The Role of Occupational Achievement in Homeownership Attainment by Immigrants and Native Borns in Five Metropolitan Areas

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Abstract

This article addresses the homeownership attainment of immigrants and native borns in five metropolitan areas: Los Angeles; New York; Washington, DC; Atlanta; and Philadelphia. The major question for analysis is the role of occupational achievement in shaping the attainment of homeownership for specific cohorts between 1980 and 1990. This effect is estimated in addition to that of human capital endowments, life cycle maturation, lengthening duration of U.S. residence, and earnings.

We find that occupational achievement makes a significant contribution to homeownership attainment, net of other factors, and that this effect is remarkably consistent across metropolitan areas, immigrant groups, and birth cohorts. The analysis also unveils substantial differences in ownership trends between metropolitan regions. Although immigrant groups attain lower levels of homeownership than non-Hispanic whites who are native born, the rate of progress toward homeownership for immigrants generally parallels that for young whites in the same metropolitan area.

Keywords: homeownership; immigrants; occupation; metropolitan regions

Introduction

This article investigates the homeownership attainment of immigrants and native borns, with special attention to the role of occupational status. Occupational achievement is the key process by which immigrants advance their economic status and may play an important role also in helping them succeed in the housing market. The analysis explores the extent to which immigrants' homeownership attainment is due to their human capital endowments, their life cycle maturation and advancing age, their lengthening duration in the United States, their level of earnings, and, net of all these factors, their occupational status.

The data are from five metropolitan areas that provide varying housing market contexts. Los Angeles is a rapidly growing metropolitan area with high prices and a large, growing immigrant population. New York is a slow-growing metropolitan area with high housing prices but also with a large, growing immigrant population. In contrast, the Atlanta and Philadelphia areas have substantially fewer immigrants and lower relative housing prices than Los Angeles and New York. The difference between these two areas is that Atlanta is fast growing, while Philadelphia is slow growing. Finally, the Washington, DC, area is somewhat in between these extremes, moderately growing with a moderately large immigrant population and relatively high housing prices.

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Homeownership opportunities are compared across all five areas by analysis of the homeownership attainment patterns of non-Hispanic, white native borns. This provides essential insights into the variable market context supporting homeownership attainment for immigrants. The primary reason for comparing markets via the experience of non-Hispanic, white native borns is two-fold: First, this population group is often the reference group used to judge immigrant progress, and, second, there is no single immigrant group that is well represented in even three of our five selected areas. Thus non-Hispanic, white native borns constitute a useful common denominator for our initial analysis.

Detailed models are then constructed of homeownership attainment by two Hispanic-origin groups: Mexicans in Los Angeles and Dominicans in New York. In addition, somewhat less detailed analysis is conducted of several Asian-origin groups in Los Angeles, New York, and Washington, DC. Overall, we find that the homeownership attainment of the different immigrant groups reflects similar trajectories, albeit on different levels, as observed among non-Hispanic, white native borns in the same cities.

Review of Literature

In the past few years, much has been learned about homeownership attainment of immigrants. The importance of duration of residence in the United States is well established, since all studies indicate more rapid advances into homeownership for immigrants over time (starting from low levels) than for native borns in the same age range. Research in Australia also found a stronger propensity on the part of immigrants to become homeowners, estimating a cross-sectional duration effect on ownership rates of 1.7 percentage points for one additional year of residence in Australia (Bourassa 1994). In the United States, Alba and Logan (1992) stressed the importance of homeownership for wealth accumulation and assimilation among immigrants. They compared 12 major race and ethnic groups in the United States in 1980 on ownership attainment, finding that those who were more assimilated (assimilation measured by English proficiency) were much more likely to be homeowners than those not assimilated. Krivo (1995) compared the ownership attainment of Hispanics and whites in 1980 (immigrants and native born), confirming Alba and Logan's findings. More importantly, she concluded from her cross-sectional regression that the likelihood of ownership increased with length of U.S. residence but the negative effect of foreign birth did not disappear until after 36 years in the United States. Most recently, housing industry analysts have begun to focus on immigration effects on U.S. housing markets, finding, for example, that the foreign born account for 33 percent of all young owners in Miami and 25 percent in Los Angeles (McArdle and Masnick 1995).

Cohort studies have become increasingly accepted for their ability to approximate longitudinal analysis of specific subgroups (but not individuals) in the population. Capitalizing on data from the American Housing Survey or the decennial census, cohort studies can be carried out for specific urban areas or for groups too small to be usefully analyzed with small, more specialized, national surveys. Originating in work at the MIT-Harvard Joint Center for Urban Studies (Myers 1982; Pitkin and Masnick 1980), those techniques were adapted in the 1990s for longitudinal analysis of immigrant behavior (McArdle 1997; Myers and Lee 1996, 1998; Pitkin et al. 1997). Distinct parallels with the housing literature have been noted in the evolution of modeling of immigrant economic achievement by labor econ-

omists (Myers, Megbolugbe, and Lee 1998). Both traditions are moving away from simple cross-sectional models and toward cohort models of aggregate changes over time.

Both housing careers and economic careers entail long-term trajectories, making them appropriate for analysis with cohort techniques. Cross-sectional studies assume that housing consumption decisions of age groups in one decade are independent of those in previous decades and do not take advantage of the fact that roughly the same group of people travel together through successive age groups in successive decades. Because of the growing infrequency of residential mobility after age 35 or so, housing consumption changes relatively slowly, so the housing decisions made in previous decades have a strong impact on current consumption (Pitkin 1990). Similarly, economic careers also have strong inertia, with education levels early in life shaping occupational potentials, and occupational choices settling into sustained careers. Given the strong economic links between housing and occupational status, it is reasonable to assume that the housing and economic career trajectories also may be linked.

Limited research has linked occupational achievement to homeownership attainment. Alba and Logan (1992) found that occupational status (measured by prestige scores) contributed significantly to homeownership attainment, net of household income, education, and other factors. This effect varied across the 12 groups they studied for the United States as a whole, falling to zero for some groups. While substantial for whites and blacks, the greatest effect was for Mexican-origin residents. McArdle's (1997) study of homeownership in New Jersey also employed a measure of occupational status, but this amounted essentially to only a dummy variable representing professionals and managers. She also found a significant effect of occupation in addition to that of income and education.

The importance of earnings, or household income, for homeownership attainment is the most established finding in the literature. Permanent income of immigrants and native borns has been found to carry more weight in the determination of tenure choice than transitory or total income (Bourassa 1994; Myers, Megbolugbe, and Lee 1998). Wealth effects are also believed important, but lack of a wealth measure in most data sets has prevented adequate analysis. A major contribution to understanding these effects is the study by Haurin, Hendershott, and Wachter (1996, 1997) of wealth accumulation and eventual homeownership attainment among young adults. Using a uniquely prepared longitudinal data set of youths ages 20 to 33 in the late 1980s, Haurin and colleagues find that wealth and homeownership are mutually determined (each increasing in anticipation of the other). They find that earnings and homeownership are also determined simultaneously; those who have a stronger desire for homeownership increase their earnings effort, with the result that the coefficient on earnings in homeownership determination is upwardly biased. They find also that borrowing constraints substantially reduce the likelihood of ownership from the unconstrained probability; it should be noted, however, that this factor is unlikely to bias estimates of other homeownership determinants if constraints remain constant over time or relatively equal across groups.

Questions to Be Addressed

What has not been investigated adequately to date is the importance of occupational status for shaping immigrants' advancement into homeownership. Immigration, like other forms

of long-distance migration, is certainly influenced by the draw of employment prospects. What is not known is how occupational achievement after arrival might alter the rate of advancement into homeownership. The Alba and Logan (1992) study cited above did not identify immigrants by length of residence in the United States, nor did it separately estimate occupational effects for immigrants and native borns.

The major hypothesis addressed in this article is that workers with higher occupational achievement are expected to have greater chances of becoming homeowners. The main effect of occupational status is expected to be through its contribution to higher earnings. Even net of income or other effects, workers with higher occupational attainment should have greater chances of becoming homeowners because current occupation proxies permanent income and future earnings prospects better than current income alone (Hauser and Warren 1997, 198). In addition, higher occupational status may indicate greater ability to secure mortgage credit. Overall, the gross relationship of occupation to homeownership is important for describing the mechanism by which immigrants advance themselves economically and become able to purchase homes.

A second question for research is whether the effect of occupational achievement on homeownership attainment is equal for all groups or whether it is greater for immigrants than for native borns. Our expectations in this regard are somewhat mixed. On one hand, we might expect immigrants to rely more heavily on their job performance to advance themselves in the housing market, and thus occupational achievement should be a more important determinant for them. On the other hand, many immigrants are forced to work in occupations that are lower status than those for which they trained in their homeland. Their relative over-qualification could lead to greater homeownership than might otherwise be expected for persons of lower occupational status; however, it is the higher educational attainment of these over-qualified workers (and its implications for family-wealth accumulation) that should be expected to generate higher homeownership.

A third question provides necessary background to the foregoing analysis. Between 1980 and 1990, new immigrant arrivals and young native-born birth cohorts are expected to have moved to higher odds of homeownership as they advanced through their housing careers. However, previous research has shown that those increases are not likely to be sufficient to reach the levels that had been achieved by their immediate predecessors in 1980 (Myers, Megbolugbe, and Lee 1998), and thus the more recent cohorts are expected to be found tracking below the homeownership trajectories of their predecessors. What is not known is whether this pattern of lagging homeownership attainment occurs equally for immigrants and native borns in the same metropolitan area or whether it occurs to the same degree in different metropolitan areas.

Methodology

Models of homeownership attainment have evolved substantially in recent years. Fresh realization of the growing importance of immigration for housing markets, combined with access to the newly released microdata files from the 1990 census, spawned a new generation of housing market research. As described above, this research has emphasized cohort models of selected subgroups in the nation and specific metropolitan regions. A major distinction of the post-1990 research is the transition from descriptive to statistical estimations of how

cohorts advance through the housing market (Myers, Megbolugbe, and Lee 1998; Pitkin 1990). Of particular importance is the double cohort formulation developed by Myers and Lee (1996) that nests birth cohorts within immigration cohorts and estimates 1980 to 1990 changes for cohorts through logistic regressions. Individual microdata records are coded by cohort membership and year of observation. (For example, persons ages 25 to 34 in 1980 and 35 to 44 in 1990 are coded into the same birth cohort.) A series of interactions are then tested to evaluate differences between immigrant cohorts or birth cohorts, and changes over time are modeled as the interaction of observation year with cohort membership. This method permits a separation of net longitudinal changes caused by increased age from the effects of increased length of residence in the United States (or assimilation).

Model Specification

The general form of the model is expressed as:

$$L(H) = b_1\mathbf{X} + b_2 Year + b_{3i} BC_i + b_{4i}(Year \bullet BC_i)\,, \tag{1}$$

$$L(H) = b_1\mathbf{X} + b_2 Year + b_{3i} BC_i + b_{4k} G_k + b_{5i}(Year \bullet BC_i) + b_{6k}(Year \bullet G_k) \tag{2}$$

and

$$L(H) = b_1\mathbf{X} + b_2 Year + b_{3i} BC_i + b_{4i}(Year \bullet BC_i) + b_{5j} MC_j + b_{6j}(Year \bullet MC_j)$$
$$+ b_{7ij}(BC_i \bullet MC_j) + b_{8ij}(Year \bullet BC_i \bullet MC_j) \tag{3}$$

where:

$L(H)$ = log odds of homeownership,

$\mathbf{X}$ = a vector of human capital or other covariates,

$Year$ = census year, either 1980 or 1990,

BC_i = birth cohort,

MC_j = immigration cohort (period of arrival or native born),

G_k = country-of-origin group (specific Asian or Hispanic origin),

and the terms enclosed in parentheses are interactions. An additional set of terms not shown interacts the X with each of the other model terms.

Equation 1 is the estimating equation for native borns or for a single immigration cohort. Equation 2 is the estimating equation for immigration cohorts drawn from different origins,

but not differentiated by period of arrival. Equation 3 represents the full double-cohort specification that contrasts immigrants of different arrival waves with native borns. Not all terms specified in equation 3 have to be included in the final estimation.

The major contribution of the new body of cohort research has been to separate the effect of cohort levels from rates of change observed over a decade. In the models shown above, levels are represented by BC_i or MC_j, while the rates of change are given by $Y \cdot BC_i$, $Y \cdot MC_j$, or higher interactions (Myers, Megbolugbe, and Lee 1998). A divergence between inferences based on levels and those based on rates of change is found when the change estimated for a cohort over a decade fails to close the difference found at the beginning of the decade between one cohort and its predecessor.

The traditional, and simpler, cross-sectional models draw inferences solely from differences between BC_i or MC_j. Estimation of homeownership in separate models for each observation year, or with dummy variable shifters to represent observation year in pooled samples, yields biased results (Bourassa 1994; Green 1996). The observed housing status at a given age is the level obtained by each cohort in a given year, but differences between age groups do not represent changes that can be expected from aging. Instead, those differences reflect *both* changes with aging and relatively permanent differences between cohorts that are tracking on different levels. The practical consequence of this model mis-specification is that it fails to recognize that the late middle-aged cohorts have been much more advantaged with regard to homeownership achievement for their whole careers, while their children are lagging substantially behind the housing career path of their elders (Myers et al. 1992). Thus a cross-sectional age specification is upwardly biased, with the very large age effect implying (erroneously) that the young adults will advance so rapidly that they will catch up to their parents when they arrive at that advanced age.

Research on immigrant progress in housing places even greater importance on correct specification of temporal dynamics. Not only must we separate aging effects from levels achieved by birth cohorts, but we must also separate effects of duration of U.S. residence from the levels achieved by different immigration cohorts. The latter criticism was brought by Borjas (1985) in the immigration literature against the cross-sectional model proposed by Chiswick (1978). However, the Borjas model focuses only on the immigration effects and does not separate aging and birth cohort effects. The double-cohort formulation achieves the correct specification on both dimensions.

Data and Sample Selection

Data are drawn from the 1980 and 1990 censuses of population and housing. The specific data files are the Public Use Microdata Sample (PUMS)-A, a 5-percent sample of individual records from the census. This source provides the only sample of geographically specific observations with sufficient size to explore detailed relationships. Moreover, the census data are of standardized format and very high quality, permitting relatively unbiased and in-depth analysis of specific metropolitan areas.

Samples were drawn of all persons, for the purpose of estimating *per capita* homeownership. This basis is preferred to the *per household* measure of homeownership because it is free of

changes in household formation that alter the number of households in the denominator of the per household ownership rate. Also, changes in household headship may alter the race, sex, and immigration status of householders, adding considerable instability to the analysis. For analysis of changes over time, the population-based, per capita measure is therefore preferred.[1]

The sample is restricted to males belonging to the cohorts ages 15 to 54 in 1980 and 25 to 64 in 1990. These are the cohorts entering and passing through prime working ages. The sample is further restricted to workers employed full time (at least 35 hours per week) year-round (at least 48 weeks in the year prior to the census). This restriction is necessary in order to focus the analysis on the effects of the labor force variables of occupation and personal earnings. The foreign-born sample is also limited to immigrants who arrived before 1980, because the 1980s arrivals are not captured in the 1980 data.

Five metropolitan regions were selected for analysis as part of the Metropolis project—Los Angeles; New York; Washington, DC; Atlanta; and Philadelphia.[2] As a set, these five areas provide a rich variety of metropolitan contexts (table 1).

Endogeneity and the Use of Census Data

The endogeneity of wealth, earnings, family formation, and homeownership determination poses a challenge to all analyses with census data. Captured at a moment in time, those data reflect associations that have been mutually determined over time through simultaneous relationships. Panel data that observe the same individuals at repeated points in time would provide the requisite data for separating these causal relationships (Haurin, Hendershott, and Wachter 1996, 1997). However, such panel data have yet to be collected for samples of immigrants; and the general-purpose national panel surveys are not large enough to capture adequate samples of different nationality groups (Edmonston 1996, 68–81). These limitations are even more severe in the case of specific metropolitan areas, for which only American Housing Survey data (approximately 5,000 cases per area) or decennial census data are available for analysis.

[1] Despite these advantages for this article, it should be noted that exclusion of household-level relationships is only a convenient sidestep of the intrinsic linkages between individual income, household formation, group income pooled within households, and homeownership attainment by households.

[2] The regions are defined by aggregation of county groups to approximate broad consolidated metropolitan areas. Two interacting constraints shaped the geographic definition. First, the geographic coding included on the PUMS-A files is limited by confidentiality restrictions to areas of at least 100,000 population. This means that small individual counties on the fringes of the metropolitan areas cannot always be identified, with the result that our PUMS-based metropolitan regions do not conform exactly to official definitions of metropolitan statistical areas or consolidated metropolitan statistical areas. A second constraint is that we required identical geographic definition in 1980 and 1990, requiring further adjustment of the regional boundaries in one year or the other. In each case, our metropolitan regions were defined to approximate the broadest definition of geographic size that was used in either 1980 or 1990 in the Census Bureau definition of each metropolitan area. A complete set of geographic components is available on request.

Table 1. **Description of Five Metropolitan Areas**

	Population* in 1990	Percent Growth 1980–90	Foreign Born Population in 1990	Percent Growth 1980–90	Median House Value (unadjusted) in 1990	Percent Change from 1980
Los Angeles	14,602,006	26	4,087,352	91	$209,800	139.8
New York	17,880,770	2	3,670,918	29	$190,100	200.3
Washington, DC	3,815,331	16	533,062	109	$165,300	110.8
Atlanta	2,423,588	36	129,825	187	$ 89,300	90.0
Philadelphia	5,736,730	3	334,307	17	$100,900	138.5

*The regional areas are defined by geographical units identified in the PUMS database. These areas approximate the consolidated metropolitan statistical area. See text for further explanation.

Given that the large sample sizes of the census are required to implement the double-cohort technique and to examine specific groups in specific metropolitan areas, the choice of data source in this article is both appropriate and very reasonable. Even though the census does not include data on wealth/assets that can be used to examine the issues of wealth/homeownership endogeneity and borrowing constraints, it remains useful for the questions defined as the focus for this article.

One way to deal with the problem of endogeneity between earnings (or occupation) and homeownership attainment is to limit the sample to year-round, full-time workers, thus excluding part-time workers who may be less motivated to achieve homeownership and who would thus bias estimates of earnings effects. As noted above, we have elected this option for the present analysis. While this sample restriction mitigates the labor supply side of the endogeneity problem, we must also acknowledge that analysis based on a sample that contains only full-time workers may suffer from sample selection bias as raised by Haurin, Hendershott, and Wachter (1997).

Variation in Opportunity for Homeownership

The level of homeownership opportunity varies substantially across these five areas. Even greater differences are observed with regard to the trend in homeownership attainment between 1980 and 1990. Table 2 provides clear insight into these differences. A good benchmark of the level of homeownership opportunity in each area is provided by the homeownership rates of native-born households. The highest level of homeownership in 1990 is found in Philadelphia (78.4 percent), followed by Washington, DC and Atlanta; the lowest levels are found in Los Angeles (65.5 percent) and New York (65.3 percent).

Substantial differences in homeownership are found among major race and ethnic groups. Generally, the highest homeownership exists among non-Hispanic whites and the lowest among blacks or Hispanics. Metropolitan areas with higher shares of white residents would thus tend to have higher homeownership, and areas whose shares of white residents are declining over time could also exhibit declines in homeownership. To adjust for this potential bias, table 2 also displays homeownership rates for each major race and ethnic group among the native-born households. If we assume the homeownership pattern for non-Hispanic whites reflects the relative opportunities in each metropolitan area, the rankings remain the same for all households, with the exception that the Los Angeles area has a homeownership rate nearly 4 percentage points lower than that of New York.

The trends over time for native borns' homeownership attainment in each area provide a rough gauge of the trend in homeownership opportunity. Among non-Hispanic whites, homeownership rates increased markedly in New York (6.7 percent) and Washington, DC, (5.2 percent) but much less in Los Angeles (1.8 percent), Philadelphia (2 percent), and Atlanta (2.9 percent). These trends are not controlled for age or other factors, but they provide a preliminary indication of how homeownership opportunities may have differed among areas. Those differences in opportunities likely have impacted the homeownership chances of immigrants newly located in those regions.

Table 2. **Homeownership Trends of Native-Born Reference Households in Major Race and Ethnic Groups for Five Metropolitan Areas: Percent of Group Attaining Homeownership**

Los Angeles	1980	1990	Difference
Total	64.0	65.5	1.5
White, Non-Hispanic	66.5	68.4	1.8
Black, Non-Hispanic	49.8	48.2	−1.5
Asian	67.0	70.6	3.6
Hispanic	57.6	59.3	1.7

Atlanta	1980	1990	Difference
Total	68.5	70.1	1.6
White, Non-Hispanic	72.6	75.5	2.9
Black, Non-Hispanic	52.4	50.7	−1.8
Asian	41.2	49.7	8.6
Hispanic	56.8	46.7	−10.2

New York	1980	1990	Difference
Total	58.8	65.3	6.6
White, Non-Hispanic	65.5	72.1	6.7
Black, Non-Hispanic	32.9	38.9	6.0
Asian	40.4	52.2	11.8
Hispanic	21.8	27.9	6.0

Philadelphia	1980	1990	Difference
Total	76.5	78.4	1.9
White, Non-Hispanic	78.8	80.8	2.0
Black, Non-Hispanic	65.4	66.5	1.1
Asian	65.3	64.0	−1.3
Hispanic	51.4	55.8	4.5

Washington, DC	1980	1990	Difference
Total	65.7	70.7	5.0
White, Non-Hispanic	70.8	76.0	5.2
Black, Non-Hispanic	48.7	53.3	4.6
Asian	62.3	69.6	7.3
Hispanic	49.8	52.7	2.9

Note: Homeownership is estimated by using the tenure variable where tenure = 1 in 1980 and 1 or 2 in 1990.
The sample includes only native-born males who are either the householder or spouse.

Number of Immigrants of Different Origins

The five areas also differ markedly in the share of their residents who are immigrants. When the population of males at least 25 years of age is segmented by race and ethnicity or by country of birth, the numbers grow quite small, especially for immigrants who arrived in the United States before 1970. Because our model focuses on long-term patterns of cohorts' mobility, we require populations with sufficient temporal depth to draw inferences.

Table A.1 reports the weighted number of cases representing males ages 25 and older recorded in the PUMS file for 1990. The underlying sample sizes can be approximated by dividing these numbers by 20. Because the analysis makes use of age segments within a specific immigrant arrival cohort, we require a minimum of approximately 400 cases, which would be weighted to 8,000. As shown in table A.1, none of the arrival cohorts before 1970 who are Asian, Hispanic, or black reaches this threshold in Washington, DC; Atlanta; or Philadelphia. In Los Angeles and New York, all groups, except black immigrants in Los Angeles, pass the desired threshold.

In the three metropolitan areas with larger numbers of Hispanics or Asians, we examine the sample sizes for more specifically defined groups of Hispanic or Asian descent (tables A.2 and A.3). Substantial numbers of Mexican immigrants who arrived before 1980 are found only in Los Angeles. In New York, instead, the major Hispanic immigrant populations are Dominican or South American as a group. In Washington, DC, there is no subgroup of Hispanics with a significant demographic presence. Among Asians, several subgroups have substantial numbers in Los Angeles (table A.3). These include Chinese, Filipino, Korean, and Vietnamese. In New York, the substantial groups are Chinese, Asian Indian, Korean, and Filipino. As with its diverse Hispanic groups, Washington, DC, has no single Asian-origin group with significant numbers.

In general, the Hispanic- and Asian-origin groups have much smaller numbers of immigrants in cohorts that arrived in, or before, the 1960s than in the 1970s. Only the Mexicans in Los Angeles have large numbers in all arrival cohorts. Among Asians, the number of immigrants in all cities is especially concentrated in the 1970s cohort. As a result of these sample-size limitations, the research design requires careful tailoring.

Variable Definitions

Table 3 presents a summary of variables selected for analysis and their definitions.

Marital Status

A dummy variable (1 = unmarried, 0 = currently married) indicates marital status. Previous research has shown marital status is an important determinant of homeownership, with never-married and formerly married (divorced or widowed) both less likely to be homeowners than those who are currently married (Green 1996; Myers, Megbolugbe, and Lee 1998).

Table 3. **Definition of Variables**

Variable	Measurement
Tenure	1 = Owner occupied 0 = Otherwise
Marital status	1 = Unmarried 0 = Married
Education	
edHS	1 = High school and some college 0 = All others
edBA	1 = Bachelor's degree or more 0 = All others
Occupation (Hauser-Warren TSEI score)	Continuous
Weekly earnings (standardized 40-hour week among full-time, year-round workers)	Continuous
Year	1 = 1990 0 = 1980
Immigration cohort in 1980 (reference category: native born)	
MC2	1 = 1970s Immigrants 0 = Otherwise
MC3	1 = 1960s Immigrants 0 = Otherwise
MC4	1 = pre-1960s immigrants 0 = Otherwise
Country of origin group Alternate coding for use with 1970s immigrant cohort only (reference = native-born Chinese American)	
G1	1 = Chinese immigrants 0 = Otherwise
G2	1 = Filipino immigrants 0 = Otherwise
G3	1 = Korean immigrants 0 = Otherwise
G4	1 = Vietnamese immigrants 0 = Otherwise
G5	1 = Other Asian immigrants 0 = Otherwise
Birth cohort (reference category: 45–54 in 1980 and 55–64 in 1990)	
BC1	1 = 15–24 (in 1980) and 25–34 (in 1990) 0 = Otherwise
BC2	1 = 25–34 (in 1980) and 35–44 (in 1990) 0 = Otherwise
BC3	1 = 35–44 (in 1980) and 45–54 (in 1990) 0 = Otherwise

Education

Two dummy variables represent completion of high school (1 = high school completion or some college, 0 = all others) and completion of a bachelor's degree (1 = bachelor's degree or more, 0 = all others). Past research has shown that the high school completion dummy variable is the critical threshold for homeownership attainment of immigrants, particularly among Latinos (Myers, Megbolugbe, and Lee 1998). In addition, analysis of education effects that compare 1980 and 1990 are hampered by changes in the census questionnaire. The use of the high school completion threshold has been found to generate less biased estimates and be more consistently coded than "years of education," the form of education measurement that was traditionally used before 1990. However, there are ways to reconcile the 1980 and 1990 data to compare educational attainment (Jaeger 1997).

Personal Income

Weekly earnings derived from annual earnings but standardized to a 40-hour week, year-round basis, represent personal income. As discussed above, individual earnings are the appropriate measure of income to be used in a cohort model because we are tracing, over time, the housing consumption of groups of individuals, not households.

Year of Observation

A dummy variable for year of observation represents 1990 versus 1980 (1990 = 1, 1980 = 0). This variable defines the basic time trend in the model, with interaction terms used to represent deviations from this trend.

Immigration Cohort

A set of dummy variables defines the immigration cohort: MC2 (1 = 1970s arrivals), MC3 (1 = 1960s arrivals), MC4 (1 = pre-1960 arrivals), and the omitted reference category is native borns. This follows the design introduced in Myers and Lee (1996).

Country of Origin Group

Because of insufficient sample size in earlier cohorts of Asian arrivals, country of origin group is defined for 1970s' Asian immigrant arrivals only. A series of dummy variables, G1 through G5, represent immigrant arrivals from different Asian racial groups: Chinese (People's Republic, Taiwan, or Hong Kong), Filipino, Korean, Vietnamese, or all other Asian origins. The reference group is native-born Chinese Americans.

Birth Cohort

A set of dummy variables defines the birth cohort: BC1 (1 = 15 to 24 in 1980 and 25 to 34 in 1990), BC2 (1 = 25 to 34 in 1980 and 35 to 44 in 1990), BC3 (1 = 35 to 44 in 1980 and

45 to 54 in 1990), and the omitted reference category is the cohort ages 45 to 54 in 1980 and 55 to 64 in 1990. This also follows the design introduced in Myers and Lee (1996).

The major factor to be investigated in this article is occupational status and its relation to homeownership achievement. Occupation is often difficult to describe quantitatively because there are so many different occupational categories. Hauser and Warren (1997) have recently prepared a standardized occupational index that matches identical occupational categories in 1980 and 1990, while scoring these jobs on an ordinal scale derived from the typical education requirements and wages of the jobs. The Hauser-Warren index provides a convenient method for introducing quantitative assessments of occupational status (and changes over the decade) into models of homeownership attainment.[3] The presumption is that persons advancing to higher-status jobs are on upward mobility tracks that foretell higher earning in future years. Thus, occupational status is an indicator of permanent income that may be a useful supplement to current earnings. In addition, differences in occupational attainment between groups explain much of the differences in their earnings (Myers 1998), so the process of immigrants' occupational achievement becomes strategic for their eventual attainment of homeownership.

Occupational status correlates most strongly with educational attainment. Table 4 displays the mean occupational status (Hauser-Warren Total Socioeconomic Index [TSEI]) for workers of different educational attainment levels who are drawn from population groups to be analyzed in following sections. Among all groups, occupational status increases markedly between those with and without a high school diploma. Occupational status increases markedly, rising for those with diplomas and even more sharply for those with four or more years of college (bachelor's degree). Among native-born, non-Hispanic whites, overall occupation levels are highest in Washington, DC (47.22) and lowest in Philadelphia (40.87). Control for education differences removes most of this disparity, but workers in Washington, DC, with high school diplomas or college degrees still have higher occupational status than those in other regions.

Comparing the other groups, we find that Mexican-American native borns in Los Angeles and black native borns in New York have lower occupational attainment than whites who share the same city and education level. Among the foreign born, Mexicans in Los Angeles have lower occupational attainment than Mexican Americans, and Dominicans in New York have lower occupational attainment than blacks in New York. Similarly, Asian foreign borns have lower occupational attainment at the same education level than do native-born whites in their respective cities. Overall, these differences reflect a clear occupational disadvantage of minorities relative to whites and immigrants relative to native borns.

Despite the clear correlation of education and occupational attainment, there remains sufficient variation to estimate separate effects. Estimates of Pearson correlation coefficients linking education and occupation for different groups were all below 0.60 and generally below 0.50, and tests for multicollinearity in regressions (reported below) showed variation inflation factors generally lower than 5.

[3] Hauser and Warren (1997, 178 and 251) "caution readers that the product of our work should be used thoughtfully and cautiously." Their exhaustive review and recalibration of occupational indices concludes that the "global concept of occupational status is scientifically obsolete." Instead, they urge researchers to "move toward a more specific and disaggregated appraisal of the effects of occupational characteristics on social, psychological, economic, political, and health outcomes." This study is a step in that direction with regard to the homeownership outcome.

Table 4. **Mean Occupational Status by Education Level for Selected Population Subgroups**

	Less than High School Completion	High School Completion and Some College	Bachelor's Degree or More	Total
Native Born				
Non-Hispanic Whites				
Los Angeles	31.17	38.00	51.70	42.67
New York	29.82	37.51	51.54	42.89
Washington, DC	30.86	39.70	53.78	47.22
Atlanta	29.85	38.04	50.16	42.63
Philadelphia	28.81	36.14	51.70	40.87
Mexican Americans				
Los Angeles	28.03	34.03	49.90	34.48
Non-Hispanic Blacks				
New York	27.55	33.40	48.04	34.61
Foreign Born				
Mexicans				
Los Angeles	24.55	29.18	39.91	26.15
Dominicans				
New York	24.92	30.17	42.36	28.44
Asians				
Los Angeles	27.23	34.97	49.24	41.28
New York	25.60	33.49	50.34	41.81
Washington, DC	23.13	32.60	51.54	42.87

Notes: Occupation status is a composite index (TSEI) derived by Hauser and Warren (1997). Population subgroups are those employed in subsequent analyses.

Comparison of Native Borns in the Five Regions

The pace of advancement into homeownership by immigrants living in different regions can only be evaluated in relationship to the housing behavior of native borns in those regions. In this section we estimate the determinants of region-specific homeownership for native borns of three different race-ethnicities. In all five regions we develop models of homeownership attainment for white, non-Hispanic native borns. This group is well represented in all five regions, and their attainments serve as a useful reference of housing achievement levels in each region. In addition, we also estimate models for Mexican-American native borns in Los Angeles and black native borns in New York. Each of these groups provides a useful reference for a specific immigrant group.

Homeownership Among Native Borns

Separate models, as specified in equation 1, are used to estimate homeownership attainment among native borns in each metropolitan region. Table 5 reports the results of logistic re-

Table 5. **Logistic Regression of Homeownership Attainment, 1980–90, for Native-Born, Non-Hispanic, White Males in Five Metropolitan Areas**

	Los Angeles		New York		Washington, DC		Atlanta		Philadelphia	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
Intercept	−0.174	0.045***	−0.055	0.033	−0.787	0.075***	0.052	0.097	0.585	0.061***
Year (1 = 1990, 0 = 1980)	0.137	0.045**	0.357	0.034***	0.353	0.081***	0.314	0.122**	0.215	0.068**
Birth cohort in 1980 (BC, reference = 45–54)										
15–24	−2.294	0.052***	−2.515	0.051***	−1.823	0.089***	−2.204	0.105***	−2.338	0.065***
25–34	−0.917	0.033***	−1.108	0.025***	−0.589	0.057***	−1.017	0.079***	−1.077	0.049***
35–44	−0.252	0.035***	−0.227	0.027***	−0.035	0.061	−0.304	0.086***	−0.389	0.054***
Aging effect with time (Y·BC, reference = year effect)										
15–24 to 25–34	0.916	0.066***	1.153	0.060***	0.878	0.114***	0.832	0.149***	0.943	0.088***
25–34 to 35–44	0.199	0.053***	0.548	0.040***	0.266	0.093**	0.327	0.135*	0.473	0.079***
35–44 to 45–54	−0.012	0.057	0.081	0.045	−0.002	0.101	0.024	0.147	0.077	0.088
Marital status (reference = currently married)										
Unmarried	−2.092	0.018***	−2.528	0.016***	−2.169	0.029***	−2.326	0.040***	−2.698	0.025***
Educational Attainment (reference = did not complete high school)										
Completed high school or some college	0.418	0.031***	0.435	0.024***	0.589	0.052***	0.353	0.057***	0.357	0.038***
Completed bachelor's degree or more	0.531	0.036***	0.406	0.028	0.628	0.058	0.352	0.069	0.169	0.048***
Occupation (Hauser-Warren TSEI score)	0.009	0.001***	0.007	0.001***	0.010	0.001***	0.011	0.002***	0.007	0.001***
Weekly earnings	0.002	0.000***	0.001	0.000***	0.002	0.000***	0.002	0.000***	0.002	0.000***
Number of cases	97,471		156,653		39,824		24,129		61,443	
Degrees of freedom	12		12		12		12		12	
Log-likelihood chi-square	40,055		72,235		17,183		10,082		28,779	

*$p < 0.05$. **$p < 0.01$. ***$p < 0.001$.

gressions estimated for non-Hispanic whites in each of the areas. The *Year* coefficient indicates the rate of homeownership increase experienced by the reference cohort (ages 45 to 54 in 1980 and 55 to 64 in 1990). Consistent with the overall ownership trends reported in table 2, the rate of increase is highest in New York and lowest in Los Angeles.

Differences between birth cohorts are very similar in all five areas, with much lower homeownership achievement found among the younger cohorts. Advancement toward homeownership is indicated by the aging effect estimated for each individual cohort in table 5. These effects estimate progress relative to that recorded for the reference cohort in the *Year* coefficient. In all five areas, the youngest cohort made very substantial progress toward achievement of homeownership. However, the cohort ages 25 to 34 in 1980 (35 to 44 in 1990) achieved a substantially larger increase in homeownership in New York and Philadelphia and a smaller increase in Los Angeles and Washington, DC. The slow progress in Los Angeles is especially noteworthy because this effect is estimated relative to the reference cohort, which also made less progress than in other areas.

The above findings of relative advancement for birth cohorts are net of other socioeconomic effects. Marital status is the single most important factor associated with attainment of homeownership. In all five metropolitan regions, the logit coefficient for those not married exceeds –2.0. Equivalently, the odds of being a homeowner are only 0.12 as great among the non-married as among men who are currently married.

Three measures of economic status are also reported in table 5: educational attainment, occupation, and weekly earnings. High school completion has substantial importance for homeownership attainment (logits of approximately 0.4 in all five areas), whereas college completion appears to add little additional benefit. Occupational status has a positive effect, estimated at about 0.01 for each occupational status point. Weekly earnings has an additional positive effect, estimated at about 0.002 for each dollar earned. Despite the highly significant effect of earnings on homeownership achievement, we view occupational status as an economic achievement that logically precedes earnings. Accordingly, it is meaningful to estimate the gross effect of occupational status by reestimating the models with earnings excluded; we find that the effect of occupational status is approximately doubled in every case (table 6). Additional tests for differences in this occupation effect proved insignificant in all areas across the birth cohorts for the white, non-Hispanic sample.

Homeownership models also were estimated for two additional samples of native-born men: Mexican Americans in Los Angeles and blacks in New York (table 7). These samples were evaluated because of their use in a following section for comparison with Mexican and Dominican immigrants in those two areas. Results are generally very similar to those for white native borns (table 5), with a few notable differences. First, the intercept is much lower for Mexican Americans and blacks than for whites in the same cities, reflecting their substantially lower rate of homeownership. In addition, the larger *Year* coefficient for the Mexican-American reference cohort indicates a larger increase in ownership over the decade than that registered by the white reference cohort. A third difference is that the rate of advancement into homeownership by younger cohorts (the aging effect with time) is much lower for both Mexican Americans and blacks than for whites in the same city.

A useful comparison of all groups in the five metropolitan regions is produced by plotting expected values for cohorts passing through key age ranges (figure 1). For this purpose, we

Table 6. **Comparison of Occupational Status Effects on Homeownership (with and without Control for Earnings) for Native-born, Non-Hispanic, White Males in Five Metropolitan Areas, 1980 and 1990**

	Los Angeles		New York		Washington, DC		Atlanta		Philadelphia	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
Gross occupation effect	0.0184	0.0007	0.0160	0.0006	0.0204	0.0011	0.0217	0.0016	0.0177	0.0011
Net of earnings effect	0.0088	0.0007	0.0072	0.0006	0.0098	0.0012	0.0112	0.0117	0.0073	0.0011
Gross occupation effect relative to the net effect	2.1		2.2		2.1		1.9		2.4	

Note: Sample is native-born, non-Hispanic, white males in five metropolitan areas, 1980 and 1990; net occupation effect is that estimated in table 5, while gross effect is the identical model with earnings removed.

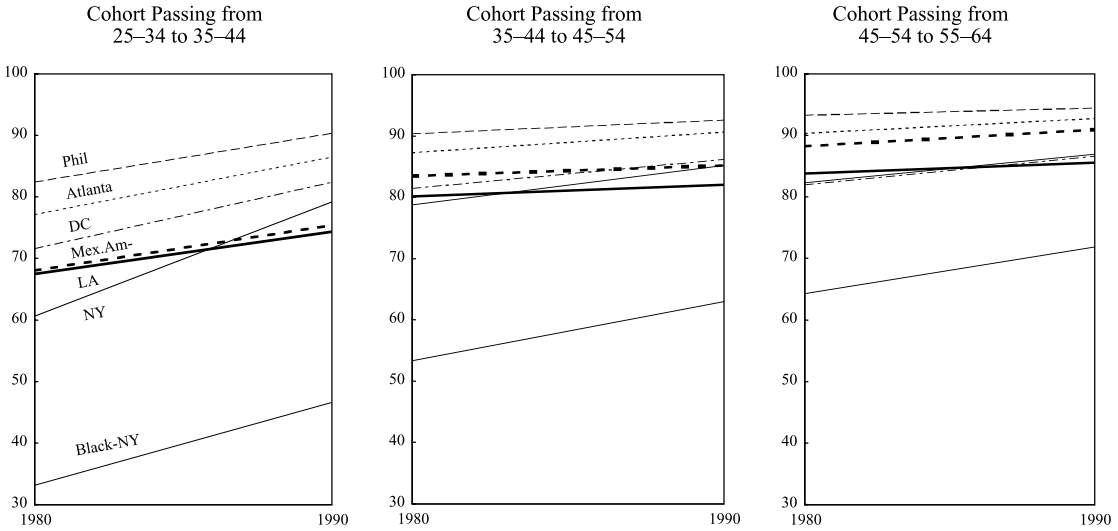
Table 7. **Logistic Regression of Homeownership Attainment, 1980–90, for Native-Born, Non-Hispanic, Black Males in New York and Native-Born, Mexican-Heritage Males in Los Angeles**

	Los Angeles Mexican-American Native-Born		New York Black Native-Born	
	Coefficient	Standard Error	Coefficient	Standard Error
Intercept	−0.518	0.101***	−1.205	0.075***
Year (1 = 1990, 0 = 1980)	0.291	0.121*	0.351	0.077***
Birth Cohort in 1980 (BC, reference = 45–54)				
15–24	−2.607	0.123***	−2.445	0.198***
25–34	−1.258	0.088***	−1.288	0.066***
35–44	−0.394	0.096***	−0.453	0.059***
Aging effect with time (Y·BC, reference = year effect)				
15–24 to 25–34	0.555	0.161***	0.473	0.217*
25–34 to 35–44	0.070	0.139	0.214	0.103*
35–44 to 45–54	−0.162	0.153	0.045	0.099
Marital status (reference = currently married)				
Unmarried	−2.153	0.052***	−1.879	0.046***
Educational attaintment (reference = did not complete high school)				
Completed high school or some college	0.409	0.052***	0.212	0.046***
Completed bachelor's degree or more	0.243	0.095*	0.418	0.073***
Occupation (Hauser-Warren TSEI score)	0.012	0.002***	0.010	0.002***
Weekly earnings	0.003	0.000***	0.002	0.000***
Number of cases	14,791		19,156	
Degrees of freedom	12		12	
Log-likelihood chi-square	6,405		5,872	

*$p < 0.05$. **$p < 0.01$. *** $p < 0.001$.

have set all groups to the same basic attributes: married status, high school completion, occupational status of 41.7, and weekly earnings of $591. The latter two values represent the mean (pooled across five areas) economic status of the 25 to 34 year-old cohort among white, non-Hispanic males in 1980. Controlled for these factors, homeownership rates of all cohorts are highest in Philadelphia and Atlanta. The lowest level of homeownership is among blacks in New York. Figure 1 clearly portrays the upward trajectory of homeownership as the 25 to 34 year-old cohort reaches ages 35 to 44, net of changes in socioeconomic status.

Figure 1. **Cohort Trajectories of Homeownership Attainment Modeled for Native-Born Males in Five Metropolitan Areas, 1980 to 1990**



Note: Homeownership trajectories are estimated for cohorts of white, non-Hispanic males in all five cities. In addition, trajectories for Mexican-American, native-born males are estimated in Los Angeles, and trajectories for black, native-born males in New York. In all cases, estimates assume currently married status, high school completion (but no college degree), occupational status score of 41.7, and weekly earnings of $591.

The patterns for New York and Los Angeles stand in sharp contrast. The New York trajectory slants upward more steeply, while the Los Angeles trajectory is relatively flat. These two different trends reflect the *Year* and *Aging* coefficients estimated for each city in table 5. (This differential rate of homeownership attainment is also reflected in the raw data reported in table 2.) Remarkably, the New York cohort's level of homeownership at ages 35 to 44 was 4 percentage points *higher* than that of the Los Angeles cohort in 1990, even though it was 5 percentage points *lower* than that of the Los Angeles cohort when it was 10 years younger in 1980. No explanation for this relative advantage of the New York cohorts in advancing toward homeownership is currently available.

It is important to note that both Mexican Americans in Los Angeles and blacks in New York mirror the same relative slope estimated for whites, indicating that the differences may permeate the entire housing market and impact all groups—including immigrants—who seek to move into homeownership in the respective regions. The finding of such substantial differences between the metropolitan regions with regard to homeownership level and rates of advancement serves to underscore the importance of evaluating immigrants' progress in relation to that of native borns living in the same region.

Differences between regions occur in more than trajectory slopes into homeownership. We note also a distinctly different pattern of cohort succession. Previous studies of cohort homeownership attainment in the nation have found that recent young cohorts are tracking below the trajectory levels attained by middle-aged cohorts (Myers, Megbolugbe, and Lee 1998). In this article, control for socioeconomic status removes differences due to marital status,

education, occupation, and earnings. We can compare the achievements of successive cohorts by comparing the end-point (1990 status) of one cohort's trajectory with the beginning-point (1980 status) of the older cohort. For example, evaluated at ages 35 to 44, we compare the recent cohort in 1990 (end point in the left panel) to its predecessor in 1980 (beginning point of the middle panel). The largest shortfall is found in Los Angeles—a homeownership rate 5.8 percentage points lower among white native borns and 8.1 percentage points lower among Mexican-American native borns. In New York, whites in the two successive cohorts have virtually identical homeownership rates, but black native borns in the more recent cohort have a homeownership rate 6.7 percentage points lower. In the other cities, we find no substantial differences in homeownership rates between successive cohorts.

Comparison of Immigrants in Five Regions

Hispanic-Origin Immigrants

Mexican-born workers are by far the largest group of Hispanic-origin immigrants in Los Angeles. Hispanic-origin immigrants in New York are more diverse in their origins, but Dominican-born immigrants constitute the largest single group. We select these two groups for detailed analysis because of both their substantial size and certain shared characteristics.

Mexicans and Dominicans share not only their Hispanic status but also very low economic status. Their achievement levels soon after arrival are among the lowest in their respective cities. However, a major difference between the two groups is their race. Mexican immigrants self-describe themselves as either "white" or, more often, "other" for race. Their racial identification is very similar to that of Mexican-American native borns in the Los Angeles area. In contrast, Dominican immigrants are most often self-identified as of black race. The relative recentness of large-scale immigration from the Dominican Republic precludes the formation of a significant native-born population (age 25 or older). Accordingly, for this article we will compare the Dominican immigrants to a sample of native-born black residents who are non-Hispanic. We make this choice under the assumption that Dominicans' housing market behavior is shaped more by their racial identification than by their Hispanic status (Schill, Friedman, and Rosenbaum 1998).

The double-cohort model shown in equation 3 is used to specify a logistic regression where immigrants of different arrival cohorts are contrasted with a native-born reference group and where different birth cohorts are contrasted with a middle-aged reference cohort (table 8). As found in the foregoing analysis, the *Year* coefficient for Los Angeles is substantially lower than that for the New York sample. Effects of the socioeconomic factors, birth cohort differences, and aging effects are all closely similar to those reported in table 7. Accordingly, we focus attention on the immigration cohort effects.

Recent immigrant arrivals are far less likely to be homeowners than are longer-settled immigrants or native borns. However, we observe in table 8 that the disadvantages of immigrants who arrived in or before the 1960s are less severe for Mexican immigrants in Los Angeles than for Dominican immigrants in New York. Whereas recent arrivals in both areas have an approximately equal disadvantage relative to native borns (MC logit for 1970s arrivals of approximately –2.0), the disadvantage of 1960s or pre-1960 arrivals is reduced more

substantially in Los Angeles than in New York. These effects identify the differences between cohorts' levels of homeownership in 1980.

A complementary set of estimates pertains to the rate of increase in homeownership between 1980 and 1990, expressed relative to the increase for native borns. In both locations, the most recent immigrant arrivals achieve the most disproportional increase, thus indicating some convergence toward the native-born level of homeownership. However, in Los Angeles, the 1960s arrivals also continued progress toward homeownership that exceeded native borns, while their counterparts in New York did not. Thus we find that Dominican immigrant cohorts of earlier arrival waves in New York have relatively greater disadvantages than Mexicans in Los Angeles in both their accumulated level of homeownership and their rate of increase over the decade. This relative disadvantage is not mitigated by the relatively small difference in baseline homeownership progress (indicated by the *Year* coefficient) observed in New York.

The double-cohort design also permits investigation of age-at-arrival effects through the interaction of birth cohort and immigration cohort (BC • MC). Past research in Los Angeles

Table 8. **Logistic Regression of Homeownership Attainment, 1980–90, for Immigrant Mexicans and Dominicans**

	Los Angeles Mexican Immigrants[a]		New York Dominican Immigrants[b]	
	Coefficient	Standard Error	Coefficient	Standard Error
Intercept	−0.625	0.085***	−1.196	0.073***
Year (1 = 1990, 0 = 1980)	0.112	0.092	0.344	0.076***
Birth cohort in 1980 (BC, reference = 45–54)				
15–24	−2.689	0.106***	−2.529	0.196***
25–34	−1.283	0.079***	−1.293	0.066***
35–44	−0.469	0.086***	−0.451	0.059***
Aging effect with time (Y·BC, reference = year effect)				
15–24 to 25–34	0.794	0.121***	0.572	0.213**
25–34 to 35–44	0.225	0.099*	0.232	0.101*
35–44 to 45–54	0.059	0.105	0.046	0.097
Immigration cohort in 1980 (MC, reference = native-born)				
1970s immigrants	−2.076	0.137***	−1.925	0.385***
1960s immigrants	−0.851	0.120***	−1.337	0.244***
Pre-1960 immigrants	−0.175	0.125	−0.636	0.500
Duration effect with time (Y·MC, reference = year effect)				
1970s immigrants	0.827	0.073***	0.611	0.293*
1960s immigrants	0.351	0.084***	−0.222	0.207
Pre-1960 immigrants	0.166	0.128	−0.525	0.540

Table 8. **Logistic Regression of Homeownership Attainment, 1980–90, for Immigrant Mexicans and Dominicans** (*continued*)

	Los Angeles Mexican Immigrants[a]		New York Dominican Immigrants[b]	
	Coefficient	Standard Error	Coefficient	Standard Error
Age-at-arrival effects (BC·MC, reference = MC)				
For 1970s immigrants				
15–24	1.396	0.148***	1.038	0.441*
25–34	1.062	0.142***	0.334	0.407
35–44	0.575	0.154***	−0.345	0.457
For 1960s immigrants				
15–24	0.720	0.157***	1.469	0.417***
25–34	0.938	0.130***	0.973	0.295**
35–44	0.413	0.136***	0.663	0.273*
For pre-1960 immigrants				
15–24	0.583	0.303	1.755	1.249
25–34	0.170	0.161	1.181	0.662
35–44	0.106	0.159	−0.294	0.677
Martial status (reference = currently married)				
Unmarried	−2.120	0.041***	−1.867	0.045***
Educational attainment (reference = did not complete high school)				
Completed high school or some college	0.305	0.035***	0.207	0.044***
Completed bachelor's degree or more	0.009	0.073	0.401	0.071***
Occupation (Hauser-Warren TSEI score)	0.013	0.002***	0.010	0.071***
Weekly earnings	0.003	0.000***	0.002	0.002***
Number of cases	33,358		21,036	
Degrees of freedom	27		27	
Log-likelihood chi-square	13,613		6,384	

[a]Mexican immigrants are modeled in reference to native-born Mexican Americans.
[b]Dominican immigrants are modeled in reference to native-born blacks.
*$p < 0.05$. **$p < 0.01$. ***$p < 0.001$.

has found that younger cohorts in each arrival group have higher homeownership relative to older cohorts than is true of the difference between younger and older native borns (Myers and Lee 1998). This pattern is observable in table 8 among Mexican immigrants in Los Angeles. Among the Dominicans of New York, only the youngest cohort of 1970s arrivals enjoys this advantage, but three birth cohorts among 1960s Dominican arrivals exhibited such an advance relative to the older reference cohort. In fact, the relative advantage of the youngest arrivals from the 1960s is substantially greater among Dominicans than Mexicans.

Asian-Origin Immigrants

A comparable analysis is carried out for immigrants of different Asian origins. As noted earlier, much smaller sample sizes are observable for specific Asian groups. In particular, relatively few Asian immigrants established residence in the United States before 1970 because of restrictions in immigration laws that were not removed until after 1965. Accordingly, we cannot estimate a full double-cohort model that compares arrival cohorts from different decades. Instead, we will focus on 1970s arrivals and compare different groups within the same model via the design expressed above in equation 2. For this article we use a reference group composed of native-born persons of Chinese descent. Chinese have the longest history of settlement in the United States and are prominent in both Los Angeles and New York. Given the prevalence of Asians in Washington, DC, we extend the modeling to include that region as well, although the much smaller sample makes for less stable estimation.

Results of the logistic regression of homeownership attainment are reported in table 9. Overall, the general pattern of results follows those already found for other groups. The effects of socioeconomic factors resemble those for other groups, but with some noteworthy exceptions. The effect of college completion is nearly twice that of high school completion among Asians in Los Angeles and New York. This contrasts with the minimal added benefits of a college degree (for homeownership) found for other groups, with the exception of native-born blacks and Dominican immigrants living in New York. A further difference concerns the stronger effect of occupational status on homeownership attainment by Asians. Compared with non-Hispanic whites in the same cities (table 5), the occupational effect is half-again as large for Asians. In addition, when the earnings variable is removed, the gross effect of occupation is increased much less than we found among non-Hispanic whites (table 6). This indicates that occupation wields a stronger influence among Asians irrespective of its influence on earnings.

Birth cohort differences generally parallel those found for other groups, although there is some indication that the 25 to 34 and 35 to 44 year-old cohorts have homeownership levels closer to the middle-aged reference cohort than is true of other groups. The *Year* coefficient indicates a baseline rate of change that closely resembles that found for non-Hispanic whites in Los Angeles (small) and New York (larger); however, the coefficient for Washington, DC, is implausibly large, suggesting instability in the small sample and model estimates. Similarly, the aging effect of rising homeownership for each cohort between 1980 and 1990 resembles the pattern for non-Hispanic whites in Los Angeles (small increases) and New York (larger increases). We note, however, that the increase over time for Asian cohorts substantially exceeds that for non-Hispanic whites in the same cities.

Estimated for 1970s immigrants alone, the immigration cohort effect is specified separately for five different Asian groups: Chinese, Filipino, Korean, Vietnamese, and other Asians. All effects are expressed relative to native borns of Chinese descent and are controlled for both birth cohort and socioeconomic status. All the immigrant groups had lower levels of homeownership attainment in 1980 than the native borns, with the largest differentials found among Korean, Vietnamese, and other Asians. Also of interest is that Chinese immigrants in Los Angeles appear much less disadvantaged than Chinese native borns compared with those groups in New York.

Table 9. **Logistic Regression of Homeownership Attainment, 1980–90, for Immigrant Asian Groups**[a]

	Los Angeles		New York		Washington, DC	
	Coefficient	Standard Error	Coefficent	Standard Error	Coefficient	Standard Error
Intercept	−0.354	0.272	−0.912	0.276***	−0.840	0.637
Year (1 = 1990, 0 = 1980)	0.109	0.317	0.417	0.347	1.919	0.874*
Birth cohort in 1980 (BC, reference = 45–54)						
15–24	−2.077	0.431***	—	—[b]	−2.239	1.115*
25–34	−0.370	0.170*	−0.901	0.174***	−0.231	0.340
35–44	0.087	0.178	−0.251	0.170	0.436	0.332
Aging effect with time (Y·BC, reference = year effect)						
15–24 to 25–34	1.564	0.465***	—	—[b]	−0.029	1.293
25–34 to 35–44	0.489	0.245*	0.919	0.285**	−1.063	0.739
35–44 to 45–54	0.446	0.264	0.624	0.298*	−1.558	0.755*
Immigration cohort in 1980 (reference = native born)						
1970s Chinese immigrants	−0.483	0.241*	−0.978	0.236***	−0.439	0.557
1970s Filipino immigrants	−0.666	0.225**	−0.331	0.241	0.297	0.611
1970s Korean immigrants	−1.330	0.249***	−1.764	0.302***	−1.229	0.538*
1970s Vietnamese immigrants	−1.467	0.265***	−1.250	0.648	−1.059	0.567
1970s Other Asian immigrants	−1.974	0.230***	−1.735	0.220***	−1.723	0.513***
Duration effect with time (Y·MC, reference = year effect)						
1970s Chinese immigrants	0.555	0.305	1.127	0.303***	1.042	0.721
1970s Filipino immigrants	0.192	0.288	−0.072	0.331	−0.787	0.777**
1970s Korean immigrants	0.327	0.319	0.872	0.396*	1.291	0.701
1970s Vietnamese immigrants	1.275	0.324***	1.069	0.757	0.985	0.706
1970s Other Asian immigrants	1.301	0.306***	0.925	0.328**	1.267	0.691
Marital status (reference = currently married)						
Unmarried	−2.151	0.098***	−2.064	0.147***	−1.888	0.229***
Educational attainment (reference = did not complete high school)						
Completed high school or some college	0.259	0.132*	0.563	0.158***	0.427	0.354
Completed bachelor's degree or more	0.448	0.141**	0.950	0.171***	0.103	0.380
Occupation (Hauser-Warren TSEI score)	0.015	0.003***	0.012	0.003***	0.016	0.007*
Weekly earnings	0.002	0.000***	0.001	0.000***	0.002	0.000***
Number of cases	4,695		3,494		865	
Degrees of freedom	22		22		22	
Log-likelihood chi-square	1,791		1,346		352	

[a]Chinese native borns are the reference group.

[b]Parameter not estimated.

*p <0.05. **p < 0.01. ***p <0.001.

Advancement into homeownership between 1980 and 1990 is estimated separately for each of these immigrant groups. In Los Angeles, only Vietnamese or other Asians experienced greater increases than did the native-born reference cohort. In New York, the Chinese immigrants, Koreans, and other Asians experienced greater increases. (Estimates for Washington, DC, are deemed unreliable because of the *Year* coefficient with which they are compared.)

Conclusion

This article demonstrates the role of occupational achievement in the homeownership attainment of immigrants and native borns. Traditionally, the role of earnings, or household income, has been the primary measure of economic status. However, despite the significant effect of earnings on homeownership achievement, we view occupational status as an economic achievement that both logically precedes earnings and has more persistent effects over the housing career. Moreover, the effect of occupation is less likely to be upwardly biased than that of earnings, which can be increased in a simultaneous decision to achieve homeownership (Haurin, Hendershott, and Wachter 1997).

Addressing our first research question of whether workers with higher occupational achievement have greater chances of becoming homeowners, we found that occupational status has a profound influence. Approximately half of the effect of occupational status on homeownership is expressed through its effect on earnings; the additional effect of occupation may well represent the higher permanent income or easier access to mortgage credit of workers with higher occupational status. We found a very similar positive effect of occupational achievement among white, non-Hispanic native borns in all five metropolitan regions. In addition, no significant differences in this occupation effect were found between younger and older birth cohorts.

The second question for research was whether the effect of occupational achievement on homeownership attainment is equal for all groups, or whether it is greater for immigrants than for native borns. We found a very similar positive effect of occupational achievement among immigrants and native borns in all five metropolitan regions. When immigrants' progress toward homeownership attainment is compared with that of native borns living in the same area, the effect of socioeconomic factors, including occupational status, among Hispanic-origin immigrants resembles that estimated for the native-born samples. In contrast, compared with non-Hispanic whites in the same cities, the occupational effect is half again as large for Asians. In addition, when the earnings variable is removed for Asians, the gross effect of occupation is increased much less than we found among non-Hispanic whites. This indicates that among Asians occupation wields less influence on homeownership through its effect on earnings.

Lastly, we examined whether or not new immigrant arrivals and young native-born birth cohorts are advancing into homeownership on the levels that had been achieved by their immediate predecessors in 1980. We found that differences between birth cohorts are very similar in all five areas, but with important exceptions. The similarity is that successively younger (more recent) cohorts had successively lower homeownership rates. Between 1980 and 1990, cohorts in Los Angeles proceeded toward homeownership at rates insufficient to match the achievements of their predecessors. In contrast, cohorts in New York began the

decade with very low homeownership but exhibited unusually sharp upward trajectories. In other cities, recent cohorts progressed more moderately and generally matched the ownership attainment levels of their predecessors.

These findings of differences between metropolitan regions underscore the importance of market context for determining immigrants' chances of achieving homeownership. We found that all groups in the same city tended to follow similar trajectories, albeit on different levels, that reflected their shared local context. This affirms the need to study immigrants in relation to native borns in the same city. Certainly, the high and rapidly rising housing values in Los Angeles served to block entry into homeownership for all residents located there. A particular question deserving further research, however, is why homeownership in New York exhibited such a sharp upward trajectory for cohorts between 1980 and 1990.

Our overall finding is that occupational status is an important determinant of homeownership for both immigrants and native borns. This factor is remarkably invariant across groups, regions, and time. Occupation is useful both as a supplement to earnings effects and as a precursor to earnings as part of immigrants' career development and economic adaptation to their new land. Further research is needed to probe the determinants of occupational status as a means of better understanding the economic basis for achieving homeownership.

Appendix

Table A.1. **Distribution of Sample Population by Major Race and Ethnic Groups and Decade of Immigration for Five Metropolitan Areas**

	Native Born	Pre-1960	1960–69	1970–79	1980–90	Total
			Los Angeles			
White, non-Hispanic	2,219,099	88,809	52,118	60,453	79,869	2,500,348
Black, non-Hispanic	299,317	1,380	3,456	6,615	7,537	318,305
Hispanic	364,768	54,527	119,301	286,747	324,597	1,149,940
Asian	68,756	14,508	29,882	106,314	171,611	391,071
			New York			
White, non-Hispanic	3,238,224	235,177	104,282	94,921	114,554	3,787,158
Black, non–Hispanic	558,536	11,258	38,894	68,172	80,087	756,947
Hispanic	336,817	21,394	83,240	98,258	164,895	704,604
Asian	14,977	11,238	28,205	73,886	146,131	274,437
			Washington, DC			
White, non-Hispanic	728,657	18,348	11,907	12,379	17,920	789,211
Black, non-Hispanic	258,145	703	3,372	8,986	14,210	285,416
Hispanic	14,037	1,544	6,615	9,776	26,549	58,521
Asian	5,189	2,203	5,643	18,415	27,459	58,909

Table A.1. **Distribution of Sample Population by Major Race and Ethnic Groups and Decade of Immigration for Five Metropolitan Areas** (*continued*)

	Atlanta					
	Native Born	Pre-1960	1960–69	1970–79	1980–90	Total
White, non-Hispanic	508,857	4,880	3,856	4,074	4,873	526,540
Black, non-Hispanic	161,867	172	893	2,244	4,197	169,373
Hispanic	5,569	441	2,253	2,328	4,440	15,031
Asian	808	316	782	3,701	8,497	14,104

	Philadelphia					
	Native Born	Pre-1960	1960–69	1970–79	1980–90	Total
White, non-Hispanic	1,306,902	35,691	12,210	11,661	12,002	1,378,466
Black, non-Hispanic	266,125	754	1,792	3,873	3,744	276,288
Hispanic	39,352	1,200	2,743	2,827	5,021	51,143
Asian	2,767	1,238	3,318	9,269	15,794	32,386

Note: The sample is derived from the 1990 PUMS data and includes males only age 25 or older.

Table A.2. **Distribution of Sample Population by Specific Hispanic Origin and Decade of Immigration for Three Metropolitan Areas**

Hispanic Origin	Native Born	Pre-1960	1960–69	1970–79	1980–90	Total
Los Angeles						
Mexican	315,677	46,004	88,497	236,000	219,042	905,220
Central American	2,675	1,968	8,383	32,801	81,160	126,987
Puerto Rican	18,351	174	115	246	214	19,100
Cuban	2,210	1,844	9,428	4,009	3,485	20,976
Dominican	156	63	347	111	159	836
South American	2,440	2,897	10,221	9,365	14,268	39,191
Other	23,259	1,577	2,310	4,215	6,269	37,630
Total	364,768	54,527	119,301	286,747	324,597	1,149,940
New York						
Mexican	7,025	1,089	1,167	5,094	14,273	28,648
Central American	2,583	1,812	7,266	11,243	26,838	49,742
Puerto Rican	289,725	867	1,467	1,864	2,557	296,480
Cuban	7,277	8,020	22,857	10,180	9,774	58,108
Dominican	5,007	2,648	19,515	27,465	42,274	96,909
South American	4,522	3,757	24,752	34,530	58,445	126,006
Other	20,678	3,201	6,216	7,882	10,734	48,711
Total	336,817	21,394	83,240	98,258	164,895	704,604
Washington, DC						
Mexican	3,880	151	366	809	2,361	7,567
Central American	453	199	1,019	4,037	15,259	20,967
Puerto Rican	5,445	23	46	108	69	5,691
Cuban	568	306	1,467	320	528	3,189
Dominican	93	—	136	354	626	1,209
South American	470	448	2,771	3,268	6,269	13,226
Other	3,128	417	810	880	1,437	6,672
Total	14,037	1,544	6,615	9,776	26,549	58,521

Note: The sample is derived from the 1990 PUMS data and includes males only age 25 or older.

Table A.3. **Distribution of Sample Population by Specific Asian Origin and Decade of Immigration for Three Metropolitan Areas**

Asian Origin	Native Born	Pre-1960	1960–69	1970–79	1980–90	Total
Los Angeles						
Asian Indian	547	410	2,716	7,664	12,415	23,752
Chinese	10,057	4,956	8,740	25,484	44,891	94,128
Filipino	7,775	4,777	9,026	24,556	35,329	81,463
Japanese	40,138	2,814	2,985	4,249	8,800	58,986
Korean	1,153	648	3,111	18,969	31,037	54,918
Vietnamese	424	57	195	16,511	22,716	39,903
Other	8,662	846	3,109	8,881	16,423	37,921
Total	68,756	14,508	29,882	106,314	171,611	391,071
New York						
Asian Indian	1,053	681	5,508	19,348	38,186	64,776
Chinese	9,001	8,577	15,561	26,746	46,592	106,477
Filipino	1,093	770	3,505	8,912	12,440	26,720
Japanese	1,701	382	643	2,499	10,539	15,764
Korean	623	525	1,773	10,262	22,874	36,057
Vietnamese	44	—	114	1,403	2,723	4,284
Other	1,462	303	1,101	4,716	12,777	20,359
Total	14,977	11,238	28,205	73,886	146,131	274,437
Washington, DC						
Asian Indian	433	375	1,665	4,056	5,036	11,565
Chinese	1,547	1,132	1,531	3,236	6,041	13,487
Filipino	963	307	1,064	1,994	2,099	6,427
Japanese	1,414	155	115	213	1,225	3,122
Korean	146	135	714	4,233	4,827	10,055
Vietnamese	40	—	72	2,856	3,871	6,839
Other	646	99	482	1,827	4,360	7,414
Total	5,189	2,203	5,643	18,415	27,459	58,909

Note: The sample is derived from the 1990 PUMS data and includes males only age 25 or older.

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