Catalogue no. 36-28-0001 ISSN 2563-8955

**Economic and Social Reports** 

# Provincial Nominee Program: Recent trends and provincial differences in earnings outcomes



by Garnett Picot, Eden Crossman and Feng Hou

Release date: December 21, 2023



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# **Provincial Nominee Program: Recent trends and provincial differences in earnings outcomes**

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DOI: https://doi.org/10.25318/36280001202301200004-eng

# Abstract

The actual earnings of provincial nominees and their relative earnings (to those of other economic immigrants) are important indicators of the ability of the Provincial Nominee Program (PNP) to meet provincial labour market needs. This paper updates national-level research on the earnings patterns of provincial nominees and, for the first time, provides provincial comparisons. The focus is on the shortand longer-run earnings of PNP principal applicants who entered Canada from 2005 to 2019. Results show that there were significant differences among provinces in the average earnings of provincial nominees. The highest earnings, both at landing and at five to six years after landing, were observed in Ontario, Alberta and British Columbia, and the lowest in the Atlantic provinces, Manitoba and Saskatchewan. A significant proportion of the observed provincial differences in earnings was related to differences in economic conditions and the background characteristics of PNP principal applicants. However, even after accounting for these factors, significant earnings differences across provinces persisted. Results also show that, among the 2005-to-2014 landing cohorts, entry earnings (one to two years after landing) were higher among provincial nominees than immigrants in the Federal Skilled Worker Program (FSWP), but the latter group had faster earnings growth and surpassed provincial nominees after five years. However, the entry earnings advantage of provincial nominees over FSWP immigrants was reversed in the 2015-to-2019 cohort, with higher entry earnings reported by FSWP immigrants than by PNP immigrants. Multivariate analysis shows that factors such as pre-landing Canadian work and study experience, educational attainment, official language ability, source region, age, and unemployment rate in the province of residence explained almost none of the reversal in entry earnings between FSWP and PNP immigrants that occurred with the 2010-to-2014 and 2015-to-2019 landing cohorts. The paper concludes with a discussion of other possible explanations for the decline in actual and relative PNP immigrant earnings, focusing on the implementation of the educational credential assessment and the Express Entry selection system.

Keywords: Provincial Nominee Program, Federal Skilled Worker Program, earnings

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# Acknowledgments

This study was conducted in collaboration with Immigration, Refugees and Citizenship Canada. The authors would like to thank Chris Hamilton and James Townsend for their advice and comments on an earlier version of this paper.

# Introduction

The Provincial Nominee Program (PNP) was initiated in almost all provinces<sup>1</sup> and Yukon from 1996 to 2005. The primary objectives of the PNP are (1) to promote immigrant settlement in provinces and communities outside Canada's three largest cities and (2) to respond to the labour market needs of the provinces. The PNP has expanded rapidly since its inception. In 2019, 35% of all economic immigrants (including principal applicants and spouses and dependants) who landed in Canada came through the PNP—the largest share registered by any single economic immigrant program (Picot, Hou & Crossman, 2023).<sup>2</sup>

The earnings outcomes of provincial nominees are important indicators of the response of the PNP to provincial labour market needs. To this end, this article examines PNP earnings, both in the short and longer term, and draws comparisons with other economic immigrant programs. It further examines the provincial variation in earnings of PNP immigrants, a topic that has received little research attention. There are significant differences among provinces in program criteria, selection methods and economic conditions, which can result in considerable provincial variation in earnings.

# Past research

Early research by Pandey and Townsend (2013) on economic principal applicants entering from 1988 to 2008 concluded that, during their first two years in Canada, provincial nominees generally had higher earnings levels than other economic immigrants. This occurred even though provincial nominees had, on average, lower educational attainment—particularly those in Manitoba. The authors speculated that this may have been partly related to the fact that provincial nominees were more likely to have had a job offer and to be working at the time of landing than other entering economic immigrants, notably those in the Federal Skilled Worker Program (FSWP). The authors also found weak evidence that earnings growth was slower among provincial nominees than among other economic immigrants.

Later work asked why provincial nominees had higher earnings than federal skilled workers during the first few years in Canada. The answer pointed primarily to the difference between programs in the share of new immigrants who were temporary foreign workers prior to landing. Importantly, following landing, former temporary foreign workers tended to economically outperform other economic immigrants who did not have pre-landing Canadian work experience (Hou, Crossman & Picot, 2020a). Pandey and Townsend (2017) showed that male temporary foreign workers had higher average initial earnings as permanent residents than other economic immigrants, controlling for background characteristics.

Hou and Bonikowska (2018) also found that economic immigrants with previous Canadian work experience (i.e., temporary foreign workers) had higher earnings in the initial years after immigration than

<sup>1.</sup> Excluding Quebec, which maintains its own program for selecting and admitting economic immigrants. The Northwest Territories signed an agreement in 2009. Nunavut does not have a PNP.

<sup>2.</sup> The same year, the Federal Skilled Worker Program—the traditional source for economic immigrants—accounted for 30%. The Canadian Experience Class (CEC) accounted for an additional 15%, and the remaining 20% came through other economic class programs (Picot, Hou & Crossman, 2023). The share of PNP immigrants rose to 36% in 2020, but decreased to 21% in 2021, while the share of CEC immigrants increased from 24% in 2020 to 52% in 2022 (authors' calculations based on Immigration, Refugees and Citizenship Canada [IRCC] data, Permanent Residents – Monthly IRCC Updates – Admissions of Permanent Residents by Province/Territory of Intended Destination and Immigration Category, <a href="https://www.cic.gc.ca/opendata-donneesouvertes/data/EN\_ODP-PR-ProvImmCat.xlsx">https://www.cic.gc.ca/opendata-donneesouvertes/data/EN\_ODP-PR-ProvImmCat.xlsx</a>). These changes occurred after 2019 because economic immigrants were selected mostly from temporary foreign workers and international students during the COVID-19 pandemic.

those without. The authors found that this gap decreased substantially over time but persisted. Hou and Picot (2016) reported similar but more nuanced findings for economic immigrants. Temporary foreign workers with medium or high pre-landing earnings experienced higher earnings than those without prelanding Canadian work experience, but this advantage did not apply to temporary foreign workers with low pre-landing earnings. Hou, Crossman and Picot (2020a) found that, between the 2000 and 2016 landing cohorts, the increase in the share of immigrants with pre-immigration Canadian earnings accounted for 94% of the increase in entry earnings. By comparison, changes in source region, education level, official language knowledge and immigration category played a minor role.

Regarding the difference in earnings between provincial nominees and federal skilled workers, Hou, Crossman and Picot (2020b) concluded that the observed initial earnings advantage of PNP over FSWP immigrants was entirely because of a higher share with medium- and high-level pre-immigration Canadian earnings among PNP immigrants (i.e., temporary foreign workers in higher-paying jobs).

Missing from earlier research is an analysis of provincial differences in the earnings of immigrants landing via the PNP. Each province designs its own programs under the PNP to meet specific provincial objectives. Hence, the details of the program vary among provinces (see Picot, Crossman, & Hou, forthcoming). This can result in significant differences among provinces in the background characteristics of provincial nominees, such as their educational attainment, age, occupation, official language skills, whether they had Canadian work or study experience prior to landing, etc. These differences can, in turn, result in some variation among provinces in the economic outcomes of provincial nominees. This article examines whether such differences explain any provincial variation in the earnings of PNP immigrants. Of course, differences among provinces in economic conditions and the demand for lower- or higher-skilled labour can also affect labour market outcomes.

# Data

This study used the Longitudinal Immigration Database (IMDB), which combines the landing records and annual tax information of immigrants (Statistics Canada, 2021). Immigrants who have filed at least one tax return since 1982 are included in the database. The landing records contain immigrant characteristics at the time of landing, including education, age, admission category (e.g., economic class, family class and refugee), source country and self-reported ability to speak an official language. Tax records provide information on annual incomes and place of residence. The most recent IMDB data cover landing information up to 2021 and tax information up to 2020.

The analysis focused on principal applicants in the economic class who were aged 20 to 54 at the time of immigration and arrived in Canada from 2005 to 2019. The starting year was 2005, when the last province (Ontario) signed onto the PNP. About 98% of all economic principal applicants who arrived in the 2005-to-2019 period were aged 20 to 54 at landing. The analysis was further restricted to immigrants who filed income tax in the landing year or the year after, because these years were used to define immigrants' initial province of residence. Initial province of residence is the province of residence at the end of the landing year for immigrants who filed an income tax return in that year, or the province of residence in the year after, for immigrants who did not file taxes in the landing year.<sup>3</sup> Initial province of residence was used to compare earnings outcomes across provinces. The analysis of provincial differences was restricted to principal applicants who arrived from 2010 to 2019, because the number of PNP immigrants was quite small in some provinces prior to 2010, including Ontario. The analysis of

<sup>3.</sup> Among economic immigrant adults (aged 20 to 54 at landing) who arrived from 2005 to 2019 and who filed income taxes in the landing year or the year after, about 93% filed in the landing year. Most immigrants who ever filed taxes after immigration started doing so in the landing year or the year after. For instance, among adult economic immigrants who arrived from 2005 to 2009 and who filed income taxes in the 10 years after immigration, about 94% filed in the landing year or the year after.

earnings included only immigrants who reported at least \$500 (in 2020 constant dollars) in annual earnings in a given tax year.

# Earnings differences among economic immigrants<sup>4</sup>

Between the 2005-to-2009 and 2015-to-2019 landing cohorts, entry earnings<sup>5</sup> among the employed (one to two years after landing) declined among provincial nominees, while increasing among other programs of economic immigrants, including federal skilled workers, Canadian Experience Class (CEC) immigrants and "other" economic immigrants (Table 1). Among the 2005-to-2009 and 2010-to-2014 cohorts, provincial nominees had higher entry earnings than federal skilled workers, but for the 2015-to-2019 cohort, the opposite was the case: average entry earnings among provincial nominees were \$50,100 (2020 constant dollars), compared with \$56,600 among federal skilled workers. Entry earnings of CEC immigrants were significantly higher, at \$72,000, while those of immigrants in "other" economic programs were considerably lower, at \$38,900 (Table 1).

Furthermore, the earnings growth rate following landing was much higher among federal skilled workers than provincial nominees. In both the 2005-to-2009 and 2010-to-2014 cohorts, average earnings grew by around 15% between years 1 to 2 and years 5 to 6 among provincial nominees and by 35% among federal skilled workers. Thus, for the 2010-to-2014 cohort, longer-term earnings were higher among FSWP immigrants (\$61,400) than among PNP immigrants (\$58,900), even though entry earnings were higher among more recent cohorts, where entry earnings were already higher among federal skilled workers. CEC immigrants had significantly higher entry and longer-term earnings than other economic immigrants (Table 1). However, the earnings growth rates between years 1 to 2 and years 5 to 6 were lower for CEC immigrants than for FSWP immigrants.

<sup>4.</sup> A similar analysis was conducted based on the incidence of employment. Anyone with annual earnings exceeding \$500 was considered employed at some time in the year. Hence, part-time and part-year employment is included. The incidence of employment is the number employed divided by the number filing taxes. This could be a slight overestimate of the employment rate. Among the 2015-to-2019 cohort, the entry employment incidence (one to two years after landing) was highest among immigrants in the Canadian Experience Class (96%), followed by the PNP (93%) and FSWP (89%). After adjusting for background characteristics, notably the proportion of people who were temporary foreign workers prior to landing, the differences in entry employment incidence largely disappeared. Similarly, although the longer-term (five to six years after landing) employment incidence was 6 percentage points higher among provincial nominees than federal skilled workers, these differences also disappeared after adjusting for background characteristics. Among immigrants with similar characteristics, there was little difference between the PNP and FSWP. Among the 2015-to-2019 cohort, the entry employment incidence was lower in the Atlantic provinces (85% to 89%) than in other provinces (92% to 96%), excluding Quebec.

<sup>5.</sup> Immigrant earnings in the first one to two years after landing are referred to as "entry" earnings. This term is used throughout this study, even though some immigrants would have worked in Canada prior to landing (e.g., as temporary foreign workers).

Annual earnings among principal applicants in the economic class who were aged 20 to 54 at landing and had earnings

	All economic immigrants	Provincial Nominee Program	Federal Skilled Worker Program 2020 dollars	Canadian Experience Class	Other economic immigrants
One to two years after immigration			2020 0011813		
2005-to-2009 cohort	42,100	56,700	46,000	62,800	31,900
2010-to-2014 cohort	44,600	51,800	44,900	70,800	32,100
2015-to-2019 cohort	52,900	50,100	56,600	72,000	38,900
Five to six years after immigration					
2005-to-2009 cohort	54,800	65,100	61,600	76,100	43,500
2010-to-2014 cohort	56,000	58,900	61,400	81,900	44,500
Ten to 11 years after immigration					
2005-to-2009 cohort	64,500	69,300	72,400	94,400	53,900

Note: Earnings are rounded to the nearest \$100.

Source: Statistics Canada, 2021 Longitudinal Immigration Database.

## **Multivariate analysis**

The observed earnings differences between admission programs and across landing cohorts may partly reflect differences and changes in immigrants' sociodemographic characteristics. For instance, compared with FSWP immigrants, provincial nominees had a smaller share in the landing age group of 40 to 49, a smaller share from South Asia, a higher share from Southeast Asia, a smaller share with a graduate degree, and much higher shares with pre-immigration Canadian work and study experience (Table 2). The differences between PNP and FSWP immigrants in educational levels, age structure, and pre-landing Canadian work and study experience became larger in more recent cohorts (Table 2).

Sociodemographic characteristics of economic immigrant principal applicants by program and landing cohort, age 20 to 54 at landing

	Provincial Nominee Program		Federal Sk	illed Worke	er Program	Canadia	n Experien	ce Class	
	2005-to-	2010-to-	2015-to-	2005-to-	2010-to-	2015-to-	2005-to-	2010-to-	2015-to-
	2009	2014	2019	2009	2014	2019	2009	2014	2019
					percent				
Men	73.6	66.2	64.7	69.6	61.5	57.0	58.4	65.3	64.6
Age at landing									
20 to 29	5.4	3.9	2.4	4.3	4.3	0.5	1.2	1.6	0.9
30 to 39	26.5	32.3	40.5	17.0	16.8	33.5	71.1	50.6	55.4
40 to 49	38.8	41.1	40.4	50.1	53.6	60.5	20.8	38.1	37.2
50 to 54	29.3	22.8	16.7	28.6	25.4	5.6	6.9	9.7	6.5
Official languages									
Not speaking English or French	13.0	6.8	1.4	11.0	8.7	1.4	0.0	0.6	0.1
Other mother tongue, speaking English or French	72.3	81.9	90.7	76.6	81.6	85.8	81.6	78.4	78.3
Mother tongue English or French	14.8	11.3	8.0	12.4	9.8	12.9	18.4	21.0	21.6
Education									
High school or less	16.2	13.6	8.6	4.0	3.3	0.8	2.4	5.1	9.0
Some postsecondary education	30.9	24.2	19.4	10.3	10.2	1.6	21.7	19.5	9.6
Bachelor's degree	40.9	45.5	45.8	49.1	41.8	38.8	58.0	52.4	53.0
Graduate degree	12.0	16.7	26.2	36.6	44.6	58.8	17.9	23.0	28.4
Source region									
Caribbean and Central and South America	5.6	4.8	4.6	6.1	4.8	4.6	6.3	6.6	7.4
Western Europe	9.1	2.9	1.4	1.7	1.3	1.9	3.3	3.9	3.9
Northern Europe	9.1	5.1	2.9	5.2	3.4	2.5	6.4	8.2	8.6
Southern Europe	1.3	1.5	2.2	0.9	0.7	1.0	0.6	1.6	2.3
Eastern Europe	4.7	4.4	3.7	6.0	3.0	2.5	1.6	3.1	4.0
Africa	4.7	4.7	6.7	7.4	9.0	13.9	3.4	4.0	5.7
Southern Asia	9.7	21.8	34.1	27.7	36.6	55.2	15.7	24.8	37.8
Southeast Asia	24.6	31.1	17.6	9.1	12.8	5.0	3.8	9.3	5.6
Eastern Asia	22.2	17.3	21.6	22.8	12.6	4.7	50.8	28.2	16.0
Western Asia	5.2	4.1	3.6	10.1	14.3	6.9	1.7	3.2	2.8
Other regions	1.3	1.1	0.9	0.9	0.7	0.7	2.0	2.8	2.5
United States	2.6	1.3	0.8	2.1	1.0	1.1	4.6	4.4	3.4
With pre-landing Canadian work experience	47.9	62.5	73.1	22.2	21.2	18.9	98.6	98.8	98.9
With pre-landing Canadian study experience	13.0	20.7	41.6	15.0	11.0	14.1	74.6	55.6	60.0
Initial province of residence									
Atlantic provinces	8.4	6.8	8.6	1.6	1.4	1.3	1.5	1.4	1.8
Quebec	0.5	0.3	0.7	3.6	2.3	2.5	0.5	0.8	1.1
Ontario	6.4	8.5	21.6	60.6	57.1	66.2	68.1	55.6	59.4
Manitoba	36.7	23.6	15.6	0.9	1.2	1.1	0.7	0.6	0.9
Saskatchewan	11.9	17.8	12.6	0.8	1.4	1.0	0.3	1.0	1.3
Alberta	15.7	24.2	20.1	13.3	20.1	13.4	12.6	24.2	15.3
British Columbia	20.3	18.2	20.4	19.0	16.5	14.5	16.3	16.3	20.0
Territories	0.3				0.1	0.1	0.1	0.2	0.1

Source: Statistics Canada, 2021 Longitudinal Immigration Database.

A multivariate regression analysis was used to determine whether a range of economic and demographic variables could account for differences in earnings among economic immigration programs at the national level. The outcome variable was annual earnings. The independent variables included immigrant class, landing cohort (2005-to-2009, 2010-to-2014 and 2015-to-2019 cohorts), immigrant class interacted with landing cohort,<sup>6</sup> initial province of residence, sex, age at landing, official language at landing, educational attainment at landing, source region, marital status, number of children, whether there was pre-landing

<sup>6.</sup> To allow for different earnings trajectories across cohorts by immigrant class.

Canadian work experience, whether there was pre-landing Canadian study experience and the annual unemployment rate in the province.<sup>7</sup> The details of these variables can be found in Appendix Table 1.

Models were run separately for entry earnings (during the first two years following landing) and longerrun earnings (five and six years after landing). In the case of the entry earnings models, the sample included economic principal applicants aged 20 to 54 at landing who had positive earnings in either the first or second year after landing. Data were pooled for the 2005-to-2009, 2010-to-2014 and 2015-to-2019 cohorts. The same approach was taken for the longer-run regressions, except only the 2005-to-2009 and 2010-to-2014 cohorts were used because the analysis was restricted to five to six years after landing.<sup>8</sup> For both the entry and longer-run analysis, two models were constructed. Model 1 included only economic immigrant programs, and the interaction between landing cohort and immigrant program. In addition to the variables in Model 1, Model 2 added the control variables outlined above. Hence, the difference in the results between Model 1 and Model 2 indicates the extent to which the control variables explain the differences among immigrant programs in the observed earnings.

## Entry earnings

As noted earlier, PNP immigrant entry earnings were significantly higher than federal skilled worker earnings during the 2005-to-2009 and 2010-to-2014 cohorts. However, by the 2015-to-2019 cohort, the outcomes had reversed (tables 1 and 3). The Model 2 (Appendix Table 1) results provide the predicted values after adjusting for the effects of the explanatory (independent) variables. The explanatory variables—including pre-landing Canadian work experience, pre-landing Canadian education, language spoken at landing, source region, province, provincial unemployment rate and other variables—accounted for 26% to 60% of the difference in entry earnings between provincial nominees and CEC immigrants (Table 3).

However, sociodemographic characteristics accounted for little of the difference in entry earnings between PNP and FSWP immigrants in the 2005-to-2009 and 2015-to-2019 cohorts. In fact, after the explanatory variables were controlled for, the entry earnings advantage held by FSWP immigrants for the 2015-to-2019 cohort would be larger than the observed one.<sup>9</sup> This finding is noteworthy because it reverses earlier patterns seen between FSWP and PNP immigrants. Possible explanations for these earnings differences must go beyond differences in the explanatory variables mentioned above, because the effect of these factors on earnings is already controlled for in the model. A discussion of possible explanations for these differences is included in the conclusion.

<sup>7.</sup> There was large variation in the annual unemployment rate, both between provinces and across years within a province over the 2010-to-2019 period. Overall, the rate ranged from 3.3% to 16.5%, with a standard deviation of 2.81 percentage points. Within the provinces, the smallest range across years was in Manitoba, varying from 4% to 5.7%, and the largest range was in Newfoundland and Labrador, varying from 10.5% to 16.5%. Nevertheless, it is unlikely that the annual unemployment rate fully captures the effect of provincial economic conditions. In the conclusion section, a discussion was added to show that provincial differences in employment income among PNP immigrants were much larger than those among all workers (born in Canada and immigrants) and federal skilled workers; the latter were likely reflective of differences among provinces in economic conditions. Thus, economic conditions that were not fully captured by the unemployment rate were probably not a key factor for the remaining provincial differences in earnings among PNP immigrants; some other factors were likely at work.

<sup>8.</sup> Hence, the sample will be different for the entry and longer-run regressions, meaning that the results should not be directly compared. However, the entry employment regressions were run based on the same cohorts as the longer-run regressions (i.e., 2005-to-2009 and 2010-to-2014 cohorts). The Model 1 results for the two cohorts were identical to those based on the expanded sample (i.e., all three landing cohorts), and the Model 2 results were very similar, whether based on a sample including the two earlier cohorts or all three cohorts.

<sup>9.</sup> This increase is consistent with the observation that a smaller share of FSWP immigrants had pre-landing Canadian work experience than PNP immigrants. Controlling for this variable (Model 2)—among others—would tend to increase earnings among federal skilled workers relative to provincial nominees; in Model 2, these shares are assumed to be equal for FSWP and PNP immigrants, thus increasing the earnings of federal skilled workers relative to provincial nominees.

## Observed and predicted difference in earnings one to two years after landing between immigrants<sup>1</sup> in the Provincial Nominee Program and other economic immigrant programs by landing cohort

	Federal Skilled Worker	Canadian Experience	Other economic
	Program	Class	programs
		2020 dollars	
Observed			
2005-to-2009 cohort	-10,700	6,100	-24,800
2010-to-2014 cohort	-6,900	19,000	-19,700
2015-to-2019 cohort	6,500	21,900	-11,200
Predicted			
2005-to-2009 cohort	-10,700	4,500	-19,300
2010-to-2014 cohort	-4,600	7,600	-15,100
2015-to-2019 cohort	7,100	9,100	-13,100
Proportion of observed difference accounted for		percent	
2005-to-2009 cohort	0	26	22
2010-to-2014 cohort	33	60	23
2015-to-2019 cohort	0	58	0

1. Principal applicants who were aged 20 to 54 at landing and had positive annual earnings in the tax year.

Notes: Earnings are rounded to the nearest \$100. The predicted differences are based on results of ordinary least squares regression models predicting earnings one to two years after immigration.

Source: Statistics Canada, 2021 Longitudinal Immigration Database.

## Longer-term earnings

The regression models with earnings five to six years after landing are reported in Appendix Table 2. The difference between the observed and adjusted results indicates that about three-guarters of the difference between the PNP and FSWP in the 2005-to-2009 landing cohort can be accounted for by differences in the explanatory variables (Table 4). FSWP immigrants earned significantly less in the longer run than PNP immigrants, largely because they had different background characteristics. Further decomposition analysis showed that differences in the proportion who had Canadian work experience prior to landing were the major contribution. Similarly, about two-thirds of the longer-run earnings advantage held by CEC immigrants over PNP immigrants was attributable to differences in background characteristics, mostly the higher share of CEC immigrants with pre-landing Canadian work experience, their higher level of education and their higher concentration in Ontario.

The longer-run earnings of the 2010-to-2014 landing cohort were the exception, where background variables explained none of the difference in longer-run earnings between FSWP and PNP immigrants (Table 4). Among this cohort, actual earnings were higher among federal skilled workers than provincial nominees in the longer run, despite being lower in the first two years after landing. Unknown factors other than those adjusted for were largely responsible for this earnings advantage.

Observed and predicted difference in earnings five to six years after landing between immigrants<sup>1</sup> in the Provincial Nominee Program and other economic immigrant programs, by landing cohort

	Federal Skilled Worker Program	Canadian Experience Class	Other economic programs
		2020 dollars	P. 68
Observed			
2005-to-2009 cohort	-3,500	11,000	-21,600
2010-to-2014 cohort	2,500	23,000	-14,400
Predicted			
2005-to-2009 cohort	-800	3,800	-15,200
2010-to-2014 cohort	3,300	8,900	-11,200
Proportion of observed difference accounted for		percent	
2005-to-2009 cohort	77	65	30
2010-to-2014 cohort	0	61	22

1. Principal applicants who were aged 20 to 54 at landing and had positive annual earnings in the tax year. Notes: Earnings are rounded to the nearest \$100. The predicted differences are based on results of ordinary least squares regression models predicting earnings five to six years after immigration.

Source: Statistics Canada, 2021 Longitudinal Immigration Database.

# **Provincial differences in earnings**

This section addresses three questions: (1) Were there differences among provinces in the earnings of provincial nominees? (2) What was the difference in earnings between provincial nominees and federal skilled workers within the various provinces? (3) How did earnings patterns change across cohorts and years following landing in the provinces?

First, there were large differences between the provinces in both initial and longer-run PNP immigrant earnings in all landing cohorts (Table 5). For example, initial earnings among the 2015-to-2019 cohort of PNP immigrants varied from a low of \$36,500 in Manitoba to a high of \$59,600 in Ontario. In general, Ontario, Alberta and British Columbia had the highest entry earnings, while the Atlantic provinces, Manitoba and Saskatchewan had the lowest. Longer-term earnings among the 2010-to-2014 landing cohort displayed a similar pattern, with the same provinces registering relatively lower and higher earnings, respectively.

# Average annual earnings among principal applicants<sup>1</sup> in the economic class, by initial province of residence,<sup>2</sup> landing cohort and years since landing

	All economic	Federal Skilled	Provincial Nominee	Canadian Experience
	immigrants	Worker Program	Program	
		2020	dollars	
2010-to-2014 cohort, one to two years after				
immigration				
Atlantic provinces	49,800	57,700	47,500	77,700
Ontario	44,400	42,000	58,000	73,500
Manitoba	34,700	43,300	34,100	84,300
Saskatchewan	47,900	50,400	47,500	77,600
Alberta	58,800	55,300	67,800	67,400
British Columbia	45,300	39,300	57,300	64,100
Territories	52,600	83,500	45,000	116,400
2010-to-2014 cohort, five to six years after				
immigration				
Atlantic provinces	57,400	72,500	54,200	82,600
Ontario	58,200	59 <i>,</i> 500	70,600	87,600
Manitoba	44,900	62,200	44,100	91,400
Saskatchewan	54,800	70,000	53,600	91,500
Alberta	65,400	67,900	70,300	71,600
British Columbia	56,900	55,600	67,700	76,600
Territories	64,200	107,200	56,700	105,200
2015-to-2019 cohort, one to two years after				
immigration				
Atlantic provinces	48,900	62,800	46,500	69,400
Ontario	57,500	57,700	59,600	74,000
Manitoba	37,800	49,400	36,500	65,200
Saskatchewan	45,100	54,800	43,800	63,800
Alberta	54,000	54,500	54,200	67,600
British Columbia	57,400	60,400	58,100	73,200
Territories	61,200	85,700	53,500	91,000

1. Principal applicants who were aged 20 to 54 at landing and had positive annual earnings in the tax year.

2. Quebec is excluded since it does not have a Provincial Nominee Program.

Notes: Earnings are rounded to the nearest \$100.

Source: Statistics Canada, 2021 Longitudinal Immigration Database.

It may be that the earnings gaps between the provinces with higher and lower entry earnings were caused by differences in the types of provincial nominees selected. For example, if a province selects more provincial nominees with lower levels of education, with no pre-landing Canadian work or education experience and with poor official language skills, then it is likely that their earnings will be lower than earnings among PNP immigrants in provinces that tend to select fewer such immigrants. Provincial nominees in provinces with poorer economic conditions, as measured by the unemployment rate, may also experience lower earnings compared with those in other provinces. To assess whether such factors explain the differences in earnings between the lower- and higher-earnings provinces, a regression analysis was conducted, incorporating a rich set of possible explanatory variables.<sup>10</sup> The provincial regression results based on earnings one to two years after landing are reported in Appendix Table 3; those based on earnings five to six years after landing are reported in Appendix Table 4.

The analysis here focuses on earnings differences between provinces with lower-earning provincial nominees—the Atlantic provinces, Manitoba and Saskatchewan—and Ontario, as the representative of the provinces with higher-earning provincial nominees. Even after differences in human capital, prelanding Canadian work and study experience, and the provincial unemployment rate were accounted for, significant earnings differences of PNP immigrants between Ontario and the Atlantic provinces, Manitoba and Saskatchewan persisted. The difference (adjusted results) in entry earnings ranged from \$5,200 to \$16,500<sup>11</sup> and, for earnings after five to six years in the province, ranged from \$9,100 to \$14,600,<sup>12</sup> depending on the province (Table 6). Put another way, the explanatory variables accounted for 6% to 55% of the observed entry earnings gap between the three lower-earnings provinces and Ontario, and 11% to 50% of the observed earnings gap after five to six years in Canada (Table 6). There are other unobserved factors beyond those included in this analysis that contributed to the earnings differences among provincial nominees by province. Observationally similar provincial nominees face different earnings levels, depending on their initial province of residence.

#### Table 6

# Difference in earnings of Provincial Nominee Program immigrants<sup>1</sup> between selected

#### provinces and Ontario

	Observed	Adjusted <sup>2</sup>	Share of observed difference accounted for by control variables
	2020 dolla	irs	percent
A. Earnings one to two years after landing,			
2010-to-2019 cohorts			
Atlantic provinces	-11,600	-5,200	55
Manitoba	-22,900	-16,500	28
Saskatchewan	-12,600	-11,900	6
B. Earnings five to six years after landing, 2010-			
to-2014 cohort			
Atlantic provinces	-16,400	-14,600	11
Manitoba	-26,500	-13,200	50
Saskatchewan	-17,000	-9,100	46

1. Principal applicants who were aged 20 to 54 at landing and had positive annual earnings in the tax year.

2. Based on results of ordinary least squares regression models predicting earnings.

Notes: Earnings are rounded to the nearest \$100.

<sup>10.</sup> Two separate ordinary least squares regressions were run. The independent variable for the first was annual earnings one and two years after landing (including the 2010-to-2019 landing cohorts) and for the second, annual earnings five and six years after landing (including the 2010-to-2014 cohort). In both regressions, the independent variable of primary interest was the initial province of residence, with Ontario selected as the reference group. The other control variables included years since immigration, sex, age at landing, official language knowledge at landing, education at landing, source region, marital status, number of children, whether the immigrant had pre-landing Canadian earnings, whether they had pre-landing Canadian education and the unemployment rate in the province. PNP principal applicants aged 20 to 54 at landing were included in the sample.

<sup>11.</sup> The sample includes provincial nominees landing in Canada in the 2010-to-2019 cohorts who were still in the initial province of residence after one or two years.

<sup>12.</sup> The sample includes provincial nominees landing in Canada in the 2010-to-2014 cohort who were still in the initial province of residence after five or six years.

In addition to differences in PNP earnings across provinces, earnings differences among immigrant classes (PNP, FSWP and CEC) also varied across provinces. As at the national level, among the 2010-to-2014 cohort, PNP immigrants displayed substantially higher entry earnings than FSWP immigrants in several provinces. For example, in Ontario, Alberta and British Columbia, provincial nominees had initial earnings \$12,500 to \$18,000 greater than those of federal skilled workers. However, for the 2015-to-2019 cohort, the situation changed significantly in these provinces. FSWP immigrants had large increases in entry earnings between the 2010-to-2014 and 2015-to-2019 cohorts—as high as 37% in Ontario and 54% in British Columbia.<sup>13</sup> Over the same period, provincial nominees in all provinces had entry earnings that increased slowly, or decreased.<sup>14</sup> As a result, the PNP immigrant entry earnings advantage over federal skilled workers seen in the 2010-to-2014 cohort changed to a provincial nominee disadvantage in the 2015-to-2019 cohort (Table 6).

In all provinces, earnings among federal skilled workers increased faster with years following landing than did earnings among provincial nominees.<sup>15</sup> Hence, with increased years following immigration, federal skilled workers gained in earnings relative to provincial nominees in all provinces.

Finally, CEC immigrants held a significant earnings advantage over PNP immigrants in all provinces except Alberta, both at entry and five to six years after immigration (Table 6).

# Conclusion and discussion

This paper examined short- and longer-run earnings of provincial nominee principal applicants who landed from 2005 to 2019, a period when many changes occurred that could affect earnings (e.g., the expansion of the PNP and simultaneous decline of the FSWP; the introduction and rise of the CEC; and the development of unique PNPs in the provinces, often with quite different selection criteria).

Earlier research, based on data up to around the 2015 landing cohort, established that entry earnings were higher among PNP than FSWP immigrants, but earnings of the latter group caught up to and surpassed those of the former after about five years. Other research found that differences in earnings between PNP and FSWP immigrants were largely attributable to differences in the share who had Canadian earnings prior to landing.

These patterns changed with the more recent 2015-to-2019 landing cohort of economic immigrants. The significant advantage in entry earnings (during the first and second years following landing) PNP immigrants traditionally held over those in the FSWP was reversed in the 2015-to-2019 cohort, with FSWP immigrants earning an average of \$6,500 more annually than PNP immigrants, compared with \$6,900 less in the 2010-to-2014 cohort (unadjusted actual results). Entry earnings increased among FSWP and CEC immigrants, while they declined among provincial nominees. The entry earnings of provincial nominees also declined relative to those of CEC immigrants. Important variables, such as prelanding Canadian work experience, pre-landing Canadian study experience, educational attainment, official language ability, source region, age and the unemployment rate in the province of residence, could not meaningfully explain the reversal in entry earnings between FSWP and PNP immigrants that occurred with the 2010-to-2014 and 2015-to-2019 landing cohorts.

<sup>13.</sup> The percentage changes for all provinces were 9% for the Atlantic provinces, 37% for Ontario, 14% for Manitoba, 9% for Saskatchewan, -1% for Alberta and 54% for British Columbia.

<sup>14.</sup> The percentage changes for all provinces were -2% for the Atlantic provinces, 3% for Ontario, 7% for Manitoba, -8% for Saskatchewan, -20% for Alberta and 1% for British Columbia.

<sup>15.</sup> Among the 2010-to-2014 cohort, the percentage increases in average earnings between years 1 to 2 and years 5 to 6 were 26% for FSWP and 14% for PNP immigrants in the Atlantic provinces, 42% and 22% in Ontario, 44% and 29% in Manitoba, 39% and 13% in Saskatchewan, 23% and 4% in Alberta, and 41% and 18% in British Columbia.

The decline in the earnings of provincial nominees relative to federal skilled workers among more recent cohorts has important implications, partly because the share of economic immigrants admitted via the PNP has increased, while the share admitted via the FSWP has declined. In 2000, the FSWP accounted for the majority (79%) of economic immigrants, but this fell to 30% by 2019. Over the same period, the PNP grew rapidly, accounting for 1% of economic immigrants in 2000 and 35% in 2019, when it was the largest single category of new economic immigrants.<sup>16</sup> This shift in composition, combined with the earnings trends, would tend to reduce overall average earnings among economic immigrants.

There are some other possible explanations for the fall in the PNP immigrant earnings relative advantage, beyond those that can be addressed with currently available data. One possibility relates to changes in the selection of economic immigrants. In 2013, the FSWP introduced a new requirement that applicants had to have foreign educational credentials formally evaluated through an educational credential assessment (ECA) program. The purpose of the ECA is to authenticate an applicant's foreign credential and determine the equivalent completed Canadian educational credential (Government of Canada, 2020). Banerjee et al. (2021) showed that, among FSWP immigrants, this requirement had a significant positive effect on entry earnings, increasing the amount by 26% among women and 20% among men. The positive effects on earnings outcomes were particularly evident among economic immigrants from non-Western countries. It seems likely that the human capital of the selected FSWP immigrants, in this case educational qualifications, improved because of the ECA process, thus affecting their earnings.

The majority of economic immigrants in the 2010-to-2014 cohort would not have needed an ECA because it was introduced in May 2013 and needed some time to become fully operational. However, among the 2015-to-2019 cohort, all FSWP immigrants needed an ECA for foreign credentials, but only the 22% of PNP immigrants who went through the Express Entry (EE)<sup>17</sup> process required an ECA. Most provincial nominees are selected by provincial selection processes, rather than the EE system. This pattern could have resulted in increased earnings among FSWP immigrants relative to their PNP counterparts in the 2015-to-2019 cohort, because even among those with observationally comparable levels of education (e.g., a university degree), educational quality<sup>18</sup> was, on average, likely higher among FSWP immigrants than provincial nominees. It is likely that the introduction of the ECA and the resulting increase in educational quality could explain much of the rise in entry earnings among FSWP relative to PNP immigrants between the 2010-to-2014 and 2015-to-2019 cohorts.

The introduction of the EE system in 2015 may also have contributed to the significant increase in relative earnings among FSWP immigrants, compared with those in the PNP. Immigrants selected via the EE system had higher entry earnings than their counterparts selected through the previous points system (IRCC, 2020), and proportionately more FSWP and CEC immigrants than provincial nominees were selected via the EE system during the 2015-to-2019 period. All applicants selected through the EE must go through the ECA for foreign education, take formal tests for official language abilities and meet minimum official language requirements. Among those selected through the EE process, core Comprehensive Ranking System (CRS) scores were higher among immigrants landing via the FSWP (451 points on average over the 2015-to-2019 period) and the CEC (421) than the PNP (371).<sup>19</sup> This indicates that even among principal applicants who landed via the EE system, human capital levels were higher among FSWP and CEC immigrants than among provincial nominees.

<sup>16.</sup> Data exist for 2020 and 2021, but the effects of the pandemic skewed the results significantly, rendering them not ideal for long-term trend analysis.

<sup>17.</sup> EE is Canada's application management system for economic immigrants in the following programs: FSWP, Federal Skilled Trades Program, CEC and a portion of the PNP (IRCC, 2020).

<sup>18.</sup> This refers to the assessment of how a year of foreign education compares with a year of education in Canada. Empirical studies frequently use average results from standard international tests in math and science as proxy measures of educational quality at the national level (Hanushek & Kimko, 2000).

<sup>19.</sup> Authors' calculations based on the EE data file. The CRS is used to assess (based on skills, education, language ability, work experience and other factors) and score an applicant's profile and rank it in the EE pool.

It is also possible that, as the criteria for selecting FSWP and CEC immigrants are strengthened, some applicants who would not qualify for either the FSWP or the CEC may seek out the PNP as an alternative avenue to becoming a permanent resident (Thevenot, 2022). The large increase in the number of PNP immigrants may also have resulted in inferior selection regarding unobserved abilities and a reduced match between labour supply and labour market demands at the provincial level, resulting in decreased earnings.

All these factors could have contributed to the rising entry earnings among FSWP and CEC immigrants, while earnings were falling among those in the PNP.

There are other highlights of the study. Following landing, earnings rose more quickly among FSWP than PNP immigrants. Among the 2010-to-2014 cohort, the latest for which longer-run earnings could be determined, earnings after five to six years were higher among FSWP (and CEC) immigrants than among those landing via the PNP.

There were also significant differences among provinces in the average earnings of provincial nominees. The highest earnings, both at entry and at five to six years, were observed in Ontario, Alberta and British Columbia, and the lowest in the Atlantic provinces, Manitoba and Saskatchewan. Regression analysis indicated that a proportion (6% to 55%, depending on the province) of the observed differences in earnings between the higher- and lower-earnings provinces was attributable to differences among provinces in economic conditions (as measured by the unemployment rate) and the background characteristics of PNP principal applicants. However, even after accounting for these differences, significant earnings gaps persisted (ranging from \$5,200 to \$16,500 annually) between provincial nominees in the higher- and lower-earnings provinces. Observationally similar PNP principal applicants had higher earnings in some provinces than others because of factors other than those accounted for in this analysis.

It may be that these provincial differences among PNP immigrants simply reflected the differences in earnings observed among all workers. However, the provincial differences in PNP earnings were much larger than those among all workers (Canadian-born and permanent residents) and different from the provincial differences among federal skilled workers. Among all workers, those in Alberta and Ontario tended to have higher employment income than those in other provinces, but the provincial differences were much smaller than those observed among PNP immigrants.<sup>20</sup> Furthermore, additional analysis showed that FSWP immigrants in Ontario generally did not hold an advantage in entry and longer-run earnings, compared with their counterparts in other provinces (appendix tables 3 and 4).<sup>21</sup> The large provincial earnings differences among observationally similar immigrants appear to be unique to the PNP program.

This research showed that earnings among provincial nominees, both in absolute terms and relative to other programs, changed significantly in recent years. More recent earnings patterns likely reflect changes in the selection process for all three economic immigrant programs. The changes noted above strengthened the human capital and hence labour market outcomes among FSWP and CEC immigrants. Provincial nominees appear not to have benefited from such changes in the same ways.

<sup>20.</sup> For instance, in 2019, the median employment income in Ontario, Manitoba and Saskatchewan was \$38,800, \$36,000 and \$38,000, respectively (data from Statistics Canada, https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=9810006701).

<sup>21.</sup> The number of PNP immigrants relative to FSWP immigrants varied greatly among provinces. For instance, for the 2010-to-2014 landing cohort, the number of employed FSWP principal applicants was six times that of PNP immigrants in Ontario. By contrast, the number of employed PNP principal applicants was 4 times that of their FSWP counterparts in the Atlantic region, 23 times in Manitoba and 14 times in Saskatchewan. It is possible that the much less numerous FSWP immigrants in the Atlantic region, Manitoba and Saskatchewan were highly selective in their ability to find relatively higher paying jobs.

# Appendix

### Appendix Table 1

Ordinary least squares models predicting earnings in the first two years after immigration among economic principal applicants aged 20 to 54 at landing, arrived between 2005 and 2019

	Model 1	Model 2
	coeffic	cients
Intercept	50,139 ***	127,368 ***
Immigration class (reference: Provincial Nominee Program)		
Federal Skilled Worker Program	6,460 ***	7,109 ***
Canadian Experience Class	21,887 ***	9,110 ***
Other economic programs	-11,265 ***	-13,067 ***
Landing cohort (reference: 2015 to 2019)		
2005 to 2009	6,534 ***	7,290 ***
2010 to 2014	1,623 ***	1,916 ***
Federal Skilled Worker Program x 2005 to 2009	-17,119 ***	-17,788 ***
Federal Skilled Worker Program x 2010 to 2014	-13,362 ***	-11,744 ***
Canadian Experience Class x 2005 to 2009	-15,795 ***	-4,584 ***
Canadian Experience Class x 2010 to 2014	-2,874 *** 12 EOG ***	-1,461 *** -6,244 ***
Other economic programs x 2005 to 2009 Other economic programs x 2010 to 2014	-13,506 *** -8,381 ***	-1,985 ***
Initial province of residence (reference: Ontario)	-8,361	-1,965
Newfoundland and Labrador	ş	23,313 ***
Prince Edward Island		-4,123 ***
	ş	
Nova Scotia	ş	-606
New Bruns wick	ş	-3,794 ***
Quebec	ş	-1,701 ***
Manitoba	§	-12,559 ***
Saskatchewan	§	-7,468 ***
Alberta	§	1,359 ***
British Columbia	§	-4,556 ***
Territories	§	1,988 ***
Female	§	-15,434 ***
Age at landing (reference: 20 to 29)		
30 to 39	§	2,021 ***
40 to 49	ş	5,716 ***
50 to 54	ş	6,954 ***
Official languages (reference: mother tongue English or French)		
Not speaking English or French	ş	-11,643 ***
Other mother tongue, speaking English or French	ş	-5,642 ***

§ not included in the model

\*\*\* significantly different from reference category (p < 0.001)

Ordinary least squares models predicting earnings in the first two years after immigration among economic principal applicants aged 20 to 54 at landing, arrived between 2005 and 2019 (continued)

	Model 1	Model 2
	coefficie	ents
Education (reference: graduate degree)		
High school or less	§	-15,975 ***
Some postsecondary education	ş	-15,237 ***
Bachelor's degree	ş	-6,836 ***
Source region (reference: United States)		
Central America	§	-46,950 ***
Caribbean	§	-49,120 ***
South America	§	-38,152 ***
Western Europe	§	-36,130 ***
Northern Europe	§	-26,541 ***
Southern Europe	§	-42,948 ***
Eastern Europe	§	-50,606 ***
Africa	§	-48,705 ***
Southern Asia	§	-54,216 ***
Southeast Asia	§	-57,004 ***
Eastern Asia	§	-57,977 ***
Western Asia	§	-51,953 ***
Other regions	§	-28,376 ***
Marital status (reference: married)		
Single	§	-8,046 ***
Divorced, separated or widowed	§	-4,236 ***
Number of children	§	-2,655 ***
Pre-landing Canadian work experience	ş	23,847 ***
Pre-landing Canadian study experience	ş	-10,744 ***
Annual unemployment rates in the initial province	§	-2,164 ***

§ not included in the model

\*\*\* significantly different from reference category (p < 0.001)

# Ordinary least squares models for earnings five to six years after immigration among economic principal applicants aged 20 to 54 at landing, arrived between 2005 and 2014

	Model 1	Model 2
	coeffi	
Intercept	58,853 ***	134,879.69 ***
Immigration class (reference: Provincial Nominee Program)		
Federal Skilled Worker Program	2,547 ***	3,277.97 ***
Canadian Experience Class	23,046 ***	8,860.65 ***
Other economic programs	-14,390 ***	-11,154.96 ***
Landing cohort (reference: 2010 to 2014)		
2005 to 2009	6,257 ***	6,285.11 ***
Federal Skilled Worker Program x 2005 to 2009	-6,062 ***	-4,048.57 ***
Canadian Experience Class x 2005 to 2009	-12,040 ***	-5,054.50 ***
Other economic programs x 2005 to 2009	-7,268 ***	-4,084.45 ***
Initial province of residence (reference: Ontario)	2	
Newfoundland and Labrador	ş	31,959.41 ***
Prince Edward Island	§	-1,287.90
Nova Scotia New Brunswick	§ §	-1,383.88 ** -3,159.89 ***
Quebec	ş	-2,216.26 ***
Manitoba	ş	-9,937.24 ***
Saskatchewan	ş	-3,587.44 ***
Alberta	ş	7,447.37 ***
British Columbia	ş	-3,858.57 ***
Territories	ş	2,702.21 **
Female	ş	-17,852.31 ***
Age at landing (reference: 20 to 29)	3	17,052.51
30 to 39	ş	-493.34 ***
40 to 49	ş	-4,095.57 ***
50 to 54	ş	-9,535.51 ***
Official languages (reference: mother tongue English or French)	Ū.	-,
Not speaking English or French	ş	-13,217.06 ***
Other mother tongue, speaking English or French	ş	-8,601.00 ***
Education (reference: graduate degree)		
High school or less	ş	-19,110.49 ***
Some postsecondary education	§	-17,253.91 ***
Bachelor's degree	§	-6,889.77 ***
Source region (reference: United States)		
Central America	§	-35,330.42 ***
Caribbean	§	-35,228.90 ***
South America	§	-22,191.13 ***
Western Europe	ş	-27,618.66 ***
Northern Europe	ş	-13,590.52 ***
Southern Europe	ş	-28,784.01 ***
Eastern Europe	§	-37,251.02 ***
Africa	§	-34,099.71 ***
Southern Asia	§	-44,260.88 ***
Southeast Asia	§	-44,090.44 ***
Eastern Asia	§	-48,999.15 ***
Western Asia	ş	-36,903.07 ***
Other regions	ş	-17,268.58 ***
Marital status (reference: married)		
Single	ş	-8,179.00 ***
Divorced, separated or widowed	ş	-2,802.00 ***
Number of children	ş	-1,830.00 ***
Pre-landing Canadian work experience	ş	19,472.00 ***
Pre-landing Canadian study experience	ş	-2,566.00 ***
Annual unemployment rates in the initial province	ş	-2,551.00 ***

\*\*\* significantly different from reference category (p < 0.01) \*\*\* significantly different from reference category (p < 0.001)

§ not included in the model

Ordinary least squares models predicting provincial differences in earnings among economic principal applicants arrived between 2010 and 2019, first two years after immigration

	Provincial	nominees	Federal skil	led workers
	Model 1	Model 2	Model 1	Model 2
		coeffici	ents	
Intercept	58,009 ***	154,597 ***	49,913 ***	134,498 ***
Initial province of residence (reference: Ontario)				
Atlantic provinces	-11,570 ***	-5,174 ***	9,336 ***	15,968 ***
Quebec	-9,924 ***	-13,191 ***	-3,881 ***	-3,077 ***
Manitoba	-22,909 ***	-16,467 ***	-4,596 ***	-7,677 ***
Saskatchewan	-12,606 ***	-11,864 ***	1,543	-2,158 **
Alberta	2,001 ***	-2,344 ***	4,555 ***	-1,723 ***
British Columbia	-164	-7,294 ***	-831 **	-4,814 ***
Territories	-9,643 ***	-10,710 ***	33,705 ***	21,042 ***
Arrival cohort (reference: 2015 to 2019)	5,515	20)/ 20	00,700	
2010 to 2014	3	2,683 ***	ş	-9,609 ***
	ş	2,065	3	-9,009
Years since immigration (reference: second year)	3	-4,432 ***	8	-8,280 ***
First year Female	ş		§ §	-17,548 ***
Age at landing (reference: 20 to 29)	§	-13,962 ***	3	-17,546
30 to 39	2	1 ()( ***	c	1,930 ***
	ş	1,626 *** 5,907 ***	ş	2,172 ***
40 to 49	ş		ş	
50 to 54	ş	7,583 ***	§	1,597 *
Official languages (reference: mother tongue English or French)	c	12 CCC ***	c	40 750 ***
Not speaking English or French	ş	-12,666 ***	ş	-12,756 ***
Other mother tongue, speaking English or French	ş	-6,713 ***	§	-8,171 ***
Education (reference: graduate degree)	c	22 740 ***	c	
High school or less	ş	-22,710 ***	ş	-5,585 ***
Some postsecondary education	ş	-18,061 ***	ş	-11,485 ***
Bachelor's degree	ş	-10,431 ***	§	-724 ***
Source region (reference: United States)	<u>,</u>	CT 470 ***	c	
Central America	ş	-67,472 ***	ş	-25,909 ***
Caribbean	ş	-60,625 ***	ş	-35,513 ***
South America	ş	-53,626 ***	ş	-22,587 ***
Western Europe	ş	-55,738 ***	ş	-19,572 ***
Northern Europe	ş	-40,851 ***	ş	-14,209 ***
Southern Europe	§	-62,147 ***	ş	-31,667 ***
Eastern Europe	ş	-70,280 ***	ş	-31,721 ***
Africa	ş	-58,816 ***	ş	-35,924 ***
Southern Asia	ş	-71,562 ***	ş	-38,668 ***
Southeast Asia	ş	-71,450 ***	ş	-38,699 ***
Eastern Asia	ş	-76,901 ***	ş	-40,736 ***
Western Asia	ş	-66,835 ***	ş	-41,246 ***
Other regions	§	-43,576 ***	§	-18,949 ***
Marital status (reference: married)	_		_	
Single	ş	-8,002 ***	ş	-6,583 ***
Divorced, separated or widowed	ş	-5,779 ***	ş	-2,214 **
Number of children	ş	-2,426 ***	ş	-3,674 ***
Pre-landing Canadian work experience	ş	19,487 ***	ş	32,035 ***
Pre-landing Canadian study experience	ş	-6,258 ***	ş	-19,383 ***
Annual unemployment rates in the initial province * significantly different from reference category (p < 0.05)	§	-2,203 ***	§	-3,863 ***

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

\*\*\* significantly different from reference category (p < 0.001)

§ not included in the model

Ordinary least squares models predicting provincial differences in earnings among economic principal applicants arrived between 2010 and 2014, five to six years after immigration

	Provincial I	nominees	Federal ski	lled workers
	Model 1	Model 2	Model 1	Model 2
		coeffic	ients	
Intercept	70,554 ***	147,962 ***	59,453 ***	126,467.00 ***
Initial province of residence (reference: Ontario)				
Atlantic provinces	-16,333 ***	-14,598 ***	13,064 ***	4,795.00 **
Quebec	-21,705 ***	-21,883 ***	-13,577 ***	-12,995.00 ***
Manitoba	-26,485 ***	-13,199 ***	2,745	3,100.00 *
Saskatchewan	-16,929 ***	-9,141 ***	10,506 ***	10,320.00 ***
Alberta	-219	-132	8,481 ***	5,423.00 ***
British Columbia	-2,825 ***	-7,159 ***	-3,876 ***	-3,881.00 ***
Territories	-13,844 ***	-10,672 ***	47,792 ***	33,265.00 ***
Years since immigration (reference: sixth year)				
Fifth year	ş	-1,168 ***	§	-2,925.00 ***
Female	§	-16,365 ***	§	-18,238.00 ***
Age at landing (reference: 20 to 29)				
30 to 39	ş	-234	§	-1.00
40 to 49	ş	254	§	-9,221.00 ***
50 to 54	§	-3,588 ***	§	-19,809.00 ***
Official languages (reference: mother tongue English or French)				
Not speaking English or French	ş	-9,409 ***	§	-14,216.00 ***
Other mother tongue, speaking English or French	§	-4,682 ***	§	-11,333.00 ***
Education (reference: graduate degree)				
High school or less	ş	-32,575 ***	§	-5,436.00 ***
Some postsecondary education	ş	-26,027 ***	§	-11,736.00 ***
Bachelor's degree	§	-15,283 ***	§	-666.00 *
Source region (reference: United States)				
Central America	ş	-55,793 ***	§	-23,505.00 ***
Caribbean	ş	-44,275 ***	§	-30,609.00 ***
South America	§	-37,853 ***	§	-17,363.00 ***
Western Europe	§	-43,907 ***	§	-18,798.00 ***
Northern Europe	ş	-23,824 ***	§	-12,301.00 ***
Southern Europe	§	-43,910 ***	§	-26,331.00 ***
Eastern Europe	§	-58,551 ***	§	-31,512.00 ***
Africa	§	-36,896 ***	§	-31,694.00 ***
Southern Asia	ş	-60,663 ***	§	-41,307.00 ***
Southeast Asia	§	-56,433 ***	§	-37,853.00 ***
Eastern Asia	ş	-66,683 ***	§	-44,076.00 ***
Western Asia	§	-53,850 ***	§	-35,899.00 ***
Other regions	§	-32,750 ***	§	-19,567.00 ***
Marital status (reference: married)				
Single	ş	-8,018 ***	§	-5,918.00 ***
Divorced, separated or widowed	ş	-5,636 ***	ş	-726.00
Number of children	ş	-1,455 ***	§	-1,738.00 ***
Pre-landing Canadian work experience	ş	17,829 ***	ş	23,699.00 ***
Pre-landing Canadian study experience	ş	953 *	ş	-5,780.00 ***
Annual unemployment rates in the initial province	ş	-752 ***	ş	-1,134.00 ***

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

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

\*\*\* significantly different from reference category (p < 0.001)

§ not included in the model

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