



EQUIFAX®

Research article

Immigrant Credit Visibility

Access to credit over time in Canada

by Jesse Tweedle, Amélie Lafrance-Cooke, Rebecca Oakes and Attila Imecs

September 2023

Abstract

Using data from the 2016 and 2019 Survey of Financial Security, this paper studies the extent to which immigrants to Canada have access to credit and whether they are credit invisible. A person is credit invisible if they do not have a credit file or sufficient credit information for a credit reporting agency to be able to calculate a credit score. A person can also be classified as having a “thin” credit file, meaning a score can be calculated but it is based on a small number of credit accounts or limited credit history. Typically, newcomers to Canada do not have a credit history in the country, and their history from their home country is not available. The study uses logistic regression to estimate the factors associated with credit invisibility, including demographic and financial characteristics and the number of years in Canada. This study found that newly landed immigrants who had been in Canada for less than two years were less visible (14.8%) than Canadian-born families (7.5%). The difference in visibility disappeared after the first two years; that is, immigrants quickly became visible, and, over time, immigrant families that had been in Canada for two to four years were actually 3.15 percentage points more visible than comparable Canadian-born families. Notably, the difference in visibility in the first two years also disappeared once financial and demographic characteristics were taken into account. However, much of new immigrants’ visibility was due to access to credit cards and not higher credit limit instruments such as mortgages, vehicle loans and student loans.

Immigrants are generally eager to build credit and to obtain credit visibility, but they are often not able to access all credit products in a timely manner. New immigrants tend to quickly obtain a cell phone account and acquire a low-limit or secured credit card. This creates a credit file yet provides insufficient credit history. Thus, their ability to be approved for larger credit amounts for products such as an automobile loan or a mortgage remains impeded, as would be the case for a Canadian-born individual new to credit with only a cell phone or low-limit secured credit card. These larger credit products can have a significant impact on an immigrant’s daily life and ability to create wealth. To minimize credit invisibility and improve a newly landed immigrant’s ability to access credit, credit bureaus could capture data from new, non- traditional sources, such as rent, phone and utility payments, on these individuals that inform the Canadian credit scores of newly arrived immigrants and inform them earlier.

Authors

Jesse Tweedle and **Amélie Lafrance-Cooke** are with the Economic Analysis Division at Statistics Canada. **Rebecca Oakes** and **Attila Imecs** are with Equifax.

Acknowledgments

This study was prepared in collaboration with Equifax Canada. The authors would like to thank Danny Leung, René Morissette and Haozhen Zhang from Statistics Canada for their very helpful comments on the paper.

Contents

Introduction	2
Data sources and definitions	5
Model and results	11
Main results for overall credit visibility	12
Results for different credit products	16
Conclusion	18
Appendix	19
References	21



Introduction

Credit is a key element to modern economic life in Canada. If a person wants to rent a car, a credit card is typically required. If a person wants to attend postsecondary school, they may require a student loan. If a person wants to buy a house, they may need a mortgage. Credit provides investment opportunities such as building home equity with a mortgage, increasing human capital by investing in an education with student loans, and accessing transportation to places of employment by buying a vehicle with an automobile loan. Credit also provides consumption-smoothing opportunities for significant purchases, such as a washing machine or a computer for a child's schooling, where the buyer can pay off the purchase over time. A person requires credit from a financial institution or lender to access these opportunities, and financial institutions and lenders tend to use a person's credit history as a major factor when evaluating their credit worthiness. According to Equifax Canada, a person who does not have a credit file (no file) or for whom the credit information on file is insufficient to generate credit scores (also known as a thin file) is defined as credit invisible (Equifax 2022).

Millions of Canadians are in this situation (Equifax 2022). Immigrants may be at greater risk of lacking access to credit markets since credit information is, for the most part, not shared across international borders.¹ Using data from Statistics Canada's 2016 and 2019 Survey of Financial Security² (SFS), this paper studies the extent to which immigrants are credit invisible, what characteristics mitigate or exacerbate credit invisibility, and how those relationships change for different credit products as immigrants build credit histories in Canada. It contributes to the literature by providing a comprehensive picture of credit invisibility based on the number of years since arrival in Canada.

Individuals are defined as credit invisible in this paper if they do not use any credit products at the time of the survey. That is, it is assumed that individuals with no credit products do not have enough information to generate a credit history, which is a proxy for the no file industry definition.³ Because financial institutions and lenders use credit histories to inform their credit decisions, newly landed immigrants (defined here as those who have lived in Canada for less than two years) are likely to be disadvantaged when applying for credit and thus more likely to be credit invisible than people born in Canada. However, financial institutions and lenders may also use information on employment, income and assets to inform credit decisions,⁴ which may be different between recent immigrants and people born in Canada. As a result, the SFS, which includes the necessary data on credit usage, such as the money owing on mortgages, vehicles, credit cards, student loans and other debts, as well as the value of all major financial and non-financial assets, and demographic characteristics, provides the best platform from which to study the relationship between immigrant status and credit invisibility, and how a lack of traditional credit history may impact this.

1 For example, there are Visa credit cards in the United Kingdom (UK) and in Canada, but Visa is a payment processor, not a credit provider. UK banks issue credit cards that are accepted by the Visa payment network, and Canadian banks do the same, but the UK banks do not share consumer credit information with Canadian credit reporting agencies (such as Equifax and TransUnion) from which Canadian banks get credit history information. Therefore, having a Visa in the UK does not transfer "credit visibility" from the UK to Canada, despite the presence of Visa credit cards in both countries. American Express is an exception and has some specific situations to allow for transfer of a credit card to a new country to facilitate credit building.

2 Statistics Canada, Survey of Financial Security, <https://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&SDDS=2620>.

3 Of course, it is possible that individuals with no credit products have no demand for credit products and are not necessarily credit invisible. This is recognized in the paper.

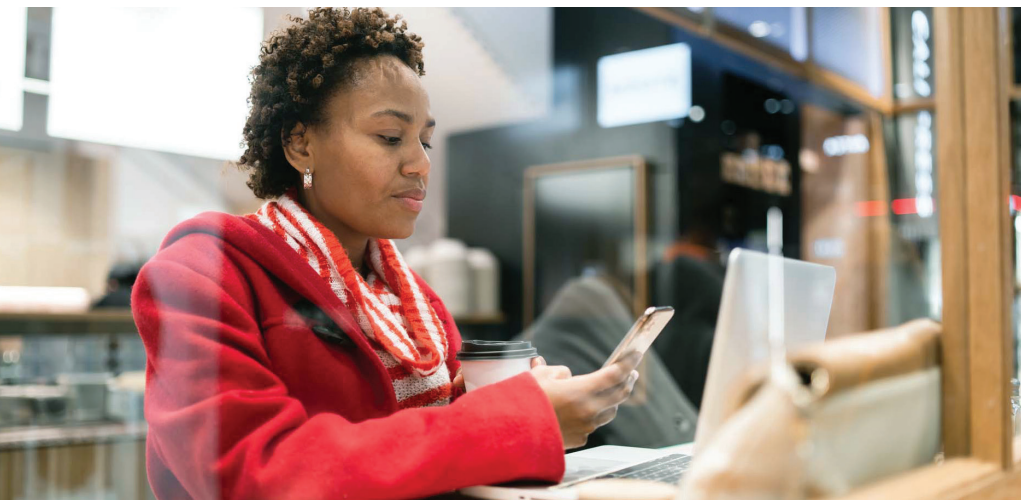
4 Not all lenders have access to the employment, income and asset information of their clients, and this can limit their decision-making abilities in providing credit.

After these characteristics are accounted for, immigrants have similar credit visibility as individuals born in Canada do. However, immigrants do differ in the mix of credit products they use—recent immigrants are more likely to have lower credit amount products (such as credit cards) than Canadian-born individuals, and less likely to have larger credit amount products (such as student loans or mortgages). This credit mix changes over time, with immigrants who have been in Canada for 10 to 39 years being more likely to have mortgages than people born in Canada. This suggests that credit invisibility has an effect on immigrants' lives, because recent immigrants have less access to larger credit amount products and therefore the housing market and longer-term equity investment opportunities.

Research on immigrant credit access overlaps with two main areas of focus. First, credit access is a part of the larger issue of financial exclusion, which is defined as the exclusion of an individual or individuals from the formal banking system. For example, payday loan usage is an indicator of financial exclusion and is one method of income smoothing used by credit-invisible households (Islam and Simpson 2017; Melzer 2011). Financial exclusion may have far-reaching effects on households: Claessens (2006) and Gloukoviezzoff (2007) have shown a tight relationship between financial and social exclusion. Second, financial exclusion makes it harder for an immigrant to access higher education, such as college or university (Solis 2013), and this may lead to diverging paths in income, career and social status.

Studies have found that certain groups are more likely to be financially excluded. For example, see PERC Canada (2019) for evidence of credit invisibility among immigrants and Indigenous people in Canada, Lamb (2015) for a study of Indigenous financial statistics in Canada, Sanchez-Moyano and Shrimali (2021) for racialized groups in the United States, and Deku et al. (2016) for evidence in the United Kingdom and a broad review of the literature. One possible improvement in providing access to financially excluded groups is capturing data outside the formal credit system that are considered non-traditional, such as including rent, phone and utility payments (Equifax 2022; Brevoort et al. 2015).

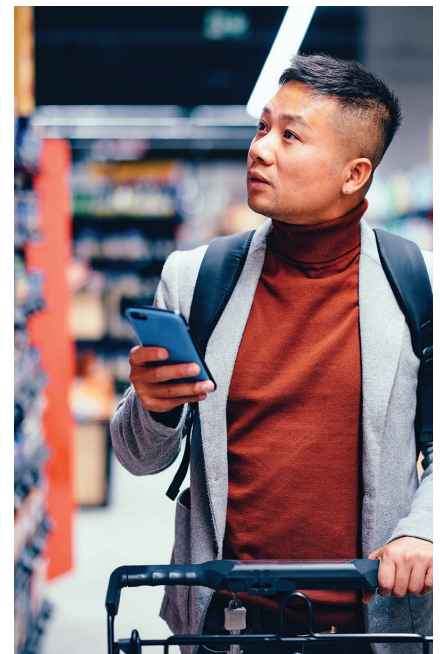
Another important aspect to consider is that individuals with no credit history may not always benefit from high-interest access to build their credit. Islam and Simpson (2017) found that both payday lending in Canada and microcredit in Bangladesh are frequently used by financially excluded consumers who have common demographic characteristics (e.g., low income, low education, low financial literacy). In other words, providing high-interest loans outside the formal financial system does not necessarily lead to credit visibility. Low income, low wealth and financial exclusion are all co-determined, and credit invisibility is an important facet of this relationship.



Immigrants face barriers when integrating into their new home country, and barriers to accessing the financial system can be considerable. For example, immigrants have lower returns to education.⁵ This is partly due to a lack of credential recognition (see Brücker et al. [2021] for a summary and recent results). In addition, recent immigrants' difficulties in the labour market are also related to the fact that Canadian employers do not appear to value foreign work experience (Picot and Sweetman 2005). The formal credit system can also be difficult to access for immigrants since it relies on a local credit history.⁶ However, existing evidence based on the SFS in Canada (Morissette 2019) suggests wealth and debt characteristics are not different for most immigrant families over time compared to their Canadian-born counterparts after accounting for age and education. For instance, Morissette (2019) found that immigrant families do not use payday loans more than Canadian-born families and are not refused credit cards more than Canadian-born families, although they do pay a lower percentage of their credit card debt each billing cycle. However, Morissette (2019) focused on immigrant wealth over time and not exclusively on the first or second year of landing in Canada, or specifically on credit invisibility or financial exclusion.

The results in this study are in line with these findings. Although immigrants have different credit behaviours, their overall credit visibility is not different from their Canadian-born peers over time, once demographic characteristics are taken into account.

The paper is organized as follows: Section 2 presents the data and definitions. Section 3 presents the model and results. Section 4 concludes.



⁵ Returns to education are defined as an incremental increase in earnings associated with an increase in schooling.

⁶ Although it is possible for international students to receive credit cards from some Canadian banks without any Canadian credit history.

Data sources and definitions

The data source for this study is the SFS of 2016 and 2019. The purpose of the survey is to collect information from a sample of Canadian households on their assets, debts, employment, income and education. The SFS provides a comprehensive picture of the financial health of Canadians. Information is collected on the value of all major financial and non-financial assets and on the money owing on mortgages, vehicles, credit cards, student loans and other debts.

Credit and debt data on the SFS are reported at the economic family level, while demographic characteristics are reported at the individual level. An economic family is defined in this paper as “credit invisible” if (1) they answer “No” to **all** of the questions that ask “Do you have [credit product X]?” or (2) they provide a zero value as a response to **all** of the questions that ask “What is the outstanding balance [on credit product X]?”.⁷ The first condition is critical to define credit invisibility since many renters and prime-aged homeowners who always pay their credit cards will not have an outstanding balance on this credit product.

Since the demographic characteristics are reported for individuals, the characteristics of the major income earner (MIE)⁸ represent the characteristics of the economic family. This includes employment, education, age and immigration status (reported as the year they became a landed immigrant in Canada). Approximately 29% of economic families in Canada had an immigrant as the MIE (Table 1). For the purposes of the paper, immigrants who have been in Canada for less than two years will be referred to as “newly landed immigrants” while any immigrant in Canada for less than five years will be referred to as a “recent immigrant”. This approach is consistent with the literature.

Based on data from the 2016 and 2019 SFS, about 1.1 million economic families, or 7.2%, were credit invisible (Table 1). Approximately 26% of credit-invisible economic families are immigrants. Among immigrants, 6.4% were credit invisible, slightly lower than the share among non-immigrant families (7.5%). However, immigrant families that had been in Canada for less than two years were disproportionately invisible: 14.8% compared with the 7.5% invisibility rate of Canadian-born people. The rate of invisibility quickly decreased with the number of years the family has been in Canada, finally increasing again once the family had been in Canada for 60 years or more. Since the last survey was in 2019, this means these families had been in Canada since 1959 at the latest. This result may be driven by age, whereby families that have been in Canada for 60 years or more tend to be older and may not need certain credit products.⁹ It is important to note that immigrants who have been in Canada for less than 10 years will skew to younger ages, while the Canadian-born population includes all ages. In other words, it is not a completely equal comparison.

7 Specifically, families that are credit invisible satisfy all of the following conditions: they have no credit cards, no lines of credit (home equity or otherwise), no mortgages, no deferred payment or installment plans, no vehicle loans, no student loans, no other money owed to financial institutions and no outstanding debt on any of the previous products.

8 The MIE is identified in the SFS as the person in the economic family with the highest income before tax.

9 For instance, Uppal (2019) found that, among households with an MIE aged 65 and older, 82% had paid off their mortgage in 2016 compared with 9.4% among those aged 25 to 34.

Table 1: Distribution of credit-visible and credit-invisible economic families based on years in Canada, 2016 and 2019 pooled

Years in Canada	Credit status			
	Visible	Invisible	Visible	Invisible
	number		percent	
Canadian-born	10,204,567	827,944	92.5	7.5
Less than 2 years	236,710	41,156	85.2	14.8
2 to 4 years	405,747	26,330	93.9	6.1
5 to 9 years	569,357	27,941	95.3	4.7
10 to 19 years	912,758	32,620	96.5	3.5
20 to 39 years	1,191,342	68,709	94.5	5.5
40 to 59 years	744,607	59,386	92.6	7.4
60 years or more	229,119	37,501	85.9	14.1
Total	14,494,205	1,121,586	92.8	7.2

Note: Survey sampling weights were applied.

Source: Statistics Canada, Survey of Financial Security; authors' tabulations.

Although newly landed immigrants were much more likely to be credit invisible, they were also different in many other financial and economic dimensions, which are factors that may affect credit visibility. Tables 2 and 3 display the rate of employment, median assets, median income and median age for immigrants of different tenures, with all families represented in Table 2 and families with MIEs aged 35 to 54 years in Table 3. This discussion will focus on Table 3 to better compare families of similar ages.

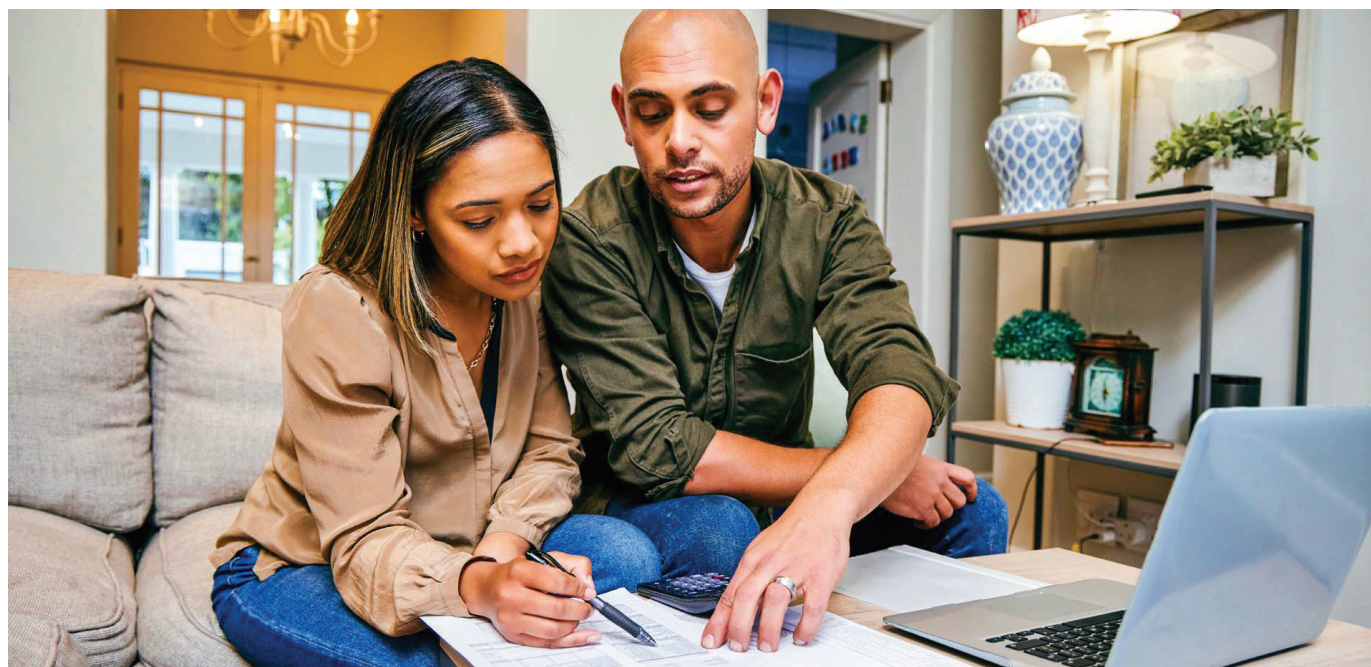


Table 2: Median characteristics of all major income earners, select variables, based on years in Canada, pooled across years

Years in Canada	Employment rate	Age of major income earner	Total assets	Total income of major income earner
	percent	years	dollars	
Canadian-born	57.80	53	339,000	58,400
Less than 2 years	58.20	30	9,000	18,200
2 to 4 years	61.00	30	20,500	29,900
5 to 9 years	74.80	38	117,100	56,200
10 to 19 years	77.70	43	416,200	66,400
20 to 39 years	67.40	53	614,500	69,300
40 to 59 years	35.50	68	707,000	56,700
60 years or more	12.70	76	622,000	43,900
Total	58.60	51	351,500	57,700

Note: Survey sampling weights were applied.

Source: Statistics Canada, Survey of Financial Security; authors' tabulations.

Table 3: Median characteristics of all major income earners aged 35 to 54, select variables, based on years in Canada, pooled across years

Years in Canada	Employment rate	Age of major income earner	Total assets	Total income of major income earner
	percent	years	dollars	
Canadian-born	81.0	45	400,600	79,200
Less than 2 years	54.7	41	46,200	26,600
2 to 4 years	72.5	41	59,500	49,000
5 to 9 years	84.5	41	171,000	60,500
10 to 19 years	81.3	44	462,000	74,600
20 to 39 years	82.8	47	708,000	78,700
40 to 59 years	86.2	51	715,900	96,200
Total	81.0	45	414,000	76,400

Note: Survey sampling weights were applied.

Source: Statistics Canada, Survey of Financial Security; authors' tabulations.

Immigrant MIEs aged 35 to 54 were just as likely to be employed as Canadian-born people unless the immigrant family had been in Canada for four years or less. Immigrant MIEs aged 35 to 54 who had been in Canada for less than two years had an employment rate of 54.7%, almost 27 percentage points lower than their Canadian-born counterparts. Note that immigrants in Canada for four years or less have a higher chance of currently being students and enrolled in higher-level education, limiting their ability to seek employment.

The median assets and income of recent immigrant MIEs aged 35 to 54 were substantially lower than those of the average Canadian-born person. Nonetheless, immigrant families had median assets that surpassed those of similar Canadian-born families after they had been in Canada for 10 to 19 years. Similarly, this occurred for median income after 20 to 39 years in Canada.

Table 4: Distribution of education of all major income earners across years in Canada categories, pooled across years

Years in Canada	High school diploma or lower	College or trade diploma	University certificate or diploma ¹
	percent		
Canadian-born	40.1	31.5	28.4
Less than 2 years	26.1	12.9	61.0
2 to 4 years	28.4	17.0	54.6
5 to 9 years	18.3	23.8	57.9
10 to 19 years	18.8	21.7	59.5
20 to 39 years	35.2	25.3	39.6
40 to 59 years	41.7	25.0	33.3
60 years or more	57.6	22.1	20.3
Total	37.4	28.9	33.7

1. Includes certificate or diploma below bachelor's degree, bachelor's degree and above.

Note: Survey sampling weights were applied.

Source: Statistics Canada, Survey of Financial Security; authors' tabulations.

Table 5: Distribution of education of all major income earners aged 35 to 54 across years in Canada categories, pooled across years

Years in Canada	High school diploma or lower	College or trade diploma	University certificate or diploma ¹
	percent		
Canadian-born	29.6	37.9	32.5
Less than 2 years	16.6	21.6	61.8
2 to 4 years	15.1	20.2	64.6
5 to 9 years	12.7	26.4	61.0
10 to 19 years	14.7	22.2	63.1
20 to 39 years	33.8	26.0	40.2
40 to 59 years	25.4	36.1	38.5
Total	26.8	33.6	39.6

1. Includes certificate or diploma below bachelor's degree, bachelor's degree and above.

Note: Survey sampling weights were applied.

Source: Statistics Canada, Survey of Financial Security; authors' tabulations.

Tables 4 and 5 compare education levels for immigrants of different tenures for all families (Table 4) and families with MIEs aged 35 to 54 (Table 5). With the exception of immigrants who had been in Canada for 60 years or more, immigrants were more likely to have university degrees or diplomas than Canadian-born people. The difference was very large for immigrants who had been in Canada for zero to nine years; between 61% and 65% of immigrant MIEs aged 35 to 54 had a university education versus 32.5% of Canadian-born people. Solis (2013) found that education is correlated with credit visibility, suggesting that highly educated immigrants may be more visible than Canadian-born people. This is explored further in the next section with multivariate analysis.

Table 6: Use of credit or debt products by economic families based on years in Canada, all years pooled

Years in Canada	Mortgages	Credit cards	Student loans	Vehicle loans	Home equity lines of credit	Other lines of credit
	percent					
Canadian-born	35.1	87.4	11.3	32.4	10.3	51.8
Less than 2 years	4.7	84.8	7.3	9.4	0.2	7.8
2 to 4 years	13.5	93.2	12.2	18.3	0.8	17.6
5 to 9 years	37.1	93.7	23.5	33.5	3.9	41.5
10 to 19 years	50.6	94.1	24.8	32.6	8.4	51.9
20 to 39 years	46.3	91.3	16.7	25.0	13.1	57.1
40 to 59 years	26.6	90.5	4.8	15.3	12.3	51.9
60 years or more	9.7	84.3	0.9	11.1	8.8	43.5
Total	35.0	88.6	12.4	29.8	9.8	50.0

Note: Survey sampling weights were applied.

Source: Statistics Canada, Survey of Financial Security; authors' tabulations.

Table 7: Use of credit or debt products by economic families with major income earner aged 35 to 54 based on years in Canada, all years pooled

Years in Canada	Mortgages	Credit cards	Student loans	Vehicle loans	Home equity lines of credit	Other lines of credit
	percent					
Canadian-born	54.6	88.1	11.5	42.9	14.4	59.2
Less than 2 years	12.3	93.3	8.0	14.5	0.4	12.0
2 to 4 years	24.3	90.8	15.1	25.7	1.8	23.6
5 to 9 years	41.1	94.0	26.4	37.0	4.5	46.2
10 to 19 years	58.0	95.9	20.4	34.9	9.5	57.4
20 to 39 years	59.4	92.9	17.0	30.4	15.1	62.3
40 to 59 years	52.0	91.7	12.3	29.5	25.8	62.2
Total	53.3	90.0	14.0	39.3	13.1	57.1

Note: Survey sampling weights were applied.

Source: Statistics Canada, Survey of Financial Security; authors' tabulations.

Although immigrants may be more credit visible (after being in Canada for a few years) or less credit visible (after either just landing in Canada or having been in Canada for 60 years or more) relative to the Canadian-born population, they may not have access to the same credit products that Canadian-born families do. In tables 6 and 7, the overall credit access pattern is decomposed into several credit products: mortgages, credit cards, student loans, vehicles, home equity lines of credit (HELOCs) and other lines of credit. This shows the proportion of economic families that reported using the credit product. Table 6 displays statistics for all families, while Table 7 displays statistics for families with an MIE aged 35 to 54. For instance, 35.0% of all economic families had a mortgage during the survey years 2016 and 2019, while 53.3% of economic families with an MIE aged 35 to 54 had a mortgage.

Few newly landed immigrants with an MIE aged 35 to 54 had mortgages; 12.3% of immigrants who had been in Canada for two years or less had a mortgage (Table 7). However, immigrants in this age group who had been in Canada for 10 to 39 years seem more likely to have mortgages than Canadian-born families. For instance, 58.0% of immigrants who had been in Canada for 10 to 19 years had a mortgage, compared with 54.6% of Canadian-born families.

Regardless of the number of years in Canada, immigrants were more likely to report using credit cards than any other debt product. Among immigrants with an MIE aged 35 to 54, the rate of credit card usage was consistently higher than for Canadian-born families, suggesting that immigrants either come to Canada with foreign credit cards or get access to credit cards quickly. Newly landed immigrant families had a particularly high credit card usage of 93.3%.

The student loan rate was lower for immigrants than Canadian-born families but rose above that after two to four years living in Canada before dipping down again. This may be due to immigration policies or economic conditions at the time of immigration. For instance, immigrants are eligible for student loans from Canadian financial institutions without a guarantor after receiving permanent residency; otherwise, an international student is likely to have either family financing or student loans from their home country. As for economic conditions, a family that immigrated to Canada 40 years ago or more was less likely to have children young enough to have student loans since their children either went to university during a period when tuition was lower than in recent decades or grew up when university education was less common. In addition, immigrant families that had been in Canada for 60 years or more may have no longer had children living in the home.

Immigrant families with an MIE aged 35 to 54 were less likely than Canadian-born families to have vehicle loans; the rate of vehicle loan usage peaked at 37.0% after five to nine years in Canada, while 42.9% of Canadian-born families had vehicle loans. HELOCs were much less common among immigrants until they had lived in Canada for 20 to 59 years. Similarly, immigrants were less likely to have lines of credit than Canadian-born families until they had lived in Canada at least 10 years.

The raw patterns of credit product usage are certainly different for immigrant families than Canadian-born families, and these could be caused by different demographic, social or economic characteristics compounded by limited credit history, rather than their immigrant status alone, as shown in tables 2, 3, 4 and 5. The next section uses a regression to account for these characteristics.

Model and results

A logistic regression model is used to study the relationship between credit invisibility and demographic characteristics:

$$\log[p(Y_i)/(1 - p(Y_i))] = X_i\beta + \varepsilon$$

where Y_i is the indicator of credit invisibility (1 if the economic family is credit invisible; 0 otherwise), X_i is a vector of demographic characteristics and ε is an error term. The coefficients β are estimated via maximum likelihood.

The demographic characteristics used for X are variables expected to be (inversely) correlated with immigration status and (inversely) correlated with credit invisibility to tease out the underlying relationship between immigration and credit invisibility. For instance, assets of the economic family were included because having assets is beneficial to access credit and the median recent immigrant family had much lower assets (\$9,000) than the median Canadian-born family (\$339,000). Therefore, recent immigrants may have had less access to credit because of a lack of assets and not necessarily because of their immigrant status.

The variables used in the model are survey year, province, language spoken well enough to conduct a conversation, household size, age, education, employment status, income, assets and years in Canada. Survey year, province, language, education and employment status are categorical variables. Household size is binned into categories one, two and three or more. Age is binned into the following categories: 16 to 24, 25 to 34, 35 to 44, 45 to 54, 55 to 64, and 65 and older. Income and assets are binned into quintiles.

Finally, **years in Canada** is the difference between the survey year and the year the economic family landed in Canada, then binned into Canadian-born, less than 2 years, 2 to 4 years, 5 to 9 years, 10 to 19 years, 20 to 39 years, 40 to 59 years, and 60 years or more.



Main results for overall credit visibility

Three logistic regressions were estimated. The first specification aimed to determine whether differences in credit invisibility between recent immigrant families and Canadian-born families of similar size are simply caused by an age effect. In other words, it aimed to determine whether higher credit invisibility among recent immigrant families reflects the fact that they are younger and thus have had less time to develop or have experience with credit history. In the second specification, education was added to recognize that recent immigrant families are more highly educated than Canadian-born families of similar age. The third specification includes additional indicators related to credit invisibility, such as income, assets, employment, language, and province of residence.

Table 8: Main results for overall credit visibility

Variables	Model 1		Model 2		Model 3	
	Age only		Age and education		Full model	
	coefficient	standard error	coefficient	standard error	coefficient	standard error
Survey year (reference: 2016)						
2019	-0.247 **	(0.0773)	-0.21	(0.0794) **	-0.129	(0.0868)
Language (reference: English, French or both)						
Neither English nor French	...	...	...	...	1.064 **	(0.265)
Household size (reference: one person)						
Two people	-1.495 **	(0.0914)	-1.453 **	(0.0928)	-0.358 **	(0.110)
Three or more people	-1.958 **	(0.126)	-1.939 **	(0.128)	-0.441 **	(0.156)
Age of major income earner (reference: 16 to 24 years)						
25 to 34 years	-0.814 **	(0.216)	-0.239	(0.230)	0.0728	(0.213)
35 to 44 years	-0.316	(0.223)	0.244	(0.234)	0.852 **	(0.224)
45 to 54 years	-0.249	(0.212)	0.156	(0.223)	0.873 **	(0.209)
55 to 64 years	-0.172	(0.210)	0.121	(0.222)	0.872 **	(0.205)
65 years and older	0.0136	(0.200)	0.197	(0.213)	0.665 **	(0.202)
Education of major income earner (reference: college or trade diploma)						
High school diploma or lower	...	...	0.957 **	(0.100)	0.571 **	(0.107)
University degree or diploma	...	...	-0.838 **	(0.161)	-0.491 **	(0.173)
Years in Canada (reference: Canadian-born)						
Less than 2 years	0.73 *	(0.315)	1.159 **	(0.338)	0.316	(0.307)
2 to 4 years	-0.240	(0.316)	0.0262	(0.344)	-0.733 *	(0.331)
5 to 9 years	-0.0538	(0.312)	0.368	(0.330)	-0.479	(0.325)
10 to 19 years	-0.310	(0.239)	0.0763	(0.243)	-0.436 †	(0.261)
20 to 39 years	0.0211	(0.150)	0.165	(0.156)	-0.0764	(0.187)
40 to 59 years	-0.133	(0.173)	-0.0123	(0.170)	0.147	(0.201)
60 years or more	0.299	(0.208)	0.262	(0.216)	0.844 **	(0.269)
Employed (reference: not employed)						
Employed	...	...	...	...	-0.744 **	(0.110)
Family income quintile (reference: bottom quintile)						
Second	...	...	...	...	-0.827 **	(0.118)
Third	...	...	...	...	-1.384 **	(0.178)
Fourth	...	...	...	...	-2.039 **	(0.269)
Fifth	...	...	...	...	-1.842 **	(0.411)

Variables	Model 1		Model 2		Model 3	
	Age only		Age and education		Full model	
	coefficient	standard error	coefficient	standard error	coefficient	standard error
Assets quintile (reference: bottom quintile)						
Second	...	...	...	...	-1.197 **	(0.118)
Third	...	...	...	...	-2.235 **	(0.163)
Fourth	...	...	...	...	-2.499 **	(0.228)
Fifth	...	...	...	...	-2.526 **	(0.284)
number						
Observations	22,821	...	22,821	...	22,821	...
Province fixed effects	No	...	No	...	Yes	...

... not applicable

* significantly different from reference category ($p < 0.05$)

** significantly different from reference category ($p < 0.01$)

† significantly different from reference category ($p < 0.10$)

Note: Survey sampling weights were applied.

Source: Statistics Canada, Survey of Financial Security; authors' tabulations.

The **size** of the household was negatively correlated with credit invisibility, and this finding occurred in all model specifications. Households that had three or more people were associated with a lower likelihood of being credit invisible.

In the simple model (1), **age** was negatively associated with credit invisibility, but this relationship changed when more covariates were added to the model. For instance, in the full model (3), a family with an older MIE was more likely to be credit invisible. This result may be due to the inclusion of income, assets and employment. Age, by itself, was negatively correlated with credit invisibility, but holding income and other economic variables constant in model (3), age was revealed to be positively correlated with credit invisibility.

More **education** was negatively correlated with credit invisibility. Postsecondary degrees may require individuals to take out student loans, and this may explain the negative coefficient on having a university degree or diploma. In contrast, a person with a high school diploma or less education was more likely to be credit invisible than someone with a college or trade diploma, indicating that education does positively affect credit access.

Income and **assets** were negatively correlated with credit invisibility; a family with income or assets in a higher quintile had a lower likelihood of being credit invisible. In other words, the coefficient on the third quintile of income was more negative than the coefficient on the second quintile of income, meaning that moving from the second to the third income quintile was associated with a lower likelihood of the family being credit invisible. Both higher income and assets make it easier for a family to acquire credit, and having more assets may be a result of using credit products, since it can be difficult to acquire high-value assets such as vehicles and housing without credit. For similar reasons, being **employed** was negatively correlated with credit invisibility. Indeed, being employed makes it more likely to acquire credit from financial institutions.

The fact that immigrant families had lower income and lower assets than Canadian-born families, combined with the positive correlation between credit visibility and both income and assets, can help explain the apparent credit invisibility of newly landed immigrant families. However, this shows a clear correlation and not causation.

Two important demographic characteristics for immigrants are **language** and the **number of years** the family has lived in Canada. Notably, families that do not speak English or French were much more likely to be credit invisible than families that speak English, French or both languages.

All **years in Canada** coefficients in the regression were compared with the base case of Canadian-born families. In models (1) and (2), newly landed immigrants showed a positive and statistically significant likelihood of being more invisible; this is consistent with the idea that it takes time to start up life in a new country and acquire credit. Moreover, accounting for the age and education of the MIE did not reduce the probability of recent immigrants being credit invisible. However, in model (3), while the coefficient for newly landed immigrants remained positive, it was no longer statistically significant. In other words, language, income and assets are likely also important factors when it comes to credit invisibility.

Immigrants who have lived in Canada for two to four years had a negative and statistically significant likelihood of being credit invisible; that is, they were more visible than Canadian-born families with similar characteristics (Table 8, full model). Between 5 and 39 years of living in Canada, immigrants had a statistically insignificant likelihood of being more credit invisible. Immigrant families that had been in Canada for 40 years or more were more likely than similar Canadian-born families to be credit invisible, particularly those that had been in Canada for 60 years or more, since the coefficient for this group was statistically significant. As mentioned above, this means the family had immigrated before 1959 at least (60 years before the last survey year of 2019), so there is likely a generational effect, even though the age of the MIE and the income and assets of the economic family were also taken into account. Potentially, they may not have had a need for credit and thus not had any credit products.

Table 9: Average marginal effects of credit invisibility based on years in Canada

Variables	Marginal effect	Standard error
Years in Canada (reference: Canadian-born)		
Less than 2 years	0.0181	(0.0188)
2 to 4 years	-0.0315 **	(0.0115)
5 to 9 years	-0.0221 †	(0.0132)
10 to 19 years	-0.0204 †	(0.0109)
20 to 39 years	-0.00395	(0.00950)
40 to 59 years	0.00803	(0.0114)
60 or more years	0.0547 **	(0.0206)
	number	
Observations	22,821	...

... not applicable

* significantly different from reference category ($p < 0.05$)

** significantly different from reference category ($p < 0.01$)

† significantly different from reference category ($p < 0.10$)

Note: Survey sampling weights were applied.

Source: Statistics Canada, Survey of Financial Security; authors' tabulations.

To further quantify the extent to which recent immigrant families are more likely to be credit invisible than Canadian-born families, marginal effects of the impact of years in Canada on the probability of being credit invisible are presented in Table 9, based on model (3) from Table 8. Although not statistically significant, all else being equal, being in Canada for less than two years led to a probability of being credit invisible that was 1.8 percentage points higher than for Canadian-born families. In contrast, an immigrant family that had been in Canada for two to four years was 3.15 percentage points less likely to be credit invisible.

In summary, newly landed immigrants were more likely to be credit invisible, but other factors, such as language, income and assets, were also important in explaining credit invisibility. For instance, recent immigrants who do not speak English or French may face unique difficulties in requesting credit products. However, although they may have had difficulty acquiring credit when arriving in Canada, immigrants seemed to be able to quickly acquire credit (relative to Canadian-born families). After two years in Canada, they had lower rates of credit invisibility compared with Canadian-born families.

Results for different credit products

Although a person may have access to credit, that does not necessarily mean they have access to the credit products they need or the amount of credit they need. In this section, immigrants' access to the following individual credit products is investigated: credit cards, lines of credit, mortgages, HELOCs and student loans.

Large loan amounts and long loan terms increase the potential risk to the financial institution that extends the loan. Thus, financial institutions naturally require more information to provide these types of loans. Because of the information required for large loans, an immigrant may be able to acquire credit through low-limit, high interest rate credit cards, but may have difficulty accessing auto loans, student loans, HELOCs or mortgages. Although this immigrant would be visible because of their credit card and would be able to build credit slowly, they may not have access to the most effective credit instruments that exist or at the best terms, which may hold back their financial or social development (Claessens 2006; Gloukoviezoff 2007).

These patterns are studied via the same methods, using the full model of overall credit invisibility, but with the indicator of credit invisibility replaced by an indicator of usage of each individual credit product. Table 9 shows the results from the logistic regressions across all products, and these regressions include all control variables from the main model (3) in Table 8. For the full set of results, see the Appendix Table A.1.

In general, newly landed immigrants and immigrants who had been in Canada for 60 years or more were less likely to have any credit products than Canadian-born households (Table 9). Newly landed immigrant households used mortgages at a significantly lower rate than Canadian-born households. Indeed, immigrants who had been in Canada for less than two years were 20.9 percentage points less likely than Canadian-born families to have a mortgage (Table 9). In contrast, immigrant households that arrived 10 to 39 years ago (relative to the survey year) were more likely to have mortgages than Canadian-born people. Immigrants that have been in Canada for 60 years or more may no longer require a mortgage.

Immigrants who had been in Canada for 2 to 19 years used credit cards at a higher rate than Canadian-born people, and then at similar rates after the household had been in Canada for 20 to 59 years. Immigrants who had been in Canada for two to four years were 7.8 percentage points more likely to have a credit card (Table 9). Recent immigrant households were less likely to have student loans after being in Canada for 0 to 4 years, but more likely to after being in Canada for 10 to 39 years. The latter result may be due to first-generation immigrant households that had children at home who were in college or university.

All immigrants, regardless of years in Canada, were less likely than Canadian-born families to have lines of credit (other than HELOCs). This effect was particularly negative for newly landed immigrants, who were 30.6 percentage points less likely to have such credit.

Taken as a whole, it appears that immigrants start by acquiring credit cards at a higher rate than Canadian-born people (while not acquiring mortgages, student loans, vehicles, credit lines or HELOCs), then slowly build credit through credit cards to acquire mortgages and student loans at greater rates than Canadian-born people with similar characteristics.



Table 10: Average marginal effects of credit products based on years in Canada

Variables	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Mortgages	Credit cards	Student loans	Vehicle loans	Home equity lines of credit	Other lines of credit
Years in Canada (reference: Canadian-born)						
Less than 2 years						
Coefficient	-0.209 **	0.0286	-0.0997 **	-0.144 **	-0.094 **	-0.306
Standard error	(0.0318)	(0.0193)	(0.00912)	(0.0340)	(0.00806)	(0.0495)
2 to 4 years						
Coefficient	-0.104 **	0.0775 **	-0.0745 **	-0.0589 *	-0.081 **	-0.192 **
Standard error	(0.0238)	(0.0114)	(0.0102)	(0.0279)	(0.0109)	(0.0307)
5 to 9 years						
Coefficient	-0.0130	0.0597 **	0.00730	-0.00506	-0.0554 **	-0.0572
Standard error	(0.0187)	(0.0127)	(0.0132)	(0.0228)	(0.0114)	(0.0270)
10 to 19 years						
Coefficient	0.0541 **	0.0432 **	0.0356 **	-0.0285 †	-0.0343 **	-0.0351
Standard error	(0.0155)	(0.0117)	(0.0124)	(0.0169)	(0.00948)	(0.0197)
20 to 39 years						
Coefficient	0.0334 **	0.00596	0.0472 **	-0.0808 **	-0.0122	-0.0118
Standard error	(0.0116)	(0.0122)	(0.0127)	(0.0140)	(0.00840)	(0.0160)
40 to 59 years						
Coefficient	0.00909	-0.00632	0.00163	-0.0997 **	-0.000521	-0.0417
Standard error	(0.0133)	(0.0143)	(0.0188)	(0.0159)	(0.0110)	(0.0174)
60 years or more						
Coefficient	-0.0768 **	-0.0572 *	-0.0434	-0.0752 **	-0.000737	-0.0645
Standard error	(0.0246)	(0.0246)	(0.0489)	(0.0292)	(0.0173)	(0.0258)
	number					
Observations	22,821	22,821	22,821	22,821	22,821	22,821

... not applicable

* significantly different from reference category (p < 0.05)

** significantly different from reference category (p < 0.01)

† significantly different from reference category (p < 0.10)

Note: Survey sampling weights were applied.

Source: Statistics Canada, Survey of Financial Security; authors' tabulations.

Conclusion

Using data from the 2016 and 2019 SFS, this paper examined the extent to which immigrants to Canada are credit invisible. Newly landed immigrant families were less visible than Canadian-born families, but this difference can be accounted for by characteristics such as language, education, income and wealth. Furthermore, immigrants quickly became visible, and, over time, immigrant families that had been in Canada for two to four years were actually 3.15 percentage points more visible than comparable Canadian-born families. However, much of new immigrants' visibility and their greater visibility than Canadian-born families two to four years after landing was due to greater credit card usage and not access to mortgages, student loans and vehicle loans that could speed their integration into Canada and improve their well-being.¹⁰

Future work could delve deeper into immigrants' access to credit by studying not only the types of products being used, but the value of debt being carried. This would provide supplementary information on the extent of immigrants' credit disadvantage. It could also examine how it may be possible to improve the access to credit of immigrants by using data outside the formal credit system, such as rent, phone, utility payments (Equifax 2022; Brevoort et al. 2015), and asset and income information, to inform their credit scores and inform them earlier.



¹⁰ A caveat to this finding is that the sample was not large enough to separate the first year in Canada and the second year. It is possible that this invisibility and difference between newly landed immigrant families and Canadian-born families disappears only in the second year in Canada.

Appendix

Appendix Table A.1: Logistic regression results for having various credit products

Variables	Model 1 - mortgages		Model 2 - credit cards		Model 3 - student loans	
	coefficient	standard error	coefficient	standard error	coefficient	standard error
Survey year (reference: 2016)						
2019	-0.081 [†]	(0.0447)	0.205 **	(0.0686)	0.0331	(0.0620)
Language (reference: English, French or both)						
Neither English nor French	0.376 [†]	(0.226)	-0.786 **	(0.260)	0.917 **	(0.338)
Household size (reference: one person)						
Two people	0.0754	(0.0661)	0.296 **	(0.0869)	0.663 **	(0.0923)
Three or more people	0.585 **	(0.0744)	0.120	(0.110)	1.397 **	(0.0956)
Age of major income earner (reference: 16 to 24 years)						
25 to 34 years	0.558 **	(0.190)	-0.559 **	(0.169)	-0.299 [†]	(0.156)
35 to 44 years	0.775 **	(0.189)	-1.139 **	(0.177)	-1.336 **	(0.168)
45 to 54 years	0.159	(0.188)	-1.085 **	(0.173)	-1.196 **	(0.165)
55 to 64 years	-0.564 **	(0.188)	-0.836 **	(0.171)	-1.365 **	(0.165)
65 years and older	-1.477 **	(0.193)	-0.464 **	(0.170)	-2.662 **	(0.203)
Education of major income earner (reference: college or trade diploma)						
High school diploma or lower	-0.00563	(0.0584)	-0.523 **	(0.0804)	-0.718 **	(0.0885)
University degree or diploma	-0.213 **	(0.0570)	0.762 **	(0.127)	0.365 **	(0.0748)
Years in Canada (reference: Canadian-born)						
Less than 2 years	-1.756 **	(0.340)	0.391	(0.288)	-1.86 **	(0.345)
2 to 4 years	-0.8 **	(0.192)	1.345 **	(0.294)	-1.104 **	(0.215)
5 to 9 years	-0.0977	(0.141)	0.931 **	(0.253)	0.0761	(0.135)
10 to 19 years	0.408 **	(0.118)	0.623 **	(0.196)	0.345 **	(0.113)
20 to 39 years	0.251 **	(0.0871)	0.0757	(0.158)	0.446 **	(0.110)
40 to 59 years	0.0683	(0.100)	-0.0776	(0.174)	0.0173	(0.199)
60 years or more	-0.584 **	(0.191)	-0.63 **	(0.244)	-0.540	(0.727)
Employed (reference: not employed)						
Employed	0.469 **	(0.0559)	0.579 **	(0.0839)	0.216 **	(0.0806)
Family income quintile (reference: bottom quintile)						
Second	0.322 **	(0.0947)	0.741 **	(0.0897)	-0.239 *	(0.112)
Third	0.436 **	(0.0944)	1.172 **	(0.120)	-0.107	(0.116)
Fourth	0.610 **	(0.0994)	1.598 **	(0.158)	-0.0304	(0.128)
Fifth	0.531 **	(0.107)	1.832 **	(0.265)	0.0144	(0.139)
Assets quintile (reference: bottom quintile)						
Second	6.380 **	(0.374)	0.964 **	(0.0867)	-0.676 **	(0.0917)
Third	7.516 **	(0.375)	1.972 **	(0.122)	-1.129 **	(0.105)
Fourth	7.315 **	(0.376)	2.555 **	(0.174)	-1.232 **	(0.112)
Fifth	6.655 **	(0.378)	2.660 **	(0.219)	-1.851 **	(0.132)
Constant	-7.908 **	(0.426)	0.273	(0.209)	-0.961 **	(0.225)
number						
Observations	22,821	...	22,821	...	22,821	...
Province fixed effects	Yes	...	Yes	...	Yes	...

... not applicable

* significantly different from reference category (p < 0.05)

** significantly different from reference category (p < 0.01)

† significantly different from reference category (p < 0.10)

Note: Survey sampling weights were applied.

Source: Statistics Canada, Survey of Financial Security; authors' tabulations.

Appendix Table A.1: Logistic regression results for having various credit products (continued)

Variables	Model 4 - vehicle loans		Model 5 - home equity lines of credit		Model 6 - other lines of credit	
	coefficient	standard error	coefficient	standard error	coefficient	standard error
Survey year (reference: 2016)						
2019	0.0328	(0.0408)	-0.239 **	(0.0569)	-0.0589	(0.0395)
Language (reference: English, French or both)						
Neither English nor French	-0.334	(0.271)	-1.353 **	(0.479)	-0.855 **	(0.218)
Household size (reference: one person)						
Two people	0.409 **	(0.0615)	0.219 *	(0.0907)	0.154 **	(0.0544)
Three or more people	0.701 **	(0.0675)	0.476 **	(0.0982)	0.105	(0.0649)
Age of major income earner (reference: 16 to 24 years)						
25 to 34 years	0.380 **	(0.143)	0.512	(0.385)	0.246	(0.170)
35 to 44 years	0.320 *	(0.144)	1.097 **	(0.377)	0.449 **	(0.169)
45 to 54 years	0.374 **	(0.142)	1.387 **	(0.374)	0.554 **	(0.168)
55 to 64 years	0.137	(0.143)	1.420 **	(0.374)	0.659 **	(0.168)
65 years and older	-0.204	(0.147)	0.825 *	(0.378)	0.435 *	(0.169)
Education of major income earner (reference: college or trade diploma)						
High school diploma or lower	-0.0885 †	(0.0516)	-0.121	(0.0751)	-0.252 **	(0.0486)
University degree or diploma	-0.377 **	(0.0526)	-0.0487	(0.0683)	0.100 †	(0.0531)
Years in Canada (reference: Canadian-born)						
Less than 2 years	-0.917 **	(0.265)	-2.493 **	(0.731)	-1.668 **	(0.336)
2 to 4 years	-0.336 *	(0.168)	-1.663 **	(0.469)	-0.981 **	(0.165)
5 to 9 years	-0.0276	(0.125)	-0.871 **	(0.249)	-0.287 *	(0.135)
10 to 19 years	-0.158 †	(0.0955)	-0.472 **	(0.151)	-0.177 †	(0.0990)
20 to 39 years	-0.472 **	(0.0878)	-0.151	(0.108)	-0.0595	(0.0808)
40 to 59 years	-0.596 **	(0.105)	-0.00614	(0.129)	-0.210 *	(0.0873)
60 years or more	-0.437 *	(0.182)	-0.00868	(0.204)	-0.324 *	(0.130)
Employed (reference: not employed)						
Employed	0.436 **	(0.0519)	0.190 *	(0.0750)	0.365 **	(0.0484)
Family income quintile (reference: bottom quintile)						
Second	0.549 **	(0.0841)	0.382 *	(0.155)	0.489 **	(0.0681)
Third	0.913 **	(0.0865)	0.487 **	(0.147)	0.663 **	(0.0726)
Fourth	1.134 **	(0.0932)	0.539 **	(0.148)	0.780 **	(0.0792)
Fifth	1.233 **	(0.102)	0.544 **	(0.154)	1.000 **	(0.0905)
Assets quintile (reference: bottom quintile)						
Second	0.561 **	(0.0728)	4.462 **	(0.715)	0.920 **	(0.0668)
Third	0.442 **	(0.0754)	5.081 **	(0.714)	1.381 **	(0.0702)
Fourth	0.173 *	(0.0792)	5.112 **	(0.716)	1.576 **	(0.0736)
Fifth	-0.191 *	(0.0887)	5.135 **	(0.717)	1.523 **	(0.0796)
Constant	-1.665 **	(0.165)	-8.95 **	(0.798)	-2.164 **	(0.194)
	number					
Observations	22,821	...	22,821	...	22,821	...
Province fixed effects	Yes	...	Yes	...	Yes	...

... not applicable

* significantly different from reference category (p < 0.05)

** significantly different from reference category (p < 0.01)

† significantly different from reference category (p < 0.10)

Note: Survey sampling weights were applied.

Source: Statistics Canada, Survey of Financial Security; authors' tabulations.

References

- Brevoort, Kenneth P., Philipp Grimm and Michelle Kambara (2015). "Data Point: Credit Invisibles." Consumer Financial Protection Bureau, May 2015.
https://files.consumerfinance.gov/f/201505_cfpb_data-point-credit-invisibles.pdf
- Brücker, Herbert, Albrecht Glitz, Adrian Lerche and Agnese Romiti (2021). "Occupational recognition and immigrant labor market outcomes." *Journal of Labor Economics*, Vol. 39, No. 2.
<https://www.journals.uchicago.edu/doi/abs/10.1086/710702>
- Claessens, Stijn (2006). "Access to financial services: A review of the issues and public policy objectives." Oxford University Press on behalf of the World Bank.
<https://openknowledge.worldbank.org/handle/10986/16428>
- Deku, Solomon Y., Alper Kara and Philip Molyneux (2016). "Access to consumer credit in the UK." *European Journal of Finance*, 22(10), 941–964. <https://www.tandfonline.com/doi/abs/10.1080/1351847X.2015.1019641?journalCode=rejf20>
- Equifax (2022). "FrontLobby and Equifax release findings that indicate Rent Reporting may benefit millions of Canadians over time," <https://www.consumer.equifax.ca/about-equifax/press-releases/-/blogs/equifax-canada-and-frontlobby-complete-first-rental-tradeline-study/>. Accessed Nov 3, 2022.
- Gloukoviezoff, Georges (2007). "From financial exclusion to overindebtedness: the paradox of difficulties for people on low incomes?" *New Frontiers in Banking Services*, pp. 213–245. Editors: Anerloni, Luisa, Maria Debora Braga and Emanuele Maria Carluccio. <https://doi.org/10.1007/978-3-540-46498-3>.
https://link.springer.com/chapter/10.1007/978-3-540-46498-3_6
- Islam, Khan Jahirul and Wayne Simpson (2017). "Payday lending and microcredit: two faces of the same problem?" *Journal of International Development*, Dec 2017. doi:10.1002/jid.3339. https://www.researchgate.net/profile/Khan-Islam-2/publication/321967780_Payday_Lending_and_Microcredit_Two_Faces_of_the_Same_Problem_Payday_Lending_and_Microcredit/links/5ad1b954458515c60f504dad/Payday-Lending-and-Microcredit-Two-Faces-of-the-Same-Problem-Payday-Lending-and-Microcredit.pdf?_sg%5B0%5D=started_experiment_milestone&_sg%5B1%5D=started_experiment_milestone&origin=journalDetail
- Lamb, Laura (2015). "Aboriginal Fringe Finance Use and Financial Capabilities: Survey Evidence from a Canadian City." *Economic Papers*. Vol. 34, Issue 4, pp. 273–289.
<https://onlinelibrary.wiley.com/doi/abs/10.1111/1759-3441.12112>
- Melzer, Brian T. (2011). "The real costs of credit access: evidence from the payday lending market." *Quarterly Journal of Economics* (2011) 126, 517–555. doi:10.1093/qje/qjq009. <https://academic.oup.com/qje/article/126/1/517/1902774?login=true>
- Morissette, René (2019). "The Wealth of Immigrant Families in Canada." *Analytical Studies Branch Research Paper Series*, Statistics Canada, April 16, 2019. 11F0019M No. 422.
<https://www150.statcan.gc.ca/n1/pub/11f0019m/11f0019m2019010-eng.htm>
- PERC Canada (2019). "Credit Invisibles & Credit Deserts in Canada."
http://www.perc.net/wp-content/uploads/2019/06/CLAEvent_060319_34.pdf
- Picot, Garnett, and Arthur Sweetman (2005). "The Deteriorating Economic Welfare of Immigrants and Possible Causes: Update 2005." *Analytical Studies Branch Research Paper Series*, Statistics Canada, June 2005. Catalogue no. 11F0019MIE — No. 262.
<https://www150.statcan.gc.ca/n1/pub/11f0019m/11f0019m2005262-eng.pdf>

Sanchez-Moyano, R. and Shrimali, B.P., 2021. "The racialized roots of financial exclusion." *Community development innovation review: Fintech, racial equity, and an inclusive financial system*, pp.9–16.

Solis, Alex (2013). "Credit access and college enrollment." Working Paper No. 2013:12, Uppsala University. <https://www.econstor.eu/bitstream/10419/82577/1/755451449.pdf?version=meter+at+null&module=meter-Links&pgtype=article&contentId=&mediaId=&referrer=&priority=true&action=click&contentCollection=meter-links-click>

Uppal, Sharanjit (2019). "Homeownership, mortgage debt and types of mortgage among Canadian families." *Insights on Canadian Society*. Statistics Canada, 75-006-X201900100012. <https://www150.statcan.gc.ca/n1/en/catalogue/75-006-X201900100012>