

Housing Cost Burden and New Lawful Immigrants in the United States

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Abstract Housing in the United States constitutes the largest expenditure for many households. Increasing rents and home prices, changes in the mortgage industry, and the growing importance of immigrants in the U.S. housing market underscore the value of examining the economic hardship that housing costs pose for immigrants. As is true for the native-born, immigrants' allocation of financial resources to housing influences the funds available for savings, investments, survival of emergencies, and the overall economic well-being of children and families. This project employs 2003 national-level data of legal permanent residents from the New Immigrant Survey to examine an outcome lacking sufficient empirical study: the proportion of household income spent on housing. The study examines whether disparities in immigrant housing cost burden by country/region of origin persist after accounting for differences in human capital, stage in the life cycle, assimilation, and other factors. The analyses disaggregate immigrants from Latin America, Asia, Europe and other areas into more nuanced categories. The results document that after controlling for a diverse array of variables, legal immigrants vary widely in housing cost burdens by country/region of origin. These disparities have implications for the future wealth accumulation and long-term financial security of immigrants in the United States.

Keywords International migration · Housing · Ethnicity · United States

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Immigrants are an emerging force in the housing market (Myers and Liu 2005), accounting for 37% of the total growth in U.S. households between 1995 and 2005 (Joint Center for Housing Studies 2006). In 2000, immigrants comprised 17% of renter-occupied units and 9% of owned housing in the United States, comprising even larger proportions in high-immigration states such as California and New York (Myers and Liu 2005). The costs of housing, estimated at one-third of household expenses for the U.S. overall (Bureau of Labor Statistics, U.S. 2005), are relevant for immigrants as they build lives in their new place of residency.

Housing cost burden, or the proportion of income dedicated to housing, is linked with the long-term economic success of immigrants in the United States. A higher allocation of financial resources to housing reduces funds available for savings, investments, survival of emergencies, and economic downturns. Rising housing costs in recent years have eroded housing affordability for owners and renters across the country (Joint Center for Housing Studies 2007). High cost burdens are particularly problematic for lower income households, resulting in more crowded, lower quality residences and longer, more expensive commuting distances to jobs (Lipman 2005). In addition, homeowners with high housing cost burdens risk losing their homes to foreclosure should unforeseen expenses arise.

The current study employs 2003 data from the New Immigrant Survey (NIS), a sample of immigrants recently granted legal permanent residence (LPR) in the United States, to investigate the factors linked with immigrant housing cost burden. NIS data were collected in the middle of the latest housing boom, which began in approximately 1999 and peaked in 2005 (Joint Center for Housing Studies 2007). The data include a diverse group of immigrants from countries around the world, some with little formal education and others with advanced degrees, persons who have just arrived in the United States and those with many years of U.S. residence. This project is primarily interested in identifying whether disparities in housing cost burden by country/region of origin persist after controlling for indicators typically associated with immigrant housing outcomes.

This research is motivated by two gaps in the housing literature. First, the housing cost burden of immigrants is less well-understood than homeownership and other housing outcomes. Understanding the proportion of income that immigrants allocate to shelter costs provides unique information on the level of economic hardship imposed by housing costs. Such research is crucial, given that immigrants are more likely to be severely cost burdened than their U.S.-born counterparts (Elmelech 2004; Lipman 2005; Schill et al. 1998). As described later in the paper, studies that have examined immigrant housing costs in a multivariate framework generally have considered the absolute size of rental payments, housing cost burden for renters or owners in only one city, or have combined housing cost burden with other outcomes. To date, no study has employed national-level data to analyze the housing cost burdens of both immigrant renters and homeowners. The present study examines whether the indicators of theories traditionally employed in housing research apply to the allocation of financial resources to housing costs in a national sample of immigrants.

Second, recent scholarship points to important differences in housing outcomes for immigrants from diverse areas of the world. For instance, among first-time

homeowners buying their residences between 1997 and 2001, 17% of Latin American immigrants spent more than half of their income on housing, compared with 11% of Asian immigrants, and 9% of non-Hispanic White immigrants (Bogardus Drew 2002). Moreover, previous housing studies reveal substantial housing disparities *within* immigrant groups from the same area of the world, such as between immigrants from Mexico and other Latin American countries and between South and East Asia (Borjas 2002; McConnell and Akresh 2008; Painter et al. 2003; Ray et al. 2004). Differences within these broader origin categories have been noted for housing cost burden specifically. For example, immigrant renters in New York City from Korea, the Philippines, and Southeast Asia have higher cost burdens relative to immigrants from China, Hong Kong, and Taiwan (Schill et al. 1998). Other groups, such as White and/or European immigrants, are typically aggregated in housing research (Alba and Logan 1992; Cobb-Clark and Hildebrand 2006; Flippen 2001), despite significant heterogeneity within European immigrants. In 2000, Eastern Europeans comprised nearly 40% of all European-born individuals in the U.S., originating primarily from Poland, Russia, and the Ukraine. The remainder of European immigrants was from countries such as the United Kingdom, Germany, and Italy (Census Bureau). One study finds that Russian immigrants in New York City have higher housing cost burdens than other European immigrants (Schill et al. 1998). Additional investigation is necessary to determine whether such within-group differences hold in other U.S. locations.

The present work divides European, Latin American, Asian, and other immigrant groups into more fine-grained country/region of origin categories. Focusing on such differences is important, given the substantial diversity of motivations for migration, contexts of arrival, and U.S. experiences of immigrants arriving from distinct countries in Europe, Latin America, Asia, and elsewhere. In addition, the results will identify which contemporary immigrant groups face challenges managing their housing costs early in their transitions to the U.S. and can illuminate how they might fare in the coming decades.

Background and Literature Review

Contemporary Context

Housing cost burden takes into account both gross housing costs and household income, making it a powerful indicator of the impact of shelter costs on overall household expenditures. All evidence points to increasing housing cost burdens in recent years, for both homeowners and renters. Nationally, income growth has not kept pace with rising housing prices (Apgar et al. 1990; Chi and Laquatra 1998), and has posed a substantial barrier to securing affordable housing and the likelihood of homeownership (Krivo 1995). The situation has worsened since 2000, as housing price appreciation has risen far faster than median household incomes and overall price inflation (Joint Center for Housing Studies 2006). Consequently, higher proportions of working families are spending more than half of their income on

housing in the United States: approximately 7% in 1997 and 11% by 2005 (Brennan and Lipman 2007).¹

Recent shifts in the U.S. home mortgage market also have implications for housing cost burdens, particularly for homeowners. For example, relatively low interest rates and the growth of alternatives to the traditional 20% down, 30 year fixed-rate mortgage undoubtedly have enabled both natives and immigrants to purchase homes in the United States. Further, dramatic increases in the subprime mortgage market since the early 1990s (Joint Center for Housing Studies 2007; Williams et al. 2005) have meant that many families with higher credit risks have been able to achieve tenure (Federal Deposit Insurance Corporation, U.S. 2004a; Di and Liu 2006). Yet, many of these new homeowners purchased their homes with adjustable rate mortgages that re-set after an introductory period of 2–3 years, typically leading to a steep rise in interest rates and monthly payments (Bair 2007). Simultaneously, homeowners who experienced large increases in home values took out record numbers of home equity lines of credit to cover other forms of debt (Joint Center for Housing Studies 2007).

Though subprime and home equity loans are useful for home purchase and consumption smoothing, both are risky when the U.S. housing market trends downward. In the year the NIS data were collected, 2003, mortgage foreclosure rates were at their highest levels since 1979 (Federal Deposit Insurance Corporation, U.S. 2004b). Since that time, foreclosures rates have climbed higher, the proportion of all types of mortgages that are delinquent has risen (Joint Center for Housing Studies 2007), and the proportion of subprime loans in foreclosure, bankruptcy, or returned to the bank has quadrupled (Bair 2007). Consequently, although immigrants have increased their U.S. homeownership rates in recent years (Myers and Liu 2005), it is critical to examine how these new homeowners are faring with their housing costs.

In sum, increasingly unaffordable housing, recent shifts in the mortgage market, growing housing debt, and declining housing prices are linked to the financial security of millions of families. The current study identifies the housing cost burdens of legal immigrants in the middle of the latest housing boom and offers insight into how immigrant renters and homeowners from diverse origins might be managing housing cost burdens at present.

Empirical and Theoretical Background

Prior research has documented substantial disparities in homeownership and other housing outcomes in the United States, by nativity, ethnicity, race and country/region of origin (e.g., Alba and Logan 1992; Borjas 2002; Cobb-Clark and Hildebrand 2006; Coulson 1999; Flippen 2004; Friedman and Rosenbaum 2004; Krivo 1995; Krivo and Kaufman 2004; Myers and Chung 1996; Oliver and Shapiro 1995; Painter et al. 2001). In addition to large differences by race and ethnicity or

¹ Households who spend more than 30% of their income on housing generally are considered to be financially burdened by housing; those allocating more than 50% are severely burdened.

country/region of origin, nearly every study reports that immigrants have less advantageous housing outcomes than those born in the United States. This is true for housing costs, as well; naturalized citizens and other immigrants are far more likely to spend half of their household income on housing than the U.S. born (Department of Housing and Urban Development 2002; Lipman 2005; Schill et al. 1998). In the next section, we describe theoretical frameworks that dominate immigrant housing research and outline how each framework shapes our expectations for immigrant housing cost burden generally.

Human Capital, Life Cycle, Local Context

Prior scholarship has shown that households with higher levels of human capital generally have higher rates of homeownership and more housing wealth (Dawkins 2005; Flippen 2001; Krivo and Kaufman 2004). Stage in the life cycle, such as marriage and the arrival of children, is linked with transitions in housing, such as from renting to owning and moving from smaller to larger housing units (Alba and Logan 1992; Coulson 1999; Myers and Lee 1998; Painter et al. 2001). Economic and contextual aspects of the local area, including housing prices and racial/ethnic/nativity composition, are also linked to housing outcomes like homeownership and home equity (Borjas 2002; Elmelech 2004; Krivo 1995; Krivo and Kaufman 2004; Toussaint-Comeau and Rhine 2004). Differences in shelter costs by U.S. location are especially relevant for immigrants, as they are more likely to reside in higher-cost areas than natives (Department of Housing and Urban Development, U.S. 2002), particularly metropolitan areas and locales in the Northeast and West (Brennan and Lipman 2007; Simmons 2004).

Each of these frameworks is likely to help explain immigrant housing cost burden. For example, immigrants with more human capital, particularly higher education, are likely to earn higher incomes, which may lower their cost burden. Married couples likely pool their resources, which may decrease the proportion of income that they allocate to housing. In some cases, human capital and life stage indicators such as the presence of children could be either positively or negatively related to cost burden. For instance, families with children might choose to reside in higher-cost neighborhoods to access better housing, schools and local amenities. Such persons might bear higher cost burdens willingly, while others may have higher cost burdens involuntarily. The larger context is also expected to relate to cost burden: persons living in higher-cost areas such as the Northeast and states with higher median home prices are likely to allocate a larger share of resources to housing.

Assimilation

Assimilation theory suggests that with time in the United States, immigrants increase their earnings and learn more about the U.S. housing market, leading to more advantageous housing situations, such as homeownership and more housing wealth (Alba and Logan 1992; Borjas 2002; Elmelech 2004; Krivo 1995; McConnell and Marcelli 2007; Painter et al. 2001, 2004; Yu 2006). English fluency is an important indicator of assimilation that is strongly connected with improved housing situations

(Alba and Logan 1992; Flippen 2001; McConnell and Akresh 2008) and may be linked with housing cost burden. Immigrants who are English proficient may be able to negotiate lower rents or mortgage terms and earn higher incomes than their non-proficient counterparts.

Many immigrants in the U.S. are expected to provide financial assistance to family remaining in the sending country (Massey et al. 1987) and large proportions of immigrants send billions of dollars home each year (Suro 2003; Suro et al. 2002). Sending transfers suggests a strong attachment to the origin country that appears to lessen over time; immigrants with longer residence in the U.S. have lower probabilities of sending transfers than more recent arrivals (DeSipio 2002). Although transfers are likely to be important for expenditures in the U.S., it is unclear how they are linked with housing cost burden. Previous studies have examined the connection between transfers and immigrant homeownership (McConnell and Akresh 2008; McConnell and Marcelli 2007) but to our knowledge, the present study is the first test of the relationship between transfers and housing cost burden. We expect the relationship to be negative as immigrants likely reduce their U.S. expenditures, including housing, in order to send more money home.

Place Stratification and Segmented Assimilation

Though typically employed to explain residential segregation and spatial mobility, the place stratification framework argues that structural barriers supporting the racial and ethnic hierarchy in the United States constrain the opportunities of non-Whites, particularly African Americans, even when they have similar socio-economic resources as Whites (Charles 2006; Rosenbaum and Friedman 2007). Institutional practices such as discrimination in mortgage lending, access to housing, and steering by real estate agents serve the interests of Whites and limit the upward mobility of African Americans and Latinos (Charles 2006; Conley 1999; Galster and Godfrey 2005; Massey and Denton 1993; Oliver and Shapiro 1995). Audit studies with pairs of trained testers, one White and the other Black or Hispanic, document that minority auditors are less likely to learn about rental incentives such as 1 month's free rent, are provided with fewer loan options from mortgage lenders, and are less likely to receive assistance with securing financing (e.g., Turner et al. 2002a; Yinger 1995). Asians have similar experiences (Turner et al. 2002b, 2003). Further, minorities tend to receive lower credit ratings than Whites (Carr and Megbolugbe 1993), which makes it more likely that they will be denied for loans in the prime market. Many minorities turn to higher-cost subprime mortgages to purchase a home (Department of Housing and Urban Development, U.S. 2000). As a result of these structural barriers in housing, minorities pay a premium for being non-White, including higher rents, less favorable mortgage terms, and a more limited pool of housing options (Turner and Skidmore 1999); all of which may increase their overall housing costs and, consequently, their housing cost burden. For these reasons, differences in housing outcomes not explained by observed characteristics are generally attributed to contemporary racial/ethnic discrimination (Borjas 2002; Coulson 1999; Dawkins 2005; Elmelech 2004).

Immigrants arriving in the U.S. enter into the existing system of racial stratification (Bashi and McDaniel 1997) and differential economic opportunity structures by race and ethnicity (Portes and Rumbaut 1990; Rosenbaum and Friedman 2007; Waters 1999). Consequently, an immigrant's phenotype, name, and/or accent provide cues to others about their country/region of origin, race, and ethnicity. At present, immigrants from Western and Eastern Europe with lighter features likely are perceived by others to be White; those of African, Asian, or Latin American origins would likely be characterized as non-White. The classic assimilation framework is generally considered to be more appropriate for understanding the outcomes of Western European groups than for immigrant groups from Asia, Latin America, and elsewhere (Alba and Nee 1997; Portes and Rumbaut 1990).

Structural barriers based on race, nativity, and other factors may lead to segmented assimilation for non-White immigrants, who may experience lessened or even downward mobility compared with White immigrants. Indeed, research shows that Black and darker-skinned Latin American immigrants who encounter structural discrimination and individual prejudice experience limited economic integration and mobility, compared with their lighter-skinned peers (Alba and Nee 1997; South et al. 2005). Some real estate agents, apartment managers, landlords, and loan officers may engage in similar kinds of discriminatory practices when dealing with non-White immigrants from Latin America, Asia, and Africa that have been documented for U.S. born minorities. Indeed, being both foreign-born and categorized as a racial/ethnic minority may constitute a double disadvantage for some immigrant groups in housing (Friedman and Rosenbaum 2004).

As a result of these discriminatory practices, Black immigrants may allocate more of their income to housing than non-Black immigrants, irrespective of their country/region of origin. Immigrants from Mexico and Latin America may experience similar forms of institutional discrimination, resulting in higher cost burdens not explained by indicators of human capital, assimilation, and other observed characteristics. Asians also encounter discriminatory treatment in housing, although research to date shows that Asian immigrants have homeownership rates and housing wealth that resemble or are higher than White and/or European immigrant groups (Cobb-Clark and Hildebrand 2006; Krivo and Kaufman 2004; Ray et al. 2004). Therefore, immigrants from Asia and the Indian subcontinent & Middle East may have similar housing cost burdens to Western Europeans. Each of the theoretical perspectives described above is relevant for understanding past scholarship about housing cost burden, to which we now turn.

Previous Work

Few published studies specifically address the housing costs of immigrants, but those that do are illuminating. For example, Krivo's (1995) examination of the gross rent paid by Hispanics and non-Hispanic Whites using 1980 census data reveals that Hispanics have lower rent payments than non-Hispanic Whites and that Mexican Americans have lower rents than Cubans and "Other Hispanics" (Krivo 1995).

However, rent payments were not connected to indicators of assimilation theory, such as nativity or time in the U.S., after controlling for other factors. A more recent study of annual rent payments shows that African Americans and Hispanics have lower rental costs than their non-Hispanic White counterparts, net of education, age, and household income (Boehm and Schlottmann 2008). Further, newly arrived immigrants have lower rental payments than those with more years of U.S. experience (Boehm and Schlottmann 2008), suggesting that more assimilated immigrants have higher housing costs.

Three other studies specifically investigate housing cost burden. Elmelech's (2004) analyses of 1990 census data for New York City renters finds that recently arrived immigrants and linguistically isolated households have higher cost burdens than those arriving before 1960 and households with English-speaking adults. Controlling for migration, demographic, and socioeconomic characteristics, non-Hispanic White renters have lower cost burdens than Indians and Koreans, higher cost burdens than Puerto Ricans, and burdens that were similar to African Americans, Dominicans, and the Chinese (Elmelech 2004). Schill et al. (1998) examine nativity and country/region of origin differences in the housing costs of New York City renters and owners using 1996 Housing and Vacancy Survey data. After controlling for income, immigrant renters from the Dominican Republic, Puerto Rico, the Caribbean/Africa, Europe, China/Hong Kong/Taiwan, and India/Pakistan/Bangladesh either have lower housing cost burdens than U.S. born Whites or similar cost burdens. Only renter households from Russia and Other Asian countries have higher cost burdens than the reference group (Schill et al. 1998).² Lipman's (2003) analyses of 2001 American Housing Survey data show that Mexican immigrants are less likely to have inadequate housing and are less likely allocate more than 50% of income to housing costs than U.S.-born Whites. However, immigrants from Canada, Europe, and Asia are as likely as U.S.-born Whites to have such problems (Lipman 2003).³

Hypotheses

Based on past theoretical and empirical work, we expect to find significant differences in immigrant housing cost burden by country/region of origin and race. In addition, we expect that some portion of these disparities can be explained by differences across groups in human capital, stage of the life course, and residential context. Immigrants of different countries/regions of origin and race vary in the presence of these predictors (e.g., Mexicans have less education than Western Europeans), which may influence their housing costs, household incomes, and overall housing cost burden. Moreover, consistent with the assimilation framework, we expect that immigrants who have been in the U.S. longer and who have better English skills will have lower housing cost burdens. Those who send money home

² Schill et al. (1998) do not employ multivariate techniques to examine immigrant housing cost burden by country/region of origin.

³ Lipman (2003) does not control for indicators of assimilation, such as years of U.S. residence.

are likely to have lower housing cost burdens, as resources are limited. Immigrants vary significantly in their duration of U.S. residence, English skills, and transfers by country/region of origin, which may help explain differences in housing cost burdens within and across origin categories.

Place stratification and segmented assimilation approaches also are likely to explain differences in housing affordability among legal immigrants by country/region of origin. We expect that Black immigrants will have higher cost burdens than non-Black immigrants, irrespective of their country/region of origin, due to institutional discrimination and structural barriers in housing. Consistent with the similarities between Western European immigrants and U.S.-born Whites, we expect that the former experience lower housing cost burdens than most other country/region groups in our sample. Compared with Western Europeans, immigrants from Mexico and Latin America may have higher cost burdens, while those from Asia and the Indian subcontinent & Middle East may have similar housing cost burdens to Western Europeans.

This study also considers the diversity within European immigrants, particularly between those from Eastern and Western Europe. Although Eastern and Western European immigrants are uniformly presented as “making rapid upward progress and achieving success with remarkable ease and speed” (Foner and Alba 2006, p. 1), historically these groups have had different processes of racialization and upward mobility in the United States (e.g., Daniels 2002; Gabaccia 2002; Ignatiev 1995; Jacobson 1998). Today, Eastern and Western European immigrants have different profiles in the U.S., including visa class of admission (Akresh and Frank 2008), which may be linked with different housing cost burdens. In addition, a study cited earlier reports important differences in the housing cost burdens of Russian and other European immigrants in New York City (Schill et al. 1998), differences which may apply to a national sample of Eastern European immigrants after broad range of factors are controlled.

Data and Methods

We use 2003 data from the New Immigrant Survey (NIS) to investigate the housing cost burden of legal immigrants in the United States. The sampling frame of the NIS was a list of all immigrants granted legal permanent residence (LPR) between May and November of 2003 (NIS-2003-1).⁴ The NIS data include immigrants from the majority of countries in the world. Respondents reside in 85 U.S. metropolitan areas and 38 counties with the largest immigrant populations and an additional ten metropolitan areas and 15 county pairs (Jasso et al. 2005). Interviews were carried out as soon as possible after LPR was granted and were conducted in the language of the respondent’s choice (Jasso et al. 2004). Persons becoming legal permanent residents in 2003 include both newly arrived immigrants and others who adjusted their status after several years in the country. To date, NIS data have been used in studies of immigrant health, English use, occupational mobility, assortative mating,

⁴ Longitudinal data for the 2003 NIS cohort is not yet available.

homeownership, and other outcomes (e.g., Akresh 2006, 2007; Akresh and Frank 2008; Jasso et al. 2000, 2005; McConnell and Akresh 2008).

The NIS provides comprehensive information on immigrant demographic and economic attributes, housing characteristics, and housing costs. The current study is restricted to the adult sample, which had a response rate of 69%, yielding 8,573 completed interviews. The sample used in this study totals 6,192 adults as individuals missing cost burden information and/or covariates are excluded due to listwise deletion.⁵ Moreover, the top 1% of cost burden values is excluded from the analyses to avoid distortion resulting from extreme values.⁶ Individuals in the final sample of 6,192 differ from the NIS sample excluded from the analyses. Most notably, individuals in our sample have higher household incomes, spent more time in the U.S., are more likely to be proficient in English, are more educated, and send more money to their origin country than those excluded. Our study therefore represents legal immigrants that are more integrated in the U.S. and more advantaged than the complete NIS sample. To the extent that these factors are also associated with lower cost burdens, our results will underestimate the challenges faced by this group.

The NIS sampling design excludes undocumented migrants and others without legal permanent residency. Compared to migrants who do not have LPR status, those who do might have better networks or greater facility navigating the immigration system. With respect to housing cost burden, the NIS sample has more education (and therefore higher earnings) than the broad population of migrants in the nation, a characteristic largely attributable to the presence of employment preference immigrants. Further, if LPR status is correlated with a higher likelihood of permanence or long-term residency in the U.S., those without this legal status may systematically differ in their incomes, housing costs, or other characteristics. Selectivity might also vary by country or region of origin. Nevertheless, LPR immigrants are an important component of the total U.S. immigrant population and merit study on their own. An ancillary analysis shows that the country/region of origin distributions of NIS respondents in our sample parallels that of all immigrants who became legal permanent residents in 2003.⁷

As a goal of this project is to provide a more comprehensive and nuanced depiction of the housing cost burdens of diverse immigrants, we consider the following origin groups:

⁵ Of those excluded from the analysis, approximately 42% were missing housing cost burden information, 18% were missing data on current employment, 20% were missing race data, and the remainder were missing other information. Household income was imputed for adults missing data on that variable using univariate imputation sampling. Predictors used in the imputation include age, education (in the U.S. and abroad), years in the U.S., region of origin, and English proficiency. The proportion of the NIS sample used in the present analyses, 72.2%, is similar to other published studies using these data.

⁶ The values of cost burden for the top 1% appear to be inaccurate, suggesting housing costs that are up to 20 times household income.

⁷ For example, immigrants from Mexico, Latin America, and Asia (including India) comprise approximately 16, 25, and 35%, respectively, of all immigrants achieving LPR status in 2003 (Department of Homeland Security, U.S. 2006) and about 12, 20, and 38% of our sample.

(1) Australia, Canada, New Zealand, and Western Europe; (2) Mexico (the largest national origin group in the sample); (3) South/Central America and the Caribbean; (4) Eastern Europe and the former USSR; (5) the Indian subcontinent (India, Nepal, Pakistan, Bangladesh) and the Middle East; (6) Asia; and (7) Africa.⁸ Western Europeans are the reference category of immigrants in the analyses. Unfortunately, sample sizes of many sending countries limited the number of country and region categories that could be created. Although there may be substantial heterogeneity within these categories, we are unable to examine all intra-group differences of interest.

The key dependent variable in the study is housing cost burden: the proportion of monthly household income spent on rent or mortgage(s). Immigrants newly achieving LPR status are renters, homeowners, or live for free. Immigrants of all three tenure statuses are included in this study to retain a sufficiently large sample of households. Individuals who are living for free are coded as having a cost burden of zero. We specify a Tobit regression to analyze housing cost burden with renters, homeowners, and those living for free. Tobit regressions are necessary because of the censoring of those who have a cost burden of zero, and are commonly employed in housing scholarship (e.g., Krivo and Kaufman 2004). Coefficients from Tobit regressions combine the effects of the independent variable at the intensive and extensive margins and cannot be directly interpreted. For interpretability, the housing cost burden figures presented in the text of the paper are the marginal effects, conditional on being uncensored, multiplied by 100. For dummy variables, the marginal effect is calculated for a discrete change from 0 to 1.

In the analyses we first focus on inter-origin group differences by comparing the magnitude of the country/region of origin and race fixed effects in seven separate Tobit regressions for the pooled sample of immigrants who are renting, owning or living for free. The first specification is the Baseline model, which includes only country/region of origin indicators to establish raw differentials. The indicator for Black (versus non-Black) is incorporated in the analyses as a measure of the place stratification and segmented assimilation perspectives. The second regression, the With Controls specification, includes the origin and race indicators and control variables generally associated with housing outcomes generally and housing costs: indicators for homeownership, whether the dwelling is a house versus condo or apartment, number in household, female, employment status, and spouse's current employment status. This model includes an indicator that is rarely included in immigrant housing analyses: having a U.S. bank account. Controlling for U.S. financial access is important, as immigrants and U.S. born racial and ethnic minorities are more likely to be "unbanked," or without a U.S. checking or savings account, than non-migrants and non-Hispanic Whites (Hogarth et al. 2005; Paulson et al. 2006). Such access may be linked with lower housing costs, particularly for homeowners, as mainstream financial institutions typically provide lower-cost mortgages, more favorable loan terms, free check-cashing and other services to

⁸ Grouping Australians and Canadians with Europeans is a common practice in housing studies (e.g., Cobb-Clark and Hildebrand 2006).

members (Paulson et al. 2006). Table 1 presents the operationalization of variables used in the analyses.

The third regression, the Life Cycle model, incorporates region of origin, race, control variables, and adds indicators for stage in the life course (married, age, age squared, and the presence of children). The Human Capital model, the fourth regression, includes region of origin, race, control variables, and years of education as indicators of human capital. The Assimilation specification, the fifth regression, includes region of origin, race, control variables and indicators of assimilation (years of U.S. experience, English proficiency, the logged amount given in transfers in the previous 12 months, and its quadratic).

The next regression, the Economic/Contextual model, includes the country/region of origin and race variables, controls, and three locational characteristics

Table 1 Operationalization of variables used in the analyses

Variable	Operationalization
<i>Dependent variable</i>	
Cost burden	Monthly housing costs (monthly rent or mortgage payments)/monthly household income in the U.S.
<i>Respondent and household characteristics</i>	
Country/region of origin	Categorized as South/Central America & Caribbean, Mexico, Western Europe/Canada/Australia/New Zealand, Eastern Europe & former USSR, Asia, Indian subcontinent & Middle East, Africa
Black	1 if respondent identifies as Black, 0 otherwise
Female	1 if respondent is female
House	1 if household resides in a house; 0 otherwise (e.g., condo, apartment)
Owens home	1 if owns home, 0 otherwise
Number in household	Number of household members
Employed	1 if respondent is currently employed
Spouse employed	1 if spouse is currently employed
Bank account	Has banking or checking account in the U.S.
Married	1 if respondent is married
Age	Age in years
Age squared	Age quadratic
Any children	Household has children under 18
Education	Categorized as <8 years, 8 to <13 years, and ≥ 13 years
U.S. experience	Categorized as <1 year, 1 to <5 years, 5 to <10 years, and ≥ 10 years
English proficient	Respondent reports speaking English well or very well
Transfers	Total amount of transfers sent in the last 12 months in thousands
Transfers squared	Square of total transfers (in 1,000 s) sent in the last 12 months
<i>Locational characteristics</i>	
Percent in state from same region	Percent from the same country/region in the state of residence
U.S. region of residence	Categorized as Northeast, Midwest, South, or West
Home value in state	Median home value in the state of residence

(the percent of foreign-born persons in the state from the same country/region, the median home value in the state, and U.S. region of residence). Unfortunately, the NIS data do not include geographic information other than the state of residence. In the case of median home value, using a more macro-level variable may be useful for capturing regional housing market effects (Myers et al. 2005). However, the foreign-born and median home value indicators may provide more conservative estimates of their connections to cost burden than if MSA-level data from NIS were publicly available. The final specification, the Full model, includes all of the previous variables.

Results

Sample Characteristics

The conditional distributions of the dependent variable and independent variables by country/region of origin are presented in Table 2. Median cost burden for the pooled sample is 18%, and it ranges from 0 to 28% across origin groups (first row of Table 2). Immigrants from Asia, the Indian subcontinent & Middle East, and Africa allocate the lowest proportion of their income to housing of all groups. More than half of African immigrants in the sample allocate no household income to housing (50.1%) and this distribution explains why their median cost burden is zero. Not surprisingly, excluding individuals who have cost burdens of zero (second row of Table 2) reveals a higher median cost burden for the entire sample, 27.4%, than when they are included (first row of Table 2). Excluding those living for free also differentially affects the median cost burdens for origin groups such that the modified numbers are substantially higher for Latin Americans, Eastern Europeans, Asians and Africans.

The majority of the NIS sample has completed 13 or more years of education (58.9%) and speak English well or very well (52.5%). There are important differences by country/region of origin in these and other domains. For example, between 73 and 93% of immigrants from the Indian subcontinent & Middle East, Africa, and Western Europe are English proficient, compared with much lower proportions of those from Mexico, other parts of Latin America, Eastern Europe & the former USSR, and Asia. Further, though nearly half of the sample has been in the country for less than 1 year (49.6%), others have resided in the country for longer periods. Immigrants from South/Central America & the Caribbean and Mexico are more likely to have been in the U.S. for 10 years or more (36.5 and 38.0%, respectively) than other immigrant groups. Immigrants also vary with respect to amount of annual transfers sent to the origin country, region of residence in the United States, and other factors. For example, immigrants from the Indian subcontinent & the Middle East, Africa and Asia send far more money (approximately \$777, \$928, and \$1,036, respectively) each year than immigrants from other areas.

Table 2 Descriptive statistics for pooled sample and by country/region

Variable	Pooled sample	South/Central America & Caribbean	Mexico	W. Europe, Australia, Canada, New Zealand & former USSR	Eastern Europe & former USSR	Asia	Indian subcontinent & Middle East	Africa
Median cost burden (total sample)	0.180	0.240	0.186	0.165	0.280	0.149	0.142	0.000
Median cost burden (renters & owners only)	0.274	0.322	0.283	0.185	0.353	0.274	0.183	0.315
Mean household income	33717 [36059]	24797 [22238]	22505 [20408]	77012 [64678]	25000 [22286]	33976 [34631]	55286 [45530]	23352 [25753]
Black	11.8%	13.5%	0.1%	6.9%	0.0%	0.1%	0.5%	76.0%
Female	49.9%	51.7%	59.0%	43.8%	50.0%	57.3%	41.1%	38.4%
House	47.2%	46.0%	61.0%	58.6%	31.2%	58.8%	40.6%	35.9%
Tenure (in percents)								
Owns home	22.8	25.5	35.2	47.9	15.0	20.2	20.6	11.9
Rents or lives for free	77.2	74.5	64.8	52.1	85.0	79.8	79.4	79.4
Number in household	3.71 [1.958]	3.88 [1.821]	4.30 [1.914]	2.79 [1.451]	3.10 [1.487]	3.98 [2.320]	3.66 [1.911]	3.41 [1.861]
Employed	63.4%	69.3%	56.7%	78.6%	64.9%	58.9%	64.1%	59.7%
Spouse employed	35.8%	36.5%	41.5%	46.2%	40.0%	34.7%	36.8%	20.4%
Bank account	51.8%	35.6%	34.9%	80.3%	53.7%	58.9%	68.1%	48.8%
Married	69.9%	58.8%	73.0%	73.1%	74.7%	74.5%	83.1%	52.4%
Age	39.0 [13.079]	39.5 [12.727]	39.4 [15.003]	38.1 [11.532]	38.2 [12.629]	41.9 [13.552]	38.7 [12.498]	33.8 [10.631]
Any children	51.1%	56.8%	64.6%	37.9%	47.9%	47.9%	56.6%	33.9%
Years of education (in percents)								
<8 years	16.5	28.2	43.7	3.1	2.6	19.9	6.8	6.8
8 to <13 years	34.4	41.3	41.8	20.0	36.7	28.3	23.0	34.4

Table 2 continued

Variable	Pooled sample	South/Central America & Caribbean	Mexico	W. Europe, Australia, Canada, New Zealand	Eastern Europe & former USSR	Asia	Indian subcontinent & Middle East	Africa
≥13 years	58.9	30.5	14.5	76.9	60.8	57.8	70.2	58.9
Years of U.S. experience (in percents)								
<1 year	49.6	38.0	32.6	25.9	57.1	60.5	46.1	73.6
1 to <5 years	17.6	14.3	13.3	32.4	24.8	14.2	23.1	12.1
5 to <10 years	15.8	11.2	16.1	28.3	11.3	15.9	24.8	11.4
≥10 years	17.0	36.5	38.0	13.5	6.8	9.4	6.0	3.1
English proficient	52.5%	34.5%	29.0%	92.8%	39.2%	53.6%	73.6%	76.3%
Mean transfers (in 1,000)	0.658	0.451	0.260	0.585	0.380	1.036	0.777	0.928
Percent in state from same region	[5.707]	[1.507]	[1.257]	[2.674]	[1.546]	[10.013]	[3.389]	[8.185]
U.S. region of residence (in percents)	4.45	10.0	9.0	1.8	1.3	4.0	1.3	0.5
	[4.591]	[4.235]	[3.483]	[0.871]	[0.756]	[2.884]	[0.634]	[0.319]
Northeast	27.7	30.3	3.7	29.0	41.2	22.0	37.8	29.1
Midwest	12.7	2.6	7.7	17.2	26.4	9.9	18.2	15.2
South	26.1	36.8	23.2	28.3	12.9	18.9	22.9	42.0
West	33.6	30.4	65.4	25.5	19.6	49.2	21.0	13.7
Average median home value in state	145690	144747	153308	136086	141328	158069	141454	131145
	[42488]	[44204]	[51033]	[39870]	[32280]	[44116]	[38581]	[34726]
N	6192	1262	766	290	823	1330	999	722

Note: Numbers in brackets are standard deviations. Percents may add up to more than 100 because of rounding

Source: NIS-2003

Theorizing Differences in Housing Cost Burden

Table 3 presents the Tobit coefficients and the marginal effects for the seven Tobit regressions. Discussion of the results first focuses on evaluating the relevance of traditional theoretical approaches for housing cost burden generally before turning to differences by country/region of origin. The analyses offer partial support for the theoretical frameworks described earlier. For example, the Life Cycle and the Full specifications (third and last columns, Table 3) document significant connections between life course indicators and housing cost burden, but not in the directions that previous scholarship would suggest. The Life Cycle model (marginal effects, third column) shows that respondents who are married and older have higher cost burdens than those who are unmarried (6.8%) and younger (4.0% per year). Prior studies show contrasting results regarding gross rent (Krivo 1995) and the cost burdens of renters (Elmelech 2004). Perhaps among immigrants recently achieving LPR status these factors are associated with a willingness to take on higher cost burdens. Moreover, immigrants in our sample are generally younger than 40 years old, so older age in this sample does not necessarily mean post-retirement. The Life Cycle model also indicates that immigrants with children in the household have 10.3% higher cost burdens than those without minors, perhaps reflecting young families' desires for higher quality neighborhoods. The Full model shows that these patterns hold when all variables are included in the analyses (last column, Table 3).

Human capital theory would suggest that immigrants with higher levels of education have more advantaged housing situations, such as lower cost burdens, than lesser-educated immigrants. The Human Capital specification (fourth column, Table 3) indicates that there is no statistically significant difference by years of education, controlling for region of origin, race, and other control variables. However, the Full model with all variables in the analyses (last column) reveals that immigrants with higher human capital, particularly those with some college, have lower housing cost burdens than individuals with less than 8 years of education. This finding is consistent with previous research on New York City renters (Elmelech 2004) and bolsters the human capital argument.

Assimilation theory receives support in both the Assimilation and Full specifications in Table 3 (fifth and last columns). For example, in the final model, those who are English proficient allocate 7.6% less of their income to housing than immigrants with limited English ability (marginal effects, last column, Table 3). This is consistent with Elmelech (2004), and suggests that speaking English well or very well may be an advantage to our national sample of legal immigrants—in accessing lower housing costs, earning higher income, or both. The results also show that persons living in the country between 1 and 5 years and 5–10 years have higher cost burdens, while those in the U.S. for more than 10 years have lower cost burdens than individuals who arrived less than 1 year ago. Although the results for the intermediate levels of time in the U.S. may seem inconsistent with previous scholarship showing improved housing outcomes with more U.S. experience, these immigrants may be spending the first decade in the U.S. moving up the “housing ladder” to access better and more expensive housing. Thus, it is after this initial ascension that more experienced immigrants have lower cost burdens, 7.5% lower,

Table 3 Tobit regressions predicting cost burden across models

Country/region of origin (W. Europe omitted)	Baseline		With controls		Life cycle		Human capital		Assimilation		Economic/contextual		Full model	
	Coeff. [SE]	ME	Coeff. [SE]	ME	Coeff. [SE]	ME								
South/Central America & Caribbean	0.484*** [0.155]	0.179	0.795*** [0.159]	0.296	0.758*** [0.159]	0.279	0.729*** [0.161]	0.267	0.639*** [0.164]	0.235	0.596*** [0.228]	0.218	0.392* [0.235]	0.140
Mexico	0.197 [0.164]	0.072	0.669*** [0.169]	0.250	0.659*** [0.169]	0.244	0.579*** [0.173]	0.214	0.487 [0.173]	0.179	0.450*** [0.150]	0.164	0.204 [0.170]	0.072
Eastern Europe & former USSR	0.669*** [0.160]	0.255	0.772*** [0.164]	0.291	0.714*** [0.164]	0.265	0.751*** [0.164]	0.283	0.722*** [0.165]	0.271	0.765*** [0.178]	0.288	0.650*** [0.150]	0.240
Asia	0.050 [0.154]	0.018	0.371** [0.157]	0.133	0.353** [0.157]	0.126	0.363** [0.157]	0.130	0.329* [0.157]	0.118	0.306*** [0.143]	0.109	0.247** [0.124]	0.087
Indian subcont. & Middle East	-0.003 [0.158]	-0.001	0.072 [0.161]	0.025	-0.022 [0.161]	-0.008	0.080 [0.161]	0.028	0.067 [0.160]	0.023	0.094 [0.143]	0.033	-0.004 [0.122]	-0.001
Africa	0.264 [0.168]	0.097	0.580* [0.200]	0.138	0.315 [0.200]	0.112	0.367* [0.200]	0.133	0.408** [0.200]	0.149	0.430*** [0.123]	0.157	0.362** [0.143]	0.130
Black	-0.854*** [0.145]	-0.280	-0.694*** [0.147]	-0.226	-0.675*** [0.147]	-0.218	-0.700*** [0.147]	-0.227	-0.663*** [0.146]	-0.216	-0.642*** [0.131]	-0.209	-0.603*** [0.182]	-0.196
Female			-0.003 [0.066]	-0.001	-0.003 [0.067]	-0.001	-0.003 [0.066]	-0.001	0.014 [0.065]	0.005	-0.001 [0.175]	-0.000	0.009 [0.060]	0.003
House			-0.882*** [0.076]	-0.306	-0.753*** [0.077]	-0.259	-0.891*** [0.076]	-0.309	-0.865*** [0.075]	-0.300	0.873*** [0.091]	-0.303	-0.734*** [0.086]	-0.253
Owens home			0.328*** [0.087]	0.117	0.186** [0.088]	0.065	0.360*** [0.087]	0.129	0.292*** [0.088]	0.104	0.343*** [0.085]	0.123	0.203*** [0.080]	0.075

Table 3 continued

	Baseline		With controls		Life cycle		Human capital		Assimilation		Economic/contextual		Full model	
	Coeff. [SE]	ME	Coeff. [SE]	ME	Coeff. [SE]	ME	Coeff. [SE]	ME	Coeff. [SE]	ME	Coeff. [SE]	ME	Coeff. [SE]	ME
Number in HH	-0.060*** [0.018]	-0.021	-0.060*** [0.018]	-0.042	-0.068*** [0.018]	-0.023	-0.022	-0.063*** [0.020]	-0.022	-0.063*** [0.020]	-0.022	-0.132*** [0.030]	-0.045	
Employed	0.358*** [0.073]	0.123	0.358*** [0.073]	0.058	0.366*** [0.073]	0.126	0.121	0.371*** [0.087]	0.128	0.371*** [0.087]	0.128	0.185*** [0.086]	0.064	
Spouse employed	0.491*** [0.067]	0.088	0.491*** [0.067]	0.088	0.494*** [0.067]	0.176	0.164	0.494*** [0.175]	0.175	0.494*** [0.175]	0.175	0.216*** [0.082]	0.075	
Bank account	0.537*** [0.069]	0.187	0.537*** [0.069]	0.151	0.560*** [0.070]	0.195	0.182	0.544*** [0.065]	0.189	0.544*** [0.065]	0.189	0.450*** [0.075]	0.155	
Married					0.198*** [0.086]	0.068						0.227*** [0.060]	0.077	
Age					0.114*** [0.016]	0.040						0.105*** [0.013]	0.036	
Age squared					-0.002*** [0.000]	-0.005						-0.001*** [0.0002]	-0.000	
Any children					0.297*** [0.077]	0.103						0.274*** [0.083]	0.095	
Years of education (<8 years omitted)														
8 to <13 years					0.063 [0.099]	0.022						-0.036 [0.159]	-0.012	
≥13 years					-0.165 [0.104]	-0.058						-0.249* [0.143]	-0.086	
Years of U.S. experience (<1 year omitted)														
1 to <5 years							0.123 [0.089]	0.043				0.155** [0.065]	0.054	

Table 3 continued

	Baseline		With controls		Life cycle		Human capital		Assimilation		Economic/contextual		Full model	
	Coeff. [SE]	ME	Coeff. [SE]	ME	Coeff. [SE]	ME	Coeff. [SE]	ME	Coeff. [SE]	ME	Coeff. [SE]	ME	Coeff. [SE]	ME
5 to <10 years									0.360*** [0.094]	0.130			0.212** [0.130]	0.118
≥ 10 years									0.327*** [0.096]	0.117			-0.220** [0.097]	-0.075
English proficient									-0.244*** [0.072]	-0.085			-0.010*** [0.073]	-0.076
Transfers									-0.009 [0.010]	-0.003			0.000 [0.007]	-0.003
Transfers squared									0.000*** [0.000]	0.000			0.025*** [0.000]	0.000
Percent in state from same region													0.029* [0.018]	0.009
U.S. region of residence (Northeast omitted)														
Midwest													0.015 [0.120]	0.030
South													-0.216*** [0.079]	-0.060
West													0.029 [0.118]	0.031
Median home value in state													-0.108 [0.166]	-0.014

Table 3 continued

	Baseline		With controls		Life cycle		Human capital		Assimilation		Economic/contextual		Full model	
	Coeff. [SE]	ME	Coeff. [SE]	ME	Coeff. [SE]	ME	Coeff. [SE]	ME	Coeff. [SE]	ME	Coeff. [SE]	ME	Coeff. [SE]	ME
Constant	-0.219 [0.139]	-0.079	-0.670*** [0.175]	-0.234	-2.400*** [0.350]	-0.829	-0.571 [0.195]	[0.199]	-0.205	-0.587*** [0.183]	0.552 [2.000]	0.192	-1.517 [1.974]	-0.524

Notes: * $p < .10$ ** $p < .05$ *** $p < .01$; ME indicates marginal effects conditional on being uncensored; numbers in brackets are standard errors; $n = 6,192$ for all specifications

Source: NIS-2003

than the most recent arrivals (marginal effects, last column, Table 3). As anticipated, the terms for transfers in the final model generally suggest an inverse relationship between sending more money home and housing cost burden and are jointly significant at the one percent level.

The broader economic and immigrant context appears to be less important for explaining disparities in housing cost burden than other theoretical perspectives. Immigrants in states with higher proportions of foreign-born from the same country/region have slightly higher housing cost burdens in the Economic/Contextual specification but not the full model (columns 6 and 7, Table 3). The state variable capturing median home price is not significantly associated with cost burden in either specification. However, those living in the South have lower housing cost burdens than persons in the Northeast in both models, in line with past studies documenting the greater affordability of the South (Chi and Laquatra 1998; Lipman 2003).

The indicator for Black is included as a measure of the place stratification/segmented assimilation framework. Immigrants from Africa and South/Central America & the Caribbean are most likely to identify as Black (76.0 and 13.5%, respectively, Table 2). In the Baseline model that controls for country/region of origin, Black immigrants have cost burdens that are 28.0% lower than non-Black immigrants (marginal effects, first column, Table 3). The Full model indicates that including additional variables in the analyses reduces this cost burden differential to 19.6% (marginal effects, last column, Table 3). This result is consistent with previous research indicating that African Americans have lower rents than Whites (Boehm and Schlottmann 2008) and similar rental cost burdens to non-Hispanic Whites (Chi and Laquatra 1998; Elmelech 2004). However, it is contrary to our expectations that institutional discrimination operating in the U.S. housing market might be linked with higher housing cost burdens for Black than non-Black immigrants, *ceteris paribus*. Black immigrants in this sample, particularly those from Africa, may be somewhat advantaged relative to African Americans. For example, African immigrants possess other characteristics that are linked with lower housing cost burdens: they are fairly young, highly educated, fluent in English, and are recent arrivals to the U.S. Accounting for such variables reduces their housing cost burden advantage vis-à-vis the reference group across specifications (first column, last column). It may be that other unmeasured characteristics of Black immigrants explain their lower housing cost burden, controlling for country/region of origin and other indicators.

The Full Model in Table 3 also reveals the importance of other factors. For example, immigrant homeowners have housing cost burdens that are 7.5% higher than renters, a result that is inconsistent with some studies (Chi and Laquatra 1998) but in line with others that focus on low to moderate-income immigrant families (Lipman 2005). Larger households have lower housing cost burdens, perhaps because they have more adults that contribute to the household income and offset expenditures on housing. A new variable that we introduce in the analyses, having a U.S. bank account, is connected with higher housing cost burden, approximately 15.5% higher, relative to those without bank accounts (last column, Table 3). This

variable may capture the U.S. economic incorporation of immigrants or unobserved financial resources.⁹

Differences by Country/Region

The Tobit specifications indicate important differences in housing cost burden between Western Europeans and immigrants from nearly every other country/region. Indeed, the Baseline model demonstrates that immigrants from South/Central America & the Caribbean allocate 17.9% more of their income to housing costs than the Western European category (marginal effects, first column, Table 3). The descriptive statistics presented in Table 2 show that immigrants from Latin America have less formal education and are less likely to be English proficient than the reference group. Both characteristics are linked with higher housing cost burden; controlling for these and other differences reduces the gap in housing cost burden between South/Central American & Caribbean immigrants and the Western European group to 14.0% in the Full model (marginal effects, last column, Table 3). Yet, even after including a broad range of variables, South/Central American & Caribbean immigrants bear a higher housing cost burden than Western European immigrants.

In contrast, Mexican immigrants in the Baseline model and the Full model (first and last columns in Table 3) have cost burdens that are similar to the Western European category. However, additional specifications suggest that differences from the reference group *are* present when accounting for variation in background characteristics, life cycle, human capital, and economic/immigrant context (columns two through four and six, Table 3). The substantial differences in these domains between Western Europeans and Mexicans seen in Table 2 indicate that these are important factors to consider in analyses of cost burden. These results also point to substantial heterogeneity *within* Latin American immigrants vis-à-vis the reference group.

Immigrants from Eastern Europe & the former USSR experience higher cost burdens than Western Europeans: cost burdens that are 25.5% higher in the Baseline model and 24.0% higher in the Full model (marginal effects, first and last columns, Table 3). Table 2 indicated that Eastern and Western European immigrants differ along several dimensions, particularly with respect to indicators of assimilation. However, the inclusion of a broad range of variables in the Full model only slightly reduces the cost burden differences between the two groups noted in the first specification.¹⁰ Schill et al. (1998) suggest that Russian immigrants voluntarily take

⁹ Other analyses, not shown, examine the housing cost burden for renters and homeowners separately in OLS regressions with the same variables as the Full model of the Tobit regression presented in Table 3 except for the indicator for tenure status. Those analyses indicate that being “banked” is linked with lower housing cost burdens for homeowners but not renters. As hypothesized, access to more information about financial options may reduce the cost of mortgages, and consequently, housing cost burdens for homeowners, with no effect for renters.

¹⁰ Additional analyses, not shown, indicate that although Eastern European immigrant renters and owners are likely to bear higher cost burdens than the reference group, the disparity is larger for renters than owners.

on a higher cost burden in order to access higher quality housing. The present analyses confirm that immigrants from Eastern Europe & the former USSR have higher housing cost burdens than Western European immigrants, but are unable to determine whether they are voluntary or involuntary.

Asians and Western Europeans have similar cost burdens in the Baseline model, but the Full specification reveals that Asian immigrants have cost burdens that are 8.7% higher than the reference group (first and last columns, Table 3). Comparing marginal effects for Asian immigrants across models suggests that some of this disparity may be due to variation in recency of arrival, household size, tenure status, location in the U.S. and other factors. Previous scholarship, noted earlier, has documented the presence of housing discrimination involving Asians. However, it is unclear whether the higher housing burdens of Asian immigrants in this setting are related to discrimination or a willingness to shoulder higher cost burdens in return for better housing or neighborhoods.

The multivariate analyses show that African immigrants have similar housing cost burdens to Western Europeans in the Baseline model but 13.0% higher cost burdens in the Full model (marginal effects, last column, Table 3). Thus, Africans allocate a higher proportion of their more modest incomes to housing than Western Europeans, even after controlling for race and characteristics in which the two groups differ, such as housing tenure, U.S. bank account, and time in the U.S. (Table 2). African immigrants may willingly bear higher cost burdens to access higher-quality housing and neighborhoods, such as taking on higher-cost mortgages, or they may involuntarily allocate a higher proportion of their resources to housing.¹¹ The results for immigrants from the Indian subcontinent & the Middle East reveal that this is the only group to have similar housing cost burdens compared with the reference group across all specifications. Although this pattern is not surprising given similarities in the median cost burdens and demographic profiles of immigrants from Western Europe and the Indian subcontinent & Middle East (Table 2), it does point to the value of disaggregating Asian immigrants into more fine-grained groupings.

Discussion and Conclusion

The analyses of 2003 NIS national-level data reveal important variation in the housing cost burden of new legal permanent residents in the United States by country/region of origin. The results for the full model (last column, Table 3) of owners, renters, and those living for free reveal that most groups bear higher housing cost burdens than Western European immigrants. Indeed, after controlling for a broad range of characteristics, immigrants from South/Central America & the Caribbean, Eastern Europe & the former USSR, Asia, and Africa have cost burdens that are between 8.7 and 24.0 percentage points higher than their Western

¹¹ Regressions conducted separately for renters and owners, not shown, indicate that African immigrant owners, but not renters, have cost burdens that are nearly one-third higher than for Western European homeowners.

European counterparts (marginal effects, last column, Table 3). That these disparities persist is notable, particularly because the immigrants in the sample are legal immigrants and the analyses control for established and lesser-studied indicators relevant to immigrant housing cost burden, such as years in the U.S. and U.S. bank accounts.

The gap is largest between Eastern and Western European immigrants, two heterogeneous groups that are often aggregated in housing research. In contrast, immigrants from Mexico and the Indian subcontinent & the Middle East allocate about the same proportion of their income to housing costs as Western European immigrants in the Baseline and Full models (first and last columns, Table 3). Perhaps legal immigrants from these areas have unmeasured advantages compared with Western European immigrants. For example, many Mexican immigrants have been in the U.S. for more than 10 years and are concentrated in areas of the country with a large co-ethnic population (Table 2). Such attributes may provide a broad range of advantages to legal Mexican immigrants vis-à-vis income, housing costs, and housing cost burden that smaller and less-established immigrant groups in the U.S. do not possess. As noted earlier, immigrants from the Indian subcontinent & Middle East and Western Europe have comparable descriptive profiles, similarities in these and other unmeasured characteristics may explain their comparable housing cost burdens. These results underscore the value of analyses that consider within-group differences among larger regional categories of immigrants, such as Latin Americans, Asians, and Europeans.

The analyses confirm that human capital characteristics, stage in the life course, traditional assimilation indicators, and contextual variables are associated with immigrant housing cost burden. In addition, the analyses point to variation in the explanations for differential housing cost burdens by country/region, with the cost burden disparity reduced for some groups by accounting for variation in human capital, life cycle, assimilation, or other factors. The indicator of place stratification/segmented assimilation employed here suggests that Black immigrants have lower housing cost burdens than non-Black immigrants, accounting for country/region of origin and other factors. Both country/region of origin and race are connected with the housing cost burdens of immigrants and should continue to be incorporated in housing scholarship.

Although the current study points to significant, and large, differences among legal permanent residents in the U.S., the results are not able to establish a complete explanation for why some groups of legal immigrants have lower or higher housing cost burdens than Western European immigrants. For instance, initially higher cost burdens for some groups are slightly reduced across models (South/Central America & Caribbean, Eastern Europe & former USSR), some groups have similar cost burdens to Western Europeans in the Baseline model but significantly higher or lower burdens in the Full model (Asia, Africa), and for other groups the differential depends on which indicators are included in the analyses (Mexico).

Clearly, the presence of cost burden disparities between legal immigrants from Western Europe and some other regions point to the need for further investigation into other unmeasured variables that may account for this disadvantage. Further, given previous research about the advantages typically associated with being White

and disadvantages linked with being Black, different housing cost burdens between Eastern and Western European immigrants and between Black and non-Black immigrants merit additional scholarly attention. Future studies focusing on housing costs and cost burdens that disaggregate larger immigrant groups into nuanced country/region and race categories and that include additional variables would provide more insight about the heterogeneous housing experiences of immigrants in the United States. Further research may also be able to determine whether higher cost burdens for different immigrant groups represent structural constraints or voluntary decisions to climb the “housing ladder” and access higher-quality housing, neighborhoods, and schools.

Although the analyses control for a broad range of indicators and diverse country/region origins, the final NIS sample employed in the study reflects an advantaged group of persons gaining legal permanent residence in the United States. This unique sub-sample excludes long-term immigrants residing in the country as naturalized citizens, other lawful residents, and those living in the U.S. without legal authorization. Therefore, these results may underestimate the housing cost burdens of some immigrants in the United States. Further, when considering the results of this project, factors such as English proficiency, years of U.S. residence, transfers to the origin country, and U.S. financial access may be differentially connected to cost burden or even more influential for unauthorized immigrants than for legal immigrants. Additional scholarship of housing cost burden that includes both authorized and unauthorized immigrants would be useful.

Finally, the context of U.S. housing remains in flux. Most of the immigrants in the NIS sample arrived within 5 years of the data collection (2003), entering an increasingly unaffordable housing market. Housing prices and the availability of higher-cost subprime mortgages have risen in recent years leading to higher housing cost burdens. Indeed, between 2001 and 2005 there was a 22.8% increase in the numbers of households with cost burdens above 50% (Joint Center for Housing Studies 2007). Immigrants have been influenced by recent developments in the housing market (Downey 2007) and may be among the first to lose their homes to foreclosure, due to their lower incomes and employment in sectors that have been particularly affected by the downturn in housing and other sectors of the U.S. economy. The financial security of immigrants and possibilities for their future wealth accumulation are likely at greater risk now than the year of this study. Congressional action regarding the U.S. banking industry generally, the regulation of subprime mortgage terms, and assistance to homeowners in danger of foreclosure will have great implications for the economic well-being of immigrants and the native-born alike. Scholarship using more recent data may provide a more updated assessment of the housing cost burdens of an increasingly important segment of the U.S. population.

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