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Executive summary

Employment outcomes of postsecondary educated immigrants, 2006 Census

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Executive summary

This study is the second part of a three part project using the 2006 Census micro data to examine interplaying associations between labour market outcomes and educational characteristics among postsecondary educated immigrants (PSE) immigrants. It's mainly descriptive. The first part of this project drew a detailed educational portrait of PSE immigrants. In this second part, we are exploring occupational skill level outcomes in relation to highest level of educational attainment, field of study, and location of study (including a focus on selected major fields of study). The goal is to explore, using descriptive statistics, employment and occupational outcomes by educational characteristics, the main focus being on the immediately observable 'transferability' of foreign degrees by field of study and country of highest post secondary degrees – that is, transferability, or a “match”, refers to shares of PSE immigrants working in skilled occupations (National Occupational Classification 2006 levels O, A, and B), and occupations related to their education.

Drawing upon the newly available information captured in the 2006 Census, this study explores how differences in immigrant employment and occupational outcomes relate to the country of highest educational attainment and different fields of study. The paper examines the following research questions: Do country of education and field of study matter in the Canadian labour market? How do observed labour market statistics of immigrants vary by field of study and place of the highest degree? Are labour market outcomes different for those immigrant workers who have degrees from countries having educational systems similar to the Canadian one, compared to those who do not? Are immigrant groups with degrees in certain fields of study, or from certain countries, more likely to be employed and work in certain occupations than others? Are there any inter-country and inter-field differences in occupational outcomes of immigrants? The study is comprised of two main sections – first, an examination of educational characteristics and labour force statistics of PSE immigrants, and second, an exploration of occupational skill level outcomes in relation to highest level of educational attainment, field of study, and location of study (including a focus on selected major fields of study). What follows are selected highlights from the results of this analysis.

Educational characteristics and labour force statistics

- Immigrant labour force statistics vary with level of educational attainment. As one example, immigrants holding a bachelor's or a master's degree had slightly higher unemployment rates than that of all PSE immigrants.
- Labour force statistics also differ by field of study. Immigrants who studied engineering, computer and information sciences and support services, and engineering technologies/technicians, outperformed other immigrants in terms of higher-than-average participation and employment rates, or lower-than-average unemployment rates. In contrast, immigrants in the fields of education and liberal arts and sciences, and general studies and humanities faced more challenges finding employment.
- PSE immigrants also showed varied labour market outcomes by country of study. Those who obtained their highest degree in Canada had better performance in 2006 in terms of a higher employment rate and a lower unemployment rate than many other main countries of study, close to the corresponding rates among their Canadian-born counterparts.
- Immigrants who obtained their highest degree in the Philippines, the United States, the United Kingdom, Hong Kong, or Poland exhibited similar labour market outcomes as those studying in Canada, with relatively higher employment rates and lower unemployment rates. In contrast,

immigrants who received their highest education in Pakistan, Iran and China did particularly poorly, with relatively higher unemployment rates.

- Overall, immigrants who had been in Canada for a longer time outperformed in the labour market their counterparts who had been in Canada for a shorter period. The labour market advantage of a Canadian diploma or degree over foreign degrees seems more apparent for established immigrants than for recent and very recent immigrants.

Occupational outcomes and education

Skill level of occupation and highest level of educational attainment

- While an occupation-education “mismatch” is found to exist for all immigrant cohorts (e.g., the term “match” being used here to refer to shares of PSE immigrants working in skilled occupations and occupations related to their education), those immigrants who had been in Canada for a longer time outperformed their counterparts who had been in Canada for a shorter period, for almost all major fields of study. Very recent and recent immigrants showed weaker occupation-education “match” rates in comparison with established immigrants.
- The occupation-education match rate increased among PSE immigrants with higher levels of educational attainment.

Skill level of occupation and field of study

- Occupational skill level distribution patterns of PSE immigrants varied substantially across fields of study. Of all immigrant postsecondary graduates who had worked during 2005 and 2006, those who held degrees in biological and biomedical sciences had the highest proportion working in skilled occupations (National Occupational Classification 2006 levels O, A and B) (77.8%), followed by those in physical sciences (76.5%), engineering (75.5%), psychology (74%), construction trades (73.1%) and computer and information sciences and support services (72.1%).
- Regardless of which major field they had studied in, immigrants with a Canadian postsecondary degree had better chances to work in occupations commensurate with their educational level and field of study. This advantage is more apparent in the fields of study of business and management, marketing and related support services, social sciences and education.

Skill level of occupation and location of study

- Significant disparities in employment and occupational outcomes across countries of study and fields of study imply that transferability of degrees or credentials obtained in other countries varies. Overall, immigrants with a Canadian postsecondary degree had better chances to find employment, and to work in occupations commensurate with their educational level and field of study. This advantage is more apparent in the fields of business and management, marketing and related support services, social sciences and education.
- Relatively more positive prospects are also found for immigrants with degrees from the U.S., the U.K. and France, and those in particular fields of study such as engineering and computer and information sciences and support services, even from non-traditional source countries such as China and India.
- Some groups facing more barriers to skilled occupations (NOC O, A and B) include immigrants with Filipino degrees, and immigrants from China, India and Pakistan who are trained in fields other than engineering and computer sciences, such as social sciences.

- PSE immigrants with Filipino degrees have a very low unemployment rate of 4.2%, comparable to the rate for immigrants with a Canadian postsecondary degree and much better than those of their Chinese and Indian counterparts. However, during 2005 and 2006, they also had the lowest proportion working in skilled occupations among all main countries of study under analysis (42.1%).
- Immigrants with their highest education from South Korea had a unique occupational distribution. Nearly one-third of them worked in management jobs (31.9%), much higher than for any other location of study and more than three times higher than the immigrant average (11.4%). This is associated with the much higher self-employment rate among these immigrants.

Occupational outcomes by country of highest educational attainment for selected major fields of study

- Recent and very recent immigrants who studied engineering, engineering technologies/technicians, and computer and information sciences and support services had better occupational outcomes compared to their counterparts in other fields of study, suggesting that particular fields of study imply better prospects in the Canadian labour market, even for immigrants educated in non-traditional source countries such as China and India.

Conclusion

- Regardless which major field immigrants had studied in, those with a Canadian postsecondary degree had a better chance to work in an occupation commensurate with their educational level and field, especially when compared to immigrants who completed their education in the main source countries of China, India, the Philippines and Pakistan. The advantage of a Canadian postsecondary degree is more apparent in the fields of business and management, marketing and related support services, social sciences and education.
- For immigrants with Chinese postsecondary degrees, those who studied computer and information sciences and support services were most likely to work in skilled occupations (71.9%), followed by engineering (66.4%), health professions and related clinical sciences (61.8%) and social sciences (54.5%). Among these immigrants, the fields of study with the lowest percentages working in skilled occupations were education (47.8%) and business and management, marketing and related support services (48.2%).
- For immigrants with Indian degrees, the fields of study of engineering (66.6%), health professions and related clinical sciences (56.9%), computer and information sciences and support services (54.0%) were associated with higher proportions working in skilled occupations.
- Among immigrants who studied in Pakistan, those who majored in computer and information sciences and support services had the highest proportion working in skilled occupations among the six most common fields of study. However, this proportion was relatively low when compared to other immigrants who studied in this field.
- The proportions in skilled occupations for immigrants with Filipino degrees were relatively lower for all six common fields of study. For this group of immigrants, the two fields of study with the highest percentages in skilled occupations were health professions and related clinical sciences (51.4%) and engineering (50.5%). In contrast, for this group, the percentage for those who studied in computer and information sciences and support services was 43.4%, while the percentages in skilled jobs for all other three fields of study were between 31.6% and 36.6%.
- The percentages of immigrants with Romanian degrees working in skilled occupations in all six fields of study were relatively high compared to those who held degrees from other locations. Computer and information sciences and support services ranked as the top field of study for these immigrants, with 85.8% working in skilled occupations, followed by engineering (77.4%) and education (74.6%). Five in 10 immigrants with Romanian degrees in business, management, marketing and related support services worked in skilled occupations (51.8%), the lowest percentage among all six major fields of study. However, this relatively lower percentage for Romanian degree holders was on par with the highest percentage working in skilled occupations for immigrants with Filipino degrees.
- Immigrants who studied in Russia were also relatively successful in obtaining skilled occupations, although in most fields of study they lagged behind their counterparts with Romanian degrees.

In a later investigation, part three of this project, we will use multivariate analyses to separate out independent effects of country of study and field of study on occupational outcomes and earnings, controlling for socio-demographic factors (such as English and French language ability, city of residence, and visible minority status).