The Housing Conditions of Immigrants in New York City

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Abstract

The influx of immigrants to New York City increases the demand for housing. Because the city has one of the nation's tightest and most complicated housing markets, immigrants may disproportionately occupy the lowest-quality housing. This article examines homeownership, affordability, crowding, and housing quality among foreign- and native-born households.

Overall, foreign-born households are more likely to be renters and encounter affordability problems. Multivariate analyses reveal that foreign-born renters are more likely to live in overcrowded and unsound housing but less likely to live in badly maintained dwellings. However, compared with nativeborn white renters, immigrants—especially Puerto Ricans, Dominicans, Caribbeans, Africans, and Latin Americans—are more likely to live in badly maintained units. Because this disadvantage is shared by native-born blacks and Hispanics, it strongly suggests that race and ethnicity are more significant than immigrant status per se in determining housing conditions.

Keywords: immigration; housing conditions; New York City; race

Introduction

Immigration has had a major impact on the United States over the past two decades. From 1982 to 1994, 8.6 million legal immigrants were admitted to the United States (New York City Department of City Planning 1996), joining an estimated 5 million illegal immigrants (Ogito 1997). Few American cities have been more affected by immigration than New York City. New York City absorbed more than 1.2 million legal immigrants during this period, more than 14 percent of the national total. Without the immigration of 856,000 individuals between 1980 and 1990, New York City's population would have fallen instead of increasing by 4 percent (Salvo and Lobo 1997).

This influx of immigrants has increased the demand for housing. Between 1980 and 1995, the number of immigrant households in the United States increased by 3.1 million, accounting for 18 percent of the nation's total household growth (Pitkin et al. 1997). In the five years before the 1990 census, some 122,000 immigrant households moved to New York City, accounting for 44 percent of all in-migrant households during that period (Kasarda et al. 1997).

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Immigrants to New York City move to what is, in all likelihood, the tightest housing market in the nation. The city's rental vacancy rate has been below 5 percent since World War II; in 1996, it stood at 4 percent. Despite these low vacancy rates and the city's rising population, rates of new housing construction are close to historic postwar lows (Schill and Scafidi forthcoming). Not surprisingly, housing costs in the city are among the highest in the nation.¹ In addition to the constraints of low vacancy rates and high housing costs, the city experiences a high degree of residential segregation, particularly among blacks and, to a lesser extent, Hispanics (Rosenbaum 1994).

Given these constraints, it is possible that immigrants disproportionately occupy the lowestquality housing in the city, yet little or no empirical research has examined this issue. While a series of articles in the *New York Times* (e.g., Sontag 1996) recounted numerous instances of immigrants living in extremely overcrowded, badly deteriorated, and vermin-infested housing, a case study approach can rarely indicate whether such conditions apply to all immigrants or are truly different from the conditions experienced by similar persons born in the United States.

This article fills this gap by using the 1996 New York City Housing and Vacancy Survey (HVS) to compare and contrast the housing conditions of native- and foreign-born households and to determine how immigrants fare in New York City's housing market. Focusing on two important dimensions of housing conditions—crowding and housing quality—we use descriptive statistics and multivariate techniques to explore whether immigrant households experience worse housing conditions than their native-born counterparts and whether these differences, if any, are consistent across race, ethnicity, and national origin.

Understanding how immigrants fare in New York's housing market is critical to developing public policy. From one perspective, because housing plays a central role in determining the social and economic well-being of families and households (Myers and Wolch 1995; Shlay 1995), unequal access to high-quality housing may restrict the upward mobility of the affected groups. Thus, if we were to find that the probability of living in high-quality housing varies significantly by immigrant status or national origin (when other relevant factors are controlled), then this would signal the need for policies that enhance the affected groups' access to better housing conditions. From another perspective, New York City has a strong interest in maintaining the flow of immigration because immigrants contribute to its economy, build neighborhood institutions, and perform important services through their labor. This interest could be threatened if inadequate housing conditions discouraged future immigration.

In the first part of this article, we analyze some of the dynamics that might cause foreignborn New Yorkers to experience different housing-related outcomes than native-born New Yorkers. In the second part, we describe the data employed in our study, and in the third part, we summarize our analytical methods. In the fourth part, we describe our results. First, we provide descriptive information about the characteristics of immigrant and native-

¹ According to the 1995 American Housing Survey, the median monthly cost of renter-occupied housing for New York City was \$632 (U.S. Department of Housing and Urban Development 1997a), and the comparable figure for Los Angeles was \$625 (U.S. Department of Housing and Urban Development 1997b); the median monthly cost of renter-occupied housing in central cities within the United States in 1995 was \$515 (U.S. Department of Housing and Urban Development 1997b); the median monthly cost of renter-occupied housing in central cities within the United States in 1995 was \$515 (U.S. Department of Housing and Urban Development 1997c).

born households as well as their housing conditions. Then, we employ multivariate analyses to examine whether foreign-born households that rent experience greater levels of crowding and deteriorated housing conditions than their native-born counterparts, controlling for their position in the life cycle, socioeconomic characteristics, race, ethnicity, and neighborhood characteristics. We conclude in the fifth part with a discussion of these results and their implications for public policy and future research.

Immigrant Housing Conditions in a Multiethnic City

Housing Searches: Opportunities and Constraints

In general, the distribution of households across housing units results from a match between individuals' housing needs and their ability to satisfy these needs. Housing preferences are driven in part by demographic factors, such as transitions through the life cycle (Rossi 1955; Speare, Goldstein, and Frey 1975). For example, when individuals marry, they typically look for housing with sufficient space to accommodate the growth of their families. Moreover, because housing is tied to specific locations, neighborhood characteristics such as school quality may also be important factors in housing searches.

The ability to satisfy housing needs depends on resources. People with high incomes are likely to enjoy the most freedom in choosing where to live, and those with high levels of education may be better able to obtain information about housing opportunities. Individuals on public assistance may be more constrained in their options. Some landlords may avoid renting to these households because of concerns about their behavior and their rent-paying ability.

Households headed by racial and ethnic minorities may experience particular difficulties in buying a home or obtaining good-quality, spacious housing because of structural barriers in the housing market (Alba and Logan 1991, 1992, 1993; Massey and Denton 1993). Studies of home sellers, landlords, and real estate agents that employed matched pair testers show that discrimination and prejudice in the housing market are widespread (Galster 1990; Yinger 1995). Blacks and Hispanics are systematically shown fewer housing units and are steered toward housing in lower-quality, predominantly black neighborhoods (Pearce 1979; Turner, Struyk, and Yinger 1991; Yinger 1995). Even if blacks and Hispanics escape the discrimination of real estate agents and home sellers, they may face discrimination in obtaining home mortgage loans (Leahy 1985; Munnell et al. 1992). Such barriers are believed to contribute to the lower levels of homeownership and housing quality among blacks and Hispanics (than whites) that remain even after controlling for differences in preferences and purchasing power (e.g., Alba and Logan 1992; Bianchi, Farley, and Spain 1982; Jackman and Jackman 1980; Krivo 1986, 1995; Oliver and Shapiro 1995; Rosenbaum 1996; Wachter and Megbolugbe 1992).

Together with data from fair housing audit studies showing that blacks and Hispanics in New York City encounter discrimination between 40 and 61 percent of the time (Schill 1996; Yinger 1995), the prevalence of residential segregation in New York² suggests that blacks

 $^{^2}$ In 1990, the black-white and Hispanic-white indices of dissimilarity (based on census tracts) were 84 and 66, respectively.

and Hispanics have unequal access to housing opportunities. For individuals limited to minority-dominated neighborhoods, the chances of obtaining quality housing are reduced even further because of the poorer housing stock in these areas. Massey, Condran, and Denton (1987) show that in Philadelphia in 1980, a greater percentage of housing units were boarded up or lacked complete plumbing and heating facilities in predominantly black neighborhoods than in less segregated neighborhoods. Schill and Scafidi (forthcoming) show that the neighborhoods in New York City with higher proportions of severe housing problems are also those with higher nonwhite populations. Thus, for minority residents, residential segregation is likely to be correlated with inferior housing quality.

Expectations about the Housing Conditions of Foreign- and Native-Born Households

The distribution of immigrants across housing units in New York City relative to nativeborn residents will depend largely on their housing needs and preferences, their ability to pay for those needs and preferences, and their race and ethnicity. Yet even after controlling for these factors, we anticipate that, overall, immigrants will be at a disadvantage in terms of their housing compared with native-born households. For example, it has been well documented in the literature that foreign-born individuals are less likely to be homeowners than their native-born counterparts (Alba and Logan 1992; Krivo 1995). Similarly, McArdle and Mikelson (1994) find that immigrants, especially those who buy a home, pay a greater share of their income toward housing costs than native-born individuals.

Immigrants are also more likely to live in overcrowded conditions than their native-born counterparts. In 1990, individuals who entered the United States between 1980 and 1989 were 10 times as likely as those born in the United States to live in housing with more than one person per room (McArdle and Mikelson 1994). The problem of overcrowding was greater for immigrant renters than for owners (Myers, Baer, and Choi 1996). Krivo (1995) finds that even after controlling for individuals' socioeconomic and demographic characteristics, foreign-born Anglos and Hispanics were still significantly more likely to live in crowded housing than their native-born counterparts.

The prevalence of crowding among immigrants may be attributable to several factors. Immigrants, particularly those who have entered the United States recently, often try to live with members of their extended family or nonrelatives and pool their resources. Some immigrants may adopt this economic strategy to send money back to family and friends in their country of origin, while others may adopt it to save on daily expenses and advance their socioeconomic status more quickly. Many immigrant households also come from cultures where living with and caring for extended families, particularly elderly kin, is the norm (Knodel, Chayovan, and Siriboon 1992; Myers, Baer, and Choi 1996; Pader 1994).

As mentioned at the outset, there has been little to no research to date that documents immigrants' housing quality. We expect, however, that, consistent with immigrants' relative housing disadvantage in terms of homeownership, affordability, and crowding, immigrants will live in poorer-quality housing, even after controlling for differences in their socioeconomic and demographic characteristics. There are a number of reasons to expect such a relationship between nativity and housing quality. For example, limited proficiency in English among some groups of immigrants may constrain their already limited knowledge of New York City's complicated housing market and, in turn, restrict their choices. Limited English proficiency may also evoke discrimination from actors in the housing market.

In addition, immigrants may live disproportionately in poorer-quality housing because they prefer to live among others of the same national origin. This type of self-segregated settlement tends to result in lower-quality housing for immigrants, because the neighborhoods to which they are relegated are older and have been vacated by several groups progressing through the assimilation process (Massey 1985). There is some evidence that immigrants to New York City disproportionately move to lower-quality housing units. Rosenbaum and Schill (1997) find that housing units with one or two deficiencies are significantly more likely to be occupied by foreign-born Hispanic in-movers than by native-born white in-movers.

When we disaggregate immigrants by place of birth, however, we anticipate that the housing market experiences of foreign-born households will not be monolithic. For example, Kalmijn (1996) finds that foreign-born blacks from English-speaking countries (e.g., Jamaica, Trinidad and Tobago, Guyana, and Barbados) have significantly higher occupational status than native-born blacks, but blacks from Spanish- and French-speaking countries (e.g., the Dominican Republic, the U.S. Commonwealth of Puerto Rico, Cuba, and Haiti) have significantly lower prestige and earnings than native-born blacks. According to Kalmijn, the success of the former group, which is likely to result in better housing conditions, is due in part to the fact that blacks from English-speaking countries have been raised in societies that are predominantly black and have therefore seen blacks at all levels of the class hierarchy. In the other Caribbean countries (with the exception of Haiti), blacks are in the minority and may have experienced discrimination and political oppression.

Some immigrants may also live in better housing because of assistance provided to them by their American co-ethnics. For example, many immigrants from the former Soviet Union, particularly Jews, have received financial and housing assistance from American fraternal or religious organizations (Herszenhorn 1996). These immigrants can obtain better-quality dwellings than individuals entering the housing market without assistance.

Moreover, there is evidence of consistent racial and ethnic differentials in access to higherquality residential outcomes, such that non-Hispanic whites enjoy the broadest access, followed by Asians, Hispanics, and finally blacks (Alba and Nee 1997). Such findings, in combination with the high level of segregation in New York City, suggest that some immigrant groups—notably those of African, Caribbean, and Hispanic origin—may be more disadvantaged in the housing market than other groups (such as foreign-born whites and Asians).

Data

The analysis of housing conditions in New York City is based on individual-level data from the 1996 panel of the HVS, a multistage probability sample of approximately 18,000 housing units located throughout the five boroughs that are surveyed every two or three years. The Census Bureau conducts the HVS under contract to New York City in compliance with city and state laws regarding rent regulation. Since the focus of the survey is on housing, data from the HVS are particularly useful for our study. Sample weights (scaled down to maintain unweighted cell sizes) are used with these data to correct for undercoverage and sampling variability between HVS data and independent data (e.g., the 1990 census). Although the HVS provides us with good data on housing in New York City, a few limitations need to be addressed regarding data on immigrants' housing conditions. First, the HVS does not ask foreign-born individuals when they moved to the United States. Therefore, we cannot assess whether the length of time immigrants spend in the United States has any impact on their housing conditions, either cross-sectionally or using cohort techniques (Myers and Lee 1996; Pitkin et al. 1997). Second, no information is available from the HVS on individuals' English proficiency, another factor that might affect the ability of immigrants to obtain good housing (Alba and Logan 1992; Krivo 1995). Finally, the HVS provides no measure of households' wealth. Therefore, we expect that our estimates of the effects of nativity status and birthplace may overstate the "true" net effect that we would obtain if we were able to control for these characteristics. In other words, the nativity status and birthplace variables will likely pick up some of the effects that time in the United States, English language proficiency, and wealth would have on residents' housing conditions.

Our analysis also uses contextual-level data. A unique advantage of using data from the HVS is that it identifies the sub-borough areas in which residents live. There are a total of 55 sub-borough areas in New York, each of which is composed of an aggregation of census tracts and has a minimum population of 100,000. Although these geographic units may be larger than what some individuals would consider their neighborhood, data at this level are useful because they provide overall measures of housing market conditions within households' immediate residential location.

We are particularly interested in controlling for geographic concentrations of racial minorities and recent immigrants. Tract-level data for these characteristics are obtained from the 1990 U.S. Census Summary Tape File (3A) and are then aggregated for each subborough area. Although using data from the decennial census creates a lag between our neighborhood- and household-level characteristics, we adopt this approach because the census data offer larger samples. Using 1990 census data instead of aggregated HVS data for the geographic concentration variables also reduces the collinearity in estimating the individual- and contextual-level effects of race on housing conditions.

Analytical Methods

The central variable in our analysis is household nativity, which is determined by the householders' birthplace and their parents' birthplaces. Individuals born in the United States are considered native born, while those born outside the 50 states to parents who are also born outside the 50 states are considered foreign born.³ In addition to this dichotomous indicator of nativity, we used several dummy variables in our analysis to indicate the birthplace of

³ Certain households were excluded because the householders (1) did not report their nativity (n = 2,143), or (2) were born outside the United States but did not report the nativity of one or both of their parents (n = 63) or reported that their parents were born in the United States (n = 65). A simple comparison of the sociodemographic and housing characteristics of households omitted from and included in the analysis (not shown) revealed that omitted households are far more likely to consist of white, single individuals who live in good-quality housing. Thus, households omitted on the basis of missing nativity information appear to be relatively advantaged, suggesting that our results may be biased in favor of less advantaged households. However, given the strong possibility that the HVS sample disproportionately omits households that may be in the very worst housing conditions (i.e., illegal immigrants living in illegal or makeshift accommodations), the bias that results from omitting these households is likely to offset any bias incurred by omitting households on the basis of missing nativity not be basis of missing nativity information.

foreign-born householders.⁴ The latter variables are introduced so that we may examine whether an immigrant's birthplace has a unique effect on housing conditions above and beyond the fact of being born outside the United States.

Our main focus is on two indicators of housing conditions: crowding and housing quality. Crowding is gauged by the ratio of the number of people in a housing unit to the number of rooms. To determine which households are overcrowded, we follow the conventional standard applied by federal and local governments since 1960 (Myers, Baer, and Choi 1996). According to this definition, households are overcrowded if there is more than one person per room in the unit. In the descriptive analysis we also examine more extreme instances of crowding (i.e., more than one and one-half persons per room) for comparison.

Housing quality is operationalized using two measures. The first is a dummy variable indicating the number of maintenance deficiencies present in the household's dwelling unit. This indicator is based on the householder's report with respect to seven items: toilet breakdowns; heating breakdowns; the need for additional heat; the presence of rats; leaks from the outside; cracks or holes in the walls, floor, or ceiling; and wide areas of broken plaster on the walls.⁵ We consider householders whose homes have three or more of these deficiencies as living in poor-quality housing.

The second measure of housing quality, derived from the interviewer's observation of the overall condition of the building in which the household lives, categorizes buildings as "unsound" or "sound." Unsound buildings are so defective that they are considered unsafe and inadequate shelter, while sound buildings are free of serious defects.⁶

In the descriptive analyses we also discuss two other indicators of housing conditions: tenure and affordability. Housing tenure indicates whether householders own or rent their units, but in New York City, each housing tenure is further segmented into subtenures. Renters can be disaggregated on the basis of whether they live in housing that is (1) rent controlled,

⁴ Ten dummy variables are created on the basis of the householder's place of birth: (1) Puerto Rico; (2) Dominican Republic; (3) Caribbean (other than Puerto Rico and Dominican Republic) and Africa; (4) Mexico, Central America, and South America; (5) Europe; (6) Russia and successor states to the Soviet Union; (7) China, Hong Kong, and Taiwan; (8) India, Pakistan, and Bangladesh; (9) Korea, Philippines, Burma, Cambodia, Laos, Malaysia, Singapore, Thailand, Vietnam, and Other Asia; and (10) all other countries. A value of 1 indicates that the householder was born in the country or region (or one of the countries or regions in the group). A value of 0 indicates that the householder was born in the United States. Category (9) is referred to as "Other Asia" in all tables and throughout the text.

⁵ The questions on individual maintenance deficiencies use different reference periods. The question on rodent infestation, for example, references the past 90 days, while the question on toilet breakdowns (which are defined as lasting at least six consecutive hours) references the past three months. Similarly, the questions on heating breakdowns (lasting six or more consecutive hours) and additional heat reference "this winter." However, because the HVS is typically conducted in March of the survey year, the reference periods of the past 90 days, the past three months, and "this winter" largely overlap. For cracks, holes, and large pieces of missing plaster, the questions reference the present. For leaks from the outside, the reference period is the past 12 months. Similar measures are available in the American Housing Survey.

⁶ The HVS enumerator originally classifies the sample unit's building into one of three mutually exclusive categories: sound, deteriorating, or dilapidated. Deteriorating buildings are defined as those with problems that cannot be corrected by normal maintenance (e.g., rotted or loose window frames or broken or missing interior stair risers). Dilapidated buildings have at least one critical defect (such as bulging or sloping exterior walls or major cracks in exterior walls) or a combination of intermediate defects that render them unsafe. We combine buildings deemed deteriorated or dilapidated into one category labeled "unsound," because we consider either type of building to be poorer-quality housing.

(2) rent stabilized, (3) regulated by other means (e.g., U.S. Department of Housing and Urban Development, Loft Board), (4) unregulated, (5) public housing, or (6) city owned (in rem). Among owners, we examine those who live in (1) "conventional" homes (i.e., privately owned homes that are not part of a cooperative or condominium), (2) condominiums or co-operatives, and (3) Mitchell Lama (state-supported) cooperative housing.

Housing affordability is measured separately for each housing tenure. First, we examine monthly costs for residents. For renters, we calculate the median gross rent, which includes the cost of utilities. For owners, we compute median housing costs on the basis of mortgage payments, property taxes, utilities, and fire and liability insurance payments. Then for each group we determine the percentage of households burdened by housing costs. For renters, we adopt the commonly used standards set forth by the federal government: the percentage of households paying more than 30 percent and 50 percent of their income for rent. For owners, the standard for overpayment is more than 60 percent of income (Schill and Scafidi forthcoming). We use this standard because it has been used by the U.S. Department of Housing and Urban Development to examine owner households with severe housing affordability problems (see U.S. Department of Housing and Urban Development 1994, app. A).

To understand why housing conditions may vary between immigrants and native-born households in New York City, we examine households' life cycle, socioeconomic, and neighborhood characteristics, and their race and ethnicity. Life cycle factors are represented by the householder's age and two dummy variables indicating (1) whether the household is headed by a married couple and (2) whether children under 18 are present. We also use a dichotomous variable to assess whether individuals other than those in the nuclear family are living in the housing unit. Although we do not specify whether these "other" individuals are extended kin or friends of the family, this measure allows us to control for immigrants' use of a multiple-earner economic strategy, which is likely to contribute to higher levels of crowding among immigrants compared with native-born households.

We use four variables to measure the socioeconomic characteristics of households. The first two are dummy variables indicating whether the householder has less than a high school education or a high school diploma. Householders having at least some college education are the reference group. The log of household income is our third socioeconomic variable,⁷ and our fourth is a dummy variable indicating whether any members of the household are receiving public assistance.

Households fall into one of the following six categories depending on the race and ethnicity of the householder: (1) white, non-Hispanic; (2) black, non-Hispanic; (3) Puerto Rican; (4) non-Puerto Rican Hispanic (including individuals who identify themselves as Dominican, Cuban, South or Central American, Mexican, Mexican American, Chicano, or other Hispanic); (5) Asian or Pacific Islander; and (6) Other (including American Indian, Aleut, Eskimo, and other races). Although Puerto Rico is part of the United States, we examine the differences in housing conditions between mainland and island-born households within

⁷ Household income includes all income received by any household member, including cash assistance from the government. The distribution of income was skewed to the right. Therefore, we use the log of income so that the distribution becomes more normal.

this group because Puerto Ricans who migrate to the U.S. mainland are likely to have experiences similar to those of immigrants.

Data from the 1990 U.S. census are used to create two neighborhood contextual variables. Specifically, we measure the percentage of blacks and the percentage of immigrants in the sub-borough area who entered the United States after 1980.

A descriptive analysis compares the life cycle, socioeconomic, and neighborhood characteristics of immigrants and native-born households. We do such an analysis for housing conditions as well. We compare foreign- and native-born households' housing tenure, housing affordability, crowding, and housing quality overall and disaggregated by birthplace. To examine the relationship between nativity status and housing crowding and quality while controlling for a range of life cycle, socioeconomic, and neighborhood contextual variables, we specify several descriptive logistic regression models.

We do not, however, perform multivariate analyses to examine the variation in households' housing affordability or in their homeownership rates. As described above, we consider households that pay a disproportionate share of their income for housing to have affordability problems. Thus, our measure of housing affordability is based on housing costs as well as household income. To explain the variation in housing affordability, we would have to account not only for factors that generate differences in housing, but also for the factors that generate differences in housing affordability for all households and then for households with incomes at or below 50 percent and 80 percent of the median income level for the New York metropolitan area. This type of analysis allows us to examine differences in housing affordability between foreign- and native-born households, controlling for income.

We do not employ multivariate analyses to examine differences between native- and foreignborn households in their housing tenure, because homeownership per se does not necessarily imply better-quality housing (Alba and Logan 1992), particularly in New York City, where two-thirds of households live in rental housing. Also, differences in homeownership between native- and foreign-born households may reflect the fact that many immigrants have recently arrived in the United States and therefore do not have the assets required for a down payment or have not formed attachments that would motivate them to live in this country permanently. Because our data cannot measure immigrants' assets or the length of time that they have lived in the United States, we do not present models of housing tenure.

Results

Descriptive Analysis

The housing conditions of immigrants are likely determined by an interplay of life cycle, socioeconomic, and racial factors that shape their demand for housing, as well as the supply of housing open to them. As the data in Table 1 indicate, immigrant householders are significantly more likely to be Hispanic or Asian and significantly less likely to have a college degree or postgraduate education than their native-born counterparts. Moreover, foreignborn households are more likely to be younger; to be headed by a married couple; to include

Characteristic	Foreign Born	Native Born
Race/ethnicity (%)		
White, non-Hispanic	26.28^{***}	59.34
Black, non-Hispanic	19.43***	29.29
Puerto Rican	15.66^{***}	7.62
Non–Puerto Rican Hispanic	23.73^{***}	2.42
Asian	14.47***	0.88
Other	0.42	0.45
Household characteristics		
Mean age (years)	47.61***	48.72
Household headed by a married couple (%)	45.80***	35.39
Presence of:		
Children under 18 (%)	25.79^{***}	21.01
Others in the household beyond		
the nuclear family (%)	17.29***	8.65
Education (%)		
Less than high school	35.33***	17.90
High school degree	27.01***	29.47
College and more	37.66***	52.62
Median household income (\$) ^a	25.300	31.500
Receiving public assistance (mean %)	22.96***	15.67
Neighborhood characteristics (%)		
Recent immigrants	14.59^{***}	10.99
Black	23.61	23.19
Ν	5,835	7,155

Table 1. Household and Neighborhood Characteristics of Foreign- and Native-Born Households in New York City

Note: Statistics are weighted.

^aSignificance test not conducted for this variable.

p < 0.10. p < 0.05. p < 0.01.

children under 18, extended family members, and friends; to receive public assistance; and to live in areas with a higher percentage of immigrants.⁸

Table 2 reveals that the household and neighborhood characteristics of immigrant households vary by birthplace when compared with those for native-born, white, non-Hispanic households. For example, the data reveal that all immigrant households are more likely than native-born white households to include extended family members and friends, yet only households originating in Puerto Rico and the Dominican Republic are less likely than native-born white households to be headed by a married couple. Similarly, all foreign-born households—except for those from India, Pakistan, Bangladesh, and Other Asia—are less likely than native-born white households to be headed by a college graduate, but more likely to receive public assistance. Finally, all categories of foreign-born households live in areas with relatively higher densities of recent immigrants, while only foreign-born households of

⁸ In separate analyses conducted for renter households only, similar differences were found (table A.1).

City

						Foreign Born	_			
Characteristic	Native Born, White, Non-Hispanic	Puerto Rico	Dominican Republic	Caribbean ^a and Africa	Latin America ^b	Europe	$ m Russia^c$	China, Hong Kong, and Taiwan	India, Pakistan, and Bangladesh	Other Asia ^d
Household characteristics Mean age (years)	51.44	50.63	42.42^{***}	44.54***	42.55***	57.67***	51.40	48.29^{***}	40.11^{***}	42.44^{***}
Household headed by a married couple (%)	41.89	28.75***	32.04^{***}	42.72	49.34^{***}	50.02^{***}	58.22^{***}	67.39***	69.47***	56.94^{***}
Presence of: Children under 18 (%)	15.12	24.15^{***}	35.18^{***}	28.64^{***}	27.14^{***}	16.47	26.60^{***}	20.58^{**}	36.99***	25.83^{***}
Uthers in the household beyond the nuclear family (%)	4.58	15.90^{***}	28.10^{***}	19.28^{***}	24.55^{***}	6.82^{**}	11.92^{***}	17.00^{***}	21.24***	13.37^{***}
Education (70) Less than high school	11.54	57.34^{***}	56.67^{***}	26.28^{***}	37.33*** 21.23	31.84^{***}	22.97***	32.08*** 07.07	13.58	12.54
High school degree College and more	28.08 60.38	25.43^{*} 17.24^{***}	23.44^{**} 19.89 ***	30.40 43.31^{***}	31.61^{*} 31.06^{***}	29.56 38.60^{***}	21.77^{***} 55.26^{**}	25.27 42.65^{**}	25.34 61.08	16.63^{**} 70.84^{***}
Median household income ^e Receiving public assistance (%)	40,500 5.16	$13,200$ 45.43^{***}	$15,450$ 48.11^{***}	29,978 13.99***	29,600 17.30^{***}	$30,000$ 7.71^{***}	$15,480$ 41.58^{***}	35,000 8.31*	$37,000 \\ 4.87$	42,000 7.26
Neighborhood characteristics (mean %) Recent immigrants Black	10.38 10.98	12.50^{***} 26.08^{***}	17.62^{***} 21.99^{***}	14.77*** 47.46***	16.88 *** 22.80 ***	12.75^{***} 10.89	14.13^{***} 10.31	15.99 *** 8.01 ***	15.33^{***} 16.33^{***}	14.28^{***} 10.44
Ν	4,200	606	615	1,139	776	891	418	301	206	327
Note:Statistics are weighted. a Caribbean other than Puerto Rico and b Mexico, Central America, and South A b Mexico, Central America, and South A e Russia and successor states to the South d Korea, Philippines, Southeast Asia (Bu e Significance tests between groups not c $^{*p} < 0.10$. $^{**p} < 0.05$. $^{**p} < 0.01$. Inc	Dominican Rep merica. et Union. urma, Cambodia conducted for th licates significal	ublic. , Laos, Malay is variable. nt difference t	sia, Singapore etween the gr	, Thailand, an oup marked a	(d Vietnam), a nd native-bor	nd Other Asia n white non-H	ispanics.			

Hispanic, Caribbean, African, and—somewhat surprisingly—South Asian descent live in areas with greater proportions of blacks.⁹

Table 3 provides a comparison of the housing characteristics of foreign- and native-born households. The data reveal that foreign-born householders are less likely than native-born householders to own their own homes (about 24 percent versus nearly 34 percent). However,

Characteristic	Foreign Born	Native Born
Tenure (%)		
Owner	24.03^{***}	33.81
Conventional owner ^a	76.99***	63.29
Cooperatives/condominiums	19.00***	29.22
Mitchell Lama	4.01***	7.49
Renter	75.97***	66.19
Controlled ^a	2.89^{***}	4.81
Stabilized	55.89***	45.30
Other rent regulation	5.30^{***}	7.91
Unregulated rental units	28.24	28.49
Public housing	6.67***	11.94
In rem housing	1.00^{**}	1.55
Housing value (owners) (\$) ^b	180,000.00	168,000.00
Monthly housing costs (\$)		
Median rent ^b	640.00	635.00
Median housing costs (owners with mortgages) ^b	1,383.33	1,105.00
Median housing costs (owners without mortgages) ^b	372.08	302.25
Affordability (%)		
All households		
Renter pays more than 30% of income for rent	56.72***	48.25
Renter pays more than 50% of income for rent	34.66^{***}	27.94
Owner pays more than 60% of income for housing costs		
(householders with mortgages)	16.89***	6.60
Owner pays more than 60% of income for housing costs	0.00	o (-
(householders without mortgages)	8.69	6.47
Households with incomes $\leq 80\%$ of the area median	FC 00* *	5 0.04
Renter pays more than 30% of income for rent	76.20**	73.64
Renter pays more than 50% of income for rent	47.54	45.57
(household our with wort rease)	E0 4E***	27.04
(nousenoiders with mortgages)	59.45 ^{*****}	37.94
(householders without mortgoges)	15 99	19.05
(nousenoiders without mortgages) Households with incomes $\leq 50\%$ of the area modion	19.38	13.80
Households with incomes $\leq 50\%$ of the area median Boston power more than 20% of income for next	07 CO**	Q4 09
Renter pays more than 50% of income for rent	62 71**	04.92 50.06
Owner pays more than 50% of income for housing costs	03.71	59.90
(householders with mortgages)	75.94	60 80
Owner pays more than 60% of income for bousing costs	10.04	03.03
(householders without mortgages)	23 62	23.03
(nousenoncers without mortgages)	20.02	20.00

Table 3. Housing Characteristics of Foreign- and Native-Born Households in New York City

⁹ Analyses conducted separately for renter households only (table A.2) reveal similar patterns.

Characteristic	Foreign Born	Native Born
Crowding (%)		
More than 1 person/room	14.71***	4.49
More than 1.5 persons/room	4.69***	1.38
Housing Quality (%)		
Deficiencies		
2 or more	30.85^{***}	27.49
3 or more	17.48**	15.82
4 or more	9.95*	8.94
5 or more	4.89*	4.19
Unsound	1.30^{*}	0.95

Table 3. Housing Characteristics of Foreign- and Native-Born Households in New York City (continued)

Note: Statistics are weighted.

^aCategories under "Owner" and "Renter" are subtenure categories and therefore sum to 100 percent (or near 100 percent because of rounding).

^bSignificance tests not conducted for these variables.

*p < 0.10. **p < 0.05. ***p < 0.01.

within the ownership category, foreign-born householders are more likely to be conventional owners, while native-born householders are more likely to own cooperatives and condominiums. The increased tendency for immigrants to be conventional homeowners is partly explained by the fact that immigrants settle disproportionately in the boroughs of Queens and Brooklyn, where single-family homes are more prevalent than in Manhattan, the borough with the highest proportion of cooperatives and condominiums.

Among renters, there are also nativity differences across the subtenure categories. In particular, immigrant households are less likely to live in controlled and in rem units and in public housing. This is at least partly because many immigrants are relatively recent arrivals, while the current stock of rent-controlled units consists of units that have been continuously occupied by the same tenant since before July 1, 1971.¹⁰ Similarly, because New York City has a waiting list for public housing that numbers in the hundreds of thousands, recent arrivals would have a much lower chance than longtime residents of obtaining apartments. Despite their underrepresentation in rent-controlled and publicly owned housing, immigrants are significantly overrepresented in rent-stabilized housing, which constitutes most rental housing in the city.

Consistent with our expectations of worse housing outcomes among foreign-born households, the data in table 3 indicate that immigrant households are not only more likely to be burdened by excessive housing costs regardless of tenure, but they are also more likely to be crowded (by both measures), to live in units plagued by maintenance deficiencies, and to live in unsound structures. For example, more than half (56.7 percent) of all immigrant renters pay more than 30 percent of their income for housing, compared with 48.3 percent of native-born renters; with respect to severe affordability problems (rent-to-income burdens)

¹⁰ In general, rent-controlled units in small buildings (fewer than six units) are removed from rent regulation completely upon vacancy, while those in larger buildings (six units or more) become subject to rent stabilization.

in excess of 50 percent), the proportions are 34.7 percent and 27.9 percent for immigrants and native-born households, respectively. These differences are statistically significant, indicating the hardship immigrants face compared with native-born households in paying for their housing. The fact that immigrants' median rent is similar to that of native-born renters (\$640 versus \$635 per month) suggests that the affordability problems of foreign-born households are attributable to their lower incomes (table 1) rather than to higher housing costs. Indeed, after controlling for income differences among households, housing affordability differences between foreign- and native-born households become less significant.

Among homeowners with mortgages, 16.9 percent of foreign-born households pay more than 60 percent of their incomes for housing, compared with 6.6 percent of native-born householders. Unlike the case of renters, this affordability problem is attributable to higher median housing costs as well as lower incomes.¹¹ For households with incomes at or below 80 percent of the median income for the New York metropolitan area, there is a statistically significant difference in affordability between foreign- and native-born households. However, among the poorest owner households in New York City—those with incomes less than or equal to 50 percent of the area median—no statistically significant difference in housing cost burdens exists. For homeowners without mortgages, there is no difference in housing affordability between foreign- and native-born households.

Table 4 also focuses on housing characteristics, but it disaggregates foreign-born households by birthplace. Again we find that immigrants' housing experiences vary greatly depending on their country of origin. Among immigrants to New York City, Europeans and Chinese have the highest rates of homeownership (which are statistically no different from the homeownership rate among native-born whites), while Dominicans and Puerto Ricans have the lowest, at just under 6 percent and 12 percent, respectively. Among renters, South Asian immigrant households (those from India, Pakistan, or Bangladesh) and Other Asian immigrant households are more likely than native-born white households to live in unregulated rental housing. This may be because they are shut out of the regulated market, because they prefer neighborhoods with high proportions of unregulated dwellings,¹² or because they have enough resources to compete in the private market. Another noteworthy finding is that island-born Puerto Rican householders and foreign-born householders from the Dominican Republic; the Caribbean and Africa; and China, Hong Kong, and Taiwan are all significantly more likely than native-born white householders to live in public housing.

Foreign-born renter households from all countries except China, Hong Kong, and Taiwan or India, Pakistan, and Bangladesh are significantly more likely than native-born white households to encounter rent burdens. Among owners, statistically significant affordability problems are evident for all foreign-born households except those from the Dominican Republic and Other Asia. When we control for income, once again we find that the differences between native- and foreign-born households tend to evaporate. Indeed, except for the Dominicans and Russians, foreign-born households with incomes at or below 80 percent of the median

¹¹ Analyses conducted separately for renter households (table A.3) reveal again that foreign-born households as a group are more likely to be crowded, to live in units with two or more maintenance deficiencies, and to live in unsound structures. Moreover, when we shift attention from all households to renters only, the observed nativity difference on the measure of housing deficiencies narrows, while that on crowding and soundness widens.

¹² Most buildings with fewer than six apartments are exempt from rent regulation. These smaller buildings are more likely to be located in the boroughs favored by immigrant households.

N	otino Dour					Foreign Born		Chino	India	
ΥŻ	auve born, White, on-Hispanic	Puerto Rico	Dominican Republic	Caribbean ^a and Africa	Latin America ^b	Europe	$ m Russia^c$	Cnina, Hong Kong, and Taiwan	ındıa, Pakistan, and Bangladesh	Other Asia ^d
	42.86	11.64^{***}	5.73^{***}	27.28^{***}	18.72^{***}	43.05	14.70 ***	40.61	22.32^{***}	28.58^{***}
	62.25	82.70 ***	61.85	87.47***	75.57^{***}	* 78.01***	50.12^{*}	70.11^{*}	88.89***	65.78
	34.45	11.33^{***}	35.68	8.75^{***}	19.82^{***}	* 19.79***	33.99	25.54^{**}	9.00 ***	33.21
	3.30	5.96	2.47	3.78	4.61	2.20	15.89^{***}	4.36	2.11	1.01^{**}
	57.14	88.36^{***}	94.27^{***}	72.72^{***}	81.28^{***}	56.95	85.30 ***	59.39	77.68^{***}	71.42^{***}
	7.29	3.25^{***}	2.47^{***}	1.74^{***}	1.66^{***}	8.53	0.91^{***}	3.41^{***}	** 0	*** 0
	51.11	47.29^{*}	69.87^{***}	52.51	56.71^{**}	54.70	71.71^{***}	41.14^{***}	54.53	55.97
	4.99	7.43^{**}	4.91	6.31	3.75	4.86	5.18	9.82^{**}	2.62^{*}	0.88^{***}
	34.08	16.56^{***}	15.18^{***}	34.90	33.86	30.49	20.88^{***}	39.93	42.85^{**}	42.33^{**}
	2.29	23.08^{***}	5.55^{***}	3.56^{*}	3.23	1.29^{*}	1.31	5.71^{**}	*** 0	0.82^{**}
	0.24	2.40 ***	2.01^{***}	0.97^{**}	0.78	0.13	** 0	$^{**}0$	** 0	** 0
	180,000.00	175,000.00	165,000.00	165,000.00	172,000.00	200,000.00	150,000.00	200,000.00	190,000.00	190,000.00
	735.00 583.00	500.00 830.83	606.00 1,075.00	660.00 1,208.75	656.00 1,140.67	652.00 729.00	670.00 749.67	640.00 1,104.17	745.00 $1,440.83$	825.00 1,125.25

						Foreign Bo	rn			
Characteristic	Native Born, White, Non-Hispanic	Puerto Rico	Dominican Republic	Caribbean ^a and Africa	Latin America ^b	Europe	$ m Russia^c$	China, Hong Kong, and Taiwan	India, Pakistan, and Bangladesh	Other Asia ^d
Affordability (%) All households										
Renter pays more than 30% of income for rent	43.08	61.29^{***}	69.52^{***}	54.60 ***	49.51^{**}	53.33^{***}	63.72^{***}	44.66	44.07	48.80 *
Kenter pays more than 50% of income for rent Owner pays more than 60% of income	23.76	39.33***	46.91^{***}	29.01^{***}	25.66	34.48^{***}	49.16^{***}	25.83	19.68	25.10
for housing costs ^g Households with incomes $\leq 80\%$ of the area median	6.04	12.39^{*}	13.19	14.80 ***	11.28^{*}	13.82^{***}	21.58^{***}	13.65^{**}	16.61^{*}	11.97
Renter pays more than 30% of income for rent	79.50	71.00 ***	80.65	79.88	71.67^{**}	77.16	81.43	63.19^{***}	72.54	84.58
Renter pays more than 50% of income for rent Households with incomes $\leq 50\%$ of the area median	49.25	45.94	54.58^{**}	42.61^{**}	37.66^{**}	52.15	63.27^{***}	37.98**	32.19^{***}	51.19
Renter pays more than 30% of income for rent	90.99	79.46^{***}	89.78	93.68	88.35	88.33	91.62	75.30 * * *	91.26	98.18^{***}
Renter pays more than 50% of income for rent	66.01	55.90 ***	65.98	64.15	58.55^{**}	66.46	77.39***	53.40 **	58.82	82.76^{***}
$\begin{array}{c} \operatorname{Crowding}\left(\%\right) \\ \operatorname{Mono}\left(4n-1 \right) \\ \operatorname{Mono}\left(4n-1 \right) \\ \end{array}$	19 24	0 70***	10 24**	***97 L1	00 41***	л 17 ***	11 00***	17 66***	***00 20	17 94**
More than 1.5 persons/room	0.97	3.32^{***}	7.08***	3.04^{***}	7.95***	1.86^{*}	4.76***	5.59***	7.86***	7.50 ***
Housing quality (%) Deficiencies										
2 or more	18.41	39.33^{***}	50.46^{***}	34.77^{***}	35.51^{***}	15.78^{*}	18.77	21.32	22.93	22.25
3 or more	8.33	23.16^{***}	33.60 ***	21.56^{***}	20.24^{***}	6.61^{*}	6.86	9.70	10.30	9.03
4 or more	3.93	12.86^{***}	23.47^{***}	11.15^{***}	11.65^{***}	2.77^{*}	3.49	6.15	5.05	3.75
5 or more	1.79	7.08^{***}	10.90 ***	5.49^{***}	6.02^{***}	1.07^{*}	1.10	3.69^{*}	2.16	2.05
Unsound	0.58	1.53^{**}	2.53^{***}	1.47^{**}	1.52^{**}	0.56	0.84	1.28	1.41	0.33
Note: Statistics are weighted.										

^aCaribbean other than Puerto Rico and Dominican Republic. ^bMexico, Central America, and South America.

^cRussia and successor states to the Soviet Union.

^dKorea, Philippines, Southeast Asia (Burma, Cambodia, Laos, Malaysia, Singapore, Thailand, and Vietnam), and Other Asia. ^eCategories under "Owner" and "Renter" are subtenure categories and therefore sum to 100 percent (or near 100 percent because of rounding). ^fSignificance tests not conducted for these variables. *p < 0.10. **p < 0.05. ***p < 0.01. Indicates significant difference between the group marked and native-born white non-Hispanics.

for New York either are significantly less likely than native-born, non-Hispanic whites to have affordability problems or have no significant differences. For renter households with incomes below 50 percent of the median income, only households from Russia and Other Asian countries have significantly greater rent burdens than native-born white renter households.

The greater tendency for immigrant households to be crowded is apparent for all birthplace categories, yet at very different levels. The most extreme crowding is registered for foreignborn households from India, Pakistan, and Bangladesh, among which nearly 28 percent contain more than one person per room, a figure that is almost 14 times greater than that for native-born white households (2.3 percent). Foreign-born households from Latin America; the Dominican Republic; China, Hong Kong, and Taiwan; and the Other Asian countries also report high levels of crowding and one of the highest levels of extreme crowding (i.e., more than 1.5 persons per room).¹³

Turning to the measures of housing quality, foreign-born Dominican, Caribbean and African, and Latin American households and island-born Puerto Rican households have a significantly greater tendency than native-born white households to live in units plagued by numerous housing deficiencies and in unsound buildings. Moreover, some of the differences are quite large. For example, while fewer than 2 percent of native-born white households live in units with at least five reported maintenance deficiencies, nearly 11 percent of foreign-born Dominican households live in such units. By contrast, foreign-born European households are significantly less likely than native-born white households to live in units with *any* maintenance deficiencies.¹⁴

Multivariate Analysis

Our bivariate results indicate that immigrants overall pay more for housing as a proportion of total household income and live in more crowded and worse-quality housing than their native-born counterparts. Since life cycle, socioeconomic, racial and ethnic, and neighborhood characteristics of immigrants differ from those of native-born households, a more complete analysis requires the use of multivariate techniques. This section presents the results of three sets of descriptive logistic regressions explaining the variability in household crowding, unsound housing conditions, and magnitude of deficient housing. We focus on the effect of nativity status on these three housing conditions after controlling for life cycle, socioeconomic, racial and ethnic, and neighborhood characteristics. These models are estimated for renters only because renters comprise the overwhelming majority of households living in overcrowded and poorer-quality housing (Schill and Scafidi forthcoming).¹⁵

 $^{^{13}}$ These households are also the most likely to be crowded (using both measures) when the focus is on renter households exclusively (table A.4).

¹⁴ The same general pattern of differences is evident when renter households are examined separately (table A.4), although in this instance, the apparent quality advantages enjoyed by foreign-born European households are also shared by foreign-born Russian households.

¹⁵ Models for homeowners, as well as hierarchical models for each group (for the overall sample, renters, and homeowners), are available upon request from the authors.

Tables 5 through 7 contain the results of our logit regressions predicting unsound housing, the presence of three or more maintenance deficiencies, and crowding, respectively. Each table follows the same format. The first three columns show the logistic regression coefficients (and their standard errors) of hierarchical models that focus on basic nativity-status differences and thus parallel the descriptive analyses of renter households in table 3. The first model (in column 1) contains the dummy variable for nativity status as well as life cycle and socioeconomic characteristics, the second (in column 2) introduces race and ethnicity, and the third (in column 3, the fully specified model) adds the contextual indicators-the percentage of people in the sub-borough who are recent immigrants and who are blackand borough location. Columns 4 and 5 contain the coefficients for models with a slightly different focus: comparing all foreign-born households (column 4) and foreign-born households by birthplace (column 5) with native-born white households (in the presence of all available controls). These analyses, especially the model using the birthplace dummy variables, parallel the descriptive analyses in table 4. The model chi-square statistics indicate that adding each new block of variables in the hierarchical models (columns 1 to 3) significantly improves the model and that the fit of all fully specified models (columns 3 to 5) is significant.¹⁶

In our analysis of the multivariate models, we focus on variables concerning nativity status, race, and ethnicity. For the most part, the life cycle and socioeconomic variables have the expected effects. Households headed by older householders and households with higher incomes tend to live in less-crowded, better-quality units, although the relationship between total household income and these dependent variables is frequently insignificant.¹⁷ Households headed by married couples are more likely to be crowded and less likely to live in unsound or badly maintained housing. The remaining characteristics—the presence of children under 18, the presence of unrelated individuals, education below the postsecondary level, and the receipt of public assistance¹⁸—are associated with crowding and lower-quality dwellings.¹⁹

¹⁶ In columns 2 and 3, the degrees of freedom equal the number of variables added in the respective block of variables. We also compared the fully specified models in columns 4 and 5 with parallel models in which we omitted the birthplace dummy variables and race/ethnicity. The model chi-square statistics indicated that adding these variables significantly improved the fit of both models.

¹⁷ We estimated separate specifications for all of our multivariate models, eliminating public assistance and education, both separately and together, to evaluate whether the correlation between these variables and household income explains the unexpected insignificant effect of income. When public assistance alone is removed, household income becomes marginally significant (at $p \le 0.10$) in the model for crowding only. Removing education alone does not affect the coefficient for household income in any model. When both variables are removed, total household income achieves significance in the models for crowding (at $p \le 0.01$) and soundness (at $p \le 0.05$) but not for deficiencies (although in this model, the insignificant household income coefficient becomes negative). There were also minor changes in some of the other coefficients in these various alternative specifications, which are available from the authors.

¹⁸ We estimated separate specifications for all of our multivariate models, adding one dummy variable indicating if the household lives in public housing and one indicating if the household receives other forms of housing assistance (e.g., Section 8). This specification was run once with public assistance and housing income remaining in the model, and once after eliminating public assistance. In the first respecification (with both public assistance and income in the model), the significance of public assistance dropped from $p \leq 0.01$ to $p \leq 0.05$ in the unsound structures model; the effect of public assistance remained the same in the models for crowding and maintenance deficiencies. The effect of household income remained insignificant across all models. The dummy variable for nativity status lost its significance in the unsound structures model but remained the same in the crowding and maintenance deficiencies models. In the second respecification (omitting public assistance), the effect of household income remained the sflort of nativity status became insignificant in the unsound structures model but remained the same in the crowding and maintenance deficiencies models. In the second respecification (omitting public assistance), the effect of household income remained the same across all models, but the effect of nativity status became insignificant in the unsound

In general, households in areas with a high percentage of recent immigrants and blacks are more likely to live in unsound housing or in a unit with three or more maintenance deficiencies. For crowding, only the immigration-related contextual variable emerges as significant. Moreover, households in Brooklyn and Queens are less likely than those in Manhattan to exhibit each of these outcomes, while households in the Bronx and Staten Island exhibit mixed effects.

Unsound Housing. As shown in each of the pooled models in table 5 (columns 1 to 3), whether a householder is foreign born is significantly and positively related to the likelihood of living in unsound housing. Indeed, in the fully specified, pooled model (column 3), the coefficient for nativity status indicates that immigrant households are 1.3 times more likely than native-born households to live in unsound housing (exp 0.2519 = 1.286). Not surprisingly, when we compare foreign-born households with native-born white households in column 4, the magnitude of the difference increases. Indeed, in this model, a foreign-born household is 1.77 times more likely than a native-born white household to live in unsound housing (exp 0.5693 = 1.767). The birthplace model (column 5) reveals that the increased likelihood of living in unsound housing that is associated with immigrant status in the previous models is shared by households in every group except for Russia and Other Asia.

Native-born black, Puerto Rican, and non-Puerto Rican Hispanic households also are more likely to live in unsound housing than native-born white households. The most extreme difference is in the case of non-Puerto Rican Hispanic households, who are almost 2.5 times more likely to live in unsound housing than similarly situated native-born white households. This finding is notable because about one-third of this group is made up of native-born Dominicans, which suggests that Dominicans—both foreign born and native born—are at a distinct disadvantage in terms of the physical quality of their housing.²⁰

Housing Maintenance Deficiencies. Although our results support the hypothesis that immigrants are more likely than their native-born counterparts to live in unsound housing, our second housing quality variable, which measures the existence of three or more maintenance deficiencies, does not consistently perform as expected. As reflected in table 6, when compared with all native-born households as a group, foreign-born households are less likely to live in housing units with maintenance deficiencies.²¹ But in the model in which nativeborn white households comprise the reference group (column 4), we find that immigrant households are, in fact, significantly more likely to live in housing units with three or more maintenance deficiencies. Consistent with our findings in the descriptive analysis, however, the results in column 5 indicate that this housing quality disadvantage (compared with native-born white households) is not shared by all groups. Rather, island-born Puerto Rican

structures model; in the crowding and deficiencies models, this effect remained the same. There were also some minor changes in the significance level of selected other control variables.

¹⁹ Our models do not include the sex of the householder. In a separate specification we included this variable and found that it did not alter the relationship between nativity status and the various dependent variables. Because of possible multicollinearity caused by the high correlation between householder's sex and family structure, we decided to omit the former variable from our model.

²⁰ The differences in unsound housing between native-born non–Puerto Rican Hispanics and foreign-born Dominicans, Caribbeans and Africans, and Latin Americans, however, are not statistically significant.

²¹ This negative relationship between nativity status and housing deficiencies was robust, despite the selection of different thresholds of maintenance deficiencies.

households and foreign-born households from the Dominican Republic, the Caribbean and Africa, and Latin America are significantly more likely than native-born white households to live in units with three or more deficiencies, while immigrant households from Russia are significantly less likely to live in such units.

As was seen in the case of soundness, the chance of living in badly maintained housing units is also higher for native-born black, Puerto Rican, and non–Puerto Rican Hispanic house-

	Pooled Sar	mple of Renter H	Iouseholds	Native Born, Race-Specific	Birthplace
Variable	1	2	3	4	5
Nativity (1 = foreign born)	0.2978^{***} (0.0808)	0.2541^{***} (0.0922)	0.2519^{***} $(0.0959)^{*}$		
Age	-0.0130^{***} (0.0027)	$egin{array}{c} -0.0112^{***} \ (0.0028) \end{array}$	-0.0119^{***} (0.0028)*	-0.0121^{***} (0.0028)	-0.0115^{***} (0.0028)
Household headed by a married couple	-0.2180^{**} (0.0934)	-0.1557^{st} (0.0943)	$-0.0920 \\ (0.0953)$	$-0.1079 \\ (0.0947)$	$-0.0895 \\ (0.0957)$
Presence of: Children under 18	$0.1005 \\ (0.1037)$	0.0238 (0.1040)	0.0686 (0.1056)	0.0774 (0.1056)	$0.0535 \\ (0.1059)$
Others in the household beyond the nuclear family	0.3040^{***} (0.1130)	0.1992^{*} (0.1139)	0.2079^{*} (0.1158)	0.2285^{**} (0.1151)	$0.1906 \\ (0.1160)$
Education ^a Less than high school	0.6143^{***} (0.1035)	0.5080^{***} (0.1065)	0.5308^{***} (0.1085)	0.5662^{***} (0.1055)	0.5028*** (0.1087)
High school degree	0.4007^{***} (0.1024)	0.3227^{***} (0.1037)	0.3863^{***} (0.1061)	0.3988^{***} (0.1053)	0.3623^{***} (0.1064)
Total household income (logged)	$-0.0255 \ (0.0194)$	-0.0223 (0.0196)	$-0.0138 \\ (0.0197)$	$-0.0123 \\ (0.0198)$	$-0.0139 \\ (0.0199)$
Receiving public assistance	0.3970^{***} (0.0912)	0.3557^{***} (0.0923)	$\begin{array}{c} 0.3504^{***} \ (0.0935) \end{array}$	0.3539^{***} (0.0929)	0.3471^{***} (0.0957)
Race/ethnicity ^b Black, non-Hispanic		0.5811^{***} (0.1120)	$0.2183 \\ (0.1369)$	0.3035^{*} (0.1551)	0.3470** (0.1587)
Puerto Rican		$\begin{array}{c} 0.3767^{***} \\ (0.1365) \end{array}$	0.3293^{**} (0.1441)	0.3758^{*} (0.2088)	0.4303^{**} (0.2101)
Non–Puerto Rican Hispanic		0.5492^{***} (0.1359)	0.4021^{***} (0.1453)	0.8666^{***} (0.2883)	0.9117^{***} (0.2880)
Asian		$0.1924 \\ (0.1909)$	$0.2096 \\ (0.1939)$	-0.6538 (1.0693)	-0.6562 (1.0693)
Other		-0.7676 (0.8475)	-1.0304 (0.8551)	$-1.4123 \\ (1.6780)$	$-1.3702 \ (1.6779)$

Table 5. Logistic Regression Coefficients of Models Predicting Living in Unsound Structures

	Pooled San	nple of Renter I	Households	Native Born, Race-Specific	Birthplace
Variable	1	2	3	4	5
Birthplace ^c Puerto Rico					0.6613***
Dominican Republic					(0.1724) 0.7885^{***} (0.1821)
Caribbean and Africa					0.5704***
Latin America					0.7188^{***} (0.1846)
Europe					0.3990^{*} (0.2224)
Russia					0.2939 (0.2696)
China, Hong Kong, and Taiwan					0.6592^{**} (0.2921)
India, Pakistan, and Bangladesh					0.8274^{**} (0.3220)
Other Asia					$0.1296 \\ (0.3428)$
All other countries					$\begin{array}{c} 0.3936 \ (0.3343) \end{array}$
All foreign born ^d				0.5693^{***} (0.1305)	
Recent immigrants (% in subarea)			$\begin{array}{c} 1.9748^{***} \\ (0.6444) \end{array}$	$\begin{array}{c} 2.1444^{***} \\ (0.6305) \end{array}$	$\begin{array}{c} 1.8692^{***} \\ (0.6512) \end{array}$
Black (% in subarea)			1.0317^{***} (0.1851)	1.0205^{***} (0.1654)	0.9762^{***} (0.1811)
Borough ^e Bronx			-0.8002^{***} (0.1235)	-0.7981^{***} (0.1221)	-0.7977^{***} (0.1239)
Brooklyn			-0.4874^{***} (0.1069)	-0.5389^{***} (0.1040)	-0.4753^{***} (0.1090)
Queens			-0.9940^{***} (0.1361)	-1.0220^{***} (0.1355)	-0.9854^{***} (0.1404)
Staten Island			$0.0057 \\ (0.2511)$	$-0.0162 \\ (0.2514)$	$-0.0025 \\ (0.2527)$
Intercept	-2.2102^{***} (0.2397)	-2.5534^{***} (0.2540)	-2.6002^{***} (0.2662)	-2.6796^{***} (0.2734)	-2.6596^{***} (0.2752)
χ^2	175.10^{***}	34.21^{***}	110.44^{***}	320.68***	329.35***
Degrees of freedom	9	5	6	20	29
Ν	9,104	9,104	9,104	9,104	9,104

Table 5. Logistic Regression Coefficients of Models Predicting Living in Unsound Structures (continued)

Note: Statistics are weighted.

^aReference is college-level education or above.

^bApplies to native-born minorities only in models 4 and 5. In models 2 and 3, applies to both native-born and foreignborn categories. Reference is white, non-Hispanic householders.

^cReference is native-born, white, non-Hispanic householders.

^dCollapses all of the place of origin categories. Reference is native-born, white, non-Hispanic householders. ^eReference is Manhattan.

*p < 0.10, **p < 0.05, ***p < 0.01.

holds (when compared with native-born white households). The most extreme case is for native-born Puerto Ricans, who are more than twice as likely as native-born whites to live in deficient housing. Moreover, a simple *t*-test of the difference in coefficients for native- and foreign-born Puerto Rican households unexpectedly reveals that native-born households are more likely to live in deficient housing units. The finding that Latin American and black households have negative housing outcomes regardless of their nativity status strongly suggests that race and ethnicity may play a more significant role than immigrant status per se in determining the physical condition of households in New York City.

Crowding. Consistent with our descriptive statistics, the results in table 7 strongly support the hypothesis that, even after controlling for relevant demographic and socioeconomic char-

	Pooled San	ple of Renter 1	Households	Native Born, Race-Specific	Birthplace
Variable	1	2	3	4	5
Nativity (1 = foreign born)	-0.1136^{**} (0.0565)	-0.1829^{***} (0.0650)	-0.1956^{***} (0.0677)		
Age	-0.0072^{***} (0.0019)	-0.0040^{**} (0.0020)	-0.0045^{**} (0.0020)	-0.0056^{***} (0.0020)	-0.0037^{st} (0.0020)
Household headed by a married couple	-0.3078^{***} (0.0654)	-0.1815^{***} (0.0666)	-0.1119^{*} (0.0676)	-0.1566^{**} (0.0670)	$-0.1042 \\ (0.0679)$
Presence of: Children under 18 Others in the household beyond the nuclear family	0.3691^{***} (0.0724) 0.5414^{***} (0.0823)	0.2102^{***} (0.0734) 0.3305^{***} (0.0836)	0.2543^{***} (0.0748) 0.3573^{***} (0.0853)	0.2837^{***} (0.0749) 0.4087^{***} (0.0849)	0.2447^{***} (0.0753) 0.3427^{***} (0.0858)
Education ^a Less than high school High school degree	0.3753^{***} (0.0717) -0.0035 (0.0706)	0.1740^{**} (0.0745) -0.1562^{**} (0.0723)	$\begin{array}{c} 0.1766^{**} \\ (0.0761) \\ -0.0988 \\ (0.0741) \end{array}$	0.2430^{***} (0.0742) -0.0545 (0.0735)	0.1519^{**} (0.0766) -0.1134 (0.0744)
Total household income (logged)	$0.0066 \\ (0.0148)$	$0.0166 \\ (0.0154)$	$0.0233 \\ (0.0156)$	0.0256^{*} (0.0155)	$\begin{array}{c} 0.0221 \\ (0.0156) \end{array}$
Receiving public assistance	0.5772^{***} (0.0655)	0.4873^{***} (0.0669)	0.4633^{***} (0.0682)	0.4583^{***} (0.0677)	0.4972^{***} (0.0700)
Race/ethnicity ^b Black, non-Hispanic Puerto Rican Non–Puerto Rican Hispanic Asian Other		$\begin{array}{c} 1.0889^{***}\\ (0.0767)\\ 0.8530^{***}\\ (0.0960)\\ 0.9204^{***}\\ (0.1001)\\ 0.3401^{**}\\ (0.1400)\\ 1.0358^{***}\\ (0.3521) \end{array}$	$\begin{array}{c} 0.8393^{***}\\ (0.0917)\\ 0.6550^{***}\\ (0.1018)\\ 0.7067^{***}\\ (0.1063)\\ 0.3368^{**}\\ (0.1425)\\ 0.9076^{**}\\ (0.3594) \end{array}$	$\begin{array}{c} 0.5649^{***} \\ (0.1004) \\ 0.6314^{***} \\ (0.1341) \\ 0.3739 \\ (0.2362) \\ 0.4032 \\ (0.4248) \\ 1.0204^{**} \\ (0.4731) \end{array}$	$\begin{array}{c} 0.6931^{***}\\ (0.1021)\\ 0.7400^{***}\\ (0.1346)\\ 0.4556^{*}\\ (0.2345)\\ 0.4295\\ (0.4243)\\ 1.1412^{**}\\ (0.4696) \end{array}$

Table 6. Logistic Regression Coefficients of Models Predicting Three or More Housing Maintenance Deficiencies

	Pooled Sar	mple of Renter I	Iouseholds	Native Born, Race-Specific	Birthplace
Variable	1	2	3	4	5
Birthplace ^c Puerto Rico					0.3065**
Dominican Republic					(0.1210) 0.5756^{***} (0.1214)
Caribbean and Africa					(0.1314) 0.5704^{***} (0.1222)
Latin America					0.5525***
Europe					(0.1290) -0.2827 (0.1726)
Russia					(0.1730) -0.7045^{***}
China, Hong Kong, and Taiwan					0.1091
India, Pakistan, and Bangladesh					(0.2302) 0.0937 (0.2508)
Other Asia					(0.2598) -0.0926 (0.2272)
All other countries					0.3886*
All foreign born ^d				0.2304^{***} (0.0858)	(0.2277)
Recent immigrants (% in subarea)			2.7127^{***} (0.4666)	3.1781^{***} (0.4589)	2.6396^{***} (0.4694)
Black (% in subarea)			0.6098^{***} (0.1344)	0.9574^{***} (0.1238)	0.6809^{***} (0.1327)
Borough ^e Bronx			-0.1270	-0.1014	-0.1127
Brooklyn			(0.0823) -0.5463^{***} (0.0705)	(0.0813) -0.5940^{***}	-0.5026^{***}
Queens			(0.0795) -1.0374^{***}	(0.0778) -1.0706^{***}	(0.0808) -1.0282^{***}
Staten Island			(0.0969) -0.6710^{***} (0.2160)	(0.0964) -0.6335^{***} (0.2149)	(0.0992) -0.6556^{***} (0.2160)
Intercept	-1.3319^{***} (0.1796)	-2.0195^{***} (0.1937)	-2.0861^{***} (0.2042)	-2.1021^{***} (0.2059)	-2.0779^{***} (0.2070)
χ^2	351.45***	227.99***	176.46***	702.20***	764.19***
Degrees of freedom	9	5	6	20	29
Ν	8,359	8,359	8,359	8,359	8,359

Table 6. Logistic Regression Coefficients of Models Predicting Three or More Housing Maintenance Deficiencies (continued)

Note: Statistics are weighted. ^aReference is college-level education or above. ^bApplies to native-born minorities only in models 4 and 5. In models 2 and 3, applies to both native-born and foreign-born categories. Reference is white, non-Hispanic householders.

^eReference is native-born, white, non-Hispanic householders.

^dCollapses all of the place of origin categories. Reference is native-born, white, non-Hispanic householders. ^eReference is Manhattan.

*p < 0.10. **p < 0.05. ***p < 0.01.

acteristics, immigrants tend to live in more crowded conditions than their native-born counterparts. The dummy variable for nativity status is positive and statistically significant (column 3), indicating that compared with all native-born households, foreign-born households are about twice as likely to be crowded (exp 0.7082 = 2.03). The odds that a foreign-born household will be crowded rise, not unexpectedly, when the comparison group is native-born white households (exp 1.1030 = 3.01). Finally, the coefficients for each of the national origin groups are positive and statistically significant. The highest propensity toward crowding is found for households from India, Pakistan, and Bangladesh; such households are 7.1 times more likely to be crowded than statistically similar native-born white households (exp 1.9615 = 7.11). Notably, in the fully specified models, only blacks face significantly higher odds of living in crowded households, suggesting that crowding—unlike physical deterioration in housing—is a condition largely limited to immigrants.

	Pooled San	ple of Renter 1	Households	Native Born, Race-Specific	Birthplace
Variable	1	2	3	4	5
Nativity $(1 = \text{foreign born})$	0.8738^{***} (0.0813)	0.7404^{***} (0.0912)	0.7082^{***} (0.0940)		
Age	-0.0305^{***} (0.0033)	-0.0294^{***} (0.0034)	-0.0300^{***} (0.0034)	-0.0302^{***} (0.0034)	-0.0289^{***} (0.0034)
Household headed by a married couple	1.1762^{***} (0.0856)	1.1822^{***} (0.0882)	1.2212^{***} (0.0892)	1.2555^{***} (0.0878)	1.1895^{***} (0.0899)
Presence of: Children under 18 Others in the household beyond the nuclear family	$\begin{array}{c} 1.3206^{***} \\ (0.1031) \\ 2.4637^{***} \\ (0.1037) \end{array}$	$\begin{array}{c} 1.3064^{***}\\ (0.1037)\\ 2.4177^{***}\\ (0.1053)\end{array}$	$\begin{array}{c} 1.3352^{***}\\ (0.1046)\\ 2.4519^{***}\\ (0.1068)\end{array}$	$\begin{array}{c} 1.3189^{***} \\ (0.1043) \\ 2.4384^{***} \\ (0.1057) \end{array}$	$\begin{array}{c} 1.3638^{***}\\ (0.1056)\\ 2.4723^{***}\\ (0.1078)\end{array}$
Education ^a Less than high school High school degree	0.4125^{***} (0.0951) 0.2168^{**} (0.0937)	0.4263^{***} (0.0984) 0.2357^{**} (0.0954)	0.4407^{***} (0.0991) 0.2608^{***} (0.0964)	0.3858^{***} (0.0959) 0.2114^{**} (0.0948)	0.4929^{***} (0.1000) 0.2861^{***} (0.0978)
Total household income (logged)	$-0.0218 \\ (0.0209)$	$-0.0193 \\ (0.0209)$	$-0.0163 \\ (0.0210)$	$-0.0169 \\ (0.0210)$	$-0.0154 \\ (0.0210)$
Receiving public assistance	0.4515^{***} (0.0897)	0.5228^{***} (0.0911)	0.5311^{***} (0.0919)	$\begin{array}{c} 0.4405^{***} \\ (0.0911) \end{array}$	0.5628^{***} (0.0951)
Race/ethnicity ^b Black, non-Hispanic Puerto Rican Non–Puerto Rican Hispanic Asian Other		$\begin{array}{c} 0.3558^{***}\\ (0.1136)\\ -0.0449\\ (0.1370)\\ 0.3779^{***}\\ (0.1246)\\ 0.8311^{***}\\ (0.1439)\\ 0.4865\\ (0.4777)\end{array}$	$\begin{array}{c} 0.2675^{**} \\ (0.1339) \\ -0.1288 \\ (0.1441) \\ 0.1763 \\ (0.1338) \\ 0.7823^{***} \\ (0.1471) \\ 0.4045 \\ (0.4896) \end{array}$	$\begin{array}{c} 0.4788^{***} \\ (0.1716) \\ 0.3681^{*} \\ (0.2094) \\ 0.2799 \\ (0.3494) \\ 0.9536 \\ (0.6569) \\ 0.9914 \\ (0.6515) \end{array}$	$\begin{array}{c} 0.3396^{*} \\ (0.1758) \\ 0.2165 \\ (0.2126) \\ 0.1860 \\ (0.3511) \\ 0.9681 \\ (0.6561) \\ 0.9310 \\ (0.6181) \end{array}$

Table 7. Logistic Regression Coefficients of Models Predicting Household Crowding

	Pooled Sam	ple of Renter H	Iouseholds	Native Born, Race-Specific	Birthplace
Variable	1	2	3	4	5
Birthplace ^c Puerto Rico					0.4770**
Dominican Republic					(0.1927) 0.5316***
Caribbean and Africa					(0.1894) 1.0555^{***}
Latin America					$(0.1800) \\ 1.4283^{***}$
Europe					$(0.1725) \\ 0.7494^{***}$
Russia					(0.2256) 1.1413^{***} (0.2138)
China, Hong Kong, and Taiwan					1.3399***
India, Pakistan, and Bangladesh					(0.2544) 1.9615^{***}
Other Asia					$(0.2349) \\ 1.5569^{***}$
All other countries					(0.2294) 1.2050^{***}
All foreign born ^d				1 1030***	(0.2892)
Thi loreign born				(0.1410)	
Recent immigrants (% in subarea)			3.3759^{***} (0.6058)	3.4397^{***} (0.5876)	3.7243^{***} (0.6133)
Black (% in subarea)			$0.1075 \\ (0.1874)$	$0.1194 \\ (0.1650)$	$\begin{array}{c} 0.1514 \\ (0.1844) \end{array}$
Borough ^e					
Bronx			-0.1622 (0.1216)	-0.2571^{**} (0.1201)	-0.2492^{**} (0.1222)
Brooklyn			-0.3420^{***}	-0.3870^{***}	-0.5096^{***}
Queens			(0.1148) -0.5290***	(0.1106) -0.4904^{***}	(0.1176) -0.7505^{***}
			(0.1214)	(0.1196)	(0.1282)
Staten Island			$0.1644 \\ (0.2642)$	$0.2062 \\ (0.2629)$	$\begin{array}{c} 0.0827 \\ (0.2687) \end{array}$
Intercept	-2.9992^{***} (0.2653)	-3.2648^{***} (0.2746)	-3.4687^{***} (0.2919)	-3.5668^{***} (0.3053)	-3.6003^{***} (0.3049)
χ^2	1,607.12***	46.63***	41.89***	$1,665.42^{***}$	1,738.58***
Degrees of freedom	9	5	6	20	29
Ν	9,187	9,187	9,187	9,187	9,187

Table 7. Logistic Regression Coefficients of Models Predicting Household Crowding (continued)

Note: Statistics are weighted. Crowding is defined as more than one person per room in a unit. ^aReference is college-level education or above.

^bApplies to native-born minorities only in models 4 and 5. In models 2 and 3, applies to both native-born and foreign-born categories. Reference is white, non-Hispanic householders.

^cReference is native-born, white, non-Hispanic householders.

^dCollapses all of the place of origin categories. Reference is native-born, white, non-Hispanic householders. ^eReference is Manhattan.

*p < 0.10. **p < 0.05. ***p < 0.01.

Discussion

Our analysis suggests that, according to most objective indicators, immigrants in New York City are more likely than native-born households to experience hardships with respect to their housing. Foreign-born householders are significantly less likely than native-born householders to be homeowners and more likely to encounter affordability problems and live in crowded and unsound housing units.²² However, immigrants from regions such as Europe and Russia do not seem to encounter the same difficulties as their counterparts from Puerto Rico, the Dominican Republic, and Latin America.

Our most consistent findings emerge in our analysis of crowding. Even after controlling for all available contributing factors, foreign-born renter households are significantly more likely to be crowded, and the significantly higher odds of living in households with more than one person per room are evident for all groups. This disadvantage likely has its roots in the social networks driving immigration; that is, when immigrants first arrive in the destination country, they tend to live with friends and relatives as they adjust to life in their new homes. Co-residence may also be a strategy disproportionately chosen by immigrants to save on living expenses, either to send remittances back home or to hasten their own upward mobility.

Another possible explanation may be found in the demographic composition of immigrant groups, particularly in imbalances in the sex ratio. Indeed, it is probably no coincidence that household crowding is most common among immigrant households from India, Pakistan, and Bangladesh; the most recent arrivals from these countries include far more men than women (New York City Department of City Planning 1996), which clearly limits the potential for forming nuclear households. It is likely that groups of men are either residing with each other or in the homes of friends and relatives who were already here. While living in a crowded household may be considered a housing disadvantage by U.S. standards, it is important to remember that not all immigrant groups share this negative evaluation of crowding. Norms influencing household size or composition, or the obligations toward family and friends, may be culturally contingent (see, e.g., Myers, Baer, and Choi 1996).

Our findings also suggest that immigrant renters are more likely than native-born renters to live in unsound housing, although they do not consistently appear to be more likely to live in dwellings with three or more maintenance deficiencies.²³ Indeed, according to our first set of multivariate analyses, immigrant households as a group actually have a smaller probability of living in badly maintained housing units than native-born households. There are several possible explanations for this seemingly inconsistent finding. One may hinge on the way our two housing variables are measured. While the census enumerator assesses whether a building is sound or not based on his or her observation, the householder reports the presence of specific deficiencies. Most immigrants who have entered the United States

²² Significant differences between native- and foreign-born households in their housing conditions may be influenced by data limitations. The HVS contains no questions on householders' English proficiency or on their time in the United States. Previous research has demonstrated that these characteristics are important in explaining differences in the housing conditions of native- and foreign-born households (Alba and Logan 1992; Krivo 1995). It is likely that the significance of nativity status and birthplace in our models partially reflects the omission of these variables.

²³ The substantive significance of this difference in outcomes, however, should be treated with caution, since the occurrence of unsound housing is quite rare.

in recent years come from countries with housing standards that are typically below American norms. Their backgrounds and expectations may give immigrants a higher tolerance for housing conditions that native-born census enumerators would view as problematic.²⁴

A second explanation for this unexpected result may be that some immigrant groups are trading housing affordability for housing quality. For example, Russians are significantly more likely than individuals born in the United States to pay more than 30 percent of their income for housing. As a group, Russians have one of the lowest median income levels among the groups disaggregated by birthplace (table 2), but the rents they pay are higher than the median for all immigrant households (see table 3). Thus, they may report significantly fewer maintenance deficiencies than other foreign-born households because they are devoting an unusually high proportion of their income to housing.²⁵

Our seemingly contradictory finding that immigrants are more likely to live in unsound housing than native-born households, but less likely to live in units with three or more maintenance deficiencies, does not persist when we compare immigrants with native-born white households. Foreign-born households have a significantly higher probability than native-born white households of living in both unsound housing *and* housing with three or more maintenance deficiencies.²⁶

Thus, our results suggest that immigrants, most of whom represent racial and ethnic minorities, obtain worse-quality housing than native-born households composed of white persons. This finding, together with our results showing that native-born black and Hispanic households are more likely to live in inferior-quality housing than white households, suggests that both immigrants, especially those who are black or Hispanic, and native-born racial and ethnic minorities are disadvantaged in New York's housing market.

Our results also suggest that a large majority of immigrants and native-born New Yorkers live in decent housing, albeit housing that is expensive relative to their incomes. Nevertheless, substantial disparities exist between the housing conditions of immigrants and racial minorities on the one hand and native-born white households on the other. Because New York City's immigrant population is composed largely of racial and ethnic minorities, policies that benefit all minority households are likely to benefit both native-born and immigrant minorities. Among the most important are efforts to fight discrimination in the housing market. The Fair Housing Act of 1968 and state and local human rights statutes make it illegal for landlords, lenders, real estate agents, home sellers, and other actors in the housing market to discriminate on the basis of a wide variety of characteristics, including race and

 $^{^{24}}$ Several articles (Myers, Baer, and Choi 1996; Pader 1994) suggest that crowding standards may be culturally contingent.

²⁵ Although a relationship no doubt exists between rent and housing quality, we do not employ rent as an independent variable because the direction of causality between housing quality and rent is ambiguous.

²⁶ Of course, it is possible that the increasingly "transnational" aspect of current immigration flows (e.g., Sontag and Dugger 1998) may also contribute to the housing disadvantages exhibited by certain immigrant groups, especially those whose countries of origin (such as Dominicans) are a short plane ride away. That is, by maintaining homes and identities in two countries, some immigrants may forgo high-quality living conditions in New York City to achieve such conditions in their countries of origin. While these factors may indeed contribute to our findings, the similarity in the patterns of disadvantages among both native- and foreign-born racial and ethnic minorities underscores the significance of race as a determinant of housing conditions in New York City.

national origin. Increased efforts by government to enforce these laws will increase housing opportunities for immigrants as well as native-born racial and ethnic minorities.

Public policy makers may also wish to target assistance directly to members of particularly disadvantaged immigrant groups such as Dominicans and Puerto Ricans. People in these groups may fare less well in the housing market than native-born households because of language limitations and because they are less knowledgeable about New York City's complicated housing market. To the extent that this is true, efforts to assist these groups in their search for housing might be useful. Housing counseling and homeownership outreach by government agencies, lenders, local service agencies, and fraternal organizations might also be helpful.

Moreover, New York City's tight housing market doubtless places immigrants at a competitive disadvantage with respect to native-born households. Because a large proportion of foreign-born households have moved to the city relatively recently, long waiting lists for subsidized housing and low rates of mobility induced by rent regulation mean that they must join a long queue for certain types of housing. Additional housing subsidies, policies to promote new housing construction, and the elimination or reduction of regulations that discourage mobility and drive up housing costs would likely bring substantial benefits to the city's foreign-born population.

Future research on the housing conditions of immigrants in New York City—and in the nation as a whole—needs to examine other aspects of housing conditions, namely, affordability and the concurrence of multiple housing problems. Indeed, our results point to many extreme cases of excessive rental burdens borne by both immigrant and nonimmigrant households and show that some immigrant groups appear to be at greater risk of experiencing the range of housing problems we examine. These are important housing policy issues that are worthy of further examination. Future research should also focus on the neighborhoods in which immigrants settle. The selection and consumption of housing are inextricably bound together with the choice and experience of neighborhood conditions. Neighborhood quality has been found to influence a wide variety of human outcomes, including educational attainment and employment (Duncan and Brooks-Gunn 1997; Ellen and Turner 1998; Galster and Killen 1995).

Future research should also evaluate immigrants' settlement patterns from a longitudinal perspective. The political and economic climate from which immigrants migrate and the context of their reception upon entering the United States are important to the success of immigrants as they settle in this country (Portes and Zhou 1992). The success of immigrants who have been in the United States for some time may well affect the experiences of recent immigrants. To date, little research has incorporated these factors when examining immigrants' housing and residential location.

Appendix

Table A.1. Household and Neighborhood Characteristics of Foreign- and Native-Born Renter Households in New York City

Characteristic	Foreign Born	Native Born
Race/Ethnicity (%)		
White, non-Hispanic	22.61***	51.23
Black, non-Hispanic	17.77***	34.84
Puerto Rican	18.15^{***}	9.82
Non–Puerto Rican Hispanic	28.04^{***}	2.71
Asian	12.90^{***}	0.89
Other	0.53	0.51
Household characteristics		
Mean age (years)	45.87	45.65
Household headed by a married couple (%)	39.94***	25.66
Presence of:		
Children under 18 (%)	26.99***	22.73
Others in the household beyond		
the nuclear family (%)	16.83^{***}	8.46
Education (%)		
Less than high school	38.48^{***}	21.38
High school degree	26.84	28.13
College and more	34.69^{***}	50.49
Median household income (\$) ^a	20,800	25,020
Receiving public assistance (%)	28.27***	21.84
Neighborhood characteristics (mean %)		
Recent immigrants	15.00^{***}	11.37
Black	23.93^{*}	24.94
Ν	4,442	4,745

Note: Statistics are weighted.

^aSignificance test not conducted for this variable.

*p < 0.10. **p < 0.05. ***p < 0.01.

ity

						Foreign Born				
Charateristic	Native Born, White, Non-Hispanic	Puerto Rico	Dominican Republic	Caribbean ^a and Africa	Latin America ^b	Europe	Russia ^c	China, Hong Kong, and Taiwan	India, Pakistan, and Bangladesh	Other Asia ^d
Household characteristics Mean age (vears)	48 43	50.16***	42.35***	49.66***	41 19***	54 75***	51.13***	47.79	38 88**	4036***
Household headed by a married	30.30	97 £5***	31.04	36.40***	44.63***	40 66***	57 96***	58 98**	66. 43***	53 40***
Presence of:										
Children under 18 (%) Others in the household beyond	13.17	24.60***	30.03***	30.12***	Z1.91	10.84**	20.97	21.31***	30.0U***	20.00
the nuclear family (%) Education (%)	2.87	15.38^{***}	27.55***	17.59^{***}	24.54^{***}	4.66*	11.65^{***}	13.38^{***}	20.93^{***}	9.71^{***}
Less than high school	13.15	59.83^{***}	58.03^{***}	28.84^{***}	39.68^{***}	28.21^{***}	24.14^{***}	40.50^{***}	15.74	14.37
High school degree	24.57	24.08	23.59	31.44^{***}	33.33^{***}	30.83^{***}	21.00	20.46	24.27	16.89^{***}
College and more	62.28	16.08^{***}	18.38^{***}	39.72^{***}	26.99^{***}	40.95^{***}	54.85^{***}	39.04^{***}	59.99	68.74^{***}
Median household income (\$) ⁶	35,000.00	11,360.00 1	14,400.00	24,093.00	26,472.00	24,000.00	13,320.00	24,000.00	33,800.00	36,600.00
Receiving public assistance (%)	7.43	49.56***	49.70^{***}	16.94^{***}	20.30***	11.66^{***}	47.31^{***}	9.60	4.56^{*}	7.65
Neighborhood characteristics (mean %)			*** ** **	***OF 1 F		***OO OF	*** ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		** ** **	****
necent immigrants Black	10.59	26.51^{***}	22.19***	10.49**** 46.62***	22.47***	12.82	10.54	10.12 7.26***	15.45^{***}	14.70 9.44*
Ν	2,378	804	581	830	632	508	357	179	160	234
<i>Note:</i> Statistics are weighted. ^a Caribbean other than Puerto Rico and D ^b Mexico, Central America, and South Am	Jominican Repu nerica.	ıblic.								

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^cRussia and successor states to the Soviet Union. ^dKorea, Philippines, Southeast Asia (Burma, Cambodia, Laos, Malaysia, Singapore, Thailand, and Vietnam), and Other Asia. ^eSignificance tests between groups not conducted for this variable. ^{*}p < 0.10. **p < 0.05. ***p < 0.01. Indicates significant difference between the group marked and native-born white non-Hispanics.

	Perc	ent
Characteristic	Foreign Born	Native Born
Crowding		
More than 1 person/room	17.26***	5.81
More than 1.5 persons/room	5.77***	1.83
Housing quality		
Deficiencies		
2 or more	37.18**	35.08
3 or more	21.79	21.78
4 or more	12.75	12.78
5 or more	6.37	6.06
Unsound	1.63**	1.11

Table A.3.Housing Characteristics of Foreign- and Native-Born Renter Households
in New York City

Note: Statistics are weighted.

*p < 0.10. **p < 0.05. ***p < 0.01.

						Foreign Bo	E			
Charateristic	Native Born, White, Non-Hispanic	Puerto Rico	Dominican Republic	Caribbean ^a and Africa	Latin America ^b	Europe	$ m Russia^{c}$	China, Hong Kong, and Taiwan	India, Pakistan, and Bangladesh	Other Asia ^d
Crowding (%)										
More than 1 person/room	2.94	10.24^{***}	20.04^{***}	17.32^{***}	26.69^{***}	7.54^{***}	16.44^{***}	19.23^{***}	34.51^{***}	19.48^{***}
More than 1.5 persons/room	1.34	3.76^{***}	6.87^{***}	3.95^{***}	9.64^{***}	3.05^{**}	5.29^{***}	7.71^{***}	10.12^{***}	8.39***
Housing quality (%)										
Deficiencies										
2 or more	24.46	42.90^{***}	53.06^{**}	42.54^{***}	40.86^{***}	22.17	19.90^{*}	30.15	27.78	25.71
3 or more	12.39	25.62^{***}	35.51^{***}	27.47^{***}	23.73^{***}	9.43^{*}	7.49^{***}	15.77	12.73	11.22
4 or more	6.37	14.60^{***}	24.99^{***}	14.89^{***}	14.03^{***}	4.08^{**}	3.86^{**}	10.37	5.99	4.75
5 or more	2.99	8.03^{***}	11.61^{***}	7.54^{***}	7.08^{***}	1.59^{**}	1.30^{**}	6.21^{*}	2.78	2.85
Unsound	0.68	1.73^{**}	2.69^{***}	1.75^{**}	1.70^{*}	0.99	0.99	2.15	1.81	0.46
Note: Statistics are weighted ^a Caribbean other than Puert	l. to Rico and Domi	inican Repul	blic.							

Table A.4. Housing Characteristics of Foreign- and Native-Born Renter Households in New York City by Birthplace

^bMexico, Central America, and South America.

^TRussia and successor states to the Soviet Union. ^dKorea, Philippines, Southeast Asia (Burma, Cambodia, Laos, Malaysia, Singapore, Thailand, and Vietnam), and Other Asia. **p* < 0.10. ***p* < 0.05. ****p* < 0.01. Indicates significant difference between the group marked and native-born white non-Hispanics.

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