

# Social life on campus and job-education matching for international students: Some evidence from Atlantic Canada

Ather H. Akbari (Saint Mary's University)

Nicholas Manuel (Saint Mary's University)

Presentation prepared for the 50<sup>th</sup> Annual conference of Atlantic Canada Economics Association, 2024, Halifax



**Sobey School  
of Business**  
Saint Mary's University

# Acknowledgements

## *Partners and supporters*



Atlantic Canada  
Opportunities  
Agency

Agence de  
promotion économique  
du Canada atlantique

Canada 



Immigration, Refugees  
and Citizenship Canada

Immigration, Réfugiés  
et Citoyenneté Canada



Sobey School  
of Business  
Saint Mary's University

# Acknowledgements (contd.)

## *PROJECT STEERING COMMITTEE*

Stephen Coyle – Group ATN

- Lauren Cullen – Saint Mary's University
- Peter Halpin – Association of Atlantic Universities
- Sarah McRae – Government of New Brunswick
- Lisa O'Connell – Maritime Provinces Higher Education Commission
- Jennifer Porter – Memorial University of Newfoundland
- Jerry Wang – University of Prince Edward Island

## *Research Team*

- Ather H. Akbari
- Stephen Coyle
- Adou Kouakou

## *Research Assistants*

- Mohshinul Karim (MAE program)
- Maya Saradammal (MAE program)
- Ambreen Tabassum (MAE program)



**Sobey School  
of Business**

Saint Mary's University

# Population in Atlantic Canada, 1996-2023



Statistics Canada. Year-end data.

# Key source of economic growth

## Growth in capital stock:

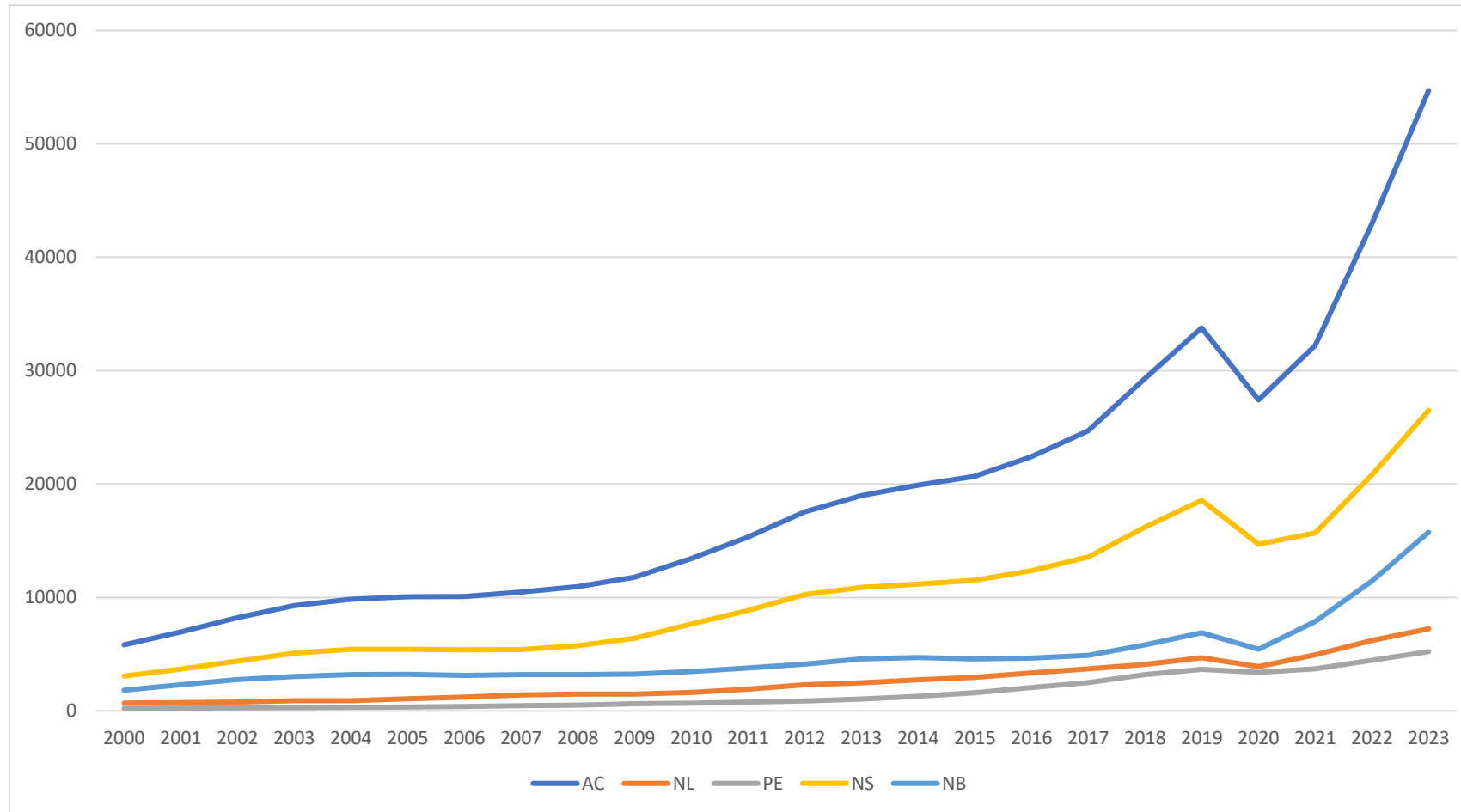
Physical capital: investment in machinery, equipment, infrastructure

Human capital: growth in knowledge, productivity and innovation through investment in education

**Challenge:** Natural decline of population causing fall in Canadian students enrolling in post-secondary institutions

**One solution:** Increase international student enrolments

# Study permit holders in Atlantic Provinces on December 31



# Objective of the survey

To understand how social integration of international students during their studies affects the possibility of their finding jobs in their field of study.

# Importance of the study

- Finding jobs in the field of study is important for:
  - Personal development and success of the individual
  - The best return to education received
  - The overall productivity of labour force



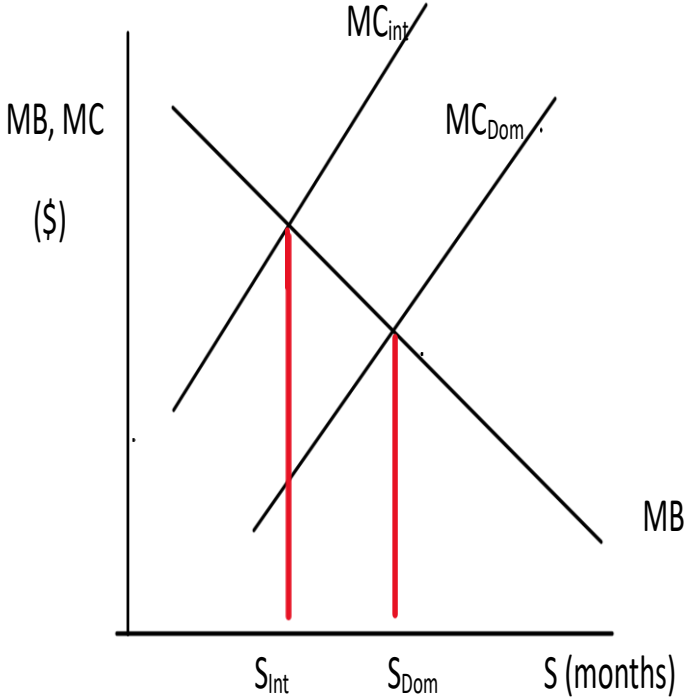
# Social experience during study and job-education matching

- On-campus social experiences reduce the search cost of finding job in one's field of study through:
    - Networking opportunities with:
      - Classmates who are working towards the same goal,
      - Professors with connection in the relevant industry/sector,
      - Industry professionals.
- These connections can lead to job referrals and insider information about job openings.

# Social experience during study and job-education matching (contd.)

- On-campus social experiences allow to develop:
  - Teamworking skills where team members focus to develop a common set of skills.
  - Interaction with classmates who are working towards the same goal. (teamworking skills).
  - Interaction with professors with connections in the relevant industry/sector.
  - Interaction with industry professionals.

# Optimal job search: Domestic versus international students



# Who was the survey administered to?

The target population for the survey was 68,845 post-secondary students who enrolled at Atlantic institutions between 2017 and 2023.

- There were 3,584 valid responses to the questionnaire, roughly equally split between males and females and over a wide range of ages.
- About 60% had received their study permit within three months of application, and few had delays on starting programs as a result.
- The Canadian application process is generally comparable to, if not rather easier than, those in other countries.

## Social interaction

- More than 70% were satisfied with their interactions with domestic students, although some admitted it was easier to make friends with other international students.
- About one-third reported social isolation on campus.
- About a quarter reported interaction with families off-campus, with most describing this experience as warm and welcoming.

# Sample

- We restrict the sample to respondents who are still in Canada, and who were not pursuing another post-secondary education credential at the time of the survey.
- 2,078 respondents remain
- Aggregate respondents into 6 regions of origin (South Asia, East Asia, Middle East, Sub-Saharan Africa, Latin America, and West).
- Aggregate fields of study into 6 different categories (Arts, Business, STEM, Hospitality/Tourism, Trades, and Other).
- Our dependent variable of interest is whether they report working in an occupation that is related to their field of study. (56.7% do)

## Social Ties Index

- Using Principal Component Analysis (PCA), we create a “Social Ties Index” that aggregates responses related to feelings of social inclusion during their studies.

Respondents indicated:

1. Whether they found it easy to make friends. (69.88%)
2. Whether they experienced social isolation on campus. (30.88%)
3. Whether they are still in contact with members of their on-campus study group. (46.22%)
4. Whether they socialized with members of their on-campus study group. (46.4%)
5. Whether they report difficulties with making friends as a factor that negatively affected their academic performance. (15.91%)

- One unit increase in the index represent a one standard deviation increase in strength of social ties.

## Study Group Composition

- Respondents also indicate whether their on-campus study group (if applicable) consists:
  1. Exclusively of other international students. (23.51%)
  2. Exclusively of domestic students. (1.46%)
  3. Both other international students and domestic students. (37.16%)
  4. We use a fourth category for respondents who indicated that they had no study group. (37.87%)

## Home Country Classmates

- We create a variable consisting of the number of fellow respondents from the same country of origin who studied in the same field, in the same year, at the same institution. (Mean=2.08)



# Model

- We run a logistic regression to obtain the log odds of working in their field.
- Control for region of origin, field of study, level of education, gender, age, years since graduation, citizen/permanent resident status, self-reported gpa, region of Canada currently residing in, whether they resided in Canada before starting their program of study, home country classmates, study group composition, and social ties index.

# Results

| Region of Origin (Base: South Asia) | Log Odds | Standard Error |
|-------------------------------------|----------|----------------|
| West                                | 1.39     | 0.36           |
| East Asia                           | 1.30*    | 0.2            |
| Middle East                         | 0.84     | 0.17           |
| Sub-Saharan Africa                  | 0.73**   | 0.11           |
| Latin American                      | 1.1      | 0.19           |

| Field of Study (Base: STEM) | Log Odds | Standard Error |
|-----------------------------|----------|----------------|
| Arts                        | 0.65***  | 0.1            |
| Business                    | 0.8**    | 0.09           |
| Trades                      | 0.64*    | 0.17           |
| Hospitality/Tourism         | 1.19     | 0.31           |
| Other                       | 0.56     | 0.25           |

# Results

| Other Coefficients              | Log Odds            | Standard Error |
|---------------------------------|---------------------|----------------|
| Female                          | 0.92                | 0.09           |
| Years Since Graduation          | 0.97                | 0.04           |
| Reside in Central Canada        | 1.51 <sup>***</sup> | 0.22           |
| Reside in Western Canada        | 1.55 <sup>**</sup>  | 0.3            |
| Citizen/Permanent Resident      | 1                   | 0.12           |
| Undergraduate Degree            | 0.84                | 0.12           |
| College/Trades Certificate      | 1.36 <sup>**</sup>  | 0.17           |
| B Student (Relative to A)       | 0.67 <sup>***</sup> | 0.07           |
| C Student (Relative to A)       | 0.36 <sup>***</sup> | 0.08           |
| Resided in Canada Before Degree | 0.89                | 0.14           |

# Results

| Other Coefficients      | Log Odds            | Standard Error |
|-------------------------|---------------------|----------------|
| Social Ties Index       | 1.14 <sup>***</sup> | 0.05           |
| Home Country Classmates | 0.96 <sup>**</sup>  | 0.014          |

| Study Group Composition (No Study Group Base)      | Log Odds           | Standard Error |
|--|--------------------|----------------|
| International Students Only                        | 0.76 <sup>**</sup> | 0.11           |
| Domestic Students Only                             | 1.73               | 0.76           |
| Combination of International and Domestic Students | 0.95               | 0.13           |



# With Institution/Field/Country/Year Effects

| Other Coefficients      | Log Odds            | Standard Error |
|-------------------------|---------------------|----------------|
| Social Ties Index       | 1.17 <sup>***</sup> | 0.05           |
| Home Country Classmates | 0.98                | 0.018          |

| Study Group Composition (No Study Group Base)      | Log Odds           | Standard Error |
|--|--------------------|----------------|
| International Students Only                        | 0.74 <sup>*</sup>  | 0.12           |
| Domestic Students Only                             | 2.93 <sup>**</sup> | 1.61           |
| Combination of International and Domestic Students | 0.95               | 0.14           |



# Summary

- Strong social ties predict the likelihood that a former international student from an Atlantic Canadian institution works in a job related to their field of study.
- Evidence that international student only study groups predict lower likelihoods of working in jobs related to their field of study, relative to no study group or study groups that contain at least some domestic students.

Thank you all!

