

October 2020

The Impacts of Housing Affordability on Immigrant Household Formation and Homeownership

Wanyun Cheng
The University of Western Ontario, wcheng58@uwo.ca

Follow this and additional works at: https://ir.lib.uwo.ca/sociology_masrp



Part of the [Sociology Commons](#)

Recommended Citation

Cheng, Wanyun, "The Impacts of Housing Affordability on Immigrant Household Formation and Homeownership" (2020). *MA Research Paper*. 39.
https://ir.lib.uwo.ca/sociology_masrp/39

This Dissertation/Thesis is brought to you for free and open access by the Sociology Department at Scholarship@Western. It has been accepted for inclusion in MA Research Paper by an authorized administrator of Scholarship@Western. For more information, please contact wlsadmin@uwo.ca.

The Impacts of Housing Affordability on Immigrant Household Formation and
Homeownership

by

Wanyun Cheng

A research paper accepted in partial fulfilment of the
Requirements for the degree of
Master of Arts

Department of Sociology
The University of Western Ontario
London, Ontario, Canada

Supervisor: Dr. Michael Haan

Abstract

Rising housing costs, in terms of both rent and ownership costs, have been posing challenges to the Canadian population in forming independent households and attaining homeownership, especially to immigrants who had lower homeownership rates since the 1980s. This paper investigates the impacts of housing affordability and the three elements of the housing pathways framework - economic resources, family composition, and cultural variations - on household formation and homeownership differences between the Canadian-born and five racialized immigrant groups. Using the Public Use Census data and the “double cohort” analytical approach, the study also assesses their housing progress from 2006 to 2016. The results demonstrate that housing affordability hinders immigrants from forming independent households, in particular owner households. Furthermore, the results show that even after controlling for a range of socioeconomic factors related to housing pathways, immigrants of different races have a stronger motivation to become homeowners than the Canadian-born.

Keywords: Housing affordability, immigrants, household formation, homeownership

Introduction

Housing cost has been the biggest expenditure for most households. With the rise of housing and rental prices in Canada, housing affordability has been given more attention. In 2016, 24.1 percent of Canadians were in core housing need (Statistics Canada, 2017). The proportion was higher among the low-income population and immigrants. Furthermore, the homeownership rate experienced its first-time decline since 1971 (Statistics Canada, 2017). In 2017, the Government of Canada announced a ten-year National Housing Strategy to ensure more Canadians have access to affordable housing. Racialized groups and recent immigrants are among the most vulnerable population identified under this initiative.

Since the 1990s, homeownership has becoming more attractive due to low interest rates and the governmental assistance to homeowners, which likely contributed to rising housing prices. At the same time, the increasing number of purpose-built rental units and decreasing social housing supply raised monthly rents. Surging housing costs in owner-occupied and rental market in comparison to the slower income growth have created barriers for more people to have access to affordable housing including the immigrant population. This paper aims to examine the impacts of housing affordability on immigrants' household formation and homeownership rates.

The population of interest in this study is racialized immigrant groups. As early as 1981, immigrants' homeownership rates used to exceed the rates of the Canadian-born in Montreal, Toronto, and Vancouver, but the advantages began to disappear since then (Haan, 2005). The standard consumer choice model explained most part of the rise in Canadian homeownership over time, but only half of the changes in immigrant homeownership. This suggests that factors like ethnic and cultural backgrounds may also play a role.

The paper begins by introducing the concept of housing pathways. According to the housing pathways framework, the gaps of housing outcomes can be attributed to financial resources, differences of demographic and family composition, as well as ethnic and cultural variations. Next, I apply the housing pathways framework and literature review in analyzing how immigrants and their Canadian counterparts differ in these determinants and how these differences translate into the household formation and homeownership gaps. In the second section, I use multinomial regression models and data from the Public Use Canadian Census from 2006 and 2016 to examine the impacts of each set of the key independent and control variables on the dependent variable, householder status. The ‘difference-in-differences’ analytical technique is used in the models to compare the housing progressions of both immigrants and the Canadian-born over the ten-year period. The results demonstrate that although immigrants are in a more adverse position on the housing ladder to start with, they also experience faster growth than the Canadian-born in forming independent households, especially owner households. The results also confirm that family life cycle and labour market outcomes explicate the gaps of housing outcomes between the two groups, but the link between ethnic and cultural background and household formation is weak. Most importantly, housing affordability is the factor that impede immigrants from both renting and owning homes, and the impacts are bigger in homeownership than renting.

The effect of affordability on residential experiences are understudied, so this research contributes to fill the knowledge gap and assist future research. Furthermore, it provides more quantitative evidence to help policymakers pinpoint obstacles to overcome and areas to improve immigrants’ household formation and homeownership rates.

Literature Review

The Concept of Housing Pathways

The concept of housing pathway builds on the idea of housing career. A housing career is considered a hierarchy of residential mobility where people move from the bottom of the housing market to a more desirable housing situation (Beer et al., 2011). Kendig (1984) notes that family life cycle and economic resources are the primary drivers of whether households are independently formed and whether households attain rental or owner occupancy.

Family structure plays a pivotal role in people's housing careers (Mulder & Lauster, 2010; Murdie et al., 1999). Housing demands and preferences vary by different life stages, including adulthood, marriage, childbearing, childrearing, and divorce. Leaving the parental home is one of the important markers of the transition to adulthood and social autonomy (Beer et al., 2011; Settersten & Ray, 2010). After moving out, single young adults choose renting since they have a higher tendency to experience residential relocation at the early stages of job career. Married couples choose owning a home, as they are in a committed long-term relationship and hope to live in a stable and secure environment (Clark & Huang, 2003; Gristein-Weiss et al., 2011). They are also more likely to afford mortgage payment with two incomes than one. Once the families have children, they continue trading up for a larger dwelling for children to have more space to play (Clark & Davies Withers, 2007). On the other hand, people who experience dissolution of a marriage or cohabitation have a higher propensity to leave owner-occupation than those who remain married (Feijten & van Ham, 2010).

Housing decisions are made not only based on household preferences, but are also subject to financial constraints (Alba & Logan, 1992; Flippen, 2001). As individuals acquire more

financial resources, they move up the housing ladder from leaving parents' home, becoming independent renters, to becoming first-time homebuyers, to trading up and moving to bigger homes (Morrow-Jones & Wenning, 2005). It is because people with higher economic status have greater risk tolerances which transfers into preferences for homeownership (Henderson & Ioannides, 1983). For example, people with lower incomes or in lower classes are forced to leave parental homes at later ages to save housing costs, people in the middle class move up from non-householders to independent renters, as their savings are not sufficient to enter homeownership at this early stage of their lives, and finally people with higher economic status are able to pay off mortgages and advance in their housing careers.

In regards to a housing pathway, Clapham (2002) defines it as “patterns of interaction (practices) concerning house and home, over time and space”. Acknowledging the economic and life-course considerations in housing careers, this approach also rejects the embedded assumption of the housing career concept that households have a common set of preferences and they work towards the universal housing goal rationally (Beers et al., 2011; Clapham, 2002). Instead, the housing pathway approach attaches social meanings to the housing consumption, arguing that one's housing career is inextricably connected with ethnic-cultural factors (Özüekren & van Kempen, 2002).

Firstly, the interpretation of ‘home’ and ‘family’, as well as the strength of family ties in different cultural traditions are associated with households' living arrangements (Chang, 2013). For example, the beliefs in independence and individualism, as well as the desire for privacy and self-sufficiency urge Americans to leave parental home early and form nuclear families, since children who stay home longer are considered as dependent or not achieving success in their profession (Bull & Gross, 2018). Conversely, co-residence and multigenerational households are

more prevalent in countries that have strong family ties, including Italy, Asian and Latin American countries (Alesina & Giuliano, 2013). Manacorda and Moretti (2006) suggest that co-residence rates are high among Italian youths since parents are happier when their children live with them. In Asian culture, the preferences of co-residence with parents are shaped by the family-oriented collective ideology and filial piety in East Asia (Chang, 2013). Regardless of the motivations, the strength of family ties in different cultural norms remarkably affects the intimacy and living arrangement behaviors in different countries.

Secondly, ethnic minority households may face racial profiling and discrimination in housing market. Private landlords may prefer renting their places to people who are Whites and speak fluent English based on race, name, and language proficiency, discouraging people of colour from entering rental market and forcing them into homeownership (Carpusor & Loges, 2006; Massey & Lundy, 2001).

In summary, the three key elements of the housing pathways framework – economic resources, family life cycle, and cultural and ethnic variations – explain household formation and homeownership discrepancies between two certain groups.

Housing Affordability: An Issue in Canada

Housing affordability is a social issue in the past two decades that affects all households since shelter is a necessity for every household. With a higher portion of their incomes being allocated to housing costs, households have less funds available to spend on food, healthcare, transportation, childcare. This will further hinder people's quality of life and the overall economy (Molina, 2017). While housing affordability measurement is not strictly defined, the most popular one used by researchers is shelter-cost-to-income-ratio (STIR). Housing is

considered affordable if a household spend less the 30 percent of household income on shelter expense (Engeland et al., 2008). In recent years, housing affordability issue has been more severe and intensifying the housing burdens. From 1985 to 2009, the proportion of renters and owners experiencing housing affordability issue surged from 30 percent and 15 percent to around 50 percent and 25 percent, respectively (Molina, 2017). This is because of the unsynchronized growths between income and housing cost have been leading to higher percentage of STIR. On the one hand, income has been stagnant due to the decline of union, loose labour policies, and the shift of economic structure from manufacturing to services (Gould, 2015). On the other hand, housing costs have surged dramatically over the past forty years, especially since 2000 (Flanagan & Wilson, 2013). The problem is more acute in metropolitan areas. Adjusted for CPI, median income in Toronto decrease by 3 percent whereas median rent rose by 4 percent from 2006 to 2016 (CMHC, 2020; Statistics Canada, 2020).

Housing affordability issue is unevenly distributed among non-households, renters, and homeowners. According to the economic resources perspective in the housing pathways framework, housing ladder is closely connected to income class. As a result, rising housing costs influence those who are at the bottom of the housing hierarchy the most. In the United States, researchers find that increasing housing expense is one of the determinants of young adults delaying their timing of leaving home to form independent households (Choi et al., 2018). During the housing market boom in early 2000s, rising housing costs and rental charges in Ireland made housing less affordable, discouraging people from forming independent households (Byrne et al., 2018). Similarly, low- and moderate-income renter households are vulnerable when facing increasing rental fees (Molina, 2017). Growing housing prices and down payments further limit their opportunities of becoming homeowners, so they can only either stay as renters and pay

higher rent, or live with other households and endure worsen housing quality. Although homeowners carry higher housing cost burdens than renters, they also have more financial buffers. Increases in housing prices reflect housing value appreciation and accumulation of homeowners' net worth. They are able to receive capital gains through home sales on top of their higher incomes (Alba & Logan, 1992). Moreover, homeowners benefit from mortgage rate drop over the years so that the increases of housing costs are not as volatile as renters. Even faced with affordability issues, homeowners have more alternative tenure options than renters and non-householders by returning to be renters, while the existing renters can only downsize or move back to parental homes.

While racialized immigrants are in the same housing market as the Canadian-born, their lower income levels force them to allocate higher portions of their wages into housing. In 2006, 33 percent of visible minorities were below affordability standard, in comparison with 20 percent of non-visible minority households (CMHC, 2011). Going up the housing ladder and entering homeownership has becoming more difficult for racialized immigrants, and thus they are more likely than the Canadian-born to stay in a large household or become a renter. Drawing from the evidence of the housing inequality, I hypothesize that *the housing affordability gaps impede immigrants' household formation and homeownership rates (Hypothesis 1)*.

Other Elements in Housing Pathways

In addition to housing affordability, other elements like demographic, cultural, and other socioeconomic factors included in the housing pathways concept also have impacts on the housing outcomes.

First of all, most immigrants have less economic resources than the native-born Canadians when they first arrive in Canada. In addition to income, labour market outcome is also used as a determinant of economic outcome. Immigrants have higher unemployment rates than their Canadian-born counterparts. From 2006 to 2017, even though the unemployment rates of both immigrants and the Canadian-born reduced, the gap of remained relatively the same (Yssaad & Fields, 2018). In the 2016 Census, immigrants had 7.5 percent of unemployment rate, compared to 6.8 percent for the Canadian-born; the unemployment rate for recent immigrants was 11.3 percent (Statistics Canada, 2020). Unfavorable employment status puts immigrant households in a disadvantageous position in the housing market since they do not have stable job opportunities and sufficient funds to move up the housing ladder and reach the same level as the native-born. Therefore, I hypothesize that *unfavorable labour market characteristics negatively affect immigrants' household formation and homeownership rates (Hypothesis 2)*.

The second element is the life-course characteristics. Immigrants mostly follow a conventional family structure, in which the majority of them maintain a marriage relationship. By contrast, the family structure of native-born Canadians is more diverse and de-standardized, with a higher proportion of whom stay single, delay marriage, and divorce compared to immigrants of same ages. As for childbearing, Organization for Economic Cooperation and Development (2015) finds that due to low fertility rates among the Canadian-born population, their likelihood of having one or more children is 11.8 percent lower than immigrant households (OECD, 2015). These evidences suggest that marriage at earlier ages and the presence of children allows immigrants to have a higher likelihood to be home consumers, and thus prevent them from further lagging behind the Canadian born in household formation and homeownership (Haan, 2005). Therefore, I hypothesize that *differences in the family life cycle help immigrants*

reduce the household formation and homeownership gaps between immigrants and the Canadian-born (Hypothesis 3).

Last but not least, the ethnicity compositions are different between immigrants and the Canadian-born. Since Canada adopted merit-based immigration policy, the source countries slowly shifted from European countries to countries in Asia and Pacific regions. In addition, Canada also offers immigration admission to refugees from Latin America, Middle East and Caribbean regions. As source countries expanded geographically, the immigrant group has become more heterogenous. Many scholars point out that immigrants' household formation and homeownership do not fully converge to the Canadian-born. They contend that the discrepancies between immigrants and native-born as well as among diverse immigrant groups still persist after controlling for sociodemographic and economic characteristics (Haan, 2007; Haan & Yu, 2012; Painter et al., 2001). To some extent, immigrants still maintain their cultural heritage and living arrangement preferences even after they move to host countries. Ng and Northcott (2013) also show that influenced by the normative patriarchy culture in Asia, the eldest son would continue to live with his parents and take care of them. In a quantitative study, Haan (2005) argues that the different homeownership rates between immigrants arriving in Canada later than 1981 and the native citizens may be affected by housing appetite differences. Therefore, based on findings from the literature, I hypothesize that *for immigrants from South Asia, China, and Philippines, their non-householder rates would remain stable due to ethnic and cultural preferences of living arrangement (Hypothesis 4).*

As this research observes the same cohorts of immigrants and their Canadian counterparts for ten years from 2006 to 2016, it is worth paying attention to and recognizing the effects of the length of immigrants staying in Canada on social and economic integration. Immigrants have

lower social and economic capital to in the early periods upon arrival to Canada. Limited social networks and unfavorable job market outcomes serve as barriers to prevent them from forming independent households or entering homeownership. But according to the assimilation theory (Alba & Logan, 1992), as immigrants stay longer, they acquire the language ability, building networks outside of their distinct ethnic groups, and gain a more stable work status. In other words, although immigrants have a lower starting point in earnings, they tend to have higher rates of growth as they stay longer in Canada (Picot & Sweetman, 2005). The faster progress of financial resources accumulation could positively translate into immigrants' housing pathways and facilitate them moving upward in the housing hierarchy. I hypothesize that *from 2006 to 2016, immigrants move to homeownership at a faster pace in comparison to the native-born population (Hypothesis 5).*

Data and Methodology

Data

I use the Canadian Census Public Use Microdata File (PUMF) in 2006 and 2016. For immigrants, the sample of the analysis includes those who arrived in Canada between 1975 and 2001. The reason of choosing 1975 as the starting point is to ensure the immigrants included in this study were selected based on the merit-based immigration system. I exclude those who came before 1975 to reduce the cohort effect.

Dependent Variables

Homeownership rate is a commonly used measurement in past research to determine people's housing attainment. Higher homeownership indicates more households transition from renters to homeowners. However, it is also possible that rising homeownership rate is due to

fewer independent households being formed, which is prevalent among certain ethnic and racial groups. In order to avoid misinterpretation of the homeownership rate, Yu and Myers (2010) construct a trichotomous variable that contains three types of householder status, namely non-householder, independent renter, independent homeowner. Their approach analyzes homeownership more accurately from an individual level instead of a household level.

Since this research examines immigrants' household formation and homeownership by race, I adopt their method to construct my dependent variable to reflect the racial and ethnic differences in forming independent families. The dependent variable is householder status, a categorical variable with three categories: non-householder, renter householder, and owner householder.

Independent Variables

There are three independent variables of interest. The first variable of interest is racialized immigrant group. The visible minority group variable in the census is used to approximate the ethno-cultural differences. I select five groups with the largest presence in Canada (White, Chinese, South Asian, Black, and Filipino). The housing attainment of these five immigrant groups are compared to the native-born Canadians. The second variable is time period, indicating the housing progress of Whites from 2006 to 2016. The third independent variable is an interaction term between the five immigrant minority groups and the period. The interaction term represents the additional change of household formation and homeownership in each racialized immigrant group from 2006 to 2016. A positive interaction effect suggests the particular immigrant group's renting or ownership rates increased faster than the native-born counterparts over the decade.

Control Variables

The models include three sets of control variables to control for individual characteristics and housing affordability.

The first set of control variables are about housing affordability. The first variable is STIR, a variable that is constructed by dividing the median monthly shelter cost of the census metropolitan area (CMA) the person resides by the individual's personal income. It approximately reflects the person's housing affordability level based on the average housing cost in the CMA. The reason that personal total income is used to construct STIR instead of the household income in the Statistics Canada definition is that the research is to examine householder status in individual level. Another variable is CMA, which is added to control for the location preferences by different groups and housing price variations across regions in Canada.

The second set contains demographic variables. Age is included because older people accumulate more wealth and are more likely to afford buying a house. The coding of age follows a "double cohort" approach to form pseudo-longitudinal data from two years of cross-sectional data. They are coded as 25-34, 35-44, 45-54 in 2006, and as 35-44, 45-54, 55-64 in 2016 by adding ten years to the ages in 2006. In addition, I include gender in my model. Traditionally, men were assumed to be the householder in the past. But recent research argues that women have higher tendency to be householder, depending on race and ethnicity (Myers, 1992). Given the shift of the householder status, gender will be a key determinant. Marital status is also an important indicator for household formation (Sweet, 1990). As delayed marriage is on the rise, people who are never married are more likely to stay with their parents for a longer period of time, whereas married people are more likely to form an independent family. Number of

children, another indicator of family characteristic, is included because parents with one or more children are more inclined to settle for a stable life and have houses with backyards for children to play which increases their likelihood of purchasing homes.

The third set of control variables covers a range of socioeconomic characteristics. Language ability is a determinant of how well an immigrant integrates to the host society, given that the majority of immigrants are from countries where English is not their first language since the point-based system immigration policy was introduced. In the United States, better English proficiency is translated into higher headship rates and smaller households than those who have lower English skill (Myers et al., 1996). Personal income is not included in the model. Since the variable STIR comprises shelter cost and income, including income as a separate variable in the model will cause a high correlation between income and STIR, which will potentially lead to a collinearity issue. Instead, employment status is considered. It is found to be associated with homeownership rates (Borjas, 2002; Chakrabarty et al., 2019; Haan, 2005).

Analytical Technique

Since the outcome variable is a trichotomous variable, multinomial logistic regression model is the most suitable regression analysis for this research. A series of models are run to assess the impact of each set of the key and control variable. I use the “difference-in-differences” technique to analyze racialized immigrants’ housing progress over the period of 2006 and 2016 in comparison with native-born Whites. The models are estimated in the following order:

$$\log\left(\frac{P_i}{P_{NH}}\right) = \alpha + \beta_1 RIG + \beta_2 Period + \beta_3 (RIG \times Period) \quad (1)$$

$$\log\left(\frac{P_i}{P_{NH}}\right) = Model\ 1 + CMA \quad (2)$$

$$\log\left(\frac{P_i}{P_{NH}}\right) = \text{Model 2} + \text{STIR} \quad (3)$$

$$\log\left(\frac{P_i}{P_{NH}}\right) = \text{Model 3} + \text{Demographic Variables} \quad (4)$$

$$\log\left(\frac{P_i}{P_{NH}}\right) = \text{Model 4} + \text{Socioeconomic Variables} \quad (5)$$

Where:

- i = tenure choice of either renter household or owner household
- NH = Non-householder
- RIG = Racialized immigrant group
- Period = 2006 or 2016 census year
- STIR = Shelter cost-to-income-ratio

In the above models, β_1 , β_2 and β_3 correspond to coefficients of the three key independent variables of interest.

Results

Descriptive Statistics

As Table 1 illustrates, all immigrant groups had lower homeownership than the native-born Canadians in 2006. The homeownership rate of Black immigrants was the lowest, along with the highest renter rates and the lowest non-householder rates. They suggest that even though Black immigrants prefer independent households, it is possible that their unfavorable economic outcomes impede their housing progression to homeownership so they can only stay as renters. On the other hand, White and Chinese immigrants are the closest to White native-born in terms of homeownership rates. One distinction is that individuals from Asia are more likely to be non-

householders, which could be due to their cultural preference of forming multigenerational households and living with parents. In 2016, all immigrant groups had higher homeownership rates and lower renter rates, catching up with the Canadian-born as immigrants stayed in Canada longer. The homeownership progresses of South Asian and Black immigrants were the most noticeable. Chinese immigrants even exceeded White native-born by 1 percent. Interestingly, the percentages of non-householder from 2006 to 2016 slightly increased among Whites while decreased among other racialized groups.

Table 1: Householder Status of Racialized Groups, 2006 and 2016

Racialized Group	2006			2016		
	Non-householder	Renter	Owner	Non-householder	Renter	Owner
White NB	45%	17%	38%	48%	9%	44%
White Imm	49%	15%	35%	50%	9%	42%
South Asia Imm	54%	13%	33%	50%	7%	43%
Chinese Imm	56%	10%	35%	50%	4%	45%
Black Imm	41%	37%	22%	38%	28%	34%
Filipino Imm	56%	16%	28%	55%	12%	34%

Source: 2006 and 2016 Canadian Census Public Use Microdata File (PUMF).

Table 2 shows the householder status of the native-born and three immigrant cohorts. By 2006, the earliest cohort, those who arrived in Canada between 1975 and 1985 have already attained similar homeownership to the non-immigrants, although they formed fewer independent households than the non-immigrants. In 2016, all three immigrant cohorts gained the same level of independent household formation rates as the native-born and narrow the homeownership gaps.

Table 2: Householder Status by Immigrant Cohort, 2006 and 2016

Racialized Group	2006			2016		
	Non-householder	Renter	Owner	Non-householder	Renter	Owner
Non-immigrant	45%	17%	38%	48%	9%	44%
1975-1985	50%	11%	39%	50%	7%	43%
1986-1995	52%	15%	33%	49%	10%	41%
1996-2001	52%	20%	28%	48%	10%	41%

Source: 2006 and 2016 Canadian Census Public Use Microdata File (PUMF).

The descriptive findings demonstrate that as immigrants stay in Canada longer, their household formation and homeownership rates integrate to the native-born Canadians regardless of the housing affordability crisis. However, small discrepancies among different racial groups still exist.

Multinomial Regression Results

The multinomial regression models aim to further analyze factors that attribute to the shrinking housing gaps. Results are shown in Table 3. Each of the four models have two columns – the first one indicates the odd ratio of forming independent renter households, and the second one indicates the odd ratio of forming independent owner households. In Model 1, consistent with the descriptive findings, the coefficients of the racialized immigrant group variable depict that immigrants had lower odds of forming both renter households and owner households than White native-born in 2006 except Black immigrants whose odds of being renters was higher. Compared to 2006, the odds of White native-born forming renter households were 52 percent ($1 - 0.481 = 0.519$) lower in 2016, whereas their odds of forming owner households were 9 percent ($1.086 - 1 = 0.086$) higher. It reflects that as the time passes and the population ages, they are more likely to leave rental market and advance into homeownership. The interaction term demonstrates the rate of change for each racialized immigrant group over the ten years. All the

coefficients are bigger than 1 and most of them are statistically significant, meaning as immigrants stay in Canada longer, their progressions into renter and owner occupations are faster than the native-born. In other words, the household formation and homeownership gaps have narrowed down. The housing pathways of two racialized groups are surprising. Chinese immigrants were one of the groups whose odds of being homeowners are closet to the native-born in 2006, and they continued to be one of the groups with most rapid advancement into homeownership in 2016. Having one of the lowest percentages of the population as homeowners in 2006, Black immigrants progressed faster than other groups over the next ten years in both renting and owner occupations.

In order to test the impacts of housing affordability, a vector of CMA variables is added in Model 2 first to control for the location selection. Compared to Model 1, the odds of renting in 2006 are lower for all immigrant groups than the native-born Canadians, while the odds of owning move in an opposite direction. This result implies that if people lived in the same CMA, then the gaps of forming renter households would have been larger and the gaps of forming owner households would have been smaller.

Table 3: Relative risk ratios (RRRs) of the determinants of housing formation and homeownership in Canada

Variable	(1)		(2)		(3)		(4)		(5)	
	Renter Household	Owner Household	Renter Household	Owner Household	Renter Household	Owner Household	Renter Household	Owner Household	Renter Household	Owner Household
Racialized Immigrant Group (Ref = White Native-born)										
White Immigrant	0.809***	0.843***	0.761***	0.868***	0.769***	0.899***	1.122***	0.860***	1.152***	0.841***
South Asian Immigrant	0.632***	0.724***	0.595***	0.759***	0.607***	0.828***	1.170***	0.796***	1.188***	0.837***
Chinese Immigrant	0.449***	0.733***	0.397***	0.774***	0.411***	0.879***	0.581***	0.879***	0.613***	0.870***
Black Immigrant	2.394***	0.648***	2.181***	0.674***	2.210***	0.715***	2.277***	0.664***	2.248***	0.701***
Filipino Immigrant	0.772***	0.582***	0.716***	0.605***	0.713***	0.608***	1.227***	0.683***	1.293***	0.662***
Period	0.481***	1.086***	0.483***	1.085***	0.485***	1.090***	0.762***	1.116***	0.762***	1.157***
Interaction (Ref = White NB * Period)										
White Immigrant * Period	1.160**	1.093**	1.173***	1.088**	1.175***	1.090**	0.966	1.095**	0.955	1.092**
South Asian Immigrant * Period	1.286***	1.306***	1.294***	1.302***	1.301***	1.314***	0.960	1.332***	0.931	1.332***
Chinese Immigrant * Period	1.076	1.327***	1.081	1.323***	1.107	1.371***	0.927	1.349***	0.909	1.334***
Black Immigrant * Period	1.669***	1.480***	1.677***	1.470***	1.672***	1.460***	1.499***	1.523***	1.494***	1.498***
Filipino Immigrant * Period	1.522***	1.153*	1.532***	1.143†	1.535***	1.141†	1.218*	1.107	1.211*	1.083
STIR										
Age Group (Ref = 35-44 in 2006 / 45-54 in 2016)										
25-34 in 2006 / 35-45 in 2016							1.119***	0.695***	1.139**	0.672***
45-54 in 2006 / 55-64 in 2016							0.739***	1.086***	0.726***	1.183***
Gender (Ref = Female)										
Male							2.392***	4.855***	2.308***	4.971***
Marital Status (Ref = Married / Common-law)										
Never Married							3.972***	0.700***	3.895***	0.756***
Formerly Married							20.35***	5.219***	20.08***	5.612***
Number of Children (Ref = None)										
One or More							0.430***	0.903***	0.417***	0.884***
Employment Status (Ref = Employed)										
Unemployed									1.197***	0.644***
Not in Labour Force									0.993	0.562***
Education (Ref = Below High School)										
High School									0.692***	1.198***
College									0.714***	1.535***
Bachelor's Degree and Above									0.620***	1.988***
Language (Ref = Neither)										
English									1.157†	0.867
French									1.266*	0.906
Both									1.291**	0.928
Constant	0.382***	0.846***	0.455***	1.019***	0.455***	1.019***	0.240***	0.476***	0.299***	0.476***
Number of observations (Weighted)	19,977,282		19,977,282		19,977,282		19,977,282		19,977,282	
Log likelihood	-529,104		-519,449		-519,449		-454,929		-448,710	

Source: 2006 and 2016 Canadian Census Public Use Microdata File (PUMF).

Note: † p<0.1, * p<0.05, ** p<0.01, *** p<0.001 (two-tailed test). Census metropolitan area (CMA) factor is controlled in Model (2) - (5).

Model 3 incorporates the housing affordability. As expected, STIR is negatively correlated to forming renter and owner households. The higher portion of incomes an individual allocates into housing costs, the less likely the person will form an independent household, especially an owner household. After controlling for STIR, both the odds of immigrants renting and owning increase from Model 2, indicating that housing affordability helps explain the association between racialized immigrant status and household formation as well as homeownership. To be more specific, the increases of the odds of immigrant renting range from 0 to 3 percent, and the increases of the odds of owning are between 1 and 13 percent from Model 2. These changes also have implication that housing affordability affects owner occupation more than renting, which is expected because the income gaps between renter and non-householder are narrower than the ones between owners and non-householders. The impacts of housing affordability also appear in the interaction coefficients of most racialized immigrant groups except Black immigrants whose coefficients are slightly lower than those in Model 2. This means if immigrants had the same affordability level as their Canadian counterparts, their progressions to becoming renters and owners would be faster. Results in Model 3 demonstrate that housing affordability is a barrier that hinders immigrants from forming independent households and entering homeownership. Therefore, Hypothesis 1 is supported.

In Model 3, adding demographic variables as control variables change the relationship between immigrant status and forming renter households. Immigrants are more likely to become renters than non-householders, except Chinese immigrants whose odds of forming renter household is still much lower. The primary reason is because immigrants had higher marriage rates and more children than the Canadian-born in 2006, so at least one of the family members was a non-householder, pulling down the likelihoods of forming renter households. Therefore,

after the marital status factor and the number of children factors are controlled, the likelihood of immigrants forming renter households increase. This reason can be backed up by looking at the coefficients of marital status. Compared to individuals who are married or common-law status, single people are more likely to be renters and less likely to be homeowners, because they move out from parents' homes and rent and do not have sufficient funds to move up to owning homes. On the other hand, formerly married people are more likely to be both homeowners and renters because most of them do not have partner, so they return to be the independent maintainer of the households. But since it is more difficult to pay the mortgage with only one person's income, they favor renting more than owning. That is why the odd ratio of renting for this group is 20, much higher than other coefficients. Marital status also explains much of the interaction effects as the interaction terms of the renter households become less significant in Model 3. For owner households, demographic variables have lower impacts. Surpassing White immigrants, Chinese immigrants had the odds of owning homes closest to White Canadian-born in 2006, and they were among one of the racialized immigrant groups with the fastest homeownership progress. It is also worth mentioning that although Black immigrants had the lowest odds in 2006, their homeownership growth was the highest. These evidences support Hypothesis 3, demonstrating that family life cycle does play an important role in explaining the variations of housing pathways. In addition to marital status and the number of children, the coefficient of age is also statistically significant. People with older ages have higher odds of being owner-occupiers and lower odds of being renters.

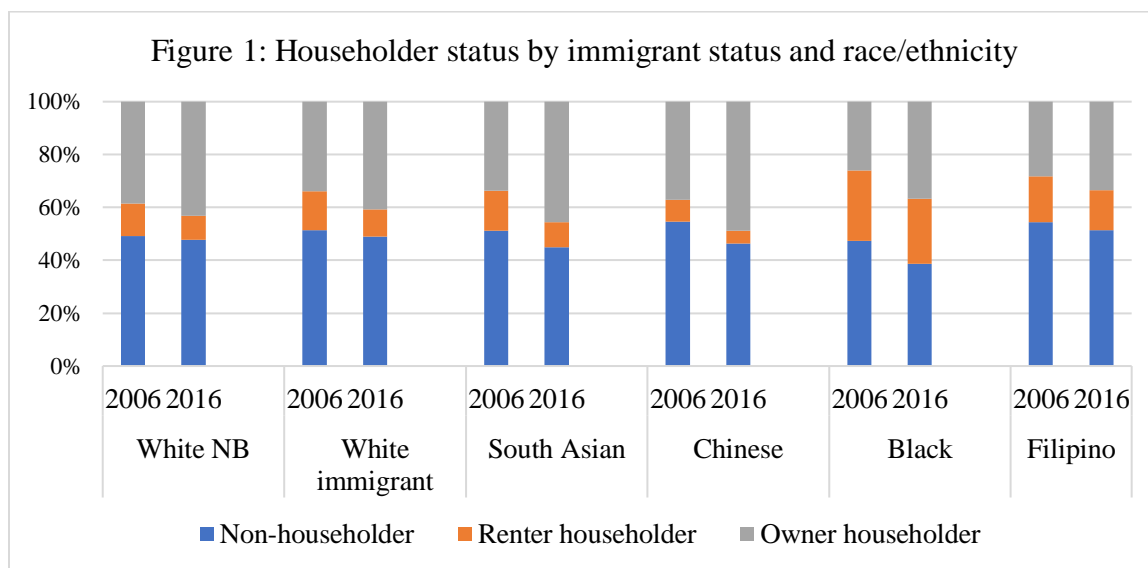
Socioeconomic variables in Model 4, such as employment status, education, and language skills, have different degrees of influence on householder status. Individuals who are unemployed or not in labour force are less likely than employed workers to become

homeowners, but the distinctions are not as straightforward in renter households. This finding implies that labour market characteristics are important indicators of people's positions in the housing ladder, which supports Hypothesis 2. Higher education is associated with higher odds of ownership and lower odds of renting. While knowing one or more official languages helps with higher odds of renting homes, its impacts on homeownership is minimum. The coefficients and significant levels of the three key independent variables do not vary much from Model 3.

From the values and the significant levels of the interaction terms of Model 1 and Model 4, it is noticeable that the progress of immigrants made in becoming renters relative to non-householders can be explained by housing affordability, demographic, and socioeconomic determinants except for Black immigrants. On the other hand, the homeownership advancement of most racialized immigrant groups is still significant after controlling for those factors. The odds of the interaction terms in Model 4 are higher than 1, meaning immigrants are moving upward to homeownership faster than native-born Canadians, which supports Hypothesis 5.

In addition to the regression results, Figure 1 demonstrates the predicted probabilities of household formation and homeownership. Overall, compared to 2006, the percentages of individuals who were dependent households and renter decreased while more people became homeowners in 2016. We can see that the householder status among White native-born, White immigrants, and Filipino remained relatively stable over the decade. South Asian, Chinese, and Black immigrants had more remarkable changes. After controlling for housing affordability, demographic, and socioeconomic determinants, South Asian and Chinese would have 3 and 6 percent more owner households than the Canadian-born, respectively. The percentage of Chinese renter households shrinks to less than 10 percent. Meanwhile, the portion of Black renter households maintain at the same level. The percentages of non-householders decrease by 6

percent, 9 percent, and 3 percent for South Asian, Chinese, and Filipino immigrants separately, leading Hypothesis 4 to be rejected.



The regression results and probability predictions inform us that the housing careers of immigrants advance as they spend more time in Canada, even when they face housing affordability issue. However, the pace of progression to homeownership differ vastly by race. After accounting for non-householders, White, South Asian, and Chinese immigrants achieve higher homeownership, whereas Black and Filipino have a longer way to catch up with the others.

Discussion and Conclusion

In this paper, it has been shown that housing affordability, family composition, and other socioeconomic factors explain some of the housing gaps between immigrants and the Canadian-born. These variables are also linked to immigrants' faster growth of forming renter households. However, their better homeownership advancements are not fully explained by the concept of housing pathways, meaning there are other determinants that the models do not capture. The

study also demonstrates that housing affordability is a barrier that hampers immigrants from forming independent households, particularly homeownership. These two findings both imply that when forming independent households, immigrants more aspire than the Canadian-born to become homeowners over renters. Immigrants' preference for homeownership can be observed from their higher debt-to-income ratios in 2016, and most of the differences come from mortgages (Morissette, 2019). One possible explanation of such phenomenon is that racialized immigrants are more likely to encounter discrimination in the rental market where they have higher likelihood of being rejected from the application process or being evicted by landlords. On the contrary, homeownership is considered more secure and safe, protecting them from the risks of being discriminated. Such mental mindset motivates them to climb the housing ladder to homeownership. The second explanation is that many immigrants do not have as many economic resources and wealth than the native-born Canadians when they move to Canada, so investing in home buying is a relative more stable and quicker option for them to accumulate wealth during the time of housing price appreciation (Morissette, 2019). The third possibility is the social status brought by homeownership. McCabe (2018) find that the systemic exclusions from the society result in African Americans and Latinos to be more likely than Whites to identify ownership as a marker of social status.

One limitation of the study is that the ethnic and cultural factor is not well defined in the model due to the lack of data. Having information like country of origin would be useful to identify whether there is a correlation between the household formation rates in immigrants' source countries and the ones in Canada. Unfortunately, this type of data is not accessible in the Public Use Census. Nevertheless, it is worthy of further research in analyzing the impacts of ethnic and cultural identity on housing outcomes.

This study provides evidence of immigrants' housing attainment in recent years. Although it shows that immigrants achieve homeownership progress as they stay longer and building social and economic capital in Canada, there is no denying that their starting point is lower than the native-born in the housing ladder. In addition to the current programs and tax incentives, government of all levels should explore more policies and work collaboratively with other stakeholders to close the housing gaps at the early years of their immigration rather than later. For people who have preferences for living with extended families as non-householders, government should have greater recognition of their ethnic and cultural need by working with developers to provide bigger homes to accommodate families with larger sizes besides nuclear families. For those who strive to form renter households, more purpose-built rental should be offered in the rental market in affordable rates. Moreover, government should enact stronger rental laws to protect tenant rights and work with non-profit organizations to provide assistance to immigrant renters of different races. Last but not least, for households who are motivated to enter homeownership, more research should be done to critically determine whether immigrants voluntarily choose or are forced to have faster increases in homeownership rates. One question we should understand is whether immigrants' motivation to become homeowners is compatible with their financial resources. For example, if a low-income immigrant household insists in buying homes to protect the family from discrimination and spend more money on the housing costs, it is seemingly that immigrants achieve success from the quantitative results, but in fact the household are 'pushed' into homeownership and end up having worse quality of life compared to renting. In this case, mortgage providers should pay more attention to this type of home buyers and ensure the financial risks they endure are within an adequate threshold. In addition, government should how to best direct households to the tenure choice that they are best suited.

References

- Alba, R. D., & Logan, J. R. (1992). Assimilation and stratification in the homeownership patterns of racial and ethnic groups. *The International Migration Review*, 26, 1314-1341.
- Alesina, A., & Giuliano, P. (2013). *Family ties* (Discussion Paper No. 7376). Retrieved from Institute for the Study of Labor website: <http://ftp.iza.org/dp7376.pdf>
- Beer, A., Faulkner, D., Paris C., & Clower, T. (2011). *Housing transitions through the life course: Aspirations, needs and policy*. Bristol, UK: The Policy Press.
- Borjas, G. (2002). Homeownership in the immigrant population. *Journal of Urban Economics*, 52, 448-476.
- Bull, M., & Gross, A. (2018). Housing and culture. In *Housing in America*. (pp. 15-27). New York: Routledge.
- Byrne, D., Duffy, D., & FitzGerald, J. (2018). Household formation and tenure choice: Did the Great Irish Housing Bust alter consumer behaviour? *The Economic and Social Review*, 49(3), 287-317.
- Carpusor, A. G., & Loges, W. E. (2006). Rental discrimination and ethnicity in names. *Journal of Applied Social Psychology*, 36(4), 934-952.
- Chakrabarty, D., Osei, M. J., Winters, J. V., & Zhao, D. (2019). Which immigrant and minority homeownership rates are gaining ground in the US? *Journal of Economics and Finance*, 43, 273-297.
- Chang, W. (2013). Family ties, living arrangement, and marital satisfaction. *Journal of Happiness Studies*, 14, 215-233.

- Choi, J., Zhu, J., Goodman, L., Ganesh, B., & Strochak, S. (2018). *Millennial homeownership: Why is it so low, and how can we increase it?* Retrieved from Urban Institute website: <https://www.urban.org/research/publication/millennial-homeownership>
- Clapham, D. (2002). Housing pathways: A post modern analytical framework. *Housing, Theory and Society*, 19(2), 57–68.
- Clark, W. A. V., & Davies Withers, S. (2007). Family migration and mobility sequences in the United States: Spatial mobility in the context of the life course. *Demographic Research*, 17(20), 591-622.
- Clark, W. A. V., & Huang, Y. (2003). The life course and residential mobility in British housing markets. *Environment and Planning A*, 35, 323-339.
- CMHC. (2011). *Appendix 2: Household income, costs and STIRs of visible minority households* [Data file]. Retrieved from <https://www.cmhc-schl.gc.ca/en/data-and-research/data-tables/appendix-2-household-income-costs-stirs-visible-minority-groups>
- CMHC. (2020). *Housing market information portal* [Data file]. Retrieved from <https://www03.cmhc-schl.gc.ca/hmip-pimh/en#TableMapChart/1/1/Canada>
- Engeland, J., Figueroa, R., Rea W., & Yuen, J. (2008). *The dynamics of housing affordability* (Catalogue no. 75F0002M – No. 001). Retrieved from Statistics Canada website: <https://www150.statcan.gc.ca/n1/en/pub/75f0002m/75f0002m2008001-eng.pdf?st=WVNJ6I5P>
- Feijten, P., & van Ham, M. (2010). The impact of splitting up and divorce on housing careers in the UK. *Housing Studies*, 25

- Flanagan, C., & Wilson, E. (2013). *Home value and homeownership rates: Recession and post-Recession comparisons from 2007-2009 to 2010-2012*. Retrieved from U.S. Census Bureau website: <https://www2.census.gov/library/publications/2013/acs/acsbr12-20.pdf>
- Flippen, C. A. (2001). Racial and Ethnic Inequality in Homeownership and Housing Equity. *The Sociological Quarterly*, 42(2), 121-149.
- Gould, E. (2015). *2014 continues a 35-year trend of broad-based wage stagnation* (Issue Brief No. 393). Retrieved from Economic Policy Institute website: <https://www.epi.org/files/pdf/stagnant-wages-in-2014.pdf>
- Grinstein-Weiss, M., Charles, P., Guo, S., Manturuk, K., & Key, C. (2011). The effect of marital status on home ownership among low-income households. *Social Service Review*, 85(3), 475-503.
- Haan, M. (2005). The decline of the immigrant homeownership advantage: life-cycle, declining fortunes and changing housing careers in Montreal, Toronto and Vancouver, 1981-2001. *Urban Studies*, 49(12), 2191-2212.
- Haan, M. (2007). The homeownership hierarchies of Canada and the United States: the housing patterns of white and non-white immigrants of the past thirty years. *International Migration Review*, 41(2), 433-465.
- Haan, M., & Yu, Z. (2012). Household formation and homeownership: A comparison of immigrant racialized minority cohorts in Canada and the United States. In C. Teixeira & W. Li (Eds.), *The housing and economic experiences of immigrants in US and Canadian cities*. (pp. 69-97). Toronto, ON: University of Toronto Press.

- Henderson, J. V., & Ioannides, Y. M. (1983). A model of housing tenure choice. *American Economic Review*, 73(1), 98-113.
- Kendig, H. L. (1984). Housing careers, life cycle and residential mobility: Implication for the housing market. *Urban Studies*, 21, 271-283.
- Manacorda, M., & Moretti, E. (2006). Why do most Italian youths live with their parents? Intergenerational transfers and household structure. *Journal of the European Economic Association*, 4(4), 800-829.
- Massey, D. S., & Lundy, G. (2001). Use of Black English and racial discrimination in urban housing markets: New methods and findings. *Urban Affairs Review*, 36(4), 452-469.
- McCabe, B. J. (2018). Why buy a home? Race, ethnicity, and homeownership preferences in the United States. *Sociology of Race and Ethnicity*, 4(4), 452-472.
- Molina, E. T. (2017). Housing affordability. In *Housing America: Issues and debates* (pp. 12-48). New York: Routledge.
- Morissette, R. (2019). *The wealth of immigrant families in Canada* (Catalogue no. 11F0019M — No. 422). Ottawa: Statistics Canada.
- Morrow-Jones, H. A., & Wenning, M. V. (2005). The housing ladder, the housing life-cycle and housing life-course: upward and downward movement among repeat home-buyers in a US metropolitan housing market. *Urban Studies*, 42(10), 1739-1754.
- Mulder, C. H., & Lauster, N. T. (2010). Housing and family: An introduction. *Housing Studies*, 25(4), 433-440.

- Murdie, R. A., Chambon, A. S., Hulchanski, J. D. & Teixeira, C. (1999). *Differential incorporation and housing trajectories of recent immigrant households: Towards a conceptual framework*. Housing New Canadians Research Working Group Discussion Paper.
- Myers, D. (1992). *Analysis with local census data: Portraits of change*. Boston, MA: Academic Press.
- Myers, D., Baer, W. C. & Choi, S. Y. (1996). The changing problem of overcrowded housing. *Journal of Housing Research*, 9, 237-269.
- Ng, C. F., & Northcott, H. C., (2013). Living arrangements of South Asian immigrant seniors in Edmonton, Canada: an assessment of the economic, cultural, health, and availability of kin explanations. *Journals of Housing for the Elderly*, 27, 1-27.
- OECD. (2015). Characteristics of immigrant households. In *Indicators of Immigrant Integration 2015: Settling In* (pp. 71-78). Paris: OECD Publishing.
- Özüekren, A. S., & Van Kempen, R. (2002). Housing careers of minority ethnic groups: Experiences, explanations and prospects. *Housing Studies*, 17(3), 365–379.
- Painter, G., Gabriel, S., & Myers, D. (2001). Race, immigrant status, and housing tenure choice. *Journal of Urban Economics*, 49, 150-167.
- Picot, G., & Sweetman, A. (2005). *The deteriorating economic welfare of immigrants and possible causes: Updated 2005* (Catalogue no. 11F0019MIE — No. 262). Ottawa: Statistics Canada.

- Setterston, R. A., & Ray, B. (2010). What's going on with young people today? The long and twisting path to adulthood. *The Future of Children*, 20(1), 19-41.
- Statistic Canada. (2017). *Housing in Canada: Key results from the 2016 Census* (Catalogue no. 11-001-X). Ottawa: Statistics Canada.
- Statistics Canada. (2020). *Table 14-10-0083-01: Labour force characteristics by immigrant status, annual* [Data file]. Retrieved from <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410008301>
- Statistics Canada. (2020). *Table 11-10-0190-01: Market income, government transfers, total income, income tax and after-tax income by economic family type* [Data file]. Retrieved from <https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=1110019001>
- Swee, J. A. (1990). Changes in the life-cycle composition of the United States population and the demand for housing. In D. Myers (Ed.), *Housing demography: Linking demographic structure and housing markets*. (pp. 35-61). Madison, WI: University of Wisconsin Press.
- Yssaad, L., & Fields, A. (2018). *The Canadian immigrant labour market: recent trends from 2006 to 2017* (Catalogue no. 71-606-X). Ottawa: Ministry of Industry.
- Yu, Z., & Myers, D. (2010). Misleading comparisons of homeownership rates when the variable effect of household formation is ignored: Explaining rising homeownership and the homeownership gap between Blacks and Asians in the US. *Urban Studies*, 47, 2615-2640.