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# Are the gaps in labour market outcomes between immigrants and their Canadian-born counterparts starting to close?



by Eden Crossman, Feng Hou and Garnett Picot

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# Research article

# Are the gaps in labour market outcomes between immigrants and their Canadianborn counterparts starting to close?

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#### **Abstract**

Earlier studies have well documented the expanding earnings gap between new immigrant workers and their Canadian-born counterparts during the 1980s and 1990s. However, significant policy changes in immigration selection and settlement have been introduced since the early 2000s, and the employment rate and entry earnings among new immigrants have been improving in recent years. Little research has been undertaken to examine whether the earnings gap between new immigrant and Canadian-born workers has recently started to close. This paper compares the employment rate and the weekly earnings of immigrant and Canadian-born workers throughout the 2000s and 2010s. It is based on information from the censuses from 2001 to 2016 and information from the Labour Force Survey from 2015 to 2019. Analyses are conducted for new immigrants (in Canada for 1 to 5 years), recent immigrants (in Canada for 6 to 10 years) and long-term immigrants (in Canada for over 10 years). Over the 2000-to-2019 period, the employment rate for new and recent immigrant men grew faster than for Canadian-born men, and the relative employment position of new immigrant women also improved slightly. The earnings gap between immigrant workers and Canadian-born workers with similar sociodemographic characteristics widened between 2000 and 2015, with both years posting similar national unemployment rates. In the late 2010s, there was some improvement in the earnings gaps for immigrant men and women relative to their Canadian-born counterparts. This improvement may be related to the rising demand for labour during these years, since relative labour market outcomes for immigrants tend to improve during expansions and to deteriorate during contractions. It may also be related, in part, to the increased tendency to select economic immigrants from the pool of temporary foreign workers. This has been shown to improve both entry earnings and longer-term earnings.

Keywords: immigration, employment rate, earnings gap

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#### Introduction

Previous studies have well established that the earnings of new immigrants relative to those of their Canadian-born counterparts declined dramatically between the late 1970s and early 1990s and somewhat stabilized between the early 1990s and early 2000s (Aydemir and Skuterud 2005; Frenette and Morissette 2005; Green and Worswick 2010; Hou 2013; Hou and Picot 2016; Picot and Sweetman 2012; Reitz 2007a, 2007b; Sweetman 2010). With a few exceptions (e.g., Clarke, Ferrer and Skuterud 2019), little systematic research has been undertaken to examine how the gap in labour market outcomes between new immigrants and the Canadian-born population has evolved since the early 2000s. Some studies have examined changes in the employment rate and earnings of new immigrants in the 2000s and the early 2010s. After the early 2000s, their entry earnings started to increase, primarily because a rising share of new immigrants had acquired Canadian work experience as temporary foreign workers (Hou, Crossman and Picot 2020b). But whether the earnings gap between entering immigrant workers and Canadian-born workers was finally starting to close, following a quarter-century of decline and stability, is relatively unknown. Furthermore, there has been little, if any, recent research on the earnings gap between other more established immigrants and their Canadian-born counterparts.

The favourable economic conditions throughout much of the 2000s and 2010s and significant policy changes in immigration selection might have helped improve immigrant outcomes relative to those for Canadian-born workers. With the exception of the 2008/2009 recession, labour demand was generally strong, particularly in the years prior to the COVID-19 pandemic, as indicated by the historically low national unemployment rates. Furthermore, considerable policy changes—primarily as responses to previous research findings on deteriorating outcomes among new immigrants—have been implemented to improve labour market outcomes for new immigrants and to increase the responsiveness of immigration to labour market demand (see Ferrer, Picot and Riddell 2014; Reitz, Curtis and Elrick 2014). Have these favourable conditions led to narrowing gaps in labour market outcomes between immigrants and their Canadian-born counterparts?

This paper addresses this question by comparing the employment rates and earnings of immigrants and their Canadian-born counterparts throughout the 2000s and 2010s. It relies on information from the censuses from 2001 to 2016 and uses information from the Labour Force Survey to extend the analysis up to 2019, the year before the pandemic-induced recession. Results have been produced for new immigrants (in Canada for 1 to 5 years), recent immigrants (in Canada for 6 to 10 years) and long-term immigrants (in Canada for over 10 years). Descriptive and multivariate analyses have also been conducted separately for men and women.

# Changing gaps in economic outcomes between immigrants and the Canadian-born population, and possible explanations

## **Explaining the trends in immigrant entry earnings**

Previous research on the decline in immigrant entry earnings throughout the 1980s and 1990s focused on the shift in immigrant source regions and language, the declining returns to foreign experience, and the general deterioration in outcomes for labour market entrants (Picot and Sweetman 2012; Reitz 2007*a*, 2007*b*). Research on immigrant labour market outcomes since the early 2000s has emphasized the role of supply and demand, particularly the labour market conditions in Canada (Hou, Lu and Schimmele 2020.

The first major factor that underlies the deterioration in the labour market outcomes of recent immigrants is the changing characteristics of immigrants to Canada, in particular, the shift in source countries of immigration from Europe and the United States to other regions. Immigrants from less developed regions may have lower income levels during their early years in Canada since, initially, their human capital may be less transferable as a result of potential issues related to language, cultural differences, education quality and discrimination (Ferrer, Green and Riddell 2006; Goldmann, Sweetman and Warman 2011; Picot and Hou 2003). Compositional changes had the most negative effect on immigrant entry earnings before the 1990s, when a large shift from traditional source regions to non-Western source countries occurred, yet the education levels of new immigrants increased only slightly (Hou 2013; Reitz 2001). Since the 1990s, any negative effect of the continuing small shift in source regions has likely been offset by the rapidly rising education levels among new immigrants. This resulted from new policy initiatives, adopted in the early 1990s, to select more highly educated immigrants (Picot and Hou 2009).

The second reason for the decline in earnings is related to a significant fall in the return to pre-immigration labour market experience. Green and Worswick (2010) found that a decline in the returns to foreign work experience was a main factor for the decline in entry earnings among immigrant men in the 1990s. Both Aydemir and Skuterud (2005) and Green and Worswick (2012) found that the decline in returns to foreign work experience was associated with the shift away from traditional source countries. The decline in returns to foreign work experience was observed primarily among new immigrants from non-traditional source countries.

The third major factor that may have influenced the immigrant entry earnings gap is some long-term changes in labour market conditions that affected both Canadian-born and immigrant workers (Picot and Sweetman 2012). Green and Worswick (2010) found that the broader deterioration in earnings for new labour market entrants had a stronger effect on the decline in immigrant men's entry earnings in the 1990s than in the 1980s. It is likely that this factor has become less important since the late 1990s. The outcomes for new labour market entrants—particularly young men, among whom the decline was largely observed—had stopped deteriorating during the late 1990s and the early 2000s (Morissette 2008).

It is also possible that more competition from an increasingly highly educated Canadian labour force contributed to the worsening economic outcomes for more recent immigrants. Over the 1970s and 1980s, the education level rose more among the Canadian-born population than among new immigrants, increasing competition for immigrants (Reitz 2001). In the 1990s and 2000s, the large increase in the supply of highly educated immigrants, combined with the continuing increase in the number of highly educated Canadian-born workers, may have further changed the nature of competition in the labour market (Picot and Hou 2009). Hou, Lu and Schimmele (2020) showed that only about one-half of the growth in university-educated workers from 2001 to 2016 was matched with growth in jobs requiring a university education. As a result, university-educated recent immigrants became more concentrated in jobs requiring less than a university education.

The impact of supply and demand is clearly exemplified by the information technology (IT) boom in the late 1990s and its bust in the early 2000s. A number of studies (e.g., Hou 2013; Picot and Hou 2009) demonstrated that the decline in employment in the IT sector during the first half of the 2000s had a large impact on the earnings of recent immigrants. The reason behind this was that a disproportionately high share of recent immigrants was trained and employed in computer sciences and engineering. After the meltdown of the IT sector, many immigrants were working in lower-skilled and generally lower-paying occupations. Similarly, the absence of a general shortage of science, technology, engineering and math (STEM) workers has been listed as a possible reason for the low education—occupation match among STEM-educated immigrants relative to their Canadian-born counterparts (Picot and Hou 2018).

#### Changing selection environment for economic immigrants

Earlier studies have shown that policy changes and, to some extent, economic conditions tend to alter immigrants' demographic characteristics, admission-class distribution and source regions, and their share holding jobs in Canada before landing, as well as their geographical region of settlement (Hou and Picot 2016). Such changes may have resulted in their enhanced labour market outcomes relative to their Canadian-born counterparts since the early 2000s. The Canadian labour market has also tightened considerably since the 2008/2009 recession, and this may have improved immigrants' relative labour market outcomes.

In the early 2000s, the selection system was revised under the *Immigration and Refugee Protection Act*. The points allocated to higher levels of education were increased, and the English and French language requirements and tests were strengthened. Entry earnings of immigrants did increase as a result of these changing characteristics (Citizenship and Immigration Canada 2010). In the late 1990s and 2000s, significant changes in settlement policies were also introduced to address employment barriers experienced by skilled immigrants, including improvement in foreign-credential assessment and recognition, and new settlement programs, such as licensing regulation, bridge training and mentoring, and increased spending on general settlement programs (e.g., language training, orientation, translation, interpretation and counselling) (Reitz, Curtis and Elrick 2014).

Beginning in the early 2000s, there were increasing concerns regarding the ability of the immigration system to respond to short-term occupational skill shortages. To mitigate these concerns and achieve other goals (e.g., meeting the needs of provinces in population growth and labour demand), some existing programs were expanded and new ones created (Hou and Picot 2016). A greater share of immigrants was selected via the Provincial Nominee Program (PNP), particularly in the West. Studies have shown PNP principal applicants earn more than their Federal Skilled Worker Program counterparts during their first few years in Canada (Hou, Crossman and Picot 2020*c*; Pandey and Townsend 2013). The Canadian Experience Class, which allows international students with Canadian work experience or temporary foreign workers to become landed immigrants under certain circumstances, was also created in 2008. A new Federal Skilled Trades Program was also established in 2013 to address areas of the labour market experiencing growth and to improve outcomes by putting more emphasis on practical experience rather than on formal education.

Between 2008 and 2014, a series of ministerial instructions were implemented to improve the responsiveness of economic immigration programs to perceived occupational demand and to restrict the numbers of applications. Beginning in 2010, Federal Skilled Worker Program and Canadian Experience Class principal applicants became subject to mandatory language testing. Regulatory changes to the Federal Skilled Worker Program also came into effect in mid-2013 to strengthen language and education credential requirements for economic immigrants. This included new minimum language requirements and mandatory assessments of foreign educational credentials. A recent major change to economic immigrant selection was the introduction, in 2015, of the "Express Entry" application management system. The objective was to transform Canada's immigration system into one that would be more responsive to labour market demand by providing federal, provincial and territorial governments and employers with opportunities to access a pool of skilled workers.

Another factor with the potential to contribute positively to immigrants' relative economic outcomes in recent years was the increasing trend towards "two-step" immigration selection. That is, economic immigrants to Canada are increasingly selected from the pool of temporary foreign workers (Hou, Crossman and Picot 2020a). Immigrants with pre-landing Canadian work experience (particularly those with high levels of earnings) have superior post-migration labour market outcomes relative to those selected directly from abroad (Hou, Crossman and Picot 2020b; Hou and Bonikowska 2018; Sweetman

and Warman 2014). The expanding two-step immigration selection was estimated to be more important than any other single factor in accounting for the improvement in immigrant economic outcomes at entry since 2000 (Hou, Crossman and Picot 2020*b*).

Beyond changes to immigrant selection, favourable economic conditions also give reason to expect relative labour market outcomes of immigrants to have improved after 2010. Immigrants' economic outcomes tend to be more sensitive to the business cycle than those of their native-born counterparts, particularly with regard to employment, but also with earnings (Borjas and Cassidy 2020; Orrenius and Zavodny 2010). Economic booms therefore hasten immigrants' progress, while recessions slow it down. While this occurs among both immigrants and native-born workers, the effect tends to be larger among immigrants (particularly those who are the least educated) (Orrenius and Zavodny 2010).

#### Data and methods

#### **Data**

This study uses microdata files from the 2001, 2006 and 2016 Census of Population and the 2011 National Household Survey as the main data sources, and uses the 2015 to 2019 Labour Force Survey (LFS) to extend the analysis up to 2019. Previous studies comparing labour market outcomes between immigrants and the Canadian-born population were almost exclusively based on census data, which have both advantages and limitations relative to other data sources. The census data have large sample sizes and comprehensive sociodemographic characteristics. Although the LFS provides more detailed labour market activity measures than the census, the survey's sample size for new immigrants is much smaller. More critically, the LFS started to collect information on immigration status in 2006, which is less desirable as a starting year than 2000 (the year for which income information was collected in the 2001 Census) to study the long-term trend in the gap in labour market outcomes between immigrants and Canadian-born workers. As a result of the 2001 IT bust, immigrants arriving in the early 2000s experienced a larger earnings gap relative to Canadian-born workers, as measured in 2005, than immigrants who arrived in the late 1990s, as measured in 2000 (Hou 2013; Picot and Hou 2009). The census data allow for the examination of the long-term trends between 2000 and 2015, the first and final years of which had similarly low national unemployment rates (6.8% in 2000 and 6.9% in 2015) and high employment rates (61.3% in both years). However, for the period covered by both the census and the LFS (i.e., from 2005/2006 to 2015), the changes in the gap in the employment rate and earnings based on the two datasets are similar. Thus, it is reasonable to use the LFS to extend the analysis from 2015 (2016 for employment) to 2019.

This study compares new immigrants (in Canada for 1 to 5 years), recent immigrants (in Canada for 6 to 10 years) and long-term immigrants (in Canada for over 10 years) with Canadian-born individuals. The analysis focuses on individuals in the core age range of 25 to 54 years. Immigrants who arrived during the census or survey year are excluded from all the analyses. Earnings information in the census refers to the data obtained from the year prior to the census year. Accordingly, in the analysis on earnings using census data, immigrants who arrived in the year prior to the census are also excluded, because they might not have had a full year to participate in the labour force.

<sup>1.</sup> The sample size for immigrants who arrived one to five years prior to the census and were aged 25 to 54 years was 165,800 in the 2016 Census, but only 20,300 in the 2016 LFS 12-month combined file. Furthermore, only about one-fifth of the yearly LFS sample is unique individuals, because the LFS follows a rotating panel sample design, in which households remain in the sample for six consecutive months.

#### **Measures**

The study uses two outcome measures to examine the gap in labour market outcomes between immigrants and their Canadian-born counterparts. The first outcome measure is the employment rate, defined as the percentage of employed individuals among the total population in the selected age range. The employment status is measured using the census reference week in the census and the reference week in each monthly LFS. The second outcome measure is weekly wages among individuals whose weekly wages are at least \$10 (in 2015 constant dollars).<sup>2</sup> Individuals who were not employed or who had weekly wages of less than \$10 are excluded, since they are considered as only marginally attached to the labour market.<sup>3</sup> Weekly wages over \$6,000 are top-coded as \$6,000. In the census, weekly wages are derived from annual total wages or salaries divided by total weeks worked. Hence, weekly earnings from the census refer to earnings during the calendar year prior to the census. In the LFS, weekly wages are either self-reported directly or calculated from usual wage rates and usual paid work hours per week, and refer to usual weekly earnings during each monthly reference week.

For the multivariate analysis, several individual-level sociodemographic characteristics are included as control variables: age, highest level of education, language, visible minority status,<sup>4</sup> province of residence and city size. Highest level of education is categorized into five groups: less than high school, high school graduation, some postsecondary education, bachelor's degree and graduate degree. Language has six categories: English mother tongue, French mother tongue, other mother tongue and speak English and French, other mother tongue and speak English, other mother tongue and speak French, and does not speak English or French. The visible minority status variable is a dichotomous variable (visible minority vs. non-visible minority). City size has six categories: Toronto, Montréal, Vancouver, mid-sized census metropolitan areas (Ottawa–Gatineau, Calgary, Edmonton, Hamilton and Winnipeg), other census metropolitan areas, and not a census metropolitan area. Two additional control variables are specific to immigrants: years since landing and immigrant source region. Immigrant source regions are classified into 13 categories: the United States, the Caribbean, Central and South America, Northern Europe, Western Europe, Southern Europe, Eastern Europe, Africa, South Asia, Southeast Asia, East Asia, West Asia, and Oceania and other.

#### **Methods**

Descriptive statistics are initially produced to show changes in the employment rates and weekly earnings by immigration status from 2001 to 2016 with census data (2000 to 2015 for earnings), and from 2016 (2015 for earnings) to 2019 with LFS data, for individuals aged 25 to 54. A descriptive table is also produced to show changes in sociodemographic characteristics by immigration status.

Multivariate regression models are constructed to examine changes in the gaps in the employment rate and weekly earnings between immigrant groups and the Canadian-born population between 2001 and

<sup>2.</sup> Weekly earnings do not capture any disadvantage that new immigrants may encounter in securing full-time, full-year jobs. The gap in annual earnings between new immigrants and their Canadian-born counterparts tended to be larger than the gap in weekly earnings. However, there were similar trends for both gaps.

<sup>3.</sup> In the study sample for 2016, 18.8% of Canadian-born men had no wages, and 0.3% had weekly wages less than \$10. The corresponding numbers were 22.2% and 0.3% for new immigrant men, 22.7% and 0.3% for Canadian-born women, and 39.1% and 0.2% for new immigrant women.

<sup>4.</sup> Language and visible minority status are not available in the LFS. Note that, beginning in July 2020, the LFS includes information on the labour market conditions of population groups designated as visible minorities.

2016 using the census data, and between 2016 and 2019 using LFS data. For each outcome measure, and for men and women separately, two models are specified:

#### Model 1:

$$Y = \beta_1 * T + \beta_2 * \text{newimm} + \beta_3 * \text{recimm} + \beta_4 * \text{ltimm} + \beta_5 * \text{newimm} * T + \beta_6 * \text{recimm} * T + \beta_7 * \text{ltimm} * T + e$$

#### Model 2:

$$Y = \beta_1^* T + \beta_2^* \text{ newimm} + \beta_3^* \text{ recimm} + \beta_4^* \text{ ltimm} + \beta_5^* \text{ newimm} T + \beta_6^* \text{ recimm} T + \beta_7^* \text{ ltimm} T + \beta_7^* X + \beta_7^* Z + e$$

Where Y refers to the outcome measure (employment rate or weekly wages), T refers to the time period (0 for the beginning year and 1 for the ending year). Newimm, recimm, and Itimm are dummy variables that represent new immigrants, recent immigrants and long-term immigrants, respectively, with their Canadian-born counterparts as the common reference group. X represents control variables common to both immigrants and Canadian-born workers, while Z represents variables specific to immigrants (years since landing and source region).  $\beta_s$  refers to the regression coefficients. In particular,  $\beta_5$ ,  $\beta_6$  and  $\beta_7$ , in Model 1, represent the observed changes in the gap in the outcome measure for new immigrants, recent immigrants and long-term immigrants relative to Canadian-born workers;  $\beta_5$ ,  $\beta_6$  and  $\beta_7$ , in Model 2, represent the estimated changes in the gap after adjusting for differences in sociodemographic characteristics. Thus, the differences  $\beta_5 - \beta_5$ ,  $\beta_6 - \beta_6$ , and  $\beta_7 - \beta_7$  represent the portion of the change in the outcome gap that is accounted for by the included control variables—the "explained" component in the conventional Oaxaca decomposition.

Following a simplified inter-temporal decomposition approach (Hou 2013), the explained changes in the outcome gap can be further decomposed into the contribution of each control variable, e.g.,

$$\beta_5 - \beta_5^* = \beta_x * (\Delta X_{t1} - \Delta X_{t0}) + \beta_z * (Z_{t1} - Z_{t0})$$

Where  $\Delta X_{t0}$  indicates differences in sociodemographic characteristics between new immigrants and their Canadian-born counterparts at the beginning of the period (e.g., 2001), and  $\Delta X_{t1}$  indicates differences in characteristics between new immigrants and Canadian-born workers at the end of the period (e.g., 2016). In addition,  $Z_{t0}$  indicates immigrant-specific characteristics at the beginning of the period, while  $Z_{t1}$  indicates immigrant-specific characteristics at the end of the period.

#### Results

# Changes in the employment rates and earnings gaps between immigrants and their Canadian-born counterparts

Table 1 presents employment rates by immigration status in the years between the 2001 and 2016 censuses, and in 2016 and 2019, estimated from the LFS.

Throughout the 2001-to-2019 period, the gaps in the employment rate among new and recent immigrant men, relative to Canadian-born men, were considerably reduced.<sup>5</sup> The gaps narrowed because the employment rate increased substantially among new and recent immigrant men, while it changed little among Canadian-born and long-term immigrant men (Table 1). Among new immigrant men, the employment rate increased by 4.6 percentage points from 2001 to 2016, and another 1.0 percentage point from 2016 to 2019. The employment rate among recent immigrant men increased 2.8 percentage points from 2001 to 2016, and another 3.8 percentage points from 2016 to 2019.

Table 1
Employment rates by immigration status, population aged 25 to 54

		Er	nploym	ent rat	es		Differe	nce wit	h Cana	dian-bo	rn counte	rparts
		Cen	sus		LF	S		Cen	sus		LFS	;
	2001	2006	2011	2016	2016	2019	2001	2006	2011	2016	2016	2019
			per	cent				p	ercenta	age poir	nts	
Men												
Canadian-born	85.7	86.4	85.1	84.1	85.2	87.0	0	0	0	0	0	0
New immigrants	77.2	80.8	79.5	81.9	83.1	84.1	-8.5	-5.6	-5.5	-2.2	-2.1	-2.9
Recent immigrants	83.2	86.1	85.9	86.0	85.7	89.5	-2.5	-0.4	0.9	1.9	0.5	2.5
Long-term immigrants	87.5	87.4	85.5	86.1	86.6	88.1	1.7	1.0	0.4	2.0	1.4	1.1
Women												
Canadian-born	76.4	78.5	79.2	80.0	81.2	83.3	0	0	0	0	0	0
New immigrants	56.5	59.3	59.3	61.1	57.8	60.1	-19.9	-19.2	-20.0	-19.0	-23.4	-23.2
Recent immigrants	66.9	68.6	68.2	68.5	67.6	72.4	-9.5	-9.9	-11.0	-11.5	-13.6	-10.9
Long-term immigrants	75.8	76.1	74.9	75.9	75.3	78.5	-0.6	-2.4	-4.3	-4.1	-5.9	-4.8

Note: LFS refers to the Labour Force Survey.

**Sources:** Statistics Canada, 2001, 2006 and 2016 Census of Population; 2011 National Household Survey, and 2016 and 2019 Labour Force Survey.

There was little change in the employment rate gap between new immigrant women and their Canadianborn counterparts throughout the 2001-to-2019 period, because the two groups experienced a similar increase in employment rates (Table 1). The relative employment rates among recent and long-term immigrant women deteriorated from 2001 to 2016, then partially recovered from 2016 to 2019. Employment rates for new and recent immigrant women were well below the rate for Canadian-born

<sup>5.</sup> These are cross-sectional results and, therefore, do not refer to the same cohort of immigrants as they acquire more years of residency in Canada and are followed longitudinally through time. Cross-sectional and longitudinal results can be quite different.

women over the entire period. Long-term immigrant women experienced a marginally lower employment rate than Canadian-born women in 2001, but the gap increased to 4.8 percentage points in 2019.

Table 2
Average weekly earnings by immigration status among employees aged 25 to 54

		Avera	ge wee	kly ear	nings		Di		e with	Canad rparts	ian-bor	'n
		Cen	sus		LF		Cen	LFS				
	2000	2005	2010	2015	2015	2019	2000	2005	2010	2015	2015	2019
	2015 constant dolla				ars				perd	ent		
Men												
Canadian-born	1256	1299	1386	1461	1205	1205	0	0	0	0	0	0
New immigrants	1003	959	1092	1108	890	955	-20.1	-26.2	-21.2	-24.2	-26.1	-20.7
Recent immigrants	1022	1128	1252	1239	985	1060	-18.6	-13.1	-9.6	-15.2	-18.3	-12.0
Long-term immigrants	1298	1285	1359	1411	1150	1170	3.3	-1.1	-1.9	-3.4	-4.6	-2.9
Women												
Canadian-born	871	912	1025	1075	925	965	0	0	0	0	0	0
New immigrants	709	685	812	806	670	735	-18.6	-24.8	-20.8	-25.0	-27.6	-23.8
Recent immigrants	754	804	931	908	710	765	-13.4	-11.8	-9.1	-15.6	-23.2	-20.7
Long-term immigrants	916	934	1043	1088	865	920	5.2	2.5	1.8	1.2	-6.5	-4.7

Note: LFS refers to the Labour Force Survey.

**Sources:** Statistics Canada, 2001, 2006 and 2016 Census of Population; 2011 National Household Survey; and 2016 and 2019 Labour Force Survey.

In contrast to the improvement in their relative position with respect to the employment rate, new immigrant men experienced a widening gap in weekly earnings; they earned 20.1% less than their Canadian-born counterparts in 2000, increasing to 24.2% less in 2015. While earnings rose for both groups, the gap expanded because the increase in earnings was faster for Canadian-born men than for new immigrant men (Table 2). Deterioration in relative earnings was also observed for long-term immigrant men. From 2000 to 2015, only recent immigrant men saw a slight improvement in their earnings gap relative to Canadian-born men. Throughout the 2015-to-2019 period, however, weekly earnings did not change among Canadian-born men but increased among the three male immigrant groups. Consequently, relative to their Canadian-born counterparts, weekly earnings of immigrant men largely deteriorated throughout the 2000-to-2015 period, followed by some improvement between 2015 and 2019.

Immigrant women also experienced broadly similar changes. Throughout the 2000-to-2015 period, the relative (to Canadian-born women) earnings of all three groups of immigrant women deteriorated (Table 2). The negative earnings gaps experienced by new and recent immigrant women expanded, and the small earnings advantage that long-term immigrant women held over Canadian-born women disappeared. From 2015 to 2019, these relative earnings losses turned around somewhat, and all three groups of immigrant women saw their earnings gap narrow relative to Canadian-born women.

The results reported above are based on the census up to 2016 and the LFS up to 2019. As a robustness check, the trends in the earnings gaps between new immigrants (in Canada for one to five years) and Canadian-born workers were produced for the 2000 to 2017 period using alternative data sources, the Longitudinal Administrative Databank and the Longitudinal Immigration Database (IMDB). The overall trend in the change in the earnings gap observed from the alternative sources was very similar to that

reported above, based on the census and the LFS. The IMDB allows for an analysis by immigrant category of admission (e.g., economic principal applicants, the spouses and dependants of economic principal applicants, the family class, and refugees). Little difference among admission categories was observed for the trends in the earnings gaps for new immigrants between 2000 and 2017.

#### Results of multivariate analysis

The observed trends noted above could be partially driven by changes in sociodemographic characteristics among Canadian-born workers and immigrants. Table 3 presents changes in the selected characteristics, by immigration status, between 2001 and 2019. Considerable change occurred among immigrants in terms of education levels, language, visible minority status, source region and geographic distribution.

Over the study period, the education level increased at a slower pace among Canadian-born men and new immigrant men than among recent and long-term immigrant men. Among women, the education level increased faster for all three immigrant groups than for their Canadian-born counterparts.

The changes in language profile differed between new immigrants and long-term immigrants. From 2001 to 2016, the share of individuals with English or French as a mother tongue increased among new immigrants, particularly among men (Table 3). This was likely the result of more stringent requirements for official language ability in the selection of economic immigrants. In comparison, the share of individuals with English or French as a mother tongue decreased among recent immigrants (men) and long-term immigrants, reflecting the longstanding shift in immigrant source regions.

There were significant changes in the geographical distribution of new and recent immigrants within Canada. Over the 2001-to-2019 period, the high concentration of new and recent immigrants in Ontario and British Columbia declined because proportionately more of them settled in the Prairie Provinces (Alberta, Saskatchewan and Manitoba). Corresponding to the changes in the geographical distribution at the provincial level, the share of new and recent immigrants settling in the Toronto and Vancouver census metropolitan areas decreased, while the share in smaller census metropolitan areas increased.

Table 3 Sociodemographic characteristics of population groups aged 25 to 54

	Canadian-born		New immigrants			Recent immigrants				Long-term immigrants						
	Cen	sus	LF	s	Cens	sus	LF	S	Cens	sus	LF	s	Cen	sus	LF	s
	2001	2016	2016	2019	2001	2016	2016	2019	2001	2016	2016	2019	2001	2016	2016	2019
								perc	ent							
Men																
Age																
25 to 34	30.3	34.1	35.0	36.3	36.8	38.1	43.7	42.2	31.2	26.9	29.8	32.1	18.6	20.7	21.8	22.5
35 to 44	38.0	31.2	31.2	32.5	41.0	41.5	39.1	42.1	44.0	43.0	43.0	42.6	34.0	29.2	31.1	31.6
45 to 54	31.8	34.7	33.8	31.2	22.2	20.3	17.3	15.7	24.9	30.1	27.2	25.4	47.4	50.1	47.1	45.9
Education																
Less than high school	23.4	12.1	10.1	8.6	13.9	7.0	6.3	5.6	22.1	8.3	5.6	5.8	21.7	11.1	7.1	6.67
High school graduation	40.0	42.4	42.9	41.6	23.8	23.5	20.0	18.9	31.9	25.4	24.9	22.6	34.5	30.7	28.9	27.32
Some postsecondary education	18.6	23.6	23.8	25.0	15.8	17.3	17.6	16.1	18.3	17.8	18.1	17.3	19.4	21.2	21.5	22.29
Bachelor's degree	12.2	15.7	16.5	17.8	23.5	27.9	33.5	34.5	15.9	26.5	29.6	31.4	14.6	23.0	27.0	29.0
Graduate degree	5.7	6.2	6.6	7.0	23.0	24.4	22.6	25.0	11.9	22.0	21.9	23.0	9.8	14.1	15.5	14.7
Language																
Does not speak English or French	0.0	0.0			4.8	4.9			4.7	3.9			1.5	1.8		
Other mother tongue, speak English or French	4.3	4.7			76.3	70.6			74.4	73.5			59.9	68.3		
English or French as a mother tongue	95.7	95.3			18.9	24.5			20.9	22.6			38.6	29.9		
Visible minority	1.8	5.6			71.3	79.5			71.9	76.7			45.6	68.6		
Province																
Atlantic region	9.3	8.0	7.8	7.7	0.9	1.9	2.0	3.3	0.8	1.4	1.5	1.4	1.5	1.0	1.0	0.8
Quebec	27.3	25.4	25.8	25.4	13.8	20.2	21.3	16.7	14.6	19.0	19.7	21.3	12.8	14.2	13.9	14.5
Ontario	33.1	34.2	34.3	34.5	55.9	37.1	37.5	44.7	56.6	43.3	42.4	41.2	55.6	54.9	55.8	55.8
Manitoba	3.8	3.7	3.5	3.4	1.6	5.3	5.4	4.8	1.8	4.0	4.3	4.2	2.8	2.1	1.9	2.4
Saskatchewan	3.5	3.5	3.5	3.5	0.7	3.8	4.6	3.5	0.5	2.0	2.5	3.1	0.8	0.7	0.9	0.8
Alberta	10.8	12.7	13.2	13.6	6.9	17.2	17.5	13.2	7.3	14.7	15.5	14.2	9.4	10.3	10.7	10.7
British Columbia	11.8	12.0	11.8	11.8	20.2	14.4	11.6	13.8	18.3	15.6	14.1	14.5	17.0	16.6	15.9	15.0
City size																
Toronto	10.0	11.2	11.1	11.2	43.5	28.5	29.2	33.3	44.1	33.2	32.4	31.8	36.6	39.9	41.8	42.0
Montréal	11.5	11.4	11.3	11.2	12.2	17.0	17.8	14.1	13.3	16.1	16.3	17.3	11.2	12.2	12.1	12.2
Vancouver	5.1	5.4	5.5	5.3	18.0	11.8	9.2	11.6	15.8	12.9	11.8	12.2	12.0	13.6	13.1	12.8
Mid-sized census metropolitan areas	14.8	16.4	16.1	16.8	13.4	23.1	22.5	18.9	14.0	20.2	21.5	19.9	16.6	16.7	16.8	16.5
Small census metropolitan areas	20.5	21.6	23.5	23.3	8.7	11.3	11.8	14.7	8.5	10.3	11.2	11.5	12.7	10.8	10.5	10.9
Not a census metropolitan area	38.1	34.1	32.6	32.1	4.3	8.4	9.5	7.4	4.3	7.3	6.7	7.2	11.0	6.8	5.8	5.6
Source region																
United States					1.6	1.8	1.6	1.5	1.6	2.0	1.9	1.4	4.9	2.8	2.2	2.4
Caribbean, Central and South America					8.2	10.8	10.9	9.1	13.4	12.2	12.9	9.5	13.1	13.6	13.4	12.5
Northern and Western Europe					6.1	7.0	6.9	5.9	5.6	7.0	6.8	8.0	23.1	9.7	9.1	8.0
Southern Europe					6.2	1.6	1.5	2.6	5.6	1.6	2.1	1.6	16.0	6.3	5.9	4.2
Eastern Europe					9.8	4.4	4.6	3.6	10.1	6.7	5.7	4.9	5.5	7.7	7.9	8.2
Africa					9.0	15.9	14.9	13.3	8.1	13.8	13.4	14.7	5.2	8.2	8.7	9.8
Southern Asia					18.4	20.2	24.6	25.7	15.5	20.3	21.8	21.6	7.4	16.0	16.4	17.7
Southeast Asia					7.5	14.2	15.2	13.5	11.5	10.9	12.2	14.0	10.4	11.0	11.0	10.7
Eastern Asia					23.9	12.8	9.3	10.9	18.6	15.2	13.1	13.2	8.9	14.7	15.7	15.6
Western Asia					8.5	10.3	10.0	12.9	8.9	9.4	9.5	10.5	4.2	9.0	8.8	10.0
net applicable		•••			5.0	10.0	10.0	12.0	5.5	5.7	5.5	10.0	7.2	5.0	- 5.0	.0.0

<sup>...</sup> not applicable.

Note: LFS refers to the Labour Force Survey.

Sources: Statistics Canada, 2001 and 2016 Census of Population; and 2016 and 2019 Labour Force Survey.

Table 3 (continued)

Sociodemographic characteristics of population groups aged 25 to 54

	C	anadia	n-born		New immigrants			Recent immigrants				Long-term immigrants				
	Cen	sus	LF	S	Census LFS			Cen	sus	LF	S	Census LFS			S	
	2001	2016	2016	2019	2001	2016	2016	2019	2001	2016	2016	2019	2001	2016	2016	2019
								perc	ent							
Women																
Age	00.4	00.5	05.0	00.4	40.4	40.0	40.0	F0 F	040	00.0	04.4	00.4	47.7	40.5	40.4	40.0
25 to 34	30.1	33.5	35.3	36.1	43.1	43.3	48.8	52.5	34.0	29.9	34.4	33.4	17.7	18.5	19.1	19.9
35 to 44	38.1	31.2	30.8	32.5	38.9	39.1	37.2	34.2	42.4	43.8	42.0	44.0	34.7	31.8	34.2	33.9
45 to 54	31.9	35.4	33.9	31.4	18.0	17.7	14.0	13.3	23.6	26.4	23.6	22.6	47.6	49.7	46.8	46.2
Education	40.7	0.0			47.0		7.0	0.4	00.0	0.7		- 0	00.0		0.0	<b>5.70</b>
Less than high school	19.7	8.0	6.3	5.1	17.9	7.7	7.0	6.1	22.9	8.7	5.5	5.3	23.0	9.9	6.6	5.78
High school graduation	34.8	29.3	29.2	27.6	25.7	19.2	17.8	14.7	30.9	21.6	18.8	17.2	31.7	26.0	25.0	
Some postsecondary education	26.0	32.0	32.5	32.4	19.9	19.3	19.4	18.2	22.1	21.7	24.0	23.3	23.9	26.4	25.8	
Bachelor's degree	13.9	22.0	22.8	25.0	22.0	32.4	35.5	35.9	15.6	29.5	33.8	35.1	14.1	25.2	29.5	31.9
Graduate degree	5.6	8.7	9.3	10.0	14.6	21.4	20.4	25.2	8.5	18.5	17.9	19.1	7.3	12.5	13.1	13.4
Language																
Does not speak English or French	0.0	0.0			7.8	5.9	•••	•••	6.3	4.7			2.3	2.7		
Other mother tongue, speak English or French	4.5	5.0			73.9	73.1			72.2	75.6			57.2	68.4		
English or French as a mother tongue	95.4	94.9			18.2	21.1			21.5	19.8			40.5	28.9		
Visible minority	1.7	5.4			72.9	82.5			73.7	79.7			46.3	70.1		
Province																
Atlantic region	9.6	8.5	8.5	8.3	0.9	1.8	2.0	2.8	0.7	1.2	1.3	1.2	1.5	1.0	0.8	0.9
Quebec	27.4	25.2	25.5	25.0	12.8	18.7	19.9	18.8	13.1	17.5	18.9	17.9	12.2	13.4	13.8	14.2
Ontario	33.3	34.6	35.0	35.2	55.4	38.8	38.7	41.6	56.2	45.5	44.3	45.5	56.2	55.9	55.6	55.9
Manitoba	3.8	3.7	3.6	3.5	1.5	5.1	5.1	4.0	1.8	3.6	4.0	4.3	2.7	1.9	1.8	2.2
Saskatchewan	3.5	3.5	3.4	3.5	0.6	3.4	4.1	3.2	0.6	1.7	2.5	2.7	8.0	0.7	0.7	0.8
Alberta	10.4	12.2	12.3	12.8	7.0	16.6	17.7	14.7	7.7	13.6	13.9	13.4	9.0	9.8	10.1	10.5
British Columbia	11.7	11.9	11.7	11.7	21.7	15.5	12.4	14.9	19.8	16.8	15.2	15.0	17.5	17.3	17.3	15.5
City size																
Toronto	10.0	11.0	10.7	11.3	43.2	29.9	30.0	31.0	43.8	34.8	33.1	35.0	37.4	40.8	41.7	42.0
Montréal	11.8	11.5	11.0	10.9	11.3	15.8	16.6	16.1	12.0	14.9	16.2	14.7	10.8	11.6	11.8	12.3
Vancouver	4.9	5.1	5.3	5.2	19.3	12.7	9.5	12.1	17.1	14.0	12.7	12.3	12.2	14.0	14.3	12.7
Mid-sized census metropolitan areas	14.7	16.2	15.5	16.4	13.3	22.5	22.9	19.8	14.2	19.3	19.8	19.4	15.9	16.4	16.0	16.5
Small census metropolitan areas	21.1	22.0	24.1	23.8	8.4	10.7	11.3	12.7	8.1	10.0	11.5	11.9	12.4	10.5	10.5	10.5
Not a census metropolitan area	37.6	34.3	33.4	32.5	4.5	8.3	9.7	8.5	4.8	6.9	6.6	6.7	11.3	6.7	5.8	6.1
Source region																
United States					2.1	1.9	1.9	1.9	2.3	2.0	1.6	1.7	6.6	3.2	3.0	2.2
Caribbean, Central and South America					9.5	10.8	10.4	10.0	14.1	11.8	12.9	11.9	15.1	14.6	13.7	13.7
Northern and Western Europe					5.2	4.7	4.8	5.1	5.3	4.8	4.4	4.8	22.5	8.6	8.3	7.0
Southern Europe					5.4	1.1	1.5	1.5	4.4	1.3	1.6	1.2	14.7	5.7	5.4	4.2
Eastern Europe					10.3	5.2	5.6	4.7	10.3	7.0	5.9	5.5	5.3	8.1	8.1	8.5
Africa					7.3	13.7	13.5	13.5	6.7	11.9	12.9	13.4	4.5	7.6	7.5	8.7
Southern Asia					15.8	17.5	19.9	21.9	12.5	18.7	18.9	17.4	7.0	15.1	15.5	15.7
Southeast Asia					11.1	19.1	19.0	16.0	16.7	14.8	16.7	18.3	10.6	12.4	12.7	13.7
Eastern Asia					25.6	16.3	13.0	13.0	20.1	18.7	15.9	15.4	9.4	16.0	16.6	17.1
Western Asia					7.2	9.2	10.2	12.0	6.7	8.6	8.8	9.9	3.1	7.6	8.2	8.5

<sup>...</sup> not applicable.

Note: LFS refers to the Labour Force Survey.

Sources: Statistics Canada, 2001 and 2016 Census of Population; and 2016 and 2019 Labour Force Survey.

Did changing sociodemographic characteristics account for the changing employment rate gaps?

To examine the extent to which changes in sociodemographic characteristics affected changes in the employment rate and weekly earnings gaps between immigrants and their Canadian-born counterparts, multivariate models were constructed, and the results are presented in tables 4 and 5. For ease of comparison, the observed changes in the gaps are also presented.

Table 4 shows the observed and adjusted changes in the employment rate gaps. A negative number indicates that the gap in the employment rate between an immigrant group and its Canadian-born counterpart narrowed (i.e., the immigrant group's relative position improved). For example, the employment rate gap between new immigrant men and Canadian-born men was 8.5 percentage points in 2001, but declined to 2.2 points in 2016 (see Table 1). Thus, from 2001 to 2016, the gap narrowed by 6.3 percentage points (Table 4, the first number under the column "Observed, Census, 2001 to 2016").

Table 4
Changes in the difference in employment rates between immigrants and Canadian-born population aged 25 to 54

	Obser	rved	Adjus	ted								
	Census	LFS	Census	LFS								
	2001 to 2016	2016 to 2019	2001 to 2016	2016 to 2019								
	percentage points											
Men												
New immigrants	-6.3	8.0	-6.6	0.3								
Recent immigrants	-4.4	-1.9	-3.4	-2.2								
Long-term immigrants	-0.3	0.3	-1.5	-0.1								
Women												
Observed												
New immigrants	-0.9	-0.2	-0.5	-0.7								
Recent immigrants	2.0	-2.6	2.6	-2.8								
Long-term immigrants	3.6	-1.1	1.7	-1.6								

**Notes:** LFS refers to the Labour Force Survey. A positive value indicates that the gap in the employment rate between immigrants and the Canadian-born population increased in the study period, while a negative value indicates that the gap decreased. The adjusted results control for age, education, official language and mother tongue, visible minority status, province and city size, and immigrant source region and years since immigration.

Sources: Statistics Canada, 2001 and 2016 Census of Population; and 2016 and 2019 Labour Force Survey.

For the three groups of immigrant men, the adjusted changes in the employment gap were only slightly different from the observed ones. This indicates that changes in sociodemographic characteristics together contributed little to the observed change in the employment gap between immigrants and Canadian-born workers. An analysis of the inter-temporal decomposition shows that changes in different sociodemographic characteristics played different roles in affecting the changes in the employment rate gaps between immigrants and their Canadian-born counterparts. The positive effects of the changes in some characteristics often offset the negative effects of changes in others. For instance, in the 2001-to-2016 period, for new immigrant men, changes in source region (particularly a decreased share from Eastern Asia and Eastern Europe) and the increased share of immigrants who spoke English or French as their mother tongue tended to reduce the employment gap. Simultaneously, more rapid improvement in education among Canadian-born men, along with the increased tendency for new immigrants to live

outside major census metropolitan areas and in provinces with relatively low employment rates, tended to increase the employment gap. The two opposite effects mostly offset each other.

Similar to immigrant men, adjusting for differences in sociodemographic characteristics accounted for little of the observed changes in the employment gaps for immigrant women.

#### What about the changing earnings gaps?

Table 5 presents the observed and adjusted changes in the earnings gap between immigrant groups and Canadian-born workers. As before, a positive value indicates a widened gap, while a negative value indicates a narrowed gap. For instance, new immigrant men earned 20.1% less than their Canadian-born counterparts in 2000 and 24.2% less in 2015 (from Table 2). Thus, the gap increased 4.1 percentage points (the first number, in the first column, in Table 5).

Table 5
Changes in the gap in weekly earnings between immigrants and Canadian-born workers

	Obser	rved	Adjus	ted								
	Census	LFS	Census	LFS								
	2000 to 2015	2015 to 2019	2000 to 2015	2015 to 2019								
		percentage points										
Men												
New immigrants	4.1	-5.4	5.3	-5.8								
Recent immigrants	-3.4	-6.0	6.7	-6.4								
Long-term immigrants	6.7	-1.7	4.1	-2.0								
Women												
New immigrants	6.4	-4.1	7.6	-2.2								
Recent immigrants	2.2	-2.6	8.1	-2.8								
Long-term immigrants	4.0	-1.8	0.9	-2.5								

**Notes:** LFS referes to the Labour Force Survey. A positive value indicates that the eanings gap between immigrants and Canadian-born workers increased in the study period, while a negative value indicates that the gap decreased. The adjusted results control for age, education, official language and mother tongue (census only), visible minority status (census only), province and city size, and immigrant source region and years since immigration.

Sources: Statistics Canada, 2001 and 2016 Census of Population; and 2015 and 2019 Labour Force Survey.

For the three groups of immigrant men, changes in sociodemographic characteristics accounted for little of the observed changes in the earnings gap. This is evident because the adjusted changes in the earnings gap with Canadian-born workers were only slightly different from the observed changes during both the 2000-to-2015 and the 2015-to-2019 periods. The only exception was recent immigrant men, for whom the adjusted earnings gap increased (+6.7 percentage points) significantly between 2000 and 2015, while the observed gap decreased (-3.4 percentage points). This is primarily because, over this period, a much larger increase in educational attainment was observed for recent immigrant men than for Canadian-born men. The adjusted results indicate that, had recent immigrant men's educational attainment increased at a slower rate like that of their Canadian-born counterparts, the earnings gap would have been much larger.

A comparison of the adjusted and observed changes in the earnings gaps between 2000 and 2015 indicates that, for new and recent immigrant women, changing sociodemographic characteristics accounted for none of the deterioration in the observed earnings gaps. In fact, the adjusted earnings

gaps increased more quickly than the observed gaps, mainly because of more rapid improvement in educational attainment relative to Canadian-born women. Changing characteristics accounted for roughly three-quarters of the deterioration in the earnings gap among long-term immigrant women.<sup>6</sup>

Regarding the 2015-to-2019 period, more rapid improvement in the educational attainment of new immigrant women relative to Canadian-born women accounted for about one-half of the improvement in the wage gap for this group. For recent and long-term immigrant women, changing sociodemographic characteristics accounted for little of the improvement in the earnings gap between 2015 and 2019.

Overall, the adjusted results show that, when immigrants are compared with Canadian-born individuals that have similar sociodemographic characteristics, earnings gaps increased for all immigrant groups from 2000 to 2015, but decreased from 2015 to 2019.

For new immigrant and recent immigrant men, the increased earnings gaps in the first period were mostly offset by the decreased gaps in the second period, resulting in little change throughout the 2000-to-2019 period. Among long-term immigrant men, the increase in their earnings gap in the first period was twice as large as its improvement in the second period, resulting in a net increase in the gap over the entire two decades.

When immigrant women are compared with their Canadian-born counterparts, based on the adjusted results, the deterioration in the relative earnings position of new and recent immigrant women was much larger in the first period than was its improvement in the second period, resulting in a general deterioration from 2000 to 2019. Among long-term immigrant women, the improvement in their earnings position in the second period was slightly larger than its deterioration in the first period.

To summarize, for all three groups of immigrant men, changing characteristics accounted for little of the observed change in both the employment rate and the earnings gaps. The results were similar for women, with the exception of the earnings gap associated with long-term immigrant women. When immigrants and Canadian-born individuals with similar characteristics are compared, throughout the 2001-to-2019 period, the adjusted employment rate gaps improved (i.e., decreased) for immigrant men, but changed little for immigrant women. The adjusted earnings gaps deteriorated (i.e., increased) for all immigrant groups between 2001 and 2015, but improved between 2015 and 2019.

### **Conclusion and discussion**

This study examined whether the gaps in the employment rates and weekly earnings between immigrants and Canadian-born individuals increased or decreased over the last two decades. The results showed that the trends differed by outcome measure, by sex and by length of time lived in Canada.

Since new immigrants who have been in Canada for one to five years are generally more subject to the influences of recent immigration selection, movements in the relative position of their labour market outcomes are of particular interest in terms of policy. New immigrant men considerably improved their relative position in the employment rate. Their relative earnings position changed little over the two decades, because the deterioration during the 2000-to-2015 period was offset by the improvement during the period up to 2019. Among new immigrant women, their relative position in the employment rate improved slightly, but their relative earnings position fell further behind that of Canadian-born women with

<sup>6.</sup> The shift in source regions and the increase in the share of visible minorities accounted for most of the observed increase in the earnings gap.

similar sociodemographic characteristics. The considerable widening in their adjusted earnings gap over the 2000-to-2015 period was not offset by the slight improvement during the period up to 2019.

The trends in earnings gaps and employment rates for recent immigrants who have lived in Canada for 6 to 10 years were similar to those for new immigrants. Among recent immigrant men, their relative position in the employment rate improved. Their earnings gap expanded between 2000 and 2015 relative to Canadian-born men with similar sociodemographic characteristics, but narrowed near the end of the 2010s, resulting in little change over the entire study period. Among recent immigrant women, their relative position in the employment rate changed little, because its deterioration in the 2000-to-2015 period was offset by its improvement in the late 2010s. The improvement in their relative earnings position in the late 2010s was not large enough to compensate for its deterioration in the previous period.

The relative position in employment among long-term immigrants who have been in Canada for more than 10 years improved slightly among men, but not among women. Their relative earnings position deteriorated in the 2000-to-2015 period, but more or less recovered up to 2019, resulting in a small decline in the relative earnings position of long-term immigrant men and a small improvement for long-term immigrant women.

Overall, while immigrants' earnings increased, there was little sign of improvement in their earnings gap, relative to their Canadian-born counterparts between 2000 and 2015—two years that had similar national unemployment rates.<sup>7</sup> New and recent immigrants faced a significant earnings gap with their Canadianborn counterparts at the beginning of the study period and, on average, they either maintained their earnings position or fell further behind Canadian-born workers. Differences between immigrant workers and Canadian-born workers in sociodemographic characteristics, and the change in these characteristics over time, generally had little impact on the observed trends in the employment rate and earnings gaps. The lack of improvement in immigrant outcomes throughout this period does not necessarily imply that significant changes in immigration selection and settlement policies did not have positive effects. It is possible that, in the absence of policy changes, new immigrants' relative earnings might have deteriorated. For example, the increased selection of immigrants with pre-landing Canadian work experience did put significant upward pressure on earnings since the early 2000s (Hou and Picot 2016). However, the large increase in the supply of new immigrants, particularly those with a university education, may have put downward pressure on immigrant earnings. The average annual level of immigration rose 28% between the late 1990s and early 2010s, and the number of new immigrants with a bachelor's degree increased 60% between 2001 and 2016. Since new immigrants compete mostly with each other and with longer-term immigrants in the labour market, the large increase in the number of new immigrants would intensify such competition, particularly when the growth in jobs requiring a university education lagged behind the rapid increase in the number of people in the population with at least a bachelor's degree (Hou, Lu and Schimmele 2020).

In the late 2010s, there was some improvement in relative earnings, particularly for new and recent immigrants. This improvement may be related to the rising demand for labour during these years, driven by a low unemployment rate of between 5.7% and 6.3%. Research has shown that the relative labour market outcomes of immigrants tend to improve during expansions and deteriorate during contractions (Borjas and Cassidy 2020). This result may also be related, in part, to the increased tendency to select economic immigrants from the pool of temporary foreign workers; this has been shown to improve entry

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<sup>7.</sup> These two years differed in the gross domestic product (GDP) growth rate: 5.3% in 2000 and 0.8% in 2015. While census data do not allow for the choice of more comparable years, results from the Longitudinal Administrative Databank and the IMDB revealed a similar trend in the earnings gaps of new immigrants relative to a mostly Canadian-born comparison group between 2001 and 2016. The GDP growth rate was 1.6% in 2001 and 1.1% in 2016, while the national unemployment rate was 7.2% in 2001 and 7.0% in 2016.

and longer-term earnings (Hou and Picot 2016; Hou, Crossman and Picot 2020*b*). The late 2010s was also when the "Express Entry" selection system was introduced, although the share of new economic immigrants selected through the new system remained small.

Finally, these results should be placed within the context of recent findings regarding the entry earnings of immigrants. Entry earnings have been improving, particularly among economic immigrants, since around 2005. However, the earnings of their Canadian-born counterparts, which serve as a benchmark indicator of the average earnings growth being generated by the economy, have also been increasing, and, in some cases, at a faster rate. The result has been a stable or increasing gap in immigrant earnings.

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