Linking Higher Education and Employer Data to Improve our Understanding of Labour Market Insertion of International Students

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Outline

1. Existing data resources
   - Longitudinal Immigration Database
   - National Graduates Survey
   - Graduate Satisfaction Survey

2. Resources to look forward to
   - Education and Labour Market Longitudinal Platform (ELMLP)

3. Some interesting insights

- Cross-sectional data, like the Canadian Census, is the most commonly used data set for research on permanent and non-permanent residents

- But it has some limitations:
  1. insufficient depth on experiences of transition and integration overtime
  2. cannot accurately estimate long-run outcomes
  3. e.g. the transition from student visa to permanent residency, and subsequent integration into the labour market

- New data sets that can help us get a clearer picture
  1. Longitudinal Immigration Database
  2. National Graduates Survey
  3. Graduate Satisfaction Survey
  4. Education and Labour Market Longitudinal Platform

Longitudinal Immigration Database

Inclusion of variables in the Longitudinal Immigration Database.

Variable	Availability
Immigration status	✔
Admission category	✔
Country of origin	✔
Visible minority group	✘
Language spoken at home	✔
Qualifications required for current job*	✔
Occupation*	✔
Income, wages and salaries	✔
Labour force status	✔
Program of study	✘
Job related to program of study	✘
Employer details (Name and address)	✘

*Intended occupation = Requires the individual to have a degree in the field and at least 1 year of relevant work experience.

Longitudinal Immigration Database

- Can be used to identify a change in status and admission category

- Cannot be used to make comparisons with native-born

- Includes highest level of educational qualification and years of schooling, but with known data quality issues

- Labour market outcomes
  1. Long-term income growth
  2. Employment and other other outcomes requires linkage with the Longitudinal Survey of Immigrants in Canada (but only relevant for the 2000-2001 entry cohort)

National Graduates Survey
2018 (cohort = 2015)

Inclusion of variables in the 2018 National Graduates Survey (cohort = 2015).

Variable	Availability
Immigration status	✔
Admission category	✘
Country of origin*	✘
Visible minority group	✔
Language spoken at home	✔
Qualifications required for current job	✔
Occupation	✔
Income, wages and salaries*	✔
Labour force status	✔
Program of study	✔
Job related to program of study	✔
Employer details (Name and address)	✘

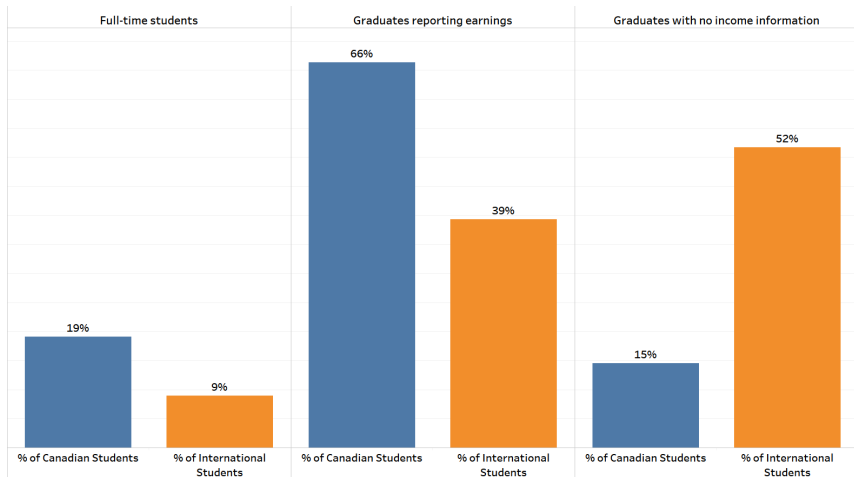*Detailed available through Statistics Canada's Research Data Center.

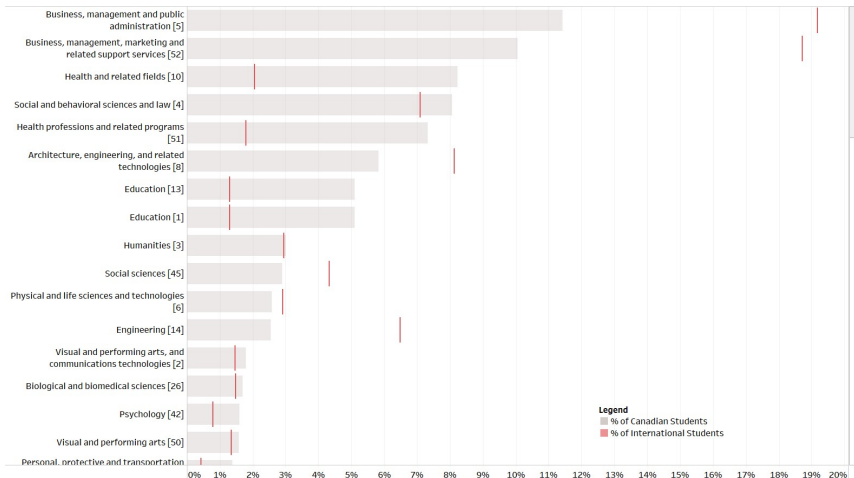The ELMLP is a combination of the following administrative datasets:

1. Post-secondary Student Information System (PSIS; 2009-current)

2. Registered Apprenticeship Information System (RAIS; 2008-current)

3. Income tax from the T1 Family File (T1FF; 2004-current)

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- The ELMLP is the most complete source of student data available for research.

- It is based on administrative student records at colleges and universities in Canada.

- However, those students that left Canada after graduation are not recorded. So some outcomes are subject to selection biases.

- The data is accessed through Statistics Canada's Research Data Center.

ELMLP

Student outcomes, by status[1]

Full-time students	Graduates reporting earnings	Graduates with no income information

Full-time students:
- % of Canadian Students: 19%
- % of International Students: 9%

Graduates reporting earnings:
- % of Canadian Students: 66%
- % of International Students: 39%

Graduates with no income information:
- % of Canadian Students: 15%
- % of International Students: 52%

ELMLP

Distribution across field of study, by status[2]

Legend
▦ % of Canadian Students
▮ % of International Students

Graduate Satisfaction Survey (GSS)

- The GSS is a survey conducted by post-secondary institutions in Ontario to get a better sense of graduate outcomes

  1. Graduate satisfaction rate
  2. Employment rate
  3. Employment in a related job rate

- While public access to the the GSS is restricted, there are partnerships with Institutional Research & Planning departments within institutions that can be leveraged.[3]

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[3]McCloy, Ursula & Liu, Shuping (2010). What are the Influencers of Graduate Satisfaction and Labour Market Outcomes of Ontario College Graduates? An Analysis of Ontario's College Graduate Satisfaction Survey. *Higher Education Quality Council of Ontario*, November 2010. Retrieved from: HEQCO.

Graduate Satisfaction Survey (GSS)

Data items available in the Graduate Student Satisfaction Surveys.

Variable	Availability
Immigration status	✔
Admission category	✘
Country of origin	✔
Visible minority group	✘
Language spoken at home	✘
Qualifications required for current job	✔
Occupation	✔
Income, wages and salaries	✔
Hours worked	✔
Labour force status	✔
Program of study	✔
Job related to program of study	✔
Employer details and opinions	✔

- It allows researchers to further connect students to their pre-immigration characteristics, such as GPA on arrival, prior educational institution in the home country, course-level attributes such as class size and instructor attributes.

- There is no other survey that will connect employers' opinions to graduates' skills.

Graduate Satisfaction Survey (GSS)

- Since it is a survey, it can be difficult to capture international students who usually move to a different address post-graduation. There is selection bias.

- If the sample of institutions that are selected is not diverse enough, it may not apply to all international students generally, because of differences in selective-ness of the institution.

- The number of international students in Canada grew by 68% between 2014 and 2018 [4], and

- represented about 12% of total enrolments in 2016-17 [5].

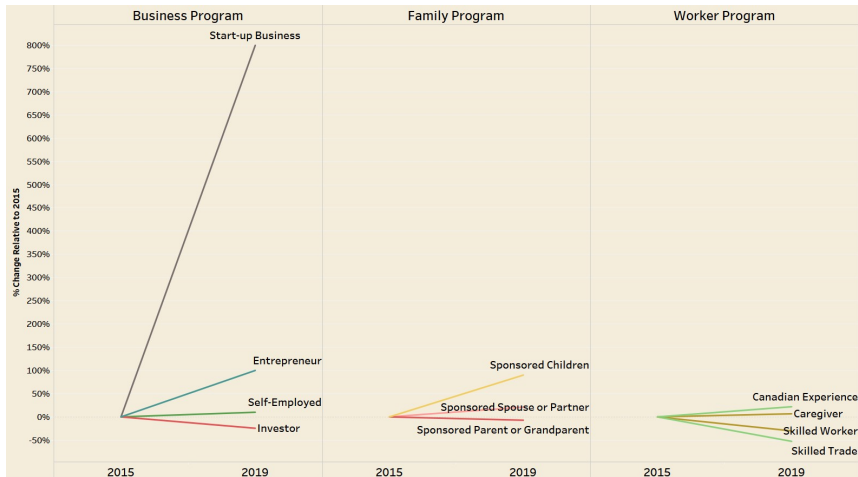- Eventually, 20-27% of international students become permanent residents [6].

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[4]Canada (2019). Building on Success: International Education Strategy 2019-2024. *Government of Canada*, Retrieved from: Global Affairs Canada on 30th January 2020.

[5]Statistics Canada (2018). Canadian postsecondary enrolments and graduates, 2016/2017. *Statistics Canada*, The Daily, 28th November 2018. Retrieved from: Statistics Canada.

[6]Lu, Yuqian & Hou, Feng (2015). International students who become permanent residents in Canada. *Statistics Canada*, Insights on Canadian Society, Catalogue no. 75-006-X.

Insights

Study permits to permanent residency, by program

- Immigrants with a foreign degree earn 11% less than comparable native-born.

- Immigrants with a Canadian degree only earn 3% less than comparable native-born.

Source: Fortin, Nicole; Lemieux, Thomas Torre, Javier (2016). Foreign human capital and the earnings gap between immigrants and Canadian-born workers. *Labour Economics*, 41, pp. 104-119.

Thank you!

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Appendix

	Canadian Students	% of Canadian Students	International Students	% of International Students
Full-time students	1,002,145	19%	32,735	9%
Graduates reporting earnings	3,488,720	66%	143,680	39%
Graduates with no income information	764,820	15%	188,880	52%
Grand Total	5,255,685	100%	365,295	100%

Appendix

		2015	2016	2017	2018	2019
Worker Program	Skilled Worker	2,090	1,865	1,700	1,995	1,460
	Canadian Experience	1,210	990	2,165	1,505	1,475
	Atlantic Immigration Pilot Programs	0	0	0	90	285
	Caregiver	75	60	85	75	80
	Skilled Trade	95	90	70	45	45
Family Program	Sponsored Spouse or Partner	1,540	1,930	1,570	1,925	1,865
	Sponsored Children	50	55	55	120	95
	Sponsored Parent or Grandparent	70	75	50	35	65
	Sponsored Extended Family Member	0	0	0	0	0
Business Program	Investor	470	430	410	570	355
	Self-Employed	50	30	15	40	55
	Entrepreneur	10	20	35	20	20
	Start-up Business	5	10	5	15	45
Resettled Refugee	Government-Assisted Refugee	0	0	0	0	0
	Privately Sponsored Refugee	0	0	0	0	0

SESSION 6

New IT Methodologies in Migration Studies

Discussant: Priya Kumar | Ryerson University and Global Affairs Canada

Audience Q&A

Thank you for attending

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