

"Are International Students the Ideal Economic-Class Immigrants? Policy Opportunities and Challenges"

"Future of Skilled Labor Force in Canada and Atlantic Canada: Attracting and Retaining International Students to Fill the Skills Gap"

Saint Mary's University

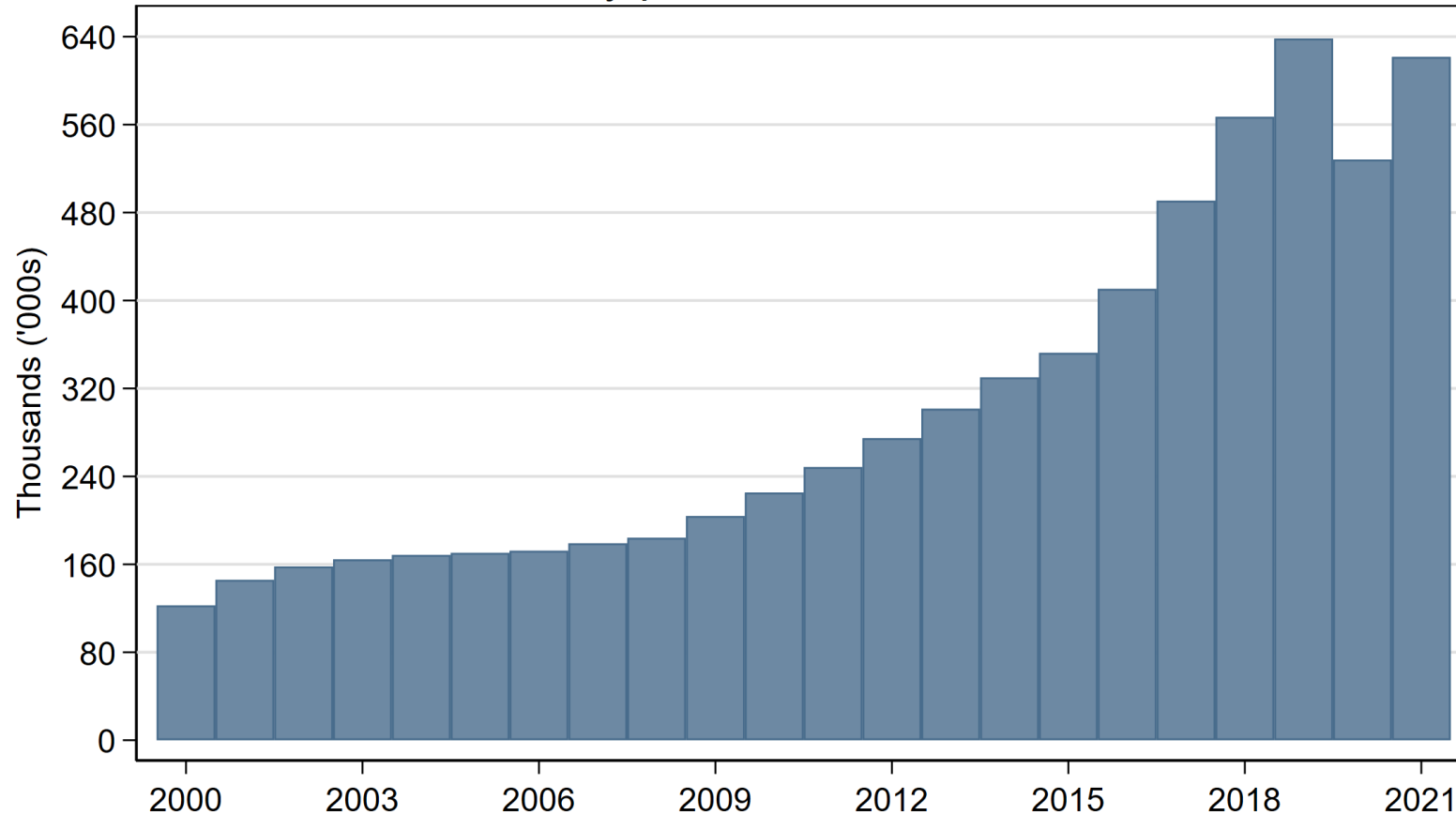
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Growth in international student population

Number of study permit holders on December 31st

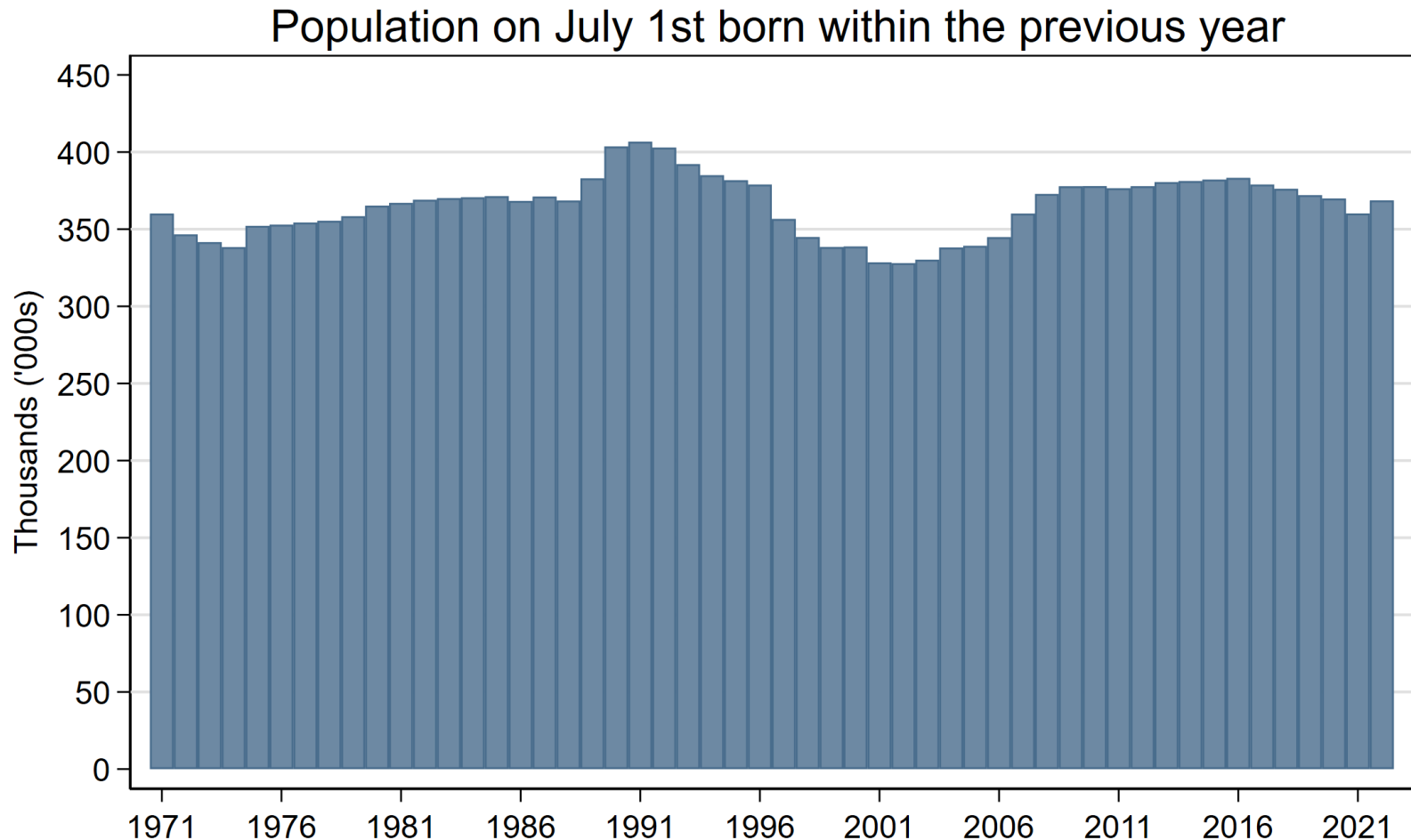


- Four-fold increase since 2000 and 150% increase over the past decade.
- Where would 2021 number have been in absence of pandemic?
- Growing discrepancy between the numbers and PSIS enrolment numbers.

Policy background

- 2001: *Canada's Innovation Strategy* made a commitment to “improve the recruitment of top foreign students” through a “coordinated international student strategy led by Canadian universities” and to “implement changes to immigration policies and procedures to facilitate retention of international students.”
- 2002: The *Immigration and Refugee Protection Act (IRPA)* prioritized high skill immigration over current labour market needs, including facilitating the entry and transitions of international students.
- 2003: *Post-Graduate Work Permit Program (PGWP)* introduced providing one-year open work permit (extended to two years in 2005 and three years in 2008).
- 2006: *Off-Campus Work Permit Program (OCWP)* introduced enabling part-time employment during studies. Permit not required since 2014. Work hours cap dropped in November 2022.
- 2008: *Canadian Experience Class Program (CEC)* providing simplified PR pathway for foreign students.
- 2016: *Express Entry System* revised to give bonus points for Canadian postsecondary credentials.

Postsecondary institution financial pressures



- Reduced provincial government funding of postsecondary institutions through 1990s.
- 19% decline in Canadian-born population who are age 19 between 2010 and 2020.

Mean log wage relative to foreign-born-and-educated



- Comparison of log real hourly earnings two years after graduation from *National Graduates Survey* and *Labour Force Survey*.
- Conditional on rich set of controls, including level and field of study, and immigrant source country.
- Strong evidence that Canadian-educated immigrants outperform their foreign-educated counterparts, but the difference is declining over time.

Mean log wage relative to Canadian-born-and-educated



- Conditional on level and field of study, Canadian-educated immigrants underperform their Canadian-born counterparts.
- Gap is increasing over time, especially among women.
- Most consistent with a quality trade-off because the supply of international students has not kept pace with the growth in demand.

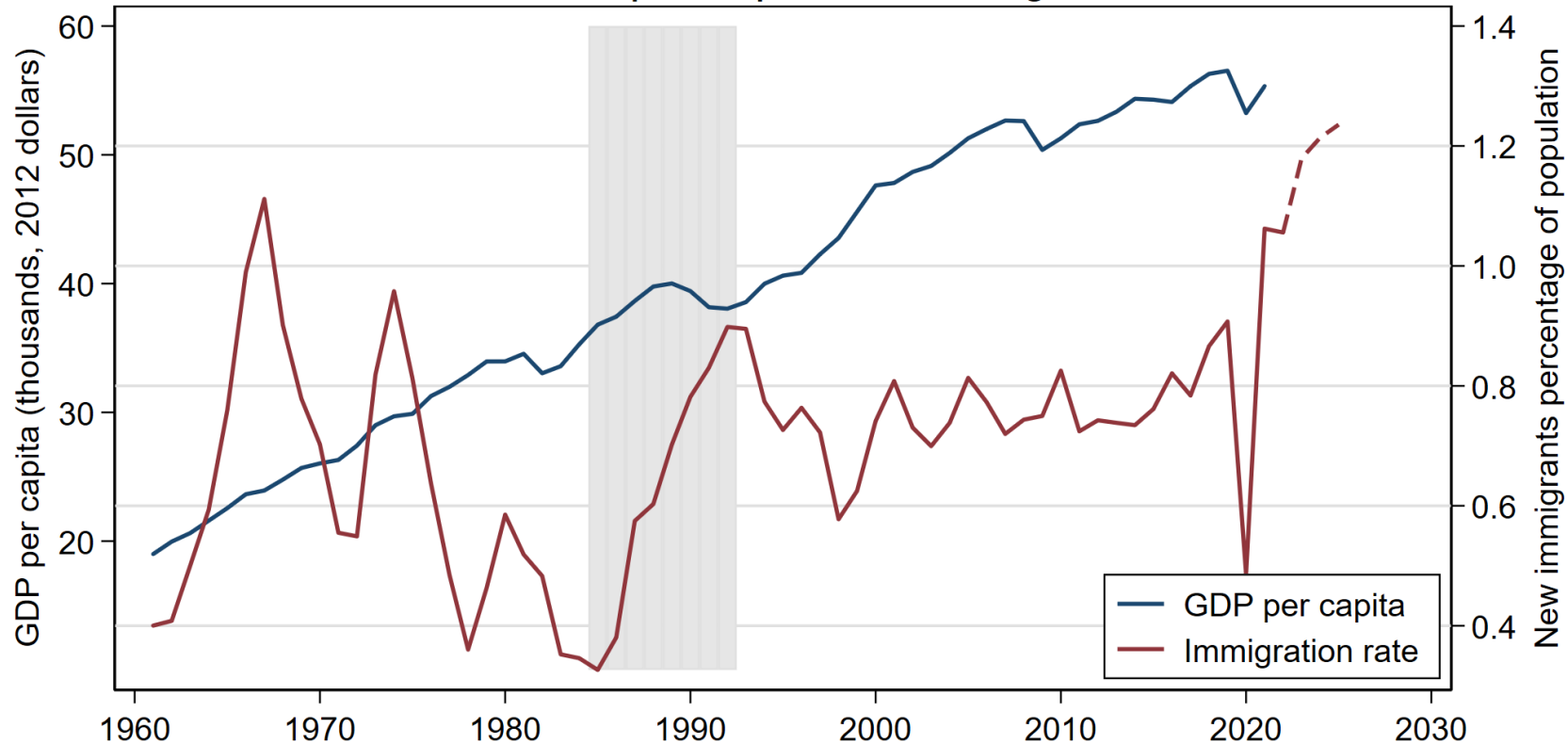
Mean grade achievement relative to domestic classmates

Faculty C						
	5th	25th	50th	75th	95th	ols
is	-5.616** (2.388)	-2.829*** (1.005)	-3.804*** (0.842)	-3.396*** (0.948)	-0.992 (1.223)	-3.388*** (0.756)
is*cohort trend	0.255 (0.338)	-0.020 (0.142)	0.110 (0.119)	0.178 (0.134)	0.194 (0.173)	0.173 (0.107)
observations	17,530	17,530	17,530	17,530	17,530	17,530
R-square	0.006	0.009	0.009	0.007	0.008	0.013
ceis	-13.510*** (3.605)	-5.191*** (1.520)	-5.719*** (1.282)	-7.447*** (1.461)	-5.687*** (1.862)	-6.513*** (1.161)
ceis*cohort trend	0.964** (0.449)	0.157 (0.189)	0.143 (0.160)	0.605*** (0.182)	0.793*** (0.232)	0.440*** (0.145)
feis	2.144 (3.773)	-0.352 (1.591)	-1.856 (1.342)	-0.394 (1.529)	-0.270 (1.949)	-0.360 (1.215)
feis*cohort trend	-0.460 (0.478)	-0.185 (0.202)	-0.005 (0.170)	-0.182 (0.194)	0.020 (0.247)	-0.118 (0.154)
observations	17,530	17,530	17,530	17,530	17,530	17,530
R-square	0.007	0.010	0.010	0.008	0.008	0.014

- Data from a large Ontario university with high foreign student presence.
- Faculty C includes programs in Arts and Social Sciences.
- Consistent with wage outcomes, foreign student gaps in academic achievement are largest at bottom end, especially among those with Canadian high school diplomas.

Objective of permanent economic immigration

Canadian GDP per capita and immigration rate



- Wide consensus that the key objective of economic immigration is to raise average economic living standards in the population.
- $GDP = F(K,L)$ and constant returns to scale (CRS)
- Requires that marginal changes in the immigration rate increase per capita GDP.

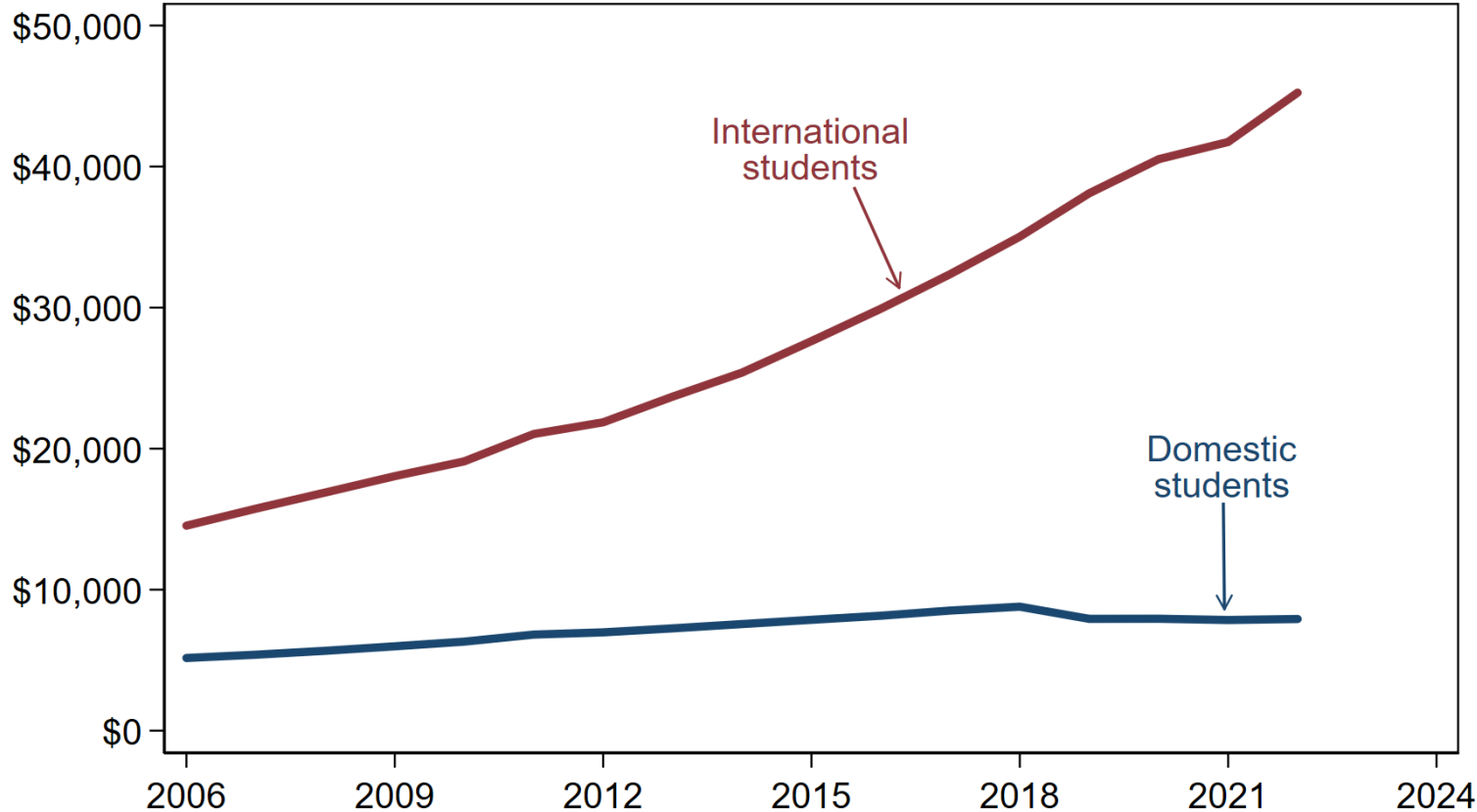
Source: Statistics Canada Tables 36-10-0369-01, 17-10-0040-01, 17-10-0050-01, and 17-10-0009-01).
Charted by @mikalskuterud.

The economics of two-step immigration

- Permanent residency (PR) status has high economic value. Ethical constraints keep the government from capturing this value.
- Two-step immigration provides employers and postsecondary institutions with influence over who gets on the PR pathway.
- The prospect of obtaining PR status influences the labour supply of TFWs (willingness to accept wages) and foreign students' demand for Canadian postsecondary education (willingness to pay tuition).
- Implies that postsecondary institutions are selling more than education (human capital and signals); they are also selling PR status.
- Easing employer access to work permits (relaxing LMIA constraints) and postsecondary access to study permits (increasing DLIs) affects equilibrium wage rates and tuition fees.

Relative increase in foreign student fees

Average Undergraduate Tuition Fees in Ontario



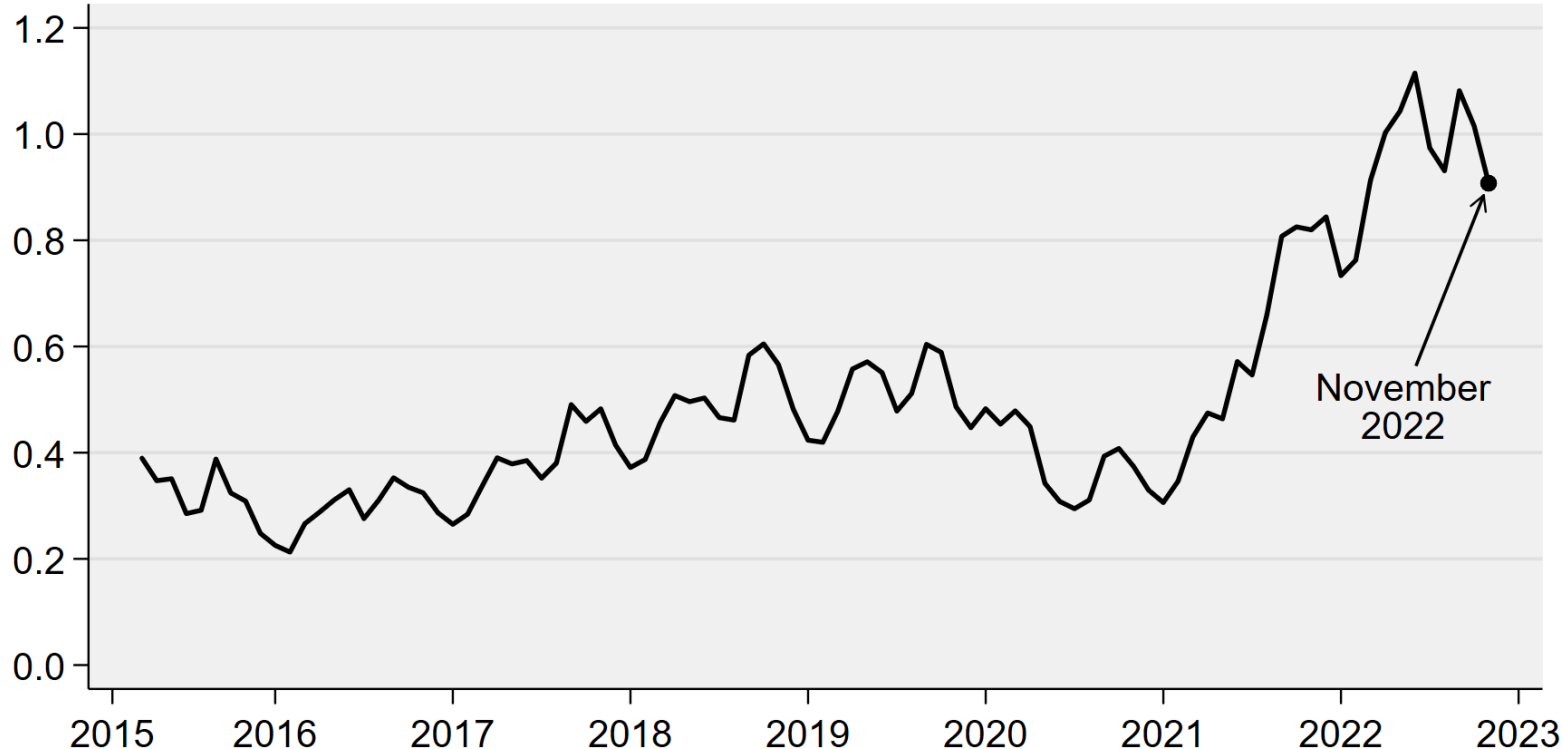
Note: Current dollars. Averages are weighted by enrolments from the PSIS, so they may partially reflect differences in fields of study between domestic and foreign students.

Source: Tables 37-10-0003-01 and 37-10-0005-01. Charted by @mikalskuterud.

- Price discrimination allows universities to capture foreign students' consumer surplus.
- Student recruitment agencies (e.g. ApplyBoard) share in surplus capture.
- No regulation of foreign student fees or the number of student visas.
- Federal-provincial disconnect in regulation of DLIs.

Why are labour shortages viewed as the “problem”?

Canadian Labour Market Tightness
Number of job vacancies per job seeker

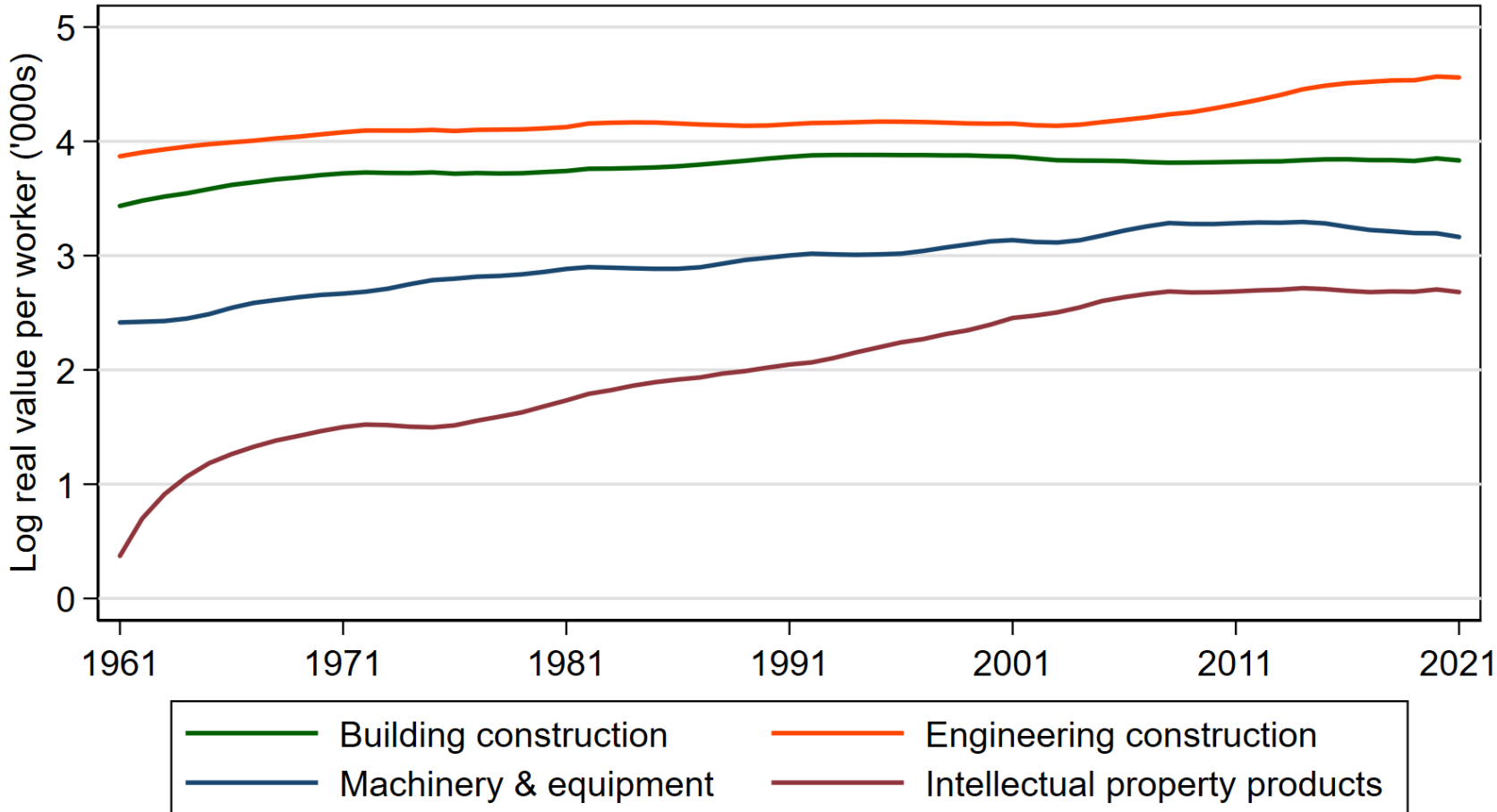


- Current exceptionally tight labour markets are *not* an effect of population aging.
- Much good can come from tight labour markets. Forces employers to compete for scarce workers by raising wages and use workers more efficiently by investing in technology.

Note: Job seekers include unemployed on temporary layoff who report searching for a new job. April-September 2020 vacancies are linearly interpolated. All data seasonally unadjusted.
Source: Labour Force Survey(PUMFs) and Job Vacancy and Wage Survey (Table 14-10-0372-01).
Charted by @mikalskuterud.

Canada's investment crisis

Non-residential capital stock per worker



- Capital per worker is a key determinant of differences in economic living standards across countries and within countries over time.
- Outside of gas & oil, growth has been flat or falling since 2010.
- Why is a scarcity of labour the current policy priority?

Note: Capital stock is the hyperbolic end-year net stock, chained (2012) dollars ('000s). Workers are the civilian labour force.
Source: Statistics Canada table 36-10-0098-01

Concluding thoughts

- Objectives of TFW and foreign student programs blurred.
 - We estimate that temporary foreign workers (TFWP and IMP) accounted for 4.0% of national employment in December 2019, up from 0.8% in 2000 (O'Donnell and Skuterud 2022). Likely closer to 6.0% if off-campus work of foreign students is included.
 - Need better data on labour market activity of temporary residents!
- Objectives of TFW and permanent economic immigration blurred.
 - Prioritization of ad-hoc PR pathway programs targeting lower skilled TFWs.
 - Category-Based Selection in “Express Entry 2.0” will target candidates’ occupational work experience bypassing CRS.