

What Are Renters Really Like? Results from a National Survey

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Abstract

If efforts to expand homeownership are to succeed, policy makers will require improved information on the characteristics of renters, especially their attitudes toward homeownership. This article examines the feasibility of identifying distinctive renter subgroups based on subjective as well as objective characteristics. To do this, a combination of factor analysis and cluster analysis was applied to a 1991 national survey of almost 2,000 renters; discriminant analysis was used to compare the renter subgroups.

Six clusters emerged from the analysis: (1) families moving up the housing ladder (17 percent of the total), (2) lifestyle renters (21 percent), (3) college graduates starting out (26 percent), (4) black renters (15 percent), (5) elderly life cycle renters (10 percent), and (6) struggling blue-collar workers (11 percent). Clusters 1, 4, and 6 may be suitable targets for homeownership assistance. Programs that may be appropriate for each are discussed.

Why study renters?

Homeownership has represented the achievement of socioeconomic mobility and been the means of propelling that mobility. Since World War II, the general progression of financial well-being for U.S. households has been characterized by the attainment of homeownership, which in turn has ensured the continued prosperity of many Americans.

For many of these households, the home is the greatest financial asset. It has been, as Kain and Quigley (1975, 150) concluded, "clearly, the most important method of wealth accumulation for low- and middle-income families in the postwar period." They estimated that nearly half of total wealth for the lowest income group of households consisted of equity in single-family owner-occupied homes.

And while the intangible aspects of homeownership are harder to quantify, some evidence exists that, compared with renters, people who own their homes are more likely to vote, take a greater role in civic affairs, maintain their homes better, and feel a keener sense of neighborhood—in short, they have a greater stake in the community and in the nation's economic prosperity.¹

For half a century, the principal goal of federal housing policy has been to increase homeownership opportunities for all Americans. This theme was recently reiterated in a federal report that touted homeownership as a means of promoting stability, social responsibility, and civic involvement (U.S. Department of Housing and Urban Development [HUD] 1991). In the past, middle-income first-time home buyers have been the target of federal housing policy aimed at promoting ownership. More recent efforts have sought to foster lower income homeownership.²

If these ownership initiatives are to succeed, policy makers will require improved information on the attitudes of renters—their aspirations toward owning, their progress toward this goal, and the extent to which they are willing to sacrifice to purchase a

¹ Politicians, housing advocates, and social scientists have made many claims about the psychological, political, and economic benefits of homeownership. However, with a few recent exceptions, empirical research on this subject has been very limited. Rohe and Stegman (1994) found that the shift from renting to owning had no significant impact on self-esteem and perceived control (when other background characteristics were controlled) but that the shift did enhance life satisfaction. Green and White (1994), using probit analysis, found that homeownership by parents decreased the likelihood that their children would drop out of school or have children of their own as teenagers. While the studies represent important and statistically sophisticated additions to the literature, they by no means provide conclusive evidence of the social and psychological benefits of owning. For a review of the evidence concerning the relationship between homeownership and political and social involvement, see Chambers and Schwartz (1989).

² This article is intended not to examine the validity of policies designed to expand homeownership but to help identify groups of renters that might be targeted should policy makers decide to pursue this goal.

The Department of Veterans Affairs (formerly Veterans Administration) and Federal Housing Administration loan guarantee programs are examples of important programs to promote homeownership among middle-income households in the postwar years. More recent efforts to promote homeownership among lower income families include the Section 235 subsidy program, the Nehemiah grant program, and experiments with the sale of public housing units.

dwelling.³ This article seeks to answer these and related questions by analyzing a national survey of renters sponsored by the National Association of Realtors (NAR). Besides seeking to add to existing knowledge concerning particular attitudes (e.g., aspirations for homeownership), we also seek to identify a limited number of subgroups (clusters) of renters who are similar in demographic, mobility, and attitudinal characteristics and to compare them in terms of their prospects for homeownership.

Overview of the study

This study analyzes a special database compiled by NAR in which renters across the country were surveyed on their beliefs and attitudes toward homeownership. Our objective is to classify respondents into groups representing different renter types.

In forming these groups, we look beyond demographic characteristics such as income to consider subjective variables such as renters' perceptions of how worthwhile homeownership is and whether they would sacrifice to become homeowners. Statistical "clustering" techniques are used to divide renters into groups that have similar tastes and characteristics. Six distinct clusters

³ Chevan's 1989 article on the growth of homeownership highlights the need for research on attitudes related to owning and renting:

Emerging from this research is an emphasis on changes in composition [e.g., rising incomes] and process [e.g., government-insured mortgages, favorable tax treatment for mortgage interest] as driving forces propelling housing changes. If the census had measured family norms and values, it is likely these would have been given similar prominence. Social change of the magnitude described here is unlikely to occur without ideological, material, and institutional changes reinforcing one another (p. 264).

Commenting on homeownership during the 1980s, Chevan goes on to state:

That home buyers were *willing to take large financial risks* under uncertain conditions stands as convincing testimony to the *depth of the preference for home ownership* (p. 264, emphasis added).

The preceding implies the importance of two attitudinal variables—willingness to take risks and the depth of preference for ownership—in explaining tenure decisions. In fact, few empirical studies have examined the impact of these variables over and beyond demographic characteristics and policy variables. This article does not have this predictive purpose; rather, we seek to determine the extent to which attitudinal variables like these two play a role in identifying clusters of renters. To put it another way, are there clusters of renters distinguishable by their preference for renting as a lifestyle choice? Or are most renters exclusively a "residual" group—householders who want, but are unable, to become owners?

are identified. By examining each cluster in depth, we determine which groups are most likely to become homeowners and what problems they face in purchasing a home. We suggest directions and roles for the housing and mortgage industries and public policy makers to play in focusing on the most likely group of potential home buyers.

NAR's national survey of renters (and homeowners)

What does homeownership really mean to American households? Is it something for which people will make sacrifices? Would young households rather spend their money on something else? Or do they spend their savings on other things because they are discouraged by the price of homes? Are potential home buyers moving so frequently that the commitment of homeownership is inappropriate?

What we know about renters is in some respects extensive and in others limited. While much of the decennial census is devoted to obtaining information about housing, most of the questions are objective, concentrating on rent paid, amenities in the dwelling, demographic and familial characteristics of the residents, and the like. HUD, in collaboration with the Census Bureau, devotes considerable resources to the biennial American Housing Survey (AHS). The AHS targets units, rather than households, and again obtains a great deal of objective information about conditions in the unit and the surrounding neighborhood as well as demographics of the occupant. (The AHS does contain some relevant attitudinal information, such as the reasons households moved from their previous units, the reasons they chose particular homes and neighborhoods, and their overall opinion of their structures and neighborhoods.) Although they are comprehensive sources of demographic and objective housing information, neither the decennial census nor AHS adds much to our understanding of homeownership aspirations among renters.

Indeed, such attitudinal information is rarely collected. The result is that precious little is known about American householders' underlying attitudes and beliefs about homeownership as compared with renting, their perceptions about the affordability of housing, and their willingness to make the sacrifices associated with purchasing and maintaining a home.

In an attempt to acquire some understanding of these issues, NAR carried out parallel mail surveys of homeowners and renters across the United States. The survey, conducted in 1991,

used demographically representative starting samples of each group drawn from a national panel of more than 320,000 households maintained by Market Facts, Inc. To make the samples demographically representative, the homeowner and renter households were selected to reflect the population of all homeowners and renters in the contiguous United States simultaneously by geographic region (nine census divisions), 1990 household income, householder age, household size, and race (black or nonblack).⁴

Eight-page questionnaires asking for detailed information on past home purchases or renting history, attitudes toward owning versus renting, and future intentions with respect to owning or renting were mailed to 9,500 owners and 3,300 renters throughout the country. Responses were received from 65 percent of the owners and 59 percent of the renters. In table 1, the samples obtained are compared with the census figures for the five controlling factors for renters. For four of these factors, the sample distribution is virtually identical to the numbers for the United States as a whole. For age, the sample is slightly older than the general population, but the difference was not serious enough to warrant weighting the responses.⁵

Because attitudinal research of this sort is so rare, few benchmarks exist with which to compare the results of the survey. However, a recent Fannie Mae effort may provide the best

⁴ Our approach for recoding race was similar to that used by Market Facts, Inc., for the NAR survey sample. That is, we combined whites (80.9 percent), Asians (1 percent), and “others” (0.8 percent) into one group and treated blacks (17.3 percent) separately. We combined the races in this way because we suspected that homeownership patterns of Asians would more closely resemble those of whites than those of blacks.

Ideally, one should treat the racial groups separately because their homeownership attitudes and behavior may be different. This separation was not feasible in our study because of the small number of nonblack minority households and because the racial identity of households in the “other” category was unknown.

This problem highlights the need for national studies of homeownership that include enough nonblack minority households that the distinctive patterns of all these subgroups can be studied.

⁵ There is arguably some bias inherent in mail surveys. It has long been recognized that households at income extremes—the very poor and the very rich—are less likely to participate.

See NAR Research Division (1992) for a summary of renter and owner survey results.

Table 1. Demographic Characteristics of Renter Population and Sample: Distribution of U.S. Population Compared with Distribution of Survey Respondents

Characteristic	Population %	Sample % (N = 1,963)
Region		
New England	5	5
Middle Atlantic	16	16
E. North Central	16	16
W. North Central	7	7
S. Atlantic	16	16
E. South Central	5	5
W. South Central	10	10
Mountain	6	5
Pacific	18	18
Household income		
Under \$12,500	30	31
\$12,500–22,499	24	25
\$22,500–34,999	22	22
\$35,000–49,999	13	12
\$50,000 and over	11	10
Householder age		
Under 30	34	28
30–39	29	26
40–49	15	17
50–59	7	9
60 and over	15	20
Race		
Nonblack	82	83
Black	18	17
Household size		
1	34	37
2	28	28
3	16	15
4	12	11
5 and over	9	9

Source: U.S. population statistics are drawn from U.S. Bureau of the Census (1992, 9–16).

corroborating evidence. In early 1992, Fannie Mae and the polling firm Hart-Teeter conducted 1,521 in-person interviews with homeowners and renters across the nation to ascertain people's views about homeownership, whether they thought it was a good time to buy, whether they perceived discrimination in the marketplace, and whether they would sacrifice to own a

home.⁶ Some questions address issues similar to those in the NAR survey, though the allowable responses are not exactly the same. Nevertheless, comparisons of the relative magnitude and general direction or rankings of the items are instructive, and where possible, we will draw them.

Piecing together a portrait of renters

Basic statistics

Some 33 million U.S. households (roughly 36 percent) rent their homes, while 64 percent own. Breaking the renter pie into pieces, we find that 19 percent of renters are black and 81 percent are white or of another race. But masked by the aggregate numbers is the fact that whites and minorities have fared differently. While 70 percent of non-Hispanic whites owned in 1991, the corresponding figure for blacks was only 43 percent (U.S. Bureau of the Census 1993).

There is some truth in the perception that renting appeals to the very young and the very old. The homeownership rate tends to rise steadily with age and then dips after age 75. However, the average age of first-time homeowners is rising—meaning people are staying renters longer—and the proportion of renters in traditional homeownership age categories, such as those 40 to 44 years old, is also on the increase (see table 2). The falling homeownership rates reflect a combination of economic influences, family dissolutions, lifestyle preferences, and other factors.

In median annual income, renters trail homeowners by a considerable margin: \$18,100 versus \$33,300. Moreover, renters spend a greater proportion of their income on housing: 27 percent versus 21 percent for homeowners with mortgages (U.S. Bureau of the Census 1992, 27). The disparity is explained in part by the fact that higher incomes enable owners to purchase homes in the first place. More than half of renters have household incomes less than \$22,500 (see table 1).

Family size and composition are undoubtedly intertwined with the decision and ability to become a homeowner. On the whole, renter households are smaller than their homeownership counterparts. One in three renter households consist of one person,

⁶ Fannie Mae conducted follow-up surveys in 1993 and 1994 and plans to update its survey annually. However, the 1992 version is used in this article because it was conducted at roughly the same time as the NAR survey.

Table 2. Proportions Renting by Age of Head and Race/Ethnicity (%)

	1973	1976	1980	1983	1987	1991
Total	35.6	35.2	34.4	35.1	36.0	36.0
Age						
Under 25	76.6	79.0	78.7	80.7	83.9	84.2
25–29	56.4	56.8	56.7	61.8	64.1	67.2
30–34	39.8	37.6	38.9	44.3	46.8	48.7
35–39	31.5	31.0	29.2	34.2	36.2	37.6
40–44	27.1	26.1	25.8	25.8	29.4	30.9
45–54	23.9	22.6	22.3	22.9	24.2	24.6
55–64	24.3	22.8	20.7	19.5	19.2	19.8
65–74	28.7	27.3	24.8	23.1	21.9	20.1
75 and over	32.9	32.8	32.2	28.4	29.3	27.6
Race/ethnicity						
White	32.9	32.4	31.3	32.4	33.2	32.7
Black	56.6	56.3	56.1	54.7	54.6	57.6
Hispanic	56.8	58.6	57.6	58.8	59.4	61.0

Sources: Derived from Joint Center for Housing Studies of Harvard University's tabulations of homeownership rates in the 1973, 1976, and 1980 American Housing Survey and the 1983, 1987, and 1991 Current Population Survey (see Joint Center for Housing Studies of Harvard University, 1992).

Note: Hispanic households may be of any race.

versus one in five for homeowners. Renter households are also more likely than in years past to consist of a single parent with children. Moreover, single parents with children, especially those from minority groups, experience lower rates of homeownership than other family types (Joint Center for Housing Studies of Harvard University 1992, 35). In general, both characteristics—single parenthood and being nonwhite—are associated with lower rates of homeownership.

Adding attitudes

While basic descriptive data about renters provide a charcoal sketch of renters, the NAR survey attempts to add color. As noted earlier, one purpose of the survey was to increase our understanding of the homeownership aspirations of renters. As revealed in the tabulations of the data, those aspirations are quite strong.

As shown in table 3, more than half of all renters say homeownership is “extremely” or “quite” important to them.⁷ By

⁷ Although it is outside of the scope of this article, it is interesting to note that owners and renters consider homeownership attractive for much the same reasons. Among the top factors cited by both groups are (1) homeownership as

Table 3. Importance of Homeownership by Tenure Status (%)

Response	Owners			Renters			
	First-Time Owners	Repeat Owners	All Renters	Will Buy within 1 Year	Will Buy in 1-2 Years	Will Buy in 2-5 Years	Will Buy in 5 Years or More
Extremely important	67	73	30	64	55	41	25
Quite important	26	21	23	25	30	34	31
Somewhat important	5	5	18	10	12	21	33
Not important	2	1	29	1	3	4	11

contrast, only 18 percent think owning is “somewhat” important, while 29 percent say it is “not important.”⁸

Renters who plan to buy someday make up 68 percent of total renters. For these renters, homeownership grows in importance as it comes within reach. One-quarter believe they will buy within the next two years, 44 percent say they will buy in two to five years, and almost 30 percent think they will not buy for at least five years. Some are already taking concrete steps toward their goal, while others are making less progress. Forty-four percent report they have been saving for less than a year, while almost a quarter have been saving for three years or more. Many perceive that they have a considerable distance to go. Forty percent of renters who are saving believe they will have to save for two to five more years to accumulate a down payment; another 13 percent think it will take at least five more years.

Three-quarters of renters planning to buy someday believe they will have to make sacrifices to become homeowners. Among the items they are willing to sacrifice are vacations, new cars, and

an investment, (2) dislike of paying rent, (3) pride of owning one’s own home, and (4) ability to control or modify the home’s features.

⁸ This finding is consistent with that of the Fannie Mae survey described earlier, which reports that almost half of all Americans say owning a home is one of the most important long-term goals in their lives. The number is even higher (60 percent) for Americans in the lowest income brackets (Fannie Mae 1992, 6).

daily nonessentials. Also, many renters report a willingness to make specific tradeoffs to become homeowners. For instance, 40 percent would buy a home with fewer amenities than desired, one-third would be willing to work an extra job, and one-quarter would be willing to move to another city.⁹

Clearly, renters' views of homeownership change with age (see table 4). While half of all renters say homeownership is "extremely" or "quite" important, the numbers are far greater for younger households. Young and middle-aged renters who say homeownership is *not* important tend to cite the inability to afford a home as the primary reason. Older renters are more likely to indicate that they do not want the trouble or responsibility of owning. Both very young and elderly households report that they are not interested in homeownership "at this stage" of their lives.

Table 4. Importance of Homeownership by Age, Current Renters (%)

Response	Under 25 Years	25-29 Years	30-34 Years	35-44 Years	45-54 Years	55-64 Years	65 Years and Over
Extremely important	48	48	42	32	21	8	2
Quite important	39	30	31	28	21	14	3
Somewhat important	9	16	19	24	23	22	7
Not important	4	7	7	15	34	57	88

The question "Why are you currently renting?" sheds more light on why some householders are moving toward homeownership and others are not. More than half of renters say financial constraints are their primary reason for renting (see table 5). They tend to be younger, with most between the ages of 25 and 44. Almost a quarter of renters say they don't want the trouble and responsibility of owning or are not interested in owning at their current stage of life. This group is mostly age 55 or older, although some are between 30 and 44.

⁹ Again, we find some general corroboration in the survey carried out by Fannie Mae (1992, 2). In that survey, respondents reported by a three-to-one margin that they would rather own a home than retire 10 years early, by a four-to-one margin they would rather own a home some distance from work than rent within easy commuting distance, and by a two-to-one margin they would be willing to work a second job if necessary in order to own a home.

Table 5. Renters’ Reported Main Reasons for Renting

Reason	Percent
I can’t afford mortgage payments or down payment	51
I don’t want the trouble, cost, or responsibility of owning	12
I’m not interested in owning at this stage of my life	11
My current residence is just temporary or short term	6
My family status has changed or will change soon	5
I want to be able to move easily	3
I don’t like this area enough to buy	3
I’m not willing to make the sacrifices to become an owner	2
I don’t need much space	1
Other	6

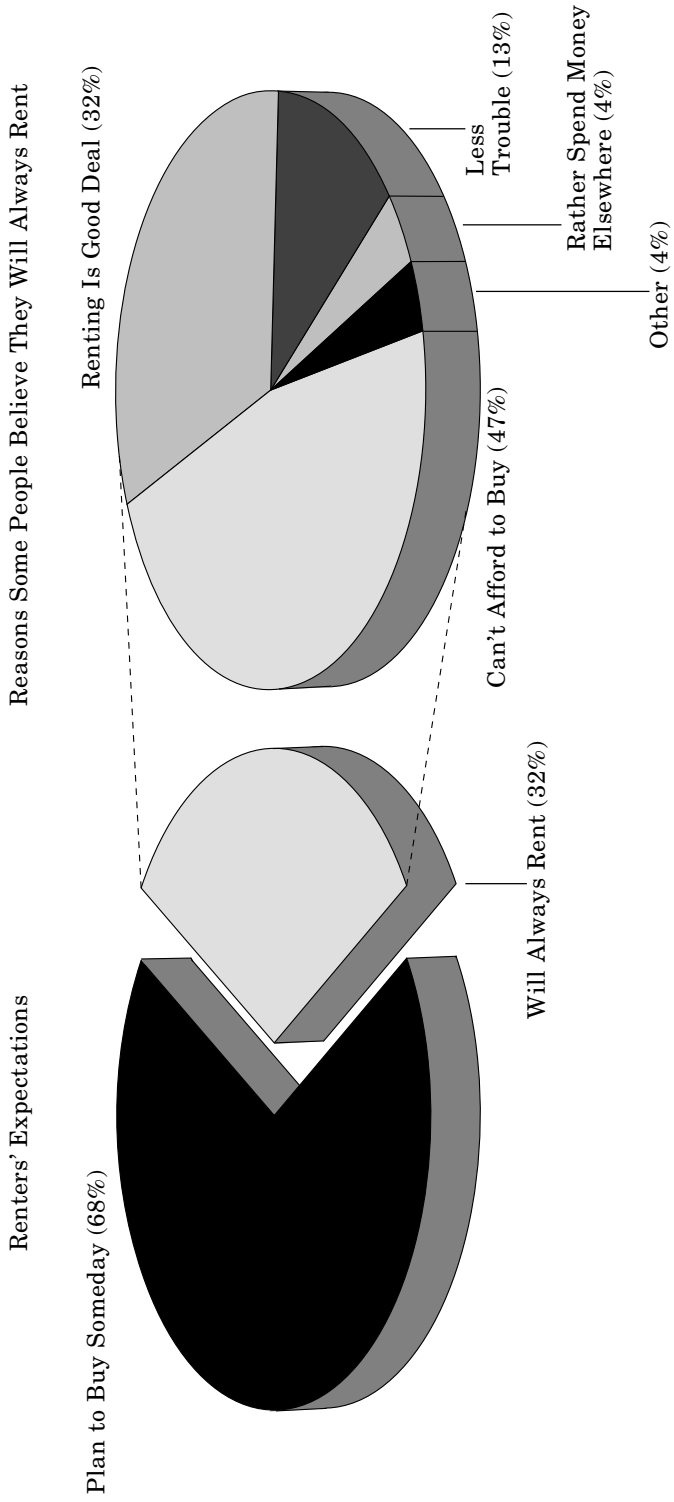
Some 68 percent of renters plan to buy a home someday, but 32 percent say they will always rent (figure 1). Affordability is an important reason for renters to believe they are permanent renters. Elsewhere on the survey, one-third reported that they had considered buying in the past three years but changed their minds because of inability to come up with a down payment or lack of income to meet monthly payments on a mortgage.¹⁰

Other distinguishing characteristics of renters include their attitudes about their current housing and their expectations of moving. Overall, renters tend to be less satisfied with their

¹⁰ A separate analysis of the NAR data set (Collins, Lipman, and Groeneman 1992) provides additional evidence of discouragement. When asked to predict the increase in price for a hypothetical home over the next one to three years, renters tended to predict considerably higher increases than did homeowners, real estate agents, economists, and other experts in the field. For example, for the three-year period, the median renter-predicted price increase is 20 percent, versus 8 percent for owners. It thus appears that some of the renters who say they will always rent may be taking themselves out of the homeownership market unnecessarily.

On the other hand, under certain circumstances expected home price appreciation could be a strong incentive for a renter to purchase a home. That is, if the renter is currently on the verge of buying and foresees substantial appreciation, then escalating prices could be an incentive to purchase. It was beyond the scope of this article to examine the issue of anticipated price appreciation in detail. In future research we intend to examine how anticipated price changes affect home-buying plans and behavior.

Figure 1. Do Renters Want to Become Homeowners?



residences than are homeowners. One-third of renters say they are “not satisfied” or “quite dissatisfied,” compared with 13 percent of homeowners. High dissatisfaction levels may account in part for some renters’ high expectations that they will move. About one-third of renters plan to move within two years, more than one-quarter in two to five years, and one-fifth in five or more years. But renters are evenly split between those who expect to buy and those who expect to rent the next time the moving van comes. Moreover, some renters expect to move frequently. Almost 30 percent say they will move twice in the next 10 years, and 14 percent say they will move three or more times. This response contrasts with owners, 91 percent of whom expect to move once or not at all during the next decade.

Taken together, these attitudinal data collected in the NAR survey enrich our understanding of the homeownership aspirations of renters. Most renters—particularly those under age 44—desire homeownership and believe they will have to sacrifice to become homeowners. Moreover, half of renters of all ages cite the inability to afford a home as the primary reason they are renting. Though they desire homeownership, the attitudes of some renters may work against them. Many anticipate moving frequently or perceive that home prices are rising at rates that will keep homeownership out of reach.

But as valuable as it is to know renters’ attitudes and perceptions toward specific issues, even more insight can be gained by combining this information and relating it to the traditional demographic data outlined above. That is what we will do in the remainder of this article.

Segmenting the renter population

Using cluster analysis to study renters

Most attempts to ascertain renters’ preferences for homeownership have consisted of “demand modeling” in which data on the age, income, and familial status of renters are used in conjunction with measures of the relative cost of owning versus renting, tax consequences, and the like. Usually, estimates are made of the sensitivity (elasticity) of housing price and household income to the quantity of homeownership demanded. One major shortcoming of this approach is that estimates are produced for all renters in the aggregate. It would be useful to know which groups of renters are more likely to “demand homeownership” and what role renter attitudes play in influencing both the demand for homeownership and the prospects of achieving it.

Such is the approach taken here. We focus on whether renters can indeed be classified into meaningful groups, how attitudinal information can be used in analyzing these groups, and the implications of these groups for directing limited resources designed to encourage homeownership to segments of the renter market where they will have the greatest impact.

To achieve these objectives, we rely on a combination of statistical techniques known as factor analysis and cluster analysis.¹¹ The purpose of factor analysis is to summarize information, and the purpose of cluster analysis is to classify objects into groups.

¹¹ We used factor analysis for 7 of the 10 purposes mentioned by Rummel in his 1970 book: (1) interrelationships (examining the links among the attitudinal items), (2) parsimony (data reduction), (3) classification (defining renter clusters), (4) scaling (creating units to measure constructs such as “progress toward ownership”), (5) hypothesis testing (examining the role of attitudes in discerning renter groupings), (6) data transformations (creating units for input into the cluster analysis), and (7) exploration (studying renting and owning attitudes without the benefit of a strong research literature).

Our use of factor analysis as a data reduction technique deserves special emphasis. Had we been doing a traditional social science study with a few predictor variables and one dependent variable, factor analysis would certainly not have been necessary as a preliminary step. However, we faced a very different situation when we started our work. The NAR renter data set contains six sets of attitudinal questions, and each question is treated as a separate variable. (For example, there were 12 separate variables in the “reasons for renting” set of questions.) Initially—that is, before we created indices and employed factor analysis—there were more than 150 explanatory variables. Had we used all 150, the computer undoubtedly would have produced a set of clusters. However, because of the sheer mass of information, interpreting how the clusters differed from one another would have been very difficult. Factor analysis was used to reduce the data and to make the cluster results more meaningful.

We realize that the use of a two-stage factor analysis is unconventional. Most researchers doing analyses of this kind perform the analysis in one stage. Our decision to use the two stages followed our hypothesis that attitudes contribute to explaining home-buying behavior over and beyond demographic and economic characteristics, and thus we need to understand these attitudes before inserting them into a broader factor analysis computer run. Our unorthodox approach to factor analysis reflects the exploratory character of this article and the fact that because of the large number of variables we had to make a large number of difficult decisions. Nevertheless, given the strong results from the cluster analysis, the approach appears to be useful in identifying subgroups of renters or owners. It is one that ought to be considered in future research of this kind.

See Chevan (1989, 265) for an example of the use of factor analysis prior to logit analysis in a study of the determinants of homeownership.

Factor analysis is a technique whereby information contained in a number of original variables can be condensed into a smaller set of composite variables. The idea is to combine variables that have some underlying relationship without losing too much information in the process (Hair et al. 1992, 265). Factor analysis is particularly appropriate for our purposes because of the large number of variables in the NAR survey database. Also, because so much of the attitudinal information is unique, there is little a priori knowledge to suggest which variables have more explanatory power than others or which variables interact and in what ways. Factor analysis helps to summarize this information in a more manageable form as a prelude to cluster analysis.

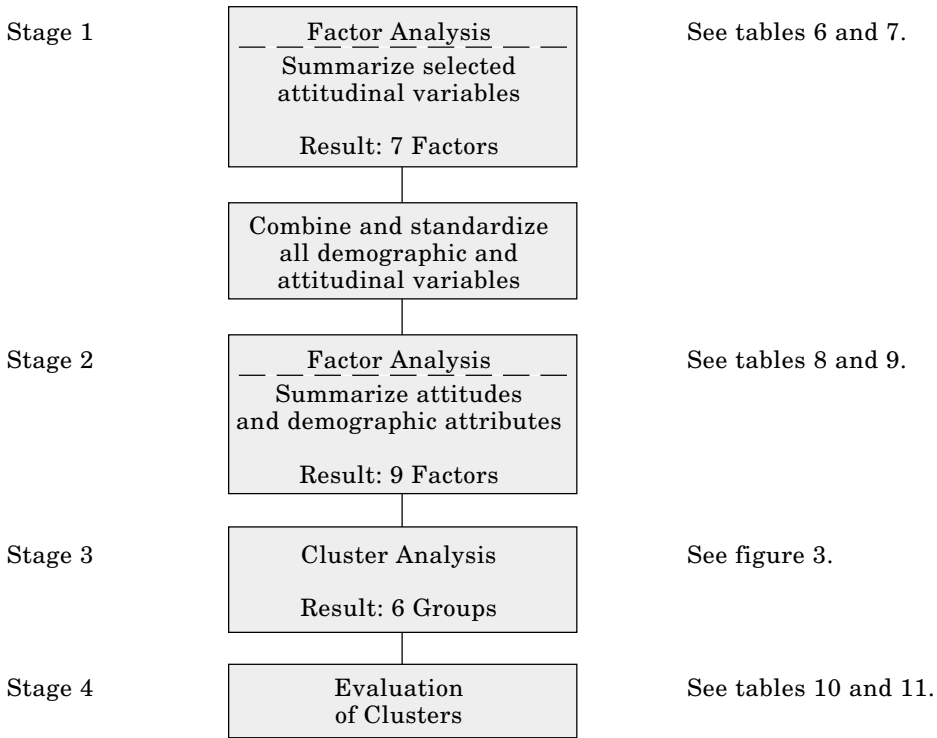
Though it has enjoyed extensive use and increasing acceptance in market research, psychology, geography, and the natural sciences (see Aldenderfer and Blashfield 1984), cluster analysis has had limited application in housing policy. Indeed, the limited use of cluster analysis for real estate in general was noted by Smith and Kroll (1989) in an attempt to determine whether some groups of renters are more likely to pay for certain housing amenities than others. Furthering the use of cluster analysis in the real estate arena was a secondary purpose of their study. Our study echoes that purpose.

Hair et al. (1992, 265) define cluster analysis as “a technique for grouping individuals or objects into clusters so that objects in the same cluster are more like each other than they are like objects in other clusters.” Measures of the “distance” between data points describing certain characteristics are used to assess the similarity between objects. The most common method for clustering—and the one employed here—is to start with each entity (in our case, household) as a unique cluster and gradually build groups in a hierarchy of steps. Eventually, all entities are merged into one large group.

An important point to remember about cluster analysis is that much is left to the discretion of the analyst. There is nothing in the clustering procedure itself to determine what the best measure of distance is, to decide beforehand what number of clusters is appropriate, or to test whether meaningful clusters exist. Rather, a whole host of decisions ranging from the decision rules about how to form clusters, to when to stop clustering, to what the clusters really mean are judgment calls. (The guidelines that we used are discussed below.)

Bearing these facts in mind, we went about our analysis in four stages (figure 2).¹²

Figure 2. Study Method



Note: See methodological notes in the appendix for additional details.

First, to summarize some of the attitudinal data, we carried out a first-stage factor analysis of two sets of survey items that measured attitudes toward owning and renting: (1) reasons why the respondent rents rather than owns and (2) the status of the family with respect to buying a home. The seven factors that emerged from the analysis for the two sets of items are listed in tables 6 and 7, along with the “loading” of particular characteristics on these dimensions.¹³

¹² Specific procedures used in applying the factor and cluster analyses are detailed in the methodological notes in the appendix to this article.

¹³ The loadings are numbers in a matrix linking the hypothesized factors with the original variables (e.g., demographic characteristics, attitudes). The numbers represent the strength of the relation between hypothesized factors and the original variables. When a variable has a high loading for only one of the factors, it means that the variable measures only one theoretical dimension.

Table 6. Stage 1 Factor Analysis Results: Reasons for Renting

Characteristic	Lifestyle	Mobility	Life Cycle	Economics
Don't want responsibility	0.76			
Not interested in owning	0.74			
No sacrifices	0.65			
Small space	0.56			
Don't like area		0.72		
Temporary home		0.64		
Move easily		0.61		
Change in family status			0.77	
Cash in equity			0.63	
No more payments				0.81
Waiting for low interest rates				0.49

We created new variables by combining responses that emerged in the factor analysis as sharing a common dimension.¹⁴ That is, respondents were classified as having a particular behavior or attitude if they responded positively to one or more of the individual items. For example, we categorized respondents as “mobility renters” if they said they rented in order to move easily, if they stated that their current residence was only temporary, or if they said that they did not like the area enough to buy there.

In the second stage, we conducted a factor analysis including background demographic and mobility characteristics as well as the factor score variables just discussed.¹⁵ Since the magnitudes

¹⁴ There was one exception to this generalization on how to compute factors, based on the stage 1 factor analysis results. We used one item, “not interested in owning at this stage of the life cycle,” as a proxy for the broader factor “not interested in owning.” Another approach would have been to set up a series of IF statements to combine the results from the former item with another one, “would like to own but cannot afford to,” to reflect the inverse relationship between the two. We decided to use the more straightforward approach in this case; using the more complicated factor would not have altered the results of the clustering routine.

¹⁵ Although we included variables measuring house type (e.g., single-family detached) and region (e.g., Northeast) in preliminary runs, we excluded them from the final runs used to form the clusters. This decision was related to our goal of identifying groupings of renters based on demographic and attitudinal characteristics. We anticipated that regional location and house type would be intercorrelated with these other personal characteristics and might proxy for them in the factor analysis. In other words, including housing type and region would interfere with our understanding of the interrelations among attitudinal and demographic characteristics. Early computer runs that included these two variables confirmed these expectations (a number of the factors were difficult to interpret), thus supporting our decision to limit the factor analysis to demographic and attitudinal characteristics.

Table 7. Stage 1 Factor Analysis Results: Thinking about Buying a Home

Characteristic	In Process of Buying	Not Ready at Present	Not Interested
Saving to afford home	0.65		
In process of buying	0.64		
Saving for a better home	0.54		
Waiting for interest rates to decline	0.53		
Move too often		0.64	
Move to a different part of country		0.63	
Waiting for change in family status		0.55	
Not ready		0.53	
Not interested at this stage of life cycle			-0.67
Would like to own but cannot afford			0.87

and measures of the variables are different, as a preliminary step, all these variables were “standardized”—that is, converted to a common scale. The nine factors that emerged from this analysis and the individual characteristics that combined to form these dimensions are listed in table 8. The variables included in this stage 2 factor analysis are defined in table 9. We created eight new factors, based on the results presented in table 8, by summing the individual items composing each dimension. It was not necessary to create a new ninth factor because this dimension (race) consisted of only one variable.

In the third stage, these nine factors were analyzed using the CLUSTER routine of SPSS-X (Norusis 1988).¹⁶ Cluster analysis computer programs typically produce an “agglomeration schedule,” which is a printout of the distances between the data points at each stage of cluster formation. One rule of thumb commonly employed by analysts is to stop clustering as soon as the increase in distance between two adjacent steps becomes large, since the larger the distance, the more dissimilar the objects one is clustering. In our cluster analysis there was a fairly large increase in the distance measure between the six-cluster and five-cluster

¹⁶ We experimented with another clustering routine, SPSS-X QUICK CLUSTER, in the preliminary cluster runs. Since QUICK CLUSTER has more modest storage requirements, it was not necessary to use a 30 percent sample as we did with the “regular” CLUSTER procedure. However, because QUICK CLUSTER produced unstable results that were difficult to interpret, we decided not to use it in later runs.

Table 9. Definitions of Variables Included in Stage 2 Factor Analysis and Cluster Analysis

Variable	Definition
1. Ownership progress	
In process of buying	Whether respondent agreed with one or more of the following statements: saving to afford a home; in process of buying; saving for a better home; waiting for interest rates to decline: (0) no, (1) yes.
Become owner	Become owner at next move: (0) no, (1) yes.
Years until home purchase	Number of years plan to wait until home purchase: (1) under 1, (2) 1 to less than 2, (3) 2 to less than 5, (4) 5 years or more.
Importance of homeownership	Level of importance of homeownership: (1) extremely, (2) quite, (3) somewhat, (4) not important.
Lottery winnings for homeownership	Whether would use the winnings from a \$10,000 lottery to purchase a home: (1) yes, (2) no.
Not interested in buying	Whether respondent not interested in owning at this stage in his/her life: (0) no, (1) yes.
Considered purchasing	Whether respondent considered purchasing in past 3 years but changed mind: (0) no, (1) yes.

Table 9. Definitions of Variables Included in Stage 2 Factor Analysis and Cluster Analysis (continued)

Variable	Definition
2. Familial orientation	
Married	Whether married: (0) no, (1) yes.
Household size	Categories ranged from (1) 1 to 8 or more.
Children	One or more children in household 18 or younger: (0) no, (1) yes.
Two adult workers	Whether two adult workers: (0) no, (1) yes.
Blue-collar worker	Whether either the respondent or spouse is a blue-collar worker: (0) no, (1) yes.
3. History of homeownership	
Previously owned	Whether previously owned: (0) no, (1) yes.
Previously rented	Whether previously rented: (0) no, (1) yes.
Ever owned	Whether ever owned: (0) no, (1) yes.
Life cycle renter	Whether agreed with one or more of the following statements: rent because of change in family status; recently cashed in equity in home: (0) no, (1) yes.

Table 9. Definitions of Variables Included in Stage 2 Factor Analysis and Cluster Analysis (continued)

Variable	Definition
4. Socioeconomic status	
High-status white-collar job	Whether respondent or spouse has a high-status white-collar job: (0) no, (1) yes.
College	Whether respondent or spouse attained at least a bachelor's degree: (0) no, (1) yes.
Income	Household income, 21 categories ranged from less than \$5,000 to \$125,000 or more.
5. Mobility	
Not ready for homeownership	Whether agreed with one or more of the following statements: expect to be moving too often to buy a home; planning to move to a different part of the state or country before I buy; awaiting a change in family size or status before I buy; not ready to purchase a home yet: (0) no, (1) yes.
Mobility renter	Whether agreed with one or more of the following statements: don't like the area enough to buy a home here; current residence is just temporary or short term; want to be able to move easily: (0) no, (1) yes.
Anticipated moves	Anticipated frequency of moves during the next 10 years; five categories ranged from none at all to five or more.

Table 9. Definitions of Variables Included in Stage 2 Factor Analysis and Cluster Analysis (continued)

Variable	Definition
6. Tradeoffs	
Postponements	<p>Whether the respondent anticipates having to postpone or give up four or more of the following in order to purchase a home: vacations, home furnishings, jewelry or clothing, daily nonessentials (general "belt tightening"), appliances or electronics, entertainment, sports, recreation, new car or other vehicle: (0) no, (1) yes.</p>
Tradeoffs	<p>Whether the respondent anticipates having to make four or more of the following tradeoffs in order to afford a home: buy a home with fewer amenities than you really want; buy a home in a neighborhood that isn't your first choice; borrow more so you could make a smaller down payment; obtain an adjustable-rate mortgage, even though monthly payments might change; commute more than an hour each way to work or school; move to another city; stay in the same area despite a desire to live elsewhere; buy a town house instead of a detached house; buy a condo or co-op instead of a house; buy an existing home instead of a new home; take on an extra job in order to save more; have a nonworking household member take a job to save more; pay a lower rent now than you can afford in order to save more: (0) no, (1) yes.</p>
Economic renter	<p>Whether the respondent agrees with one or both of the following statements concerning reasons for renting: cannot afford mortgage payments; waiting for housing prices or interest rates to fall: (0) no, (1) yes.</p>

Table 9. Definitions of Variables Included in Stage 2 Factor Analysis and Cluster Analysis (continued)

Variable	Definition
7. Housing dissatisfaction	
Housing rating	Rating of the current residence, where 10 represents the best residence you could afford in the next few years and 1 represents a residence that just meets your basic housing needs.
Housing dissatisfaction	Level of dissatisfaction with the home: (1) very satisfied, (2) pretty satisfied, (3) not really satisfied, (4) quite dissatisfied.
Moving plans	Whether plan to move within 2 years: (0) no, (1) yes.
8. Tenant lifestyle	
Length of residence	Years at current residence.
Lifestyle renter	Whether agree with one or more of the following reasons for renting: don't want the trouble, cost, or responsibility of owning; not interested in owning at this stage of my life; not willing to make the sacrifices it would take to become an owner; don't need much space: (0) no, (1) yes.
Age	Age of respondent, five categories: (1) under 30, (2) 30–39, (3) 40–49, (4) 50–59, (5) 60 and over.
Homeownership as an investment	How the respondent views homeownership as an investment: (1) good, (2) pretty good, (3) average or no opinion, (4) risky, and (5) bad.
9. Black	Black household: (0) no, (1) yes.

solutions. Therefore, we determined to stop the process at the six-cluster solution.

In the fourth stage, we evaluated and interpreted the six clusters shown in figure 3 and assigned them names.¹⁷ We determined group means for the six clusters based on the standardized scores for the nine factors (table 10). In table 11, the six clusters are compared with respect to some of the original demographic and economic variables (e.g., age, income, race).

Results: Six renter clusters

1. Families moving up the housing ladder (17 percent). Cluster 1 contains young families making relatively rapid progress toward homeownership; the results highlight this group's family orientation, which, with a factor score of 0.71, is greater than that of any other cluster. This cluster also contains the highest proportion of younger couples with school-age children (37 percent), but it also contains many young singles with no children and young couples with no children.

Of the six clusters, this group is advancing most rapidly toward purchasing a home; 63 percent expect to purchase a home when they next move, and 47 percent are currently saving to purchase a home. Both percentages are the highest among the six clusters, making cluster 1 a particularly attractive market for real estate agents and other housing industry professionals.

At first glance, these results suggest that members of this cluster are making such meaningful progress toward owning that

¹⁷Assigning names to clusters is as much an art as a science. The names are used as heuristic devices to highlight tendencies rather than to describe individuals. (In this respect the labels are similar to statistics like the mean; that is, few if any members of the sample are at the mean.) This point is shown clearly in the "struggling blue-collar" cluster. This cluster contains by far the highest proportion of blue-collar workers (56 percent), but obviously not all breadwinners in cluster 6 have blue-collar jobs. The results suggest strongly that the lower status workers in this cluster resemble blue-collar workers in the fragility of their employment situation and in the difficulty they are experiencing in moving toward homeownership.

We were surprised by the existence of a distinct "black renter" cluster; however, the label is strongly supported by the statistical results. All the households in this cluster were black, and only one other cluster (elderly life cycle renters) contained any blacks—and even in that case, the proportion of blacks was only 2 percent. The fact that race was such a strong clustering variable undoubtedly reflects its high correlation with many other social variables, such as the incidence of single parenthood.

Figure 3. Six Renter Clusters

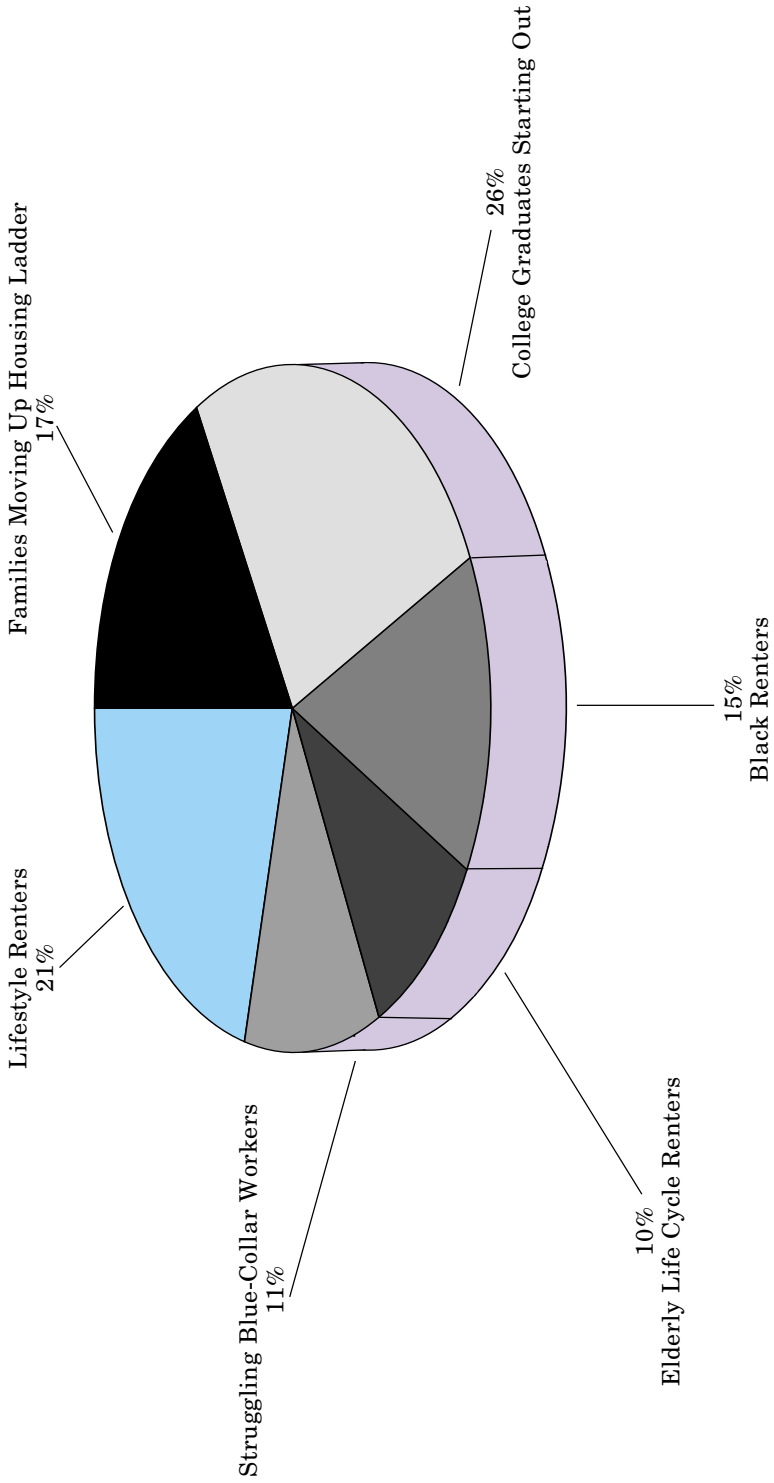


Table 10. Comparison of Renter Clusters with Respect to Transformed Factor Scores (group means)

Clusters	Ownership Progress	Familial Orientation	History of Ownership	Socio-economic Status	Mobility	Tradeoffs	Housing Dissatisfaction	Tenant Lifestyle	Black
1	0.79	0.71	-0.37	-0.28	-0.46	-0.11	0.11	-0.70	-0.46
2	-0.98	-0.40	-0.15	-0.36	-0.33	-0.61	-0.45	1.03	-0.46
3	0.26	-0.35	-0.16	1.18	0.81	0.43	0.38	-0.42	-0.46
4	0.22	0.09	-0.37	-0.32	-0.18	0.12	0.35	-0.06	2.19
5	-0.71	-0.56	2.21	-0.39	-0.46	-0.59	-0.56	0.79	-0.40
6	0.54	0.64	-0.30	-0.43	0.46	1.50	0.39	-0.59	-0.46
F ratio	73.45	33.41	128.69	81.39	41.04	64.19	17.97	82.74	7,263.07
Significance	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

Note: Clusters are (1) families moving up the housing ladder, (2) lifestyle renters, (3) college graduates starting out, (4) black renters, (5) elderly life cycle renters, and (6) struggling blue-collar workers.

Table 11. Comparison of Renter Clusters with Respect to Demographic and Economic Characteristics

Characteristic	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Cluster 6
Average age (years)	35.5	55.5	34.3	40.5	60.8	32.5
Married (%)	60.2	29.5	29.2	22.5	15.7	50.8
Children in the home (%)	58.1	11.6	13.1	47.5	7.8	55.9
Average annual income (\$)	28,425	27,041	38,373	25,953	26,740	25,423
College graduate (%)	17.2	14.3	73.0	23.8	11.8	10.2
Blue-collar (%)	45.2	11.6	13.1	27.5	15.7	55.9
High-status white-collar (%)	14.0	16.1	70.8	15.0	15.7	8.5
Black (%)	0.0	0.0	0.0	100.0	2.0	0.0
Owned at previous residence (%)	0.0	3.6	4.4	3.8	82.4	0.0
Rented at previous residence (%)	92.5	90.2	86.1	91.3	17.6	83.1

Note: Clusters are (1) families moving up the housing ladder, (2) lifestyle renters, (3) college graduates starting out, (4) black renters, (5) elderly life cycle renters, and (6) struggling blue-collar workers.

they need little if any assistance from either government or other sources. This is not the case. More than half (56 percent) of cluster 1 members said that they had considered purchasing a home during the preceding three years but had decided against doing so. The most frequently mentioned reason was the high down payment, cited by 68 percent of the total; 48 percent mentioned the high monthly payments. These results suggest that at least half this cluster would progress even faster toward homeownership if they were helped with the down payment, the closing costs, or the mortgage payments. Clearly, cluster 1 could be a target for homeownership assistance programs.

2. *Lifestyle renters (21 percent)*. Cluster 2 contains older householders who prefer to rent as a way of life. The average age for this cluster (56 years) is second only to cluster 5 (elderly life cycle renters). Sixteen percent are older couples without children (the highest of the six clusters), and 42 percent are older singles. Cluster 2 is distinguishable from the others on the basis of a history of renting and a tenant lifestyle. Nine out of 10 rented previously, and 69 percent never owned in their adult lives. Furthermore, 69 percent rent because they do not want the cost, trouble, or responsibility of homeownership. Not surprisingly, the proportion of cluster 2 members who consider owning a risky or poor investment (21 percent) is higher than for any other cluster.

Given these pro-renting attitudes, it is hardly shocking that this cluster scored lowest on the ownership progress factor. Only 10 percent had considered purchasing a home during the preceding three years, and 77 percent are not interested in owning a home at this stage in their lives. This cluster is not an appropriate target for homeownership policies because of the lifestyle preferences of members.

3. *College graduates starting out (26 percent)*. Cluster 3 consists largely of upwardly mobile white-collar workers in the earliest stages of the life cycle. The overwhelming majority are either young singles (63 percent) or young couples without children (18 percent).

This is clearly the highest status cluster, as evidenced by its socioeconomic status factor score of 1.18. It also has the highest average income (\$38,373), the highest proportion of college graduates (73 percent), and the highest proportion of high-status white-collar workers (71 percent). Reflecting a strong career orientation, this cluster also contains the largest proportion of households with both spouses working (21 percent).

These householders are interested in owning homes. Seventy percent consider it to be either “extremely important” or “quite important” to own a home “now or some time in the future.” However, for most members of this cluster, homeownership is not imminent. Thirty percent anticipate having to wait five years or more before purchasing a home.

The relatively slow progress of cluster members toward homeownership is not surprising. Most are in an early stage of a professional career, when frequent job transfers and moves are

the norm. Some 67 percent of cluster members plan to move two or more times during the next five years; 43 percent say that they rent rather than own because their current residence is only “temporary or short term,” and 37 percent rent to be able to move quickly. Similarly, 29 percent plan to move to a different part of the state or country before they purchase a home. Because the reasons for the modest progress of members of this group toward homeownership are largely voluntary, there is little that government can do to speed their movement toward purchasing homes.

4. Black renters (15 percent). The findings highlight two seemingly contradictory results for black renters (cluster 4). On the one hand, this cluster is almost as well off as cluster 1 (families moving up the housing ladder) with respect to socioeconomic status. For example, the average income of cluster 4 (\$25,953) is only slightly lower than that for cluster 1 (\$28,425). On the other hand, black renters lag behind members of cluster 1 in housing conditions and progress toward homeownership. With respect to both of these factors, black renters resemble cluster 6 (mobile blue-collar workers). Specifically, black renters have a higher cost burden (monthly rent divided by income; 44 percent versus 26 percent for cluster 1), rate their homes as poorer (an average of 5.1 versus 5.7 out of 10), and are less likely to plan to purchase a home at the time of the next move (38 percent versus 63 percent).

We suspect that the slow advancement of cluster 4 toward homeownership is due to the high proportion of single-parent households (34 percent) and the difficulty these households experience in saving for a down payment. The results provide some support for this view. Black single-parent renters are of lower socioeconomic status than other black renters and are making less progress toward homeownership.

However, the gap between clusters 1 and 4 cannot be fully explained by the higher incidence of single-parent households among black renters. If it could, the differences between the two clusters would have been minimal when single-parent households were excluded from the analysis. In fact, when we made this type of comparison, cluster 4 continued to lag behind cluster 1 in both socioeconomic status and homeownership progress.

One possible explanation for the remaining differences between the two clusters is discrimination in the housing or credit markets, whether perceived or real. There is mounting empirical

evidence that some minority home seekers and prospective borrowers encounter discrimination.¹⁸ Moreover, some blacks may assume that they will experience discrimination if they look for homes to buy. This belief would make them less willing to look. Unfortunately, with the limited data at hand from the renter questionnaire it is not possible to test the validity of this alternative explanation. However, the survey by Fannie Mae (1992, 12–13) found that 57 percent of whites and only 38 percent of blacks believe that blacks and other minorities have as good a chance as whites in their communities to get housing they can afford.

These findings imply that cluster 4 could be targeted for homeownership programs but that such efforts would have to be sensitive to both the affordability problems of single-parent households and the discrimination that black home seekers face in the housing market.

5. Elderly life cycle renters (10 percent). Like the members of cluster 2, those in cluster 5 typically are in the postchild stages of the family life cycle. The average age is 61, and 61 percent are older couples without children.

Although similar to cluster 2 demographically, cluster 5 can be distinguished from 2 on the basis of members' history of owning. The 2.21 score on this factor, shown in table 10, is by far the highest among the six groupings. Of cluster 5 members, 83 percent had owned at their last location, and 100 percent had owned at least once in their lives. Many of these householders had recently moved because they had been "overhoused" at their previous location. This conclusion is supported by the finding that 51 percent rent because they no longer need "much space." Cluster 5 members were twice as likely to mention this reason as the next nearest group (cluster 2).

As a result of their recent switch to renting, these older householders have been able to achieve a high degree of congruence between their housing needs and lifestyle and their actual housing situation. On average, these renters rate their dwellings higher (7.1 out of 10) than householders in the other clusters. Similarly, the proportion who planned to move within the next five years (14 percent) was lower than for any other cluster. As

¹⁸ Two recent studies documenting discrimination include a national fair housing audit conducted for HUD by the Urban Institute and Syracuse University (Turner, Edwards, and Mikelsons 1991) and a Boston Federal Reserve Bank analysis of mortgage lending in Boston (Munnell et al. 1992; see also Megbolugbe 1993).

in cluster 2, most members (63 percent) are not interested in owning at this stage in their lives. Cluster 5 clearly is not an appropriate target for homeownership programs.

*6. Struggling blue-collar workers*¹⁹ (11 percent). Cluster 6 is made up of younger householders, with an average age of 33 years, facing a number of obstacles, including affordability, as they seek to purchase homes. Members of this cluster are concentrated in the early stages of the family life cycle. This cluster contains the highest proportion of young singles (31 percent), but it also contains sizable numbers of households in all of the childbearing and child-rearing stages of the life cycle. The proportion of single parents (19 percent) is second only to black renters (cluster 4).

These are householders of modest means. The average income (\$25,423) is the lowest of the six clusters, as is the proportion of college graduates (10 percent). On the other hand, the proportion of blue-collar workers (56 percent) is the highest of the six clusters. The job prospects for these blue-collar workers are uncertain because of the restructuring of the U.S. economy from manufacturing to service jobs.

The overwhelming majority (93 percent) of members of cluster 6 want to own homes. However, 46 percent are “not ready.” The main reason is economics. Ninety percent agreed with the statement “I would like to own a home but cannot afford to.” Only a slightly lower proportion (84 percent) agreed with the statement “I am renting because I cannot afford mortgage payments.” Both percentages are higher than for any other cluster. Finally, 48 percent said they had considered owning during the preceding three years but had decided against it. Members of this cluster are more likely than those in any other to mention economic obstacles in explaining their decision: a high down payment (89 percent), high monthly payments (68 percent), and high interest rates (57 percent).

Because of their low incomes and uncertain job prospects, members of cluster 6 envision homeownership as involving some difficult sacrifices. This cluster scored highest by far (1.50) on the tradeoffs factor (table 10). The overwhelming majority of

¹⁹ A recent newspaper article (Russakoff 1993) gives a human face to the statistical analysis for cluster 6. The article focuses on three middle-aged steelworkers who lost their jobs at a plant not far from Pittsburgh. Since their long-term job prospects are so uncertain, the three have left their wives behind and share a town house. Chasing work has fractured the lives of these steel families. However, the situation of younger steelworkers who lack the seniority of these three workers is even bleaker.

members of this cluster (85 percent) expect homeownership to involve one or more of the economic tradeoffs mentioned on the survey. These blue-collar workers were especially likely to anticipate having to borrow more (61 percent), commute further (32 percent), or take an extra job (67 percent) in order to purchase a home.

Similarly, 78 percent of cluster members expect to have to postpone or give up consumer items to achieve their goal of purchasing a home. For example, 85 percent expect to have to shelve vacations, and 74 percent expect that they would go out less frequently for entertainment, sports, or recreation.

Cluster 6 members are the ones most prone to move; 54 percent expect to move at least twice during the next 10 years. The high propensity for mobility reflects a high level of housing dissatisfaction. The average housing rating (5.0) is the lowest of the six clusters. Many of these moves are linked to anticipated job shifts, as shown by the fact that 27 percent plan to relocate to another state or another part of the country before purchasing a home. Typically, such long-distance moves accompany job searches.

This cluster is an obvious target for programs to facilitate homeownership. However, the programs would have to take into account the precarious job situation of cluster members.

Conclusions and future directions

Policy implications

This article has sought to improve understanding of renter aspirations for homeownership and the extent to which renter attitudes are an obstacle to ownership. We have also examined the feasibility of using cluster analysis to identify a limited number of renter groups with similar demographic, mobility, and attitudinal characteristics.

Most renter households desire homeownership. Some renters choose not to own for several reasons, including the expectation of moving frequently, the preference for avoiding the responsibilities of homeownership, or finding that renting is more affordable.

Cluster analysis identified six groups of renters, highlighting their diversity. In contrast to the stereotype that all, or nearly

all, Americans want to own their homes, 32 percent of the sample preferred to rent for the foreseeable future. This total consists of two groups of older householders: (1) elderly life cycle renters (10 percent of the total), who recently gave up ownership to rent smaller apartments or dwellings; and (2) lifestyle renters (21 percent), who prefer the greater flexibility and reduced commitment associated with renting.

The other two-thirds of the renters would prefer to own. However, one of the four remaining clusters, college graduates starting out (26 percent of the total), is not a top-priority candidate for limited resources to assist homeownership because the members are very young and at the early stages of their life cycle. They are also at an early stage of their professional careers, when frequent job changes and transfers make renting a suitable option.

The other three clusters are more realistic targets for homeownership assistance. Although families moving up the housing ladder (17 percent of the total) are generally moving smoothly toward homeownership, some in this group are experiencing affordability problems. A sizable number had considered purchasing homes recently but decided against doing so, typically for economic reasons.

With a limited amount of help from public, private, or nonprofit institutions, many members of this cluster might be able to move faster toward homeownership. Given the relatively young age of the group, households may not yet be in their peak earning years. At the same time, saving is difficult (especially for those who have the expenses of raising children). Alternative mortgage designs, such as graduated-payment mortgages, would be appropriate for this group.²⁰ The initial rates on these mortgages are below those of regular fixed-rate mortgages, and therefore initial payments are lower and households need less income to qualify. When payments rise, households are likely to be in their peak earning years. Also, the availability of government-backed or privately insured mortgages might enable these households to qualify for mortgages with lower down payments.

Equity considerations would suggest more direct help for the two other groups with greater housing needs. One group, black renters (15 percent of the total), is experiencing limited progress

²⁰ The graduated-payment mortgage is a variant in which monthly payment levels start out low and gradually rise to a level above that charged for a fixed-payment loan to compensate the lender for forgone interest.

because of the high incidence of single-parent households and possibly because of discrimination in the mortgage and housing markets. Increasing the availability of mortgage credit would help these renters, and their high rent burdens imply that they would benefit from down payment assistance programs along the lines of those offered by Fannie Mae.²¹ Though helpful for all first-time home buyers, homeownership counseling would be particularly effective for making members of this group fully aware of their rights in both the housing and credit markets.

Members of the final group, struggling blue-collar workers (11 percent of the total), find it difficult to achieve their goal of homeownership because of modest incomes, uncertain job prospects, and the possibility of having to relocate frequently in search of the diminishing number of manufacturing jobs. While mortgage and down payment assistance may be appropriate for this group, households with tenuous job situations or with the strong likelihood of moving present special problems to lenders. Allowing households to tap their individual retirement accounts or other retirement funds without penalty to purchase a home in the event of a move is one possibility for the future, but current law does not permit this. Certainly, any type of down payment or mortgage assistance must be coupled with prepurchase and postpurchase counseling to minimize the possibility of foreclosure.

Further work

As noted at the beginning of this study, an important contribution of NAR's national survey of homeowners and renters is its emphasis on renters' attitudes toward homeownership, affordability, and saving behavior to augment what we already know from the census and other traditional sources of data on renters. From the results of this study, it appears that such information is indeed worth collecting and that attitudes are in fact an important way to differentiate renters. Still, further work must be done using both the renter and owner data sets to see how much such attitudinal information increases our understanding of behavior as compared with the usual demographic explanatory variables. Among the questions we plan to explore are the following: To what extent do specific attitudes (e.g., willingness to make sacrifices for ownership, expectations of price appreciation)

²¹ Under Fannie Mae's Community Home Buyers Program, a 3 percent down payment can be supplemented by a 2 percent gift from a relative or a 2 percent grant or unsecured loan from a nonprofit organization, church, or public entity.

predict movement toward homeownership (e.g., which families save for a down payment or start shopping for a home) over and beyond the role played by demographic characteristics? Once demographic characteristics are controlled, to what extent do these attitudes distinguish between recent home buyers and renters who considered but then decided against buying a home?

Furthermore, additional work is warranted on the underlying reasons for the limited progress of black renters toward homeownership. The cluster analysis results indicated that in general blacks were making less progress than might be expected from their income. However, it was not possible within the limited scope of this article to determine whether the progress was limited because of perceived discrimination in the housing and credit markets, the high proportion of single parents within the black population, or a wealth differential between whites and blacks even after controlling for income.²² Future work might use multiple regression analysis or some other multivariate technique to test for the independent effect of race on progress, controlling for other variables (e.g., socioeconomic status, mobility, perceived tradeoffs).

The method employed in this study was really a foray into relatively unexplored territory. Cluster analysis is not widely applied by researchers to the study of renters in particular or housing policy in general. Because so much depends on the judgment of the analyst and the decision rules applied in the procedure, it would be useful to experiment with different factor analysis strategies (e.g., one-stage versus two-stage) and different methods of clustering to determine how sensitive the clusters are to the methods used to create them, or—put more positively—to confirm that the clusters derived here are stable.²³

Finally, it would be advantageous to know whether, given the attitudes of a renter household, we can accurately determine its

²² The importance of wealth differences between whites and blacks was pointed out to us by a reviewer. Even though the survey did include measures of wealth (savings accounts, mutual fund shares, investment property), it was not practical to include them in the analysis at this late stage. Future work will include these measures in multivariate analyses of the determinants of progress toward homeownership.

²³ SPSS-X offers six clustering approaches—average linkage between groups, average linkage within groups, single linkage (nearest neighbor), complete linkage (furthest neighbor), centroid clustering, and median clustering—in addition to Ward's method, which was used in this article. In future work we would like to use these other approaches with the same sample and see how the clustering results change.

cluster. We did some preliminary testing of the robustness of the six clusters with satisfactory results.²⁴ Still, it would be useful to derive a more formalized model consisting of both demographic attributes and attitudinal variables that can accurately predict the cluster into which that household falls. This refinement would help policy makers assess the renter population and direct limited resources to households where they are most appropriate.

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²⁴ When we applied discriminant analysis, using the cluster number as the dependent variable for each household and the nine factors as independent variables, we made correct predictions in about 90 percent of the cases. By this statistical criterion, our approach was quite successful. We are not emphasizing the explanatory results at this point because we are mainly concerned with the policy implications stemming from the six renter clusters. In future work we would like to develop a discriminant function based on part of the sample and test it on the remainder of the sample.

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Appendix
Methodological notes

Stage 1: Factor analysis. In earlier analyses for this article we conducted five other factor analyses of attitudinal items: (1) reasons for being interested in owning, (2) reasons the respondent intends always to rent, (3) things the respondent would have to postpone for ownership, (4) anticipated tradeoffs in order to afford a home, and (5) how the respondent would use winnings from a \$10,000 lottery. Because of the way the survey was designed, many respondents skipped the first four sets of items. Consequently, each set had a large number of missing cases. For example, set 1 was relevant only to those who were interested in owning. Had we included the factors derived from these sets in the cluster and discriminant analyses, the analyses would have been based on small samples not representative of the renting population.

We attempted to use the four sets of items by a recoding that combined the missing cases with negative responses. The recoding therefore distinguished between those who answered yes to the item (coded 1) and those who did not (coded 0). We examined the validity of this approach to recoding through a two-stage process.

First, we tested the correlations between different measures of an orientation toward ownership on the one hand and the two types of recoding on the other (i.e., the recodes including missing data and the recodes excluding this information). We found that the results of the two forms of recoding were quite different.

Second, we cross-tabulated the different measures of ownership orientation with a recoded version of the items involving three categories: (1) those who skipped the question, (2) those who answered no, and (3) those who answered yes. The results for categories 1 and 2 were quite different, indicating that combining them would be a mistake. There was therefore no feasible way to use the four sets of items in later runs.

We used principal component analysis and varimax rotation to identify the best factor solution. We used 0.30 as the arbitrary cutoff for the factor loadings.

Stage 2: Factor analysis. The variables were standardized by the Z-score transformation feature of SPSS-X. Again, we used principal component analysis and the varimax rotation to identify the best factor solution and 0.30 as the cutoff for the factor loadings.

Stage 3: Cluster analysis. Storage requirements for the SPSS-X cluster routine increase rapidly with the number of cases. Consequently, we used a 30 percent sample. Applying cluster analysis requires choosing a “decision rule” for forming clusters. We chose Ward’s method, described in Norusis (1985, 181):

For each cluster the means for all variables are calculated. Then for each case the squared Euclidean distance to the cluster means is calculated. These distances are summed for all of the cases. At each step, the two clusters that merge are those that result in the smallest increase in the overall sum of the squared within-cluster distances.

Stage 4: Analysis of variance. We used the stepwise discriminant feature of SPSS-X to identify the distinctive features of the six renter clusters. This method is equivalent to an analysis of variance, which tests for statistically significant differences in variables across clusters.

