

Regional Disparities in Homeownership Trajectories: Impacts of Affordability, New Construction, and Immigration

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Abstract

In contrast to the 1980s, we find substantial increases in the homeownership rates of young adults in the 1990s. Focusing on the younger half of the baby boom generation, aged 35 to 44 in 2000, we explore the factors that caused steeper trajectories into homeownership in some metropolitan areas. Factors include prices and incomes, housing construction relative to employment growth, and rates of household formation and immigration. Homeownership gains are modeled separately for whites, blacks, Asians, and Hispanics.

Our findings highlight the importance of household formation on regional homeownership rates. Evidence shows greater homeownership gains in areas with greater rent increases, indicating lower relative costs of owning, and with greater price increases, indicating greater investment incentives. Our findings also underscore the importance of keeping housing construction consistent with employment growth. Finally, the effect of immigration was especially important for Hispanics, sharply depressing homeownership in regions with more recently arrived immigrants.

Keywords: Demographics; Homeownership; Immigration

Introduction

Homeownership is a principal indicator of economic and social well-being in America (Rohe, Van Zandt, and McCarthy 2002; Rossi and Weber 1996). After the 1990 census, an alarm was sounded over the fact that the homeownership rate of young households had dropped sharply (by more than 5 percentage points), signifying that the baby boom generation was failing to sustain the achievements of its predecessors (Green 1996; Myers et al. 1992).

Of major interest is how fully this lagging generation has caught up in the ensuing decade.

Previous studies have found wide regional disparities in the homeownership trends of age groups. Analysis of the 50 states showed a substantial reversal of homeownership fortunes: States that had been lagging enjoyed rebounds as regional economic forces shifted between the 1980s and 1990s (Myers 2001). For example, 49 states experienced homeownership gains during the 1990s, while only 18 experienced such gains in the 1980s (Simmons 2001b). A more careful analysis of these trends should choose to study metropolitan areas, because they better represent actual housing markets. The analysis should also be disaggregated by race and Hispanic origin because the changing demographic mix could cause homeownership rates to decline even if each group was achieving at a higher rate than before.

Our study analyzes the early homeownership trajectories of young adults aged 25 to 34 and 35 to 44. We compare these trajectories between 1990 and 2000 in the 100 most populous metropolitan areas. We find substantial disparities in the regional patterns of homeownership, and we test the effect of several factors that could contribute to higher or lower rates.

Several factors can be hypothesized to shape the pace of progress into homeownership. First, it would be expected that metropolitan areas where house prices increase relatively faster than incomes would have lower increases in homeownership than areas where the opposite was true. However, at the same time, greater increases in prices relative to rents also create an investment incentive that could stimulate more home purchases among young adults. In addition, the relative balance of housing supply (new construction) and demand (employment growth) is expected to help explain the greater access to homeownership in some areas rather than others. Findings with regard to the effect of new construction are especially important because this variable is the most subject to policy influence. Further, in the case of Hispanics and Asians, homeownership trends may be strongly influenced by immigration over the past decade, given that new arrivals are much more likely to be renters than owners. Accordingly, we estimate how the share of the age cohort that is composed of recent immigrants, rather than longer-settled immigrants or native-borns, has affected the homeownership rate in each metropolitan area. Finally, we also test for the effect of accelerated household formation on homeownership rates. We expect that areas where the age cohort has increased its household formation over the decade will have added relatively more renters and fewer owners within that cohort, thereby depressing the homeownership rate.

The results are largely consistent with the literature on the influence of metropolitan-level house prices, incomes, and the role of the immigrants in metropolitan areas. The findings with respect to incentives for home purchase are especially notable. Other results concern the importance of housing supply and the balance between employment growth and changes in supply. Increases in single-family permits lead to higher homeownership rates, but employment growth that exceeds the growth in housing supply lowers regional rates. Finally, the analysis finds that increases in the rate of household formation have an independent and negative effect on homeownership.

Background

Homeownership rises rapidly with age. The most critical years for attaining homeownership are between ages 25 to 34 and 35 to 44—the stage in which households establish their economic and residential careers. Given the relative permanence of the transition to homeownership, success in this stage lays the basis for housing careers in the middle and elderly years as well. Of additional importance in recent decades is the fact that the large baby boom generation (born between 1946 and 1964) has been in this range. In 1990, the older half of the baby boomers was between 35 and 44, while the younger half was between 25 and 34. By 2000, the younger baby boomers were between 35 and 44. Thus, an analysis of homeownership trends in this age group translates into an analysis of the well-being of the baby boom generation.

National trends for young age groups

We first examine homeownership trends for the nation in table 1. During the 1980s, there was a pronounced decline among young adults, even as rates increased among the elderly (Myers et al. 1992). In the 1990s, changes in homeownership rates were much more favorable for young households of almost all races and in both age groups than they were in the 1980s. Even where homeownership rates failed to rise, the decline of the previous decade was arrested. The resurgence was greater for blacks and Hispanics than it was for non-Hispanic white households or for the age groups as a whole. Asians and Pacific Islanders comprise the one case where homeownership rates continued to decline, especially between ages 25 and 34. This may be due to the large number of Asian immigrants in this age group, or it could be due to Asians' concentration in metropolitan areas with some of the highest costs and lowest homeownership rates (Painter, Yang, and Yu 2003).

Table 1. Homeownership Rates for Young Adults of Different Races and Hispanic Origin, United States, 1980 to 2000 (in Percents)

	1980	1990	2000	Change from 1980 to 1990	Change from 1990 to 2000
All households	64.4	64.2	66.2	-0.2	2.0
Non-Hispanic white	68.5	69.1	72.4	0.6	3.3
Black (includes Hispanics)	44.4	43.4	46.3	-1.0	2.9
Asian/Pacific Islander	52.5	52.2	53.2	-0.3	1.0
Hispanic	43.4	42.4	45.7	-1.0	3.3
25 to 34	51.6	45.3	45.6	-6.3	0.3
Non-Hispanic white	55.7	51.0	53.0	-4.7	2.0
Black (includes Hispanics)	29.7	23.3	27.3	-6.4	4.0
Asian/Pacific Islander	38.2	34.9	31.8	-3.3	-3.1
Hispanic	33.9	28.9	32.9	-5.0	4.0
35 to 44	71.2	66.2	66.2	-5.0	0.0
Non-Hispanic white	75.6	71.8	73.2	-3.8	1.4
Black (includes Hispanics)	47.6	43.0	44.6	-4.6	1.6
Asian/Pacific Islander	61.0	58.0	57.8	-3.0	-0.2
Hispanic	49.6	45.6	48.8	-4.0	3.2

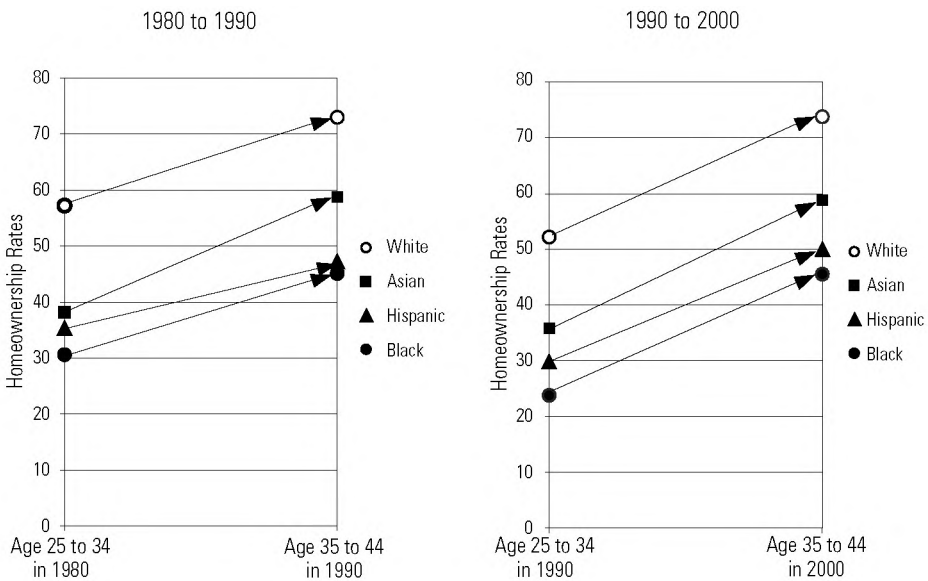
Source: U.S. Bureau of the Census 1980a, 1980b, 1990, 2000.

In our study, we place particular emphasis on the group between 35 and 44 in 2000. In the past, the younger group has been considered the prime age for attaining homeownership. However, increasing emphasis is now being given to the 35–44 age group. In recent years, the age at marriage and at family formation has been delayed substantially, especially in the Northeast and in the larger metropolitan areas. This is also confounded with longer periods of education, including increasing professional and postgraduate education. The result is that in some metropolitan areas, the path to homeownership begins at a very young age, while in others—especially those where costs are higher and education levels are also higher—homeownership is delayed. Taking a reading at age 35 to 44 provides a way to measure young adults’ progress that avoids these variations in lifestyle among people in their 20s. In effect, a comparison of the 35–44 age group in the two decades amounts to a comparison of the homeownership attainments of earlier and later baby boomers when they were at the same stage in life. In turn, comparison with the still earlier cohort that was between 35 and 44 in 1980 provides an assessment of how the baby boomers have fared relative to their predecessors.

An additional rationale for concentrating on those who were between 35 and 44 in 2000 is that they were between 25 and 34 in 1990 and transitioned

into age 35 to 44 over the 1990s. Comparing these age groups in the two censuses allows us to execute a quasi-panel or cohort longitudinal design (Myers 1999). As shown in figure 1, households in each of the four major racial-ethnic groups made dramatic progress in homeownership as they advanced into the 35–44 age group. White households clearly have much higher levels of homeownership than minorities, but the latter demonstrate dramatic upward surges in attainment despite their slower start.

Figure 1. Cohort Progress into Homeownership from Age 25 to 34 to Age 35 to 44, 1980 to 2000



Note: White refers to non-Hispanic whites. Asian refers to non-Hispanic Asians and Pacific Islanders.

Figure 1 compares trajectories in the 1980s with those in the 1990s. The racial-ethnic cohorts in 1980 commenced their trajectories from higher initial homeownership rates. For example, in 1980, blacks aged 25 to 34 began with 30 percent homeownership, while those aged 25 to 34 in 1990 began with 24 percent. However, what is especially noteworthy is that, despite the lower initial level, the black households' trajectory reached virtually the same level of homeownership by 2000 as the earlier trajectory for the same group in 1990. Clearly, the trajectories were steeper in the 1990s than in the 1980s, helping the later cohort make up lost ground.

Metropolitan areas with the greatest increases and decreases in homeownership among young adults

We conducted a closer analysis of trends during the 1990s for the 100 largest metropolitan areas (primary metropolitan statistical areas [MSAs] or consolidated MSAs [CMSAs]). Here we focus solely on the 35–44 age group, when homeownership is expected to be attained by the majority of those who will ever do so. Comparing this age group in 1990 and 2000 also has the advantage of highlighting differences in homeownership attainment between the front and trailing halves of the baby boom generation. In some metropolitan areas, the later cohort may have caught up and surpassed the homeownership levels of its predecessor. In other areas, it may still have lagged behind.

Homeownership gains at age 35 to 44 varied markedly for the 100 largest metropolitan areas. During the 1990s, homeownership rates among all households aged 35 to 44 increased in 55 of the metropolitan areas, with the largest increase observed in Austin, TX (+6.9 percentage points), and the greatest decrease seen in Albany, NY (–4.8 percentage points). (See table 2.)

Among black households of the same age, increases occurred in 48 metropolitan areas. The greatest increase was found in McAllen, TX (+10.9 percentage points) and the greatest decrease in Scranton, PA (–10.9 percentage points). (See table 3.) Among Hispanic households of the same age, increases occurred in 41 metropolitan areas. The largest increase was found in Miami (+9.5 percentage points), while the greatest decrease occurred in Lexington, KY (–19.2 percentage points). (See table 4.)

The size of the metropolitan area bears some relationship to the likelihood of increasing homeownership. We find that increases for 35- to 44-year-olds during the 1990s were greatest for blacks and Hispanics in metropolitan areas where the size of their group was the largest (correlations of 0.23 and 0.29, respectively). The explanation for this size effect is not known but could reflect several factors. Larger areas might constitute housing markets that present more favorable investment returns for prospective buyers. Alternatively, the largest metropolitan areas might have been more likely to be selected for buyer assistance programs, and so the size effect could reflect differential access to counseling and mortgage programs. Finally, it is also possible that metropolitan areas with the greatest access to homeownership might have induced more employment growth and more in-migration.

Whatever the reasons, we note that many of the most extreme decreases, and even some of the greatest increases, were in metropolitan areas with very few households in the designated age-race group. This creates an instability in measurement, and the large changes draw attention to areas that are actually smallest and least important. Therefore, it is potentially misleading to compare

Table 2. Homeownership Rate Changes in the 1990s for All Householders Aged 35 to 44, Ranked from 1 to 15 (Highest) and 86 to 100 (Lowest) among the 100 Largest Metropolitan Areas

Rank	Metropolitan Area	Number of Householders Aged 35 to 44 in 2000	Difference in Ownership Rates from 1990 to 2000
1	Austin–San Marcos, TX	117,407	6.86
2	Melbourne–Titusville–Palm Bay, FL	42,809	5.82
3	Colorado Springs, CO	50,440	4.97
4	Las Vegas, NV–AZ	130,395	4.10
5	Fort Myers–Cape Coral, FL	31,533	4.03
6	McAllen–Edinburg–Mission, TX	35,654	3.75
7	Sarasota–Bradenton, FL	41,314	3.55
8	Denver–Boulder–Greeley, CO*	249,735	3.53
9	Daytona Beach, FL	36,465	3.04
10	West Palm Beach–Boca Raton, FL	92,347	2.87
11	Houston–Galveston–Brazoria, TX*	423,595	2.83
12	Raleigh–Durham–Chapel Hill, NC	113,459	2.65
13	El Paso, TX	51,213	2.64
14	Miami–Fort Lauderdale, FL*	333,306	2.49
15	Phoenix–Mesa, AZ	269,679	2.33
⋮	⋮	⋮	⋮
86	Fresno, CA	66,921	-1.72
87	Harrisburg–Lebanon–Carlisle, PA	54,420	-1.78
88	Little Rock–North Little Rock, AR	51,778	-1.80
89	Buffalo–Niagara Falls, NY	101,851	-1.85
90	Scranton–Wilkes-Barre–Hazleton, PA	48,441	-2.00
91	Hartford, CT	107,658	-2.01
92	Los Angeles–Riverside–Orange County, CA*	1,341,877	-2.10
93	Johnson City–Kingsport–Bristol, TN–VA	39,133	-2.25
94	San Diego, CA	239,141	-2.34
95	Honolulu, HI	62,217	-2.55
96	Syracuse, NY	64,734	-2.69
97	Allentown–Bethlehem–Easton, PA	55,117	-3.06
98	Rochester, NY	98,136	-3.47
99	Providence–Fall River–Warwick, RI–MA	103,547	-4.13
100	Albany–Schenectady–Troy, NY	77,577	-4.75

Note: Metropolitan areas ranked between 16 and 85 are omitted to save space. The full table is available on request.

*Consolidated MSAs. The rest are MSAs.

Table 3. Black Homeownership Rate Changes in the 1990s for Ages 35 to 44, Ranked from 1 to 15 (Highest) and 86 to 100 (Lowest) among the 100 Largest Metropolitan Areas

Rank	Metropolitan Area	Number of Black Householders Aged 35 to 44 in 2000	Difference in Ownership Rates from 1990 to 2000
1	McAllen–Edinburg–Mission, TX	111	10.87
2	Stockton–Lodi, CA	3,107	9.23
3	West Palm Beach–Boca Raton, FL	13,352	7.45
4	Colorado Springs, CO	3,645	7.21
5	Boise City, ID	235	6.39
6	Washington–Baltimore, DC–MD–VA–WV*	192,106	6.29
7	Atlanta, GA	118,715	6.06
8	Austin–San Marcos, TX	9,397	6.03
9	Lakeland–Winter Haven, FL	5,195	5.46
10	New York–Northern New Jersey–Long Island, NY–NJ–CT–PA*	305,273	4.68
11	Memphis, TN–AR–MS	42,212	4.56
12	Raleigh–Durham–Chapel Hill, NC	25,226	4.26
13	Fort Myers–Cape Coral, FL	2,326	4.13
14	Albuquerque, NM	1,723	4.02
15	Miami–Fort Lauderdale, FL*	65,281	3.73
:	:	:	:
:	:	:	:
86	Syracuse, NY	4,053	–3.28
87	Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD*	102,666	–3.31
88	Youngstown–Warren, OH	4,526	–3.71
89	Johnson City–Kingsport–Bristol, TN–VA	916	–4.12
90	Harrisburg–Lebanon–Carlisle, PA	4,299	–4.13
91	Lancaster, PA	1,072	–4.39
92	Spokane, WA	631	–5.08
93	Albany–Schenectady–Troy, NY	5,031	–5.12
94	Louisville, KY–IN	13,172	–5.25
95	Little Rock–North Little Rock, AR	11,332	–5.43
96	Madison, WI	1,624	–6.04
97	Oklahoma City, OK	10,542	–6.11
98	Rochester, NY	9,632	–7.06
99	Tulsa, OK	6,488	–8.38
100	Scranton–Wilkes-Barre–Hazleton, PA	555	–10.89

Note: Metropolitan areas ranked between 16 and 85 are omitted to save space. The full table is available on request.

*Consolidated MSAs. The rest are MSAs.

Table 4. Hispanic Homeownership Rate Changes in the 1990s for Ages 35 to 44, Ranked from 1 to 15 (Highest) and 85 to 100 (Lowest) among the 100 Largest Metropolitan Areas

Rank	Metropolitan Area	Number of Hispanic Householders Aged 35 to 44 in 2000	Difference in Ownership Rates from 1990 to 2000
1	Miami–Fort Lauderdale, FL*	132,338	9.54
2	Chicago–Gary–Kenosha, IL–IN–WI*	102,352	8.93
3	Bakersfield, CA	16,904	7.78
4	Las Vegas, NV–AZ	22,347	6.99
5	Springfield, MA	5,505	6.71
6	Sarasota–Bradenton, FL	2,474	6.42
7	Melbourne–Titusville–Palm Bay, FL	1,831	6.27
8	Houston–Galveston–Brazoria, TX*	101,407	6.24
9	Washington–Baltimore, DC–MD–VA–WV*	37,235	5.36
10	West Palm Beach–Boca Raton, FL	11,349	5.02
11	Lakeland–Winter Haven, FL	2,994	5.01
12	Austin–San Marcos, TX	24,250	4.76
13	Colorado Springs, CO	4,448	4.32
14	Daytona Beach, FL	2,105	4.21
15	McAllen–Edinburg–Mission, TX	31,669	4.19
⋮	⋮	⋮	⋮
85	Jackson, MS	276	–8.31
86	Mobile, AL	567	–8.31
87	Syracuse, NY	969	–8.57
88	Memphis, TN–AR–MS	1,684	–8.72
89	Columbus, OH	1,921	–9.25
90	Greenville–Spartanburg–Anderson, SC	1,824	–9.84
91	Nashville, TN	2,550	–10.56
92	Baton Rouge, LA	761	–11.12
93	Scranton–Wilkes-Barre–Hazleton, PA	455	–11.54
94	Charlotte–Gastonia–Rock Hill, NC–SC	4,679	–15.27
95	Indianapolis, IN	2,734	–15.44
96	Little Rock–North Little Rock, AR	847	–17.61
97	Johnson City–Kingsport–Bristol, TN–VA	372	–18.37
98	Greensboro–Winston-Salem–High Point, NC	3,498	–18.79
99	Louisville, KY–IN	1,290	–18.92
100	Lexington, KY	682	–19.17

Note: Metropolitan areas ranked between 16 and 84 are omitted to save space. The full table is available on request.

*Consolidated MSAs. The rest are MSAs.

the relative increases in homeownership between metropolitan areas of such widely varying sizes. The increases for blacks, for example, in New York or Atlanta are obviously more important than the substantial declines registered in Madison (WI) or Honolulu.

To adjust for this size effect and to better display trends, we have plotted the data from tables 2, 3, and 4 on a series of maps, figures 2, 3, and 4. Each metropolitan area is represented by a circle that is proportional to the size of the targeted group. The color of the circle indicates the amount of change in homeownership rates. Those metropolitan areas with very small population groups become only small dots on the map, and the larger ones stand out for their size.

The pattern of homeownership change for the entire 35–44 age group from 1990 to 2000 is displayed in figure 2. Increases in the rate, shown in dark gray, are prevalent across the country, with two notable exceptions. Homeownership in Los Angeles and other California metropolitan areas declined markedly, as indicated by the black circles. Similarly, throughout the Northeast, metropolitan areas experienced declines in homeownership rate or at best minimal changes for the age group in question. The deepest declines were recorded in the smaller metropolitan areas in the region.

In the case of black households aged 35 to 44, substantial gains in homeownership occurred along the East Coast and throughout the South, with a few notable exceptions (figure 3). The deep decline in homeownership among the large black population in Philadelphia is unlike that found in any other large city. Declines in Jacksonville (FL) and Houston also stand out, as do the deep declines in the small metropolitan areas of Arkansas and Oklahoma. By contrast, substantial gains are observed in Atlanta, Washington, DC, and New York—metropolitan areas that have some of the largest black populations. In the Midwest, gains in homeownership were achieved in Chicago and Indianapolis, but elsewhere only minimal changes or even declines are observed. In the West, minimal changes are recorded in Los Angeles as well, but gains are observed in both northern California and Las Vegas.

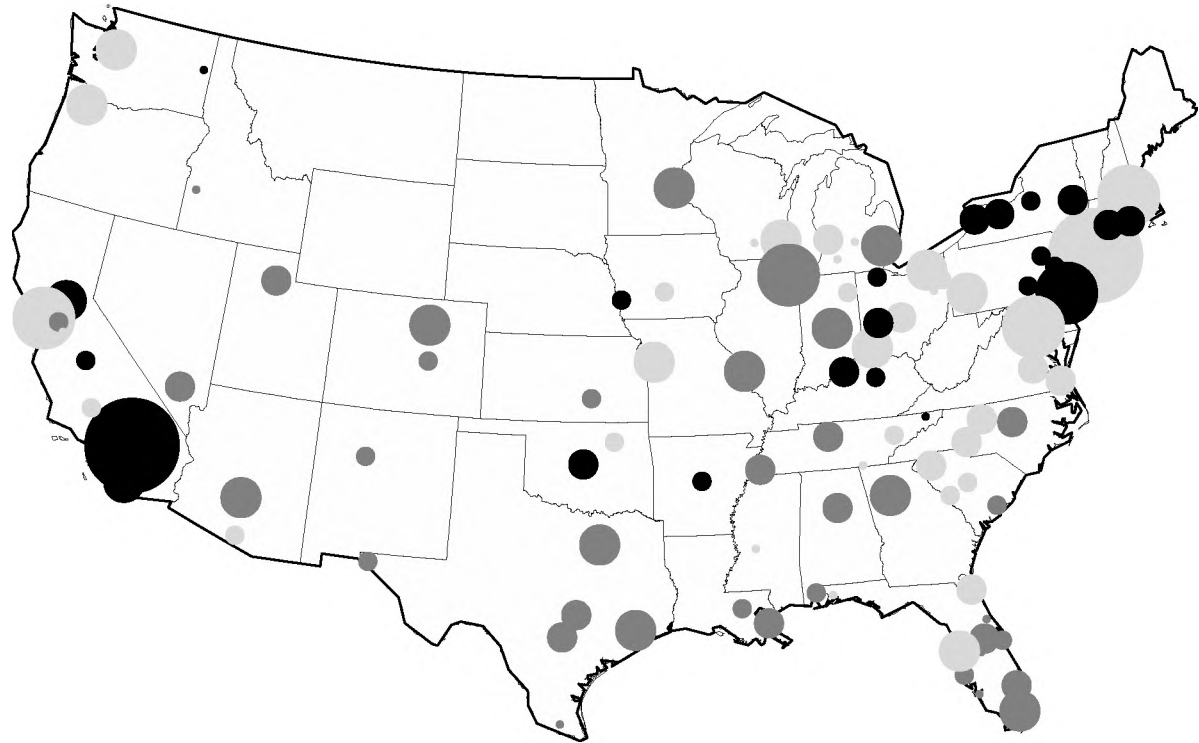
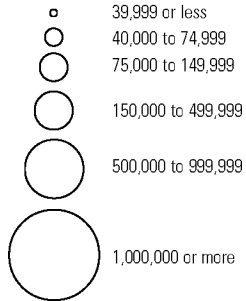
Among Hispanic households aged 35 to 44, gains are spread throughout the country, including the large metropolitan areas of California, Texas, Florida, the Northeast, and Chicago (figure 4). What stands out, by contrast, is the large number of metropolitan areas throughout the South and Midwest with very small Hispanic populations. Almost all of these areas recorded deep declines in homeownership that in all likelihood reflect the rapid growth of the Hispanic population through migration in the 1990s. Unlike the more settled residents of the large Hispanic population centers, relatively few of these newcomers were likely homeowners.

Figure 2. Change in Homeownership Rate in the Top 100 U.S. Metropolitan Areas for All Householders Aged 35 to 44, 1990 to 2000

Percentage Point Change
in Homeownership
between 1990 and 2000

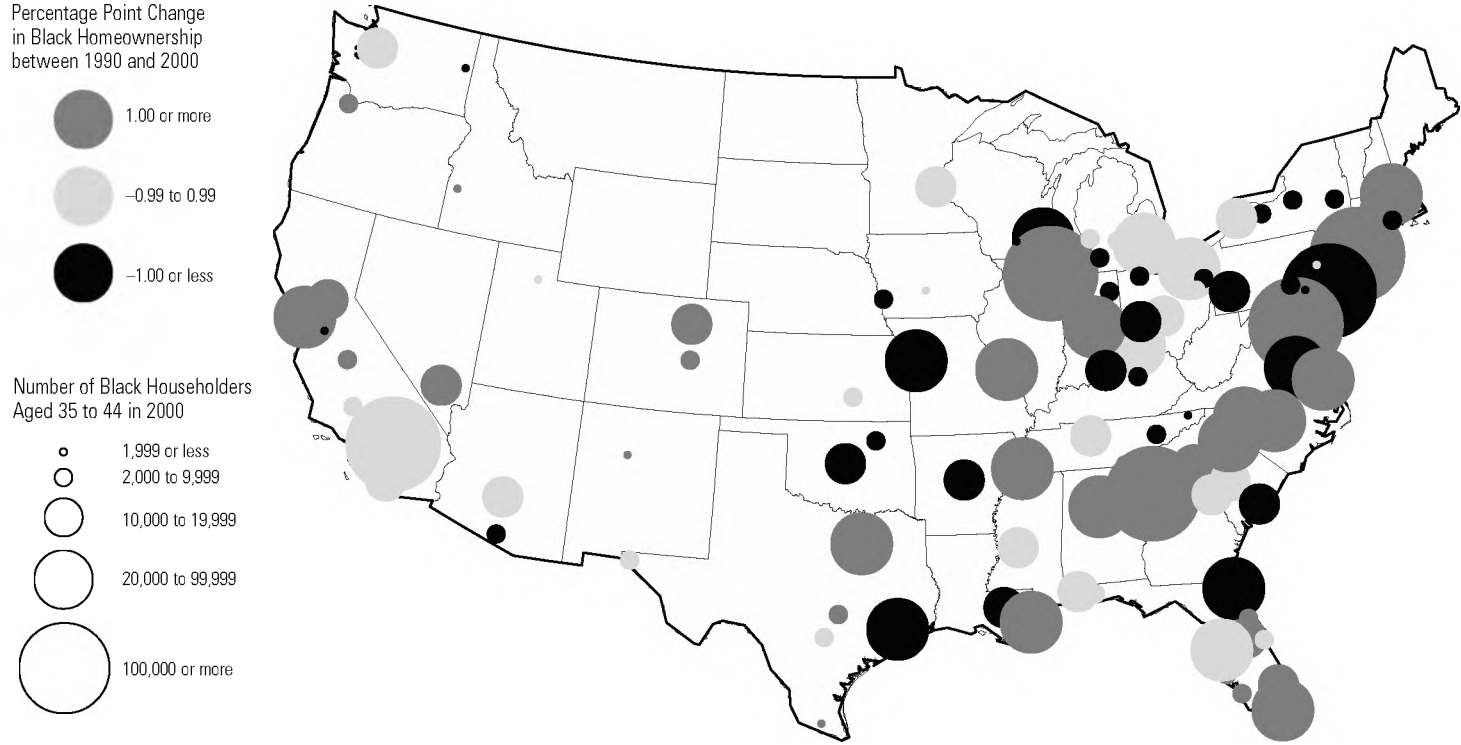


Number of Householders
Aged 35 to 44 in 2000



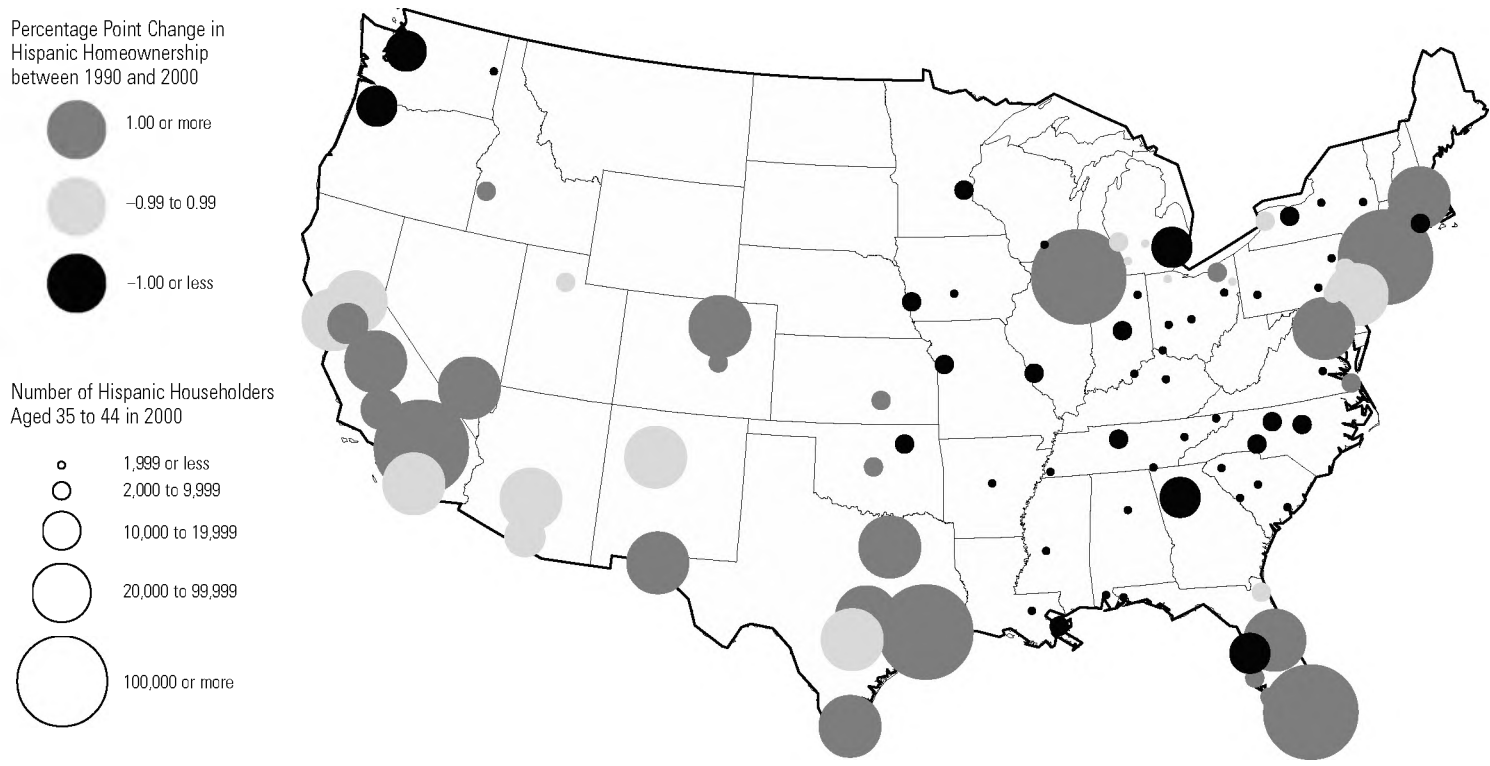
Source: Map created by Liang Wei.

Figure 3. Change in Black Homeownership Rate in the Top 100 U.S. Metropolitan Areas for Householders Aged 35 to 44, 1990 to 2000



Source: Map created by Liang Wei.

Figure 4. Change in Hispanic Homeownership Rate in the Top 100 U.S. Metropolitan Areas for Householders Aged 35 to 44, 1990 to 2000



Source: Map created by Liang Wei.

Regional differences

Despite the national averages for the younger half of the baby boom generation (those between 35 and 44 in 2000), homeownership gains were clearly substantially greater in some metropolitan areas than in others. Widening differences in regional economic growth, house prices, and homeownership created a volatile context for local chances of achieving homeownership. The pattern during the 1980s or early 1990s of booming prosperity in California and the Northeast was followed by a reversal as employment growth and prices slumped in those regions (Hughes 1996; Landis, Elmer, and Zook 2002). By contrast, formerly lagging regions in the Northwest, Midwest, and South surged upward. The remainder of this article focuses on how best to explain the regional differences in gains.

Review of influences on homeownership

The prospects for homeownership are affected in complex ways by several regional trends, among them changes in housing supply and demand. Part of housing demand is related to employment growth. Increases in employment can be expected to raise housing prices, while at the same time higher prices can also have a significant negative effect on labor force changes (Johnes and Hyclak 1999). What research has found, however, is that employment growth that increases housing demand and exerts pressure on prices ought to stimulate new construction, but is often subject to regulatory constraints that limit supply (Malpezzi 2002; Mayer and Somerville 2000). When new construction lags behind employment growth, shortages force up prices and restrict opportunities for new home purchases (Cervero 1996). Thus the balance between growth in employment and growth in housing supply is an important element in a region's homeownership rates.

A second element that affects regional demand is house prices, although the effect of rising prices on homeownership rates may not always be negative. If regional income levels rise in tandem with prices, the effect can be neutral. Moreover, in many cases, rising house prices capture the increases in a region's amenities that cause households to be willing to pay more for housing (Gyourko and Tracy 1991). Rising prices may also stimulate higher rates of home purchase by triggering an investment incentive that overrides affordability concerns (Henderson and Ioannides 1987). Thus, Myers et al. (1992) showed that the steepest declines in homeownership for young adults occurred in states with the steepest declines in prices, while rates held steady or even increased where prices rose most steeply. A recent study found that the same relationship held in the 1990s as in the 1980s (Myers 2001).

The purchase decision, of course, involves more than investment considerations. Households explicitly weigh the cost of renting versus owning, and it is the relative increase in housing prices that is important. At the same time, Case and Shiller (2003) have shown in their survey of four metropolitan areas in both 1988 and 2003 that households are very optimistic about how much they expect their house to appreciate (more than 10 percent per year over the next 10 years), thus suggesting that they view housing as a strong place to invest their money. Therefore, rising housing costs may not always lead to a decline in demand for owner-occupied housing (Pritchett 1977).

Demographic characteristics also play an important role in how consumers respond to market conditions. Older households that already own a home are largely insulated from market conditions, whereas young households must deal with them in full. In the past decade, there has been widespread recognition of the importance of this housing demography, although its exact interpretation has been debated (Green 1996; Gyourko and Linneman 1997; Hughes 1996). Large differences in homeownership rates between age groups and racial-ethnic groups often dominate more refined relationships of market adjustment (Masnick 2002).

More recently, scholars have begun to focus on the role of immigration in shaping housing demand (Joint Center for Housing Studies 2002; Myers, Megbolugbe, and Lee 1998; Painter, Gabriel, and Myers 2001; Pitkin et al. 1997). Coulson (2002) finds that immigrant status is perhaps the most important demographic factor in homeownership attainment. Borjas (2002) suggested that immigrants have lower homeownership rates than native-borns and that such differences have widened over time, thus implying that a growing immigrant presence could depress homeownership.

Less recognized is the effect of household formation on homeownership rates, a relationship suggested by Hendershott (1988) and Green (1996). In theory, the rising supply of housing, especially multifamily housing, increases opportunities and lowers the cost of household formation (Skaburskis 1994). When headship rises, however, the increase typically comes from new renter households that are added to the denominator of the homeownership rate, thereby lowering it. An analysis of trends among young adults for the 50 states in the 1990s found a strong inverse correlation ($r = -0.50$) between an increase in household formation and an increase in the homeownership rate (Myers 2001).

Hypotheses explaining regional differences in homeownership

The preceding review identifies several factors that can help explain why homeownership increases were greater in some metropolitan areas than in

others. Given the firm agreement that differences in homeownership attainment exist between age groups and racial-ethnic groups, there is little value in testing those factors here. Instead, we will focus on measuring the attainment of a single cohort stratified by racial-ethnic groups. The second half of the baby boom generation, the cohort aged 25 to 34 in 1990 and 35 to 44 in 2000, suffered substantial declines in homeownership relative to earlier generations. The overall question to be answered is how much progress toward homeownership they achieved during the 1990s and what features of metropolitan areas helped explain where they were most successful. Our analysis will separately examine the attainments of each of the four major racial-ethnic groups. Rather than compare whites and blacks, for example, we will investigate under what market conditions each group fared best. We investigate four main hypotheses.

Household formation. First, we expect that areas where the rate of household formation for the cohort has increased over the decade will have added relatively more renters and fewer owners. Accordingly, rising headship rates should lead to falling homeownership rates.

Price effect relative to cohort income. Second, we expect that areas where house prices increase relatively faster than the cohort's income should have smaller increases in homeownership. In general, higher prices should depress homeownership gains, and higher rents should increase them. At the same time, we are also aware of the counter hypothesis that rising prices that reflect the increased value of amenities or housing shortages create an investment incentive for increased homeownership.

New construction relative to employment growth. Third, we expect that metropolitan areas with greater housing construction relative to employment growth should have increased opportunities for homeownership. Like housing prices, the relative balance of housing construction and employment growth has a market-wide impact. Since added supply has a significant effect on prices, once price changes are introduced into the model, the construction effect should be reduced. However, prices may not fully absorb the effect of housing shortages, and the increased absolute number of housing opportunities is still expected to facilitate household mobility. The impact of single-family construction is expected to be positive for homeownership gains, while the impact of multifamily construction should be weaker.

Effect of the growing immigrant population. Finally, we expect that metropolitan areas where a large share of the 35–44 age cohort in 2000 is composed of recent immigrants will have substantially lower rates of homeownership and

those with a higher share of native-borns or long-settled immigrants will have higher rates. This hypothesis will be tested only for Hispanics and Asians, because the white and black groups in most metropolitan areas contain relatively few immigrants.¹

Data and methods

The study builds on data from the 2000 census combined with comparable data from the 1990 census. Our aim is to analyze trends over time for comparably defined geographic units and to determine which conditions in those areas may have led to greater increases in homeownership. We estimate a series of multivariate regressions to evaluate the relative contributions of different contextual factors that facilitate or impede progress toward homeownership.

Data

The study combines data from several sources, most of which are derived from the decennial censuses. This is an aggregate-level analysis of metropolitan areas, rather than an individual-level analysis with markers for metropolitan areas. The primary analysis was carried out before detailed Microdata Files from the 2000 census were available, but the summary files we used have certain advantages. First, the summary files specify all the demographic data required for the study. Second, the summary files are available for more specifically defined geographic areas than the Microdata Files. Given changes in metropolitan-area boundary definitions from census to census, we preferred to work with data that permit us to add or subtract component counties and townships to reconstruct comparable geographic definitions in the two census years, thus permitting a more accurate definition of comparable geographic areas for trend analysis.

Data are taken from a series of different summary files. Summary Files 1 and 2 report data on per capita household headship rates and per household homeownership rates of different age and racial-ethnic groups. Unpublished

¹ In 2000, only 4.8 percent of non-Hispanic whites and 9.3 percent of non-Hispanic blacks between 35 and 44 were foreign-born (tabulation from the Public Use Microdata Sample, 5% file). Moreover, a large portion of the foreign-born are concentrated in a handful of metropolitan areas. The New York area alone accounts for nearly half of all foreign-born blacks. The result is that in most of our sample of 100 metropolitan areas, the number of foreign-born whites and blacks in our designated age cohort is too small for analysis. By contrast, 87.3 percent of Asians and 58.8 percent of Hispanics in the age cohort are foreign-born, so that status is much more widely distributed.

tabulations from the census yield the immigration status (native- or foreign-born, and decade of entry for the foreign-born) of different groups.

These demographic data are then supplemented by contextual data for each metropolitan area. Household income for each cohort, by racial-ethnic group, is calculated from data in Summary File 3. Employment trends are taken from the Regional Economic and Income System database provided by the Bureau of Economic Analysis (2003). Housing construction trends are taken from the U.S. Bureau of the Census C40 reports (2003). Housing prices are provided by the Office of Federal Housing Enterprise Oversight's Housing Price Index (2001). Rents are derived from a special tabulation of gross rents for two-bedroom multifamily units that are 10 to 19 years old in each census year. Definitions of all variables used to model cohort homeownership progress are given in table 5.

Table 5. Definition of Variables

	Variable	Definition
Dependent	<i>Hown</i> ₂₀₀₀ ³⁵⁻⁴⁴	Homeowners as a percentage of households aged 35 to 44 in 2000 by racial-ethnic group
Independent	<i>Hown</i> ₁₉₉₀ ²⁵⁻³⁴	Homeowners as a percentage of households aged 25 to 34 in 1990 by racial-ethnic group
	Headship_change	Difference in the percentage of people who are householders, 2000 and 1990 by racial-ethnic group
	Income_change	Percent change in median household income, 1990 to 2000 by racial-ethnic group, CPI adjusted
	Price_change	Percent change in housing price in each MSA, 1990 to 2000, CPI adjusted
	Gross_rent_change	Percent change in median gross rent of specified rental units in each MSA, 1990 to 2000, CPI adjusted
	Job_growth	Absolute change in the number of jobs in each MSA, 1990 to 2000
	Construction_SF	Absolute number of single-family building permits in each MSA, summed 1990 to 1999
	Construction_MF	Absolute number of multi-family building permits in each MSA, summed 1990 to 1999
	Immigrant_prevalence	Percentage of households in a given racial-ethnic-age cohort that arrived in the United States between 1990 and 2000
	Immigrant_new	Percentage of households in a given racial-ethnic group that arrived in the United States between 1990 and 2000
	Immigrant_1019	Percentage of households in a given racial-ethnic group that have lived in the United States for 10 to 19 years
	Immigrant_20+	Percentage of households in a given racial-ethnic group that have lived in the United States for 20 years or longer
Weight	Target group	The number of households in target group, by age and racial-ethnic group in 2000

Note: CPI = Consumer Price Index.

Geographic areas

Detailed analysis focuses on a sample of the 100 most populous metropolitan areas, which are specified according to the geographic definitions used in the 2000 census. The areas comprise one or more whole counties, with the exception of New England, where areas are built from aggregations of townships. Data from the 1990 census are rearranged to conform to these 2000 definitions. For this study, we do not use primary MSAs that are subsets of the larger CMSAs. Instead, we use the whole CMSA as a unit. Thus, our set of the 100 largest metropolitan areas consists of both CMSAs and freestanding MSAs.

Sample

The sample comprises the 100 largest metropolitan areas, as defined. We conduct separate analyses of various age groups and racial-ethnic groups residing within the geographic sample.

Methods

As noted, homeownership attainment varies considerably. The formulation we adopted in this study emphasizes the growth in homeownership as cohorts advance 10 years through their housing careers. Although many households have achieved homeownership between the ages of 25 and 34, the transition from age 25 to 34 to age 35 to 44 is pivotal for those who are slower to achieve it. After age 44, the progression of homeowner status slows and begins to level off. Accordingly, our analysis models these trajectories by estimating rates at age 35 to 44 in 2000, controlling for the earlier rates achieved when the cohort was between 25 and 34 in 1990 and subject to the key contextual factors prevailing in each market area.

We conduct multivariate estimation through weighted least squares regression, with weights supplied by the size of each area's racial-ethnic-age target group. Models are specified as a lagged cohort regression, following the cohort economic design introduced by Pitkin (1990). The homeownership rate of a designated cohort in 2000 is specified as a function of its rate in 1990 and a series of changes affecting the market context of the metropolitan area over the decade. A cohort longitudinal design such as this has marked advantages over cross-sectional analysis with census data because it approximates a quasi-panel design (Myers 1999). However, a weakness of the design is that cohort membership in each metropolitan area is not closed: In- and out-migration churns the membership. Offsetting this weakness is the lower rate of migration common to the 35–44 age group, inclusion of the employment growth rate as

a proxy for higher and lower migration flows, and direct measurement of immigration status in the case of Hispanic and Asian households.

The model is specified as follows:

$$Hown_{2000}^{35-44} = \beta_0 + \beta_1 Hown_{1990}^{25-34} + \beta X + \epsilon \quad (1)$$

where

$Hown_{2000}^{35-44}$ = Homeowners as a percentage of households aged 35 to 44 in 2000

$Hown_{1990}^{25-34}$ = Homeowners as a percentage of households aged 25 to 34 in 1990

X is a vector of explanatory factors: *Headship_change*, *Income_change*, *Price_change*, *Gross_rent_change*, *Job_growth*, *Construction_SF* and *Construction_ME*, and *Immigrant_prevalence* (see table 5 for definitions of these and other variables).

The homeownership rate for the 35–44 age group in 2000 is modeled as a function of the cohort’s homeownership rate 10 years earlier, as modified by a series of additional factors. The market context variables are all measured over the 10-year period before the 2000 census. The reference group for *Immigrant_prevalence* is the native-born.

Results

We report the results of the model estimations in two sets. First, we show the estimation of the base model and each separate set of explanatory factors (table 6), presenting results separately for each of the four population groups. We present the full model estimations with all factors included, again separately for each group (table 7), and discuss the combined set of results with regard to each of our hypotheses.

Base model

The base model estimates homeownership rates in 2000 solely in relation to the homeownership rate of the same cohort in 1990, plus an intercept. As might be expected, the R^2 is very high for this base model, with the exception of Asians. Were it not for the intercept, the coefficient on the 1990 homeownership rate would measure the ratio of the 2000 rate to the 1990 rate.² It

² The coefficient of $Hown_{1990}$ is approximated by the mean of the 2000 ownership rate less the intercept, with that difference divided by the mean of the 1990 ownership rate.

Table 6. Weighted Regression of the Homeownership Rate at Age 35 to 44, by Race and Hispanic Origin, 100 Largest Metropolitan Areas

	Model 1	Model 2	Model 3	Model 4
White				
Intercept	30.74***	35.24***	31.99***	31.35***
How ₂₅₋₃₄ ₁₉₉₀	0.845***	0.856***	0.808***	0.824***
Headship_change		-0.723***		
Income_change			-0.014	
Price_change			0.045***	
Gross_rent_change			0.089***	
Job_growth				0.000014***
Construction_SF				-0.000007
Construction_MF				-0.000059***
Immigrant_new				
Immigrant_1019				
Immigrant_20+				
<i>df</i>	1	2	4	4
<i>F</i> value	494.3	340.8	216.3	189.3
<i>R</i> ²	0.835	0.875	0.901	0.889
Incremental <i>R</i> ²	—	0.041	0.067	0.054
Black				
Intercept	14.11***	21.52***	14.67***	14.21***
How ₂₅₋₃₄ ₁₉₉₀	1.356***	1.272***	1.320***	1.282***
Headship_change		-0.456***		
Income_change			0.019	
Price_change			0.049	
Gross_rent_change			-0.044*	
Job_growth				0.000005
Construction_SF				0.000027***
Construction_MF				-0.000085***
Immigrant_new				
Immigrant_1019				
Immigrant_20+				
<i>df</i>	1	2	4	4
<i>F</i> value	459.2	275.6	122.5	161.9
<i>R</i> ²	0.824	0.850	0.838	0.872
Incremental <i>R</i> ²	—	0.026	0.014	0.048

Table 6. Weighted Regression of the Homeownership Rate at Age 35 to 44, by Race and Hispanic Origin, 100 Largest Metropolitan Areas *Continued*

	Model 1	Model 2	Model 3	Model 4	Model 5
Hispanic					
Intercept	13.06***	15.57***	9.86***	9.60***	12.90***
<i>Hown</i> ₂₅₋₃₄ ₁₉₉₀	1.227***	1.214***	1.222***	1.277***	1.251***
Headship_change		-0.207			
Income_change			0.032		
Price_change			-0.074***		
Gross_rent_change			0.172***		
Job_growth				0.000007**	
Construction_SF				0.000013	
Construction_MF				-0.000041*	
Immigrant_new					-0.224***
Immigrant_1019					0.041
Immigrant_20+					0.055
<i>df</i>	1	2	4	4	4
<i>F</i> value	881.9	444.7	345.8	238.8	255.7
<i>R</i> ²	0.900	0.902	0.936	0.910	0.915
Incremental <i>R</i> ²	—	0.002	0.036	0.009	0.015
Asian/Pacific Islander					
Intercept	37.99***	40.56***	30.28***	39.15***	35.40***
<i>Hown</i> ₂₅₋₃₄ ₁₉₉₀	0.540***	0.594***	0.700***	0.598***	0.372***
Headship_change		-0.361***			
Income_change			0.044***		
Price_change			0.130***		
Gross_rent_change			0.042		
Job_growth				0.000009***	
Construction_SF				0.000015	
Construction_MF				-0.000132***	
Immigrant_new					0.299***
Immigrant_1019					-0.361***
Immigrant_20+					0.829***
<i>df</i>	1	2	4	4	4
<i>F</i> value	59.73	42.07	69.24	33.22	29.53
<i>R</i> ²	0.379	0.465	0.745	0.583	0.554
Incremental <i>R</i> ²	—	0.086	0.366	0.204	0.176
<i>Note:</i> White refers to non-Hispanic whites. Asian refers to non-Hispanic Asians and Pacific Islanders.					
* <i>p</i> < 0.1. ** <i>p</i> < 0.05. *** <i>p</i> < 0.01.					

defines the average upward slope of the trajectory as the cohort passes from 25 to 34 to 35 to 44 in each metropolitan area. This coefficient ranges from 1.36 for blacks to 0.54 for Asians (Model 1, table 6).

Hispanics are next highest at 1.23, in part because the intercepts are very low for blacks and Hispanics, thus placing more weight on the coefficient. Among Asians, the very high intercept and lower coefficient for 1990 homeownership, as well as the very low R^2 value, indicate that the history of the cohort is much less predictive of current homeownership for Asians than for others.

Household formation

The hypothesis that increases in household formation depress gains in homeownership is clearly supported in models that exclude the other contextual factors (Model 2, table 6). For whites, blacks, and Asians, the estimated coefficients are -0.72 , -0.46 , and -0.36 , respectively. The coefficient for Hispanics is not statistically significant. The household formation effect is largely sustained when we introduce other factors thought to influence homeownership (table 7). Only the effect for whites is markedly reduced by adding controls for rent changes and other factors. Even then, the white coefficient remains substantial at -0.41 , which implies that each 2 percentage point increase in the headship rate of the cohort translates into a decrease of almost 1 percentage point in homeownership rate.

Income and price trends

Estimation of the effects of income and price trends are generally similar for both the gross effects (table 6) and the full model (table 7). The results are somewhat mixed with respect to our hypotheses. With the exception of the Asian cohort, the growth in income of the cohort between 1990 and 2000 does not significantly affect the rate of progress into homeownership.

The pace of rent increases is significantly positive for promoting homeownership in most cases. In both the gross and full models, this has an especially strong effect on Hispanic homeownership progress. After controlling for new construction and other factors, the rent effect becomes insignificant for whites and turns significantly negative for blacks. Home price changes were hypothesized to either depress homeownership through constraints on affordability or to elevate it through investment incentives. Although the effects of house prices were mixed in the gross models, in the full models we find that house prices have a significant positive effect for all groups (most strongly for

Table 7. Weighted Homeownership Regression with Full Models

	White		Black		Hispanic		Asian	
	Model A	Model A	Model A	Model B	Model A	Model B	Model A	Model B
Intercept	35.18***	18.60***	2.673***	8.78***	37.09***	40.79***		
<i>Hown</i> ₂₅₋₃₄ <i>Hown</i> ₁₉₉₀	0.794***	1.319***	0.044***	1.222***	0.732***	0.564***		
Headship_change	-0.410***	-0.510***	0.188	-0.310*	-0.311***	-0.264***		
Income_change	-0.009	0.020	0.023	0.023	0.013*	0.015**		
Price_change	0.041***	0.048*	0.030*	0.004	0.207***	0.169***		
Gross_rent_change	0.032	-0.108***	0.036***	0.151***	-0.012	0.014		
Job_growth	0.000008***	0.000004	0.000004	0.000000	-0.000009***	-0.000004		
Construction_SF	0.000004	0.000028***	0.000008**	0.000005	0.000034***	0.000040***		
Construction_MF	-0.000052***	-0.000047***	0.000022	-0.000039*	-0.000074***	-0.000096***		
Immigrant_new				-0.286***		-0.096		
Immigrant_1019				0.193***		-0.047		
Immigrant_20+				0.216***		0.257**		
<i>df</i>	8	8	8	11	8	11		
<i>F</i> value	154.4	134.5	178.9	184.7	79.8	64.22		
<i>R</i> ²	0.931	0.922	0.940	0.959	0.875	0.889		

Note: White refers to non-Hispanic whites. Asian refers to non-Hispanic Asians and Pacific Islanders.

* $p < 0.1$. ** $p < 0.05$. *** $p < 0.01$.

Asians), suggesting that locations with rising house prices may also be the places with the highest perceived future returns on investment.

Employment growth and housing construction

Regional employment growth is an important benchmark for judging the relative rate of housing construction. In the gross models of table 6, employment growth has a positive effect on increasing homeownership for every group except blacks. But once controls are introduced for other factors in table 7, the effect of employment growth is reduced to insignificant for blacks and Hispanics. For Asians, the introduction of controls changes the impact of regional employment growth to significantly negative.

The effect of housing construction is largely consistent with our hypothesis. Once all controls are introduced, the volume of single-family housing permits has a pronounced positive effect on homeownership gains for all populations except whites. The effect is strongest for blacks and Asians. For the latter groups, the estimations imply that more single-family construction—10,000 units per decade (1,000 units per year)—is associated with an increase in the cohort's homeownership rate of 0.3 or 0.4 percentage points.

Conversely, results show that the volume of multifamily construction from 1990 through 1999 was associated with a negative effect on homeownership gains. In the models in table 7, these factors are all adjusted for the effect of home prices and rents on homeownership.

Given that prices, rents, and household formations are accounted for, the negative effect of multifamily construction is unexpected. It would appear that large volumes of new multifamily construction retard the growth in homeownership. The size of the effect, approximately twice as large as the one for single-family construction, is explained in two ways. First, the number of units added represents a much larger percentage increase than the equivalent number of single-family units. Second, it may also be that the change in rental prices does not capture all of the effects of adequate housing supply or other incentives to rent that are generated by a high level of multifamily construction.

Immigration

A large share of the Hispanic and Asian cohorts are foreign-born, and many are newly arrived immigrants. The importance of immigrants in the housing market has been widely documented (Joint Center for Housing Studies 2002; Painter, Gabriel, and Myers 2001; Pitkin et al. 1997). What has not been recognized to this point is how the growth in immigrants could depress the overall homeownership rate in a metropolitan area. Estimation results for Hispanic cohorts strongly support this hypothesis, while those for Asians yield contrary or mixed support.

The gross effects of immigration are shown in table 6. Among Hispanics, the share of households composed of immigrants who arrived in the past decade has a significant negative effect on the cohort's homeownership rate. Among Asians, the share of new immigrants significantly *raises* the homeownership rate. These findings are uncontrolled for other factors.

In the full model, the newcomer share strengthens its negative effect among Hispanics and loses its effect among Asians (table 7). There is an enormous impact on the homeownership rates for Hispanics. For every 10 percent of the cohort that consists of new arrivals, the homeownership rate falls nearly 3 percentage points relative to a cohort consisting of all native-born Hispanics. Among Asians, there is no negative effect for new arrivals, consistent with what we expect based on previous studies of Asian immigrants (Myers, Megbolugbe, and Lee 1998).

In the case of long-settled immigrants, a different pattern is found (table 7). For every 10 percent of the Hispanic cohort that consists of immigrants who have been in the United States for at least 20 years, the homeownership rate

increases 2 percentage points above what would be expected for a native-born cohort. In the case of Asians, the homeownership rate increases 2.5 percentage points. This pattern of achievement in excess of native-borns is consistent with the findings of previous studies (Myers, Megbolugbe, and Lee 1998). A cohort that was between 35 and 44 in 2000 and had more than 20 years of residence immigrated as teenagers or young children. These young immigrants have had a long time to adjust to social and economic conditions in the United States, living their entire housing careers in this context, and this advantage could be combined with stronger immigrant ambitions for homeownership than are common among the native-born.

Discussion

The preceding findings compare the housing careers of the younger members of the large baby boom generation observed in the 100 largest metropolitan areas through analysis stratified by major racial-ethnic groups. Rather than comparing cross-sectional differences observed across areas, this design directly measures the net gains in homeownership that accrue in each area as the cohort advances 10 years along its trajectory from age 25 to 34 to age 35 to 44. Because homeownership rises sharply through the younger age range, the average gain experienced in each metropolitan area was 21.8 percentage points, but there is substantial variation across areas in the rate of progress. The reasons for that variation are a subject for investigation.

One factor we identified has not been quantified by previous research. Household formation rates shifted slightly over the decade and their impact on homeownership rates net of other factors was consistently very important. An increase of 1 percentage point in the percentage of people who are householders lowered the group's increase in homeownership rates by 0.3 to 0.5 percentage points. The impact of prices, rents, and incomes was more varied, and only the change in house prices was a consistently positive predictor of homeownership. Household income increased for cohorts in this age range in all the metropolitan areas. Moreover, income trends are likely correlated with price trends, but only the latter are generally significant. Evidence offered earlier showed how surprisingly weak the correlation between median household income at the metropolitan level and homeownership for the 35–44 age group is.

The empirical findings with respect to the rate of housing construction relative to employment growth have potentially the greatest policy significance. Growth in employment is an excellent indicator of the number of potential new households in the region, and housing construction that fails to

keep pace severely constrains opportunities for both household formation and homeownership. It is noteworthy that the effect of single-family housing construction was especially crucial for the homeownership advancement of nonwhite households. In fact, the coefficients on single-family construction for blacks and Asians were more than seven times greater than they were for whites. These effects persist even after controlling for price, suggesting that prices may be sticky and not fully adjusted to the relative adequacy of supply within the decade we measured.

Our results also highlight the role of immigration in shaping homeownership rates. We found that recently arrived Hispanic immigrants have a substantial negative effect on the homeownership rate of Hispanics in a metropolitan area. This could help explain the many metropolitan areas throughout the U.S. heartland that had small Hispanic populations and experienced declining homeownership in the 1990s (figure 4). Many of these small populations were newly seeded by a wave of immigrants during the decade. By contrast, larger, well-established Hispanic areas appear to have enjoyed increases in homeownership—a fact that is consistent with the finding that areas with longer-settled immigrants enjoyed homeownership gains that were even higher than they were for native-borns.

The complexity of this pattern of immigrant effects indicates that minority groups with a substantial share of foreign-borns cannot be analyzed by a single indicator. Declines for Hispanics, for example, cannot be interpreted in the same way as declines for black households. If we are to understand the trend, we need to know nativity status and length of residence in the United States.

Conclusion

This study has noted, as have other researchers (Simmons 2001a, 2001b), the secular increase in homeownership rates that occurred in almost every state. These positive gains also occurred for young households in the second half of the baby boom generation and stand in contrast to the poor performance of these age groups in the 1980s. In contrast to previous work, our study focuses on the gains in homeownership in the 100 most populous metropolitan areas.

We found a large degree of variation in areas that saw increased versus decreased homeownership rates. Further, some places with growth in homeownership rates for blacks and Hispanics, such as Southern California and New York, experienced lower homeownership rates over the 1990s for the rest of the population.

The models in the multivariate analysis examine the relative importance of household formation, changes in house prices and income, growth in employment versus growth in housing supply, and immigrant status among Hispanics and Asians. In terms of house prices, incomes, and immigrant status, our results agree with those in the literature (e.g., Painter, Gabriel, and Myers 2001). The strongest results concern the role of household formation, suggesting that an increasing headship rate leads to lower metropolitan homeownership rates. The importance of housing supply as a determinant of homeownership demonstrates that increases in single-family housing permits led to higher homeownership rates.

Of all the explanatory variables, the construction rate is the most amenable to policy influence, and so its importance for enhancing homeownership deserves underscoring. The dominant set of policy effects on new construction is wielded at the municipal and county government levels. Zoning, comprehensive planning, growth management, and other smart growth tools can all be used to stimulate a level of housing construction that is balanced with the rate of employment growth in the region.

A major obstacle is that housing market effects operate at the regional level, while employment growth and housing construction locate themselves in local jurisdictions. The localities that are sustaining employment or housing growth are not always the same. The two types of growth often occur in different locations; the tax and other economic benefits of employment growth may accrue to one set of localities, while the service expenditures and other economic costs of housing construction accrue to a different set. Recognizing this imbalance, local officials often suppress construction. Thus, new policy tools are needed to reduce the disparity between the interests of localities on the one hand and the regional marketplace or regional welfare on the other. These instruments center on various means of tax revenue sharing, whether through rebates from the state to localities or exchanges among localities that share a regional economy.

Overall, our results confirm that the 1990s were a decade of progress into homeownership for young households of all racial-ethnic groups across the United States. At the same time, progress was not uniform, since some metropolitan areas experienced declines because of new immigrants, supply constraints, or affordability. Further work is needed to better understand the contributions of regional factors vis-à-vis national trends fostering homeownership.

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