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Why are Public Attitudes Towards Immigration in Canada Becoming Increasingly Positive?

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Abstract

Why and how have public attitudes towards immigration in Canada grown more positive in the last 20 years? Can the changes in attitudes be accounted for by changes in population characteristics, or in the change in the effect of these characteristics? Did the 2008-2010 financial crisis affect support for immigration? Our logit regression analysis shows that positive attitudes towards immigration are positively related to higher levels of education attainment regardless of the survey years but negatively associated with the support for conservative political parties, especially during and after the financial crisis. We use a decomposition analysis to investigate the shift in public opinions across individual characteristics before, during and after the 2008 financial crisis. We find that, for all periods, most of the attitude shift results from the change in the effect of population characteristics rather than the change in the characteristics themselves. Differences in educational attainment across survey years, however, explain a small portion of the shift before and during the financial crisis, though the impact disappears after the financial crisis period. Our analysis also shows that some groups' attitudes fluctuate more than others with the economic cycle. Regardless of the financial crisis, the change in the positive opinions of the supporters of liberal parties contributes significantly to the overall shift in positive attitudes in all periods. On the other hand, while the change in the views of the conservative party supporters and respondents with the 'weaker' perceptions of current Canadian economic conditions contributes to the overall shift in the positive attitudes in the pre-financial crisis period, their impact is reversed in the financial crisis period and thereafter.

Keywords: immigration, public opinion, multivariate decomposition analysis, attitudes, Canada

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Introduction

Immigration management and migrant integration are both politicized and divisive issues in most western democracies. Examples abound. One may consider the role of intra-EU migration and the quest to 'take back control' in the Brexit referendum leading to the exit of the United Kingdom from the EU (Thielemann & Schade, 2016; Goodwin & Milazzo, 2017); the ways in which former US President Donald Trump manipulated migration and border control during his electoral campaigns (Rumbaut et al., 2019) or also the focus on migration and the perceived partial integration of migrants, particularly those of Muslim religion, in French politics throughout French Presidential elections in the last three decades (Bonjour & Lettinga, 2012; Morgan, 2017). Understanding what drives public attitudes towards immigration is a primary issue of interest for both politicians and researchers.

Research has distinguished between attitudes concerning the economic benefits (or challenges) that migration brings for the economy and labour market from views about whether migration contributes positively or threatens the host country's values and majority culture (Bilodeau et al., 2012; Card et al., 2012; Hainmueller & Hopkins, 2014). In addition, research has examined whether such attitudes are driven by the socio-demographic characteristics of respondents, by their ideology and political preferences, by macro-economic factors (e.g., economic growth, unemployment etc.), or also by contextual factors (such as a recent economic downturn, or a sudden migrant or refugee influx). A combination of these factors usually explains both the formation and the change in public attitudes towards immigration, but some findings have been constant in the literature. Across western democracies, for instance, more highly educated and younger respondents tend to have more positive attitudes towards immigration, compared to their older or less educated counterparts (Ceobanu & Escandell, 2010; Wilkes, R., & Corrigall-Brown 2011; Bilodeau et al. 2012; Citrin et al. 2012; Gang et al., 2013; Banting & Soroka 2020; Dražanová, 2020). Similarly, economic downturns tend to lead to more negative attitudes towards immigration overall (Gang et al., 2013). People voting for conservative parties tend to also hold less positive views on migration compared to supporters of progressive parties (Wilkes et al., 2008; Citrin et al., 2012; Banting & Soroka, 2020; Besco, 2021).

Canada stands out from other western democracies: Canadian attitudes towards immigration have been positive throughout the last two decades and grew even more favourable during the last ten years, including during the pandemic crisis of the 2019-2021 period (Environics, 2021).

The reasons why Canadians are positive towards immigration are many: Canada is a settler-colonial state largely built on immigration, and a country that understands itself not only as a multicultural society (Simonsen, 2016) but largely as a 'post-national' state as Prime Minister Justin Trudeau stated in 2015 (Lawson, 2015) and most "Canadians define their country's uniqueness in terms of being multicultural, inclusive and accepting of people like immigrants and refugees, well ahead of such attributes as freedom, democracy, the land, and health care" (Focus Canada, 2021, p.10).

Canada is distant from important countries of origin of migrants and refugees and has a capacity to proactively regulate both immigration and refugee flows, maintaining (nearly) total control of who enters and exits the country. Canada is not directly affected by, for instance, refugee crises in the Middle East (Syria) or Asia (Afghanistan) but rather proactively volunteers to welcome Syrian or Afghan refugees as part of its overall humanitarian commitment internationally. It may seem counter-intuitive for other countries, but the Canadian national election of 2015 was won by the Liberal party, partly based on its pro-refugee programmatic declarations relating to the Syrian crisis (Besco & Tolley, 2019; Triadafilopoulos & Taylor, 2020). Welcoming Afghan refugees has been an issue supported by most Canadian political parties in the 2021 election (Zimonjic, 2021).

And while in the past economic crises have had a negative impact on Canadians' attitudes towards immigration (after the 2008 global financial crisis), the current pandemic crisis does not seem to have led to a similar effect. By contrast, Canadians have grown increasingly positive towards immigration, from both an economic and a cultural perspective, as testified by the Environics Institute's relevant survey research in Fall 2020 and Fall 2021 (Environics 2020; 2021). Thus while in the late 2000s, positive attitudes towards immigration declined by seven percentage points (between 2008 and 2010) (Environics, 2010) as unemployment rose and GDP decreased too in those years (Cross, 2011), the same was not true during and after the pandemic economic downturn. By contrast, public attitudes remained positive and grew slightly more positive, increasing by three percentage points between 2019 and 2021 (Environics, 2021).

A few questions arise from these general observations: is Canada an exception compared to other western democracies when it comes to public attitudes towards immigration? And if that is the case, why and how have public attitudes in Canada grown more positive in the last 20 years? Was this a linear process, or did it have significant 'bumps,' and how can these be explained? Most importantly, we would like to find out whether Canada is an exception (that confirms the rule as simply being an exception that cannot be explained) when it comes to public attitudes towards immigration in western societies and when we consider the role of economic crises on attitudes towards immigration.

Even though several studies in the existing literature examine the factors that affect the attitudes towards immigration in Canada, we know little about what accounts for the *shift* in attitudes over the years (Palmer, 1996; Wilkes et al., 2008; Wilkes and Corrigall-Brown, 2011; Citrin et al., 2012; Bilodeau et al., 2012; Banting and Soroka, 2020; and Besco, 2021). Thus, more specifically, this paper aims to shed light on the following questions: What factors affect support for immigration today in Canada? Are these the same factors that previously affected support for immigration, or have the "drivers" of public opinion changed over time? Is it attributable to the change in population characteristics or change in the effect of characteristics? Has the 2008-2010 financial crisis affected the support for immigration? Which group's attitudes towards immigration were more resistant to the financial crisis?

The rest of the paper is organized as follows. The following section gives detailed information on the Environics Focus Canada survey datasets and the research questions. Section 3 presents the characteristics of the sampled population for each year. Section 4 analyzes the determinants of positive attitudes towards immigration from 1998 to 2021 using logit regression analysis. In section 5, we analyze the shift in attitudes towards immigration in three distinct periods: pre-financial crisis (1998-2008), financial crisis (2008-2010), and post-financial crisis years (2010-2021) by utilizing the logit decomposition analysis. The last section summarizes the results of the analyses.

Methodology and Research Questions

This paper analyses the Environics Focus Canada Survey datasets from 1998 to 2021, conducted regularly on a nationally representative sample of approximately 2,000 telephone interviews within households randomly selected across Canada. It represents the population in Canada regardless of their citizenship status aged 18 and over except for those living in the Yukon or Northwest Territories or institutions (armed forces barracks, hospitals, prisons). The survey has been asking the same question to the participants whether they strongly agree, somewhat agree, somewhat disagree, or strongly disagree with the following statement "Overall, there is too much immigration in Canada" to measure attitudes toward immigration. This cross-sectional survey enables us to investigate the social change in attitudes over the years. The survey also includes the information of participants' demographic characteristics and political preferences.

For the regression and decomposition analyses, we pooled the data from 1998 to 2021 data

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sets with a sample size of 5,989 (the cases with missing data and responses of neither agree/disagree and not eligible to vote were removed). We use the Environics sample weights in all our analyses, including the descriptive statistics. The individuals are weighted to represent their regional, age cohort, and gender proportion of the national population.

Even though positive attitudes towards immigration have been continuously increasing in Canada last two decades, we observe up and downs between specific years, specifically during the financial crisis years between 2008 and 2010. This paper examines the effect of economic downturns on attitudes to provide analysis of which factors are most significant in understanding the rising positive attitudes towards immigration between 1998 and 2008, and between 2010 and 2021, and the decline between 2008 and 2010. As represented in Figure 2.1, while the positive attitude rose between 1998 and 2008, it fell during the financial crisis years 2008-2010 and then recovered again in the post-financial crisis years 2010-2021. Therefore, we divided our period into three sub-periods based on the change in the positive attitudes towards immigration in Canada over time. To the best of our knowledge, this is the first paper that employs a logit regression model along with the decomposition analysis in these three distinct periods to examine the impact of the financial crisis on the dynamics of the factors that affect positive attitudes and decompose the factors that contributed to the shift in positive attitudes.

Figure 2.1 Positive attitudes: There is too much immigration to Canada (share of disagreement in the sample, %)
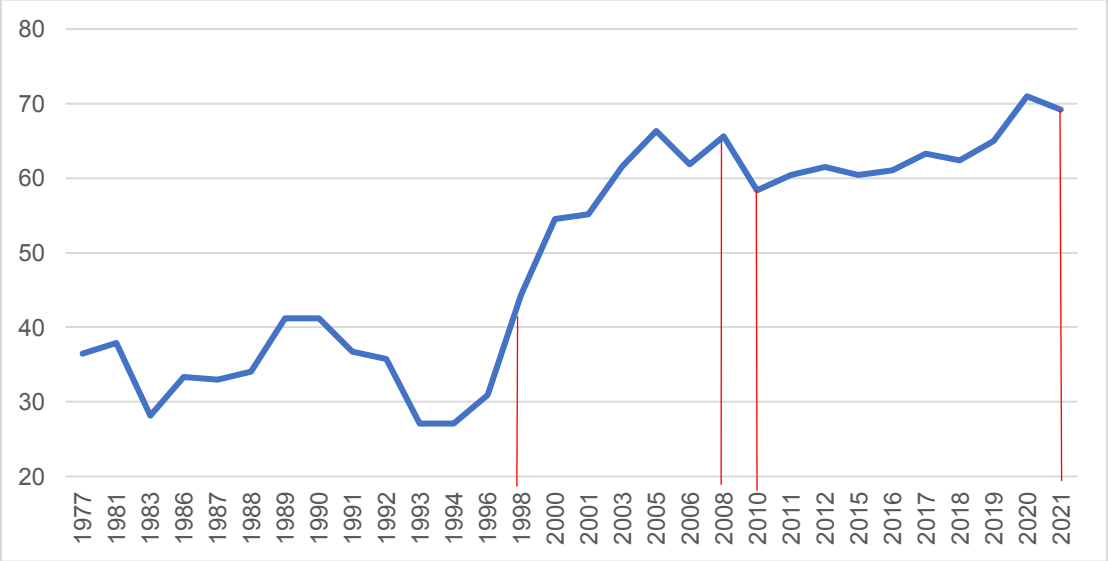
In general, scholars who study attitudinal and social changes used two approaches. The first approach investigates the impact of cohort and period differences on attitudes. In contrast, the second approach explores the change in causal variables to decompose the effect of change in the characteristics of the population from the change in the impact of characteristics on attitudes. As Firebaugh (2011) argued, the first approach helps decompose the effect of cohort replacement from the effects of within-cohort change. Wilkes and Corrigall-Brown (2011) utilized this approach to examine the reasons for the change in public attitudes over time by investigating the cohort and period differences in attitudes towards immigration in Canada. While our paper is highly related to Wilkes and Corrigall-Brown (2011), we follow the second approach to examine the effects of the compositional change of individual characteristics and the change in the impact of these characteristics on the shift of positive attitudes in Canada. In that sense, we follow the decomposition model in Gang et al. (2013) that examines the attitudes towards foreigners in European Union.

Descriptive Analysis: Change in the demographics over the years

Independent Variables

We focus on the individual-level characteristics in understanding the factors that affect attitudes toward immigration. To this end, we include socio-demographic characteristics of the residents such as categorical education variables (highest educational attainment), lifecycle variable to measure the generational impacts on attitudes (youth, adult and senior), labour force status of participants (such as full-time employed, unemployed, student, homemaker etc.). The existing research also points to differences in attitudes towards immigration between the immigrants and native-born. To capture the differences in attitudes towards immigration between immigrants and native-born Canadians, we include a binary variable: 'Canadian' and 'immigrants.' We also include a categorical region variable (six different regions; Atlantic, Quebec, Ontario, Manitoba and Saskatchewan, Alberta, and British Colombia) to highlight the impact of the residency. To uncover the differences in attitudes between genders, we include a binary variable: 'woman,' and 'man.' Tables A.1 and A2 represent the descriptive statistics of independent variables.

Figure 3.1. Changes in the age group (%), 1998-2021
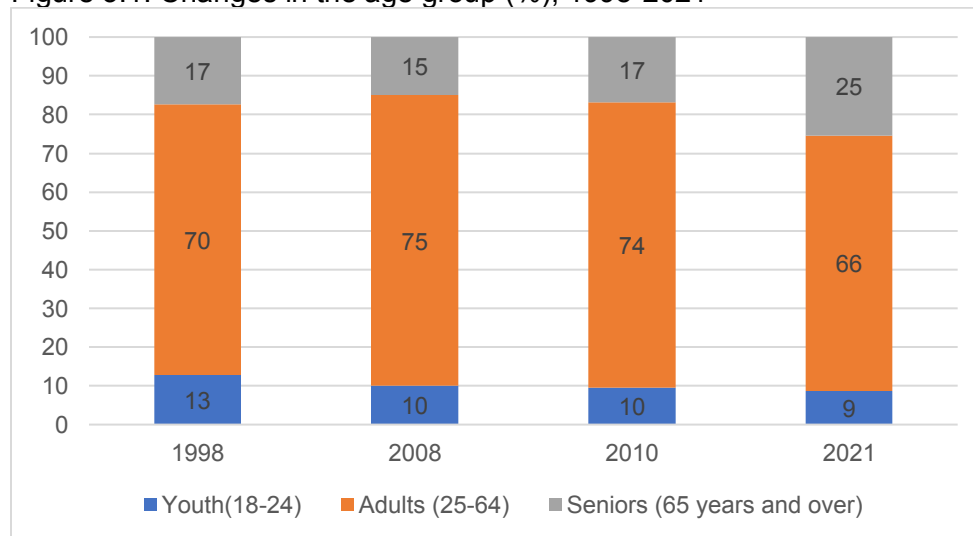
The youth (aged between 18 and 24) ratio has declined within the lifecycle groups over the years (Figure 3.1). The average age rose from 44.4 years in 1998 to 50.4 in 2008, 50.1 in 2010, and 56.6 in 2021. Focusing on the highest educational attainment, the proportion of university graduates and post-graduates has increased over the years; in 1998, 23% of the respondents had university or higher degrees, which has risen to 35% in 2008, 41% in 2010, and 47% in 2021 (Figure 3.2).

Figure 3.2. Changes in the highest education attained (%), 1998-2021
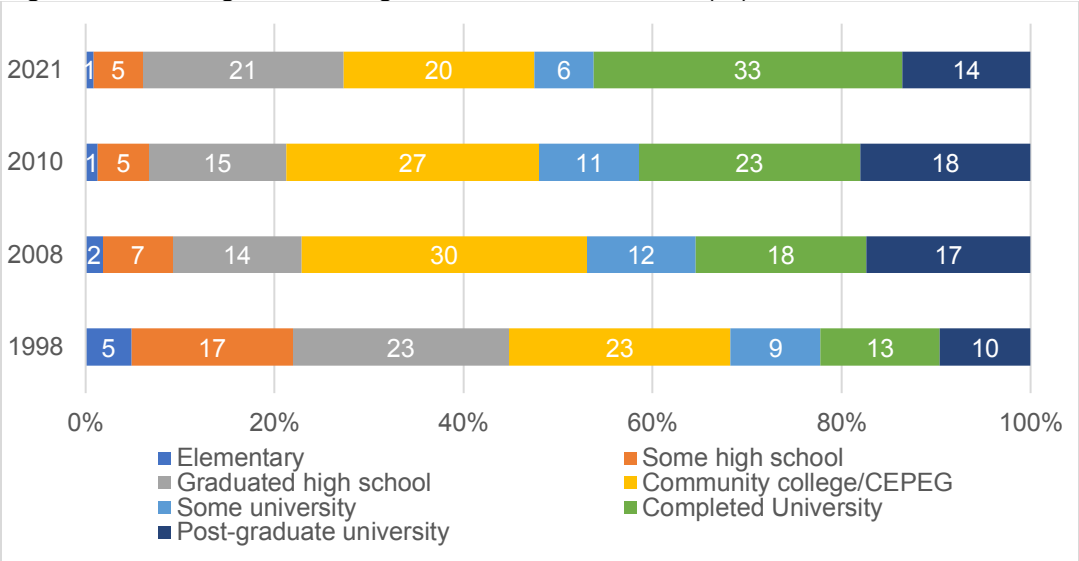
Another important observation is that the proportion of native-born respondents has declined from 86% in 1998 to 79% in 2021 (Table A.1). Turning attention to the job status, we see fluctuations. For instance, the proportion of unemployed initially declined from 7% in 1998 to 4% in 2008; in the following years, it increased to 5% in 2010 and 2021 (Figure 3.3).

Figure 3.3. The proportion of Job Status, 1998-2021 (%)
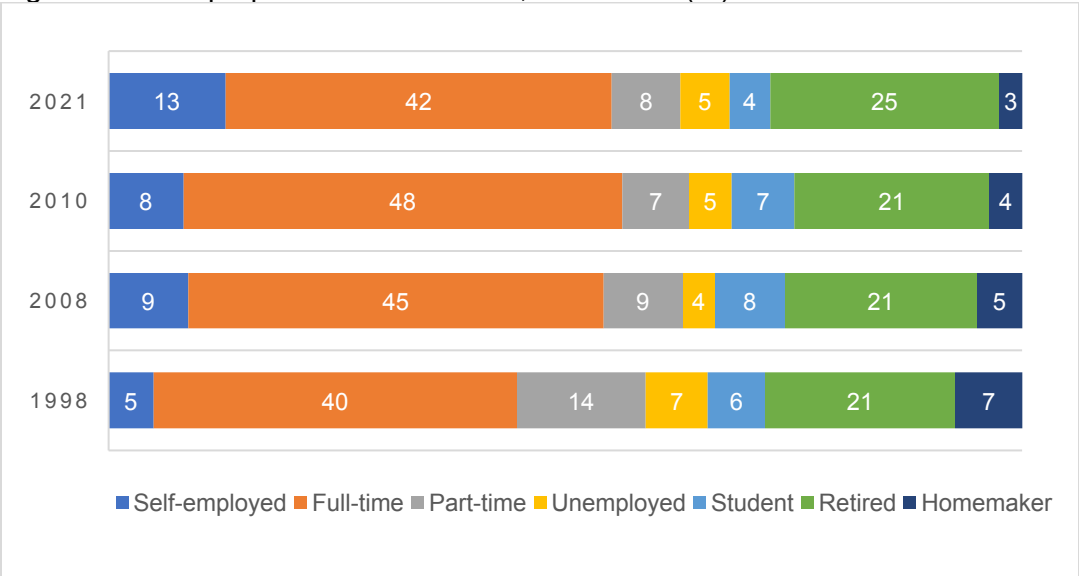
Besides the above socio-demographic individual variables, the existing research shows a significant difference in the opinions towards immigration among supporters of the different political parties (Besco, 2021; Banting & Soroka, 2020; Citrin et al., 2012). In our analysis, we include party support to investigate whether an ideological shift in Canada over time explains the change in the attitudes towards immigration. In the Focus Canada survey, the participants were asked, "if a Canadian federal election were held today, which one of the following parties would you vote for?". Since the Reform Party did not exist as a separate party after 2003 and the Green Party of Canada did not contest federal elections before the 2004 election, nor did the People's

Party of Canada prior to 2019, it would be impossible to analyze the impact of party support in a complete fashion. To overcome this problem, we created four dummy variables based on the immigration position of political parties (for a detailed discussion, see Besco 2021). New Democratic Party (NDP) and Liberals are combined under the group called 'liberal,' and Conservatives, including the Peoples Party in 2021 and Reform party in 1998, are combined under the group 'conservatives.' The third dummy variable is 'Bloc Québécois' while 'others' represent the supporters of other parties, including the supporters of the Green party after the year 2008.

The political party support data informs us that the proportion of supporters of the liberal declined from 61% in 1998 to 44% in 2008 and then rose to 45% in 2010 and 51% in 2021 (Figure 3.4). In contrast, the proportion of supporters of the conservatives (including the Reform Party) initially increased from 26% in 1998 to 35% in 2008 and then fell to 34% in 2010 and 2021 (including the supporters of the Peoples Party).

Figure 3.4. Party support, 1998-2021 (%)
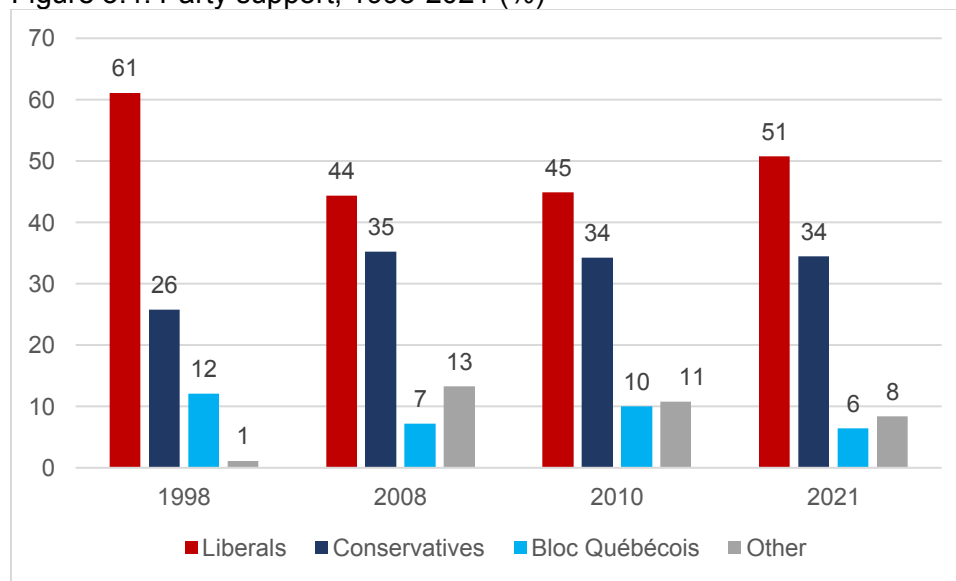
Furthermore, even though there is a general belief that the personal economic situation might explain the individual differences in attitudes towards immigration, Dražanová (2020) and Hainmueller and Hopkins (2014) underline that the individual's income or wage is not a significant predictor in most analyses. On the other hand, Bilodeau et al. (2012) find a statistically significant relationship between the household income level and the attitudes toward immigration in Canada; respondents with higher income are more likely to be positive about immigration. Several research papers also examine the impact of the country's macroeconomic conditions (such as unemployment rate, GDP per capita) on the attitudes toward immigration and immigrants (Wilkes et al. 2008; Semyonov et al. 2008; Wilkes & Corrigall-Brown 2011; Banting & Soroka 2020). Banting & Soroka (2020) also find that the national measure (change in the unemployment rate) plays a more vital role than regional data to explain the attitudes towards immigration.

This paper examines the impact of change in the individual and socio-demographic characteristics of the population on the shift of attitudes towards immigration, and we opt for focusing on the individual perceptions of the current economic conditions rather than including macro-level factors or individual's income in our analysis. Gorodzeisky & Semyonov (2020) analyzed the impact of perceptions (misperceptions) of the size of the immigrant population and found that it has a more critical effect than factual reality in shaping public views and attitudes toward immigration. They argue that "the perceptions represent individual beliefs,

and as such constitute a 'cognitive map' that may influence and shape individual attitudes toward outsiders" (p.613). Kuntz et al. (2017) tested whether the change in individuals' perception of economic insecurity and change in objective economic condition of country (unemployment rate) played a role in forming anti-immigrant attitudes in the European economic crisis period. They found that change in perception of economic insecurity was much more relevant than changes in objective economic conditions. In the light of the above discussion, we use the question "In your opinion, is the Canadian economy getting stronger, weaker or is it staying about the same?" to measure the individual perceptions of the current economic conditions. Based on this question, three dummy variables are created: 'weaker,' 'stronger,' and 'staying the same.' As shown in Table 1, the proportion of 'stronger' initially increased from 1998 to 2008 and then with the financial crisis, it started declining and continued to decline till 2021, by which point the COVID-19 pandemic had taken hold. Using these variables, we analyze whether the individual perceptions of a country's economic conditions have any impact on the attitudes towards immigration and how the change in the individual perceptions of a country's economic state affects the shift in attitudes towards immigration. Therefore, our objective is to examine the effects of individual perceptions of current Canadian economic conditions on shaping the attitudes toward immigration rather than analyzing the impact of the reality of Canada's economic indicators.

Table 1. The proportion of economic perception over the years (%)

Canadian economy is getting…	Survey Years			
	1998	2008	2010	2021
Weaker	51	29	22	45
Staying the same	33	45	57	40
Stronger	16	25	21	15

Dependent variable: Public opinion towards immigration

In this paper, we measure the attitudes towards immigration based on participants' responses to the question "Overall, there is too much immigration in Canada." Participants were asked whether they strongly agree, somewhat agree, somewhat disagree, or strongly disagree. Based on this question, a new binary variable is created to measure the attitudes: the respondents that somewhat disagree or strongly disagree are recorded as "one" to measure the positive attitudes towards immigration, while the respondents that somewhat agree or strongly agree are recorded as "zero."

Table 2 represents the attitudes of Canadian residents to immigration over the years. The columns represent the positive (disagree) and negative (agree) responses in different years. For example, in 1998, only 46% of all participants disagreed or strongly disagreed with the statement 'there is too much immigration in Canada.' Moreover, the positive attitudes towards immigration rose by 20 percentage points from 1998 to 2008. Then, during the financial crisis years 2008-2010, the positive attitudes declined by 7 percentage points and rebounded sharply in the post-financial crisis period 2010-2021.

Table 2. General Attitude: There is too much immigration to Canada. (%)

	Survey Years			
	1998	2008	2010	2021
Agree	54	34	41	30
Disagree	46	66	59	70

Logit Regression Model and Decomposition Analysis

The logit regression model is used to model dichotomous outcome variables. In the logit model, the log odds of the outcome are modelled as a linear combination of the predictor variables. The objective is to understand the relationship between the dependent and multiple independent variables by estimating probabilities using a logistic regression equation. This type of analysis can help predict the likelihood of an event happening or a choice being made. We utilize this regression model to demonstrate the partial correlation between the positive attitudes towards immigration and various demographic variables, disaggregated labour market groups, individual perceptions on current economic conditions and political ideologies. Specifically, we investigate how each independent variable affects the probability of the attitudes toward immigration being positive. Our logit regression results show which variables are statistically significant and explain the change in positive attitudes over the years.

Given the logit regression model results, we use the multivariate decomposition model, widely used in quantifying the contribution to group differences in average predictions from multivariate models. To this end, we follow a similar approach as in Firebraugh (1997) and Powers et al. (2011) in transforming our results from the Logit regression model into two distinct components. Based on Firebaugh (1997); a general model for decomposing aggregate change is as follows:

$$Y = \alpha + \beta X + \varepsilon$$

The estimated model is:

$$\bar{Y} = \alpha + \beta \bar{X}$$

If one focuses on the initial period (1998-2008) in our analysis, decomposition of change can be found by subtracting the estimated model of 1998 from 2008:

$$Y_{2008} - Y_{1998} = \Delta\alpha + \Delta\beta X_1 + \beta_1 \Delta\bar{X} + \Delta\beta\Delta\bar{X}$$

In the above equation, the contribution of changing parameters is defined as $\Delta\alpha + \Delta\beta X_1$ while the contribution of changing level is $\beta_1 \Delta\bar{X}$. Finally, we can define the joint contribution of change in the level and effect of X as follows: $\Delta\beta\Delta\bar{X}$. Firebaugh (1997) argues that "the change in $\bar{Y}$ (in our model, it is the change in positive attitudes) can be portioned into four components, reflecting the difference in the intercept $\Delta\alpha$, change in the means of the explanatory/independent variables $\Delta\bar{X}$ and change in the effect of the explanatory variables $\Delta\beta$ "(p. 37). So, in this model, components sum to change in $\bar{Y}$.

Next, based on the above discussion, we identify two main components. The first component is attributable to compositional differences between groups, such as differences in characteristics captured by $\beta_1 \Delta\bar{X}$. The second component is attributable to differences in the effects of characteristics such as the difference in coefficients, defined as $\Delta\alpha + \Delta\beta X_1 + \Delta\beta\Delta\bar{X}$. From here on, we use the name' characteristics effect' for the former component, denoted by E and' coefficients effect' for the latter component, denoted by C. We used STATA command (mvdcmp) for multivariate decomposition for nonlinear response models which was developed by Powers et al. (2011).

Logit Regression Results: Do the same factors affect support for immigration over the years in Canada?

Our logit results are represented in Table A5. While we observe extensive heterogeneity in the statistical significance of the coefficients on the dummy variables across groups and years, we

also observe some regularities. For example, in the education groups relative to elementary school graduates, two groups have positive and highly statistically significant coefficients regardless of the years: 'university graduates' and post-graduates. Consistent with the existing research, we found that having the highest education increases the likelihood of having positive attitudes towards immigration regardless of the survey years. However, it is important to note that the estimated coefficients for both university and post-university graduates were higher in 2008 relative to 1998, but they declined in 2010 and increased again in 2021. The financial crisis might explain the decline in 2010 relative to 2008.

When one focuses on lifecycle estimated coefficients, relative to the youth (age 18-24), the 'adults' between age 25-64 and the 'senior' group (age 65 and over) are more likely to have less positive attitudes. However, the difference between youth and adults was only statistically significant in 1998. So being young explains the positive attitudes only in 1998.

One striking observation from our logit analysis is the coefficient on the native-born Canadians relative to immigrants. While the native-born Canadians were less likely to have positive attitudes than the respondents born outside of Canada (immigrants) in 1998, the opposite result was obtained in 2021. These differences in attitudes between native-born and immigrants are statistically significant. The likelihood of having positive attitudes towards immigration was not different between the native-born and immigrant in 2008 and 2010.

Our analysis on different regions indicates that, relative to the Atlantic region, there exists no statistically significant evidence regarding the impacts of regions on the positive attitudes towards immigration in all years. The only exception was for Ontario in 2010.

Our results on job status deliver interesting insights. In 1998, there is no evidence that the job status had any impact on the positive attitudes. In other words, the likelihood of having positive attitudes towards immigration does not differ by labour market status in both years. In 2008, there was a statistically significant difference in positive attitudes between 'unemployed' and 'full-time employed.' Following the financial crisis in 2010, we could not find any significant evidence that shows a difference in positive attitudes between the full-time employed and others except for 'self-employed.' However, all other job status categories are more likely to have less positive attitudes towards immigration relative to 'full-time employed' in 2021. But only the difference in attitudes between 'unemployed' and 'full-time employed' is statistically significant. It is also important to note that the coefficient of unemployed in 2021 becomes more negative relative to other years, implying that the difference in attitudes between the unemployed and full-time employed widens.

When we focus on the attitudinal difference between women and men, it is negative and statistically significant only in 2010. This difference implies that women are more likely to have less positive attitudes towards immigration than men.

The regression results on the perceptions of the correspondents on the strength of the Canadian economy indicate that, relative to 'stronger,' the estimated coefficients of 'weaker' are negative and statistically significant only in 1998 and 2021. This means that the respondents with the perception of a "strong economy" are more likely to have positive attitudes towards immigration relative to others in those years. We do not obtain the same results for the financial crisis years (2008 and 2010), which can be explained by the convergence of positive attitudes among these groups.

Finally, when we focus on the political ideology, we find that conservatives are more likely to have less positive attitudes toward immigration than liberals (including the supporters of the Liberal Party and NDP). Except for 2008, the difference in attitudes between liberals and conservatives is highly statistically significant (at 0.01 level). Interestingly, this difference became more pronounced after 2008, highlighting the prominent role of liberals in explaining the positive attitudes towards immigration in Canada.

Having identified the significant factors affecting attitudes toward immigration between 1998-2021, we next provide an analysis on which of these factors contributed the most in explaining the growing positive attitudes towards immigration in Canada between 1998-2008 and

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deteriorating positive attitudes during the financial crisis years 2008-2010 and recovery in the positive attitudes thereafter between 2010-2021.

Decomposition Model: What are the "drivers" of public opinion shift over time in Canada?

In order to understand the reasons for the shift in attitudes, we first need to address the following questions: What has changed? Is it the opinion or the composition of the population? Our decomposition analysis helps answer these questions by isolating the contribution of the change in the population's composition, called the characteristics effect (E), from the contribution of the change in the population's opinions, called the coefficients effect (C). Consider the following example that highlights the intuition behind these two distinct effects. First, suppose that university graduates have highly positive attitudes in the initial year, and their share in the population rises over time. Then, one should expect that the positive attitudes towards immigration will increase necessarily. In fact, we know from the data that the share of university graduates rose from 13% in 1998 to 18% in 2008. Our logit analysis shows that the coefficient on the university graduates is positive and statistically significant in 1998. As a result, this change partly explains the increase in the positive attitudes towards immigration which is captured by the characteristics effect.

Now, irrespective of the change in the proportion of university graduates among the overall population, suppose that the attitudes of university graduates towards immigration become more positive over time. In fact, the positive support of university graduates rose from 59% in 1998 to 80 % in 2008. This change explains one part of the rise in the positive attitudes towards immigration in Canada that is captured by the coefficients effect. Next, we provide our results from our decomposition analyses for each period.[1]

Decomposition of the Change in Positive Attitudes 1998-2008

As reported in the top rows of Table 3, 20.0 % of the aggregate change during this period can be explained by the characteristics effect, while the coefficients effect explains 80.0% of the aggregate change in positive attitudes towards immigration in Canada between 1998 and 2008. A closer look at the characteristics effect indicates that the difference in the composition of the education levels between 1998-2008 is the main contributor to the rising positive attitudes, explaining 21% of the change.[2] It is important to note that 20% is the net, overall effects of the change in characteristics of the population in explaining the increase in the positive attitudes towards immigration, combining both positive and negative changes; thus the 21% is a sub-aggregate effect of change in the composition of education and captures the impact of change by differences in people's highest educational attainment between 1998 and 2008, which is partially offset by smaller negative changes due to other factors. The change in the composition of the other variable plays no significant role in explaining the shift in the positive attitudes. By looking at the education groups individually, we can argue that the change in the composition of the 'post-graduates' contributes to this finding the most (9%), and 'university graduates' (4.0%) and 'some high school' (3.82%) follow.

Next, we turn our attention to the coefficient effect. It is interesting to note that, among all the education groups, the change in the attitude of the people with 'some high school education' has the most explanatory power (7.6%) for the aggregate change in the attitudes and 'university graduates' (3.0%), 'post-graduates' (1.9%), and 'high school graduates' (1.2%) follow.

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[1] The positive attitudes of each group as a percentage can be found in Tables A2, A3 and A4.
[2] Figures 5.1-5.5 represent the relevant characteristics and coefficients effects on positive attitudes for different groups in three periods.

Looking at the life cycle variables, the opinion of the adult population became more positive about immigration, and this change explains 13.6% of the rise in positive attitudes. Examining the effects of the change in the opinions of native-born Canadians between 1998 and 2008 leads us to a striking result: it is the most crucial contributor for the shift of the positive attitudes (33.5%).

Another important finding is that among the regions, the attitude of the residents of Quebec became drastically more positive and contributed the most to the aggregate change (13.8%). Detailed analysis of the job status variable informs us that, while the opinion of the unemployed became more negative over time and undermined the positive attitude by 5.5%, full-time employees' opinions became more positive and contributed the most to the aggregate change (8.7%) in the positive attitude.

Interestingly, turning our attention to the perceptions on the current economic conditions, we find that people who regard the Canadian economy as weaker became more positive towards immigration which explains 8.4% of the rise in positive attitudes. One should note here that, while all groups with different economic viewpoints became more supportive of immigration between 1998 and 2008, the change in the attitudes of the people with weaker perspectives became relatively more positive, making this group the main contributor for the aggregate change.

Finally, we show that both liberals and conservatives changed their opinions positively towards immigration, contributing to the aggregate change by 15.8% and 11.8%, respectively. Decomposition analysis shows that besides the impact of differences in the composition of education levels between 1998 and 2008, the change in opinions of adults, Canadian-born, residents of Quebec, supporters of liberals and conservatives contribute significantly to the shift in positive attitudes towards immigration between these two years.

Next, we will investigate how these results change in the face of an economic depression led by the financial crisis between 2008 and 2010, during which positive attitudes towards immigration declined sharply.

Table 3. Decomposition of Change in Attitudes Towards Immigration in Canada Between 1998 and 2008

	Characteristics Effect (E)		Coefficients Effect (C)	
	Coefficient 0.042**	**Percent** 20.0	**Coefficient** 0.164**	**Percent** 80.0
Variables				
Elementary	0.007**	3.2	-0.003	-1.5
Some high school	0.008*	3.8	0.016	7.6
Graduated high school	0.007**	3.2	0.003	1.2
Community college/vocational/trade school/CEPEG	-0.004**	-2.0	-0.008	-3.9
Some university	0.001	0.5	-0.009	-4.3
Completed University	0.008**	4.0	0.006	3.0
Post-graduate university	0.018**	8.7	0.004	1.9
Youth (18-24)	-0.0001	-0.1	-0.007	-3.3
Adults (25-64)	-0.0003	-0.1	0.028	13.6
Seniors (65 years and over)	0.00001	0.0	0.002	1.2
Canadian	-0.00003	-0.1	0.07**	33.5
Immigrant	0.00001	0.0	-0.012**	-5.6
Atlantic	0.00003	0.0	-0.001	-0.7
Québec	-0.003*	-1.2	0.029*	13.8
Ontario	0.0003	0.1	-0.0005	-0.2
Manitoba and Saskatchewan	0.00002	0.0	-0.005	-2.3
Alberta	-0.0003	-0.1	-0.002	-0.9
British Columbia	-0.001	-0.5	0.001	0.6

Self-employed	0.000001	0.0	-0.004	-1.7
Full-time	0.0004	0.2	0.018	8.7
Part-time	-0.003	-1.0	0.009	4.4
Unemployed	0.005*	2.3	-0.011*	-5.5
Student	0.001	0.5	0.001	0.3
Retired	-0.0002	0.0	0.005	2.6
Homemaker	-0.002	-0.8	0.007	3.3
Man	-0.0007	0.0	0.01	4.8
Woman	-0.0007	0.0	-0.01	-4.7
Stronger	0.002	1.2	-0.006	-2.9
Weaker	0.002	0.8	0.018	8.4
Staying Same	-0.003	-1.2	0.001	0.3
Liberals	-0.004	-1.8	0.033	15.8
Conservatives	-0.002	-0.8	0.025	11.8
Bloc Québécois	0.001	0.4	0.007	3.3
Other	0.002	0.8	-0.002	-1.2
Constant	-	-	-0.045	-21.4

* $p < 0.05$, ** $p < 0.01$

Decomposition of the Decline in the Positive Attitudes 2008-2010

The positive trend of attitudes towards immigration was interrupted by a steep decline of more than seven percentage points during the financial crisis years (2008-2010). Therefore, the sign of the coefficients here should be interpreted accordingly. For instance, as we examine in detail below, a negative coefficient in the decomposition analysis should be interpreted as a contribution to positive attitudes, while a positive coefficient indicates a contribution to negative attitudes.

In the pre-financial crisis period, we stated that both the characteristics and the coefficients effects work in the same direction, increasing positive attitudes. However, one should note from the top rows of Table 4 that, while the characteristics effect leads to a rise in the positive attitudes, the coefficient effect works in the opposite direction. Its effect is so significant relative to the characteristics effect that it dominates the characteristics effect and explains the entire decline in the positive attitudes. A detailed examination of the change in characteristics effect informs us that the change in the composition of the education levels between 2008 -2010 led to rising positive attitudes by 16.2%. Once we examine the education groups individually, the change in the composition of the 'University graduates' contributes to this finding the most (11.6%) and 'some high school' follows by 4.7%. This result is consistent with the one that occurred in the earlier period 1998-2008 since the share of 'university graduates' in the population increased while the share of 'some high school' continued to decline. As in the previous period, the change in the composition of the other groups plays no significant role in explaining the shift in attitudes in this period.

Next, we focus on the change in coefficients effect that highlights the striking negative impacts of the financial crisis on the positive attitudes of different sub-groups. Except for the elementary school graduates (the smallest sub-group in our sample), the attitudes of all education sub-groups became less positive in this period (see Table 4). In fact, the declines in the positive attitudes of 'some high school' and 'post graduates' are the highest and thus they have the highest impact on the negative change in the attitudes (20.7% for 'post graduates' and 8.4% for 'some high school'). One interesting finding to note here is that the decline in the positive attitude of the community college graduates is small relative to other education subgroups. Therefore, it counteracts against the overall negative change in attitudes.

Looking at the life cycle variables and immigrations status, we observe drastic changes relative to the previous period. Note first that the negative change in the opinions of the adult

population contributes to the decline in positive attitudes by 38.7%. A similar result obtains for the Canadian born whose attitudes became less positive in this period, contributing to the decrease in positive attitudes by 17.9%. Another important finding that contradicts the previous period is the opinions of Ontario and Quebec residents. In this period, they become less supportive and explain the negative change in attitudes by 18.7% and 21.5%, respectively. This result might arise because the core of financial sectors is mainly in these provinces, and thus the impact might be felt more deeply.

Focusing on the job status variable, we find that the negative change in the opinions of the part-time workers and homemakers contributes the most to the negative change in the attitudes by 11.4% and 6.8 percent, respectively. Here, it is interesting to note that the negative change in the opinion of the unemployed group does not contribute to the negative change in attitudes. This stems from the positive attitude of 'unemployed' was at the lowest among all groups in 2008. Thus, the rate of decline in the positive attitudes during 2008-2010 was small relative to the other job status groups.

Table 4. Decomposition of Change in Attitudes Towards Immigration in Canada Between 2008 and 2010

	Characteristics Effect (E)		Coefficients Effect (C)	
	Coefficient 0.015**	**Percent** -19.9	**Coefficient** -0.089**	**Percent** 119.9
Variables				
Elementary	0.001	-0.7	0.002	-3.3
Some high school	0.004**	-4.7	-0.006	8.4
Graduated high school	-0.001**	1.2	-0.002	3.2
Community college/vocational/trade school/CEPEG	-0.001	0.7	0.023*	-31.2
Some university	-0.0003	0.4	-0.002	2.7
Completed University	0.009**	-11.6	-0.001	1.4
Post-graduate university	0.001**	-1.4	-0.015	20.7
Youth (18-24)	-0.0004	0.6	0.007	-9.7
Adults (25-64)	0.001	-0.8	-0.029	38.7
Seniors (65 years and over)	-0.001	0.8	-0.005	6.7
Canadian	0.0001	0.2	-0.013	17.9
Immigrant	0.0001	0.2	0.002	-2.9
Atlantic	0.0003	-0.5	0.004	-6.0
Québec	0.00002	0.0	-0.016	21.5
Ontario	0.0003**	-0.4	-0.014	18.7
Manitoba and Saskatchewan	-0.001*	0.7	0.003	-3.8
Alberta	0.0002	-0.2	-0.002	3.3
British Columbia	0.0001	-0.2	0.003	-4.6
Self-employed	-0.001**	1.2	0.013*	-17.0
Full-time	0.0001	0.1	-0.004	5.7
Part-time	0.001	-1.2	-0.008	11.4
Unemployed	-0.001	0.9	0.003	-4.7
Student	-0.001	0.5	-0.002	2.7
Retired	-0.0004	0.2	-0.001	1.8
Homemaker	0.0005	-0.6	-0.005	6.8
Man	-0.001**	0.9	0.007	-9.2
Woman	-0.001**	0.9	-0.007	9.1
Stronger	-0.001	1.8	-0.0001	0.2
Weaker	0.003*	-3.8	-0.008	10.8
Staying Same	0.001	-1.3	0.012	-16.9

|				
Liberals	0.0004**	-0.5	0.016	-22.2
Conservatives	0.001**	-1.2	-0.025*	34.2
Bloc Québécois	0.001	-1.5	0.004	-5.5
Other	0.0002	-0.3	-0.003	4.0
Constant	-	-	-0.02	27.1

* p<0.05, ** p<0.01

As expected, people who perceived the Canadian economy as weaker became less positive towards immigration during this period, contributing to the negative change by 10.8%. Finally, supporters' opinions of all political ideologies became less positive during this period. However, the decline in the positive attitude of conservatives is much more significant relative to liberals, and thus this explains the negative change in attitudes by 34.2%. By contrast, liberal supporters resist the impact of the financial crisis regarding their positive attitudes towards immigration.

All these findings above imply that the financial crisis had a deep impact on the shift of attitudes towards immigration. However, the effects of the financial crisis on adults, Canadian-born, residents of Quebec and Ontario, part-time workers, individuals who perceived the Canadian economy as weaker, and supporters of conservatives are more notable relative to others. We should note that the change in the opinions of most of these groups played a significant role in the shift of positive attitudes in the previous period.

Decomposition of the Recovery in the Positive Attitudes 2010-2021

During this period, the positive attitudes toward immigration rebounded and increased by %11 marking a sharp change compared to the financial crisis years. Relative to the financial crisis period, the directions of the characteristics and coefficients effects reversed in the post-financial crisis period. While the characteristics effect leads to a decline in the positive attitudes, the coefficients effect counteracts in a very dominant way and explains the entire increase in the positive attitudes (Figure 5.1). In order to explain why the recovery period differs from the previous two periods in terms of the characteristic effect, we considered in more detail the role of different characteristics.

Figure 5.1. A shift in positive attitudes towards immigration in Canada, 1998-2021
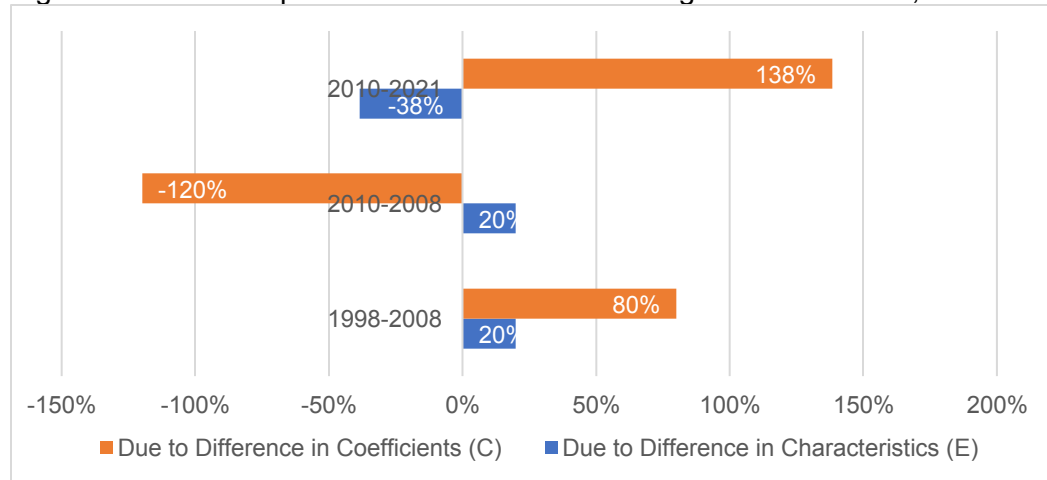
Our results inform us that, unlike the last two periods, the change in the composition of the education levels between 2010-2021 led to a fall in the positive attitudes by 3.7%. This surprising result can be explained by examining the individual education groups: it is evident from

Table A1 that the proportions of the 'post graduates' and 'some university" have declined in this period, leading to a significant change in the composition of education levels. We underline here that this could be a feature of the sample. The proportions by education attainment may vary in the survey but not in the population leading to this peculiar result[3].Thus, these declines in the composition of education levels lower the positive attitude the most (-6.3%, -4.9%, respectively). Here, it is worth mentioning that the change in the composition of university graduates still leads to the rise in positive attitudes (8.8%). The change in the composition of other factors does not significantly explain the positive change in attitudes. Besides the compositional change in the education groups, the increase in the proportion of the respondents with 'weaker' economic perceptions led to a 20.6% decline in positive attitudes.

Next, we turn to the coefficient effect. Our results indicate that the positive attitudes of all education groups have risen except for the elementary school graduates. However, we should note here that the increases in the positive attitudes among 'University graduates' and 'community college graduates' are more limited relative to other education groups, which leads to our main result in deriving the contribution of each education group. While larger positive changes in the opinions of 'graduated high school,' 'some university' and 'post graduates' explain the positive change in attitudes towards immigration by 3.7%, 8.2% and 2.2%, respectively, smaller changes in positive attitudes among 'University graduates' and 'community college graduates' hamper the rise in the positive attitudes. It is important to emphasize that this result obtains although the positive attitude towards immigration among university graduates is the second-highest among all education groups in 2021. The intuition behind why this seemingly contradictory result arises can be explained. The magnitude of the rise in the positive attitudes among university graduates falls well below those in the other education groups. Therefore, the increase in the positive attitudes of university graduates hinders the shifts in positive attitudes rather than contributing to it.

Figure 5.2. Shift in Positive Attitudes - Difference in Coefficients (%)
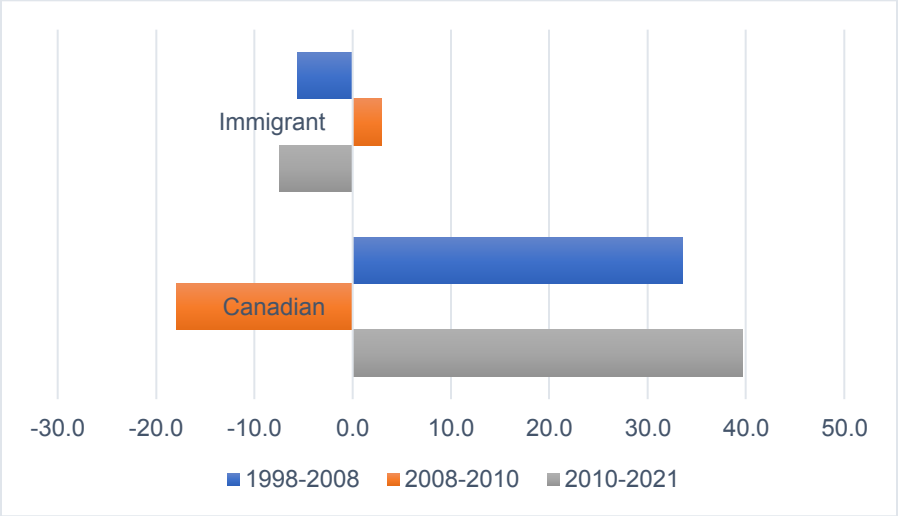
Our analysis shows that some groups' attitudes fluctuate more than others with the economic cycle - more ups and downs - whereas others are less affected. Unlike the financial crisis period, the positive opinions of the native-born Canadians increased sharply and showed

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[3] For further information see Statistics Canada. Table 37-10-0130-01 Educational attainment of the population aged 25 to 64, by age group and sex, Organisation for Economic Co-operation and Development (OECD), Canada, provinces and territories

similar (even more substantial) impact as in the initial period: it contributed 39.6% to the overall change in positive attitudes measured by the coefficients effects (Figure 5.2) The opinions of Ontario and Quebec residents have rebounded after the financial crises as well and became more positive towards immigration, contributing to the rise in positive attitude by 8% and 7%. Focusing on job status gives us a similar picture of the positive attitudes of full-time employees. While their attitudes contributed negatively to the financial crisis period, the change in their views led to a rise in the positive attitudes by 21% in the post-financial crisis period. Furthermore, although the decline in the positive opinions of women in 2008-2010 is greater relative to men, the increase in women's positive attitude surpassed the ones of men in 2010-2021. We find that the positive change in women's opinions towards immigration explains 22.5% of the change in the positive attitudes.

Figure 5.3. Shift in Positive Attitudes - Difference in Coefficients (Economic Perception, %)
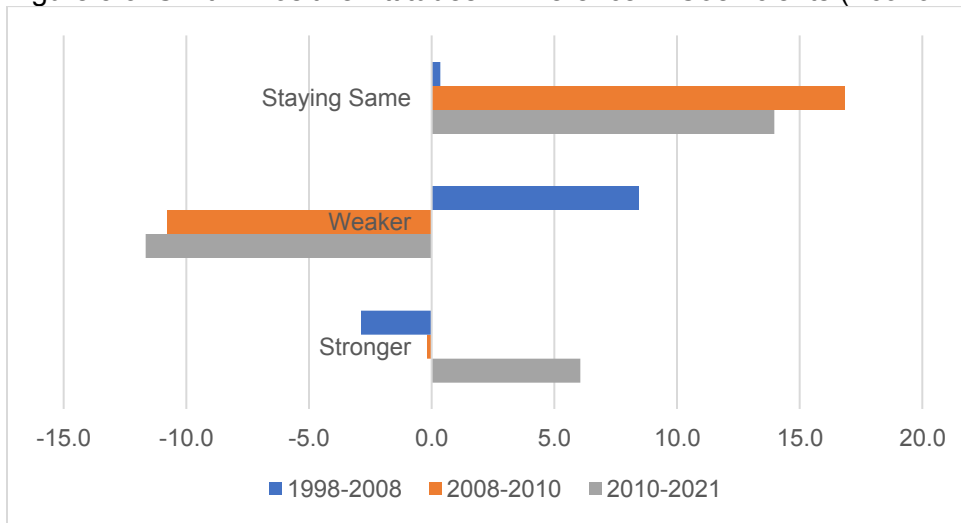
On the other hand, the impacts of views of some groups on aggregate positive attitudes have remained unchanged relative to the financial crisis period. For example, the opinions of the group with 'weaker' economic perceptions continue to deteriorate in post-financial crisis. Thus it counteracts the trend of the rise in positive attitudes (-11.7%) (Figure 5.3). A similar pattern is observed for conservative supporters whose negative contribution to positive attitudes continues to hold in post-financial crisis (-13.8%) (Figure 5.4). Finally, as in all periods, regardless of the financial crisis, we find that the change in the positive opinions of liberals contributes significantly to the overall change in positive attitudes (14.4% in 2010-2021).

Figure 5.4. Shift in Positive Attitudes - Difference in Coefficients (Party Support, %)
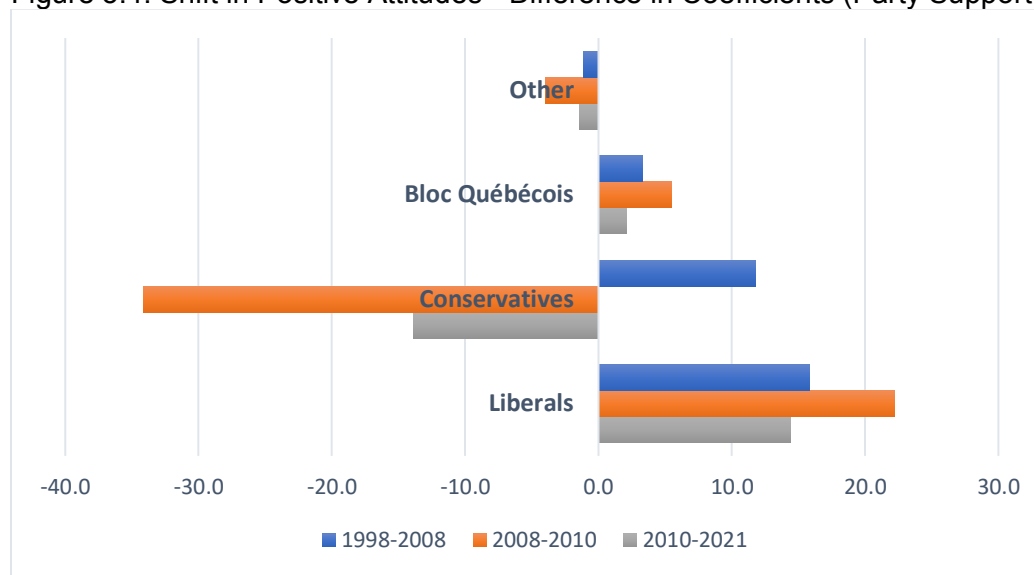
Table 5. Decomposition of Change in Attitudes Towards Immigration in Canada Between 2010 and 2021

	Characteristics Effect (E)		Coefficients Effect (C)	
	Coefficient	**Percent**	**Coefficient**	**Percent**
	-0.043**	-38.4	0.157**	138.4
Variables				
Elementary	0.001**	0.9	-0.002	-1.5
Some high school	0.0003	0.1	0.004	3.6
Graduated high school	-0.004	-3.4	0.004	3.7
Community college/vocational/trade school/CEPEG	0.001	1.0	-0.008	-6.8
Some university	-0.006	-4.9	0.009	8.2
Completed University	0.01	8.8	-0.009	-7.5
Post-graduate university	-0.007	-6.3	0.002	2.2
Youth (18-24)	-0.001	-0.5	-0.001	-1.0
Adults (25-64)	0.003	3.0	-0.0004	-0.3
Seniors (65 years and over)	-0.002	-1.5	0.002	1.8
Canadian	-0.003	-3.0	0.045*	39.6
Immigrant	-0.003	-3.0	-0.008*	-7.4
Atlantic	-0.001	-0.5	-0.0003	-0.2
Québec	-0.001	-0.9	0.008	7.0
Ontario	-0.001	-0.7	0.009	8.2
Manitoba and Saskatchewan	0.0001	0.1	-0.004	-3.3
Alberta	-0.0001	-0.1	0.002	1.4
British Columbia	-0.0002	-0.2	-0.001	-0.7
Self-employed	0.001	1.2	-0.008	-7.3
Full-time	-0.003*	-2.7	0.024	21.4
Part-time	-0.00004	0.0	0.003	2.6
Unemployed	-0.001*	-0.6	-0.003	-2.3
Student	0.0003	0.2	-0.003	-3.1

Retired	0.002	1.4	0.017	14.9
Homemaker	0.0001	-0.1	0.001	1.2
Man	-0.0003	-0.3	-0.024**	-21.4
Woman	-0.0003	-0.3	0.025**	22.5
Stronger	-0.004*	-3.5	0.007	6.1
Weaker	-0.023**	-20.6	-0.013*	-11.7
Staying Same	-0.006	-5.6	0.016	14.0
Liberals	0.006**	5.1	0.016	14.4
Conservatives	-0.0002**	-0.2	-0.016	-13.8
Bloc Québécois	-0.002	-2.0	0.002	2.1
Other	0.001	0.5	-0.002	-1.4
Constant	-	-	0.061	53.5

* p<0.05, ** p<0.01

Discussion and Conclusion

Canadian attitudes toward immigration are unique and atypical relative to many other developed nations (Simon & Sikich, 2007; Citrin et al., 2012; Harell et al., 2012; Foran, 2017). While the attitudes towards immigration have become more positive over the last three decades in Canada, this paper shows that this trend is not immune to changes in economic conditions, such as the 2008-2010 financial crisis. Unlike the existing literature, this paper uses a logit regression model and a decomposition analysis in three distinct periods: pre-financial crisis period (1998-2008), financial crisis period (2008-2010) and post-financial crisis period (2010-2021). Our analysis delivers two important messages. First, from our logit analysis, we find that the factors that determine the positive attitudes have varied considerably across years. Second, our detailed decomposition analysis yields that the financial crisis deeply impacted the factors that contributed to the shift in positive attitudes. These findings are critical to fully understanding the dynamics of the change in opinions towards immigration and its role in the shift in attitudes in Canada over time. In addition, the analysis shows that, while attitudes towards immigration, in general, become more favourable after the financial crisis, the opposition to immigration among specific groups becomes more visible.

The logit regression results lead us to make some general points regarding the determinants of positive attitudes towards immigration. We first show that residents with the highest education levels (University graduates and higher) are more likely to have more positive attitudes towards immigration regardless of the years. This finding provides support for the consensus in the existing literature that shows a positive relationship between education level and positive attitudes (see Wilkes et al. 2008; Wilkes, R., and Corrigall-Brown 2011; Bilodeau et al. 2012; Citrin et al. 2012 and Banting & Soroka 2020).

In our lifecycle analysis, we find evidence only in 1998 that 'adults' are more likely to have less positive attitudes relative to 'youth' while there is no evidence of such differences between 'youth' and 'senior.' This result extends support for the argument that there is not much of a generational replacement effect as indicated by Norris & Inglehart (2019). This finding provides partial support to Wilkes and Corrigall - Brown (2011) and Banting and Soroka (2020), that find a negative association between age and positive attitudes. It is not full support since such a relationship arises only in 1998 and does not hold when seniors are taken into consideration.

The evolution of the coefficient on native-born Canadians relative to immigrants provides interesting insights. Consistent with Wilkes and Corrigall - Brown (2011), we find that native-born Canadians were less likely to have positive attitudes towards immigration in 1998. However, we see an exactly opposite result in 2021, lending support to Besco (2020) and Bilodeau et al. (2012) that argue the attitudes of native-born Canadians have become increasingly positive

We find no evidence of differences across regions regardless of the years except for 'Ontario' in 2010. In that year, residents of Ontario are more likely to have less positive attitudes relative to the Atlantic region. Unlike this result, Bilodeau et al. (2012) find significant differences across all ten provinces on views toward immigration. We should emphasize here that, unlike the present paper, Bilodeau et al. (2012) focus on the native-born *white* population.

Gender analysis points to attitudinal differences between men and women only in 2008 and 2010. In those years, women are more likely to have less positive attitudes than men. These findings are consistent with Bilodeau et al. (2012) and Banting & Soroka (2020) that women are less likely to hold positive attitudes toward immigration than men. However, in the later periods, this result does not necessarily hold, and it supports Dražanová's (2020) meta-analysis, which shows gender is not a significant factor in most studies based on many different countries (p. 14).

Our results on job status deliver interesting insights. Except for 2008 and 2021, there is no evidence that job status impacts positive attitudes. However, we find evidence in 2008 and 2021 that unemployed people are less likely to have more positive attitudes towards immigration relative to full-time employees. Using data covering the periods between 1987 and 2008, Wilkes and Corrigall-Brown (2011) argue that there is no statistically significant relationship between job status and positive attitudes. We find the same result in our initial period, but unlike Wilkes and Corrigall-Brown (2011), this paper covers later years, and we find an attitudinal difference between 'unemployed' and 'full-time employed' in 2008 and 2021, as mentioned above. The intuition behind this result can be explained as follows. It is worth noting that, while the unemployed respondents are more likely to have less positive attitudes relative to full-time employed in all periods, this difference became more significant in 2008 and 2021 and not significant in the financial crisis period. This might stem from the impact of the recent pandemic. Our findings are also related to the existing literature that points to mixed results regarding the relationship between job status and attitudes towards immigration. Based on the labour market competition theory, the residents of the host country in the labour market might see immigrants as a threat to their employment income/opportunities (Mayda, 2006). However, Malhotra et al.(2013) argue in detail that the link between employment status and opposition to immigration via labour market threat is questionable.

From our logit regression results on public perceptions of the strength of the economy, we can argue that respondents with weaker economic perceptions are more likely to have less positive opinions relative to respondents with stronger economic perceptions in 1998 and 2021. During the financial crisis, the positive attitudes towards immigration declined for all groups, converging with each other. Therefore, we do not find evidence of such differences in the financial crisis years. These results significantly contribute to Canadian literature. Even though the existing research in Canada shows evidence of a relationship between the economic conditions and public attitudes towards immigration (see Wilkes et al. 2008; Wilkes & Corrigall-Brown 2011; Banting & Soroka 2020), it might fail to hold for the pandemic years. While the unemployment rate and the decline in the GDP growth reached their peaks of the last two decades in Canada (see Statistics Canada. Table 36-10-0222-01 & Table 14-10-0327-01), the public attitudes towards immigration stay positive.

On the other hand, our logit analysis in 2021 shows that the gap in positive attitudes between respondents with stronger economic perceptions and those with weaker economic perceptions became wider and statistically significant. Our findings suggest that the individual perception of the strength of the economy is a significant factor in explaining the attitudes, especially for 2021. But further analysis should be pursued to clearly understand whether the change in the individual perspectives of economic conditions or the change in the macroeconomic conditions (i.e. unemployment rate) better predict attitudes towards immigration in Canada (see Kuntz et al., 2017 analysis for European countries).

Finally, our logit analysis on the political ideology implies that conservatives are more likely to have less positive attitudes toward immigration than liberals in all years except for 2008.

Interestingly, this difference in attitudes between liberals and conservatives became more pronounced after 2008. These results lend support to the findings of Wilkes et al. (2008), Banting and Soroka (2020) and Besco (2021). Moreover, the period after the early 2000s marks a different period of party competition in Canada, with a new Conservative Party on the right that combined two parties (Reform and Progressive Conservative) and a defeated Liberal Party than ultimately fell into third place for the first time in history (in 2011). These dynamics may have opened up new opportunities for immigration to be mobilized as a more salient political issue to partisans than in earlier periods.

Another exciting result is that there is no evidence of an attitudinal difference between liberals and Bloc Québécois supporters. This result goes against the findings in Besco (2021) that points to the similarities of the immigration restrictions views between the Bloc Québécois supporters and the supporters of the Conservative Party. Environics survey dataset shows that even relative to the conservatives, Bloc Québécois supporters were more likely to have more negative attitudes towards immigration in 1998. However, the attitudes of Bloc Québécois supporters have become more positive relative to conservatives in 2008 and thereafter. Note that the gap between the supporters of Bloc Québécois and conservatives widened, especially after 2010 (see Table A3). At the same time, this implies that the differences in the positive attitudes towards immigration between the supporters of liberals and the Bloc Québécois narrowed over these years. This coincides with two developments in Québec: the increase in economic confidence in the province and the decline in support for Québec's independence (sovereignty). Both of these could have played a role in shifting the views of Bloc supporters (in each case, it is a decline in perceived threat).

As stated above, our decomposition analysis significantly contributes to the existing literature. First, it provides a detailed analysis of what proportion of the shift of the attitudes towards immigration in Canada stems from the change in the composition of the population (i.e., characteristics effect) and the change in the opinions of the population (i.e., coefficients effect) over three distinct periods. The central message of our analysis is that, regardless of periods, it is the change in the public opinions that matters the most in explaining the shift in the attitudes towards immigration in Canada. In fact, the change in attitudes is entirely explained by the change in the public opinions in the financial crisis and post-financial crisis periods. An interesting finding is that the change in the composition of education levels is the primary contributor to the characteristics effect and leads to a rise in positive attitudes in the initial periods. This positive contribution is higher for the initial period and declines afterwards. This result may suggest that the education level of the society had already greatly improved and reached its upper limit, helping to the shift in positive attitudes in the initial periods, and marginal improvements in the composition of education levels would no longer contribute to the shift in positive attitudes.

In the post-financial crisis period, the composition of respondents regarding the perceptions of the strength of the economy plays a primary role in the characteristics effect, counteracting the rise in positive attitudes. We should note here that the 2020-21 pandemic might also contribute to this result, given that many economic indicators have worsened, leading to greater proportions of respondents having 'weaker' perceptions of the strength of the economy.

The coefficient effect of the decomposition results gives information on the role of the change in public opinions towards immigration. A striking finding in our analysis is that, in the pre- and post-financial crisis periods, the positive changes in the views of native-born Canadians were the most important contributors to the increase in positive attitudes. However, the attitudes of native-born Canadians became less positive in the financial crisis years and contributed to the decline in positive attitudes. Our decomposition analysis takes Besco (2021)'s findings on the evolution of the attitudes of immigrants and native-born Canadians and goes one step further, providing additional insight for the shift in positive attitudes.

The second major contributor to the shift in positive attitudes in pre-financial crisis is the supporters of liberals and conservatives. However, this positive opinion change among the

supporters of conservatives does not explain the positive change in the attitudes for the periods of the financial crisis and post-financial crisis. In these periods, our results lend strong support to Besco (2021) in that the 'liberal' group leads the positive changes in the attitudes towards immigration. This is a critical finding informing us that a downturn in economic conditions affects the opinions of conservative supporters more negatively, whereas the change in the positive views of liberals contributes significantly to the rise in positive attitudes during and post-financial crisis periods.

The other important factor that explains the positive shift in the pre-financial crisis period is the change in the opinions of the adult population. However, with the financial crisis, the change in adults' views became reversed, pushing down the positive attitudes. This negative impact continued in the post-financial crisis, but the effect was not as strong as the financial crisis. The proportion of unemployed among adults is significantly higher relative to other groups. Thus, the impact of the financial crisis might be more severe on the change in their opinions. A similar pattern is observed for the regions. In the initial period, the attitudes of the residents of Quebec became drastically more positive and contributed the most to the change in positive attitudes. However, during the financial crisis, the opinions of both the residents of Ontario and Québec have become less positive. This fact explains a large portion of the decline in the positive attitudes towards immigration (much higher in Québec). Finally, in the post-financial crisis period, the opinions of Ontario and Québec residents rebounded, becoming more positive towards immigration, contributing to the rise in positive attitudes. Another interesting result is that in all three periods, change in positive attitudes of the full-time employees contributes to the shift in positive attitudes while the opposite holds for the 'unemployed' in pre-and post-financial crisis periods. Opposite to expectations, the change in attitudes of 'unemployed' does not play any significant role in the decline in positive attitudes during the financial crisis. This stems from the decrease in the positive attitudes towards immigration are lower for the unemployed respondents relative to the ones fully employed during the financial crisis period.

Finally, our decomposition analysis informs us that all groups with different economic perceptions became more supportive of immigration in the initial period. However, the change in the opinions of respondents with 'weaker' viewpoints is stronger relative to others. and thus explains the most significant portion of the increase in positive attitudes. The financial crisis led to an expected outcome: people with 'weaker' economic perceptions became less supportive, contributing significantly to the decline in positive attitudes. This result confirms the findings of Kuntz et al. (2017, p. 407) in the European context where they find that "the change in *subjective* economic conditions of individuals (measured by perceptions of economic insecurity) can be consequential for the formation of attitudes toward immigrants in times of economic crisis as the one experienced in 2008 in Europe." This effect seems to continue in the post-financial crisis period, and opinions of the group with 'weaker' economic perceptions and the others diverge from each other, and it counteracts the trend of the increase in positive attitudes in Canada. It is critical to note that the pandemic might have important implications for economic perceptions.

Next, we turn to the question of whether Canada is an exception compared to other western democracies regarding public attitudes towards immigration? The results of this paper underline that, on the one hand, Canada might not be an exception compared to other western democracies when it comes to public attitudes towards immigration during the financial crisis period (Hatton, 2016; Kuntz et al.,2017; Isaksen, 2019). For example, higher educational attainment has a strong positive effect, whereas being unemployed and conservatives have a negative impact on public attitudes towards immigration both in Canada and other western countries (Hatton, 2016; Kuntz et al.,2017). On the other hand, however, the impact of native-born on attitudes is different between Canada and others. While being native-born has a large negative effect in European countries, such as Sweden and Germany, before and after the economic crisis (Hatton, 2016), the negative impact of Canadian-born on positive attitudes disappears after 1998 and becomes positive in 2021. Even though our analysis shows that positive attitudes of specific groups

(conservatives, unemployed, and the respondents with 'weaker' economic perceptions) have not reached their pre-financial crisis period level, we do not find evidence of the long-term impact of the financial crisis on the positive attitudes for the whole population as observed in some European countries (Isaksen, 2019).

Focusing on the effect of cultural concerns on attitudes can be an essential avenue for future research that might help separate the impact of economic and cultural concerns on attitudes over the years in Canada (see Card et al., 2012). Moreover, the implications of the change in the party system in the 2000s as well as the evolution of the Canadian (and Québec) identity in the post-1995 period on the attitudes towards immigration would contribute to the literature.

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Appendix

Focus Canada Survey Descriptive Data

Table A1. Independent Variables by years (% share in the population, weighted data)

	Survey Years			
Gender	**1998**	**2008**	**2010**	**2021**
Man	51	50	49	50
Woman	49	50	51	50
Lifecycle	**1998**	**2008**	**2010**	**2021**
Youth (18-24)	13	10	10	9
Adults (25-64)	70	75	74	66
Seniors (65 years and over)	17	15	17	25
Highest level of education/schooling completed	**1998**	**2008**	**2010**	**2021**
Elementary	5	2	1	1
Some high school	17	7	5	5
Graduated high school	23	14	15	21
Community college/vocational/trade school/CEPEG	23	30	27	20
Some university	9	12	11	6
Completed University	13	18	23	33
Post-graduate university	10	17	18	14
Born in Canada	**1998**	**2008**	**2010**	**2021**
No	14	14	16	21
Yes	86	86	84	79
Current Job Status	**1998**	**2008**	**2010**	**2021**
Self-employed	5	9	8	13
Full-time	40	45	48	42
Part-time	14	9	7	8
Unemployed	7	4	5	5
Student	6	8	7	4
Retired	21	21	21	25
Homemaker	7	5	4	3
Province	**1998**	**2008**	**2010**	**2021**
Newfoundland & Labrador	2	2	2	2
Prince Edward Island	0	0	1	0
Nova Scotia	3	3	3	2
New Brunswick	2	2	2	2
Québec	27	23	25	22
Ontario	39	38	38	39
Manitoba	4	4	3	4
Saskatchewan	3	3	2	4
Alberta	9	11	10	11
British Columbia	11	14	13	14
Vote	**1998**	**2008**	**2010**	**2021**
The Liberal Party	49	28	29	30
The Conservative Party	13	35	34	27
The New Democratic Party	12	17	16	20
The Bloc Québécois	12	7	10	6
The Green Party	N/A	13	11	6
Peoples Party	N/A	N/A	N/A	7
Other Party	1	0	0	2
Reform Party	13	N/A	N/A	N/A
Total	100	100	100	100

Table A2. Positive Attitudes Toward Immigration by individual groups (%)

	1998	2008	2010	2021
Gender				
Man	47	69	63	68
Woman	44	64	55	73
Lifecyle				
Youth (18-24)	56	69	70	73
Adults (25-64)	45	68	60	70
Seniors (65yearsandover)	40	60	51	72
Highest level of education/schooling completed				
Elementary	29	36	46	41
Some high school	28	54	36	61
Graduated high school	38	58	46	61
Community college/vocational/trade school/CEPEG	44	57	54	63
Some university	66	69	61	77
Completed University	59	80	70	78
Post-graduate university	70	85	70	81
Born in Canada				
No	57	65	59	65
Yes	44	67	59	72
Current Job Status				
Self-employed	63	68	72	67
Full-time	46	68	62	73
Part-time	44	69	53	69
Unemployed	45	48	52	54
Student	65	76	71	73
Retired	39	60	50	72
Homemaker	38	69	47	61
Province				
Newfoundland & Labrador	41	61	55	75
Prince Edward Island	57	70	44	75
Nova Scotia	22	65	72	80
New Brunswick	66	70	75	78
Québec	41	71	64	76
Ontario	48	64	55	69
Manitoba	52	74	70	74
Saskatchewan	61	71	65	63
Alberta	45	66	55	63
British Columbia	44	64	58	69
Aggregate	**46**	**66**	**59**	**70**

Table A3. Positive Attitudes of Canadian Residents Toward Immigration by Party Support (% of each group)

Vote	1998	2008	2010	2021
Liberal (Supports Liberals or NDP)	48	69	64	81
Conservatives (Supports Conservatives, includes Reforms in 1998 and the Peoples Party in 2021)	41	62	50	53
Bloc Québécois	38	68	67	80
Others (Supporters others than liberal, conservatives and Bloc Québécois, includes Green after 1998)	74	68	58	69
Aggregate	**46**	**66**	**59**	**70**

Table A4. Positive Attitudes by Individual Perceptions on Canadian economy (% of each group)

Canadian economy is getting…	1998	2008	2010	2021
Weaker	42	66	55	59
Staying the same	44	65	60	79
Stronger	59	70	61	82
Aggregate	**46**	**66**	**59**	**70**

Table A5. Logistic Regression Tables

	1998	**2008**	**2010**	**2021**
Some high school	-0.0549	0.648	-0.389	0.733
	(0.324)	(0.452)	(0.528)	(0.675)
Graduated high school	0.356	0.695	-0.0277	0.855
	(0.316)	(0.426)	(0.491)	(0.638)
Community college/vocational/trade school/CEPEG	0.617	0.75	0.471	1.049
	(0.316)	(0.416)	(0.481)	(0.640)
Some university	1.406**	1.275**	0.553	1.748*
	(0.360)	(0.447)	(0.502)	(0.685)
Completed University	1.273**	1.783**	1.116*	1.653**
	(0.342)	(0.433)	(0.488)	(0.638)
Post-graduate university	1.693**	2.164**	1.110*	1.914**
	(0.373)	(0.443)	(0.491)	(0.654)
Adults (25-64)	-0.478*	-0.0512	-0.568	-0.508
	(0.203)	(0.283)	(0.314)	(0.391)
Seniors (65 years and over)	-0.334	-0.026	-0.518	-0.392
	(0.315)	(0.342)	(0.358)	(0.422)
Born in Canada/Canadian	-0.532**	0.2	0.0544	0.620**
	(0.201)	(0.190)	(0.174)	(0.181)
Québec	-0.195	0.365	-0.238	-0.0509
	(0.232)	(0.240)	(0.229)	(0.272)
Ontario	-0.211	-0.129	-0.583**	-0.435
	(0.207)	(0.216)	(0.204)	(0.239)
Manitoba and Saskatchewan	0.47	0.223	0.14	-0.171
	(0.242)	(0.263)	(0.269)	(0.326)
Alberta	-0.00113	-0.0114	-0.404	-0.304
	(0.254)	(0.260)	(0.252)	(0.296)
British Columbia	-0.269	-0.131	-0.299	-0.312
	(0.257)	(0.255)	(0.243)	(0.283)

Table A5. Logistic Regression Tables (Continues)

	1998	2008	2010	2021
Self-employed	0.501	-0.0329	0.687**	-0.115
	(0.323)	(0.220)	(0.240)	(0.218)
Part-time	0.0613	0.148	-0.268	-0.321
	(0.197)	(0.237)	(0.234)	(0.303)
Unemployed	0.22	-0.734*	-0.229	-0.792*
	(0.252)	(0.333)	(0.278)	(0.322)
Student	0.463	0.307	0.227	-0.309
	(0.292)	(0.345)	(0.347)	(0.520)
Retired	-0.132	-0.222	-0.209	-0.0568
	(0.242)	(0.187)	(0.183)	(0.215)
Homemaker	0.0908	0.302	-0.136	-0.206
	(0.259)	(0.295)	(0.317)	(0.503)
Woman	-0.0628	-0.24	-0.367**	0.16
	(0.128)	(0.128)	(0.125)	(0.144)
Staying the same	-0.401*	-0.227	-0.0942	-0.122
	(0.199)	(0.156)	(0.159)	(0.236)
Weaker	-0.486*	-0.167	-0.293	-0.787**
	(0.189)	(0.174)	(0.187)	(0.232)
Conservative (Supports Conservatives, includes Reforms in 1998 and the Peoples Party in 2021)	-0.371*	-0.187	-0.700**	-1.135**
	(0.153)	(0.143)	(0.140)	(0.158)
Bloc Québécois	-0.211	-0.194	-0.102	-0.166
	(0.237)	(0.272)	(0.240)	(0.345)
Others (Supporters others than liberals, conservatives, and Bloc Québécois; includes Green Party supporters after 2003)	1.127	-0.0439	-0.323	-0.596*
	(0.653)	(0.202)	(0.204)	(0.258)
Constant	0.583	-0.232	1.198	0.796
	(0.472)	(0.547)	(0.624)	(0.788)
Observations	1,369	1,577	1,546	1,497
chi2	126.5	111.8	118.9	192.1
p	0.000	0.000	0.000	0.000

Standard errors in parentheses
* $p<0.05$, ** $p<0.01$