



COMMENTARY NO. 672

Harnessing Immigrant Talent: Reducing Overqualification and Strengthening the Immigration System

Job overqualification among skilled immigrants wastes talent and hinders Canada's growth. Barriers like credential recognition and language gaps block access to jobs matching their qualifications. Smarter policies can unlock potential, strengthen the labour market, and drive prosperity.

### Parisa Mahboubi and Tingting Zhang

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## HARNESSING IMMIGRANT TALENT: REDUCING OVERQUALIFICATION AND STRENGTHENING THE IMMIGRATION SYSTEM

#### by Parisa Mahboubi and Tingting Zhang

- University-educated immigrants, especially recent arrivals, face disproportionately high rates of overqualification for their jobs compared to non-immigrants. This issue persists across various immigrant groups, with family-class immigrants and refugees experiencing particularly high levels.
- Immigrants can end up in jobs not matching their education level because of barriers to foreign credential recognition, lack of Canadian work experience, insufficient language proficiency, unfamiliarity with workplace norms, and mismatches between their education and labour market needs. Regulatory hurdles, such as complex licensing processes for regulated occupations also exacerbate the issue.
- Overqualification reduces potential earnings, limits career progression, and leads to dissatisfaction among immigrants, potentially affecting their decision to stay in Canada. Economically, it represents a misallocation of skilled labour, reducing productivity and innovation and hindering growth.
- To address overqualification, better match immigrant skills with market needs, and maximize immigrants' economic contributions, this study recommends several measures: revising the Express Entry system to include stricter language requirements and incorporate educational factors that better align with labour market needs; enhancing and expanding access to language training programs; streamlining the recognition of foreign credentials; and increasing employer awareness and support.

#### INTRODUCTION

Immigrants account for more than one in four people living in Canada and increasingly play a major role in labour force growth and economic development (Statistics Canada 2024). However, university-educated immigrants, particularly recent arrivals, often encounter difficulties in securing employment that aligns with their qualifications and experience. These challenges contribute to high rates of overqualification,

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where individuals hold jobs requiring lower qualifications than they possess.<sup>1</sup> Proverbial examples include PhD-holders driving cabs or serving fast food.

The overqualification of Canada's skilled immigrants has been a significant issue since the 1990s – a problem that differs fundamentally from short-term cyclical underemployment (Reitz, Curtis, and Elrick 2013). Previous work has shown that university-educated immigrants are more likely to be overqualified for the position they hold compared to their Canadian-born counterparts. While some level of integration is expected to take time, immigrants are significantly more likely to experience persistent overqualification. This issue is particularly pronounced among family-sponsored immigrants and refugees, who are more likely to experience overqualification for their jobs than economic-class, principal applicants and their accompanying family members (Cornelissen and Turcotte 2020).

The consequences of overqualification are significant for both immigrants and the economy. For immigrants, overqualification can lead to underemployment, limited career development, and lower life satisfaction, which may impact their decision to stay in Canada. Overqualified workers also tend to earn lower salaries than their appropriately employed peers, underscoring potential shortcomings in the educational and labour market systems in effectively translating qualifications into productive outcomes. Moreover, high rates of overqualification among immigrants may point to inefficiencies within the immigration system in selecting candidates with the right level of skills. From an economic standpoint, overqualification may represent an underutilization of human capital, as skilled immigrants might not fully apply their expertise in their roles, limiting potential productivity and innovation. McGowan and Andrews (2015) find that higher levels of overqualification are associated with lower labour productivity. Such underutilization of skilled labour can stifle economic growth and diminish the benefits of welcoming skilled immigrants.

This is particularly concerning given Canada's ongoing efforts to attract highly skilled immigrants. According to the Labour Force Survey,<sup>2</sup> universityeducated immigrants (aged 25-54) now make up an increasingly large share of Canada's total immigrant labour force. Moreover, recent years have seen substantial increases in the number of new immigrants admitted to Canada. According to Statistics Canada's latest population estimates, immigration continues to play a pivotal role in driving Canada's population growth and shaping its demographic trends.

Lu and Hou (2019) found that a surplus of university-educated immigrants relative to labour market demand in Canada was positively linked to job overqualification. Compared to the United States, university-educated recent immigrants are more likely to experience overqualification in Canada. While Canada has seen a significant shift toward high-skilled occupations over time, the issue of immigrant job overqualification raises

<sup>1</sup> Overqualification and skills underutilization are distinct but related concepts. Overqualification refers specifically to a mismatch between an individual's formal qualifications and their job requirements, while skills underutilization encompasses broader circumstances where skills, knowledge, or experience are not fully applied. For instance, an individual may be overqualified yet still well-matched to their role in terms of applied skills or appropriately qualified but unable to utilize their full expertise. This is because individuals with the same level of education may possess significantly different skill levels. Variations in education quality, work experience, specialized training, and other factors, such as language proficiency and workplace norms, significantly influence these dynamics.

<sup>2</sup> The share of university-educated immigrants (aged 25-54) in the labour force increased from about 37 percent in 2006 to 55 percent in 2023 – representing a rise of 19 percentage points. In contrast, only about 35 percent of non-immigrants had a bachelor's degree or higher in 2023, up by 11 percentage points from 2006.

concerns about the economy's ability to create sufficient skills-matched jobs for highly educated new immigrants, particularly if they face any level of skills underutilization.<sup>3</sup>

Our study evaluates the extent of overqualification among immigrants and identifies key contributing factors, including gaps in education quality, credential recognition issues, unfamiliarity with Canadian workplace norms, and language proficiency barriers. Immigrants generally face higher overqualification rates compared to nonimmigrants, with family-class immigrants and refugees experiencing particularly high levels. Although recent immigrants face significant challenges, established immigrants also encounter persistent overqualification problems. However, the overqualification gap between immigrants and non-immigrants disappears when controlling for factors such as socio-economic and occupational characteristics, language proficiency, ethnicity, and location of study, all of which influence overqualification rates.

While immigration systems play a pivotal role in selecting and integrating skilled immigrants, the broader challenges of credential recognition and equivalency within regulated occupations can also exacerbate the overqualification problem. Addressing these issues requires collaborative efforts between immigration policymakers, regulatory authorities, and employers to create clearer pathways for credential recognition, foster mutual recognition agreements with key source countries, and streamline licensing processes for internationally trained professionals. By implementing such strategies, alongside revising the Express Entry system to better align language and labour market needs, enhancing language training programs, and promoting employer support,

Canada can reduce job overqualification, improve the integration of skilled immigrants, and maximize their economic contributions.

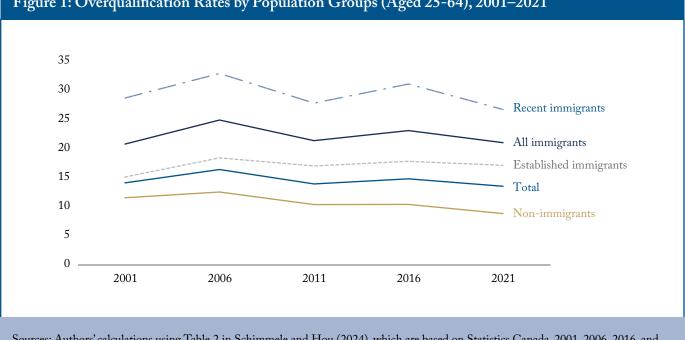
### TRENDS IN OVERQUALIFICATION OF IMMIGRANTS

Over time, overqualification rates have been consistently higher for immigrants than nonimmigrants (Figure 1), with the gap between the two groups widening between 2001 and 2021. This widening gap was mainly driven by improved outcomes for non-immigrants, whose overqualification rate decreased from 11.5 percent in 2001 to 8.8 percent in 2021.

Recent immigrants (those who have been in Canada for 10 years or less) face the greatest challenges in finding employment that matches their level of education, consistently experiencing the highest overqualification rates. Overqualification among recent immigrants peaked in 2006. Census data show a downward trend in recent years, likely due to improved selection processes that prioritize candidates with Canadian education and work experience. Nevertheless, their rates remain significantly higher than those of Canadian-born workers. In 2021, 26.7 percent of recent working-age immigrants with a Bachelor's degree or higher worked in jobs requiring only a high-school diploma or less - three times the rate of Canadian-born workers.<sup>4</sup> These findings align with studies showing that immigrants, particularly recent arrivals, are more likely than Canadianborn workers to fill lower-skilled jobs. This is largely attributed to their lack of human capital specific to the domestic labour market, including language proficiency, locally relevant education, and Canadian work experience. However, as recent

<sup>3</sup> However, studies using direct measurements of immigrant skills suggest that, while overqualification exists, there is limited evidence to support widespread skills underutilization (Ferrer, Green, and Riddell, 2006; Blit, Skuterud, and Zhang 2024).

<sup>4</sup> According to Statistics Canada's Labour Force Survey in September 2024, 30.5 percent of recent core-aged immigrants with post-secondary education reported being overqualified for their jobs, compared to just 19.7 percent of Canadian-born workers.



#### Figure 1: Overqualification Rates by Population Groups (Aged 25-64), 2001–2021

Sources: Authors' calculations using Table 2 in Schimmele and Hou (2024), which are based on Statistics Canada, 2001, 2006, 2016, and 2021 Censuses of Population; and 2011 National Household Survey.

immigrants spend more years in Canada, their labour market outcomes tend to improve as they build on their foreign-acquired skills, enhance their language abilities, and gain experience relevant to the domestic labour market.

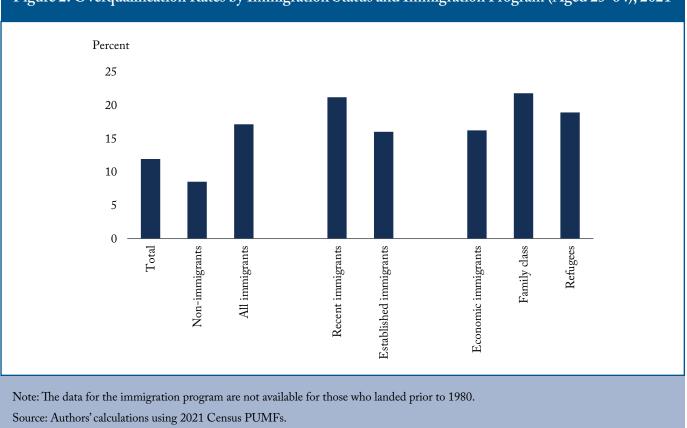
Despite being in the country longer, established immigrants (those who have landed in Canada for over 10 years) continue to face relatively high and stable overqualification rates compared to nonimmigrants, indicating persistent challenges. Their overqualification rate in 2021 was two percentage

points above the 2001 level, but consistent with recent Census rounds.

#### AN EXAMINATION OF OVERQUALIFICATION GAPS FOR **IMMIGRANTS**

In this study, we use the 2021 Census Public Use Microdata Files (PUMFs) to investigate the job overqualification gap for immigrants relative to their counterparts,<sup>5</sup> along with its

The 2021 Census data were collected in May 2021, during the recovery phase from the economic disruptions caused by the 5 COVID-19 pandemic. The pandemic likely influenced labour market outcomes and overqualification rates, particularly for groups disproportionately affected by labour market shocks, such as those in lower-skilled jobs. This may partially explain the sharper reduction in overqualification rates among non-immigrants. Nevertheless, overqualification rates for immigrants - especially recent immigrants - have consistently remained higher than those for non-immigrants across Census rounds (2001–2021). This consistency suggests that the observed gaps in 2021 reflect longer-term patterns rather than solely pandemic-related effects (see Figure 1 for overqualification rates over time).



#### Figure 2: Overqualification Rates by Immigration Status and Immigration Program (Aged 25-64), 2021

potential underlying factors and impacts (Box 1).<sup>6</sup> Although our estimates of overqualification rates for immigrants are less severe due to the exclusion of certain occupations, we still observe substantial gaps between immigrants and nonimmigrants: immigrants face an overqualification rate of 17.2 percent compared to 8.5 percent for non-immigrants (Figure 2). The impact of the length of time staying in Canada is also significant. According to our estimates, recent immigrants experience an overqualification rate of 21 percent, which is substantially higher than the 16 percent rate observed among established immigrants.

*By Immigration Program*: When examining overqualification rates by immigration program, distinct patterns emerge. Family-class immigrants have the highest overqualification rate, at around 22 percent, indicating that they face greater

<sup>6</sup> Due to limitations in the public use microdata files, which prevent us from identifying overqualified individuals in certain occupational categories – where skills and qualification requirements are varied (managerial occupations and National Occupational Classifications (NOCs) 43-45, 51-52, 53-55, 82-85, and 92-95) – we excluded these occupations from our sample. This exclusion results in a 25 percent reduction in the sample size. It is important to note that this may affect the results if the overqualification gap between immigrants and non-immigrants differs significantly in these excluded occupations compared to the overall gap. Additionally, variations in occupational distributions between immigrants and non-immigrants could also impact the results (e.g., see Picot and Hou 2024).

#### Box 1: Data and Definitions

We use the 2021 Census Public Use Microdata Files (PUMF), focusing on the working population aged 25-64 who were employed and held a Bachelor's degree or higher in 2021. This includes both non-immigrants born in Canada and immigrants born outside of Canada. Our sample size consists of 100,729 observations.

Occupations are categorized into low-, medium-, and high-skilled levels based on the Training, Education, Experience and Responsibility (TEER) codes. Overqualification is defined as university-educated individuals working in positions that do not require any post-secondary education; it's a subset of general mismatch, which measures the number of university-educated individuals working in positions that do not require university degrees.

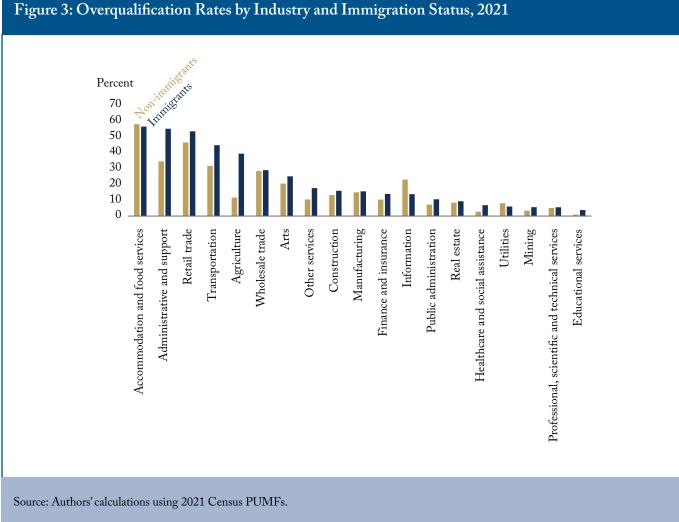
We use logistic regression models<sup>\*</sup> to estimate the likelihood of overqualification among immigrants, adjusting for factors such as age, sex, marital status, education levels, provinces, conversational proficiency in official languages (first official language spoken), industry, field of study, ethnicity and location of study (see Table A1 in Appendix for the list of categories for categorical variables).

\* Logistic regression is a statistical method for analyzing binary outcomes, such as being overqualified or not, while accounting for various influencing factors. Logistic regression allows us to include a range of independent variables to assess their individual and combined effects on overqualification.

difficulties in the labour market compared to other immigrant groups. Refugees also experience a high rate of overqualification, at 19 percent, reflecting the unique challenges they encounter during their resettlement. In contrast, economic immigrants have a relatively lower overqualification rate of 16 percent. This lower rate is likely due to their skills and qualifications being more aligned with the economic needs of the labour market, as they are selected based on their skills and qualifications and are more likely to have pre-admission Canadian work or study experience. Additionally, to meet immigration requirements and increase their chances of being selected, many may have made investments in their human capital, enhancing their employability in Canada.

*By Industry:* The job overqualification rate also varies significantly across industries (Figure 3). Immigrants generally experience higher overqualification rates than non-immigrants in most industries. However, the situation is reversed in information and utilities, where non-immigrants have higher overqualification rates.

Both immigrants and non-immigrants face substantial overqualification in the accommodation and retail industries, likely because these jobs often serve as temporary sources of income or stepping stones before transitioning to more



suitable or matched occupations. The extent of overqualification varies markedly between immigrants and non-immigrants across different industries. For example, in the agriculture sector, 39.3 percent of university-educated immigrants worked in roles that required no postsecondary education, compared to 11.6 percent of non-immigrants. This represents a 27.7 percent overqualification gap between the two groups. Similar disparities are also notable in

administration, transportation, and other services, indicating the greater challenges in effectively utilizing immigrant talent in these sectors.

A concerning trend is that immigrants increasingly work in industries with higher rates of overqualification. Since 2010, the proportion of recent immigrants has surged in transportation and warehousing, as well as in accommodation and food services (Statistics Canada 2022a). In 2021, recent immigrants represented 8 percent of total employed people. However, they comprised 13 percent of the workforce in accommodation and food services and 10 percent in transportation.<sup>7</sup>

A Focus on Healthcare and STEM Skills Fields: Canada launched a category-based selection last year that prioritizes eligible applicants in specific indemand occupations facing severe labour shortages, such as those in healthcare and STEM fields. Although the data used in this study predate the introduction of category-based selection, examining how these immigrants fared earlier remains relevant and provides valuable context. Results by industry show that although immigrants are 2.5 times more likely than non-immigrants to be overqualified in the healthcare industry, their overqualification rate (7 percent) is not as high as that for immigrants in some other industries. However, many immigrants work in unrelated fields, with a particularly high mismatch rate among healthcare professionals. Only three in five internationally educated healthcare professionals worked in health-related occupations (Frank et al. 2023), and only 36.5 percent of foreign-educated nurses and 41.1 percent of foreign-educated doctors worked in their related occupations in Canada (Statistics Canada 2022b). In contrast, approximately nine in ten Canadians with nursing or medical degrees worked as registered nurses or doctors. Our analysis shows that immigrants with a field of study in healthcare faced an overqualification rate of 9.2 percent,<sup>8</sup> more than five times higher than that of non-immigrants in the same field.

Similarly, Picot and Hou (2019) found that only a fraction of immigrants with a degree in STEM fields worked in a STEM occupation (46 percent) or a job requiring a university degree (49 percent) in 2016. Notably, immigrant engineering graduates had lower rates of employment in jobs requiring a university degree: only two in five employed immigrant engineering graduates with a Bachelor's degree found a job requiring a university degree, compared to 71 percent of their Canadianborn counterparts. These findings suggest that a significant proportion of immigrants with STEM degrees are working in jobs below their

STEM degrees are working in jobs below their level of qualification. This may be partly due to the stringent safety and regulatory standards that govern engineering work, as failure to meet these standards can lead to legal or other risks. As a result, immigrants may face additional barriers in obtaining the necessary credentials or certifications to practice in their field, limiting their potential contribution to Canada's economy.

Despite the increased demand for STEM professionals during the pandemic, our sample shows 12 percent of immigrants with a STEM background were overqualified, nearly twice the rate observed for non-immigrants in 2021. Specific occupations in the STEM field (e.g., software engineers and designers, software developers and programmers, information systems specialists) were top intended occupations among those selected under the economic immigration in 2023 (IRCC 2024) to address skills needs.<sup>9</sup>

<sup>7</sup> Many temporary foreign workers are employed in these industries. In the first quarter of 2024, employers received approval to hire nearly 29,000 workers through the low-wage stream, marking a 25 percent increase from the previous year (Mahboubi 2024). Including temporary foreign workers in the sample is likely to show higher overqualification rates in these industries.

<sup>8</sup> It is likely that the overqualification rate is underestimated since our sample exclude certain occupational categories, where about 24 percent of immigrants and 27 percent of non-immigrants studied with a field of study in healthcare.

<sup>9 &</sup>lt;u>https://www.canada.ca/en/immigration-refugees-citizenship/corporate/publications-manuals/express-entry-year-end-report-2023/fact-sheet-2023.html</u>

#### IMPACT OF OVERQUALIFICATION

Overqualification, the mismatch between an individual's education and job requirements, has significant implications for both individuals and the economy. It leads to inefficiencies, reduced productivity, and slower economic growth (Hsieh et al. 2019). This inefficiency can also reduce innovation and diminish competitiveness in industries that depend on skilled labour.

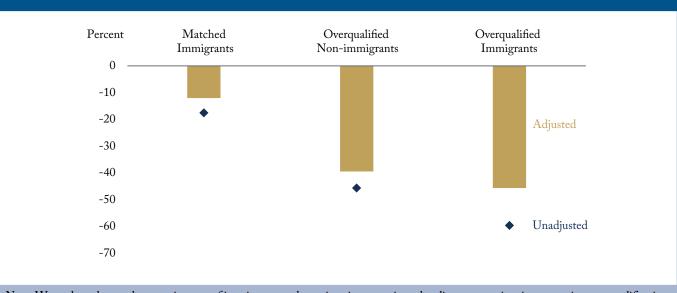
For workers, overqualification may lead to underemployment, where their skills are not fully utilized. This underemployment can result in lower wages, fewer career advancement opportunities, and limited skill development.

For immigrants, finding a job that matches their education and skills is critical. It not only boosts their incomes and tax contributions, but also enhances their economic engagement and maximizes the benefits of immigration. However, when overqualified, they often earn less than their appropriately employed peers, contributing to widening economic inequality. This wage disparity limits their economic mobility, entrenches inequality and creates challenges for social and economic integration.

Studies have shown that overqualification is linked to reduced job satisfaction, fewer opportunities, and lower earnings (Verhaest and Omey 2009; Mavromaras et al. 2013; McGuinness et al. 2018).<sup>10</sup> Reitz (2001) found that immigrants received a smaller earnings premium for formal education or work experience compared to nonimmigrant workers. Similarly, Wald and Fang (2008) observed that immigrants face a larger earnings disadvantage from overeducation than Canadian-born workers. Furthermore, overeducated workers from developing countries, especially those from Africa or the Middle and Near East, experience greater wage penalties compared to their well-matched counterparts (Jacob et al. 2022). Jacob, Rycx and Volral (2022) found that overeducation creates a positive gap between productivity and wages for both immigrants and non-immigrants, with over-educated workers being underpaid compared to their well-matched colleagues. However, productivity returns to over-education are higher for immigrants from developed countries than those from developing countries, implying different qualities of education and imperfect transferability of skills from developing regions.

Earnings Gaps: Our findings show significant earnings gaps linked to overqualification (Figure 4). While overqualification affects both immigrants and non-immigrants, overqualified immigrants face the most pronounced earnings gap, with their earnings being, on average, 60 percent lower than non-immigrants whose education and skills match their jobs. Even after adjusting for various factors, the gap remains substantial at 46 percent. Matched immigrants also experience a notable earnings shortfall, earning 17.6 percent less than matched non-immigrants, which decreases to 12 percent after adjusting for disparities in their characteristics. In contrast, overqualified non-immigrants show a 45.6 percent earnings gap compared to matched non-immigrants, which reduces to about 39 percent after adjustments. Our adjusted regression results also show that individuals lacking conversational proficiency in either English or French and those with the highest educational degree from Eastern Asia experienced the largest earnings gaps (each

10 While overqualification and skill underutilization are separate phenomena, their combination – having higher qualifications and more skills than required for a job – leads to the most negative outcomes.



#### Figure 4: Unadjusted and Adjusted Earnings Gaps Relative to Matched Non-immigrants

Note: We analyze the employment income of immigrants and non-immigrants using a log-linear regression, incorporating overqualification and immigrant status as control variables. Adjusted figures also account for socio-demographic characteristics, conversational proficiency in official languages, industry, field of study, ethnicity, and location of study (see Appendix). Our sample is restricted to the population aged 25-64 who were employed with a positive income and held a Bachelor's degree or higher in 2021.

Source: Authors' calculations using 2021 Census PUMFs.

exceeding 39 percent), compared to those who can converse primarily in English and those with the highest educational degree from Canada, respectively.<sup>11</sup>

The economic costs of immigrant overqualification include reduced consumer spending, lower potential tax revenues, a greater burden on social programs, and an additional strain on public finances. Reitz et al. (2014) estimated the economic cost of immigrant overqualification at about \$4.8 billion in 1996, rising to \$11.4 billion in 2006 (in 2011 dollars). With a higher immigration level today, this loss is likely much greater. Overqualification also negatively affects quality of life and mental health of immigrants (Shibayama 2023). Improving the overqualification of immigrants is crucial for fostering economic growth and enhancing the living standards of Canadians.

#### FACTORS CONTRIBUTING TO OVERQUALIFICATION

Various factors contribute to the overqualification gap between immigrants and non-immigrants, with notable variations across different groups. Factors that can inhibit immigrants from landing a job that matches their education levels include the place of acquisition of formal qualifications, language ability,

11 It is important to note that the earnings data from the 2021 Census reflect the 2020 tax year, which was an atypical year due to the COVID-19 pandemic. The unique circumstances of that year, such as disruptions in the labour market and economic activity, may have influenced earnings patterns. Therefore, these findings should be interpreted with caution and may not fully reflect structural issues. However, using Census data from 1996, 2001, and 2006, Reitz et al. (2014) also found that overqualified immigrants faced earnings losses due to lower access to skilled occupations.

the region of origin, and work experience (Battu and Sloane 2004; Mahboubi 2019).

We use logistic regressions to estimate the likelihood of overqualification for immigrants relative to non-immigrants, adjusting for several factors (Box 1). Our results show that, in the unadjusted model, the odds of immigrants being overqualified are 2.2 times greater than nonimmigrants. After only controlling for sociodemographic factors like age, sex, marital status, and educational attainment in Model 2, the likelihood of overqualification for immigrants increases to 2.45 times compared to non-immigrants, indicating that socio-demographic characteristics, by themselves, partially mask the full extent of the disparity. However, as additional factors are controlled for, the likelihood of overqualification for immigrants decreases. While this disparity remains statistically significant, it narrows after adjusting for differences in additional factors such as conversational proficiency in English or French, ethnicity and educational, and industrial characteristics (Table 1).<sup>12</sup>

*Location of Study*: The location of study appears to play the largest role, reducing the overqualification odds from 2.45 in Model 2 to 1.3 in Model 6, and highlighting the importance of where the education was obtained. Immigrants with degrees from outside Canada are more likely to experience overqualification, with those educated in Southeast and Southern Asia being 2.7 times more likely to experience it. This suggests that the perceived quality of education from these regions plays a crucial role, which will be discussed further in the following sections. However, it's important to note that the reduction in overqualification odds in Model 6 could partly be due to the effects of other factors, such as language proficiency intervening with location of the study, rather than the location itself.

In the fully adjusted model (Model 7), which includes all variables, the odds of overqualification falls to 1.03 and is no longer statistically significant.

The breakdown by recent and established immigrants reveals a similar trend: the overqualification gap diminishes as additional factors are controlled for. However, recent immigrants are consistently at a higher risk of overqualification than established immigrants across all models, with likelihood measures ranging from 2.88 times in the unadjusted model to 1.14 times in the fully adjusted model.<sup>13</sup>

In the following section, we will examine specific factors linked to the overqualification rates among immigrants to provide targeted recommendations.

#### LACK OF FOREIGN CREDENTIALS Recognition

One major issue is the lack of recognition of foreign credentials (Damelang, Ebensperger and Stumpf 2020; Banerjee et al 2021), which can prevent immigrants from working in their trained professions. Previous research indicates that immigrants' education and work experience obtained abroad did not yield the same economic returns as those of non-immigrant residents (Ferrer and Riddell 2008). Foreign degrees are often seen as inferior to Canadian degrees, even when they have the same title. Despite obtaining Canadian licenses, immigrants may still face non-recognition of their pre-immigration credentials during job

<sup>12</sup> The contribution of the language variable in explaining the overqualification gap for immigrants appears limited compared to other factors, likely because it does not capture variations in language proficiency levels among individuals with the same language background. We also examined an alternative variable, mother tongue, but similar results were found, and the limitation persists. Unfortunately, Census data lack precise measures of language proficiency to fully capture these variations.

<sup>13</sup> We conducted the same regressions on general mismatch and found that the results were consistent, albeit with varying odds ratios.

| Table 1: Likelihood of Overqualification for Immigrants Relative to Non-immigrants (Odds Ratios) |             |              |              |              |              |              |              |
|--|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
|  | Unadjusted  | Adjusted     |              |              |              |              |              |
|  | Model 1     | Model 2      | Model 3      | Model 4      | Model 5      | Model 6      | Model 7      |
|  |             |              | Panel A      |              |              |              |              |
| Immigrants   | 2.22***     | 2.45***      | 2.38***      | 1.89***      | 1.81***      | 1.30***      | 1.04         |
|  | · · · · · · |              | Panel B      |              |              |              |              |
| Recent immigrants  | 2.88***     | 3.57***      | 3.45***      | 2.68***      | 2.26***      | 1.56***      | 1.14         |
| Established immigrants   | 2.04***     | 2.18***      | 2.12***      | 1.71***      | 1.70***      | 1.27***      | 1.02         |
| Socio-demographic characteristics  |             | $\checkmark$ |              |              | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Conversational<br>proficiency in official<br>languages   |             |              | $\checkmark$ |              |              |              | $\checkmark$ |
| Ethnicity  |             |              |              | $\checkmark$ |              |              | √            |
| Industry and field of study  |             |              |              |              | $\checkmark$ |              | $\checkmark$ |
| Location of Study  |             |              |              |              |              | $\checkmark$ | √            |

Note: Significance levels are indicated by \* for 10%, \*\* for 5%, and \*\*\* for 1 %. Coefficients are relative odds ratios (RORs), representing the likelihood of being overqualified relative to the reference group (non-immigrants). A ROR greater than 1 suggests that immigrants are more likely to be overqualified compared to non-immigrants, while a ROR less than 1 suggests it is less likely. Socio-demographic characteristics include age, sex, marital status, and educational attainment (highest level of university degree). Conversational proficiency in official languages (first official language spoken) refers to the ability to hold a conversation in at least one of Canada's first official languages (English and French).

Source: Authors' calculations using 2021 Census PUMFs.

searches and employment opportunities. This issue also extends to non-licensed occupations, where foreign education is often undervalued. As a result, the human capital immigrants acquire abroad is not fully transferable to the Canadian labour market.

Employers in Canada often struggle to accurately evaluate foreign credentials and tend to view them with skepticism (Zhang, Banerjee and Amarshi 2023). The challenge is particularly acute for small and medium-sized businesses that lack the resources to properly assess international education and training. Due to unfamiliarity with the quality and content of foreign education, employers tend to doubt the standards of these qualifications,

particularly those from certain countries (Elrick 2016). Damelang and Ebensperger (2020) suggest that foreign credential recognition can help narrow the gap in the hiring opportunities between foreign- and domestic-trained applicants.

In 2013, the mandatory educational credential assessment (ECA) requirement was introduced for the federal skilled worker program. Banerjee et al. (2021) found that the introduction of a formal ECA increased employment rates and earnings for both immigrant men and women after two years in Canada. However, employers remain skeptical of foreign credentials despite the ECA validation. Many human resource and hiring managers are

unfamiliar with ECAs and do not use them as an evaluation tool (Zhang, Banerjee and Amarshi 2023). They are also often unaware of changes introduced by the Express Entry system, such as a greater emphasis on formal education and higher language proficiency (Zhang, Banerjee and Amarshi 2023).

Foreign credentials may also take time to be fully valued in the labour market. Dostie et al. (2023) found that while university-educated immigrants from disadvantaged countries - who are often overqualified for their jobs - initially face a discount on their credentials. However, their productivity is eventually acknowledged, leading to significant wage growth. In contrast, immigrants from advantaged countries experience minimal additional wage progression, as firms more readily evaluate and value their credentials upon arrival. Between 2005 and 2013, the earnings of university-educated immigrants from disadvantaged countries increased by 22 percent relative to non-immigrants, with four percentage points attributed to employment shifts toward higher-paying employers. These findings suggest that immigrants' initial disadvantages in the labour market can be mitigated over time through mobility and job advancement within firms that value their skills and experience (Dostie et al 2023). However, this takes a few years to be realized.

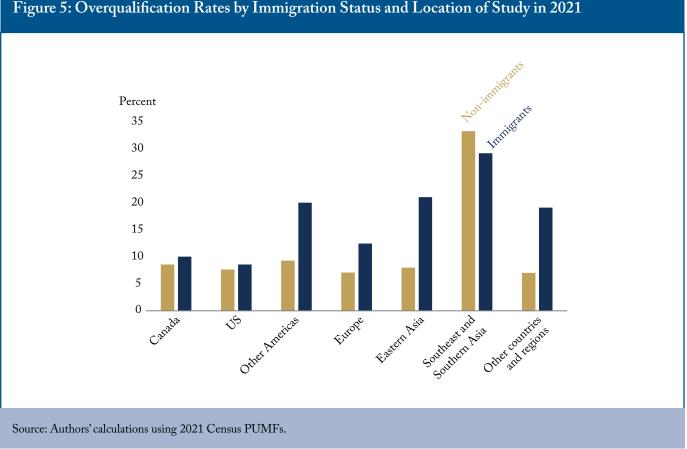
#### **Education Quality and Skills Gaps**

Immigrants, particularly those with university degrees from developing countries, often encounter challenges in fully leveraging their educational credentials, which may be linked to education quality. The quality of education abroad can vary, leading to differences in human capital and labour market outcomes in the host country (Li and Sweetman 2014; Li 2017; Aydede and Dar 2022). Immigrants from countries with highquality educational outcomes see better economic returns to education compared to those from developing countries. This disparity suggests that some instances of overqualification can be justified; when educational quality is low, individuals might possess credentials that do not align with Canadian standards and have skills gaps, resulting in a mismatch between their qualifications and job expectations.

*Credentials Questioned:* Immigrants from Asia experience the most wage discounting compared to those from the United States or United Kingdom (Fortin, Lemieux, and Torres 2016). As more immigrants come from non-Western countries, their education credentials may be less readily recognized or transferable in the Canadian labour market. Differences in the quality of education among immigrants can significantly contribute to the overqualification gap between immigrants and non-immigrants.

*Source Country Matters:* Figure 5 shows that overqualification rates significantly depend on the country where the education was obtained. For example, both immigrants and non-immigrants with education from Southeast and Southern Asia experience notably high overqualification rates of 29 percent and 33 percent (unadjusted), respectively. In comparison, immigrants with education from Canada have a lower overqualification rate of 10 percent.

Moreover, the odds of being overqualified for immigrants who obtained their highest educational degree from Southeast Asia and Southern Asia are 2.7 times more than those who studied in Canada (adjusted results from Model 7). However, only 38 percent of immigrants obtained their highest level of education in Canada, compared to 95 percent of non-immigrants. Conversely, the share of non-immigrants who obtained their education in Southeast and Southern Asia is negligible (less than one percent), while it is 25 percent among immigrants. The results suggest that education from Western countries is more portable to the Canadian labour market than education from other regions.



#### Figure 5: Overqualification Rates by Immigration Status and Location of Study in 2021

*Field of Study Matters:* Furthermore, human capital acquired in certain fields of study can make a difference. For example, immigrants with degrees in trades, business, or other non-STEM fields are more likely to experience overqualification compared to those with STEM degrees. This suggests that skills from STEM fields are more transferable across countries, helping immigrants secure jobs that match their education level. There are also higher demand and better job opportunities for STEM graduates in Canada, reducing the likelihood of overqualification. Fortin, Lemieux, and Torres (2016) found immigrants whose degrees are in "Computer Sciences, Mathematics, Physical Sciences and Sciences Technologies" incur small wage

penalties, whereas degrees in "Business, Finance and Marketing" face larger negative wage penalties.

#### Challenges in Regulated Occupations

A significant factor contributing to overqualification is the complex mix of licensing and certification requirements for regulated professions and occupations. In these fields, employers often hesitate to hire new immigrants due to slow accreditation processes (Zhang, Banerjee and Amarshi 2023). This delay in credential recognition can prevent qualified immigrants from securing jobs that match their education and skills, forcing them into lowerskilled positions.

In Canada, about 20 percent of jobs, including those in professions such as medicine, nursing, engineering, electrical work, and welding, are regulated by various bodies.<sup>14</sup> These positions require obtaining a licence or certification from a regulatory body authorized by provincial governments to ensure public health and safety standards. However, the regulatory environment varies significantly across provinces and territories, as there is no central national credential recognition body. Each jurisdiction has its own regulatory authority, with different education, language, and work experience requirements across regulated professions.

*Health Occupations:* Many professional and occupational regulatory bodies have stringent entry requirements and control the "supply" of qualified labour, often overlooking the impact of their rules and administrative processes on immigrants. Health occupations, in particular, face significant challenges in advancing foreign credential recognition due to their complex licensure and regulatory requirements, coupled with strong protective stakeholder interests. This makes it especially difficult for immigrants in health professions to have their qualifications recognized and to practice in their fields in Canada.

For instance, despite Canada's shortage of primary care physicians and the strong interest among international medical graduates (IMGs) in family medicine, residency spots for IMGs remain highly limited. In 2023, only 34.3 percent of IMGs were matched with the necessary post-graduate training compared to 97.8 percent for Canadian medical graduates (Zhang 2024). Similarly, foreigntrained physicians need to complete the residency training in Canada, even if they had completed one

their medical training and skills. Some provinces are already moving in the right direction to streamline recognition of foreign credentials and work experience. For example, nine provinces offer practice-ready assessments, an accelerated pathway for internationally trained family physicians who have already completed their residency. However, the number of assessments seems low: only 50 applicants in Ontario and 10 applicants in New Brunswick will be accepted in 2024 (Zhang 2024). While exams and assessment requirements are waived for physicians from Western countries in several provinces,<sup>15</sup> immigrants from other regions still need to go through a lengthy credential recognition process, assessment exams, and residency training. As a result, many internationally educated healthcare professionals with a university degree work in technical health occupations that require lower levels of education.

*Engineering Occupations:* In contrast, foreigntrained engineers can start working without professional licensing, but they need to secure a licensed engineer to supervise their work and find employers who recognize their foreign training and experience. In some provinces, strict Canadian work experience requirements further hinder newcomers from practicing in their field. To overcome the Canadian work experience barrier, many engineering immigrants accept lower-level positions in the hope of gaining more skilled work over time.

The high cost of re-credentialing poses another significant barrier for skilled immigrants.

<sup>14</sup> For more details, see <u>https://www.canada.ca/en/employment-social-development/programs/foreign-credential-recognition.</u> <u>html</u>

<sup>15</sup> Nova Scotia was the first province in Canada to allow physicians who received training in the United States to skip certification exams and begin to practice immediately. Ontario has recently made it easier for internationally trained family doctors from the United States, Ireland, Australia, and Britain to practice medicine in the province by removing supervision and assessment requirements.

Certification exams, along with application and registration fees, can total several thousand dollars for regulated professions. Without an established local credit history, many newcomers struggle to secure loans to cover these costs, limiting their ability to get their licence and work in their fields. Reducing these fees or providing affordable credit options could greatly improve employment outcomes for skilled immigrants, especially those from non-Western countries. A recent PricewaterhouseCoopers study of Windmill Microlending for skilled immigrants showed that when immigrants gained access to affordable career loans and related support, their income rose by an average of \$32,000, with a 64 percent increase in tax contributions.<sup>16</sup>

Over the past few years, several provincial governments have taken steps to reduce barriers for foreign-trained immigrants. For instance, Ontario has removed the requirement for Canadian work experience for engineering licensing. Similarly, British Columbia and Nova Scotia have reduced credential assessment barriers and expedited regulatory approvals for foreign-trained physicians, nurses, and other healthcare professionals. These progressive approaches not only facilitate the integration of immigrants into roles that match their qualifications but also help to address sectoral labour needs.

## LANGUAGE AND COMMUNICATION BARRIERS

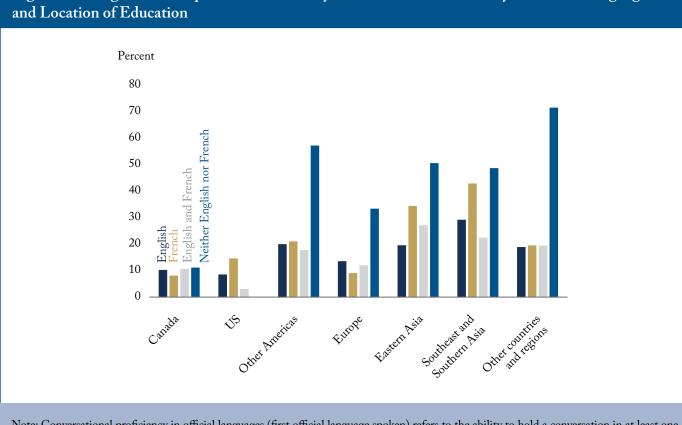
Language and communication barriers significantly contribute to overqualification among immigrants, as many lack proficiency in English or French (Ferrer, Green, and Riddell 2006; Warman, Sweetman and Goldmann 2015). Proficiency in the host country's official language is crucial for accessing employment opportunities. Even though immigrants from non-English or non-Frenchspeaking backgrounds may have strong technical skills, their limited proficiency in one of Canada's official languages can create significant barriers. Immigrants with limited language skills may find it challenging to navigate job markets, apply for positions, showcase their skills, and perform effectively in roles that especially require high levels of communication.

Furthermore, language barriers can impact immigrants' integration into professional networks and workplace cultures, both of which are essential for career advancement and job performance. These challenges can further perpetuate the cycle of underemployment and overqualification, limiting immigrants' career growth and contributions to the workforce.

In contrast, proficiency in the host language can positively influence skills outcomes (Mahboubi 2017) as well as labour market outcomes such as earnings, employment, and occupational attainment (Chiswick and Miller 2010; Zhen 2013; Aldashev et al. 2009; Yao and Van Ours 2015). Budría and Martínez-de-Ibarreta (2021) also show that better language skills among immigrants can decrease the likelihood of overqualification.

Our analysis indicates that immigrants who lack sufficient proficiency in either English or French to engage in conversation face an overqualification rate of 48 percent, which is notably higher compared to those with at least conversational proficiency in English (18 percent), French (12 percent), or both English and French (14 percent).

Figure 6 shows the combined effect of place of education and conversational proficiency in official languages on the overqualification of immigrants. Immigrants with education from Western countries, particularly Canada and the United States, experience a lower overqualification rate, regardless of their first official language. However, immigrants who lack proficiency in both English and French face substantially higher overqualification rates,



### Figure 6: Immigrants' Overqualification Rates by Conversational Proficiency in Official Languages

Note: Conversational proficiency in official languages (first official language spoken) refers to the ability to hold a conversation in at least one of Canada's first official languages (English and French).

Source: Authors' calculations using 2021 Census PUMFs.

except for those who studied in Canada, compared to English or French-speaking immigrants.

Training and Support Services Required: Efforts to improve language training and support services for immigrants are crucial in addressing these barriers. This is particularly important for those who are not selected based on their language ability through Canada's points-based system, known as the Express Entry, for economic (skilled) immigration. Enhanced language education programs, workplace language training, and access to resources that facilitate language acquisition can help immigrants better integrate into the labour market and reduce the incidence of overqualification. A stricter language requirement for selection of economic immigrants

through the Express Entry is also necessary, given the important role of pre-arrival language training and language screening (Mahbubi 2024).

#### LACK OF CANADIAN EXPERIENCE

Unfamiliarity with Canadian workplace norms (Fang et al. 2022; Zhang, Banerjee and Amarshi 2023), and employers' requirement for Canadian work experience (Ghadi et al. 2023) pose significant barriers for immigrants. Furthermore, immigrants may be unfamiliar with the local labour market and hiring practices, or lack of access to professional networks, which can further hinder their job search. In 2023, about 58 percent of newcomers who arrived in Canada less than five years ago reported

difficulties finding work related to their experience or credentials in the past two years (Statistics Canada 2023). The most frequently cited challenges included insufficient Canadian job experience (22.7 percent), lack of connections in the job market (20.3 percent) and absence of Canadian references (18.5 percent).

At the same time, immigrants' foreign work experience is often undervalued in the Canadian labour market. Research shows that Canadian employers place little or no value on work experience gained outside Canada (Reitz 2001; Aydemir and Skuterud 2004; Warman, Sweetman and Goldmann 2015; Aydede and Dar 2022). Compared to Canadian work experience, an additional year of foreign work experience yields only marginal returns (Aydemir and Skuterud 2004; Ferrer and Riddell 2008).

Immigrants may also lack social capital and cultural knowledge compared to non-immigrants (Chiswick and Miller 2009). Additionally, foreign educational credentials may not adequately reflect essential soft skills such as communication, critical thinking, or team collaboration, which are highly valued by Canadian employers. Employers cited applicants' poor communication skills and insufficient knowledge of Canadian business practices and organizational culture as reasons for hesitation in hiring new immigrants (Zhang, Banerjee and Amarshi 2023). In the ICT sector, Elrick (2016) found that lack of Canadian work experience is the greatest barrier to making immigrants known in inter-firm networks.

Immigrants without Canadian work experience may find it challenging to secure jobs that match their qualifications, often settling for roles requiring fewer skills. Even immigrants with extensive foreign work experience may experience lower earnings compared to those with less foreign experience, particularly if they lack Canadian work experience (Picot and Hou, 2023). In contrast, immigrants with prior Canadian work experience gain more from their foreign experience, showing higher earnings and a better job alignment (Pandey and Townsend 2016).

The emphasis on Canadian experience acts as a form of cultural gatekeeping, where employers use it as a proxy for assessing soft skills and cultural knowledge deemed necessary for success in the local workplace environment. However, Murray (2024) argues that actual skills demand varies significantly among employers and across different roles within organizations in ways that credentials or work experience profiles alone cannot accurately capture.

*Remedies:* Structured interviews and competencybased assessments can more effectively demonstrate equivalent soft skills. These assessment methods offer multiple benefits, including reducing recruitment and selection transaction costs and addressing the current misalignment between joblevel skill demand and supply. They can also help eliminate discrimination and bias in certification and hiring processes (Murray 2024). To enhance awareness and support the integration of these methods among small employers, several strategies can be implemented. Organizing educational workshops and webinars can clarify the benefits and applications of these assessment methods. Partnering with industry associations can effectively disseminate information, leveraging trust among small employers. Developing accessible online resources, like toolkits and guides, can offer step-bystep instructions for implementation. Additionally, providing grants or subsidies can ease cost concerns and encourage adoption. Establishing mentorship programs that connect small employers with larger organizations can further facilitate knowledge sharing and guidance.

#### DISCRIMINATION AND BIAS IN Hiring

Discrimination and bias in hiring practices significantly impact the overqualification of immigrants, shaping their employment and



#### Figure 7: Relative Odds of Overqualification by Country of Origin (compared to Canada), 2021

Notes: Adjusted figures account for socio-demographic characteristics, industry, field of study, ethnicity, and location of study (see Appendix). A value greater than 1 suggests higher odds of being overqualified compared to those whose country of origin is Canada, while an odds ratio less than 1 indicates lower odds.

Source: Authors' calculations using 2021 Census PUMFs.

earnings outcomes in the Canadian labour market. Research has shown that implicit biases and discriminatory practices in hiring processes can lead to immigrants being overlooked for positions they are well-qualified for (Oreopoulos 2011; Esses, Bennett-Abu Ayyash, and Lapshina 2014), thereby exacerbating the issue of overqualification.

Research consistently shows that immigrants from non-Western countries, particularly those from Southeast and Southern Asia, face more substantial barriers compared to their counterparts from Western countries (Banerjee et al. 2021). This disparity is evident in the overqualification rates, with immigrants from the Philippines and South Asia experiencing higher rates of overqualification compared to those from the United States and Europe (Figure 7). After adjusting for variations in socio-economic characteristics, immigrants from the Philippines and South Asia still experience higher rates of overqualification. In contrast, immigrants from Europe, Oceania, the United Kingdom, and the United States – countries that are culturally and linguistically more similar to Canada – are less likely to face overqualification.

Our regression analysis reveals a striking difference between immigrants and non-immigrants in terms of overqualification rates across ethnic backgrounds. Non-immigrants exhibit relatively little variation in overqualification rates among different ethnic groups. However, among immigrants, ethnic background has a more substantial impact on overqualification rates, with those from the Philippines and South Asia being particularly affected. These observations underscore the broader, more complex factors influencing overqualification. Systemic issues such as discrimination, challenges related to language ability, and difficulties with credential recognition and labour market integration contribute to the elevated overqualification rates experienced by immigrants.

#### RECOMMENDATIONS

Examining the overqualification gap between immigrants and non-immigrants shows that immigrants generally face higher rates of overqualification for their jobs than nonimmigrants, with significant variations depending on immigration programs, industry, and the length of time spent in Canada. Family-class immigrants and refugees experience particularly high levels of overqualification. While economic immigrants fare somewhat better due to their alignment with market needs, they still face a higher overqualification rate compared to non-immigrants.

Our findings suggest that immigrants' overqualification is both a source and host country issue that requires comprehensive strategies to resolve. The analysis points out that immigrants' foreign education and work experience are often undervalued, leading to challenges in securing roles that match their qualifications. Factors such as the place of study, language ability and Canadian work experience play critical roles in determining the level of overqualification, as do hiring biases and discrimination at times. Based on the analysis, several targeted recommendations can be made to better integrate immigrants into the Canadian labour market and reduce overqualification rates.

#### 1. Enhancing the Express Entry (EE) System

The EE selection system prioritizes applicants with strong human capital attributes who can integrate well into Canada's labour market. However, the system could benefit from refinements to better predict applicants' labour market integration and reduce overqualification. One potential improvement would be to include applicants' pre-immigration earnings, as this factor is highly predictive of future earnings and labour market success (Mahboubi 2024). Research by Oreopoulous and Skuterud (2024) suggests that labour market earnings are the best indicator of the value of workers' skills to the economy and their ability to integrate into the workforce without facing overqualification.

However, applying this measure requires careful implementation to avoid unintended consequences. For example, while this approach could benefit applicants with prior Canadian income, it may present challenges for individuals who do not have a Canadian income history. Newcomers with international experience may struggle to meet certain thresholds if their pre-immigration earnings are not easily comparable to Canadian standards. To address this, Canada could improve its selection criteria by running statistical regressions that relate immigrants' post-landing earnings to their human capital characteristics at the time of application. This would help identify the human capital factors most positively correlated with post-landing earnings, enabling the government to assign higher points and weights to those characteristics, thereby refining the selection process (Mahboubi 2024).

Furthermore, the current system should introduce stricter language proficiency standards and incorporate new educational criteria to account for educational institutions, fields of study, and academic grades - factors often overlooked but crucial for assessing labour-market integration potential. These factors significantly impact labour market integration and overqualification (Oreopoulos and Skuterud 2024; Li 2017). These adjustments could align with global best practices, such as Australia's points system, where language and education are heavily weighted. This approach would help prevent the overqualification of skilled immigrants and enhance their integration by ensuring that the skills they bring are recognized and effectively utilized in the Canadian economy.

While it is essential to enhance Canada's immigration selection system to better identify and leverage the human capital of all highly educated immigrants, irrespective of their country of origin, these measures must be implemented alongside efforts to address systemic biases and barriers faced by immigrants from diverse educational and cultural backgrounds. This includes improving credential recognition, providing targeted support programs, and educating employers on the value of international qualifications.

#### 2. Improving Language Proficiency

Language proficiency plays a crucial role in labour market integration. As discussed earlier, research shows that the language requirement for economic immigrants should be more stringent, similar to Australia's approach, with high language proficiency heavily weighted in the points system (Mahboubi 2024). Enhanced language requirements should be implemented to help immigrants communicate effectively and utilize their skills, thereby reducing overqualification and underemployment.

That said, not all immigrants need to meet the language requirement to be admitted to Canada. The overqualification gap is much higher for refugees and family-class immigrants where language is not a selection factor. Although Canada provides various funded settlement services to newcomers to improve their language skills and support their integration, the effectiveness appears to be limited to some extent due to low participation. Almost half of newcomers take no advantage of any settlement services, and only 38 percent of participants used language training services (Foltin et al. 2022). Furthermore, university-educated newcomers are less likely to use services. Between 2016 and 2020, only 8.5 percent of economic principal applicants accessed federally funded employment and community connection programs, far lower than the 46 percent average for all classes.<sup>17</sup>

Lack of awareness, challenges related to participation, and the need for high-quality training may explain low participation. In 2023, only 68 percent of all newcomers were aware of IRCCfunded settlement services (IRCC 2024). In 2021, only 8 to 9 percent of skilled newcomers who used employment services learned about the available services from government offices (e.g., upon arrival at the border; SRDC 2021). Immigration officials should actively reach out to newcomers to educate them about available assistance and improve the usage of pre-arrival employment services.

While numerous programs and services are available for newcomers, there is a knowledge gap about their effectiveness and efficiency in improving labour market integration among participants. To enhance the impact of these services, more support and systematic evaluations are needed (Reitz 2005). Developing flexible, accessible and effective training programs is crucial in creating concrete employment pathways for skilled immigrants. Governments need to evaluate these programs rigorously, identify best practices, and scale innovative approaches that improve immigrants' labour market integration. Focusing on value for money and proven effectiveness will help determine what program works and for whom.

#### 3. Addressing Foreign Credential and Work Experience Recognition Issues

To better integrate skilled immigrants, collaborative efforts between immigration policymakers, regulatory authorities, and employers are essential. Provincial governments must collaborate with regulatory bodies to streamline the recognition of foreign credentials and work experience. For example, the recent initiatives in British Columbia and Nova Scotia to expedite regulatory approvals for healthcare professionals demonstrate such collaborative approaches. Regulatory bodies also should re-examine and update their licensing processes to reduce red tape and to ensure that qualification and licensing requirements imposed on foreigners are not excessively burdensome.

Expediting the licensing of immigrants from trusted countries<sup>18</sup> is beneficial. Mutual credential recognition agreements<sup>19</sup> with prominent source countries can also help streamline labour market integration, save resources, and facilitate an easier transition for new immigrants (Richardson and Leach 2024). These agreements can set clear equivalency standards and foster international partnerships, ensuring foreign-trained professionals meet Canadian workplace requirements.

Introducing partial licensing or conditional recognition can also make pathways into regulated professions more accessible. This allows immigrants to work in supervised or limited-capacity roles while completing additional training or exams required for full licensure. These measures could help expand the workforce in fields like healthcare.

To enhance efficiency, provinces should allow prospective immigrants to initiate the credential recognition and licensing processes before arriving in Canada. Fast-tracked pre-arrival assessments by official authorities can reduce the time needed for full integration into regulated occupations.

Immigrants also need assistance in navigating the complexities of the recertification process and available career paths. Since occupations in Canada are regulated at the provincial level, regulations can vary. Provincial regulatory bodies can

partner with professional associations to develop comprehensive licensing guides for regulated professions to provide skilled immigrants with a roadmap for understanding their relicensing options. Allowing the credentialing process to begin while the prospective immigrant is still overseas can reduce the time associated with the licensure process. Several provinces, such as British Columbia and Manitoba,<sup>20</sup> provide information to help newcomers navigate the domestic labour market and professional regulations. Providing up-to-date and detailed labour market information to newcomers is crucial for their labour market integration. Other jurisdictions should adopt similar systems to help immigrants understand domestic labour market requirements.

#### 4. Strengthen Employer Awareness and Support

The federal and provincial governments need to enhance efforts to educate employers, especially small and medium-sized businesses, about credential assessment services and the benefits of hiring immigrants. Developing comprehensive databases of program equivalencies for foreign credentials will aid employers in understanding the true value of immigrants' qualifications and skills. Promoting the positive impacts of diversity on organizational performance can also encourage employers to actively seek and hire immigrants.

- 18 Trusted countries refer to countries with professional training standards similar to those in Canada, including comparable curricula, rigorous training protocols, and licensing standards. For example, the United States, the United Kingdom, Australia and New Zealand often meet these criteria for medicine and nursing, with similar accreditation processes and oversight frameworks. Despite these similarities, Canada's requirements for foreign-trained physicians to complete residencies and foreign-trained nurses to undergo a lengthy application process pose significant hurdles for these professionals. While some provinces have started to ease these requirements, they vary widely across provinces and territories, creating inconsistencies that can further complicate the licensing process for newcomers.
- 19 For example, Engineers Canada has directly negotiated mutual recognitions agreements (MRAs) with Australia, France, Hong Kong, Ireland and some states in the United States. However, Canada's regulatory bodies operate provincially, meaning only a provincial or territorial regulator can decide whether to ratify a country-specific MRA. Reaching uniform agreements across all provinces would require coordination that involves time, personnel, and financial resources.
- 20 For example, Welcome BC and Manitoba Start help newcomers discover and navigate the local labour market. For more information, see <u>https://www.welcomebc.ca/</u> and <u>https://manitobastart.com/for-newcomers/work-experience-programs/</u>

Organizations with greater ethnic and cultural diversity are 36 percent more likely to outperform their competitors in profitability (Dixon-Fyle et al. 2021). According to a Toronto Region Immigrant Employment Council survey, 80 percent of GTA employers who intentionally hire immigrants noticed a positive impact on their organization (TRIEC 2018).

Meanwhile, the federal, provincial and municipal governments need to support programs that focus on employability skills and develop targeted jobmatching programs to connect employers and immigrants. They need to invest more in language training tied to Canadian work cultures, bridging training programs, practice-ready assessment programs, and internship opportunities. Bridging programs such as Canada Work Experience, which connect immigrants with experienced professionals in their respective fields through experiential learning, internships, or unlicensed opportunities, can help new immigrants understand the local job market and learn the workplace culture. Existing immigration career support services, such as BC JobConnect or Windmill Microlending, also serve as strong examples of initiatives that successfully connect private-sector employers with new immigrants.

By implementing these recommendations, Canada can better harness the skills of its immigrant population, reduce the incidence of overqualification, and ultimately enhance the economic contribution of highly educated immigrants.

#### CONCLUSION

Immigrant overqualification in the Canadian labour market results from several interconnected factors. While systemic barriers, such as the lack of recognition for foreign credentials and cumbersome credential assessment processes, play a role, individual factors – including language proficiency, educational quality, and familiarity with Canadian workplace norms – also influence overqualification outcomes.

Our analysis reveals that location of study, field of study, ethnic background, and language proficiency significantly affect overqualification rates among immigrants. For example, our research shows that controlling for these factors significantly reduces the overqualification gap between immigrants and non-immigrants to near parity. The location of study alone reduces the overqualification odds for immigrants relative to non-immigrants by nearly half. Foreign credentials, particularly from Southeast and Southern Asia, are generally undervalued compared to Canadian ones, with immigrants from these regions having 2.7 times higher odds of working in jobs requiring only a high-school diploma compared to Canadianeducated counterparts. Similarly, immigrants with degrees in trades, business, or non-STEM fields face higher overqualification risks than those with STEM qualifications. Ethnic background and limited proficiency in Canada's official languages further compound these challenges.

To address these issues, several recommendations should be considered. First, the Express Entry system should implement stricter language requirements and better incorporate labour market data and educational factors, ensuring that immigrants' skills are more effectively aligned with market needs. Enhancing language training by improving access to high-quality, culturally relevant programs and increasing participation in training services are crucial. Simplifying the recognition process for foreign credentials and work experience, alongside providing clear guidance on licensing requirements, will facilitate smoother workforce integration. Additionally, increasing employer awareness of the value of foreign credentials and promoting job-matching programs will support better integration. By tackling both systemic and individual challenges, Canada can reduce overqualification, better align immigrant skills with the labour market needs, and enhance their economic contributions.

#### APPENDIX:

| Table A1: Categories for Categorical Variables      |  |  |  |  |
|---|--|--|--|--|
| Variables   | Categories   |  |  |  |
| Gender  | 0. Male, 1. Female   |  |  |  |
| Marital Status                                      | 0. Single, 1. Married/Common-law   |  |  |  |
| Province  | 1. ON, 2. NL, 3. PEI, 4. NS, 5. NB, 6. QC, 7. MN, 8. SK, 9. AB, 10. BC, 11. Northern Canada  |  |  |  |
| Education Level                                     | 1. Bachelor's, 2. University Cert/Diploma, 3. Medicine/Dentistry/Vet, 4. Master's, 5. Doctorate  |  |  |  |
| Location of Study                                   | 1. Canada, 2. USA, 3. Other Americas, 4. Europe, 5. Eastern Asia, 6. Southeast/Southern Asia, 7. Other   |  |  |  |
| Field of Study                                      | 1. STEM, 2. Health, 3. Trades, 4. Business, 5. Other   |  |  |  |
| Conversational Proficiency in Official<br>Languages | 1. English, 2. French, 3. English and French, 4. Neither English nor French  |  |  |  |
| Industry  | 1. Agriculture, 2. Mining, 3. Utilities, 4. Construction, 5. Manufacturing, 6. Wholesale, 7.<br>Retail, 8. Transportation, 9. Information, 10. Finance, 11. Real Estate, 12. Professional, 13.<br>Admin, 14. Educational, 15. Health, 16. Arts, 17. Accommodation, 18. Other Services, 19.<br>Public Admin |  |  |  |
| Ethnicity   | 1. Indigenous, 2. Canadian, 3. French, 4. Other North American, 5. European, 6. Latin<br>American, 7. African, 8. West/Central Asian, 9. South Asian, 10. Chinese, 11. East/Sour<br>Asian, 12. Arab, 13. Caucasian, 14. Christian, 15. Jewish, 16. Other/Multiple  |  |  |  |

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#### REFERENCES

- Aydemir, Abdurrahman, and Mikal Skuterud. 2005. "Explaining the Deteriorating Entry Earnings of Canada's Immigrant Cohorts, 1966 – 2000." *Canadian Journal of Economics* 38(2): 641-672. https://doi.org/10.1111/j.0008-4085.2005.00297.x
- Aydede, Yigit, and Atul Dar. 2016. "The Cost of Immigrants' Occupational Mismatch and the Effectiveness of Postarrival Policies in Canada." *IZA J Migration* 5: 9. <u>https://doi.org/10.1186/s40176-016-0057-z</u>
  - \_\_\_\_. 2022. "Native-born-immigrant Wage Gap Revisited: The Role of Market Imperfections in Canada." *Canadian Labour Economics Forum* (CLEF), Working Paper Series 50. University of Waterloo.
- Banerjee, Rupa, Feng Hou, Jeffrey G. Reitz and Tingting Zhang. 2021. "Evaluating Foreign Skills: Effects of Credential Assessment on Skilled Immigrants' Labour Market Performance in Canada." *Canadian Public Policy* 47(3): 358-372. DOI: 10.3138/ cpp.2021-014
- Battu, H., and P.J. Sloane. 2004. "Over-Education and Ethnic Minorities in Britain." *The Manchester School* 72 (4): 535-559.
- Chiswick, Barry R., and Paul W. Miller. 2009. "International Transferability of Immigrants' Human Capital." *Economics of Education Review* 28(2): 162-169. <u>https://doi.org/10.1016/j.</u> <u>econedurev.2008.07.002</u>
- Cornelissen, L., and M. Turcotte. 2020. "Persistent overqualification among immigrants and nonimmigrants." Statistics Canada. Catalogue no. 75-006-X.
- Crossman, Eden, Feng Hou and Garnett Picot. 2021. "Are the Gaps in Labour Market Outcomes between Immigrants and their Canadian-born Counterparts Starting to Close?" Statistics Canada. Available at <u>https://www150.statcan.gc.ca/n1/pub/36-28-</u> 0001/2021004/article/00004-eng.htm

- Damelang, Andreas, Sabine Ebensperger and Felix Stumpf. 2020. "Foreign Credential Recognition and Immigrants' Chances of Being Hired for Skilled Jobs—Evidence from a Survey Experiment Among Employers." Social Forces 99(2): 648–671. <u>https://doi.org/10.1093/sf/soz154</u>
- Dixon-Fyle, Sundiatu, Kevin Dolan, Dame Vivian Hunt and Sara Prince. 2021. "Diversity Wins: How Inclusion Matters." McKinsey and Company. Available at <u>https://www.mckinsey.com/featuredinsights/diversity-and-inclusion/diversity-winshow-inclusion-matters</u>
- Dostie, Benoit, Jiang Li, David Card and Daniel Parent. 2023. "Employer Policies and the Immigrant–native Earnings Gap." *Journal of Econometrics* 233(2): 544-567. <u>https://doi.org/10.1016/j.jeconom.2021.07.012</u>
- Esses, Victoria M., Caroline Bennett-AbuAyyash and Natalia Lapshina. 2014. "How Discrimination Against Ethnic and Religious Minorities Contributes to the Underutilization of Immigrants' Skills." *Policy Insights from the Behavioral and Brain Sciences* 1(1):55-62. DOI:10.1177/2372732214550166
- Elrick, Jennifer. 2016. "Screening, Skills and Cultural Fit: Theorizing Immigrant Skill Utilization from an Organizational Perspective." Int. Migration & Integration 17: 801–817. <u>https://doi.org/10.1007/ s12134-015-0433-1</u>
- Fang, Tony, Na Xiao, Jane Zhu and John Hartley. "Employer Attitudes and the Hiring of Immigrants and International Students: Evidence from a Survey of Employers in Canada." *Canadian Public Policy* 48:17-37. DOI: 10.3138/cpp.2022-007
- Ferrer, Ana, David A. Green and W. Craig Riddell. 2006. "The Effect of Literacy on Immigrant Earnings." *Journal of Human Resources* 41(2): 380-410. Available at <u>https://www.jstor.org/stable/40057280</u>

- Ferrer, Ana, and W. Craig Riddell. 2008. "Education, Credentials, and Immigrant Earnings." *Canadian Journal of Economics* 41(1): 186-216.
- Frank Kristyn, Jungwee Park, Patrick Cyr, Susan Weston and Feng Hou. 2023. "Internationally Educated Health Care Professionals in Canada: Sociodemographic Characteristics and Occupational Distribution." Health Canada. DOI: <u>https://doi. org/10.25318/36280001202300800004-eng</u>
- Fortin, Nicole, Thomas Lemieux and Javier Torres. 2016. "Foreign Human Capital and the Earnings Gap between Immigrants and Canadian-born Workers." *Labour Economics* 41: 104-119. <u>https://doi.org/10.1016/j.labeco.2016.05.021</u>
- Ghadi, Needal, Charles Gyan, Daniel Kikulwe, Christine Massing and Crystal J. Giesbrecht.
  2023. "Labour Market Integration of Newcomers to Canada: The Perspectives of Newcomers in a Smaller Urban Centre." *International Migration* 61(6): 133-154. May 15. <u>https://doi.org/10.1111/</u> imig.13151
- Hsieh, Chang-Tai, Erik Hurst, Charles I. Jones and Peter J. Klenow. 2019. "The Allocation of Talent and U.S. Economic Growth." *Econometrica*, Vol. 87, No. 5 (September): 1439–1474.
- Hou, Feng. 2024. "The Improvement in the Labour Market Outcomes of Recent Immigrants Since the Mid-2010s." Statistics Canada. February 28. DOI: <u>https://doi.org/10.25318/36280001202400200004-</u> eng
- Immigration, Refugees and Citizenship Canada. 2024. "2023 Settlement Outcomes Report." Available at https://www.canada.ca/en/immigration-refugeescitizenship/corporate/settlement-resettlementservice-provider-information/2023-settlementoutcomes-report.html
- Jacobs, Valentine, Kevin Pineda-Hernández, François Rycx and Mélanie Volral. 2022. "Does Overeducation Raise Productivity and Wages Equally? The Moderating Role of Workers' Origin and Immigrants' Background." *Education Economics*. DOI: 10.1080/09645292.2022.2156981

- Jacobs, Valentine, François Rycx and Mélanie Volral. 2022. "Wage Effects of Educational Mismatch According to Workers' Origin: The Role of Demographics and Firm Characteristics." *De Economist* 170(4): 459-501. Available at <u>https:// www.iza.org/publications/dp/14813/wage-effectsof-educational-mismatch-according-to-workersorigin-the-role-of-demographics-and-firmcharacteristics</u>
- Li, Qing. 2017. "Closing the Divide: Education Quality and Immigrants' Success in the Canadian Labour Market." E-Brief. Toronto: C.D. Howe Institute.
- Li, Qing, and Arthur Sweetman. 2014. "The Quality of Immigrant Source Country Educational Outcomes: Do They Matter in the Receiving Country?" *Labour Economics* 26: 81-93. <u>https://www.sciencedirect.com/</u> <u>science/article/abs/pii/S0927537113001280</u>
- Lu, Yao, and Feng Hou. 2019. "Over-education Among University-educated Immigrants in Canada and the United States." Statistics Canada. Available at <u>https://www150.statcan.gc.ca/n1/</u> pub/11f0019m/11f0019m2019022-eng.htm
- Mahboubi, Parisa. 2017. Power of Words: Improving Immigrants' Literacy Skills. Commentary 486. Toronto: C.D. Howe Institute. May.
  - \_\_\_\_\_. 2019. Bad Fits: The Causes, Extent and Costs of Job Skills Mismatch in Canada. Commentary 552. Toronto: C.D. Howe Institute. September.
  - \_\_\_\_. 2024. "Faster, Please, on Fixing the Temporary Foreign Worker Problem." Intelligence Memo. C.D. Howe Institute. Available at <u>https://www.cdhowe.</u> <u>org/intelligence-memos/parisa-mahboubi-faster-</u> <u>please-fixing-temporary-foreign-worker-problem</u>
  - \_\_\_\_. 2024. Quality Over Quantity: How Canada's Immigration System Can Catch Up With Its Competitors. Commentary 654 Toronto: C.D. Howe Institute.
- Mavromaras, K., S. McGuinness, N. O'Leary, P.Sloane and Z. Wei. 2013. "Job mismatches and labour market outcomes: Panel evidence on Australian University Graduates." *Economic Record* 89 (286): 382-395.

- McGuinness, Seamus, Konstantinos Pouliakas and Paul Redmond. 2018. "Skills Mismatch: Concepts, Measurement and Policy Approaches," *Journal of Economic Surveys*, Wiley Blackwell 32(4): 985-1015. September.
- McGowan, Müge Adalet and Dan Andrews, 2015. "Labour Market Mismatch and Labour Productivity: Evidence from PIAAC Data," OECD Economics Department Working Papers 1209, OECD Publishing.

Murray, T. Scott. 2024. "Competency-based Certification can Transform Canada's Immigration System." Intelligence Memo. Toronto: C.D. Howe Institute. Available at <u>https://www.cdhowe.org/intelligencememos/t-scott-murray-competency-basedcertification-can-transform-canadas-immigration</u>

- Oreopoulous, Philip, and Mikal Skuterud. 2024. "It's Time to Relearn Some Basic Immigration Lessons." Intelligence Memo. Toronto: C.D. Howe Institute. Available at <u>https://www.cdhowe.org/intelligencememos/oreopoulos-skuterud-its-time-relearn-somebasic-immigration-lessons</u>
- Pandey, Manish, and James Townsend. 2017. "Prior Host-country Work Experience and Immigrant Labor Market Outcomes: Evidence from Canada." *IZA J Migration* 6:3. <u>https://doi.org/10.1186/</u> <u>s40176-016-0075-x</u>
- Picot, Garnett, and Feng Hou. 2019. "Skill Utilization and Earnings of STEM-educated Immigrants in Canada: Differences by Degree Level and Field of Study." Statistics Canada. Available at <u>https://www150.statcan.gc.ca/n1/</u> en/pub/11f0019m/11f0019m2019023-eng. pdf?st=7jHGCh-w

\_\_. 2023. "The Effect of Pre-immigration Canadian Work Experience on the Returns to Human Capital Among Immigrants." *Int. Migration & Integration* 24(3): 661–679 (2023). <u>https://doi.org/10.1007/</u> <u>s12134-023-01025-9</u>

Picot, Garnett, Feng Hou and Eden Crossman. 2022. "Occupational Outcomes of Immigrants' Lower vs Higher Skilled jobs." Immigration, Refugees and Citizenship Canada. April. Available at <u>https://</u> <u>publications.gc.ca/collections/collection\_2023/ircc/</u> <u>Ci4-242-2023-eng.pdf</u>

- Picot, Garnett, and Feng Hou. 2019. "Skill Utilization and Earnings of STEM-educated Immigrants in Canada: Differences by Degree Level and Field of Study." Statistics Canada. Catalogue no. 11F0019M — No. 435.
- Picot, Garnett, Feng Hou and Theresa Qiu. 2016. "The Human Capital Model of Selection and Long-run Economic Outcomes of Immigrants in Canada." *International Migration* 54(3): 73–88.
- Reitz, Jeffrey G. 2005. "Tapping Immigrants' Skills: New Directions for Canadian Immigration Policy in the Knowledge Economy." *Law and Business Review of the Americas* 11(3): 409-432.
- Reitz, Jeffrey G. 2001. "Immigrant Skill Utilization in the Canadian Labour Market: Implications of Human Capital Research." *Journal of International Migration & Integration* 2: 347–378. <u>https://doi.org/10.1007/s12134-001-1004-1</u>
- Reitz, Jeffrey G., Josh Curtis and Jennifer Elrick. 2014.
  "Immigrant Skill Utilization: Trends and Policy Issues." *Journal of International Migration and Integration* 15: 1–26. DOI:10.1007/s12134-012-0265-1
- Richardson, Benjamin, and Cynthia Leach. 2024. "A Growing Problem: How to Align Canada's Immigration with the Future Economy." RCB Thought Leadership. Available at <u>https://</u> <u>thoughtleadership.rbc.com/a-growing-problem-how-to-align-canadas-immigration-with-the-future-economy/</u>
- Schimmele, Christoph, and Feng Hou. 2024. "Trends in Education–Occupation Mismatch among Recent Immigrants with a Bachelor's Degree or Higher, 2001 to 2021." Statistics Canada. May 22. DOI: https://doi.org/10.25318/36280001202400500002eng
- Social Research and Demonstration Corporation. 2021. "Survey of skilled newcomers who previously used employment services." available at <u>https://km4s.ca/</u> wp-content/uploads/Survey-of-skilled-newcomerswho-previously-used-employment-services-2021.pdf
- Statistics Canada. 2022a. "Research to Insights: Immigration as a Source of Labour Supply." Available at <u>https://www150.statcan.gc.ca/n1/</u> <u>pub/11-631-x/11-631-x2022003-eng.htm</u>

\_\_\_\_. 2022b. "Canada Leads the G7 for the Most Educated Workforce, Thanks to Immigrants, Young Adults and a Strong College Sector, but is Experiencing Significant Losses in Apprenticeship Certificate Holders in Key Trades." Available at https://www150.statcan.gc.ca/n1/dailyquotidien/221130/dq221130a-eng.htm

- \_\_. 2023. "Labour Force Survey, November 2023." Available at <u>https://www150.statcan.gc.ca/n1/daily-</u> <u>quotidien/231201/dq231201a-eng.htm?HPA=1</u>
- \_\_\_\_\_. 2024. Table 14-10-0083-01. "Labour force characteristics by immigrant status, annual (x 1,000)." DOI: <u>https://doi.org/10.25318/1410008301-eng</u>
- Shibayama, Takuya. 2023. The Health Consequences of Persistent Overqualification Among Immigrants in Canada. Master of Science thesis. University of Waterloo.
- Thompson, Eden Nicole. 2000. "Immigrant Occupational Skill Outcomes and the Role of Region-of-Origin-Specific Human Capital." Human Resources Development Canada. Available at <u>https://citeseerx.</u> <u>ist.psu.edu/document?repid=rep1&type=pdf&doi=aa</u> 783d4c3e99a5041870bb34caacc11847c61317
- Toronto Region Immigrant Employment Council. 2018. "State of Immigrant Inclusion in the Greater Toronto Area Labour Market." Available at <u>https://triec.ca/wp-content/uploads/2018/11/</u> <u>TRIEC-State-of-Immigrant-Inclusion-Reportfinal-181123.pdf</u>

- Verhaest, D., and Omey, E. 2009. "Objective overeducation and worker well-being: a shadow price approach." *Journal of Economic Psychology* 30(3), 469-481
- Wald, Steven, and Tony Fang. 2008. "Overeducated Immigrants in the Canadian Labour Market: Evidence from the Workplace and Employee Survey." *Canadian Public Policy* 34(4): 457-479. DOI: 10.3138/cpp.34.4.457
- Warman, Casey, Arthur Sweetman and Gustave Goldmann. 2015. "The Portability of New Immigrants' Human Capital: Language, Education, and Occupational Skills." *Canadian Public Policy* 41(1):64–79. DOI: 10.3138/cpp.2013-055
- Zhang, Tingting, Rupa Banerjee and Aliya Amarshi. 2023. "Does Canada's Express Entry System Meet the Challenges of the Labor Market?" *Journal of Immigrant & Refugee Studies* 21(1): 104-118. DOI: 10.1080/15562948.2022.2133201
- Zhang, Tingting. 2024. *The Doctor Dilemma: Improving Primary Care Access in Canada*. Commentary 660. Toronto: C.D. Howe Institute.

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