous works in that an important dimension of discrimination would have been entirely ignored.

This research should also be viewed as an extension of Kain and Quigley (1972), Roistacher and Goodman (1976), and Schafer (1979) in that knowledge concerning borrowing expectations can begin to answer criticisms of the above studies by providing a way to view the effect of anticipated discrimination on demand in the housing market. If the general hypothesis is not supported, then students of housing discrimination would have to look elsewhere (perhaps returning to lenders' practices and relators' behavior) for additional underlying causes of the lower ownership rates for blacks.

### Hypotheses

We present two hypotheses: (1) there is a significant difference in the proportion of blacks

versus whites anticipating discrimination in the home lending market (blacks are more likely to anticipate discrimination) and (2) anticipated discrimination is a factor through which other factors such as race and income are modified to produce varying probabilities of ownership. To elaborate, Kain and Quigley (1972) and others present a model (Figure 1) where race and other factors are seen as joint causes of homeownership. Our model posits relationships where race is viewed as a truly antecedent variable and anticipated discrimination operates as an intervening variable between race, income and other factors and ownership (Figure 2).

FIGURE 1. — Traditional Model

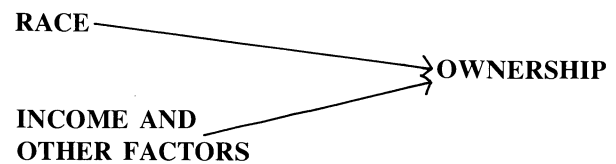
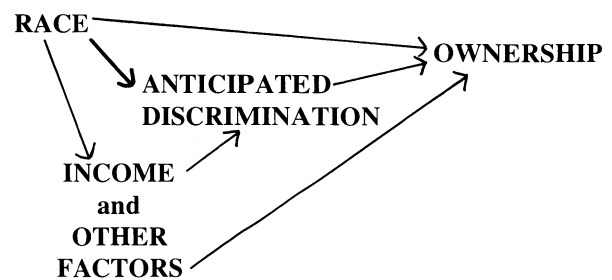


FIGURE 2. — Revised Model



### Data and Methods

#### Sampling

Data concerning anticipated discrimination in the home lending market were generated from a survey of owner and renter occupied housing units conducted in Memphis, Tennessee between November, 1980 and March, 1981. Respondents were selected using a stratified cluster sampling technique.<sup>3</sup> Initially, the sampling frame was

identified as the residential addresses listed in a 1980 city directory. Because this directory is organized by zip code areas, it was necessary to superimpose census tracts on the appropriate zip code areas for the purposes of statistical comparison. However, zip code and census tract boundaries are not identical. Therefore, we included a census tract in a zip code area if one-half or more of its land area was located within a given zip code. The zip code areas were then stratified by population size and percent black by aggregating tract level characteristics from the 1970 Census of Population. Finally, a city wide random sample of 624 addresses was drawn proportionate to the population size of each strata — 2.4 percent of the housing units shown in the 1980 Census preliminary count for the city. The resulting sample included 576 completed housing unit interviews with head of household or spouse. These 576 completed interviews represent 92 percent of the original 624 interviews attempted.

Comparisons of summary characteristics from this data set with known population characteristics show it to be a fairly good representation of the Memphis population. For example, while 48 percent of the population of Memphis was black in 1980 (preliminary 1980 census counts), 51 percent of our sample is black. However, due to the restrictions placed upon us by the data available at the time the sample was drawn (1980 preliminary Census counts were not available), an undetermined amount of sample bias is most likely present. Zip code areas and the census tracts that comprise those zip code areas which grew rapidly in the 1970s are probably somewhat underrepresented in the sample, while areas exhibiting population decline in the 1970s are overrepresented.

### *The Instrument*

The survey instrument used included 42 items directed at ascertaining actual and anticipated prejudice in home borrowing as well as homeownership preferences. In addition to demo-

graphic information, the instrument was comprised of questions concerning geographic mobility, reasons for choosing a neighborhood and methods of home financing. Specific to the question posed by this paper is the item:

(Q) Do you feel that others like yourself are discriminated against in any way in obtaining home loans?

The potential responses were yes, not sure, and no. The "not sure" response was viewed as an alternative lying halfway between yes (1) and no (0) and was coded accordingly (.5). The wording of this question was carefully formulated to avoid potential bias. That is, wording the question in a racial context most likely would have elicited responses laden with racial overtones.

We have relied on Hanna and Lindamood's (1979) work on racial differences in housing preferences for direction in the selection of independent social and economic factors that could explain racial differences in anticipated discrimination. Hanna and Lindamood (1979: 41-42) present a model from Morris and Winter (1978: 26) where race, resources, family composition, and age of respondent are viewed as affecting stated preferences. The control of the resource and composition factors allow them to make valid racial comparisons of preferences. In the present study, we have substituted anticipated discrimination for stated preferences. We find this substitution acceptable because in our judgement, preferences and anticipated discrimination are but two dimensions of a general category of factors that affect demand. If blacks have lower ownership preferences than whites (Hanna and Lindamood show they do not), then housing demand for blacks is reduced. Similarly, anticipated discrimination in the lending market can discourage blacks from applying for home loans, also reducing demand. Again, this research should be seen as one study among several seeking to uncover factors affecting the already demonstrated difference in ownership proportions between blacks and whites.

In addition, we use these same factors (resource and composition variables) along with anticipated discrimination to explain homeownership. A comparison of the work of Hanna and Lindamood (1978) with that of Kain and Quigley (1972) shows that many of the same factors seen as affecting preferences are also viewed as determining the probability of ownership.

One final note of caution must be made. Although we are measuring anticipated discrimination for the present, many home-buying decisions in our sample were made several years earlier. Therefore, we must assume that anticipated discrimination has operated in a similar manner over this period of time. We think this is a reasonable assumption.

### Results

Table 1 presents the means and standard deviations for the variables selected for analysis. Included are anticipated discrimination, race, the resource variables, occupational prestige score, income and education, the family composition variables, number of dependent children living in

**TABLE 1. — Means and Standard Deviations for the Variables of Interest**

	Mean	Standard Deviation
Homeownership (1=yes; 0=no)	.615	.487
Anticipated Discrimination (1=yes; .5=not sure; 0=no)	.263	.405
Race (1=white; 0=black)	.486	.500
Income	15762.	12233.
Education (in years completed)	10.43	4.82
Occupational Prestige Score	28.64	20.16
Number of Dependent Children at Home	2.35	2.25
Marital Status (1=married; 0=not married)	.582	.494
Age of Respondent	47.24	17.37

n = 572

the household and marital status, age of respondent as well as homeownership status. The n is reduced from 576 to 572 valid cases because four persons either did not disclose their age or did not provide an answer to the question on anticipated discrimination. In addition, 33 respondents did not report their income and for these persons, the mean value of the 539 reporting respondents was substituted.

Tables 2 through 4 present cross-tabulations of anticipated discrimination by race, ownership, and marital status. As can be seen, significant differences exist for all three analyses. More specifically, the black-white difference in anticipated discrimination is 10 percent (yes response), the owner-renter difference is 15 percent and the unmarried-married difference is about 10 percent.

**TABLE 2. — Anticipated Discrimination Cross-tabulated by Race**

Anticipated Discrimination	Black	White
Yes	74 (25.2)*	42 (15.1)
Not Sure	48 (19.7)	28 (10.1)
No	162 (55.1)	208 (74.8)
n =	294	278

\*column percentages in parenthesis

Chi Square = 24.58 p < .001

**TABLE 3. — Anticipated Discrimination Cross-tabulated by Ownership Status**

Anticipated Discrimination	Rent	Own
Yes	65 (29.6)*	51 (14.5)
Not Sure	39 (17.7)	47 (13.3)
No	116 (52.7)	254 (72.2)
n =	220	352

\*column percentages in parenthesis

Chi Square = 24.76 p < .001

**TABLE 4. — Anticipated Discrimination Cross-tabulated by Marital Status**

Anticipated Discrimination	Unmarried	Married
Yes	63 (26.4)*	53 (15.9)
Not Sure	43 (18.0)	43 (12.9)
No	133 (55.6)	237 (71.2)
n =	239	333

\*column percentages in parenthesis

Chi Square = 15.05 p < .001

Table 5 presents the zero-order correlation matrix. Focusing on the anticipated discrimination-ownership relation, the correlation is in the hypothesized direction; that is, anticipated discrimination is inversely associated with the probability of homeownership (p < .01). In addition, race is positively associated with ownership — whites are more likely to own — and

negatively associated with anticipated discrimination. As expected, these results confirm the results from the chi square analyses. Furthermore, the zero-order relationships with homeownership and anticipated discrimination are generally in the expected direction and most are significant at least at the .05 level. In sum, our initial hypothesis concerning the expected higher proportion of blacks anticipating discrimination is confirmed. The hypothesized relationship between anticipated discrimination and ownership status also has received some preliminary support. However, we also wish to know if the relationship between race and anticipated discrimination persists after controlling for resources, family composition, and age of respondent. Table 6 presents the results of the regression of anticipated discrimination on race and other variables of interest. Even after these controls are instituted, blacks are still significantly more likely to anticipate discrimination than whites, though family composition and age of respondent are important determinants as well.

**TABLE 5. — Zero Order Correlation Matrix Among the Variables of Interest**

Homeownership									
Anticipated Discrimination	-.21**								
Race	.16**	-.17**							
Income	.30**	-.15**	.44**						
Education	.03	-.02	.35**	.36**					
Occupational Prestige Score	.05	-.09*	.30**	.33**	.52**				
Number of Dependent Children at Home	.14*	.11**	-.23**	-.10*	-.18**	-.17**			
Marital Status	.34**	-.14**	.19**	.32**	-.04	.04	.10		
Age of Respondent	.23**	-.07	-.02	-.18**	-.38**	-.18**	.23**	.03	
		Homeownership	Anticipated Discrimination	Race	Income	Education	Occupational Prestige	Number of Dependent Children at Home	Marital Status

n = 572    \*\* p < .01  
 \* p < .05

**TABLE 6. — Multiple Regression Model with Anticipated Discrimination as the Dependent Variable**

Independent Variables	Standardized Coefficient	F	p
Race (1=white; 0=black)	-.098	4.00	<.05
Income	-.086	3.00	>.10
Education (in years completed)	.052	.96	>.10
Occupational Prestige Score	-.057	1.34	>.10
Number of Dependent Children at Home	.108	6.14	<.05
Marital Status (1=married; 0=not married)	-.094	4.45	<.05
Age of Respondent	-.098	4.60	<.05
Constant	.440		
Complete Equation		5.63	<.001
R <sup>2</sup>	.065		

n = 572

Tables 7 and 8 present the final analyses required to test hypothesis 2. Table 7 is the result of the regression of ownership status on anticipated discrimination, race, and the remaining variables of interest.<sup>4</sup> In this analysis, the effect of anticipated discrimination persists, though that of race is reduced to virtually zero. In addition, income, family composition, and age of respondent continue to be strong determinants of the probability of ownership. Recall that we hypothesized that the effects of race on ownership are mediated through anticipated discrimination. Given our causal ordering, the hypothesis has been substantiated. However, the question that persists

concerns whether or not the effect of race has been reduced to zero. Certainly, the data from Table 7 support this conclusion. Table 8, which is based on Figure 2 and relies on data from Tables, 5, 6, and 7, decomposes the total effect, i.e., the path effect (Finney, 1972; Alwin and Hauser, 1975), of race and the remaining variables on ownership. Although the direct effect of race on ownership is nearly zero (-.001), the indirect effect through the remaining variables is substantial (.167). This finding supports the hypothesis that the effect of race on ownership status is, in part, mediated through anticipated discrimination.

**TABLE 7. — Multiple Regression Model with Ownership Status as the Dependent Variable**

Independent Variables	Standardized Coefficient	F	p
Anticipated Discrimination (1=yes; .5=not sure; 0=no)	-.141	14.08	<.001
Race (1=white; 0=black)	-.001	.00	>.10
Income	.239	29.07	<.01
Education (in years completed)	.091	3.52	<.10
Occupational Prestige Score	-.037	.73	>.10
Number of Dependent Children at Home	.106	7.33	<.01
Marital Status (1=married; 0=not married)	.236	35.53	<.001
Age of Respondent	.265	41.78	<.001
Constant	-.100		
Complete Equation		24.71	<.001
R <sup>2</sup>	.260		

n = 572

TABLE 8. — Direct and Indirect Effects of Independent Factors on Ownership Status

Independent Variables	Direct	Indirect	Total
Anticipated Discrimination	-.141	.000	-.141
Race	-.001	.167	.166
Income	.240	.012	.252
Education	.091	.008	.099
Occupational Prestige Score	-.037	.008	-.029
Number of Dependent Children at Home	.106	-.015	.091
Marital Status	.236	.013	.249
Age of Respondent	.264	.014	.278

n = 572

### Discussion

Though resources, family composition, and age of respondent significantly affect the probability that one will or will not anticipate discrimination to persons like themselves in the homelending market, controlling for these factors does not negate the fact that blacks are significantly more likely to expect this discrimination than whites. In turn, we have shown that anticipated discrimination, *certeris paribus*, affects the likelihood of ownership. It is likely that these expectations have some effect on housing demand by causing a certain proportion of otherwise qualified persons not to attempt to purchase homes. The precise extent of this effect on demand and estimates of the number of persons affected, however, is unknown and should be the topic of further research. In addition, contextual affects, i.e., neighborhood characteristics, have not been accounted for and could perhaps affect ownership status in ways unseen in the present research.

Previous research, i.e., Morris and Winter (1978) and Hanna and Lindamood (1979), has shown that homeownership preferences are fairly constant across a broad range of societal subgroups, thereby offering evidence that the demand for homeownership across subgroups, when controlling for resources, is relatively constant. But preferences may not be reflected in behavior, i.e., demand, and we have shown that there is at least one additional dimension of fac-

tors, anticipated discrimination, that affects demand. In sum, the argument that areas experiencing low levels of home mortgage lending are also areas with low home mortgage demand, appears to be an overly simplistic one. Low demand should not be interpreted as only (1) the lack of requisite resources and/or (2) a lack of desire for homeownership — items which may be seen as being out of the realm of responsibility of mortgage lenders. It is also a product of anticipated discrimination — certainly in the purview of those in a position to influence lending policy.

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#### Notes

1. Despite racial differences in ownership rates, Weinberg notes that such differences are not direct evidence of discrimination. However, he does state that differences in ownership preference are unlikely to account for a significant portion of the disparity.
2. As noted by Agelasto and Listokin (1975), the conclusions reached from these studies must be viewed with caution. They frequently begin with lender bias and utilize questionable assumptions and limited analyses to show that a low volume of lending in an area can be translated as evidence of redlining. Overlooked are a host of factors including the demand for loans. Benston (1979) expresses the same concern over the absence of controls for demand in the majority of studies addressing the redlining issue.
3. Stratification was necessary because of the relatively small sampling fraction (2.4 percent of all 1980 housing units), the relatively high degree of segregation existing in the city, and to facilitate interviewing.
4. As can be seen from Table 1, the split on the dependent variable is .62 and .38, within the accepted range for retaining a linear relationship (Goodman, 1976).