Factors Affecting Hispanic Homeownership: A Review of the Literature

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Abstract

Homeownership rates have reached unprecedented levels in the United States. According to 2005 Current Population Survey data, virtually every segment of the population has higher homeownership rates than they did a decade ago—although the gains have been largest among Hispanics. Yet, despite the rapid growth in Hispanic homeownership over the past decade, the gap between non-Hispanic White and Hispanic homeownership rates is still 26 percentage points. In light of these statistics, this article has two goals: (1) to describe the demographic and socioeconomic characteristics of the U.S. Hispanic population and how these characteristics relate to the Hispanic homeownership gap and (2) to identify the main barriers to Hispanic homeownership, including barriers associated with the lack of information about the homebuying process, the real estate and housing markets, and the financial and mortgage markets. To accomplish these goals, the article reviews the existing literature and incorporates key information on Hispanic households derived from the decennial census and other publicly available national data sets. This article is derived from a more detailed review of Hispanic homeownership gaps (Cortes et al., 2006), and the reader is referred to this study for greater details on the data and literature cited in this article.

Introduction

Promoting homeownership has long been an objective of housing policy in the United States and is reflected in a wide variety of federal, state, and local programs and policies. The Internal Revenue

Service, U.S. Department of Housing and Urban Development, state housing finance agencies, and local community development corporations are among the numerous stakeholders that promote homeownership through a variety of programs. Underlying these programs is the belief that homeownership provides important benefits to both individuals and communities.[1]

Today, the benefits of homeownership are being increasingly realized as U.S. homeownership rates soar to unprecedented levels, although not all segments of the population are benefiting equally. According to 2005 Current Population Survey (CPS) data, virtually every segment of the population has higher homeownership rates than they did a decade ago—although the gains have been largest among Hispanics. Between 1993 and the fourth quarter of 2005, ownership rates rose by 5.8 percentage points among non-Hispanic Whites, 6.6 percentage points among African Americans, and 10.6 percentage points among Hispanics. Yet, despite these gains, sizable gaps in homeownership rates persist among Hispanics compared with non-Hispanic Whites. As of the fourth quarter of 2005, 76.0 percent of non-Hispanic Whites were homeowners compared with 50.0 percent of Hispanics. Thus, despite the rapid growth in Hispanic homeownership over the past decade, the gap between non-Hispanic White and Hispanic homeownership rates is still 26.0 percentage points.

This article examines Hispanic homeownership rates and gaps in an effort to understand the major barriers that restrict homeownership opportunities for this demographic group. The article uses decennial census data to provide a brief demographic profile of Hispanics in the United States and highlight key demographic characteristics that are associated with homeownership rates and gaps. The article also uses Census data to briefly discuss major trends that have occurred since 1980 and supplements this discussion with a review of the literature on homeownership that addresses the demographic and socioeconomic characteristics of the Hispanic population that contribute to the gap. The article also delineates the barriers to Hispanic homeownership beyond the demographic and socioeconomic characteristics of Hispanic households and summarizes the literature that investigates these issues. These barriers are associated with the lack of information about the home-buying process, the real estate and housing markets, and the financial and mortgage markets.

Hispanics in the United States

According to 2000 decennial census data, 9.2 million households of Hispanic origin and 35 million Hispanic people reside in the Unites States, representing 8.7 percent of all U.S. households and 12.5 percent of the total U.S. population. About 54 percent of Hispanic households in the United States are of Mexican origin, 12 percent are of Puerto Rican origin, 5 percent are of Cuban origin, and 3 percent are of Dominican origin.[2] South Americans and other Central Americans constitute 10 percent of Hispanic households and "other Hispanics" constitute 15 percent of these households.[3] Approximately 91 percent of Hispanic heads of household are White or "other" race (50 percent White and 41 percent other race), 6 percent are of two or more races, and only 2 percent are Black.[4]

Hispanics in the United States tend to be socioeconomically disadvantaged compared with non-Hispanic households. More than two-fifths of Hispanic households (44 percent) earn less than $30,000 annually, and less than one-quarter earn more than $60,000 a year (22 percent).

By contrast, only one-third of non-Hispanic households (34 percent) earn less than $30,000 and more than one-third (34 percent) earn more than $60,000 annually. Also, Hispanic households have relatively less formal education compared with non-Hispanic households. Almost one-half of Hispanic heads of household (46 percent) have less than a high school education and only one-third have some education beyond high school. Very few Hispanic households have a professional or graduate degree (4 percent). By contrast, about one-sixth of non-Hispanic households (16 percent) have less than a high school education and more than half (56 percent) have some type of education beyond high school. Nearly 10 percent of non-Hispanic households have a graduate or professional degree.

Age and family structures are also significantly different in Hispanic households than those in non-Hispanic households. Hispanic households in the United States are much younger than non-Hispanic households. More than three-fifths of Hispanic households (62 percent) are under age 45 compared with approximately two-fifths of non-Hispanic households (43 percent). A greater percentage of Hispanic heads of household than non-Hispanic household heads are in each of the three youngest age categories: under 30 (21 versus 12 percent), 30 to 34 (14 versus 9 percent), and 35 to 44 (27 versus 22 percent). Also, although most Hispanic (58 percent) and non-Hispanic (54 percent) heads of household are married, Hispanic married couples are more likely to have children than non-Hispanic married couples are. Across all household types, 43 percent of Hispanic households have children compared with 30 percent of non-Hispanic households.

Many Hispanics in the United States are immigrants. Most Hispanic households (53 percent) are foreign born; this percentage is much larger than the proportion of non-Hispanic households (8 percent) that are foreign born. Despite the large proportion of foreign-born households, more than two-thirds of Hispanic households (68 percent) are U.S. citizens. By contrast, nearly all non-Hispanic households (97 percent) are U.S citizens. The large proportion of foreign-born Hispanic households may suggest that a similarly large proportion of Hispanics have poor English-speaking skills; however, only about one-quarter of Hispanic heads of household report that they do not speak English (8 percent) or speak English poorly (18 percent). Most Hispanic households (75 percent) report that they speak English fluently. Among Hispanic immigrant[5] households, most have been in the United States for many years. More than half of these households (54 percent) have lived in the United States for 16 years or more, and few (13 percent) have been in the United States for 5 years or less.

The geographic distribution of Hispanics across the United States is uneven. Hispanics represent 25 percent or more of the total state populations in Arizona, California, New Mexico, and Texas. Hispanics are also heavily concentrated in Colorado, Florida, Nevada, New Jersey, and New York, constituting 12.5 to 24.9 percent of these states' populations. Except for Illinois and Kansas, Hispanics are considerably underrepresented in the Midwest. Regionally, Hispanic households are heavily represented in the West (17 percent), slightly underrepresented in the South and Northeast (8 percent and 7 percent, respectively), and considerably underrepresented in the Midwest (3 percent).

The overwhelming majority (98 percent) of Hispanic households reside in metropolitan areas and few are found in nonmetropolitan areas (2 percent). By contrast, fewer non-Hispanic households are located in metropolitan areas (93 percent) and the proportion of households in nonmetropolitan areas (7 percent) is triple that of Hispanic households.[6] More than half of all Hispanic households (53 percent) live in one of the 30 largest metropolitan areas in the United States, while one-third of non-Hispanic households (33 percent) live in these areas.

These characteristics are important, not only because they highlight the enormous diversity among Hispanic households, but also because they are critical to understanding how Hispanic homeownership rates and gaps may change over time. Indeed, a number of studies have found that many of these characteristics are associated either positively or negatively with the likelihood that a Hispanic household will become a homeowner.

The Hispanic Homeownership Gap: Contributing Factors[7]

In 2000, more than 105.4 million households were in the United States and approximately 69.8 million were homeowners. Less than half of the 9.1 million Hispanic households were homeowners (45.6 percent) compared with a large majority of the 79 million non-Hispanic Whites (72.5 percent) (see exhibit 1). The homeownership rates for African Americans (46.6 percent), Asians or Pacific Islanders (53.1 percent), and other non-Hispanic racial minorities[8] (51.2 percent) were also considerably lower than the rate for non-Hispanic Whites. As exhibit 1 demonstrates, in 2000, Hispanics had the largest homeownership gap (26.8 percentage points) of any minority group.

Homeownership rates have improved for most groups since the early 1990s. During the decade, the Hispanic homeownership rate increased by 3.5 percentage points from 42.1 percent in 1990, the largest gain among all racial and ethnic minorities and the only rate increase to exceed the increase among non-Hispanic Whites. As a result, the homeownership gap between Hispanics and non-Hispanic Whites narrowed slightly, by 0.11 percentage points, while it increased for African Americans by 0.65 percentage points, for Asians or Pacific Islanders by 2.48 percentage points, and for other non-Hispanics by 5.08 percentage points. Data from the 2005 CPS indicate that gains in Hispanic homeownership rates have continued to outpace gains among non-Hispanic Whites since 2000.

These figures suggest that Hispanics confront significant barriers to homeownership, and homeownership gaps among Hispanic households are persistent over time. Despite the homeownership gains made by Hispanics during the 1990s, the homeownership gap in 2000 was even larger than it was in 1980. Although the gap has narrowed somewhat since 2000, it was still 26.0 percentage points in the fourth quarter of 2005, according to CPS data. This trend raises a critical question: What factors contribute to this persistently large gap?

Although the literature on homeownership rates and gaps by race is extensive, research has only recently focused on Hispanic homeownership rates and gaps in particular. That literature suggests that much of this gap—although by no means all—is related to several key factors: age, income, level of education, net worth, household type, nativity, country of origin, English proficiency, citizenship status, years in the United States, and place of residence.

Exhibit 1

Homeownership Rates and Gaps,[a] 1980–2000

Household Head	1980			1990			2000		
	N	Rate (%)	Gap (%)	N	Rate (%)	Gap (%)	N	Rate (%)	Gap (%)
Hispanic	4,010,898	44.1	– 24.9	5,812,158	42.1	– 26.9	9,187,972	45.6	– 26.8
Non-Hispanic Black	8,284,691	45.4	– 23.6	9,691,699	43.9	– 25.2	11,796,057	46.6	– 25.9
Non-Hispanic Asian/ Pacific Islander	1,022,940	52.5	– 16.5	1,911,257	52.2	– 16.9	3,181,674	53.1	– 19.4
Other Non-Hispanic	485,017	52.6	– 16.4	628,292	52.9	– 16.2	2,236,977	51.2	– 21.3
Non-Hispanic White	66,590,515	69.0		73,664,936	69.1		79,077,421	72.5	
Total	80,394,061	65.0		91,708,342	64.2		105,480,101	66.2	

[a] *Homeownership gaps are calculated in relation to the non-Hispanic White homeownership rate.*

Source: U.S. Census Bureau's Integrated Public Use Microdata Series (IPUMS) using the 1980 1% metropolitan sample, the 1990 1% metropolitan sample, and the 2000 IPUMS 1% metropolitan sample

Age

Decennial census data suggest two important relationships between age and homeownership: (1) homeownership rates rise as householders age and (2) homeownership gaps can persist among specific-age cohorts over time. In all decennial census years, the homeownership rate increases steadily with age. For example, in 2000, the homeownership rate increased from 21 percent for Hispanics less than 30 years old to 60 percent for Hispanics 75 and older. The peak Hispanic homeownership rate is 64 percent among 65-to-74-year-old households. Accordingly, homeownership gaps narrowed with age, although the gap was lowest among the youngest and oldest age groups. Within most of the age groups, minimal change in the gaps occurred between 1980 and 2000.

The association between aging and increasing homeownership is largely driven by two factors. The investment demand for housing is lower among younger householders because they are more mobile than their older counterparts and the high transaction costs of moving make homeownership less attractive (Haurin, Herbert, and Rosenthal, 2007; Herbert et al., 2005). Thus, mobile, younger householders will choose to rent rather than purchase a home. In addition, a strong positive association exists between age and income; on average, incomes increase with age and income, in turn, is positively associated with homeownership. As a result of both factors, the demand for housing is likely to increase with age. Research has also found an independent effect of age on homeownership, after controlling for income and other socioeconomic characteristics (Borjas, 2002; Callis, 2003; Coulson, 1999; Flippen, 2001a; Krivo, 1995, 1986; Masnick, 1997; Myers and Lee, 1998; Myers, Megbolugbe, and Lee, 1998; and Painter, Gabriel, and Myers, 2001), likely reflecting a greater desire for residential stability as people age.

In addition to the effect of age on homeownership rates, an age cohort effect exists on homeownership. For example, 2000 Census data suggest that in 1980 the 45-to-54 age cohort continued to evince the highest homeownership rates of all age cohorts even as the cohort aged over the next 20 years. In 1990, the 55-to-64 age group demonstrated the highest homeownership rate, and 10 years later the same age cohort (now 65 to 74 years old) also had the highest rate. Similarly, a recent study found that younger cohorts track across successive age groups with persistently lower homeownership rates (Myers and Lee, 1998). This study showed that the decline in homeownership rates among the 34-to-44 age cohort in 1990 was driven by the lower homeownership rates carried into that age bracket by cohorts who were 25 to 34 years old in 1980.

In addition to considering age cohorts, it is also important to consider the year of immigration when examining trends in Hispanic homeownership rates over time. The literature on age cohort effects often nests age (or birth) cohorts within immigration cohorts or year of entry into the United States. The dual-cohort approach is applied to the study of immigrant populations to distinguish between the impact of aging, which may differ by age cohorts, and the effect of longer residency in the United States, which is an assimilation effect. For example, a recent study indicated that the effect of age on homeownership among Hispanic immigrants is weakened (and almost eliminated) by controlling for immigration cohorts (Masnick, 1997). The effect of longer residency (or assimilation effect) will be discussed in more detail in the following sections.

Income

Hispanic households with higher incomes have higher homeownership rates and lower homeownership gaps relative to non-Hispanic White households. Homeownership rates differed substantially between the lowest and highest income households. When Hispanic households are grouped into income declines, homeownership rates in 2000 ranged from 23 percent in the bottom decile to 75 percent in the highest decile. The disparity in Hispanic homeownership rates by income has declined from a 57-percentage point disparity in 1980 but remains large. Homeownership gaps for Hispanic households compared with non-Hispanic White households decline with higher levels of household income, although the differences in gaps have been declining over time. In 1980, the homeownership gap relative to non-Hispanic Whites was 25 percentage points for Hispanics in the lowest income decline compared with 9 percent for the highest income decline. In 2000, the differences in these gaps narrowed to 22 and 15 percentage points, respectively.

These patterns are consistent with previous research that found an independent effect of income on homeownership, especially among Hispanics, even after controlling for numerous socioeconomic characteristics (Krivo, 1986, 1995; Myers and Lee, 1998; and Painter, Gabriel, and Myers, 2001).[9] One study conducted a series of simulations that eliminated the income and educational differentials between native Hispanics and non-Hispanic Whites to estimate the effect on homeownership rates and gaps among a sample of recent mover households from the 1980 and 1990 decennial censuses (Painter, Gabriel, and Myers, 2001). The simulations using 1980 data suggested that nearly the entire homeownership gap was accounted for by these two characteristics, while in 1990 they accounted for 11 percentage points out of a total gap of 16 percentage points. The study also found, however, that in 1990 a sizeable homeownership gap remained among Hispanic immigrants who had arrived in the Unites States in the early 1980s, even after controlling for education and income differences with non-Hispanic Whites. Another study nested income within age cohorts and found a decreasing effect of income across successively older birth cohorts. This finding suggests that younger adults have less time to accumulate wealth to finance a home purchase and, therefore, are more reliant on current income. In addition, current income is likely to have a minimal direct effect on homeownership among older people because they likely purchased their homes when they were younger (Myers, Megbolugbe, and Lee, 1998).

Level of Education

Homeownership rates are considerably higher and gaps smaller as education level increases. In 1980, the homeownership rate ranged from 41 percent among Hispanic households with less than a high school education to 54 percent among college-educated households. In 1990, the rate similarly rose from 37 percent of Hispanic households with less than a high school education to 58 percent of Hispanic households with an advanced degree. In 2000, a 22-percentage-point difference in homeownership rates existed between poorly educated Hispanic households (40.4 percent) and highly educated Hispanic households (62 percent).

Accordingly, smaller homeownership gaps were associated with greater Hispanic educational attainment. For example, in 2000, the homeownership gap among Hispanics with less than a high school education was 28 percentage points and declined successively by 0.5, 7.3, 1.5, 0.6, and 0.8 percentage points as education levels increased. Therefore, the smallest homeownership gaps occur among those with the highest educational attainment—but even among this group the gap was 17 percentage points.

These trends are consistent with recent empirical work associating the likelihood of becoming a homeowner with educational status. The studies, however, also demonstrate that education levels are positively correlated with other demographic characteristics, which are in turn positively associated with higher homeownership probabilities. Therefore, the decline in homeownership gaps cannot be attributed solely to increases in education levels. To address this issue, researchers estimate statistical models (multivariate regression equations) that control for age, income, country of origin, and other characteristics, thereby isolating the independent impact of education on homeownership. These models suggest that the probability of homeownership among Hispanics is significantly lower (5 percentage points) for households without a high school diploma and significantly higher (3 percentage points) for college-educated households, even after controlling for numerous demographic characteristics (Painter, Gabriel, and Myers, 2001). The effect of education on Hispanic homeownership, however, is influenced by country of origin and birth cohort. For example, Krivo (1986) demonstrated that all Hispanic subpopulations experienced larger effects of education on homeownership than did non-Hispanic Whites, but the difference was statistically significant only among Mexicans and Cubans. Also, Myers, Megbolugbe, and Lee (1998) interacted educational attainment with birth cohorts to show that among native-born males of Mexican origin the effect of not completing high school is less detrimental on achieving homeownership among older cohorts (ages 55 to 74) than younger cohorts (ages 15 to 34). This finding suggests that the effect of educational attainment on achieving homeownership varies by birth cohort.

Net Worth

In 2000, higher household net worth[10] was associated with higher homeownership rates regardless of ethnicity. For both Hispanics and non-Hispanic Whites, the homeownership rate increased dramatically from about 1 percent among households with $0 net worth to more than 94 percent among households with $50,000 or more of net worth. Although homeownership gaps between Hispanics and non-Hispanic Whites are evident at net-wealth levels of less than $10,000, at net-wealth levels above this level, Hispanics have the same or higher homeownership rates as non-Hispanic Whites. The large overall gaps in Hispanic–non-Hispanic White (hereafter, Hispanic-White) homeownership rates reflect the fact that homeownership gaps fluctuated across the range of net-wealth categories. A much larger share of Hispanics (46 percent) than non-Hispanic Whites (21 percent) are found within the net-worth categories of less than $5,000, and only one-quarter of Hispanic households had a net worth of $50,000 or more.

Net worth (and wealth) is frequently discussed in the literature as a major barrier to homeownership among all households (Collins and Dylla, 2001; Gyourko, Linneman, and Wachter, 1999; Quercia, McCarthy, and Wachter, 2003; and Savage, 1999), especially among low-income households (Haurin, Hendershott, and Wachter, 1996). In one study, in 1995, an estimated one-third of renters could not afford to buy a house selling for half of the regional median housing price because they lacked the wealth to cover downpayments and closing costs. Two-thirds of renters could not afford to buy a modestly priced house because of both inadequate wealth (limiting their ability to cover downpayments and closing costs) and insufficient income (limiting their ability to afford mortgage payments) (Savage, 1999). Low-income renters are particularly at a disadvantage because most of their resources are used to cover basic needs and, thus, they are unlikely to accumulate cash to cover downpayments and closing costs. Low-income renters are also less likely than other households to receive downpayment assistance from family members because of the intergenerational nature of poverty (Englehardt and Mayer, 1998).

Household Type

From 1980 to 2000, homeownership rates were higher for married couples with and without children than any other type of Hispanic household. For example, in 2000, 53 percent of Hispanic married couples with children were homeowners compared only 27 percent of other families with children. Hispanic married couples without children had the highest rate of homeownership during the 20-year period and the rate steadily increased with each decennial census, from 55 percent in 1980 to 61 percent in 2000. By contrast, Hispanic married couples with children experienced a decline in homeownership rates from 1980 to 1990 (from 54 percent to 48 percent), but rebounded in 2000 to 53 percent. Homeownership gaps fluctuated across these household types, ranging from 23 percentage points for other families with children, to 26 percent for married couples without children, and 31 percentage points for married couples with children. Hispanic-White homeownership gaps have generally been highest among married couples than other household types, which suggests that the positive effect of marriage on homeownership is greater among non-Hispanic Whites.

Nevertheless, households composed of married couples have the best chance of being homeowners (Callis, 2003; Coulson, 1999; Flippen, 2001a; Krivo, 1986, 1995; Myers and Lee, 1998; and Painter, Gabriel, and Myers, 2001). Recent studies suggest that marriage is the strongest determinant of homeownership among people of any racial and ethnic background (Myers and Lee, 1998) and is important even after accounting for immigrant characteristics (such as citizenship status) (Callis, 2003).

Nativity, English Proficiency, and Citizenship

Across all decennial census years, homeownership rates were about 8 to 10 percentage points higher among native-born Hispanics[11] than among foreign-born Hispanics. For example, in 2000, nearly 50 percent of native-born Hispanics and 42 percent of foreign-born Hispanics were homeowners. This trend represents an increase since 1980 of 2 percentage points for native-born Hispanics and 3 percentage points for foreign-born Hispanics; however, the gaps between these rates and those of native and foreign-born non-Hispanic Whites changed only slightly over this period. Among native-born Hispanics, the gap widened slightly from approximately 22 percentage points in 1980 to 23 percentage points in 2000, while among foreign-born Hispanics, the gap decreased from nearly 24 percentage points in 1980 to 22 percentage points in 2000.

Few studies have examined the disparity in homeownership rates among native- and foreign-born households. A recent study focused on homeownership in the immigrant population and found that differences in numerous socioeconomic characteristics between natives and immigrants explained relatively little of the gap in homeownership rates (Borjas, 2002). The study demonstrated that differences in the residential location choices made by natives and immigrants played a key role in explaining the homeownership gap between these groups, which is discussed in more in the following sections.

Indeed, nativity has not been found to be a critical variable in predicting homeownership rates among Hispanic households after controlling for numerous socioeconomic characteristics. The effect of nativity on homeownership is weakened by other characteristics such as age cohorts, English language ability, and, especially, length of U.S. residence (Coulson, 1999; Flippen, 2001a; Krivo, 1995; Myers and Lee, 1998; and Painter, Gabriel, and Myers, 2001). In one of these studies, the homeownership rates of immigrants who had resided in the United States for the longest time were indistinguishable from the rates of natives. Another study indicated that, although foreign-born and Spanish-speaking households were less likely than native-born households to be homeowners, immigrants who have been in the United States for longer periods of time are as likely to be homeowners as natives. Thus, the statistical importance of nativity gives way to other factors.

Nativity, however, is related to other factors that are associated with larger differences in homeownership rates. For example, census data show that, across all decades, Hispanics who speak English "very well" or "exclusively" are nearly twice as likely to be homeowners as are those who are less proficient in speaking English. For each decennial census year from 1980 to 2000, the homeownership rate increased from 25, 23, and 28 percent, respectively, among households who do not speak English to 49, 48, and 51 percent, respectively, among Hispanic households that speak English very well.

In addition, homeownership rates for Hispanic citizens are typically 20 percentage points higher than for non-citizens, with naturalized citizens demonstrating higher homeownership rates than other groups. For example, in 2000, the homeownership rate among Hispanic citizens was 52 percent (including 58 percent among naturalized citizens and 50 percent among Hispanics born in the United States) compared with only 32 percent of Hispanic non-citizens. Also, compared with other native-born households, Hispanic households born in the United States consistently evinced the highest homeownership gap, which widened slightly from 22 percentage points in 1980 to

23 percentage points in 2000. In comparison, compared with other naturalized households, naturalized Hispanic households had homeownership gaps that ranged between 15 and 19 percentage points during this time period.

The research on the effect of citizenship on homeownership among all households supports these findings (Callis, 2003; Coulson, 1999; Masnick, 1997). In a descriptive analysis of CPS data, Callis (2003) found in 2002 that naturalized-citizen householders (of all origins) were more likely than native householders to be homeowners in the Midwest, South, and West. Masnick (1997) indicated that among all foreign-born people, citizens are exactly twice as likely as non-citizens to be homeowners, and the more recent the decade of arrival to the United States, the greater the citizens' homeownership rate exceeds that of non-citizens. The effect of immigrant-arrival cohorts on homeownership is discussed next.

Years in the United States

Homeownership rates increased dramatically as time spent in the United States lengthens. In each decennial census year from 1980 to 2000, the ownership rate is about 40 percentage points higher among Hispanics that have been in the United States for 21 years or more compared with those who have been in the U.S. for less than 5 years. For example, in 2000, only 16 percent of Hispanic immigrant households living in the United States for 5 years or less owned homes, while 61 percent of Hispanic immigrant households who had been in the country for 21 years or more were homeowners.

Data also suggest that Hispanic immigrants who arrived during the mid-1990s had the highest homeownership rate (16 percent) in their first 5 years of residency compared with immigrants with similar tenure in the United States who arrived during the mid-1980s (10 percent) and mid-1970s (12 percent). A more detailed examination of homeownership rates among immigrant-arrival cohorts from the 1980, 1990, and 2000 decennial censuses highlights several important trends:

- Homeownership rates increased for all immigrant-arrival cohorts as residency in the United States increased, although earlier immigrant-arrival cohorts had higher rates than more recent immigrants had. For example, 49 percent of Hispanics entering the United States between 1960 and 1964 were homeowners after being in the country for 15 to 20 years compared with 41 percent of the 1970-to-1974 cohort and 43 percent of the 1980-to-1984 cohort after similar periods of time in the United States

- Hispanic immigrants who arrived between 1960 and 1964 consistently had the highest homeownership rate among other Hispanic immigrants throughout the 20-year period. Their homeownership rate was 49 percent in 1980, 54 percent in 1990, and 63 percent in 2000.

- Homeownership rates increased dramatically among Hispanic immigrants who arrived between 1975 and 1979, rising from 13 percent in 1980 to 51 percent in 2000. Immigrants who arrived during the early 1980s had the largest percentage point increase in homeownership rate (nearly 26 percentage points) within a decade of being in the United States

These trends are firmly supported by recent studies on length of residency and immigrant-arrival cohorts that have found a persistent positive effect on homeownership as length of residency increases (Borjas, 2002; Callis, 2003; Coulson, 1999; Krivo, 1995; Masnick, 1997; Myers and Lee, 1998; and Painter, Gabriel, and Myers, 2001). These studies have found length of residence to be significant statistically regardless of other contributing factors such as age group, immigrant status, and country of origin. For example, one such study found that recent arrivals initially have far lower odds of homeownership than do households that have been in the United States for longer periods of time, but this gap is progressively reduced across immigrant-arrival cohorts as duration in the United States increases.

The reasons why recent immigrant waves have lower homeownership probabilities than immigrant-arrival cohorts from several decades ago at a similar length of residence in the United States is likely due to lower endowments, including income, educational level, marital status, and employment skills. That is, recent-immigrant households are more likely than new-immigrant households in the past to be poor, uneducated, headed by singles, and unskilled. As a result, recent immigrants experience greater difficulties than less-recent immigrants do in overcoming the barriers to homeownership.

Country of Origin

Hispanic homeownership rates and gaps vary by country of origin. Dominicans and Puerto Ricans consistently had the lowest homeownership rates and highest homeownership gaps, and Spaniards and Cubans consistently fared better than other Hispanic households. Homeownership rates among Mexican households were slightly higher than the total rate for all Hispanics during the 20-year period but changed little across decennial census years. For example, in 2000, the homeownership rate and gap among Dominicans, Puerto Ricans, Mexicans, Cubans, and Spaniards was 20/52, 34/38, 48/24, 58/15 and 60/12, respectively.

These patterns are supported by studies suggesting that country of origin is a key explanatory variable in predicting homeownership among Hispanic subpopulations (Borjas, 2002; Calis, 2003; Krivo, 1986, 1995; and Masnick, 1997). These studies underscore large differences in skills and economic performance across national origin groups. In one such study, the effect of numerous socioeconomic characteristics was measured across several Hispanic subpopulations and non-Hispanic Whites. The study found that household characteristics did not have the same effect on homeownership across all Hispanic subgroups. For example, the effect of income and education was larger on Mexicans, the impact of marriage was larger on Puerto Ricans, and the presence of children was larger on Cubans, compared with other Hispanic subgroups. Another study demonstrated that the correlation between homeownership and citizenship (discussed previously) was greatest among European and smallest among Mexicans, Dominicans, and Central Americans. Thus, the cumulative effect of the numerous socioeconomic characteristics on homeownership varies among households from different countries of origin.

Place of Residence

According to decennial census data, Hispanic homeownership rates were consistently largest in the South (55 percent in 1980, 52 percent in 1990, and 53 percent in 2000) and lowest in the Northeast (20 percent in 1980, 21 percent in 1990, and 25 percent ion 2000). Rates in the Midwest and West ranged between 44 and 48 percent over the 20-year period. Homeownership rates were consistently higher among households residing in nonmetropolitan areas than in metropolitan areas. For example, for the three decennial census years, homeownership rates were 53, 50, and 53 percent, respectively, among Hispanic households located in metropolitan areas of the South and 61, 60, and 59 percent, respectively, among households located in nonmetropolitan areas of the South. Similar discrepancies are observed for other regions. These findings are particularly important for understanding Hispanic homeownership rates and gaps, because Hispanics are highly concentrated in metropolitan areas.

Homeownership gaps are much larger in the Northeast and smaller in the South and typically smaller in nonmetropolitan than metropolitan areas. For example, in 2000, the Hispanic-White homeownership gap in the Northeast was 45 percentage points, consisting of a 30-percentage-point gap in nonmetropolitan areas and a 45 percentage point gap in metropolitan areas. In the South, the Hispanic-White gap was 21 percentage points, consisting of a 20-percentage-point gap in nonmetropolitan areas and a 21-percentage-point gap in metropolitan areas.

The low Hispanic homeownership rates in metropolitan areas are due in part to the high cost of housing in these areas relative to Hispanic household income. In the 30 metropolitan areas with the highest proportion of Hispanic households in 2000, Hispanic homeownership rates are higher and gaps are lower in areas where (1) Hispanic median income is a higher proportion of the area median income (AMI) and (2) median housing values are lower. For example, the Hispanic median income as a percentage of AMI was above 80 percent in 9 of the 10 metropolitan areas with the highest homeownership rates. None of the top 10 metropolitan areas with high Hispanic homeownership rates had median housing values above the national median ($159,397). By contrast, Hispanic homeownership rates are much lower in metropolitan areas where the Hispanic median income was a lower proportion of AMI and median housing values were higher. For example, the Hispanic median income as a percentage of AMI was below 80 percent in 7 of the 10 metropolitan areas with the lowest homeownership rates. Half of the metropolitan areas with the lowest homeownership rates had median housing values above the national median.

Indeed, place of residence has consistently been found to be an important factor in determining homeownership (Borjas, 2002); its effect on Hispanic households is unique in two important ways. First, most Hispanics enter the United States through gateway cities, particularly cities in California, Texas, New York, and Florida, that tend to be high-cost housing markets (McArdle, 1995). The weighted average median house value for Hispanics across the 107 metropolitan areas with the highest proportion of Hispanics was $147,987 compared with $121,205 for non-Hispanic Whites in these areas.[12] This observation suggests that Hispanic households are located disproportionately in higher cost housing markets, which contributes to the gap in homeownership rates between Hispanics and non-Hispanic Whites. One recent study even found that expensive housing markets create greater barriers to homeownership for Hispanics than for non-Hispanic Whites (Krivo, 1995).

Second, the concentration of Hispanic households in ethnic enclaves (or barrios) is prevalent. The impact of ethnic enclaves on homeownership opportunities is unclear (Borjas, 2002; Flippen, 2001b). On the one hand, Hispanic barrios may help immigrants circumvent any discrimination otherwise encountered outside the enclave. In this scenario, access to housing and mortgage markets is facilitated by Hispanic REALTORS® and bankers who live in the community. Neighbors with similar preferences and cultures may also make a community more welcoming and desirable, thereby increasing demand for housing. On the other hand, ethnic enclaves could create incentives for immigrants not to leave the community. The attractiveness of these enclaves may result in greater rates of segregation from non-Hispanic Whites, which may, in turn, depress Hispanic homeownership rates by limiting homeownership opportunities or preventing Hispanics from acquiring the skills needed in the larger labor market.

Determinants of Overall Homeownership Gaps Among Hispanics

Many of the factors discussed previously have been found to have clear effects on Hispanic homeownership rates and gaps, but determining which of these factors affect rates and gaps more heavily than other factors do is challenging. Wachter and Megbolugbe (1992) analyzed data from the 1989 American Housing Survey using multivariate regression techniques and found that household characteristics (income, age, education, family type, and gender) and market factors (house prices and geographic location) together explain 78 percent (or 32 percentage points) of the 41-percentage-point gap in homeownership rates between non-Hispanics (including African Americans) and Hispanics. These researchers conclude that income is the single most important characteristic accounting for the Hispanic homeownership gap, followed by martial status and gender. A number of important variables were not included in their statistical models, however, because of limitations with the available data, including wealth, immigration status, and credit history.

Using data from the 1996 CPS to analyze Hispanic homeownership rates, Coulson (1999) was able to include measures of Hispanic immigrant status, how long individuals have lived in the United States, and whether they are citizens. Unlike most studies of racial and ethnic differences in homeownership rates, Coulson's did not include measures of race and ethnicity directly in the regression model. Instead, the estimated homeownership rate for each racial/ethnic group was compared with its actual rate to determine whether the model overpredicts or underpredicts homeownership rates for each group. Coulson found that only a relatively small portion of the difference in homeownership rates between non-Hispanic Whites and Hispanics is unexplained by the household characteristics and housing market variables in the model. Of the 31-percentage-point difference in Hispanic-White homeownership rates, only 2 percentage points are unexplained. The most important explanatory factors among Hispanics include their higher share of immigrants, younger age, and concentration in high-cost housing markets. Coulson further examined these differences for different ethnic groups and found the largest unexplained gaps in homeownership rates are for Puerto Ricans (9 percentage points), followed by Cubans (7 percentage points), and "other" Hispanics (4 percentage points). Mexicans were not found to have any unexplained difference in homeownership rates from non-Hispanic Whites after household and market characteristics are taken into account.

Flippen (2001a) is notable because of the extensive set of explanatory variables used in the study. The study used data from the Health and Retirement Survey from 1992 to study racial differences in homeownership rates among non-Hispanic Whites, African Americans, and Hispanics. The data included information on inheritance amounts; age; marital status; number of children; health status; cognitive ability; levels of education and income; occupation, self-employment, and retirement status; number of prior layoffs; expected years of life remaining; geographic location, including region and urban location; risk tolerance; and length of planning period. Although the list of variables includes proxies for hard-to-measure concepts such as income uncertainty and risk aversion, the study does not include measures for immigrant status and the sample is limited to individuals between the ages of 51 and 61. The unadjusted gap in Hispanic-White homeownership in the sample was 27 percentage points, of which differences in observable personal characteristics explained 21 percentage points, leaving an unexplained residual gap of 6 percentage points. Differences in income and employment characteristics between Whites and Hispanics were the most important factors, together accounting for half of the overall homeownership rate differences. The geographic concentration of Hispanics in higher cost housing markets, especially in the West and in urban areas, was also found to be important. Since the sample was restricted to a single age group, age was not found to be a factor contributing to lower homeownership rates among Hispanics in the sample.

Finally, Gabriel and Rosenthal (2005) analyzed data from the Survey of Consumer Finances (SCF) to identify the factors associated with homeownership trends by race and ethnicity between 1983 and 2001. The models used in the study control for household demographic characteristics and geographic location but also incorporate information on whether the household is constrained in its access to credit; however, the models do not control for immigrant status. Gabriel and Rosenthal found that roughly half of the average Hispanic gap during the study period was explained by available variables (14 percentage points out of a total gap of 30 percentage points). The remaining portion of the gap is attributable to factors not captured in the models, including immigrant status and discriminatory treatment. Gabriel and Rosenthal also did not attempt to identify the specific household and housing market factors that were most important in producing the overall disparity in White and Hispanic homeownership rates, although credit barriers accounted for between 2 and 5 percentage points of the overall gap.

Barriers to Hispanic Homeownership

As described in the previous section, the socioeconomic and immigrant characteristics of Hispanic households are strongly associated with their homeownership rates and gaps. The relationship between these characteristics and the likelihood that a Hispanic household will become a home-owner, however, does not occur in a vacuum. Institutional and market barriers faced by Hispanic households affect both whether they view homeownership as a real opportunity and whether they are able to navigate through the homebuying process successfully.

These institutional and market forces can be grouped into three types of barriers: (1) lack of information about the homebuying process, (2) real estate and housing markets, and (3) financial and mortgage markets. This section discusses each of these barriers in turn.

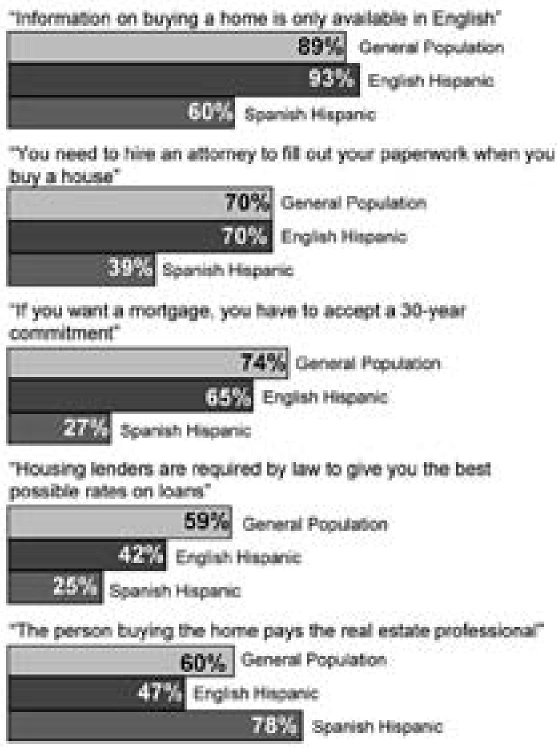
Lack of Information About the Homebuying Process

Although Hispanics today have extraordinary faith in homeownership as a desirable investment and a source of personal satisfaction (Congressional Hispanic Caucus Institute, 2004; Fannie Mae, 2003; Ratner, 1996; Schoenholtz and Stanton, 2001), they are less likely to have accurate information about homeownership than other populations (Fannie Mae, 2003; Lee, Tornatzky, and Torres, 2004). The level of understanding about the general homebuying process, the importance of a person's financial history, and mortgage qualification is considerably lower among Hispanics, especially Spanish-speaking Hispanics, than it is among the general population. Overall, the information gap dissuades some Hispanics from considering homeownership and undermines their confidence in completing the homebuying process successfully.

The Homebuying Process. Fannie Mae's 2003 National Housing Survey found that only 44 percent of Spanish-speaking Hispanics and 64 percent of English-speaking Hispanics have accurate information about the homebuying process compared with 60 percent of African Americans and 69 percent of the total population.[13] As exhibit 2 suggests, when Hispanics, particularly Spanish-speaking Hispanics, are asked specific questions about the homebuying process, they are less likely to have an accurate understanding of the process. For example, most English-speaking Hispanics (58 percent) and a large majority of Spanish-speaking Hispanics (75 percent) believe that housing lenders are required by law to give borrowers the best possible rates on loans. Spanish-speaking Hispanics in particular are less likely than other groups to have accurate information. Of Spanish-speaking Hispanics, 40 percent believe that information on buying a home is available only in English.

Exhibit 2

Percentage Who Know That the Following Statements Are False



Source: Fannie Mae National Housing Survey (2003: 7)

Misconceptions about the U.S. homebuying process are exacerbated by cultural differences and past experiences in the home country. In the United States, the homebuying process is a highly regulated activity, from the point of housing construction or renovation to the point when a buyer closes on a home. By contrast, in Mexico, an estimated 12 to 16 million homes have been built without formal approval, and clouded titles may prevent households from selling or buying homes (Schuetz, Belsky, and Retsinas, 2004). As a result, many homes in Mexico are simply passed along in the family, and members of these households are never exposed to, or learn about, the process of buying a home. Despite knowing very little about the homebuying process, a recent study found that many Hispanic immigrants said that it was much "tougher" to become a homeowner in the United States than in their home country. Many participants in the study expressed the following view: "While America gives you some advantages, it is more difficult to own a home in the United States" (Bendixen and Associates, 2004: 14).

Even for those household members who have gone through the homeownership process in their home county, prior experiences do not always resolve misconceptions about the U.S. homebuying process. Indeed, for many Hispanic immigrants, these misconceptions are worsened by their prior experiences with homebuying in their countries of origin (Schoenholtz and Stanton, 2001). For example, many Hispanic immigrants who come from countries where a very large downpayment (up to 50 percent of the house value) is required to purchase a home assume this requirement applies to the U.S. market as well. According to the National Council of la Raza (2004), this "old country knowledge" deters many Hispanic immigrants from pursuing the homeownership path.

Financial Literacy. Financial literacy—knowing and understanding the basic principles of spending, using credit, saving, and investing—typically is learned through routine interactions with financial institutions, especially banks; however, a number of low-income and immigrant Hispanic households distrust mainstream financial institutions and eschew relations with them (Congressional Hispanic Caucus Institute, 2004). For example, a 1999 survey of residents of low-income neighborhoods in New York and Los Angeles found that 45 percent of Hispanics did not have a transaction account with a bank compared with 31 percent of African Americans and 9 percent of Whites (Dunham, 2001). Focus groups conducted in Alabama and Nevada suggest that Hispanics view banks as "insecure," "unforgiving," and "unwelcoming." Focus group participants describe losing their life savings because of bad banking practices, losing their property to bank foreclosure, and other "horrible" or "disappointing" experiences (Bendixen and Associates, 2004). This distrust is reinforced by financial institutions' lack of outreach to Hispanic communities and the general absence of bilingual and bicultural financial professionals (National Council of La Raza, 2004).

A recent study focusing on homeownership achievement among Mexican-Americans in three major metropolitan areas concluded that the lack of a formal relationship with a bank was a common characteristic of survey respondents who were least able to progress in the homebuying process (Lee, Tornatzky, and Torres, 2004). This study was based on a telephone survey of 1,400 households that divided households into two groups: (1) those actively pursuing homeownership or who had recently purchased a home and (2) those who would like to buy a home but are not actively pursuing this goal at present. The researchers found that a key distinguishing feature of those not actively pursuing homeownership was a lower likelihood of having a bank account. Although 77 percent of those actively seeking a home to buy had an account, only 52 percent of inactive households did. Inactive households were also less likely to have a credit card (40 percent compared with

60 percent of active households). The researchers concluded that this lack of a formal relationship with a financial institution signaled both a lack of comfort and familiarity with formal financial networks and a lack of a credit history, both of which are needed to become a homeowner.

Undocumented Hispanics[14] in particular may exist completely in the informal economy, working in jobs that pay in cash and purchasing all goods and services in cash. According to a recent estimate, approximately 1.5 million undocumented Hispanic households (or 5.8 million undocumented Hispanics) are in the United States. An estimated 216,000 of these households could become homeowners if they had improved access and information to the homebuying process (Paral, 2004).

Whether by habit or necessity, these Hispanics do not interact with formal aspects of American society, especially banks, and tend to rely on the alternative financial sector (Barr, 2004) and personal connections (National Community Reinvestment Coalition, 2003). A research brief on banking for the poor, Barr (2004) noted that, in lieu of bank-based transactions, unbanked households often use check cashers to cash checks; pay bills; and wire funds, tax preparers, and refund anticipation lenders to file for an Earned Income Tax Credit (EITC). Check-cashing fees vary widely nationally, from about 1.5 to 3.5 percent of the face value of the check, which amounts to approximately $1.5 billion in annual fees. Some low-income households, especially households that do not speak English and have difficulty understanding the tax-filing process, rely on tax preparers and refund anticipation lenders, which can consume a considerable portion (an average of 13 percent) of a low-income household's EITC. Overall, the use of the alternative financial sector significantly reduces take-home pay, hinders a household's ability to accumulate wealth and establish credit, and may expose a household to a higher risk of robbery or theft.

The lack of a relationship with a financial institution also leads some Hispanics to seek advice from informal sources such as a family member or friend (Congressional Hispanic Caucus Institute, 2004; Ratner, 1996; Real Estate Center at Texas A&M University, 2004; Toussaint-Comeau and Rhine, 2000) or to rely on "cultural brokers" such as bilingual real estate agents, housing advocates, or lenders (Ratner, 1996). In some cases, these advisors are not a good source of advice or cannot be trusted. Focus groups conducted in 11 cities[15] throughout the country suggest that Hispanics are quick to trust "anyone who speaks their language and knows their community," but often these trusted sources were predatory lenders and Realtors (Congressional Hispanic Caucus Institute, 2004).

The Mortgage Qualification Process. Surveys of Hispanics in the United States suggest that Hispanics understand the value of establishing a good credit history and they know that a credit history is a key criterion for becoming a homeowner. Hispanics are less clear, however, about what defines a good credit history, what qualifies as acceptable creditworthiness to secure a mortgage, and what steps can be taken to repair their credit history (Bendixen and Associates, 2004; Ratner, 1996). In an ethnographic study of minority pathways to homeownership, several focus group participants believed that their credit rating was downgraded when they paid their bills on time because creditors were making less money. Some participants noted that they were advised to let a few payments slip as a way to build their credit, and others thought that having a loan on an expensive car would improve their credit rating because it demonstrated their ability to pay off a loan.

The lack of understanding about credit is particularly troubling among Hispanics. In Fannie Mae's national survey (2003), credit concerns were the most frequently cited reason why both English-speaking Hispanics (49 percent) and Spanish-speaking Hispanics (46 percent) have not purchased a home. By contrast, 42 percent of African Americans and 39 percent of the general population cite credit concerns as the main reason for not purchasing a home. Nearly half of all Hispanics in the United States worry that their credit is not good enough to qualify for a mortgage. Only 15 percent of Spanish-speaking Hispanics report having a great deal of experience with credit and debt compared with 40 of the total population and 41 percent of English-speaking Hispanics.

As exhibit 3 suggests, many Hispanics, especially Spanish-speaking Hispanics, have inaccurate information about mortgage credit decisions. Almost 80 percent of Spanish-speaking Hispanics believe they need a perfect credit rating to qualify for a mortgage, approximately 60 percent believe they need to stay in the same job for at least 5 years, and 70 percent believe they must always pay their bills on time or carry some debt. These percentages are significantly lower—27, 35, and 36 percent, respectively—among the general population. Overall, two-thirds of the general population correctly answered these three questions on mortgage credit decisions compared with approximately half of English-speaking Hispanics and less that one-third of Spanish-speaking Hispanics.

Exhibit 3

Percentage Who Know That the Following Statements Are False

Source: Fannie Mae National Housing Survey (2003: 10)

Housing Market Barriers

The U.S. housing market experienced a sustained boom from the late 1990s into the first half of the next decade. Fueled by low interest rates and steady residential construction, the boom encompassed all regions of the nation, geographic areas, and a range of submarkets (Joint Center for Housing Studies, 2004). The housing boom outlasted an economic recession and considerable job losses that occurred during the past few years. Nevertheless, the fear among many observers is that the boom squeezed many homeseekers out of the market as housing prices were rising faster than household incomes. These fears are not completely unfounded. A recent study suggested that, beginning in 2004, at the national level, a median-income, first-time homebuyer with a 10 percent downpayment would no longer qualify for a median-priced home. At the metropolitan level, a median-priced home would remain affordable or nearly affordable for median-income buyers in only 3 of 11 major urban markets (Tong, 2004).

In addition to affordability, another barrier that Hispanics may face in the housing market is discrimination. Although nearly one-third of household growth is attributed to immigration, concerns persist (albeit diminished) about the incidence of discrimination in the housing market, which may continue to limit homeownership opportunities among minorities.

Housing Affordability. The increasingly common perception among Hispanics is that homeownership is an unaffordable dream. A study conducted by Fannie Mae (Tong, 2004) suggests that the confluence of dramatic housing price appreciation with the slow pace of income growth is making homeownership increasingly unaffordable for median-income working households, especially households seeking to purchase a home for the first time. The Fannie Mae study created annual homeownership affordability ratios—the amount of qualifying income required to obtain a median-priced home loan divided by median family income—from 1990 to 2008 (projected) for both the nation and 11 major metropolitan areas. Of the 11 metropolitan areas in the study (all except Seattle), 10 are among the 30 metropolitan areas with the largest number of Hispanic households in the nation. Ratios were created separately for first-time homebuyers and repeat homebuyers.[16] A ratio equal to 100 suggests that a median-income family is just able to afford a median-priced home; ratios above 100 equate to unaffordable conditions while those below 100 equate to affordable conditions. Of course, this ratio analysis is a fairly crude measure of affordability both because it focuses on single points in the income and house price distributions and because it ignores household wealth, which is an important factor in determining whether a household can afford to purchase a home. Nonetheless, it is a useful shorthand measure for comparing affordability across market areas.

Exhibit 4 presents the homeownership affordability ratios among first-time homebuyers for all 11 metropolitan areas in the study. Data in Tong (2004) show that middle-class homebuyers in Atlanta, the District of Columbia, Houston, and Philadelphia are able to afford median-priced homes; each of these metropolitan areas has an affordability ratio below 100. Middle-class families in Chicago are just able to buy a median-priced home (ratio is 100). Families in 6 out of the 11 metropolitan areas (Boston, Denver, Los Angeles, New York, San Francisco, and Seattle) are not able to afford median-priced homes in these markets. With affordability ratios ranging from 118 to 198, middle-class families purchasing a median-priced home would need approximately 1.2 to 2.0 times the AMI to qualify for a mortgage with a 10-percent downpayment.

When using 2000 Integrated Public Use Microdata Series data to produce comparable income measures for Hispanic families,[17] however, none of these metropolitan areas are affordable for Hispanic families earning a median income. For example, the median income among Hispanics families in Atlanta is approximately $42,600, more than $20,000 less than the median family income for all

Exhibit 4

2000 Homeownership Affordability Ratios for First-Time Homebuyers in 11 Large Metropolitan Areas

Metropolitan Area	Income to Qualify for a Mortgage[a]	Median Family Income[b]	Hispanic Median Family Income	Homeownership Affordability Ratio	Hispanic Homeownership Affordability Ratio
Atlanta[c]	$48,800	$63,100	$42,600	77	115
Washington, D.C.[c]	$69,300	$82,800	$50,000	84	139
Houston[c]	$48,900	$56,700	$33,000	86	148
Chicago[c]	$67,700	$67,900	$40,500	100	167
Philadelphia[c]	$52,700	$57,800	$28,000	91	188
Denver[c]	$73,600	$62,100	$36,200	118	203
Seattle	$83,800	$65,800	$40,000	127	210
Los Angeles[c]	$73,400	$52,100	$33,400	141	220
San Francisco[c]	$148,400	$74,900	$49,000	198	303
New York[c]	$88,800	$56,200	$27,600	158	322
Boston[c]	$121,200	$65,500	$29,100	185	416

[a] *The qualifying income calculation is based on a 28-percent qualifying ratio for monthly housing payment (principal, interest, taxes, and insurance) to gross monthly income.*

[b] *Data on estimated median family income come from three sources: the national median-income data from the Census Bureau's Current Population Survey, the metropolitan median-income data from the U.S. Department of Housing and Urban Development, and the occupational average wage data from the Bureau of Labor Statistics' Occupational Employment Statistics Survey. Data on qualifying income for purchasing the median-priced home comes from the NATIONAL ASSOCIATION OF REALTORS®, Federal Housing Finance Board, and the Census Bureau.*

[c] *Among the 30 metropolitan areas with the largest number of Hispanic households in the nation.*

Source: Tong (2004)

families in Atlanta. After adjusting the affordability ratio to reflect Hispanic median family incomes, the homeownership affordability ratio increases in Atlanta to 115. This observation suggests that a first-time Hispanic homebuyer in Atlanta would need to earn 115 percent of the AMI to qualify for a mortgage with a 10-percent downpayment. Hispanics in Denver, Los Angeles, and New York face even greater affordability gaps. The 2000 Hispanic median family income in these housing markets was $36,200, $33,400, and $27,600, respectively. Using these Hispanic median family incomes, the adjusted affordability ratios are 203 in Denver, 220 in Los Angeles, and 322 in New York. These extraordinarily high ratios suggest that a Hispanic median-income family would not be able to purchase a median-priced home in these markets.

As these figures suggest, housing affordability is largely a function of the relationship between incomes and housing prices; but housing affordability among Hispanics is also affected by the degree to which Hispanics are clustered or segregated into particular residential areas. It terms of housing affordability effects, ethnic clustering and segregation perpetuates a dual housing market that in turn engenders supply restrictions in minority neighborhoods. A dual housing market relegates Hispanics and other minorities to neighborhoods near the city core; these neighborhoods are characterized by older, low-quality, multifamily housing that is less suitable for ownership (Harding, Rosenthal, and Sirmans, 2007; Rosenbaum, 1996). Multifamily buildings have less appeal for ownership because they offer less privacy, have higher management costs to coordinate the activities of all owners, and offer less control because all owners must agree on maintenance and renovation investments. These structural characteristics diminish homeownership opportunities among Hispanics and other minorities and lead to higher housing prices. A shrinking affordable housing stock has also been associated with neighborhood gentrification, limited incentives and financing for affordable housing development, zoning regulations that restrict the development of multifamily units, and environmental regulations that increase building costs (Congressional Hispanic Caucus Institute, 2004).

Racial and Ethnic Discrimination in the Housing Market. Although racial and ethnic discrimination in the housing market has been researched extensively, most research has focused on African-American households.[18] The nature and impact of discrimination among Hispanics is less understood. In theory, discriminatory practices experienced by African Americans similarly apply to Hispanics. For example, during the homebuying process, both Roychoudhury and Goodman (1996) and Ondrich, Stricker, and Yinger (1998) suggest that a real estate agent may discriminate against minorities by—

- Limiting information shared with a potential homebuyer about available housing units or neighborhood amenities.
- Limiting the number of housing units shown to and inspected by a potential homebuyer.
- Limiting information about financing, available financial and mortgage products, and referrals to mortgage professionals.
- Limiting ongoing encouragement or assistance offered to the potential homebuyer.
- Steering a potential homebuyer to certain types of neighborhoods based on the person's socioeconomic and racial characteristics; for example, the real estate agent may steer a minority homeseeker to predominantly minority or integrated neighborhoods and a White homeseeker to predominantly White neighborhoods.

To explore some of these dimensions, the U.S. Department of Housing and Urban Development (HUD) sponsored the largest paired-test study[19] to date. The Housing Discrimination Study 2000 (HDS 2000) conducted by Turner et al. (2002b) is based on 4,600 paired tests conducted in 23 metropolitan areas nationwide.[20] Based on the Hispanic-White paired tests,[21] Turner et al. found that discriminatory treatment experienced by Hispanic homebuyers has declined since 1989 (when HUD last conducted this type of paired-test study of housing discrimination), but many Hispanics still face significant levels of discrimination.

Exhibit 5 presents the overall results from Turner et al. for many of the dimensions highlighted by Roychoudhury and Goodman (1996) and Ondrich, Stricker, and Yinger (1998). The overall consistency indicator—a measure of the extent to which the different forms of treatment consistently favor one tester over another—suggests that non-Hispanic Whites were consistently favored in 19.7 percent of tests and Hispanics were favored in 12.3 percent of the tests. The net consistency measure, which is the difference in favorable treatment between Whites and Hispanics (7.4 percent), is statistically significant, indicating that non-Hispanic Whites were significantly more likely than Hispanics to be consistently favored throughout the home search process. The net consistency

Exhibit 5

Differential Treatment Among Non-Hispanic White Homeseekers and Hispanic Homeseekers, 2000

Overall Indicator	% of Non-Hispanic White Favored	% of Hispanic Favored	Net Measure (%)	Change Since 1989, Net Measure (%)
Housing availability	46.3	44.4	1.9	– 10.5*
Housing inspection	38.3	40.9	– 2.6	– 14.7*
Geographic steering—inspected	14.7	9.7	5.0*	3.5
Financial assistance	38.6	24.2	14.4*	13.1*
Agent encouragement	30.6	27.5	3.1	– 14.5*
Overall consistency measure	19.7	12.3	7.4*	– 3.0

** Indicates significance in net measure and change in net measure at the 95% level (using a two-tailed test).*
Source: Turner et al. (2002b: 3–17; 3–19)

measure dropped slightly (3.0 percentage points) from the findings of HUD's 1989 study, although the decrease is not statistically significant.

Focusing on the indicators that revealed differential treatment among homeseekers, non-Hispanic Whites received more favorable treatment than Hispanics did in terms of receiving information about home financing (financial assistance) and inspecting homes in predominantly non-Hispanic neighborhoods (geographic steering). The issue of financial assistance was the area of greatest disparity in treatment between Whites and Hispanics, with 14.4 percent of Whites receiving more favorable treatment on net. The financial assistance indicator is based on a range of treatments. More specifically, real estate agents were significantly more likely to offer non-Hispanic Whites help with financing (22.2 percent of non-Hispanic Whites favored; 10.5 percent of Hispanics favored), recommend lenders (19.6 percent of non-Hispanic Whites favored; 12.8 percent of Hispanics favored), and discuss downpayment requirements (24.9 percent of non-Hispanic Whites favored; 15.4 percent of Hispanics favored). Financial assistance is the one area in which the discriminatory treatment of Hispanics was statistically significantly worse in 2000 than in 1989, with the net measure for systematic discrimination in financing assistance increasing by 13.1 percent points.

The other indicator in which non-Hispanic Whites were favored was geographic steering. In paired tests, 14.7 percent of non-Hispanic Whites were shown homes in less predominantly Hispanic areas, compared with 9.7 percent of Hispanics. The 5-percentage-point difference in treatment is statistically significant, although the net measure of discrimination did not change significantly from the 1989 measure. This finding suggests that Hispanic homeseekers are slightly more likely to be directed to neighborhoods that primarily consist of minority households.

Turner et al. (2002b) also found, however, that Hispanic and non-Hispanic White homebuyers received comparable treatment along several other indicators in the housing search process, including receiving information about available housing opportunities, the number of housing inspections by the potential homebuyer, and real estate agent encouragement. On several measures, Hispanics were treated more favorably than non-Hispanic Whites were. For example, Hispanics were more likely to be given information on an advertised unit than non-Hispanic Whites were

(15 percent versus 12 percent) and were given the opportunity to inspect more units (38.1 percent Hispanic favored versus 35.7 percent non-Hispanic Whites favored). The change in the net measure across each of these indicators decreased significantly in 2000 from the measures reported in 1989. Thus, there were several areas in which discriminatory treatment of Hispanics appeared to have eased since 1989.[22]

Financial and Mortgage Market Barriers

The push to connect Hispanics, especially immigrants, with mainstream financial resources is mounting among financial institutions and community development organizations. Despite this growing interest, connecting Hispanics to mainstream financial institutions has been challenging and is a significant barrier to Hispanic homeownership. In particular, obtaining mortgage financing is a critical, albeit difficult, stage in the homebuying process and is guided by the mortgage industry's three "C"s: creditworthiness, capacity, and collateral. Creditworthiness is a measure of the kind of credit the borrower has been extended in the past and whether that credit was paid in a timely fashion. Capacity is an income-to-debt measure that gauges a borrower's ability to afford a loan. Collateral is a measure of the size of the borrower's downpayment. Collectively, these measures constitute a borrower's overall credit profile and determine whether a borrower will qualify for a loan. Hispanic borrowers, however, face several barriers to performing well on these measures and thus have problems qualifying for mortgages. These barriers, each of which is discussed in turn in the following sections, include poor credit history, low wealth and income, lack of proper documentation, and racial and ethnic discrimination in mortgage lending.

Poor Credit History. Recent evidence suggests that many Hispanics have poor credit, which hinders their ability to become homeowners. In a recent study, Bostic, Calem, and Wachter, (2004) used data from the Survey of Consumer Finances (1989, 1995, 1998, and 2001 surveys) to assess the trends in credit quality across various segments of the U.S. population stratified by demographic characteristics; Bostic, Calem, and Wachter (2004) also quantified the extent to which credit quality constraints play an important role in a household's decision to pursue homeownership opportunities. The researchers identified an individual as constrained by credit if his or her credit score was below 660 (or the 25th percentile of the score distribution).[23] Overall, the study suggests that median scores across all individuals in the national sample increased from 721.3 in 1989 to 730.1 in 2001. The percentage of individuals who are credit constrained also increased slightly, from 19.3 percent to 24.5 percent during the study period.

These marginal increases for the total national sample, however, mask the results for Hispanics. The median score among Hispanics decreased from 695 in 1989 to 670 in 2001. The proportion of Hispanics who fell below the 660 threshold increased significantly from 25.4 to 48.5 during the same time period. Moreover, these results are especially dramatic for Hispanic renters. The predicted score decreased significantly for Hispanic renters from 685.2 to 623.7, and the proportion of credit-constrained Hispanics increased dramatically from 20.5 percent to 63.3 percent. These results varied among Hispanics renting in central cities, suburbs, and rural areas, but the trends are consistent. For example, the average scores among Hispanic renters living in central cities and rural areas dropped significantly from 681.3 and 689.3, respectively, in 1989 to 624.7 and 624.0, respectively, in 2001. For these same groups, the proportion of individuals who were considered uncreditworthy increased from 27.1 and 6.7 percent, respectively, to 63.1 and 62.2 percent, respectively. These findings are corroborated by the regression results and suggest that fewer Hispanics, especially renters, are viewed as creditworthy and many more are likely to be subject to more extensive reviews, which could potentially deter them from considering homeownership or completing the homebuying process.

These findings are echoed, albeit less pronounced, in an earlier study that estimates how much homeownership rates might increase for various subgroups of the population if all borrowing constraints were eliminated but households otherwise keep to their budget constraints (Rosenthal, 2002). The study made use of a set of survey questions from the 1998 SCF that enabled the researcher to identify individual households that perceived themselves to have been subject to binding credit barriers of any type (mortgage, auto credit, consumer credit, and so on). Then, controlling for sample selection, the researcher estimated the demand for homeownership among families not subject to credit barriers and used the results to predict the demand for homeownership for the entire sample. Comparing predicted with actual homeownership rates provided an estimate of the influence of credit barriers on homeownership.

For the full sample, the results indicate that the overall homeownership rate would be 4.0 percentage points higher in the absence of credit constraints. The impact of credit barriers on homeownership, however, varied by subgroups in the sample. Among Hispanics, eliminating borrowing constraints is predicted to raise Hispanic homeownership by 6.7 percentage points; this predicted increase is higher than for any other racial/ethnic subgroup in the study.

Poor credit has consistently been identified in focus group research as a primary barrier to Hispanic homeownership (Bendixen and Associates, 2004; Congressional Hispanic Caucus Institute, 2004; Fannie Mae, 2003). These studies suggest that the confluence of numerous factors contribute to this barrier. One factor is a lack of experience with financial establishments and an understanding of how to build and maintain a good credit rating, which was discussed previously. Another factor is the fact that assessing credit history is reliant on a history with credit payments, which currently does not include utility or rent payments, and some Hispanics—especially immigrants (in particular, those who are unbanked and undocumented)—pay for goods and services in cash, which does not contribute to a traditional credit assessment.

Low Wealth and Income. The mortgage approval process also relies heavily on a borrower's wealth and annual income to demonstrate capacity and collateral. A study for the Pew Hispanic Center by Kochhar (2004) analyzed data from the Survey of Income and Program Participation and the SCF to describe the net worth of Hispanics between 1996 and 2002. The study demonstrated that Hispanic (and African-American) households are extremely vulnerable to economic downturns because their low net worth cannot protect them from short-term recessions or spells of unemployment. Overall, a Hispanic household has less than 10 cents in wealth for every dollar owned by a non-Hispanic White household.

Exhibit 6 presents the median net worth among Hispanic and non-Hispanic households by tenure from 1996 and 2002. The median net worth of all Hispanics increased by 14 percent from $6,961 in 1996 to $7,932 in 2002. Net worth increased throughout the time period until the recession of 2001 and rebounded thereafter to 1997 levels. As would be expected, however, Hispanic renters have dramatically less net worth than Hispanic homeowners do. Among Hispanic renters, median

Exhibit 6

Median Net Worth ($) Among Hispanic and Non-Hispanic Households, 1996–2002

Household	1996	1997	1998	1999	2001	2002
Hispanic						
Renters or others	578	570	337	545	774	762
Homeowners	56,767	53,614	49,485	57,928	57,376	62,839
All Hispanics	6,961	7,801	7,167	10,495	6,213	7,932
Non-Hispanic						
Renters or others	2,264	1,935	1,914	2,059	1,816	1,526
Homeowners	111,141	115,222	117,070	123,175	126,261	129,778
All non-Hispanics	59,786	61,171	62,179	67,692	68,248	69,305

Source: Kochhar (2004) tabulations of SIPP data

net wealth rose 32 percent over the period but was still only $762 in 2002. In comparison, during the same period, the median net worth among non-Hispanics increased 16 percent, from $59,786 to $69,305; the latter figure is nearly nine times the net wealth of all Hispanics. Non-Hispanic renters also had significantly lower net worth than non-Hispanic homeowners did, although non-Hispanic renters had about twice the net worth of Hispanic renters in 2002.

Another indication of the degree to which Hispanics are wealth constrained is to consider the share of households with $0 or negative net wealth. The Pew Hispanic Center study found that, as of 2002, 26.0 percent of Hispanics had no positive wealth compared with 13.1 percent of Whites.

Some evidence indicates that a lack of greater connection to financial institutions may limit wealth accumulation among Hispanics. Information tabulated by the Kochhar (2004) from 1996 to 2002 suggests that the most common assets among both Hispanic and non-Hispanic households are a car and a house, although wide disparities exist in the proportion of households that own these assets. But perhaps the most striking disparity is reflected in the proportion of households with interest-earning accounts (including interest-earning checking accounts, savings accounts, money market accounts, and certificates of deposit) at financial institutions. In 2002, 69 percent of non-Hispanic White households reported owning an interest-earning account compared with 42 percent of Hispanics, which is nearly a 30-percentage-point gap. Ownership rates for households holding noninterest-bearing checking accounts are low for both Hispanics (30 percent) and non-Hispanic Whites (36 percent). Ownership rates for households holding other financial assets are particularly low for Hispanics: less than 10 percent of Hispanics own U.S. savings bonds, IRA or Keogh accounts, or stocks or mutual funds, and less than one-fifth own a 401(k) account or thrift savings account. More than 10 percent of Hispanics report having no assets other than unsecured liabilities. By contrast, more than one-third of non-Hispanic White households own stocks or mutual funds, or 401(k) accounts or thrift savings accounts, and 30 percent have IRA or Keogh accounts. Very few non-Hispanic White households (less than 3 percent) report having no assets other than unsecured liabilities. Hispanic households, however, are slightly less likely to own unsecured debt (46 percent) than non-Hispanic White households (53 percent) are.

These findings suggest that homeownership is an enormous part of a household's asset portfolio. Indeed, according to Kochhar, the *average* net worth among all Hispanics is $65,371 (in 2003 dollars) and 61 percent of their mean net worth is in the form of home equity. Interest-earning assets represented less than 6 percent of their mean net worth and checking accounts represented less than 1 percent. Rental property, 401(k) accounts or thrift savings accounts, and stocks or mutual funds each represented about 7 percent of Hispanic mean net worth. In comparison, the mean net worth among non-Hispanic White households ($221,871) is less frequently tied directly to home equity. For these households, about 39 percent of the average net worth is associated with home equity, 22 percent is in the form of stocks and mutual funds, and about 7 percent is associated with each of the following assets: interest-earning accounts, IRA and Keogh accounts, and 401(k) accounts and thrift savings accounts.

Kochhar's results are supported by other research that has been able to quantify net worth by ethnic groups. In an analysis of the Census Bureau's Survey on Income and Program Participation data from 1996 to 2000, Osili and Paulason (2005) suggested that Hispanic immigrants were 4.1 percentage points less likely to own stock and 3.8 percentage points less likely to have a savings account compared with native-born residents, all else being equal. The researchers attributed these differences to the "institutional quality" of the immigrants' home country, which measures the extent to which the country protects private property and provides incentives for investment. Hispanic immigrants from countries with higher levels of institutional quality (for example, Mexico) tend to have more net worth than immigrants from countries with lower levels of institutional quality (for example, El Salvador).

The low wealth accumulation among Hispanic households is explained in large part by the demographic characteristics discussed earlier. It is also strongly associated with annual income. Exhibit 7 shows a steep increase in median net worth and homeownership rates as incomes increase for both Hispanic and non-Hispanic households. Among Hispanics, a sharp increase in median net worth occurs after the third quintile. Hispanics in the fourth income quintile have four times more wealth than Hispanics in the lower quintile; however, the sharp increase is not associated with an unusually large increase in homeownership rates.

Exhibit 7

Median Net Worth ($) and Homeownership Rates (%) of Hispanic and Non-Hispanic Households by Monthly Income Quintile, 2002

Income Quintile[a]	Hispanics		Non-Hispanic	
	Median Net Worth	Homeownership Rate	Median Net Worth	Homeownership Rate
First	1,218	26.8	7,963	48.5
Second	4,466	38.5	40,194	62.3
Third	9,629	52.6	57,080	70.4
Fourth	38,402	64.4	90,361	80.2
Fifth	79,401	72.9	195,018	87.0
All households	7,932	47.3	69,305	70.0

[a] *Monthly income quintiles were estimated from the 2001 SIPP panel and were as follows: less than or equal to $1,380; $1,380 to $2,552; $2,552 to $4,020; $4,020 to $6,434; and more than $6,434.*

Source: Kochhar (2004) tabulations of SIPP data

Low wealth among Hispanics also is affected by large remittance flows to relatives living in an immigrant's home country. Some consider the funds that immigrants send to Latin America and the Caribbean to be more important to these regions' economic and social development than foreign direct investment, portfolio investment, foreign aid, or government and private borrowing.[24] For example, remittances to Central America doubled from $1.8 billion in 1996 to $3.6 billion in 2001, compared with an estimated $2.0 billion in foreign direct investment and $2.1 billion in official development assistance[25] in 2001 (Inter-American Dialogue, 2004).

Although the exact scale of this remittance flow is unclear, it is undoubtedly significant. According to one estimate, immigrants living in the United States sent $25 billion to relatives living in Latin America and Caribbean countries, and total remittances grew by 19 percent between 2002 and 2003 (Singer and Paulson, 2004). Others estimate that immigrants send more than $30 billion a year, which amounts to more than $2,500 a year for each Hispanic household in the United States (Kochhar, 2004). If that amount were saved and invested in the United States, the impact on Hispanic household wealth would be significant. Finally, the Inter-American Dialogue Task Force on Remittances (Inter-American Dialogue, 2004) estimated that immigrants sent $32 billion to these regions in 2002, a 40-percent increase from the amount sent in 2000.

Because many Hispanics eschew relationships with banks, Orozco (2004) found that banks have captured a very small fraction of the remittance market. According to the study, the four largest banks in this field—Citibank, N.A.; Wells Fargo & Company; Harris N.A.; and Bank of America, N.A.—conduct fewer than 10,000 remittances monthly, of which the overwhelming majority go to Mexico. In 2003, however, an estimated 40 million remittance transactions occurred between the United States and Mexico, suggesting that U.S. banks have captured only 3 percent of the remittance market. Thus, Orozco emphasized the potential for banks to offer remittance services to immigrants living in the United States and reach out to immigrants without savings or checking accounts.

Lack of Proper Documentation. Undocumented immigrants seeking a home mortgage may be denied financing because they do not have Social Security numbers (SSNs) or proper proof of employment.[26] The U.S. Immigration and Naturalization Service (INS) estimated in 2000 that 7 million people resided illegally in the United States as undocumented immigrants (U.S. Immigration and Naturalization Service, 2003). Others estimated a population of approximately 7.8 million in 2001 (Kochhar, 2004) and even as high as 9.3 million in 2002 (Passel, Capps, and Fix, 2004).

In terms of undocumented households (rather than population), Paral (2004) used data from the U.S. Citizenship and Immigration Services (formerly the INS) on the number of undocumented Hispanics and information on non-citizen, recent Hispanic immigrants captured by the 2000 decennial census to estimate the number of undocumented Hispanic householders and their characteristics.[27] The researcher also produced estimates by income, age categories, and region. The study found that in 2000, nearly 1.2 million undocumented Hispanic households were in the United States. The vast majority were Mexican but also included 2,500 people from Cuba, 28,000 from the Dominican Republic, 153,000 from Central America, and 113,000 from South America. In comparison, the 2000 decennial census identified a total of 9.2 million Hispanic households residing in the United States. Paral estimated that most households (669,705) were in the 25-to-34 age group category and 419,633 were in the 35-to-44 age group category. Although most of these households (817,392) earned between $10,000 and $39,999 annually, more than 200,000 earned between $50,000 and $74,999 annually.

In addition, the study estimated the geographic location of undocumented Hispanic households by distributing their numbers across regions and states of the United States based on the location of Hispanic non-citizen renter households that entered the United States during the 1990s. This methodology suggests that 16.6 percent of undocumented Hispanic households are in the Northeast (mostly in New York and New Jersey), 9.9 percent are in the Midwest (especially in Illinois), 38.2 percent are in the South (predominantly in North Carolina, Georgia, Florida, and Texas), and 35.3 percent are in the West (particularly in Arizona and California).

This sizable population is effectively shut out of the homebuying process because undocumented immigrants cannot obtain valid SSNs, which, in turn, prevents them from applying for loans from mainstream lenders and for federally funded homeownership assistance programs. Indeed, focus groups conducted by the Congressional Hispanic Caucus Institute (2004) found that lack of documentation is a significant barrier to homeownership in 7 out of 11 cities: Atlanta, Chicago, Durham, Kansas City, Los Angeles, San Antonio, and New York City. In many of these cities, focus group participants admitted using false SSNs but also stated that they were unable to establish credit histories using these numbers or successfully complete the mortgage application process because the underwriting computer "will likely spit it out" (Congressional Hispanic Caucus Institute, 2004: 16).

Without valid SSNs, Hispanics also have difficulties documenting their wages and employment histories. Lenders expect documentation such as pay stubs to demonstrate sustained employment income, which is needed to satisfy the lender's assessment of the borrower's capacity to repay the loan. Also, because undocumented immigrants do not have valid SSNs and are thus unable to work in the formal economy, many of them work in seasonal positions and change jobs frequently. These Hispanics face additional challenges to documenting their income and employment histories because it is difficult to locate their former employers.

Racial and Ethnic Discrimination. Racial or ethnic discrimination within the financial and mortgage market has been researched extensively, particularly among African-American households. Numerous studies during the 1990s focused on the incidence and severity of discrimination in mortgage lending, which are succinctly summarized by LaCour-Little (1999) and Turner and Skidmore (1999). These summaries suggest that race and ethnicity has a significant effect on whether a household is rejected for a home loan, even after controlling for a variety of demographic and economic indicators. A few studies are particularly noteworthy.

The HUD-sponsored HDS 2000 conducted by Turner et al. (2002b) used paired tests to demonstrate that real estate agents treated non-Hispanic Whites more favorably than they treated Hispanics in terms of providing information about home financing assistance. Similarly, Turner et al. (2002a) applied the paired-testing approach in both Chicago and Los Angeles to investigate whether minorities (African Americans and Hispanics) receive the same treatment and information as Whites do during the preapplication phase of the mortgage application process.

The tests revealed statistically significant patterns of unequal treatment that systematically favored Whites (see exhibit 8). In terms of statistically significant findings, Hispanics in Chicago were

Exhibit 8

Differential Treatment Among Non-Hispanic White Homeseekers and Hispanic Homeseekers, in the Preapplication Phase of the Mortgage Application Process

Overall Indicator	Chicago		Los Angeles	
	% of Non-Hispanic White Favored	% of Hispanic Favored	% of Non-Hispanic White Favored	% of Hispanic Favored
Information provided	7.5	8.8	12.7	1.3**
House homeseekers could afford				
Maximum loan amount	51.9	19.2**	42.9	32.7
Maximum house price	51.0	13.7**	44.0	30.0
Number of products	55.6	27.8**	51.9	34.6
Received positive coaching	40.5	15.2*	39.2	36.7
Received followup	7.6	13.9	6.3	13.9
FHA encouraged	13.0	13.0	15.0	30.0

** Indicates significance at the 90% level or higher.*
*** Indicates significance at the 95% level or higher.*
Source: Turner et al. (2002a: 25–35)

given lower estimates of loan amounts and house prices than they could afford, told about fewer loan products, and offered less coaching than were their non-Hispanic White counterparts. For example, non-Hispanic Whites were quoted higher loan amounts and house prices more than 50 percent of the time, while Hispanics were favored less than 20 percent of the time. Non-Hispanic Whites were told about more loan products 56 percent of the time, while 28 percent of Hispanics were favored in this area. Non-Hispanic Whites were also given more assistance on how they could improve their qualifications as borrowers 41 percent of the time, while Hispanics were favored only 15 percent of the time.

In Los Angeles, Hispanics were given less information about affordable loan amounts and house prices and were informed about fewer products; however, Hispanics received more followup than their non-Hispanic White counterparts did. For example, non-Hispanic White testers were given more information 13 percent of the time, while Hispanics received more information 1.3 percent of the time. In terms of the number of loan products discussed, the incidence of favoritism was statistically insignificant but the study found that the differences in the number of products discussed were significant, with non-Hispanic Whites told about an average of 2.9 products and Hispanics told about only 2.3 products. Similarly, although the incidence of followup among the testers was not statistically significant, the average number of contacts among Whites (0.2) was statistically *lower* than that of Hispanics (0.4).

Discrimination in mortgage lending was also the focus of an earlier study that supplemented Home Mortgage Disclosure Act (HMDA) data in Boston with specific information on the financial, employment, and property characteristics of loan applicants that were relevant to a lending decision (Munnell et al., 1996).[28] The results demonstrated that even after controlling for the usual mortgage underwriting criteria, minorities were more likely to be rejected for a mortgage than Whites were. The study did confirm that minority applicants differ from White applicants in several important ways. Minority applicants have considerably less net wealth, liquid assets, and income than White applicants do and they also have poorer credit histories. African-American and Hispanic applicants also make lower downpayments and have higher loan-to-value ratios than Whites do. These disadvantages in the loan application process accounted for a large portion of the difference in denial rates—but not all of the difference. The disparity between minority and White denials decreased from 18 percentage points to just more than 8 percentage points after controlling for these economic and property characteristics. Put differently, minority applicants with economic and property characteristics identical to those of White applicants would experience a rejection rate of 28 percent, while White applicants would experience a rejection rate of 20 percent (Munnell et al., 1996: 26).

The study also divided the sample into lenders with high and low volumes of loans made to minorities to determine if loan denial disparities among Whites, African Americans, and Hispanics differed by the size of the lending institution. The study found that race was an important explanatory factor for both types of lenders. Thus, the study concluded that an applicant's financial characteristics play a significant role in explaining loan denial disparities between Whites and minorities, but differential treatment based on race and ethnicity was evident in the mortgage market.[29]

These quantitative studies have been supported by qualitative research. For example, Temkin et al. (1999) conducted an indepth case study of a moderately sized lending institution based on detailed interviews with staff and a review of the institution's HMDA loan data. According to the case study, loan officers (a third of whom were Hispanic) and senior staff all spoke about the importance of fairness and the efforts to make sure that all qualified households were able to qualify for loan. The institution's data showed, however, that Hispanics were 2.5 times more likely to be denied a loan than Whites were, which was a considerably higher denial rate than the average rate within that metropolitan statistical area, even after controlling for an applicant's income and loan product. These researchers could not quantitatively pinpoint a reason for the discrepancy between the reported fair treatment of all applicants by staff and the lender's high denial disparities suggested by its HMDA data but offered three possible explanations: (1) the possibility that a higher rate of unqualified minority applicants applied at this institution, (2) HMDA-based data may be too imprecise to measure discrimination and may generate "false positives," and (3) the lending institution's staff may have good intentions but lack training, monitoring, or feedback mechanisms that ensure fair treatment. Also, after reviewing the lender's managerial practices and procedures, the researchers concluded that the lender fell short of implementing numerous fair lending practices that could have reduced the possibility of differential treatment of minority loan applicants.

Summary

The Hispanic community in the United States is very diverse. Hispanic households come from many different countries and differ across many demographic and socioeconomic characteristics. Some Hispanics are born abroad or speak English poorly, while others are native-born citizens or speak English fluently. A portion of the Hispanic community consists of immigrant households; and some of these households have been in the United States for many years, while others have been in the country for only a few years. In terms of residence, most Hispanic households are located in the South and West, particularly in California and Texas, and a few metropolitan areas in the Northeast have very high concentrations of Hispanic households.

These characteristics are important, not only because they highlight the enormous diversity among Hispanic households, but also because they are critical to understanding how Hispanic homeownership rates and gaps may change over time. This study provided an analysis of decennial census data to explore the relationship between these characteristics and homeownership rates and gaps. The analysis, supported by a literature review, found that age, income, level of education, net worth, household type, nativity, country of origin, degree of social integration (citizenship status and years in the United States), and place of residence were important factors that explained the gap in homeownership rates among Hispanics and non-Hispanic Whites. The data demonstrated that Hispanic homeownership rates increase and gaps decrease as age, income, and wealth, and educational status increase. Marriage was also a strong determinant of homeownership.

Also, among the immigrant-related characteristics, country of origin, citizenship status, and years in the United States were found to be important determinants of Hispanic homeownership. Homeownership rates increased as citizenship and length of stay in the United States increased, but immigrant-arrival cohorts effects were evident. That is, the homeownership rates of more recent immigrant groups have not risen as much over time as that of earlier immigrant-arrival cohorts. The analysis also indicated that the concentration of Hispanics in high-cost housing markets could depress Hispanic homeownership rates in these areas.

The descriptive analysis was supported, in general, by the existing literature on homeownership and was supported, specifically, by the emerging literature on Hispanic homeownership. Research suggests that individual "endowment" factors (such as income, age, education, family type, gender, and characteristics of the housing market where Hispanics reside) explain between half and three quarters of the racial and ethnic gap in homeownership rates among Hispanics. Much of the remaining gap appears to be related to the large share of Hispanics who are immigrants, at least based on the findings of one study that includes the broadest set of variables to explain Hispanic-White homeownership gaps.

The high share of Hispanics who are immigrants contributes to a number of key barriers to Hispanic homeownership, including information gaps about the homebuying process, barriers in the housing market, and barriers in the mortgage application process. This study described these barriers and how they impinge on the homebuying process. For example, information gaps about the homebuying process, the importance of establishing a financial history, and the mortgage qualification process can discourage some Hispanics from pursuing homeownership either because their misunderstandings about the process lead them to believe that homeownership is unaffordable or too complicated, banks are not to be trusted, or they do not qualify for a mortgage due to their credit history. Similarly, housing affordability concerns and the perception of discrimination in the housing market may chill interest in pursuing homeownership by putting it out of the reach of many Hispanic households or by making the housing search excessively difficult. These concerns are exacerbated by poor credit histories, low wealth and income, lack of proper documentation, and the potential for racial and ethnic discrimination in the mortgage application process. These mortgage market barriers can lead to frustration with the mortgage application process and prompt some Hispanics to give up or view homeownership as an unaffordable opportunity. Furthermore, racial and ethnic discrimination in the mortgage application process can limit a household's search for housing and even shut out Hispanics altogether.

Taken as a whole, this article suggests that Hispanics face considerable barriers to homeownership in the United States The ability of homeownership programs—formed at all levels of government and within private and community-based groups—to overcome these barriers remains unclear (Cortes et al., 2006). In particular, our understanding of Hispanic homeownership rates and gaps suffers from two shortcomings. First, most of the existing literature on homeownership focuses on all U.S. households generally and on the gaps among Whites and African Americans. Some of the lessons learned from these studies are applicable to Hispanics, but, as this report suggests, numerous challenges to accessing homeownership opportunities are particular to Hispanics. Second, although not touched upon in this article, the literature on the impact of different policy approaches on increasing homeownership rates among Hispanics is severely lacking. Anecdotal evidence from various communities across the country provides an important starting point from which to craft more informed policies, but the long-term success of homeownership programs that target Hispanics will rely on more rigorous empirical studies.

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Notes

1. For a comprehensive review of the literature examining the extent to which low-income and minority households benefit from homeownership, see Herbert and Belsky (2006).

2. All data presented in the study are weighted to be representative of the population.

3. In the 2000 Census, write-in responses that were not classified into one of the response categories associated with 20 different countries were coded as “Other Central American,” “Other South American,” or “Other Spanish or Latino.” It is unclear what types of write-in responses would be classified as “Other Spanish or Latino.” Most Caribbean countries are not included in the list of 20 response categories, but it is unlikely that people with origins in that these countries collectively constitute 15 percent of Hispanic households in the United States.

4. The racial classification of Hispanics has historically been problematic for the U.S. Census. In the 1980 and 1990 Census reports, Hispanic people were treated as "White" when the "other race" category was recorded in order to maximize historical comparability with previous census. The Integrated Public Use Microdata Series recoded as "White" those who marked "other race" and identified themselves as being of Hispanic origin on the Hispanic origin question.
5. An immigrant is defined as a foreign-born head of household, including a person born in Puerto Rico or another U.S. outlying area or a person born abroad to U.S. parents. In 2000, the number of Hispanic immigrant households totaled 4,819,856.
6. The shares of households in metropolitan areas are based on those households for which metropolitan area status is identified in the microdata sample of the 2000 decennial census. Households living in urban areas with populations of less than 400,000 have their metropolitan area status suppressed for confidentiality. Metropolitan area status is reported for 80 percent of Hispanic households and 51.5 percent of non-Hispanic households.
7. Unless otherwise noted, the figures cites in this section of the article are from the Census Bureau's Integrated Public Use Microdata Series using the 1980 1-percent metropolitan sample, the 1990 1-percent metropolitan sample, or the 2000 1-percent sample.
8. This category includes non-Hispanic household heads who selected two or more race categories on the census.
9. In addition, Flippen (2001a) found that both homeownership rates and housing equity among Hispanic households increase with increased income.
10. Information on net worth is from the 1996 panel of the Survey of Income and Program Participation (Wave 12 Core Microdata File, Inter-University Consortium for Political and Social Research version). Net worth is the difference between the sum of the market value of assets owned by each member of a household and unsecured liabilities associated with each household member. Assets included savings accounts, equity in a home, mutual funds, vehicle ownership, 401(k) plans, and other financial assets. Liabilities included a variety of unsecured liabilities (for example, credit card debt, medical bills, and education loans).
11. A native-born head of household does not include a person born in a U.S. outlying area (for example, Puerto Rico) or a person born abroad to U.S. parents.
12. These figures are derived by using the share of the population of Hispanics and non-Hispanic Whites in each market as a weight in estimating the average house value across these markets. For example, a market where 4 percent of Hispanics reside would have a weight of .04 in estimating the average. If 2 percent of Whites live in that market, the weight for Whites would be .02.
13. The Fannie Mae survey divided Hispanics into two groups based on the use of Spanish in the home. Hispanic respondents who reported Spanish as the most language used most frequently in the home for both speaking and reading were categorized as "Spanish Hispanics," while those that reported English as the most frequently used language were categorized as "English Hispanics." For clarity, the terms "Spanish-speaking" and "English-speaking" Hispanics are used for these two groups in this report.

14. An undocumented person is defined as a foreign-born person who is not a U.S. citizen and does not have legal immigration status.

15. A total of 467 housing advocates and practitioners, industry experts, and Latino consumers participated in focus groups in the following cities: Atlanta, GA; Chicago, IL; Durham, NC; Kansas City, KS; Las Cruces, NM; Las Vegas, NV; Los Angeles, CA; Miami, FL; New York, NY; San Antonio, TX; and San Juan, PR.

16. It is assumed that first-time homebuyers have 10-percent downpayments and repeat buyers have 20-percent downpayments. The mortgage interest rate is assumed to increase by 0.5 percentage points annually.

17. The Fannie Mae study by Tong (2004) uses family median-income data from the U.S. Department of Housing and Urban Development, which does publish separate estimates by race or ethnicity. In order to produce comparable median family income for Hispanics, we used 2000 Integrated Public Use Microdata Series data for a household of four.

18. For a more thorough summary of the literature on racial discrimination in the housing market, see Herbert et al. (2005).

19. In a paired test, two individuals pose as identical homebuyers except one is a minority and the other is White. The two individuals visit real estate agents to inquire about available housing opportunities. The paired-test methodology reveals whether real estate agents treat minorities differently than they treat Whites during the housing search process.

20. The study conducted paired tests for both rental and sales housing markets. We focus on the findings from the sales market. Within the 23 metropolitan areas, Hispanic-only paired tests were conducted in 4 metropolitan areas: Pueblo, CO; San Antonio, TX; San Diego, CA; and Tucson, AZ. Both African-American and Hispanic paired tests were conducted in six metropolitan areas: Austin, TX; Chicago, IL; Denver, CO; Houston, TX; Los Angeles, CA; and New York, NY. African-American only paired testing was conducted in the remaining 10 metropolitan areas.

21. The paired testers were assigned similar characteristics, including number of bedrooms desired by the household, geographic preference, reason for moving, household income (monthly and annual), employment history, household assets and debts, credit status, and tenure at current residence.

22. These results varied somewhat by metropolitan region. Hispanic homeseekers face higher levels of discriminatory behavior from real estate agents in New York City and Austin, Texas. Levels of discriminatory treatment in Chicago, Denver, Houston, Los Angeles, San Antonio, and San Diego were similar to national patterns, while discriminatory treatment was slightly lower in Pueblo, Colorado and Tucson, Arizona.

23. The researchers had access to a data set that included credit scores and a variety of household characteristics. Using these data, they developed a statistical model to predict a credit score using household characteristics that were available in the Survey of Consumer Finances (SCF), including detailed information on assets and liabilities; use of financial services; income; housing status (renter and homeowner); and demographic characteristics (age,

years of education, martial status, number of dependents, and race and ethnicity). They then applied the estimated model to SCF survey data in each of the 4 years. The SCF for these 4 years contains information for more than 200,000 individuals. The cutoff of scores below 660 to represent those who are credit constrained is based on the authors' review of information on the use of credit scores by mortgage lenders as reported by Fair Issac Corporation at www.ficoguide.com.

24. According to the data collected from the Inter-American Development Bank, remittances account for 30 percent, 15 percent, and 12 percent, respectively, of the gross domestic products of Nicaragua, El Salvador, and Honduras.

25. The official development assistance excludes loans from The World Bank and the International Monetary Fund.

26. An undocumented Hispanic is defined as a foreign-born person who is not a U.S. citizen and does not have legal immigration status and therefore is not eligible to obtain a Social Security Number.

27. The report assumes that the decennial census captures most undocumented Hispanic immigrants and that all those who reported they were not citizens and had immigrated since 1980 are representative of undocumented Hispanic immigrants. The authors argue that a comparison of the number of legal immigrants over time with the number of self-reported immigrants captured by the decennial census supports the contention that most undocumented individuals are largely reported in the census. More specifically, Paral notes that the estimated undercount of Hispanics in the 2000 Census is 2.85 percent, including both natives and immigrants; however, Census Bureau analysis of the undercount suggests that the foreign born have a higher undercount rate (Robinson, 2001).

28. The study combines African-American and Hispanic applicants into a single minority category in the analysis.

29. The findings of this study were controversial and subject to intense scrutiny. Critics have pointed to potential problems with omitted variables, data errors, assumptions in their predictive equation, and disentangling endogenous explanatory variables from minority status as explanations for the findings of disparate treatment. Nevertheless, a reanalysis conducted by Ross and Yinger (2002) suggests that the study's findings have emerged intact in the face of most of this scrutiny and that the large differences in loan denial rates between minority and White applicants cannot be explained away by these issues (see Turner and Skidmore, 1999).

References

Barr, Michael. 2004. Banking the Poor: Policies to Bring Low-Income Americans Into the Financial Mainstream. Research Brief, September. Washington, DC: The Brookings Institution.

Bendixen and Associates. 2004. "The Barriers to Banking and Building Credit History for Latin Americans: A Focus Group Study of Un-Banked Hispanics in Mobile, Alabama and Las Vegas, Nevada." Miami, FL: Bendixen and Associates. http://www.bendixenandassociates.com/studies2004.html.

Borjas, George J. 2002. Homeownership in the Immigrant Population. Working Paper No. 02-01. Washington, DC: Research Institute for Housing America.

Bostic, Raphael W., Paul S. Calem, and Susan Wachter. 2004. Hitting the Wall: Credit as an Impediment to Homeownership. Working Paper BABC 04-5. Harvard University, Joint Center for Housing Studies.

Callis, Robert R. 2003. Moving to America—Moving to Homeownership: 1994–2002. *Current Housing Reports*, H121/03-1. U.S. Bureau of the Census.

Collins, Michael, and Doug Dylla. 2001. "Mind the Gap: Issues in Overcoming the Information, Income, Wealth, and Supply Gaps Facing Potential Buyers of Affordable Homes." *Home Ownership Summit: 2000 Research Series*. LISC Center for Home Ownership.

Congressional Hispanic Caucus Institute. 2004. "Focus Group Findings: Cross-Site Report." Washington, DC: Mosaica, the Center for Nonprofit Development and Pluralism.

Cortes, Alvaro, Christopher E. Herbert, Erin Wilson, and Elizabeth Clay. 2006. *Improving Homeownership Opportunities for Hispanic Families*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research.

Coulson, N. Edward. 1999. "Why Are Hispanic and Asian-American Homeownership Rates So Low? Immigration and Other Factors," *Journal of Urban Economics* 45: 209–227.

Dunham, Constance R. 2001. "The Role of Banks and Nonbanks in Serving Low- and Moderate-Income Communities." In *Changing Financial Markets and Community Development: A Federal Reserve System Conference*, edited by J.L. Blanton, et al. Richmond, VA: Federal Reserve Bank of Richmond: pp. 31–58.

Englehardt, Gary V., and Christopher J. Mayer. 1998. "Intergenerational Transfers, Borrowing Constraints, and Saving Behavior: Evidence From the Housing Market," *Journal of Urban Economics* 44: 135–157.

Fannie Mae. 2003. *Understanding America's Homeownership Gaps: 2003 Fannie Mae National Housing Survey*. Washington, DC: Fannie Mae.

Flippen, Chenoa A. 2001a. "Racial and Ethnic Inequality in Homeownership and Housing Equity," *The Sociological Quarterly* 42: 121–149.

———. 2001b. "Residential Segregation and Minority Home Ownership," *Social Science Research* 30: 337–362.

Gabriel, Stuart, and Stuart Rosenthal. 2005. "Homeownership in the 1990s: Aggregate Trends and Racial Disparities," *Journal of Urban Economics* 57 (1): 101–127.

Gyourko, Joseph, Peter Linneman, and Susan Wachter. 1999. "Analyzing the Relationship Between Race, Wealth and Homeownership in America," *Journal of Housing Economics* 8: 63–89.

Harding, John, C.F. Sirmans, and Stuart S. Rosenthal. 2007. "Depreciation of Housing Capital, Maintenance, and House Price Inflation: Estimates From a Repeat Sales Model," *Journal of Urban Economics* 61 (2): 193–217.

Haurin, Donald R., Patric Hendershott, and Susan Wachter. 1996. "Wealth Accumulation and Housing Choices of Young Households: An Exploratory Investigation," *Journal of Housing Research* 7: 33–57.

Haurin, Donald R., Christopher E. Herbert, and Stuart S. Rosenthal. 2007. "Homeownership Gaps Among Low-Income and Minority Households," *Cityscape* 9 (10): 5–51.

Herbert, Christopher E., and Eric S. Belsky. 2006. *The Homeownership Experience of Low-Income and Minority Families: A Review and Synthesis of the Literature*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research.

Herbert, Christopher E., Donald Haurin, Stuart S. Rosenthal, and Mark Duda. 2005. *Homeownership Gaps Among Low-Income and Minority Borrowers and Neighborhoods*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research.

Inter-American Dialogue. 2004. *All in the Family: Latin America's Most Important International Financial Flow.* Report of the Inter-American Dialogue Task Force on Remittances. Washington, DC: Inter-American Dialogue.

Joint Center for Housing Studies. 2004. *State of the Nation's Housing: 2004*. Cambridge, MA: Harvard University.

Kochhar, Rakesh. 2004. *The Wealth of Hispanic Households, 1996–2002*. Washington, DC: Pew Hispanic Center.

Krivo, Lauren J. 1995. "Immigrant Characteristics and Hispanic-Anglo Housing Inequality," *Demography* 32: 599–615.

———. 1986. "Home Ownership Differences Between Hispanics and Anglos in the United States," *Social Problems* 13: 319–335.

LaCour-Little, Michael. 1999. "Discrimination in Mortgage Lending: A Critical Review of the Literature," *Journal of Real Estate Literature* 7: 15–49.

Lee, Jongho, Louis G. Tornatzky, and Celina Torres. 2004. *El Sueño de Su Casa: The Homeownership Potential of Mexican-Heritage Families.* Los Angeles: University of Southern California, The Tomás Rivera Policy Institute. 27 p.

Masnick, George. 1997. "Citizenship and Homeownership Among Foreign Born Residents in the U.S." Research Note N97-1. Cambridge, MA: Harvard University, Joint Center for Housing Studies.

McArdle, Nancy. 1995. Homeownership Attainment of New Jersey Immigrants. Working Paper W95-2. Cambridge, MA: Harvard University, Joint Center for Housing Studies.

Munnell, Alicia H., Geoffrey M.B. Tootell, Lynn E. Browne, and James McEneaney. 1996. "Mortgage Lending in Boston: Interpreting HMDA Data," *American Economic Review* 86 (1): 25–53.

Myers, Dowel, and Seong Woo Lee. 1998. "Immigrant Trajectories Into Homeownership: A Temporal Analysis of Residential Assimilation," *International Migration Review* 32: 593–625.

Myers, Dowel, Isaac Megbolugbe, and Seong Woo Lee. 1998. "Cohort Estimation of Homeownership Attainment Among Native-Born and Immigrant Populations," *Journal of Housing Research* 9 (2): 237–269.

National Community Reinvestment Coalition. 2003. *The Broken Credit System: Discrimination and Unequal Access to Affordable Loans by Race and Age*. Washington, DC: National Community Reinvestment Coalition.

National Council of La Raza. 2004. *Financial Education in Latino Communities: An Analysis of Programs, Products, and Results/Effects*. Washington, DC: National Council of La Raza

Ondrich, Jan, Alex Stricker, and John Yinger. 1998. "Do Real Estate Brokers Choose to Discriminate? Evidence From the 1989 Housing Discrimination Study," *Southern Economic Journal* 64: 880–901.

Orozco, Manuel. 2004. *The Remittance Marketplace: Prices, Policy, and Financial Institutions*. Report prepared for the Pew Hispanic Center. Washington, DC: Georgetown University, Institute for the Study of International Migration.

Osili, Una O., and Anna Paulason. 2005. *Immigrant-Native Differences in Financial Market Participation*. Chicago, IL: Federal Reserve Bank of Chicago.

Painter, Gary, Stuart Gabriel, and Dowell Myers. 2001. "Race, Immigrant Status, and the Housing Tenure Choice," *Journal of Urban Economics* 49: 150–167.

Paral, Robert. 2004. *The Potential for New Homeownership Among Undocumented Latino Immigrants.* Report prepared for the National Association of Hispanic Real Estate Professionals. Chicago, IL: Paral and Associates.

Passel, Jeffrey S., Randy Capps, and Michael Fix. 2004. *Undocumented Immigrants: Facts and Figures*. Washington, DC: The Urban Institute.

Quercia, Roberto G., George W. McCarthy, and Susan M. Wachter. 2003. "The Impacts of Affordable Lending Efforts on Homeownership Rates," *Journal of Housing Economics* 12 (1): 29–59.

Ratner, Mitchell. 1996. "Many Routes to Homeownership: A Four-Site Ethnographic Study of Minority and Immigrant Experiences," *Housing Policy Debate* 7 (1): 103–145.

Real Estate Center at Texas A&M University. 2004. "Home Buying Among Ethnic Groups." PowerPoint presentation.

Robinson, J. Gregory. 2001. *ESCAP II: Demographic Analysis Results*. Washington, DC: U.S. Census Bureau, U.S. Department of Commerce, Executive Steering Committee for A.C.E. Policy II.

Rosenbaum, Emily. 1996. "Racial/Ethnic Differences in Home Ownership and Housing Quality, 1991," *Social Problems* 43 (4): 403–26.

Rosenthal, Stuart. 2002. "Eliminating Credit Barriers to Increase Homeownership: How Far Can We Go?" In *Low-Income Homeownership: Examining the Unexamined Goal*, edited by Eric Belsky and Nicolas Retsina. Washington DC: Brookings Institution Press: 111–145.

Ross, Stephen L., and John Yinger. 2002. *The Color of Credit: Mortgage Discrimination, Research Methodology, and Fair-Lending Enforcement*. Cambridge, MA: Massachusetts Institute of Technology Press.

Roychoudhury, Canopy, and Allen C. Goodman. 1996. "Evidence of Racial Discrimination in Different Dimensions of Housing Search," *Real Estate Economics* 24: 161–178.

Savage, H. 1999. *Who Could Afford to Buy a House in 1995?* Washington, DC: U.S. Census Bureau.

Schoenholtz, Andrew, and Kristin Stanton. 2001. *Reaching the Immigrant Market: Creating Homeownership Opportunities for New Americans*. Washington, DC: Georgetown University and Fannie Mae Foundation.

Schuetz, Jenny, Eric S. Belsky, and Nicolas P. Retsinas. 2004. *Current Housing Situation in Mexico 2005*. Cambridge, MA: Harvard University, Joint Center for Housing Studies.

Singer, Audrey, and Anna Paulson. 2004. *Financial Access for Immigrants: Learning from Diverse Perspectives.* Policy brief. Washington, DC: The Brookings Institution.

Temkin, Kenneth, George Galster, Roberto Quercia, and Sheila O'Leary. 1999. *A Study of the GSEs' Single-Family Underwriting Guidelines*. Washington, DC: The Urban Institute.

Tong, Zhong Yi. 2004. *Housing Affordability in Urban America: Past and Future.* Washington, DC: Fannie Mae Foundation.

Toussaint-Comeau, Maude, and Sherrie L.W. Rhine. 2000. "Ethnic Immigrant Enclaves and Homeownership: A Case Study of an Urban Hispanic Community." Consumer Issues Research Series. Chicago, IL: Federal Reserve Bank of Chicago, Consumer and Community Affairs Division.

Turner, Margery Austin, et al. 2002a. *All Other Things Being Equal: A Paired Testing Study of Mortgage Lending Institutions*. Washington, DC: U.S. Department of Housing and Urban Development.

———. 2002b. *Discrimination in Metropolitan Housing Markets: National Results From Phase I HDS 2000*. Washington, DC: U.S. Department of Housing and Urban Development.

Turner, Margery Austin, and Felicity Skidmore, eds. 1999. *Mortgage Lending Discrimination: A Review of Existing Evidence.* Washington, DC: The Urban Institute.

U.S. Immigration and Naturalization Service. 2003. *Estimates of the Unauthorized Immigrant Population Residing in the United States*. Washington, DC: U.S. Department of Justice, U.S. Immigration and Naturalization Service.

Wachter, Susan M., and Isaac F. Megbolugbe. 1992. "Racial and Ethnic Disparities in Homeownership," *Housing Policy Debate* 3 (2): 333–370.

Yinger, John. 1998. "Housing Discrimination Is Still Worth Worrying About," *Housing Policy Debate* 9 (4): 893–927.