

Economic and Social Reports

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Release date: June 23, 2021



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International students as a source of labour supply: Transition to permanent residency

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DOI: <https://doi.org/10.25318/36280001202100600002-eng>

Abstract

International students are increasingly viewed as a promising pool of skilled individuals who can be tapped for participation in the Canadian labour market. This is a key motivating factor for providing international students with pathways to obtain permanent residency. This article documents the share of international students who became landed immigrants across various sociodemographic characteristics. Findings show that international students who arrived in Canada throughout the 2000s and the early 2010s had similar rates of transition to permanent residency five years after receiving their first study permit. Among international students who arrived in the 2000s, about 3 in 10 became landed immigrants within 10 years of their arrival. This share rose to 5 in 10 master's degree students and 6 in 10 doctoral degree students. The share of international students who worked while studying or after graduation has been increasing. Six in 10 international students who were employed during their period of study or after graduation became landed immigrants within 10 years of having obtained their first study permit. Higher levels of earnings from employment while studying or after graduation are associated with an increased likelihood of transition to permanent residency.

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Acknowledgements

This study was conducted in collaboration with Immigration, Refugees and Citizenship Canada. The authors would like to thank Cédric de Chardon, Rebeka Lee, Katherine Wall and Linda Wang for their advice and comments on an earlier version of this paper.

Introduction

A growing number of international students are choosing Canada as a study destination. The number of study permit holders increased from 122,700 in 2000 to 642,500 in 2019 (IRCC 2020). Increasingly, international students are seen as a promising pool of skilled individuals who can be tapped for participation in the Canadian labour market. The Government of Canada's International Education Strategy 2019–2024 described international students as making “excellent candidates for permanent residency: they are relatively young, proficient in at least one official language, have Canadian educational qualifications, and can help address this country's current and pending labour market needs, particularly for highly skilled workers” (Government of Canada 2019, p. 5). As permanent residents, former international students may have some advantages in the labour market over immigrants who studied abroad. International students face fewer obstacles with respect to credential recognition and language proficiency, are familiar with the culture, and have already built social networks in Canada. For these reasons, there is considerable interest in improving understanding of the context in which—and the extent to which—international students become permanent residents.

In addition to attracting and selecting international students, the Canadian International Student Program has evolved to facilitate work opportunities for them and help them transition to permanent residency. Permanent residency opportunities are available to current international students or recent graduates, including those already working in Canada as temporary workers. Canadian educational credentials and work experience assist temporary residents in qualifying for permanent residency in Canada. The Canadian Experience Class was established in 2008, specifically to provide permanent residency opportunities for skilled temporary foreign workers, including those who spent time in Canada as international students. Many Provincial Nominee Programs have also been put in place to attract recent graduates (with or without a job offer) and temporary foreign workers. Through the Express Entry application management selection system (launched in 2015), points are awarded to those who have studied or worked in the country or whose spouse (if applicable) has studied or worked in Canada.

Former international students may be eligible to work in Canada after graduation under a post-graduation work permit (PGWP). The Post-Graduation Work Permit Program (PGWPP) is a temporary worker program under the International Mobility Program (IMP) and is considered a key component of the International Student Program. The PGWPP allows 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 a range of economic-class immigration programs.

This article documents trends in the transition rate of international students in Canada to permanent residency, updating the work by Lu and Hou (2015). This analysis focuses on first-time study permit holders who obtained their first study permits in 2000 or later.¹ The term “first-time study permit holder” refers to international students who did not receive any other study permit in the previous 10 years (very few current study permit holders had another study permit 10 years earlier).² International students are grouped into three cohorts according to the year the first study permit was issued (2000 to 2004, 2005 to 2009, and 2010 to 2014). Transitions from temporary resident status to permanent resident status are calculated as the cumulative transition rates to permanent residency (by cohort)—i.e., the share of international students who became landed immigrants a number of years after obtaining their first study

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1. This article uses the terms “international students” and “study permit holders” interchangeably, and the numbers reported in the article refer specifically to the latter.
 2. In 2016, among 515,300 current study permit holders, 30.2% (or 155,500) were first-time study permit holders. The corresponding shares were 31.2% in 2010 and 27.1% in 2015.

permit. This study uses data from the Longitudinal Immigration Database (IMDB) that were integrated with T4 tax files.³

This article is part of a series that provides a broad overview of international students as a source of labour supply in Canada. It documents the share of international students who became landed immigrants across various sociodemographic characteristics at time of arrival in Canada, including intended level of study. This article further describes the transition to permanent residency according to post-arrival factors, such as work experience during the period of study and after graduation. It also compares international students with other temporary resident permit holders who first arrived in Canada as temporary workers in terms of their transition to permanent residency.

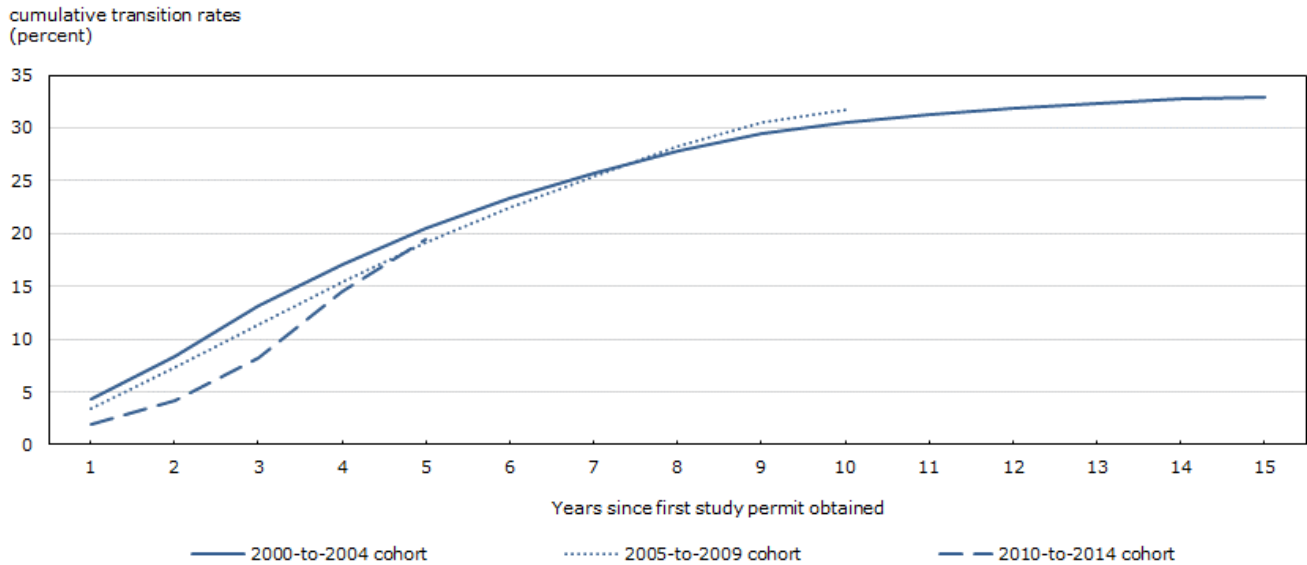
Three in 10 first-time study permit holders became permanent residents within 10 years

Chart 1 shows the cumulative rates of transition to permanent residency among international students for the cohorts who arrived from 2000 to 2004, from 2005 to 2009, and from 2010 to 2014. Of the international students who obtained their first study permit between 2000 and 2004, 21% became permanent residents within five years after the first study permit was obtained. This proportion increased to 31% when the period of observation was extended to the first 10 years after the first study permit was obtained and increased to 33% by the 15th year.

The three successive cohorts had relatively similar patterns of cumulative transition rates. The time between when the initial study permit was obtained and immigration appears to have increased. It is important to note that a decreasing share of international students became landed immigrants during the first three years after having obtained their first study permit (13% for the 2000-to-2004 cohort and 8% for the 2010-to-2014 cohort). However, cumulative transition rates did not decline in the longer term, but increased slightly with successive cohorts.

3. The IMDB contains information on all temporary resident permits issued since 1980 and on all immigrants who have landed in Canada since 1952. The T4 dataset is based on T4 tax slips issued by employers to their employees and contains information on earnings from paid employment.

Chart 1
Cumulative rates of transition to permanent residency among international students



Source: Statistics Canada, Longitudinal Immigration Database.

Half of first-time study permit holders who came for graduate studies became landed immigrants within 10 years

The rates of transition to permanent residency for international students vary by sociodemographic characteristics, such as sex, age, level of study, destination province and source country. Table 1 examines these transition rates by sociodemographic characteristics at the 5th and 10th year after the international students obtained their first study permit.

Across all cohorts, male and female international students shared similar rates of transition to permanent residency. Among the three younger age groups (i.e., aged 17 and younger, aged 18 to 24, and aged 25 to 34), the oldest group had the largest transition rates, which have also increased with successive cohorts. In contrast, the five-year cumulative transition rates for those who obtained their first study permit aged 17 and younger decreased over the three cohorts.

Among those who obtained their first study permit for postsecondary education in Canada, there was a positive relationship between the study level of the first permit and the cumulative rates of transition to permanent residency by the 10th year after having obtained their first study permit. Graduate studies were associated with higher cumulative transition rates than lower postsecondary study levels. Five in 10 master’s degree students and 6 in 10 doctoral degree students became permanent residents within 10 years of having obtained their first study permit, compared with 1 in 3 bachelor’s degree students.

Across the cohorts, there were considerable changes in the five-year cumulative rates of transition to permanent residency, by study level, the most notable being an increasing transition rate among those attending college-level courses. From the 2000-to-2004 cohort to the 2010-to-2014 cohort, the proportion of international students who became permanent residents by the fifth year after having obtained their first study permit more than doubled for non-university postsecondary study permit holders, but it was

halved for study permit holders at the bachelor's and doctoral degree levels (and remaining relatively stable for study permit holders at the master's degree level).⁴

The cumulative rates of transition to permanent residency also differed by the destination province for the first study permit. For the cohort arriving in the early 2000s, the 10-year cumulative transition rate was lowest among those initially destined to study in British Columbia (20%) and highest among those initially destined to study in Newfoundland and Labrador (39%) and in Ontario (38%). When this earlier cohort is compared with the one arriving between 2005 and 2009, there was a large increase in the 10-year cumulative transition rate for those initially destined to study in Alberta and in Prince Edward Island. For the 2005-to-2009 cohort, the transition rate was highest in Alberta (42%) and continued to be lowest in British Columbia (21%).

The rate of transition also varied considerably among international students by source country. The study by Lu and Hou (2015) found that the rate of transition to permanent residency for international students is influenced by the level of economic development in their source countries; international students from countries with a lower gross domestic product (GDP) per capita (such as India) typically had higher rates of transition to permanent residency than those who came from countries with a higher level of GDP per capita (such as South Korea). The transition to permanent residency among international students is jointly determined by several constraints (e.g., meeting requirements for permanent residency and motivation; those from countries with socioeconomic conditions similar to those in Canada are less motivated to seek permanent residency in Canada). Among the source countries listed in Table 1, international students from Nigeria, India, Viet Nam and China had rates of transition two to three times higher than those from the other remaining countries within 10 years after the first study permit had been obtained. Notably, the cumulative transition rates for international students from Nigeria, Viet Nam and China five years after having obtained their first study permit decreased considerably across the three successive cohorts, whereas the transition rates of those from India increased.

4. This may suggest that it took longer for the most recent cohort of study permit holders at the bachelor's and doctoral degree level to make the transition to permanent residency, since the transition rates 10 years after having obtained their first study permit were the same for the 2000-to-2004 cohort and for the 2005-to-2009 cohort.

Table 1
Number of international students and their cumulative rates of transition to permanent residency 5 years and 10 years after having obtained their first study permit, by sociodemographic characteristics at time of first study permit

	Cumulative transition rates by cohort							
	Number of first-time study permit holders			5 years after having obtained first study permit			10 years after having obtained first study permit	
	2000 to 2004	2005 to 2009	2010 to 2014	2000 to 2004	2005 to 2009	2010 to 2014	2000 to 2004	2005 to 2009
	number			percent				
All	354,510	357,580	530,290	21	19	20	31	32
Sex								
Male	181,230	190,090	288,370	21	19	20	31	32
Female	173,280	167,490	241,920	20	19	19	30	32
Age when first study permit obtained								
0 to 17	80,230	83,920	108,340	25	19	15	31	25
18 to 24	185,760	192,770	304,970	14	14	16	27	31
25 to 34	72,780	67,830	99,750	28	31	34	35	40
35 to 44	11,950	9,940	13,580	41	41	33	47	49
45 to 54	2,910	2,360	2,970	39	41	30	44	47
55 and older	820	610	580	38	34	21	41	40
Level of study for first study permit obtained								
Primary	30,310	33,430	27,100	38	27	35	45	32
Secondary	59,100	54,920	87,230	18	14	9	26	21
Non-university postsecondary	101,040	81,240	110,140	13	17	30	24	30
University – Bachelor's degree	52,890	70,090	93,380	17	13	8	35	36
University – Master's degree	21,550	27,140	40,890	42	40	41	50	53
University – Doctoral degree	6,660	9,760	13,730	50	44	23	59	59
Other	82,920	79,420	120,960	19	17	12	26	26
Not stated	70	1,540	36,860	44	41	33	56	59
Destination for first study permit obtained								
Newfoundland and Labrador	1,520	2,500	2,920	26	20	19	39	36
Prince Edward Island	600	1,040	1,430	14	21	13	22	33
Nova Scotia	9,290	10,230	13,790	13	13	11	24	25
New Brunswick	4,820	5,440	5,830	19	20	16	37	35
Quebec	54,670	54,920	75,200	26	23	20	34	37
Ontario	132,480	126,330	229,830	26	22	23	38	37
Manitoba	8,510	7,900	11,140	22	22	22	34	37
Saskatchewan	5,880	6,110	7,000	21	25	32	35	39
Alberta	26,160	26,210	28,900	19	27	30	29	42
British Columbia	110,290	116,710	149,970	12	12	13	20	21
Territories	250	180	110	15	27	27	25	32
Source country								
United States	23,890	19,950	18,880	12	11	11	17	19
Mexico	17,580	12,800	15,270	9	10	11	12	16
Brazil	6,270	8,050	23,650	11	12	8	15	17
France	18,900	22,130	33,510	14	12	9	20	23
Nigeria	2,340	3,650	10,550	52	38	30	72	67
China	47,750	55,420	119,950	22	17	13	49	43
Japan	28,890	21,170	19,670	4	5	4	7	8
South Korea	64,270	66,220	41,420	11	9	10	15	14
Viet Nam	2,450	2,040	5,520	41	23	21	60	53
India	9,710	17,520	69,950	39	42	46	58	66
Other countries	132,410	128,620	171,970	31	28	22	41	40

Notes: The numbers of first-time permit holders are rounded to the nearest 10. For the Year 10 cumulative rates of transition to permanent residency for the 2005-to-2009 cohort, and for the Year 5 cumulative transition rates for the 2010-to-2014 cohort, the first four years included in the cohorts were used to calculate the rates of transition to permanent residency, because of the data available at the time of the study. The listed source countries are the top 10 countries in terms of the number of first study permits issued in 2016.

Source: Statistics Canada, Longitudinal Immigration Database.

Six in 10 first-time study permit holders who worked during their period of study or after graduation became permanent residents

Beyond holding a study permit upon their first arrival in Canada, many international students also have additional experience as a temporary resident, by either extending their studies, holding a job while studying, or finding employment after graduation. This section presents the cumulative rates of transition to permanent residency for international students, by selected post-arrival characteristics. These post-arrival characteristics relate to changes in temporary resident status and to Canadian work experience before having become a landed immigrant or before the most recent year of available T4 data (2017).

The first three columns of Table 2 show the distribution of international students across the selected post-arrival characteristics for the three cohorts. In terms of changes in temporary resident status, more than half of international students obtained an additional temporary resident permit (work, study or other, as listed in Table 2) after having obtained their first study permit; this share increased over the three successive cohorts. Notably, the share of international students who had gone on to receive a PGWP tripled over time, reaching 33% among those who first arrived as international students from 2010 to 2014.⁵ Meanwhile, the share of international students who remained in Canada on study permits (i.e., they had never obtained other types of temporary resident permits) decreased across the three cohorts. In other words, an increasing share of international students have been staying in Canada and working, after having first arrived as international students. Consistent with this change, a growing share of international students had earnings in Canada after having obtained their first study permit; almost one-half of those arriving over the period from 2010 to 2014 had Canadian work experience. Among international students who reported employment earnings, over one-half made less than \$20,000 (in 2017 dollars) annually.

The remaining columns in Table 2 present cumulative rates of transition to permanent residency for international students as of the 5th and 10th year after their first study permit was obtained, by selected post-arrival characteristics. International students who obtained an additional temporary resident permit had a transition rate twice as high as of the 5th year after their arrival in Canada and three times as high as of the 10th year, compared with those who obtained only a study permit. It is possible that those who intended to seek permanent residency were more likely to apply for additional permits to extend their stay in Canada to enhance their qualifications for immigrant selection.

International students who obtained a work permit had a much higher rate of transition to permanent residency than those who did not obtain a work permit. For the 2010-to-2014 cohort, international students who obtained a PGWP had a higher five-year transition rate than those who obtained other types of work permits through the IMP, although the opposite was the case for the two earlier cohorts. For those international students who obtained a PGWP, 62% became landed immigrants within 10 years of having obtained their first study permit—a slightly higher share than that of international students who obtained another type of IMP work permit (59% and 46% for the cohorts of 2000 to 2004 and of 2005 to 2009, respectively) and more than double the share of those who obtained a study permit only (28% and 23% for the cohorts of 2000 to 2004 and of 2005 to 2009, respectively).

Consistent with the previous findings, 6 in 10 international students who had paid earnings in Canada became landed immigrants within 10 years after having obtained their first study permit. For the 2005-to-2009 cohort, there was a clear positive relationship between the level of annual earnings as temporary residents in Canada and the 10-year cumulative transition rates. About 9 in 10 international students who had Canadian earnings greater than \$50,000 (in 2017 dollars) became landed immigrants within 10 years

5. The earliest year in which it would have been possible to receive a PGWP was 2003, when the PGWPP began as a pilot project in selected provinces; it expanded nationwide in 2005 and was further enhanced in 2008 (CIC 2010). Trends presented in Table 2, therefore, partially reflect factors related to the implementation timeline of the program.

after having obtained their first study permit, whereas the comparable share for those who earned less than \$20,000 was closer to half (e.g., 87% versus 46% for the 2005-to-2009 cohort, respectively).

In summary, international students who gained Canadian work experience during their period of study or after graduation were much more likely to become landed immigrants. Moreover, there appears to be a positive relationship between the level of earnings and the rate of transition to permanent residency, suggesting that those with higher-paying jobs or higher levels of occupational skills were more likely to become permanent residents.

Table 2

Cumulative rates of transition to permanent residency for international students, 5 years and 10 years after having obtained their first study permit, by selected post-arrival characteristics

	Characteristics			Cumulative transition rates				
	First study permit obtained			5 years after having obtained first study permit			10 years after having obtained first study permit	
	2000 to 2004	2005 to 2009	2010 to 2014	2000 to 2004	2005 to 2009	2010 to 2014	2000 to 2004	2005 to 2009
	percent							
Overall	100	100	100	21	19	20	31	32
Had another temporary residency permit in Canada								
No	42	38	28	12	12	10	13	13
Yes	58	62	72	27	24	23	43	43
Obtained post-graduation work permit	11	23	33	16	21	33	62	62
Obtained other International Mobility Program (IMP) work permit (never obtained post-graduation work permit)	14	16	16	43	34	21	59	46
Temporary Foreign Worker Program work permit (never obtained an IMP work permit)	1	0	0	29	36	37	56	53
Refugee claim or temporary resident permit (never obtained a work permit)	1	0	0	29	17	25	40	24
Obtained other study permits (never obtained other types of temporary permits)	31	23	22	23	19	11	28	23
Had paid earnings in Canada								
No	69	62	53	13	11	9	16	13
Yes	31	38	47	37	32	32	63	62
Highest annual earnings in Canada (in 2017 dollars)								
Below \$20,000	19	20	25	41	33	19	57	46
\$20,000 to \$49,999	9	13	16	34	32	44	73	76
\$50,000 or more	3	5	5	24	31	59	73	87

Notes: The Year 10 cumulative rates of transition to permanent residency for the 2005-to-2009 cohort include international students who obtained their first study permit between 2005 and 2008, given the data available at the time of the study. For the same reason, the Year 5 cumulative rates of transition for the 2010-to-2014 cohort include those who obtained their first study permit between 2010 and 2013.

Source: Statistics Canada, Longitudinal Immigration Database.

While first-time work permit holders were more likely to become permanent residents in the short run, transition rates for first-time study permit holders caught up in the longer run

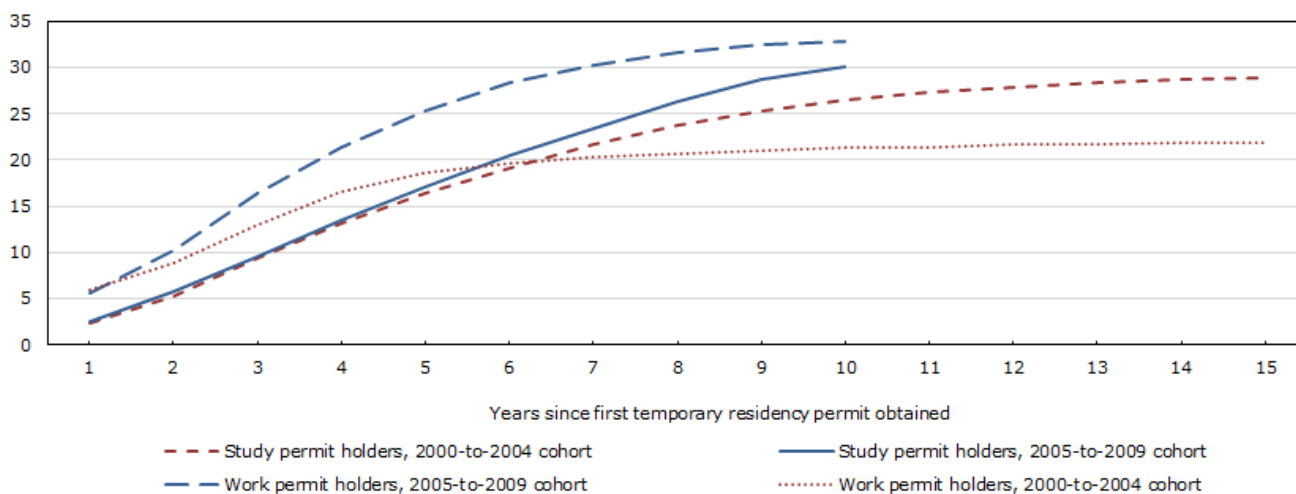
The final part of this analysis examines whether international students had higher rates of transition to permanent residency than those who first arrived in Canada as temporary workers. Chart 2 compares the cumulative rates of transition to permanent residency between those who first came to Canada in the 2000s to study and those who first came to Canada in the 2000s to work. This comparison focuses on first-time study permit holders and first-time work permit holders who had not obtained any other temporary resident permits in the previous 10 years. Note that this section defines first-time study permit holders more restrictively than the previous section, in which they could have had other temporary resident permits prior to having obtained their first study permit.

Among those who arrived in the early 2000s, the share who became landed immigrants was higher for first-time work permit holders during the first five years after their arrival. However, over the longer term, the share of those holding a first-time study permit caught up to and surpassed the rate for work permit holders. The share of international students who transitioned to permanent residency reached 29% by the 15th year after arriving in Canada; the comparable rate was 22% for first-time work permit holders.

For the 2005-to-2009 arrival cohort, cumulative rates of transition to permanent residency for first-time work permit holders were considerably higher than for those in the earlier cohort. While the cumulative transition rates for these two cohorts started out similarly, the transition rate for the later cohort reached 33% by the 10th year, compared with 21% for the earlier cohort. The growth in the cumulative rates of transition to permanent residency for first-time work permit holders was driven by participants in the Temporary Foreign Worker Program, a group with a cumulative rate of transition to permanent residency of 46% by the 10th year after arriving in Canada (versus 24% for those in the IMP). Although international students arriving in the latter half of the 2000s also had an increased rate of transition to permanent residency relative to their counterparts in the earlier cohort, their Year 10 cumulative transition rate, at 30%, was below that of work permit holders.

Chart 2
Cumulative rates of transition to permanent residency among first-time study permit holders and first-time work permit holders

cumulative transition rates
 (percent)



Source: Statistics Canada, Longitudinal Immigration Database.

Conclusion

Over the last two decades, the arrival of international students to Canada has grown considerably. This article documented rates of transition to permanent residency among international students and the associated changes that have occurred in these rates over time. Findings showed that about 3 in 10 international students who entered Canada in 2000 or later became landed immigrants within 10 years of having obtained their first study permit. This share rose to more than half among international students who came to study for a master's or doctoral degree.

Among international students who entered Canada from 2010 to 2014, the share that became landed immigrants within five years of arrival was highest among those intending to enrol in non-university postsecondary programs and master's degree programs. These programs typically have a relatively short period of study, one to two years in many cases.

This study also found that 6 in 10 international students who were employed during their period of study or after graduation became landed immigrants within 10 years of having obtained their first study permit. Higher levels of earnings from employment while studying or after graduation were associated with an increased likelihood of transition to permanent residency. Taken together, these results suggest that having gained Canadian work experience, particularly in higher-paying jobs, reflects the motivation of international students to stay permanently in Canada and their ability to meet the qualification requirements for permanent residency.

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