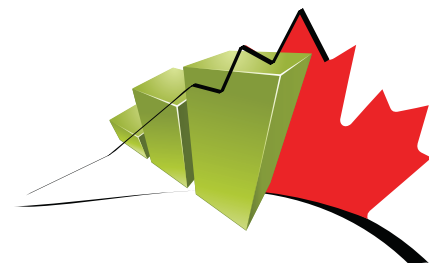


Economic and Social Reports

International students as a source of labour supply: Engagement in the labour market after graduation



by Eden Crossman, Yuqian Lu and Feng Hou

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International students as a source of labour supply: Engagement in the labour market after graduation

By Edén Crossman, Yuqian Lu and Feng Hou

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Abstract

This study examines the extent to which international students are engaged in the labour market through the Post-Graduation Work Permit Program (PGWPP) after having held a study permit at the postsecondary level (yet before immigration). The number of international students participating in the PGWPP after their studies has increased markedly, driven by increasing numbers of international students in Canada and larger shares of international student graduates obtaining a post-graduation work permit (PGWP). The labour market participation of PGWP holders (defined as the share of PGWP holders with positive T4 earnings) remained fairly stable from 2008 to 2018, with roughly three-quarters reporting T4 earnings annually. With rising numbers of PGWP holders, this equated to the number of PGWP holders with T4 earnings growing more than 13 times in size, from 10,300 in 2008 to 135,100 in 2018. Median annual earnings received by PGWP holders with employment income also rose over this period, from \$14,500 (in 2018 dollars) in 2008 to \$26,800 in 2018, suggesting an increase in the average amount of labour input. Almost three-quarters of all PGWP holders became permanent residents within five years of having obtained their PGWP. Through participation in the PGWPP and subsequent transition to permanent residence, international students have provided a growing source of labour for the Canadian labour market that extends well beyond their periods of study.

Authors

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Introduction

The number of international students has grown considerably worldwide, primarily from developing countries to Western developed countries. In recent years, Canada has led other major Western countries in the growth of international students. For instance, from 2008 to 2019, the number of permits issued to tertiary-level international students increased 2.8 times from 45,900 to 173,000 in Canada, compared with a growth of 7% from 340,700 to 364,000 in the United States, 50% from 249,000 to 374,000 in the United Kingdom, and 52% from 114,400 to 173,400 in Australia (OECD 2020). The faster growth in the inflows of international students in Canada is likely related to both the changing reception environment in other major receiving countries (particularly the United States, where the new admission of tertiary-level international students declined 23% from 2016 to 2019¹) and concrete measures adopted by the Canadian government to attract international students.²

The opportunity for international students to work in Canada after graduation and to potentially become permanent residents, and ultimately Canadian citizens, is considered a draw factor for prospective international students. When international students decide to stay and work in Canada after graduation, one of the main avenues to do so is through the Post-Graduation Work Permit Program (PGWPP). The PGWPP is a temporary worker program that provides labour market opportunities for international student graduates of public postsecondary and private degree-granting educational institutions. On the one hand, the PGWPP allows international students who have graduated from a recognized Canadian postsecondary institution to gain work experience in Canada and can provide the necessary job experience required to apply for some permanent residence streams. On the other hand, the PGWPP facilitates international students' contribution to the Canadian labour market, increases the pool of qualified candidates for eventual immigration and serves to make Canada a more attractive destination of study (CIC 2010).

The PGWPP started in 2003 as a pilot program in selected provinces and expanded nationwide in 2005. Further enhancements in 2008 allowed recent graduates to obtain an open work permit for up to three years (depending on the length of their program of study) with no restrictions on location of work, employer, occupation or requirement of a job offer. With a post-graduation work permit (PGWP), as with all open work permits, graduates can work full time, work part time and be self-employed (CIC 2010). In 2014, international student program regulatory changes took effect and included amendments that extended to the period after graduation (Government of Canada 2014). Before 2014, study permit holders were not authorized to work after the completion of their studies while awaiting approval of their PGWP. With the changes, eligible international graduates are authorized to work full time after their studies are completed until a decision is made on their application for a PGWP.

Currently, to obtain a PGWP, the applicant must have graduated from an eligible designated learning institution. They must also have completed an academic, vocational or professional training program at an eligible institution in Canada that is at least eight months in duration leading to a degree, diploma or certificate. They had to have maintained full-time student status in Canada during each academic session of the program or programs of study they have completed. Students are ineligible for a PGWP if they have completed an English or French as a second language course or program of study, general interest or self-improvement courses, or a course or program of study at a private career college. Applicants can receive only one PGWP in their lifetime.

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1. Among the key factors cited for this decline were the rising cost of higher education in the United States, high numbers of student visa delays and denials, a difficult political environment for immigrants under the Trump administration, and expanded opportunities to study in other countries (Israel and Batalova 2021).
 2. Additionally, changes in a source country's economic condition and political environment could also affect the inflow of international students from a particular country.

Little research has been done to examine how international students have taken advantage of the PGWPP by obtaining the PGWP, finding employment and transitioning to permanent residency. To fill this knowledge gap, this article assesses the extent to which international students are engaged in the labour market through the PGWPP after having held a study permit at the postsecondary level. This article is part of a series that provides a broad overview of international students as a source of labour in Canada. It seeks to better understand the activities of international students in the labour market after their period of study (yet before immigration).³ Specifically, this article examines the trends in the number and share of international students participating in the PGWPP and the share of PGWP holders with employment income and their earnings levels. The transitions of PGWP holders to permanent residency are also examined.

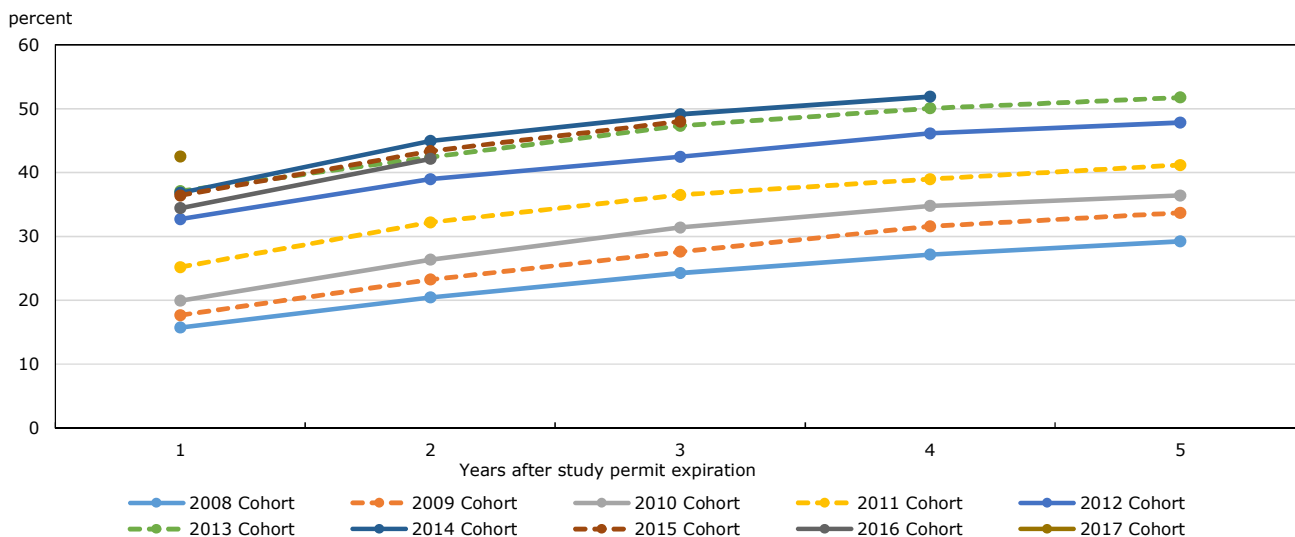
The analysis is based on international students who held a study permit at the postsecondary education level between 2004 and 2018 and on those who subsequently obtained a PGWP over the period from 2008 to 2018.⁴ For aspects of the analysis that look at study permits, information comes from the first study permit issued (and before the PGWP) and includes study permit holders who were aged 15 to 59 in the signing year.⁵ One PGWP is attributed to an individual, keeping the first one issued. This study relies on data from the Longitudinal Immigration Database that were integrated with T4 National Accounts Longitudinal Microdata File tax files.

The number of new post-graduation work permit holders has increased, with the largest gains occurring among those from India and those intending to work in Ontario

The number of international students participating in the PGWPP after their studies has increased markedly, alongside increasing numbers of international students in Canada. The number of first-time study permit holders has increased fairly steadily since the mid-2000s (when this number was roughly 75,000), accelerating notably after 2015 and reaching 250,000 in 2019 (Crossman, Choi and Hou 2021). At the same time, larger shares of international students are obtaining a PGWP after graduation. Chart 1 shows the cumulative rate of international students who obtained a PGWP by years after their first study permit expired. More recent cohorts of international students (defined by their first study permit expiration year) tended to have higher shares of students obtaining a PGWP. One year after their study permits had expired, 16% of international students with a study permit that expired in 2008 had obtained a PGWP; this compares with 43% of those with a study permit that expired in 2017. Five years after their first study permits had expired, 29% of the 2008 international student cohort had obtained a PGWP, compared with 48% of the 2012 cohort.

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3. This article uses the terms “international students” and “study permit holders” interchangeably, and the numbers reported in the article refer specifically to the latter.
 4. The starting year of 2008 to examine PGWP holders was chosen to reflect the starting point in which the program came to more closely resemble that which is currently in place; the starting year 2004 for study permit holders was chosen to allow for several cohorts of international students (up to a four-year degree) to have become eligible to apply for a PGWP.
 5. Study permit holders who became landed immigrants in the same year that their study permit was obtained are excluded from the analysis. PGWP holders who became landed immigrants before the year that their PGWP was obtained are excluded from the analysis.

Chart 1
Cumulative rate of international students obtaining a post-graduation work permit by expiration year (cohort) of study permit



Source: Statistics Canada, 2019 Longitudinal Immigration Database.

From 2008 to 2018, the annual number of new PGWP holders grew more than six times in size, from 10,300 to 64,700 (Table 1). While this increase occurred for both men and women, the share of male PGWP holders was consistently larger than that of female PGWP holders throughout the period. By age, the share of PGWPs obtained by those aged 24 and younger has trended upwards over time, and made up almost half (49%) of all PGWPs signed in 2018. In contrast, the share signed by those aged 25 to 34 trended downwards, falling from 56% in 2008 to 46% in 2018, although their number rose continuously from 5,800 to 29,400.

The large majority of PGWP holders came from two source countries, India and China. Together, these two source countries comprised 66% of all PGWPs issued in 2018, up from 51% in 2008. The share of PGWPs obtained by international students from India grew more than four times in size from 10% in 2008 to 46% in 2018. The trend was reversed for the share obtained by international students from China, falling from 41% to 20%. Over this period, international students from India intending to study at the postsecondary level increased much faster than those from China (Crossman, Choi and Hou 2021).

The large majority of PGWP holders intended to work in Ontario, followed by those intending to work in British Columbia and Quebec. For PGWPs obtained in 2018, 56% were for those intending to work in Ontario (up from 44% in 2008); these shares were 16% for British Columbia and 11% for Quebec (down from 19% and 13%, respectively, in 2008).

Table 1
Post-graduation work permit holders by sign year, 2008 to 2018

	Post-graduation work permit signing year										
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	percent										
Sex											
Male	54	55	56	57	59	57	58	57	55	55	56
Female	46	45	44	43	41	43	42	43	45	45	44
Age group at PGWP signing year											
Younger than 25	41	42	45	46	47	45	44	43	42	46	49
25 to 34	56	55	52	51	50	52	53	54	54	49	46
35 and older	3	3	3	3	3	3	3	4	4	5	5
Top source country (2018 PGWP ranking)											
India	10	10	16	25	32	32	32	28	23	32	46
China	41	36	33	29	27	30	30	33	33	27	20
France	3	5	5	4	4	4	4	4	5	4	3
South Korea	4	4	4	3	3	3	3	3	3	3	3
Brazil	0	1	1	1	0	0	0	1	1	2	2
Nigeria	1	2	2	2	2	2	2	3	3	3	2
Iran	1	1	1	2	2	2	2	2	2	1	1
Vietnam	1	1	1	1	1	1	1	1	1	1	1
United States	5	5	4	4	3	3	2	2	2	2	1
Pakistan	2	2	2	2	2	2	2	2	2	1	1
Other countries	31	33	32	28	24	22	21	22	24	23	19
Intended destination											
Newfoundland and Labrador	1	1	1	1	1	1	...	...	...	...	0
Prince Edward Island	0	0	0	0	0	0	...	...	...	...	0
Nova Scotia	3	3	3	3	3	3	...	0	0	0	2
New Brunswick	2	2	2	1	1	1	0	0	0	0	1
Quebec	13	17	17	16	14	14	2	4	1	1	11
Ontario	44	42	45	46	48	48	0	3	2	3	56
Manitoba	5	4	4	3	4	3	0	0	0	0	4
Saskatchewan	2	2	3	6	6	3	...	0	0	0	2
Alberta	10	9	8	8	9	10	0	0	0	0	6
British Columbia	19	19	17	16	15	16	2	2	2	2	16
Territories	...	...	...	...	...	0	...	...	...	...	0
Not stated	...	...	...	...	...	0	95	90	94	94	1
	number										
Total	10,300	11,800	13,500	18,100	23,000	29,500	32,100	27,200	33,300	44,800	64,700

... not applicable

Note: PGWP stands for post-graduation work permit.

Sources: Statistics Canada, 2019 Longitudinal Immigration Database and T4 - National Accounts Longitudinal Microdata File.

The share of post-graduation work permit holders reporting earnings has remained fairly stable but differs by source country

The number of PGWP holders with positive T4 earnings rose more than 13 times in size from 10,300 in 2008 to 135,100 in 2018 (Table 2). This equated to roughly three-quarters of PGWP holders with T4 earnings in each year over the period.⁶ The share of PGWP holders reporting earnings provides a measure of their participation in the labour market. In this sense, their labour market participation rate has remained fairly stable over the period.

Although the proportions of male and female PGWP holders reporting employment earnings were roughly similar in the 2017 and 2018 tax years, the share for men was generally higher throughout the period (with the exception of 2008 and 2009). There was little difference by age in the share of PGWP holders reporting earnings.

Nigeria was the source country with the highest share of PGWP holders reporting earnings in 2018 (95%), followed by Brazil (91%), Vietnam (88%), and Iran and Pakistan (at 86% each). The major source country associated with the lowest share reporting earnings in this same year was China (62%), followed by the United States (67%), India (75%) and France (76%).

By destination, the highest share of PGWP holders reporting earnings in 2018 was for those intending to work in the territories (95%), followed by Newfoundland and Labrador (87%) and New Brunswick (86%). The intended destinations with the lowest shares of PGWPs reporting earnings in 2018 were Ontario (72%), British Columbia (75%) and Nova Scotia (76%). Some of the lowest shares of PGWP holders reporting earnings therefore occurred for destinations with the largest shares of PGWP holders, namely Ontario, British Columbia and Quebec.

6. There are many reasons a PGWP holder may not report T4 earnings, including having left Canada, having spent time searching for a job, having pursued further education within Canada, having worked at an unpaid internship or having done volunteer work, having spent time setting up a business, or having family care responsibilities.

Table 2
Percentage of valid post-graduation work permit holders with T4 earnings, tax years 2008 to 2018

	Tax year										
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	percent										
Sex											
Male	77	73	70	69	73	75	76	76	75	75	75
Female	79	73	68	66	68	69	71	71	71	73	73
Age group in the tax year											
Younger than 25	78	72	69	69	73	73	75	75	75	76	73
25 to 34	79	74	69	67	70	72	73	73	73	73	75
35 and older	75	71	68	68	69	71	72	72	74	77	81
Top source country (2018 PGWP ranking)											
India	86	84	83	84	87	87	87	87	86	84	75
China	73	67	61	57	58	60	61	61	61	60	62
France	82	72	72	71	70	67	69	71	72	74	76
South Korea	72	65	58	58	62	65	69	71	72	76	80
Brazil	74	73	69	73	65	68	76	78	84	89	91
Nigeria	94	88	81	81	80	83	86	90	92	94	95
Iran	80	80	79	80	80	82	78	78	80	83	86
Vietnam	87	80	68	67	68	73	79	81	84	83	88
United States	82	74	68	63	63	63	61	62	62	66	67
Pakistan	86	78	78	77	83	83	83	84	83	85	86
Other countries	81	76	73	70	71	71	74	75	75	78	82
PGWP											
Newfoundland and Labrador	81	83	75	72	75	76	73	65	55	77	87
Prince Edward Island	88	88	81	70	78	67	63	64	48	...	82
Nova Scotia	79	73	69	67	63	64	62	57	49	73	76
New Brunswick	84	76	72	69	70	75	75	78	70	85	86
Quebec	74	70	68	67	69	67	67	62	59	67	78
Ontario	75	71	67	67	70	72	74	70	64	73	72
Manitoba	82	74	74	72	78	79	78	69	61	89	81
Saskatchewan	87	81	79	85	87	85	79	63	56	80	82
Alberta	90	86	80	78	82	84	82	75	71	82	80
British Columbia	80	73	67	61	63	66	66	62	58	68	75
Territories	...	...	...	91	...	91	87	71	...	...	95
Not stated	...	...	...	...	...	75	76	78	76	75	74
Total	78	73	69	68	71	72	74	74	74	74	74
	number										
Total number of PGWP holders	10,300	20,300	28,900	40,300	50,500	64,900	77,800	83,500	92,900	104,700	135,100

... not applicable

Note: PGWP stands for post-graduation work permit.

Sources: Statistics Canada, 2019 Longitudinal Immigration Database and T4 - National Accounts Longitudinal Microdata File.

Median earnings of post-graduation work permit holders have risen over the past decade

While Table 2 quantifies the percentage of PGWP holders who have employment income in a given tax year, Table 3 shows the median annual earnings of those who have employment income. Changes in earnings levels over time can provide an indication of changes in intensity of labour market engagement by PGWP holders who have paid employment. Over the past decade, the median earnings received by PGWP holders with employment income rose from \$14,500 (in 2018 dollars) in 2008 to \$26,800 in 2018, indicative of increased labour market engagement (e.g., hours worked during the tax year).

Earnings of male PGWP holders were consistently higher than those of their female counterparts. While earnings of PGWP holders were generally highest at the older end of the age spectrum, earnings growth was stronger for the younger age groups from 2008 to 2018.

In 2018, PGWP holders from Iran had the highest median earnings, followed by those from Nigeria and Pakistan. In contrast, earnings were lowest for those from China, followed by those from the United States and Vietnam. Over the period, earnings increased most among those from the United States, France and South Korea.

In 2018, the highest median earnings were reported by PGWP holders working in the territories, followed by those employed in Alberta and Saskatchewan. The lowest earnings were reported by those employed in Quebec, Nova Scotia and Prince Edward Island. From 2008 to 2018, growth in earnings was highest among PGWP holders employed in Newfoundland and Labrador, followed by Quebec and New Brunswick. Growth was lowest among those working in Alberta, Prince Edward Island and Manitoba.

In 2018, median earnings were highest for those PGWP holders employed in mining and oil and gas extraction, utilities, and public administration. In contrast, the lowest earnings amounts were reported by those employed in educational services; administrative and support, waste management and remediation services; accommodation and food services; and retail trade. These differences across sectors are consistent with the general pattern among all Canadian workers. Earnings growth over the 2008-to-2018 period was highest for those PGWP holders working in accommodation and food services, retail trade, real estate and rental and leasing, and educational services.

Table 3
Median earnings among valid post-graduation work permit holders with positive T4 earnings, tax years 2008 to 2018

	Tax year					
	2008	2010	2012	2014	2016	2018
	2018 constant dollars					
Sex						
Male	15,900	20,000	23,000	25,200	29,300	28,100
Female	13,500	17,100	19,400	20,300	23,700	25,300
Age at tax year						
Younger than 25	12,800	14,100	16,600	18,600	21,800	23,500
25 to 34	16,000	21,600	24,300	25,600	29,000	28,800
35 and older	17,300	20,800	24,000	25,200	27,300	29,000
Top source countries (2018 PGWP ranking)						
India	16,100	18,000	22,100	26,300	31,600	27,500
China	13,800	17,400	18,200	18,900	21,900	23,100
France	13,800	18,400	23,600	22,400	22,600	27,100
South Korea	13,500	18,700	21,400	20,600	24,500	25,700
Brazil	17,600	21,600	26,600	25,000	25,300	28,800
Nigeria	19,600	22,300	25,200	24,700	27,900	31,900
Iran	22,000	18,800	24,000	22,700	26,900	32,100
Vietnam	17,400	23,700	25,000	21,000	23,900	25,300
United States	11,500	17,400	18,500	19,800	21,800	24,200
Pakistan	17,300	28,100	28,900	27,800	32,400	31,300
Other	15,400	19,500	22,600	22,600	24,700	27,500
Province of employment in the tax year¹						
Newfoundland and Labrador	10,100	15,700	19,000	21,900	27,300	26,300
Prince Edward Island	15,300	25,600	17,200	19,900	21,400	24,000
Nova Scotia	12,400	17,100	17,400	19,800	26,600	23,400
New Brunswick	13,400	20,200	23,000	24,800	28,800	27,800
Quebec	10,600	13,500	17,400	16,500	19,400	23,200
Ontario	13,300	19,200	20,000	21,400	26,000	26,000
Manitoba	15,700	19,300	15,400	23,500	24,100	25,200
Saskatchewan	16,900	14,300	26,100	32,300	32,300	30,400
Alberta	24,000	27,300	30,600	30,100	33,900	32,000
British Columbia	14,700	18,200	20,600	21,700	27,800	28,400
Industry of employment in the tax year²						
Agriculture, forestry, fishing and hunting	15,800	17,600	19,400	23,200	29,600	29,900
Mining and oil and gas extraction	45,900	52,400	52,800	49,300	41,400	47,600
Utilities	33,600	45,000	44,800	47,100	48,900	42,300
Construction	22,900	24,500	27,000	28,900	32,000	32,000
Manufacturing	22,000	29,900	30,600	31,200	36,200	33,600
Wholesale trade	15,900	22,000	25,800	27,300	31,000	30,500
Retail trade	9,100	13,700	16,900	19,200	21,700	22,800
Transportation and warehousing	17,300	21,800	26,300	31,000	32,700	31,700
Information and cultural industries	19,700	25,500	27,100	30,300	37,300	32,800
Finance and insurance	20,900	29,500	32,100	33,300	36,000	35,500
Real estate and rental and leasing	12,400	20,500	22,000	23,300	27,400	29,000
Professional, scientific, and technical services	22,200	28,100	32,600	32,400	34,900	33,900
Management of companies and enterprises	20,100	25,800	29,800	29,900	32,600	31,000
services	11,900	14,800	15,300	17,200	20,500	22,100
Education services	8,600	10,900	11,100	12,300	15,300	19,500
Health care and social assistance	17,500	25,400	26,100	27,500	31,000	30,300
Arts, entertainment and recreation	11,200	13,000	18,000	19,200	20,500	23,000
Accommodation and food services	8,800	11,000	15,900	17,000	20,100	22,200
Other services (except public administration)	14,300	17,300	19,000	20,900	24,300	25,900
Public administration	25,300	35,000	39,000	41,000	46,200	40,000
Overall	14,500	18,700	21,500	23,100	26,800	26,800

1. Based on province of highest reported earnings.

2. Based on North American Industrial Classification System (NAICS) 2017.

Note: PGWP stands for post-graduation work permit.

Sources: Statistics Canada, 2019 Longitudinal Immigration Database and T4 - National Accounts Longitudinal Microdata File.

The number of post-graduation work permit holders transitioning to permanent residency is increasing, particularly among those with a study permit at the college or master’s degree level

A previous study shows that among international students who arrived in the 2000s, about 3 in 10 became landed immigrants within 10 years of their arrival (Choi, Crossman and Hou 2021). It is expected the PGWP holders would have high transition rates, because Canadian work experience would improve their chance to be selected as economic immigrants, and because they may have stronger motivation to seek permanent residency than those who did not apply for a PGWP.

The overall cumulative share of transitions of PGWP holders to permanent residents by years since PGWP signing year (to immigration year) for PGWPs signed from 2008 to 2016 are shown in Chart 2. Overall, the rate of transition to permanent residency among PGWP holders remained consistently high across cohorts of PGWPs signed from 2008 to 2016. For cohorts from 2008 to 2012, almost three-quarters of PGWP holders became permanent residents within five years of having signed their PGWP, with little increase in this share in subsequent years. For the 2008 cohort, by the 10th year, 73% had become permanent residents.⁷

Chart 2
Cumulative rate of transition to permanent residency among post-graduation work permit holders, by years since signing year (to immigration year), post-graduation work permits signed from 2008 to 2016

percent



Source: Statistics Canada, 2019 Longitudinal Immigration Database.

Differences in the transition to permanent residency among PGWP holders were evident by level of study. The cumulative transitions of PGWP holders to permanent residents by selected level of study and by years since PGWP signing year (to immigration year) for PGWPs signed from 2008 to 2016 are shown in Table 4. Generally speaking, when levels of study are compared, the rate of transition to permanent residency appears highest among those who held a study permit at the master’s degree level, followed by those at the college level. For both of these groups, there is also a trend towards increased transition rates across cohorts, with more recent cohorts having higher rates of transition at similar points in time, relative to earlier cohorts. While those who held a study permit at the bachelor’s degree level had the

7. The 10-year transition rates among PGWP holders should not be directly compared with the 10-year rates of new international students cited in the previous paragraph. For the former, the 10 years are counted from the PGWP signing year, while for the latter, the 10 years are counted from the year of receiving the first study permit.

next highest rates of transition to permanent residency, these shares were more stable across cohorts. PGWP holders who held a study permit at the doctoral level had the lowest transition rates relative to other levels of study. However, some of the more recent cohorts had higher transition rates at similar points in time relative to earlier cohorts.

Table 4
Cumulative rate of transition to permanent residency among post-graduation work permit holders by selected level of study at last study permit, by years since signing year, post-graduation work permits signed from 2008 to 2016

PGWP signing year	Years since PGWP signing year									
	1	2	3	4	5	6	7	8	9	10
	percent									
Non-university postsecondary programs										
2008	12	31	49	62	67	70	72	72	73	74
2009	7	24	47	57	64	66	68	68	69	...
2010	4	30	50	66	70	72	74	74	...	...
2011	4	34	62	72	77	79	80	...	...	...
2012	5	32	57	72	78	81	...	...	...	...
2013	5	21	44	67	76	...	...	...	...	...
2014	3	16	52	74	...	...	...	...	...	...
2015	4	29	61	...	...	...	...	...	...	...
2016	7	33	...	...	...	...	...	...	...	...
University—bachelor's degree										
2008	15	36	53	63	67	69	70	71	71	72
2009	9	26	47	58	64	66	67	68	68	...
2010	6	26	46	60	65	67	68	69	...	...
2011	7	26	48	59	64	66	67	...	...	...
2012	8	27	44	58	64	66	...	...	...	...
2013	5	20	38	55	62	...	...	...	...	...
2014	6	17	45	60	...	...	...	...	...	...
2015	5	25	49	...	...	...	...	...	...	...
2016	6	29	...	...	...	...	...	...	...	...
University—master's degree										
2008	25	46	62	71	73	75	76	76	76	77
2009	17	34	55	64	69	70	71	72	72	...
2010	11	37	60	71	74	75	75	76	...	...
2011	15	43	66	74	77	78	79	...	...	...
2012	17	46	67	75	78	79	...	...	...	...
2013	13	43	65	75	79	...	...	...	...	...
2014	15	40	69	80	...	...	...	...	...	...
2015	11	48	74	...	...	...	...	...	...	...
2016	16	51	...	...	...	...	...	...	...	...
University—doctoral degree										
2008	21	32	42	49	52	55	56	57	58	58
2009	29	42	50	56	60	60	61	63	63	...
2010	16	34	51	59	63	64	66	67	...	...
2011	20	37	47	56	59	60	61	...	...	...
2012	22	44	57	67	68	70	...	...	...	...
2013	20	44	57	67	70	...	...	...	...	...
2014	21	41	55	64	...	...	...	...	...	...
2015	15	38	63	...	...	...	...	...	...	...
2016	12	42	...	...	...	...	...	...	...	...

... not applicable

Note: PGWP stands for post-graduation work permit.

Sources: Statistics Canada, 2019 Longitudinal Immigration Database and T4 - National Accounts Longitudinal Microdata File.

Conclusion

This study examined the extent to which international students are engaged in the labour market through the Post-Graduation Work Permit Program (PGWPP) after having held a study permit at the postsecondary level (yet before immigration). The number of international students participating in the PGWPP after their studies has increased markedly, driven by increasing numbers of international students in Canada and larger shares of international student graduates obtaining a post-graduation work permit (PGWP).

The labour market participation of PGWP holders (defined as the share of PGWP holders with positive T4 earnings) remained fairly stable from 2008 to 2018, with roughly three-quarters of PGWP holders reporting T4 earnings annually. With the rise in the number of PGWP holders, the number of PGWP holders with T4 earnings grew more than 13 times, from 10,300 in 2008 to 135,100 in 2018. Median annual earnings received by PGWP holders with employment income also rose over this period, from \$14,500 (in 2018 dollars) in 2008 to \$26,800 in 2018.

Almost three-quarters of all PGWP holders became permanent residents within five years of having obtained their PGWP. When levels of study are compared, the rates of transition to permanent residency were highest among those who held a study permit for college- and master's-level programs. Both of these education groups showed a trend towards increased transition rates across cohorts, with more recent cohorts having higher rates of transition at similar points in time relative to earlier cohorts.

In sum, increasing numbers of international students have meant that increasing numbers of PGWP holders have engaged in the Canadian labour market over the past decade. Through participation in the PGWPP and subsequent transition to permanent residency for many, international students provided a growing source of labour for the Canadian labour market that extended well beyond their periods of study.

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