Immigrants' Transition to Homeownership, 1991 to 2006

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Abstract

Using a lifecourse perspective and a double-cohort model, we analyze 1991, 1996, 2001, and 2006 census data to ask if immigrants are less likely to be homeowners than the Canadian-born, and whether recent immigrants are less likely to own homes than earlier immigrant cohorts. While descriptive findings suggest that immigrants, particularly recent arrivals, have lower homeownership rates than the Canadian-born, multivariate results qualify this impression. The double-cohort model with additional variables shows that immigrants' transition to homeownership does not differ from those of the Canadian-born. Recent arrivals do begin at lower levels of homeownership, but they rapidly transition to homeownership.
Keywords: *homeownership; immigrants; lifecourse perspective; double-cohort model.*

Résumé

Au moyen d'une perspective de vie entière et d'un modèle de double cohorte, nous analysons les données des recensements de 1991, 1996, 2001 et 2006 pour nous demander si les immigrants sont moins portés à devenir propriétaires que les Canadiens de naissance, et si les nouveaux immigrants le sont moins que ceux des cohortes précédentes. Les conclusions descriptives indiquent que le taux de propriété chez les immigrants, surtout les nouveaux arrivés est moins élevé que chez les Canadiens de naissance, bien que des résultats multidimensionnels qualifient cette impression. Le modèle à double cohorte avec variables additionnelles indique que le passage des immigrants à la propriété n'est pas différent de celui des Canadiens de naissance. Les nouveaux arrivés commencent à des taux de propriété inférieurs, mais qu'ils passent à la propriété.
Mots-clés : *propriété, immigrants, perspective sur toute une vie, modèle à double cohorte.*

Introduction

The *lifecourse perspective* is a framework for understanding the dynamics of age-related changes and the relationship between life events and outcomes (Elder 1994; Fuller-Iglesias et al. 2009). It is particularly appropriate for studying immigrants and homeownership, as both migration and buying a home are closely related to the lifecourse.

Migration is selective by age—young adults are generally more likely to migrate than people at other ages (Long 1988; Tobler 1995), and varies by lifecourse stages such as marriage, having children, and retirement (DeAre 1990; Jasso 2003). Housing arrangements also reveal strong age and lifecourse influences (Foley 1980). The most direct sociodemographic influence on the demand for housing is the rate of household formation and dissolution, as households exhibit a distinct lifecycle with respect to their housing. Young people move out of their parental homes to form their own households and families. As individuals age, their housing situation may change again, perhaps by moving to smaller homes or into institutional housing.

The study of immigrants and homeownership also relates to how well immigrants adapt. Canada's immigrant population has grown rapidly in recent decades. The 1961 census reported 1.6 million foreign-born residents, or 10 per cent of Canada's population. By 2006, the foreign-born population had increased to over 6 million, or 19.8 per cent of the population—a record high in seventy-five years. As the immigrant population grew, so has its ethnic and cultural diversity. Although European-origin immigrants accounted for about one-half of Canada's foreign-born

population in 2001, in 2006 the percentage of immigrants born in Asia and the Middle East (40.8 per cent) exceeded the percentage born in Europe (36.8 per cent) for the first time. Increased ethnocultural diversity may have implications for immigrant adaptation.

Homeownership is a key dimension of immigrant integration.[1] The transition to being a homeowner signals independent living, and is often associated with other key lifecourse changes such as marriage and having children. For understanding immigrant integration, homeownership indicates economic progress since sufficient financial resources are needed to buy a home. For most people, their homes represent their largest single investment. Having one's own home also provides greater privacy and security and improved housing conditions. For immigrants in Canada, homeownership also signals a commitment to life in Canada. Owning one's home is often part of the dream of becoming successful in Canada. Thus homeownership is a particularly good variable for research on immigrant adaptation over the immigrant's lifecourse because it represents key changes over time, as well as economic and symbolic integration.

Previous Research

Research on homeownership shows that age, a fundamental lifecourse factor, plays a central role. Between 1997 and 2003, data from the Survey of Household Spending showed that the highest probability of buying a first home was among householders in their 20s. Couples in their 30s accounted for the largest proportion of first-time home buyers because they were more likely to have formed independent households and there were also more of them (CEO 2005). Nationally, about 8.3 million Canadian households, or 65.8 per cent, owned their homes in 2001 (Lampert 2003).

Do immigrants differ in their homeownership rates from non-immigrants? Aggregate statistics indicate that immigrants are just as likely as the Canadian-born (defined as Canadian citizens at birth) to be homeowners (Edmonston et al. 2008). In fact, among Canadian citizens in 2001, naturalized citizens had higher homeownership rates (70.1 per cent) than Canadian-born citizens (66.1 per cent). Foreign-born non-citizens, however, have homeownership rate that was just 44.1 per cent in 2001. Thus, there are large differences in homeownership within the immigrant population.

Previous research in the US on homeownership among immigrants has shown that length of stay in the US is a critical factor (Alba and Logan 1992; Krivo 1995; Myers and Lee 1998). Several Canadian studies have also confirmed the important role of duration of residence on homeownership among immigrants (Balakrishnan and Wu 1992; Ray and Moore 1991). Homeownership is highest among the foreign-born who have been in Canada for 10 to 15 years or more (Edmonston et al. 2008). This may reflect the years of employment and financial savings required before most immigrants achieve homeownership. It may also be related to the composition of immigrants who have been in Canada for less than 5 or 10 years who include, for example, immigrants with fewer financial resources or reflect other differences affecting homeownership, such as changes in the housing market and mortgage interest rates.

Some immigrants' homeownership may exceed that of the Canadian-born population, as shown by the higher homeownership rates among Chinese immigrants in Canada (Edmonston et al. 2008). Compared to the extensive US research on differences in homeownership between whites and minority groups (Alba and Logan 1992; Bianchi et al. 1982; Krivo 1995), and between various immigrant ethnic groups (Myers and Lee 1998), there are relatively few studies that have analyzed homeownership among immigrant ethnic groups in Canada. One exception is the study by Haan (2007), which focused on the role of racial or visible minority status on immigrants' homeownership. This study concluded that factors other than visible minority status play larger roles in any gaps in homeownership between immigrant groups.

As noted above, most studies show that immigrants' homeownership rates increase with duration of residence, but some recent research in the US suggest that more recent immigrants may be attaining homeownership at a faster rate compared to earlier cohorts of immigrants (Myers and Lee 1998). Immigrants are increasingly likely to buy a home within five years of arrival in the US, according to data from the Fannie Mae Foundation Immigration Research Project (Fannie Mae 1999). Myers and Lee (1998) report that Asian immigrants in California appear to achieve high

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1. Other indicators may include employment and earnings (Boyd 1984; Chiswick 1978; Lee 1999), language proficiency (Stevens 1999), and intermarriage (Lee and Boyd 2008).

levels of homeownership soon after arrival, while Hispanic immigrants begin from very low levels of homeownership but show sustained increases in homeownership once they begin to purchase homes in larger numbers. In contrast, there may be a decline in homeownership rates among immigrants in Canada in recent years.[2] Given the relative lack of research, it remains to be seen whether more recent immigrant cohorts in Canada are achieving homeownership at similar, faster, or slower rates than the Canadian-born or long-term immigrants.

Research Objectives

This study contributes to the existing literature on immigrants and homeownership in Canada in several ways. First, we use national samples of immigrants and the Canadian-born from four censuses—1991, 1996, 2001, and 2006—to examine homeownership trends among immigrants. The trend analysis over fifteen years provides the first national examination using up-to-date census data of whether immigrants are becoming homeowners at comparable rates to the Canadian-born. Given the few and inconsistent results reported in previous research, we also address the question of whether recent immigrants are becoming homeowners at the same rate as earlier cohorts of immigrants and the Canadian-born.

Second, we compare several ethnic groups in order to study differences within the foreign-born population. This comparison provides a different and less restricted perspective to Haan (2007), who focused on the role of minority racial status in homeownership among immigrants.

Third, to highlight lifecourse-related factors in migration and homeownership, we use the unique double-cohort research design (described below) in which birth cohorts are nested with immigrant cohorts (Myers and Lee 1996, 1998) to separate aging, duration of residence, and temporal effects on immigrants' transition to homeownership.

Data

The data are from the 3-per cent public use microdata samples of the 1991, 1996, 2001, and 2006 censuses. We extract all householders (identified by the census question on household maintainer), aged 21 and older, who report owning or renting a house. We exclude persons who are reported as living in collective household arrangements, such as dormitories, prisons, or First Nations Band housing.

We include both female and male householders in the sample, coding separately for household type.

Variables

Housing tenure. This outcome dichotomous variable indicates homeownership or not.

Birth cohort. We code the householder's age (in years) into 7 birth cohorts, as follows:

Birth Cohort	1991	1996	2001	2006
1971 and later	–	≤ 25	≤ 30	≤ 35
1961–1970	21–30	26–35	31–40	36–45
1951–1960	31–40	36–45	41–50	46–55
1941–1950	41–50	46–55	51–60	56–65
1931–1940	51–60	56–65	61–70	66–75
1921–1930	61–70	66–75	71–80	76–85
1920 and earlier	≥ 71	≥ 76	≥ 81	≥ 86

Immigrant cohort. There are 6 immigrant cohorts—arrivals prior to 1950, and arrivals in 1951–60, 1961–70, 1971–80, 1981–90, and 1991–2006.

Period. This is indicated by census year.

Household type. There are six household types: married couple, common-law couple, lone householder, multiple households, living alone, and other non-family.

Presence of children. This is a dichotomous variable indicating whether there are children present.

Educational attainment. Educational attainment is coded as number of years of schooling completed by the householder.

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2. Haan (2005) found that homeownership among immigrant households worsened from 1981 to 2001 compared with Canadian–born households. However, this study was limited to Toronto, Montreal, and Vancouver, with their unique housing markets and conditions, and the findings may not apply to other parts of the country.

Household income. Household income is analyzed as a continuous variable in terms of 2001 constant dollars. Household income is recoded based on midpoints for the 21 or more categories of household income reported in the four censuses. Using consumer income inflation rates reported by Statistics Canada for the 1991 to 2006 period, each census year's income figure (other than 2001) was multiplied by the appropriate rate: 1.1812 for 1991, 1.1249 for 1996, and 0.8964 for 2006.

Ethnic groups. There are 12 ethnic origin groups: European, Arab, West Asian, South Asian, Chinese, Filipino, Vietnamese, Other Asian, Latin American, Black and Caribbean, Canadian and Other Single Origin, and Multiple Origins.

Knowledge of official languages. Householders are coded as: (a) understand neither English nor French; or (b) understand English or French or both.

Contextual variables. Contextual factors that may affect homeownership include differences in local housing markets, such as cost and supply. We take these contextual factors into account by including a set of fixed effects, indicated by 23 codes for metropolitan areas and 11 codes for the non-metropolitan portions of each province.

Methods of analysis

We begin with descriptive analysis, followed by multivariate analysis, where we estimate two logistic regression equations. The first is the double-cohort model with temporal variables only, and the second adds three groups of covariates (described below).

As this is the first analysis of homeownership in Canada using a double-cohort model, we briefly describe the model.[3] To properly analyze time-sensitive changes for immigrants such as buying a home, analysis has to consider two processes: (1) changes in immigrant cohorts over time, including those that occur with increased duration of residence; and (2) changes in birth cohorts that take into account the aging of birth cohorts. Because immigrants experience both duration effects (time from period of entry) as well as aging effects, an appropriate method must be able to separate two determinants of temporal change—duration of residence and aging.

The approach taken in the double-cohort method is to nest immigrant cohorts within birth cohorts. The double-cohort method includes both immigrants and the Canadian-born for the same time period for two or more censuses or surveys. All persons have the same period changes, so differences can be interpreted as net of period effects. Changes in the Canadian-born represent lifecourse changes, and provide a reference group for comparison of changes over time for immigrants. Aging plus period effects are identified by changes over time for the Canadian-born. Differences between the Canadian-born and immigrants of the same birth cohort therefore represent changes for immigrants due to duration of residence, net of period and aging effects.

The double-cohort model estimates six temporal effects: period effects (Year); birth cohort effects (Birth Years); immigrant cohort effects (Immigrant Years of Arrival); aging effects (the Year*Birth Years interaction term); immigrant duration effects (the Year*Immigrant Years of Arrival interaction term); and joint aging and immigrant duration effects (the Birth Years*Immigrant Years of Arrival interaction term).

We estimate two logistic regression equations for the double-cohort homeownership model. The first equation includes only temporal variables—age cohorts, immigrant cohorts, year effects, and temporal interaction terms—and is written as follows:

$$L(homeownership) = \beta_0 + \sum_{i=1}^{4}\beta_{1,i}Y_i + \sum_{j=1}^{7}\beta_{2,j}B_j + \sum_{k=1}^{7}\beta_{3,k}I_k + \sum_{i=1}^{4}\sum_{j=1}^{7}\beta_{4,j}Y_iB_j +$$

$$\sum_{i=1}^{4}\sum_{k=1}^{7}\beta_{5,k}Y_iI_k + \sum_{j=1}^{7}\sum_{k=1}^{7}\beta_{6,k}B_jI_k$$

where *L(homeownership)* is the log odds of owning the housing unit; Y_i is a set of 4 census years, with dummy variable codes for 1991, 1996, 2001, 2006; B_j is a set of 7 birth cohorts, ranging from births before 1920, and births in the 1920s, 1930s, 1940s, 1950s, 1960s, and 1971 and later; I_k is a set of 6 immigrant cohorts, ranging from arrival before 1950, and 1950s, 1960s, 1970s, 1980s, and 1991–2006, plus a 7th group, which is the Canadian-born as the reference group; the Y_i*B_j interaction term represents changes over time due to aging; the Y_i*I_k interaction term represents chan-

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3. For more details on the double–cohort model, see Myers and Lee (1996, 1998).

ges over time due to immigrant duration of residence; and the $B_j{*}I_k$ interaction term represents birth and immigrant cohort changes, or the *joint aging and immigrant duration effect*.

In order to understand effects of additional covariates, we add three groups of explanatory variables to the basic double-cohort model in the second logistic regression equation: (1) household covariates (household type, presence of children, number of persons in the household, sex, knowledge of official languages, number of years of schooling, citizenship of householder, and household income); (2) ethnic group covariates (a set of dummy variables indicating the householder's ethnic origin); and (3) fixed effects for place of residence.

Descriptive findings

Table 1. Foreign-born householders aged 21 years and older, by period of arrival in Canada, 1991–2006 (in per cent).

	1991	1996	2001	2006
Total per cent foreign-born	20.9	21.2	21.6	21.9
Period of arrival				
All periods	100.0	100.0	100.0	100.0
Before 1950	13.9	9.2	6.3	4.1
1950s	24.3	22.0	17.1	14.5
1960s	21.4	22.7	17.2	15.0
1970s	22.1	23.1	19.5	18.8
1980s	18.3	20.5	17.1	13.7
1990s	–	2.6	22.9	20.9
2000s	–	–	–	13.0
Total number of foreign-born householders	2,084,033	2,296,116	2,535,098	2,650,846

For this study, the per cent foreign-born for householders aged 21 and older remains fairly stable at about 21 to 22 per cent throughout the study period (see Table 1, top row). Because duration of residence and immigrant cohort affects homeownership, we show the percentage distribution of immigrant households by period of arrival of the householder. Not surprisingly, there is a decrease in the percentage that arrived in earlier decades as mortality, emigration, and other changes occurred. In 2006, most immigrant householders were recent arrivals who arrived during the 1990s (20.9 per cent) or since 2000 (13 per cent), and only 4.1 per cent arrived before 1950.

Table 2 shows homeownership rates by nativity, and for the foreign-born, by period of arrival.[4]

Table 2. Homeownership rates by nativity and immigrants' year of arrival in Canada, 1991–2006.

	1991	1996	2001	2006	1991–1996 difference	1996–2001 difference	2001–2006 difference	1991–2006 difference
Total population	63.7	64.1	66.2	68.6	0.4	2.1	2.4	4.9
Canadian-born	63.3	64.4	66.6	68.8	1.1	2.2	2.2	5.5
Foreign-born	65.2	63.1	64.8	67.9	−2.1	1.7	3.1	2.7
Year of arrival								
2001–2006	–	–	–	38.3	–	–	–	–
1991–2000	–	–	40.7	61.3	–	7.9	20.6	–
1981–1990	39.0	44.7	59.6	69.0	5.7	14.9	9.4	30.0
1971–1980	64.3	62.8	71.7	78.5	−1.5	8.9	6.8	14.2
1961–1970	73.5	68.6	79.0	82.4	−4.9	10.4	3.4	8.9
1951–1960	80.0	78.1	82.9	82.6	−1.9	4.8	−0.3	2.6
1950 and earlier	72.5	73.3	76.6	74.9	0.8	3.3	−1.7	2.4

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4. Because census data are for 5-year intervals while immigrant cohorts are defined in 10-year intervals, immigrant populations for some censuses are different (for example, about half of immigrants in the 1991–2000 immigrant cohort were observed in the 1996 census, while all were observed by 2001). We do not see this as posing a problem for the double-cohort model, as period effects are estimated separately.

Homeownership rates for the total population remained fairly stable between 1991 and 1996, at around 64 per cent, but increased by over 2 percentage points between 1996 and 2001, and again between 2001 and 2006. Home-ownership among Canadian-born householders increased from 63.3 per cent in 1991 to 68.8 per cent in 2006 (or by 5.5 percentage points), and by a smaller 2.7 per cent among foreign-born householders, from 65.2 per cent in 1991 to 67.9 per cent in 2006. Changes in homeownership rates between pairs of census years were all positive, except for immigrants between 1991 and 1996.

Canadian-born householders had higher homeownership rates than immigrant householders in 1996, 2001, and 2006—except in 1991, when immigrants' homeownership was 1.9 percentage points higher. The gap in homeowner-ship between Canadian- and foreign-born householders decreased in 2006, compared with the differences in 1996 and 2001.

There were important differences in homeownership rates by year of arrival for immigrants. Immigrants who arrived earlier have higher homeownership rates. Except for immigrants who arrived in 1950 and earlier, home-ownership rates increase with increased duration of residence in Canada. The lower homeownership rate among the oldest immigrants is likely associated with lifecourse-related housing changes as people age. More recent arrivals (for example, those arriving in the 1980s and 1990s) have larger increases in homeownership rates.

Logistic regression findings

The double-cohort model with only temporal variables has a Cox and Snell R^2 of 0.090, and the overall percent-age classified correct is 69.7. Adding covariates for household characteristics, ethnic origin, and place of residence increases the Cox and Snell R^2 to 0.284. The overall percentage classified correct improves to 77.5. However, the direction or size of the temporal effects observed in the first equation, with only temporal effects variables, are not much changed by the introduction of additional variables.

Overall, the logistic regression model with temporal variables and additional covariates presents a useful set of estimates for understanding the temporal dynamics plus the role of all additional explanatory factors in immigrant homeownership during the 1991 to 2006 period. In presenting these logistic regression results, we calculate the predicted probability of homeownership for each variable (or category of each variable).[5] Because the logistic regression model is non-linear, it is useful to calculate predicted probabilities, holding all other variables constant, in order to interpret the re-lationship between explanatory variables and homeownership. Predicted probabilities can be interpreted as percentages when multiplied by 100. These are shown in the last column in Table 3, except for continuous variables—for example, number of persons in the household—which have predicted probabilities that are separately described.

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5. As noted by Long and Freese (2006: 114–116), the effect of an explanatory variable x on a response variable y in a simple linear regression can be interpreted easily from the regression coefficient β because when x changes by one unit, y changes by β units. For nonlinear models, such as logistic regression, the interpretation of the effect of changes of x on y is more complicated because the effect of changes depends on the values of all other variables in the model. There are two broad ways for interpreting logistic regression coefficients. One approach is in terms of the log odds, which are obtained by taking the exponential of both sides of the logistic regression equation. Exponentiation of the logistic regression coefficient provides an interpretation of how much the odds change, holding other variables constant. Many users, however, find it difficult to provide substantive interpretations for the log odds of logistic regression coefficients. A second approach—the method selected for this paper—is to generate predicted probabilities for each variable (or variable category). We calculate these predicted probabilities using the margin post-estimation function in Stata 12 statistical software (Stata 2011: 1027–1081).

Table 3. Logistic regression results, double-cohort model with additional covariates (page 1 of 4).

Explanatory Variable	Coefficient	Standard Error	Predicted Probability of Homeownership
Constant	−1.392		
Year			
1991 (Ref.)	1.000		0.576
1996	−1.188	0.044	0.616
2001	−0.321	0.034	0.685
2006	0.121	0.029	0.713
Birth Cohort			
1971 and later (Ref.)	1.000		0.452
1961–70	−0.706	0.033	0.550
1951–60	0.180	0.032	0.642
1941–50	0.661	0.033	0.701
1931–40	1.055	0.034	0.743
1921–30	1.359	0.034	0.759
1920 or earlier	1.265	0.029	0.749
Immigrant Cohort			
Citizen at birth (Ref.)	1.000		0.659
1950 and earlier	0.352	0.032	0.728
1951–60	0.485	0.037	0.737
1961–70	0.110	0.054	0.698
1971–80	0.371	0.070	0.654
1981–90	−0.127	0.060	0.570
1991–2006	−0.212	0.032	0.530
Aging Effect (Year*Birth Cohort Interaction)			
1996			
1971 and later (Ref.)	1.000		
1961–70	1.828	0.046	0.641
1951–60	1.619	0.045	0.682
1941–50	1.525	0.046	0.665
1931–40	1.574	0.047	0.740
1921–30	1.432	0.047	0.764
1920 or earlier	1.309	0.044	0.712
2001			
1971 and later (Ref.)	1.000		
1961–70	1.614	0.037	0.654
1951–60	1.133	0.036	0.685
1941–50	0.989	0.037	0.723
1931–40	0.948	0.039	0.775
1921–30	0.651	0.039	0.774
1920 or earlier	0.550	0.037	0.719
2006			
1971 and later (Ref.)	1.000		
1961–70	1.449	0.033	0.692
1951–60	0.845	0.032	0.773
1941–50	0.699	0.033	0.776
1931–40	0.468	0.035	0.774
1921–30	0.137	0.035	0.724
1920 or earlier	0.129	0.036	0.716

Note: Coefficients that are not statistically significant at the .05 level are in italics.

Table 3. Logistic regression results, double-cohort model with additional covariates (page 2 of 4).

Explanatory Variable	Coefficient	Standard Error	Predicted Probability of Homeownership
Duration Effect (Year*Immigrant Cohort Interaction)			
1996			
Citizen at birth (Ref.)	1.000		0.621
1950 and earlier	*−0.078*	*0.045*	*0.556*
1951–60	−0.122	0.035	0.589
1961–70	−0.252	0.034	0.538
1971–80	−0.167	0.032	0.597
1981–90	0.086	0.033	0.530
1991–2006	−0.380	0.067	0.469
2001			
Citizen at birth (Ref.)	1.000		0.692
1950 and earlier	*−0.031*	*0.051*	*0.687*
1951–60	*0.048*	*0.038*	*0.673*
1961–70	*−0.029*	*0.037*	*0.686*
1971–80	*−0.031*	*0.034*	*0.687*
1981–90	0.335	0.035	0.595
1991–2006	−0.385	0.027	0.505
2006			
Citizen at birth (Ref.)	1.000		0.708
1950 and earlier	*−0.059*	*0.059*	*0.661*
1951–60	*0.046*	*0.040*	*0.698*
1961–70	0.197	0.040	0.736
1971–80	0.181	0.036	0.741
1981–90	0.626	0.038	0.687
1991–2006	*−0.064*	*0.039*	*0.613*
Joint Aging-Duration Effects (Birth Cohort*Immigrant Cohort Interaction)			
1961–70 Birth Cohort			
Citizen at birth (Ref.)	1.000		0.548
1950 and earlier	—[a]		—[a]
1951−60	—[a]		—[a]
1961–70	−0.164	0.063	0.545
1971–80	−0.369	0.071	0.552
1981–90	−0.395	0.059	0.492
1991–2006	−0.555	0.037	0.325
1951–60 Birth Cohort			
Citizen at birth (Ref.)	1.000		0.647
1950 and earlier	—[a]		—[a]
1951–60	−0.398	0.051	0.670
1961–70	*−0.001*	*0.060*	*0.669*
1971–80	−0.168	0.069	0.661
1981–90	−0.594	0.057	0.560
1991–2006	−0.559	0.039	0.332
1941–50 Birth Cohort			
Citizen at birth (Ref.)	1.000		0.709
1950 and earlier	−0.285	0.067	0.719
1951–60	−0.229	0.046	0.719
1961–70	0.338	0.057	0.768
1971–80	−0.208	0.069	0.722
1981–90	−0.723	0.061	0.600
1991–2006	−0.467	0.051	0.456

Note: Coefficients that are not statistically significant at the .05 level are in italics.

Table 3. Logistic regression results, double-cohort model with additional covariates (page 3 of 4).

Explanatory Variable	Coefficient	Standard Error	Predicted Probability of Homeownership
1931–40 Birth Cohort			
Citizen at birth (Ref.)	1.000		0.748
1950 and earlier	*−0.028*	*0.071*	*0.777*
1951–60	0.135	0.043	0.837
1961–70	0.295	0.058	0.801
1971–80	−0.337	0.073	0.758
1981–90	−0.931	0.068	0.653
1991–2006	−0.695	0.065	0.467
1921–30 Birth Cohort			
Citizen at birth (Ref.)	1.000		0.767
1950 and earlier	0.200	0.042	0.835
1951–60	0.141	0.041	0.855
1961–70	0.251	0.063	0.815
1971–80	−0.592	0.078	0.701
1981–90	−1.091	0.071	0.620
1991–2006	−0.541	0.087	0.578
1920 and earlier Birth Cohort			
Citizen at birth (Ref.)	1.000		0.721
1950 and earlier	−0.256	0.082	0.784
1951–60	0.293	0.089	0.799
1961–70	−0.246	0.087	0.762
1971–80	−0.966	0.085	0.638
1981–90	−0.783	0.087	0.595
1991–2006	*−0.103*	*0.174*	*0.520*
Household Type			
Married Couple (Ref.)	1.000		0.748
Common Law Couple	−0.748	0.008	0.613
Lone Householder	−0.948	0.008	0.592
Multiple Household	−0.280	0.024	0.724
Living Alone	−1.077	0.008	0.557
Other Non-Family	−1.314	0.015	0.510
Presence of Children			
No Children (Ref.)	1.000		0.642
Children	0.344	0.008	0.685
Number of Persons in Household	0.045	0.004	—[b]
Sex of Householder			
Female (Ref.)	1.000		0.647
Male	0.108	0.005	0.662
Knowledge of English/French			
Neither (Ref.)	1.000		0.618
English/French	0.229	0.015	0.657
Number of Years of Schooling	0.034	0.001	—[b]
Household Income (in 2001 dollars, 1,000s)	0.022	0.000	—[b]
Ethnic Origin of Householder			
European (Ref.)	1.000		0.678
Arab	−0.863	0.033	0.522
West Asian	−0.333	0.024	0.627
South Asian	−0.236	0.024	0.629
Chinese	0.695	0.018	0.766
Filipino	−0.629	0.032	0.575
Vietnamese	−0.467	0.045	0.630
Other Asian	−0.255	0.032	0.646

Note: Coefficients that are not statistically significant at the .05 level are in italics.

Table 3. Logistic regression results, double-cohort model with additional covariates (page 4 of 4).

Explanatory Variable	Coefficient	Standard Error	Predicted Probability of Homeownership
Latin American	−1.081	0.041	0.491
Black/Caribbean	−0.824	0.021	0.535
Canadian/Other Single Origin	−0.239	0.007	0.628
Multiple Origin	−0.157	0.006	0.648
Place (fixed contextual effects)			
Halifax (Ref.)	1.000		0.610
Moncton	0.388	0.054	0.567
Quebec	−0.147	0.024	0.602
Montreal	−0.441	0.021	0.558
Sherbrooke/Trois-Riviere	−0.066	0.029	0.620
Ottawa/Gatineau	−0.213	0.024	0.609
Oshawa	0.287	0.033	0.692
Toronto	−0.289	0.022	0.577
Hamilton	*0.034*	*0.026*	*0.642*
St-Catherines/Niagara	0.461	0.029	0.687
Kitchener	*0.012*	*0.029*	*0.668*
London	*−0.026*	*0.028*	*0.652*
Windsor	0.438	0.032	0.670
Brantsford/Guelph/Barrie	0.366	0.048	0.690
Kingston/Peterborough	*0.047*	*0.054*	*0.668*
Sudbury/Thunder Bay	0.182	0.031	0.672
Winnipeg	0.259	0.025	0.704
Regina/Saskatoon	0.355	0.028	0.682
Calgary	0.242	0.025	0.652
Edmonton	0.152	0.024	0.681
Vancouver	−0.165	0.022	0.614
Victoria	*0.005*	*0.029*	*0.656*
Kelowna/Abbottsford	0.567	0.055	0.717
Newfoundland	0.941	0.028	0.766
Prince Edward Island	0.688	0.041	0.688
Non-metro Nova Scotia	0.989	0.027	0.784
Non-Metro New Brunswick	0.895	0.026	0.772
Non-metro Quebec	0.578	0.022	0.726
Non-metro Ontario	0.540	0.022	0.710
Non-metro Manitoba	0.616	0.028	0.754
Non-metro Saskatchewan	0.770	0.027	0.722
Non-metro Alberta	0.591	0.024	0.722
Non-metro British Columbia	0.642	0.023	0.727
Northern Canada[c]	−0.912	0.048	0.496

Model Summary

−2 Log Likelihood	41,163,785
Model Chi-Square	13,408,742
Degrees of freedom	134
Statistical Significance	0.0001
Cox and Snell R^2	0.2840
Overall Percentage Classified Correctly	77.51
Number of Observations	1,241,346

a Structural zero cell with no observations possible for this cell.
b For continuous variables, the marginal effects for discrete change are calculated separately and are not included in this table.
c Refers to Yukon Territory, Northwest Territories, and Nunavut.

Note: Coefficients that are not statistically significant at the .05 level are in italics.

Temporal Effects

Period Effects. Predicted per cent homeownership increased slightly from 1991 to 1996 (from 58 per cent to 62 per cent), further increasing to 69 per cent in 2001 and to 71 per cent in 2006.[6] Taking all other factors into account, there was an increasing trend in homeownership between 1991 and 2006.

Birth Cohort Effects. Birth cohort effects are consistent with the lifecourse perspective: more recent birth cohorts—that is, younger householders—have lower probabilities of homeownership compared to older householders. For example, birth cohorts born before 1940, who were 60 years or older in 2001, have homeownership levels of about 75 per cent. More recent birth cohorts—for example, those born between 1961 and 1970, who were in their 30s in 2001—are less likely to be homeowners, with a predicted homeownership rate of 55 per cent. This decreases further to 45 per cent for householders born after 1971.

Immigrant Cohort Effects. In examining homeownership rates for various immigrant cohorts, and after taking other temporal factors into account, we expect higher homeownership rates for earlier immigrant cohorts because they have longer residence in Canada.[7] Compared with a homeownership rate of 66 per cent among Canadian-born householders, immigrant householders who arrived before 1971 have higher homeownership rates (70 to 74 per cent). The 1970s immigrant cohort is just as likely as the Canadian-born to be homeowners, while post-1980 immigrants have lower rates of homeownership (between 53 to 57 per cent). The lowest homeownership rate is for immigrants who arrived in 1991 or later, with a homeownership rate that is 13 per cent lower than that of Canadian-born householders.

Aging Effects. The fourth temporal factor deals with the aging effect, or the changes in homeownership experienced by birth cohorts as they become older over time. The lifecourse perspective predicts greater increases in homeownership for more recent birth cohorts (that is, younger age groups, who are more likely to get married and have children—factors associated with buying homes), relative to earlier birth cohorts (who are older householders), and possible slight decreases in homeownership for the oldest birth cohorts, who may be moving from homeownership to other types of housing as they age. Findings support lifecourse-related changes in homeownership. More recent birth cohorts—in 1996, 2001, and 2006, indicating changes in homeownership over the previous five years—experienced larger gains in homeownership than householders born earlier. The oldest birth cohorts, for each of the three five-year periods, experienced some decreases in homeownership, as expected.

Immigrant Duration Effects. The fifth temporal factor in the double-cohort approach is immigrant duration, which measures the change in homeownership between 1991–1996, 1996–2001, and 2001–2006 for each immigrant cohort, relative to Canadian-born householders. Descriptive statistics shown in Table 2 indicate that homeownership rates increased for the Canadian-born but decreased for the foreign-born from 1991 to 1996, and increased for both groups from 1996 to 2001 and from 2001 to 2006. The effect for immigrant duration offers a test of whether these overall changes for the foreign-born are observed in the multivariate analysis.

For all immigrant cohorts, there were smaller increases in homeownership rates—relative to Canadian-born householders—during 1991–1996, with predicted probabilities of homeownership that were less than for Canadian-born householders. During 1996–2001, the duration effect was similar for Canadian-born residents and immigrant cohorts arriving before 1980; however, more recent immigrant cohorts (those arriving after 1980) did not move into homeownership as rapidly as other groups during this period. The picture is mixed in 2001–2006, with similar duration effects for Canadian-born householders and some immigrant cohorts (1951–1960, and 1981–90), higher rates

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6. As discussed in the previous note, predicted probabilities are calculated using Stata 12's margin post–estimation function for the logistic regression estimates. The margin function can hold all other variables constant in two ways. Some users calculate the predicted probabilities for each observation, setting all other variables to the mean for covariates. This provides predicted probabilities based on the mean of the covariates. A second approach, which is used here, calculates the mean of the probabilities, with each person having his/her own observed data. The second approach evaluates each person with his/her actual data, and then calculates the mean predicted probabilities for all persons. For example, the predicted probability for homeownership in 1991 using the second approach is calculated as follows: first, the probability for each observation is calculated with the year set to 1991, including the year 1991 for the main effect and all interactions of the year 1991 with other variables; and second, the predicted probability for the year 1991 is calculated as the mean of all the person probabilities. For additional examples and more details, see Stata (2011: 1027–1081).

7. Immigrant cohort effects reflect the "pure" effects of immigrant groups by arrival (that is, differences by arrival period) as well as some duration effects that refer to changes for immigrant cohorts over specific periods (for example, 1991 to 1996 or 2001 to 2006). This is a subtle difference from the immigrant duration effects, but both effects contain duration effects.
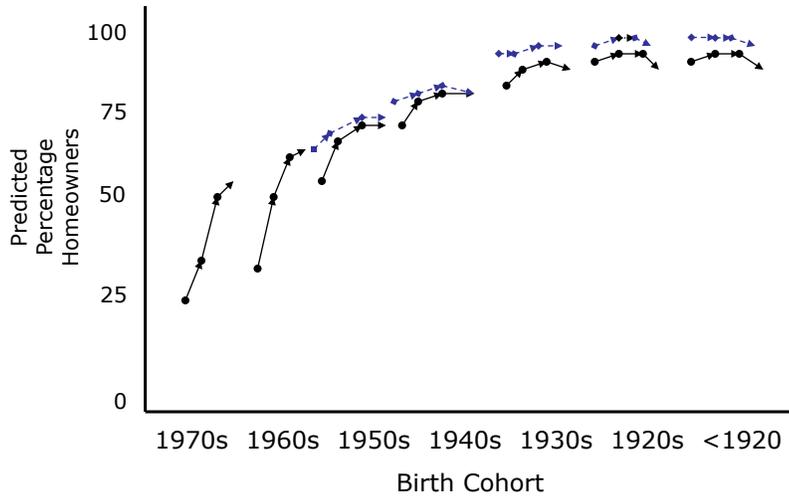
Figure 1. Homeownership trajectories for Canadian-born and pre-1950s and 1950s immigrants, by birth cohort and year (see text for explanation of Figure).

for the 1961–70 and 1971–80 immigrant cohorts, and lower rates for the oldest immigrant cohort (1950 and earlier) and the youngest immigrant cohort (1991–2006).

Joint Aging-Immigrant Duration Effects. The final temporal effect is the joint aging-immigrant duration effect, which indicates the changes in homeownership between 1991–1996, 1996–2001, and 2001–2006 for each birth cohort within each immigrant cohort, relative to Canadian-born householders of a similar birth cohort. These effects are best presented in graphs, because the interaction of aging and immigrant duration effects is complex. We illustrate these effects in a set of homeownership trajectory graphs that show changes in homeownership for immigrant cohorts, relative to Canadian-born householders, for similar birth cohorts. The temporal effects take all other explanatory variables into account.

The trajectories are reported in a set of 5 graphs, each showing homeownership trajectories for Canadian-born householders as the reference category. Figure 1 shows comparisons for the pre-1950 and 1950s immigrant cohorts combined, because the results are virtually the same; Figure 2 is for the 1960s immigrant cohort; Figure 3 is for the 1970s immigrant cohort; Figure 4 is for the 1980s immigrant cohort; and Figure 5 is for the 1990s immigrant cohort.

For Figures 1 to 5, predicted probabilities of homeownership are shown as per cent homeownership on the vertical axis. Changes in per cent homeownership between 1991–1996, 1996–2001, and 2001–2006, are shown for each birth cohort. Canadian-born householders are shown with solid lines, with the beginning year (for example, 1991) indicated by a circle, and the end year (for example, 1996) indicated by an arrow. Immigrants are shown with dotted lines, with the beginning year indicated by a diamond and the end year by an arrow. Therefore, the first arrow

Figure 2. Homeownership trajectories for Canadian-born and 1960s immigrants, by birth cohort and year (see text for explanation of Figure).
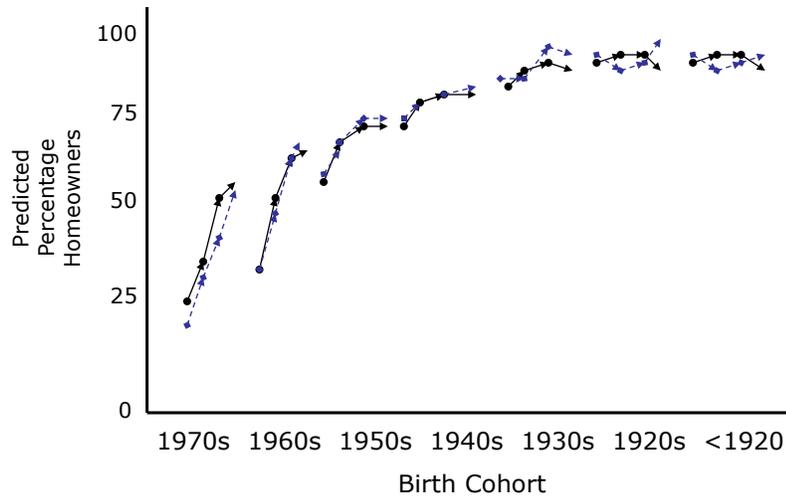
Figure 3. Homeownership trajectories for Canadian-born and 1970s immigrants, by birth cohort and year (see text for explanation of Figure).

shows change from 1991 to 1996; the second arrow shows change from 1996 to 2001; and the third arrow shows change from 2001 to 2006. All the trajectories are predicted probabilities of homeownership controlling for all other explanatory variables.

Figure 1 compares homeownership trajectories of the pre-1950 and 1950s immigrant cohort with Canadian-born householders. Homeownership trajectories for Canadian-born householders display a picture of changes typically associated with the lifecourse. Homeownership rates are low but quickly rise for younger householders; homeownership peaks and stays steady for householders aged 50 to 70, and decreases slightly for older householders. The pre-1951 and 1950s immigrant cohort shows a pattern of homeownership that is very similar to that of Canadian-born householders, except overall homeownership rates are generally higher for these immigrant cohorts.

For the 1960s immigrant cohort, shown in Figure 2, homeownership levels and trajectories are also similar to those of Canadian-born householders. Immigrants in some more recent birth cohorts—those born in the 1950s and 1960s—had smaller gains in homeownership from 1991 to 1996; however, their homeownership levels recovered sharply between 1996 and 2001 and were similar to the Canadian-born by 2006. Just as in Figure 1, older immigrants have higher levels of homeownership than Canadian-born householders of similar age.

Homeownership trajectories for the 1970s immigrant cohort (see Figure 3) also resemble those of Canadian-born householders. Immigrants who arrived in Canada in the 1970s at age 40 and older (that is, birth cohorts from the 1930s and earlier) had stable or slightly declining rates of homeownership during 1991–2001 but experienced
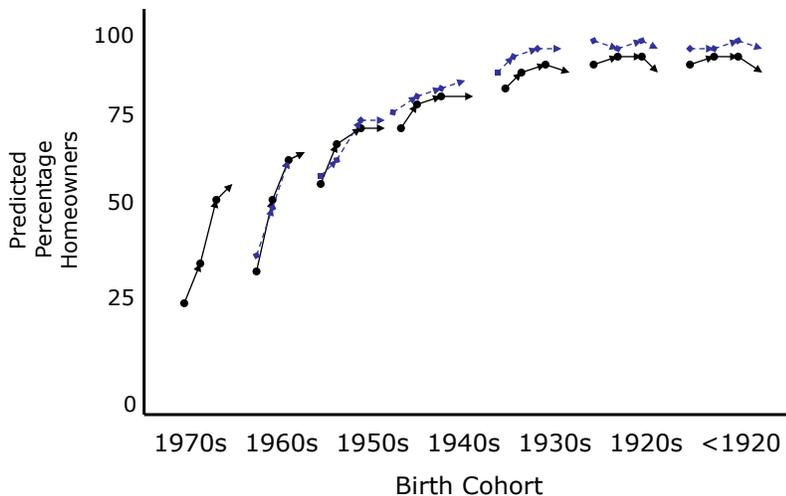

Figure 4. Homeownership trajectories for Canadian-born and 1980s immigrants, by birth cohort and year (see text for explanation of Figure).
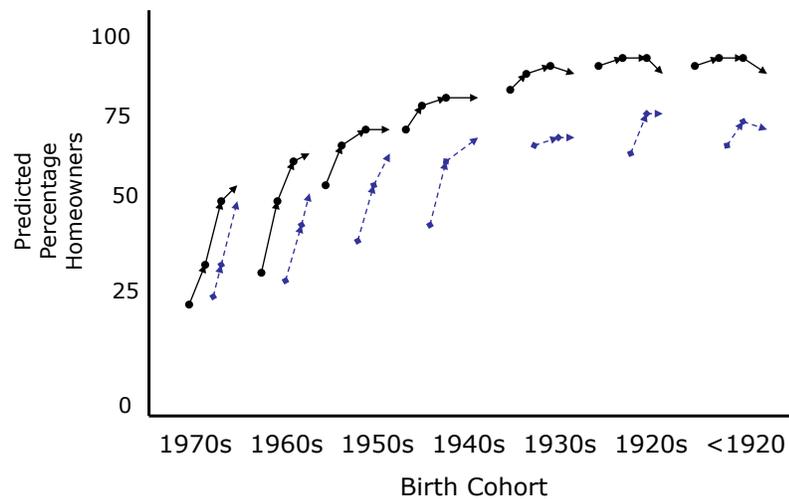
Figure 5. Homeownership trajectories for Canadian-born and 1990s immigrants, by birth cohort and year (see text for explanation of Figure).
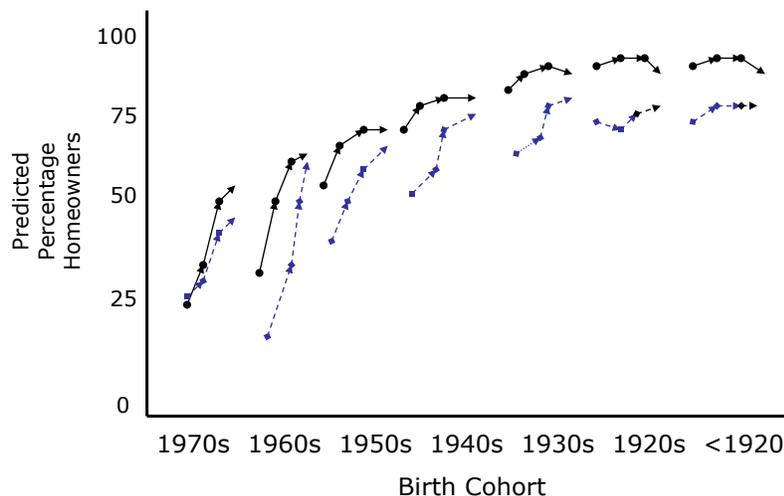
gains from 2001 to 2006. Overall, homeownership trajectories are similar for the Canadian-born and the 1970s immigrant cohort.

As shown in Figure 4, the 1980s immigrant cohort had lower homeownership rates than Canadian-born householders in 1991. However, the gap was narrowed between 1996 and 2001, especially for younger householders. Younger immigrants continued to experience gains in homeownership during 2001 to 2006, with only slightly lower levels of homeownership than Canadian-born householders of similar age by 2006. Older immigrants, however, continued to have moderately lower homeownership rates than similarly aged Canadian-born householders in 2006, but showed gains from 1996 to 2006.

Finally, for the most recent immigrant cohort—those arriving in the 1991 to 2006 period (see Figure 5)—homeownership rates were much lower than Canadian-born householders of similar age in 1996. However, younger householders in this immigrant cohort show rapid gains in homeownership levels during 1996–2001 and again during 2001–2006, and substantially narrow the gap with the Canadian-born for all birth cohorts. While older immigrants in this immigrant cohort—that is, who arrived at age 60 and older, made modest gains in homeownership from 1996 on, they continue to have lower homeownership rates than similarly aged Canadian-born householders in 2006.

The trajectories shown in Figures 4 and 5 indicate that among the most recent immigrant cohorts, all birth cohorts from the 1940s and later experienced rapid gains in homeownership. Only the 1930s and earlier birth cohorts—that is, recent immigrants who arrived at age 60 and older—continue to have noticeably lower homeownership compared with the Canadian-born. In other words, there is no evidence that younger recent immigrants are lagging in homeownership compared with the Canadian-born.

Effects of other variables

We briefly describe the main effects of other variables included in the model.

Household Type. Results confirm that married-couple households have the highest per cent homeownership (75 per cent), followed by multiple-family households (72 per cent) and common-law couple households (61 per cent). All other household types have lower probabilities of homeownership, with the lowest per cent observed among "other non-family" households, with just 51 per cent homeownership.

Gender of Householder. Male householders are only slightly more likely than female householders to own their home (66 v. 65 per cent).

Presence of Children. As expected, homeownership is higher when there are children present in the household—69 per cent, compared with 64 per cent for households without dependent children.

Household Size. Homeownership is directly associated with the number of persons in the household. For continuous variables in the model, we calculate the predicted probability for homeownership for the explanatory variable set at 1 standard deviation (SD) below and above the mean: 1.2 persons for 1 SD below the mean and 4.2 persons for 1 SD above the mean. A household with 1.2 persons has a predicted probability of homeownership of 0.640, with all

other variables set at their mean values, and a household with 4.2 persons has a predicted probability of homeownership of 0.679, again, taking all other variables into account. The marginal effect of household size, varying between 1 SD below the mean and 1 SD above the mean, is a change of predicted homeownership of 3.9 percentage points.

Educational Attainment. Calculating the predicted probability of homeownership at 1 SD below the mean (9.6 years of schooling) and 1 SD above the mean (15.6 years of schooling), and taking all other variables into account, we obtain a homeownership rate of 0.644 for householders with 9.6 years of schooling, and 0.670 homeownership for householders with 15.6 years of schooling. The marginal effects of educational attainment, varying between 1 SD below the mean and 1 SD above the mean, is a predicted change in homeownership of 2.6 percentage points.

Knowledge of Official Languages. Relative to those who do not speak either official language, householders who speak one or both official languages are more likely to own a home (66 v. 62 per cent).

Household Income. As expected, household income has a substantial effect on homeownership. We calculate the predicted probability of homeownership for household income for 1 SD below the mean ($10,800 in 2001 dollars) and 1 SD above the mean ($104,000 in 2001 dollars), and obtain a 0.503 homeownership rate for household incomes of $10,800 and 0.835 for household incomes of $108,000. The marginal effect of household income, as measured by differences between household incomes of $10,800 and $104,000, is substantial, with a percentage point difference in predicted homeownership of 33.2 percentage points—a greater effect on homeownership than other variables such as number of persons in the household and householder's educational attainment.

Ethnic Origin. It is not possible to track separate ethnic groups with a double-cohort model, because the sample size would become relatively small for categories involving birth cohorts, immigrant cohorts, as well as interactions of birth and immigrant cohorts and period. We include a set of dummy variables for ethnic groups, however, to examine whether ethnic group differences in the likelihood of homeownership persist after taking into account all other variables.

Compared to European-origin householders (with a predicted 68 per cent homeownership), only Chinese householders have a higher per cent homeownership, at 77 per cent. Many ethnic groups, including "other Asian" and householders with multiple ethnic origins, have predicted homeownership levels that are close to European-origin householders. Three ethnic groups—Latin American, Arab, and Black/Caribbean—have lower probabilities of homeownership, with Latin American householders having the lowest per cent homeownership, at just 49 per cent.

Place of Residence. Housing markets are substantially different in metropolitan and non-metropolitan areas. Different parts of Canada also vary on other characteristics, such as size and composition of the immigrant population, resources available to facilitate home buying among immigrants, and supply of owned versus rental housing. Compared with the national average homeownership rate of about 68 per cent, the probability of homeownership is much higher in all non-metropolitan areas (except Northern Canada),[8] Newfoundland, and a few metropolitan areas (including Kelowna/Abbotsford and Winnipeg), and strikingly lower in some metropolitan areas, including the major immigrant centres of Toronto (58 per cent), Montreal (56 per cent), and Vancouver (61 per cent).[9]

Discussion and conclusion

This paper approaches the study of homeownership among immigrants in Canada from a lifecourse perspective that highlights the importance of age-related effects on the transition to homeownership. A lifecourse perspective is particularly useful to study immigrants' transition to homeownership, because both migration and homeownership are among the most important changes that can happen to individuals over their lifecourse. Main findings confirm the important role of socioeconomic factors in immigrants' homeownership attainment, particularly the role of household income—which is, in turn, related to age, education, and other lifecourse characteristics. The effects of other lifecourse-related characteristics such as marital status and presence of children are also confirmed, with higher homeownership rates for family households with young children.

Descriptive results showed that immigrant homeownership rates declined during the 1991–1996 period and then rebounded during the 1996–2006 period. Over the study period, immigrants' homeownership rates increased by 2.7

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8. Northern Canada (consisting of Yukon Territory, Northwest Territories, and Nunavut) has a high proportion of rental housing, in part to provide housing for seasonal and temporary workers.
9. The findings for Toronto, Montreal, and Vancouver highlight the need for caution when applying research based on immigrants residing in these three metropolitan areas to the rest of the country.

percentage points, which was lower than the 5.5 percentage-point increase among the Canadian-born, suggesting that immigrants are not keeping pace with the Canadian-born in attaining homeownership. Logistic regression analyses using a double-cohort design reveal, however, that such a descriptive conclusion needs qualification, because *all* immigrant cohorts experienced homeownership gains between 1991 and 2006. Immigrant householders display rapid gains in homeownership with longer residence in Canada. Among immigrant householders who have resided in Canada for 20 years or longer, homeownership rates are comparable to those of Canadian-born householders. More recent younger immigrant householders begin their housing careers with much lower levels of homeownership, but they made rapid and remarkable gains in homeownership during the 1996 to 2006 period.

One important question that is often asked about immigrants and homeownership is: "Are more recent immigrant cohorts moving into homeownership at the same rate as earlier immigrant cohorts?" Our research suggests that the answer is not a simple "yes" or "no." As noted in the discussion of age-period-cohort effects and the motivation for using a double-cohort model, the understanding of homeownership trajectories for immigrant cohorts requires a more complicated and nuanced answer. Since we examined data from four censuses—1991, 1996, 2001, and 2006— we do not have data for a sufficient time period to allow a *direct* comparison of immigrant cohorts for the initial 10 or 20 years after arrival in Canada. Such an analysis would require data from the 1951, 1961, 1971, and 1981 censuses, for example, in order to study the initial years of homeownership trajectories for the 1950s, 1960s, and 1970s immigrant cohorts. However, our examination of data from four censuses using a double-cohort design avoids the limitations of cross-sectional studies, based on one data point, or studies using just two data points, by showing differences in immigrant homeownership trajectories over three periods—1991–1996, 1996–2001, and 2001–2006.

The findings enable some tentative conclusions about homeownership trajectories for recent immigrant cohorts. In particular, results for joint aging and immigrant duration effects shown in Figures 4 and 5 indicate sharp gains in homeownership rates for younger birth cohorts among the more recent immigrant cohorts from 1991 to 2006. These findings support the notion that younger immigrants are quickly making up for their initially lower homeownership levels upon arrival in Canada. We therefore do not see any evidence that more recent immigrant cohorts are unable to move into homeownership or are less likely to close the gap in homeownership with earlier immigrant cohorts or the Canadian-born.

In this study, we included a measure of place of residence based on a set of fixed effects for all metropolitan areas and non-metropolitan areas for each province. These *place effects* deserve further analysis, given that housing supply, demand, and pricing are mainly locally determined.

The strong ethnic origin effects on homeownership also deserve further study, as censuses do not have information on some factors that might account for these differences. For instance, part of the differences may be due to householders' financial resources (other than household income included in the model and discussed earlier)—both the resources that they had at time of arrival in Canada as well as access to resources after arrival. Census data do not provide information on wealth at the time of arrival or on financial resources available from relatives, friends, or other sources. Another factor that may account for differences in homeownership among ethnic groups is the extent to which different ethnic groups value homeownership. Although such factors may help to understand ethnic group differences in homeownership, we are unable to pursue these possibilities with census data.

In addition, for studying immigrant homeownership, a measure of the size of the immigrant population by ethnic origin may help to understand additional aspects of immigrant homeownership. For example, areas with very small populations of particular ethnic origin may have lower rates of homeownership for those ethnic groups. Such areas may have immigrants who are isolated from co-ethnics, and lack help from others who speak their language and can help them to negotiate the complex process of buying a home. Future research that includes contextual characteristics such as size and ethnic composition and residential segregation would provide important additional insights into the process of homeownership for recent immigrant populations.

There has been considerable debate in recent years about the integration pathway of "new" immigrants. Much of the recent debate centers on whether new immigrants, primarily from Asia, Latin America, and other countries will replicate the experiences of predominantly European arrivals of several decades ago. Zhou (1997) and other researchers studying ethnic enclaves suggest that new immigrants may engage in segmented assimilation, with some groups adapting in ways that deviate from the majority, including homeownership. Other researchers, such as Alba and Nee (2003), suggest that recent immigrant experiences (in the US, at least) have been similar to earlier historical patterns. Our findings on immigrant transition to homeownership in Canada are more consistent with Alba and Nee's (2003) perspective. To be sure, some immigrant ethnic groups have lower rates and some have higher rates

of homeownership, as we found in this study. The diversity within the immigrant population is a key aspect for any inquiry into immigrant integration. It would be misguided to speak of "immigrant integration" as if immigrants were a homogenous population. For the most part, however, Canadian results for homeownership trajectories suggest that recent immigrant experiences are more broadly similar than different compared with that of earlier immigrants and the Canadian-born.

In conclusion, the findings from this analysis show fairly rapid attainment of homeownership by immigrants after arriving in Canada. A trend analysis, using data from four censuses and a double-cohort design, produced findings suggesting that immigrants are generally making successful transitions to homeownership. This approach yields additional insights into the temporal dynamics of homeownership for immigrant households. Comparisons across ethnic origin groups underline the diversity of Canada's immigrant population, and the need to consider this diversity in research on immigrants. As the Asian, Latin American, and Caribbean populations continue to grow from immigration and expansion of the second generation, we expect their influence on housing to become even larger, particularly in metropolitan areas with large and ethnically diverse populations. Lastly, because Canada's immigrants are concentrated in the largest metropolitan areas, more and better measures of place or context would improve our understanding of immigrant transition to homeownership.

Acknowledgements

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