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Employment outcomes of postsecondary educated immigrants, 2006 Census

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September 2010



Canada 

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Acknowledgement

The authors wish to acknowledge and thank Eden Crossman, Research and Evaluation Branch for her significant contribution to the final report.

Ci4-91/2012E-PDF
978-1-100-21236-4
Ref. No.: RR20120702

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Executive summary

This paper takes advantage of the first available information on location of the highest education in the 2006 Census. 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. In a later investigation, part three of this project, we will use multivariate analyses to net independent effects of country of study and field of study on occupational outcomes and earnings, controlling for socio-demographic factors (e.g., English and French language ability, city of residence, visible minority status, etc.).

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.

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.

Introduction

For the first time in the Canadian census history, detailed location relating to where the highest postsecondary degree was obtained has been collected in the 2006 Census.¹ In combination with the existing information on the level of education and field of study, this newly available information provides important clues about the possible reasons why some immigrants may develop a stronger or weaker attachment to the Canadian labour market. Immigrant assimilation theory predicts that holding all other factors constant, integration into the Canadian labour market should be easier for recent immigrants holding a postsecondary degree completed in Canada compared to those who do not. Degrees similar to the Canadian ones, such as those obtained in the US, UK, and/or some European (OECD) countries, are predicted to have similar effects on labour market integration.

Although the current immigrant selection system does not consider field of study, new policies such as Bill C-50² currently do favour certain occupations which are closely related to field of study when selecting skilled immigrants. Research indicates that postsecondary field of study is an important predictor of labour market outcomes for both immigrants and the Canadian-born population (e.g. McBride and Sweetman, 2004³). Large inter-field differences in earnings are observed between immigrants who obtained their education in Canada and those who did not.

However, little research focuses on field of study or the economic impacts of field of study on immigrants, not to mention how postsecondary field of study interplays with location of education in determining the labour market outcomes of immigrants. This area of research remains open.

Drawing upon the newly available information captured in the 2006 Census, this study looks at statistical variations in country of the highest educational attainment and field of study among postsecondary educated (PSE) immigrants. The paper examines the following research question: What is the picture of postsecondary degree holders in terms of field of study and place of the highest degree among various immigrant groups? The study is comprised of two main sections – first, a comparison of immigrant and Canadian-born demographic and educational profiles, and second, an examination of highest level of educational attainment, location and field of study of PSE immigrants.

This study is the first part of a three part project using the 2006 Census micro data to examine interplaying associations between labour market outcomes and educational characteristics among PSE immigrants. It's mainly descriptive. The second part of this project will explore employment and occupational outcomes by educational characteristics, the main focus being on the transferability of foreign degrees by field of study and country of highest post secondary degrees. A third

¹ Statistics Canada refers to this variable as “Location of study”. This variable indicates the province, territory (in Canada) or country (outside Canada) where the highest certificate, diploma or degree was obtained. It is only reported for individuals who had completed a certificate, diploma or degree above the secondary (high) school level.

² In order to improve the immigration program's responsiveness to Canada's labour-market needs, on June 18, 2008, Parliament approved Bill C-50 which made changes to the Immigration and Refugee Protection Act removing the obligation to process all applications CIC receives, and authorizing the Minister of Immigration and Citizenship to issue instructions regarding which applications are eligible for processing, based on the Government of Canada's goals for immigration. The instructions outline a set of eligibility criteria that apply to all federal skilled worker applications received on or after February 27, 2008. Currently 29 occupations under high-demand areas such as health, skilled trades and resource extraction are on the eligibility list for processing.

³ McBride, S. & Sweetman, A. (2004). “Postsecondary field of study and the Canadian labour market outcomes of immigrants and non-immigrants”, Analytical Studies Branch Research Paper Series, Statistics Canada, Catalogue no. 11F0019MIE2004233.

investigation using multivariate analyses will net independent effects of country of study and field of study on occupational outcomes and earnings, controlling for other socio-demographic factors.

Among the postsecondary educated population, this study focuses on working age immigrants, aged 25-64 years, classified by the following groups: very recent immigrants (who landed between 2001 and 2006); recent immigrants (who landed between 1996 and 2001); and established immigrants (who had been in Canada for more than 10 years).

The highest level of postsecondary completed certificate, diploma and degree is grouped into five categories:

- trades certificate, college diploma, university certificate or diploma below bachelor level;
- bachelor's degree (including university certificate or diploma above bachelor level);⁴
- degree in medicine, dentistry, veterinary medicine or optometry;
- master's degree, and
- earned doctorate.

For the first time with the 2006 Census, data on major field of study was coded with the Classification of Instructional Programs (CIP) Canada 2000. The groupings of the CIP are independent of the level at which study was undertaken. The CIP consists of 13 major categories or primary groupings, 12 of which are used for the Census. The 12 primary groupings are further subdivided into 41 two-digit "series" that represent the most general groupings of programs that are related in subject area.

Based on a new question added to the Census on "location of study", the place where the highest degree was obtained is broken down into two groups: 1) inside Canada, and 2) abroad, for selected main countries of origin including the US, the UK, China, India, the Philippines, Pakistan, etc.

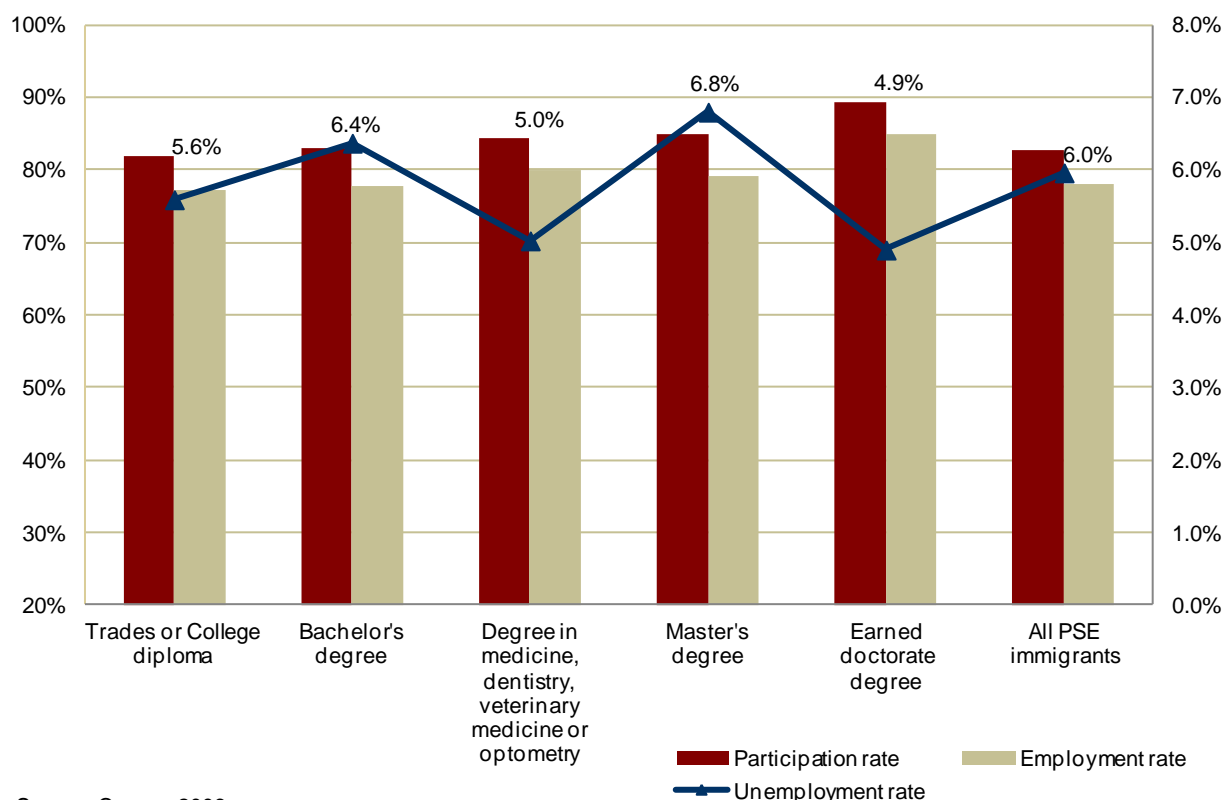
Our focus in the current paper is on PSE immigrants who were 25-64 years old at the time of the 2006 Census, and the analysis is limited to this group. For a demographic and educational comparison of this group of interest to the Canadian-born population, please refer to part one of this three part project, a report titled "An Educational Portrait of Post-Secondary Educated Immigrants, 2006 Census."

⁴ University certificates or diplomas are commonly connected with professional associations in fields such as accounting, banking, insurance or public administration. If a bachelor's degree is a normal prerequisite for a university certificate or diploma course, as may occur with teaching certificates, then the latter is classified as a university certificate above the bachelor level. In the current report, we do not separate it from the bachelor's degree.

Section 1: Educational characteristics and labour force statistics

Labour force statistics are collected for the population 15 years of age and over in the 2006 Census. The reference period for the 2006 Census was the week of Sunday, May 7 to Saturday, May 13, 2006. The Census definitions of employed, unemployed and not in the labour force are comparable to those used for the Labour Force Survey (LFS).

Figure 1: Labour force statistics of PSE immigrants by highest educational attainment, 2006



Source: Census 2006

Immigrant labour force statistics vary with the level of educational attainment (Figure 1). For all PSE immigrants aged 25 to 64, 82.8% participated in the labour force in 2006 and 77.9% were employed, resulting in an unemployment rate of 6%.

Immigrants with a trade certificate or a college diploma or degree had comparable participation and employment rates to those of all PSE immigrants. The unemployment rate for immigrants with a trades or college diploma, at 5.6%, is lower than the immigrant average of 6%. In contrast, immigrants holding a bachelor's degree had a slightly higher unemployment rate at 6.4%.

Immigrants with medical degrees did fairly well in obtaining a job in the Canadian labour market in 2006, recording an unemployment rate of 5%, one percentage point lower than that of the immigrant average. Master's degree holders had the highest unemployment rate among all groups. PhDs had the best outcomes in 2006 in terms of the highest participation and employment rates and the lowest unemployment rate among all PSE immigrants aged 25-64.

Labour force statistics also differ by field of study (Figure 2). Among immigrants in the top 10 fields of study, those who studied engineering, computer and information sciences and support services, and engineering technologies/technicians had higher-than-average participation and employment

rates, while immigrants in the fields of education and liberal arts and sciences, general studies and humanities had relatively lower participation and employment rates.

Looking at unemployment rates, immigrants who studied in health and related clinical sciences, education, and engineering technologies/technicians outperformed other immigrants in terms of their lower-than-average unemployment rates (4.8%, 5.5% and 4.8%, respectively).

Figure 2: Labour force statistics of PSE immigrants by field of study, 2006

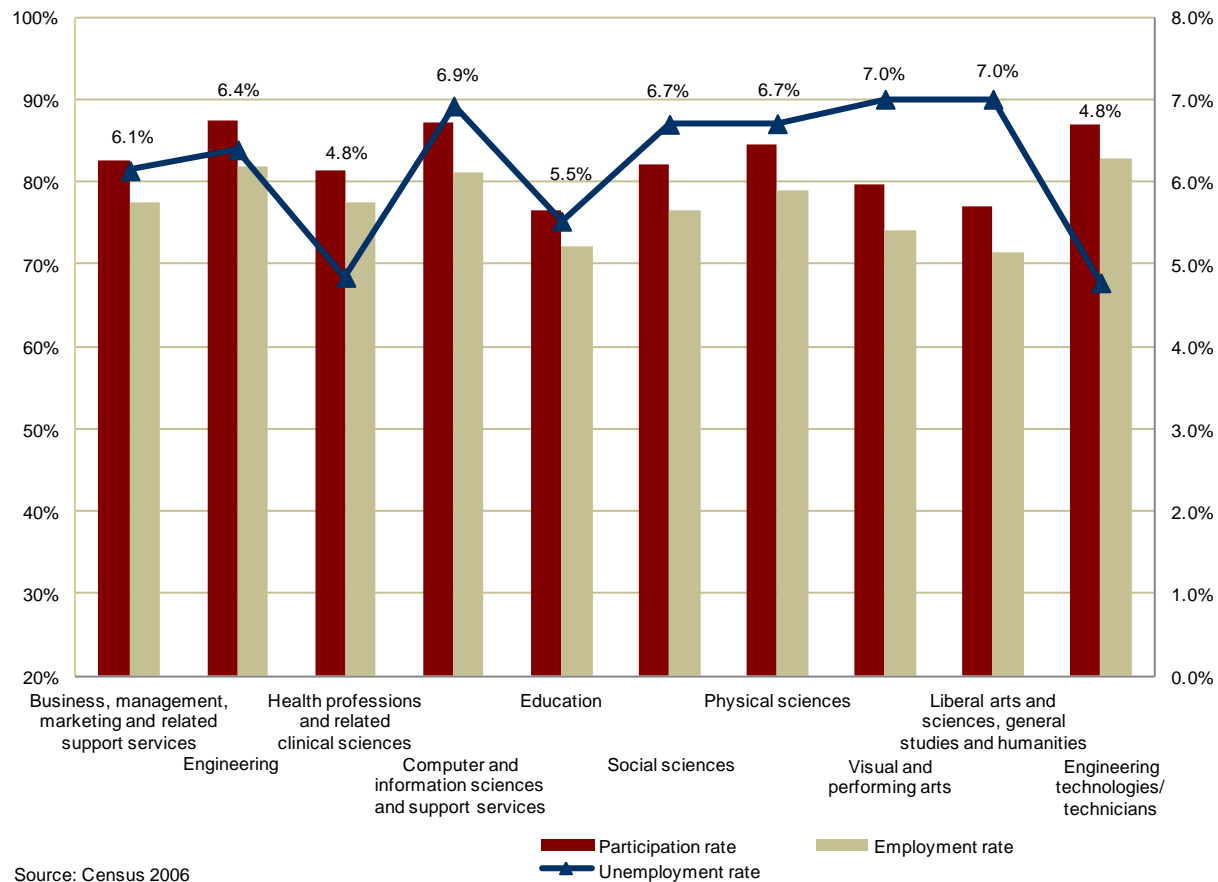
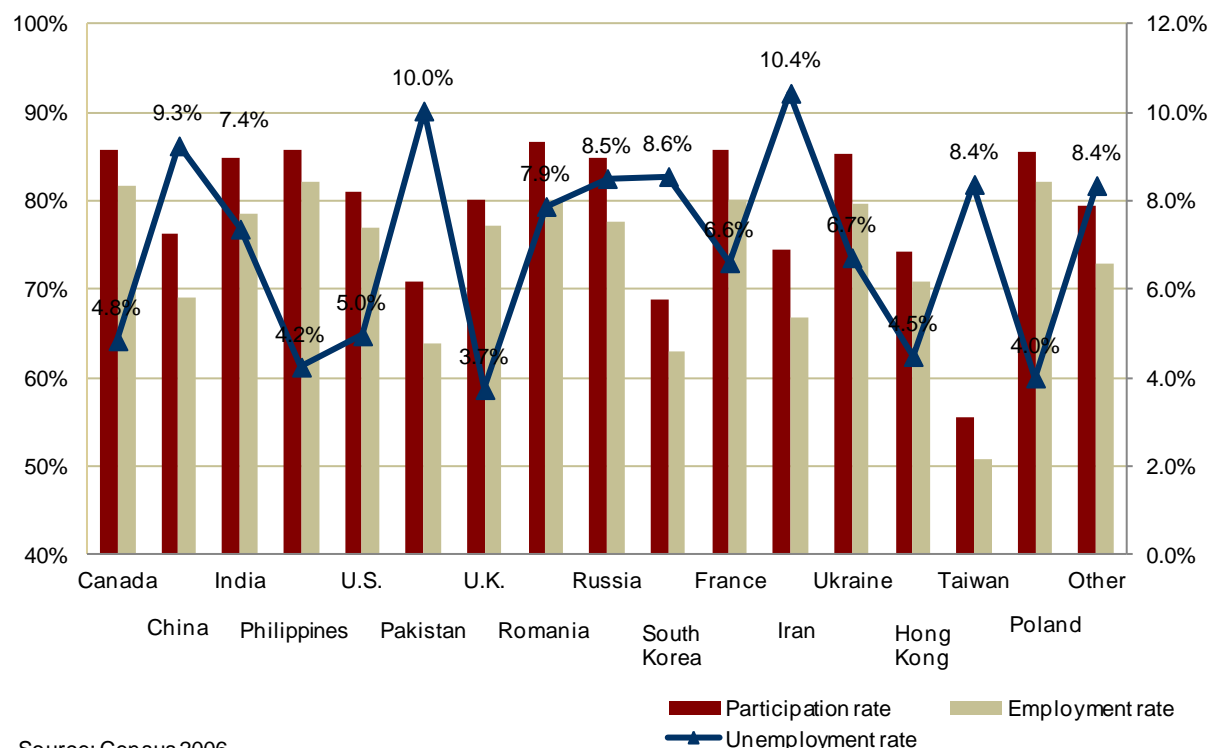


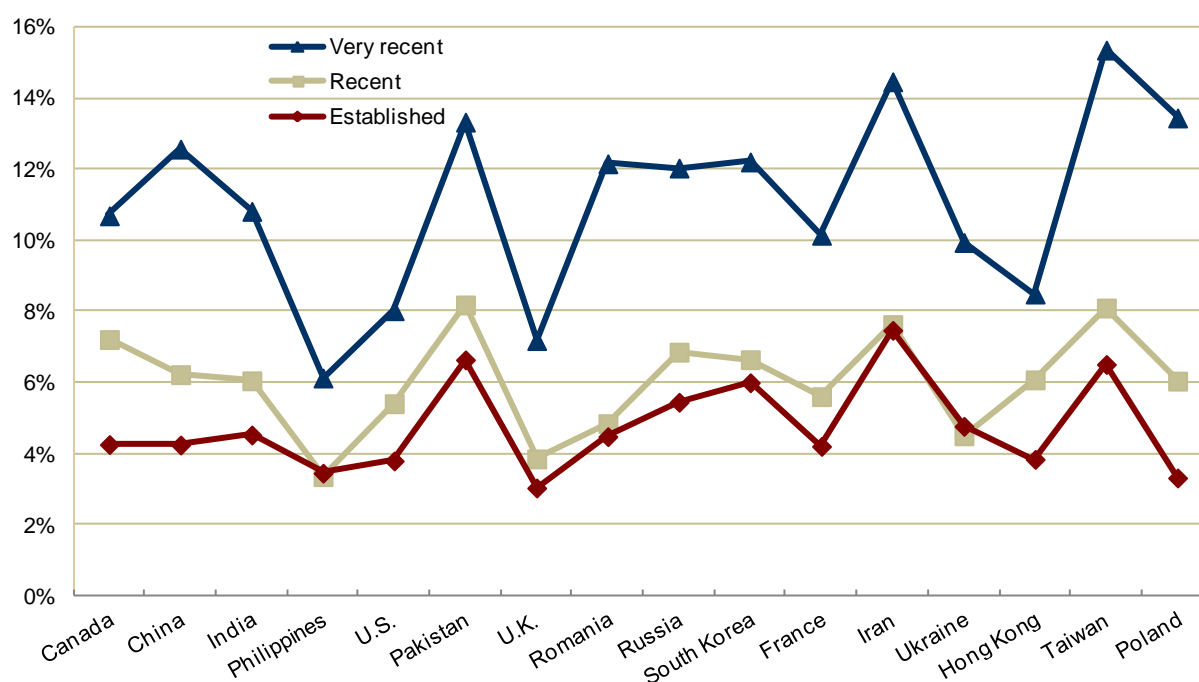
Figure 3: Labour force statistics by country of study, 2006



PSE immigrants also showed varied labour market outcomes by country of study (Figure 3). Those who obtained their highest degree in Canada had a better performance in 2006 in terms of a higher employment rate (81.7%) and a lower unemployment rate (4.8%) than many other countries of study. Further, these rates are close to the corresponding rates among their Canadian-born counterparts during 2006. The employment rate for the PSE working age Canadian-born population was 82.4% and the unemployment rate was 4.2%. Immigrants who obtained their highest degree in the Philippines, the United States, the United Kingdom, Hong Kong and Poland exhibited a similar pattern as those studying in Canada with relatively higher employment rates and lower unemployment rates.

In contrast, immigrants who studied in Pakistan, South Korea and Taiwan were less likely to participate in the labour market and had lower employment rates. Immigrants who received their highest level of education in Pakistan and Iran did particularly poorly, with unemployment rates higher than 10%. The leading source countries – China and India -- showed different outcomes: in 2006, immigrants with a Chinese degree had a participation rate of 76%, an employment rate of 69% and an unemployment rate of 9.3%, while those obtaining their degrees from India had a much higher participation rate at 85%, a higher employment rate at 76% and a lower unemployment rate at 7.4%.

Figure 4: Unemployment rate by country of study and immigration period, 2006

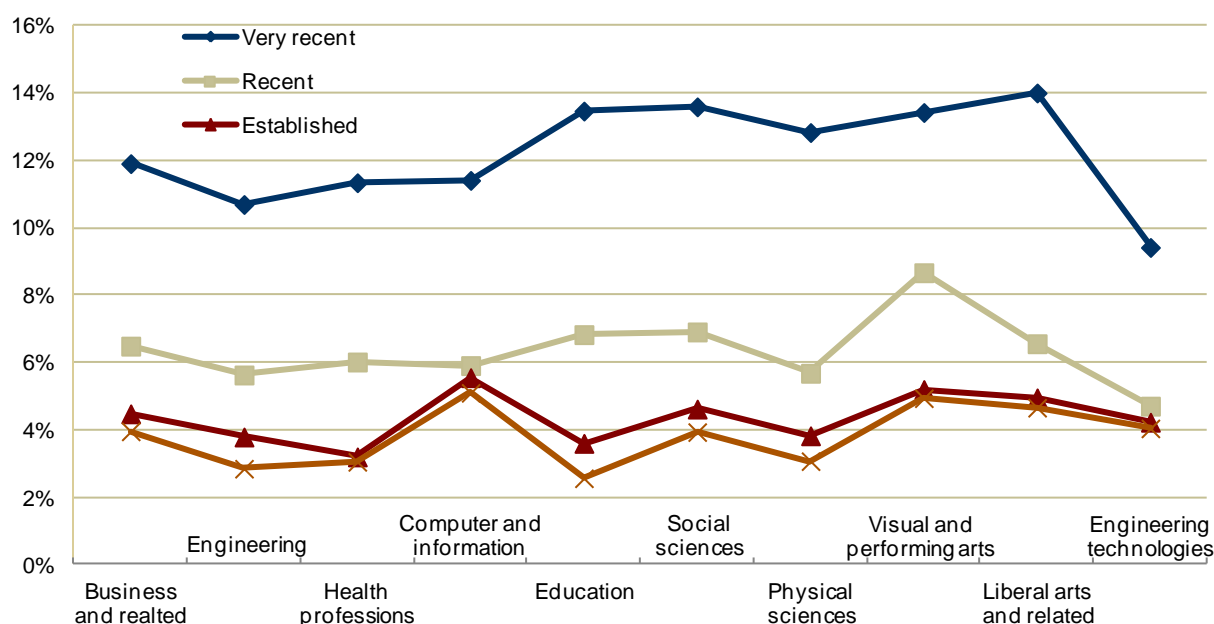


Source: Census 2006

Figure 4 presents further variations in unemployment rates across different immigrant cohorts by country of highest educational attainment. Overall, immigrants who had been in Canada for a longer time outperformed their counterparts who had been in Canada for a shorter period, with relatively lower unemployment rates. Established immigrants who landed in Canada before 1996 had lower unemployment rates than their recent and very recent counterparts for all main countries of study. Very recent immigrants, in contrast, had much higher unemployment rates across all countries of study included in Figure 4, than did recent immigrants and established immigrants. The unemployment rates for very recent immigrants more than doubled the rates for established immigrants who received their highest degree in the same country, including Canada.

Unemployment rates among very recent immigrants were particularly high for postsecondary degree holders who completed their degrees in China (12.6%), Pakistan (13.3%), Romania (12.2%), Russia (12%), South Korea (12.2%), Iran (14.5%) and Taiwan (15.4%). It is important to note that for the very recent arrivals, a Canadian degree does not necessarily lead to a lower unemployment rate, which was 10.7% for those very recent immigrants with a Canadian degree -- only 1 percentage point lower than the immigrant average. The advantage of a Canadian diploma or degree over foreign degrees, especially Asian degrees, seems more apparent for established immigrants relative to recent and very recent immigrants.

Figure 5: Unemployment rate by major field of study and immigration period, 2006

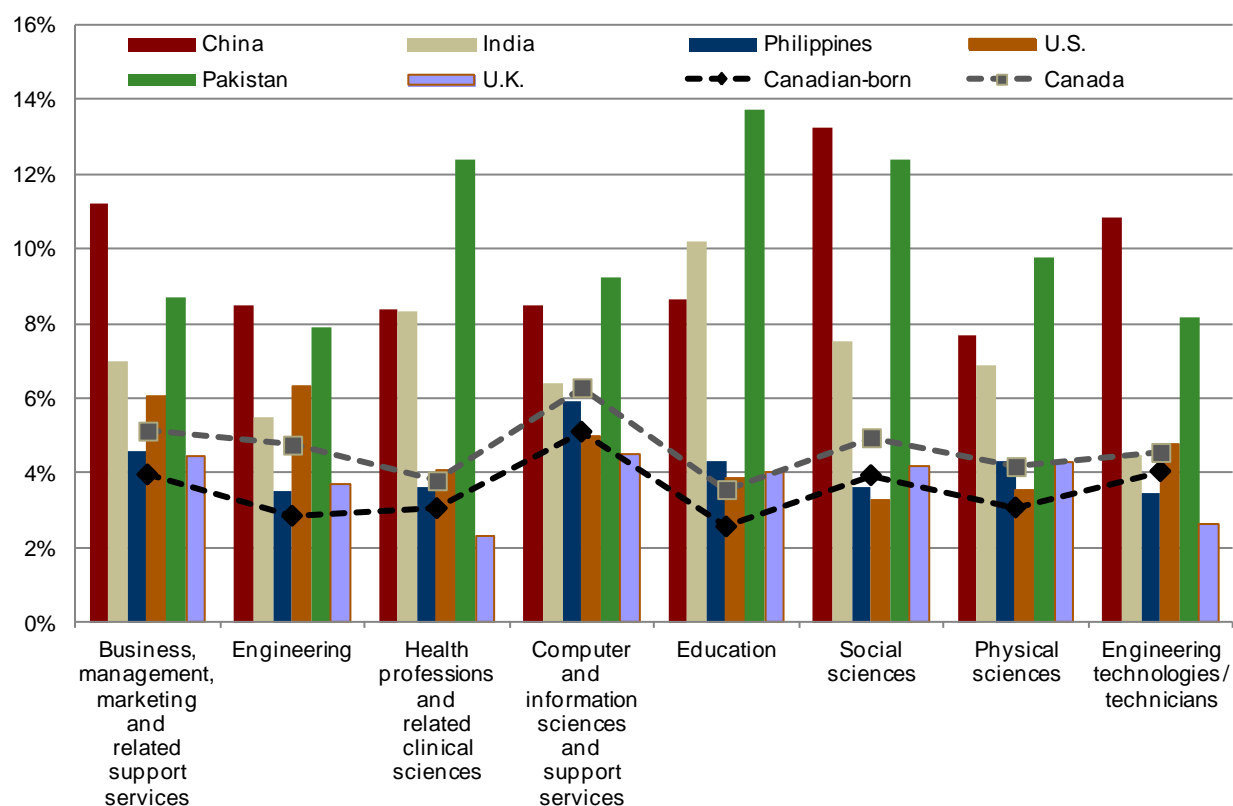


Source: Census 2006

Looking at unemployment rates across major fields of study and immigration period (Figure 5), established immigrants stand out among all three immigrant cohorts with significantly lower unemployment rates across almost all major fields of study, with the exception in the fields of computer and information sciences and support services and engineering technologies/technicians. Very recent PSE immigrants had much more difficulty in the Canadian labour market than their predecessors. The gaps in unemployment rates between very recent and recent immigrants were large, at an average of 6 percentage points for all fields of study.

Recent and very recent immigrants who studied engineering and engineering technologies/technicians had better outcomes compared to immigrants in other fields of study. Those who studied arts or humanities such as education, social sciences, visual and performing arts, and liberal arts and sciences, general studies and humanities faced more challenges than those in engineering or related fields. For established immigrants, those who studied computer and information sciences and support services had the highest unemployment rate across all major fields of study, while those with a degree in health professions and related clinical sciences were most likely to be employed. However, the situation for these two fields of study changed for recent and very recent immigrants, a phenomenon most likely associated with changing labour market demand during the past decade. The IT boom promoted employment opportunities for those immigrants in a computer related field. Regulatory requirements, along with compositional change, meant that recent immigrants who studied in health professions and related sciences, especially in a non-western country, had to face more entry obstacles into their professional jobs than did their predecessors, such as language barriers, recognition of foreign qualifications, and large differences in professional regulations between that in their source country and in Canada.

Figure 6: Unemployment rate by major fields of study and main countries of study, 2006



Source: Census 2006

Figure 6 shows unemployment rates of PSE immigrants by field of study and country of study. Among immigrants in the same major field of study, outcomes differ significantly. Immigrants who obtained their highest degrees in Canada had relatively lower unemployment rates than the average for all immigrants. Among immigrants in the top major field of study – business, management, marketing and related support services, those from Russia, China, South Korea, Romania and Pakistan had higher unemployment rates than others in this field. If we look at engineering, although immigrants who studied in this field had a slightly better outcome than those in other fields in terms of a lower unemployment rate, the results also differ by country of study. Again, immigrants who studied engineering in China, South Korea, and Pakistan had unemployment rates at around 8%, much higher than the rates for immigrants from other countries. For all major fields of study, immigrants who studied in Pakistan, China, and South Korea faced a tougher labour market in 2006.

The following sections take a closer look at detailed labour force statistics for the main countries where immigrants obtained their highest degrees, namely Canada, China, India, the Philippines, the United States, Pakistan and the United Kingdom.

Canada

Of the 1,244,885 working age immigrants who had attained their highest PSE degrees in Canada, 1,068,695, or 85.8%, participated in the labour market in 2006, and 1,016,975 or 81.7% were employed. As a result, the overall unemployment rate for this group of immigrants was 4.8%, close to the rate for Canadian-born postsecondary graduates (4.2%).

Table 1: Labour force statistics by main fields of study for the working age PSE immigrants who obtained their highest degree in Canada, 2006

Fields of study	All working age PSE immigrants	Employment rate	Unemployment rate	Participation rate
Business, management, marketing and related support services	277,565	81.4%	5.1%	85.8%
Health professions and related clinical sciences	156,010	82.0%	3.8%	85.3%
Computer and information sciences and support services	83,030	83.1%	6.3%	88.7%
Engineering	81,755	85.7%	4.8%	90.0%
Education	62,330	77.9%	3.6%	80.7%
Engineering technologies/technicians	61,210	84.4%	4.6%	88.5%
Mechanic and repair technologies/technicians	52,040	84.6%	3.7%	87.9%
Social sciences	50,225	82.1%	5.0%	86.4%
Personal and culinary services	45,655	75.9%	5.3%	80.2%
Visual and performing arts	36,305	78.9%	6.3%	84.2%
Other	338,760	81.2%	4.9%	85.4%
Total	1,244,885	81.7%	4.8%	85.8%

Source: Census 2006

Of the 277,565 immigrants who obtained their degrees in business, management, marketing and related support services in Canada, 85.8% participated in the labour force in 2006 and 81.4% found a job. As a result, the unemployment rate was 5.1%, one percentage point lower than the immigrant average for this major field of study. However, this rate was still higher than that of the Canadian-born average of 4%.

Health professions and related clinical sciences was the second most popular major field of study among those immigrants with a Canadian degree. In 2006, 85.3% of those PSE immigrants in this group participated in the labour force, and 82% were employed. Their unemployment rate of 3.8% was much lower than that for immigrants in most other major fields of study, and close to that for their Canadian-born counterparts (3.1%).

The 2006 Census enumerated 83,030 immigrants aged 25-64 who acquired their highest diploma or degree in computer and information sciences and support services in Canada, which made this field of study the third most popular field among immigrants with a Canadian degree. However, the advantage of a Canadian credential was not obvious for this field: the unemployment rate was one of the highest rates among all major fields of study for immigrants with Canadian credentials (6.3%). This rate was moderately lower than the immigrant average (6.9%) and higher than the Canadian-born average (5.1%).

The results for engineering were somewhat different. Of the 81,755 immigrants who acquired a Canadian degree in engineering, 90% participated in the labour force and 85.7% were employed in 2006. The unemployment rate of this group was relatively low, at 4.8%, compared to the rates for many other major fields of study, and to the immigrant average for this field (6.4%). This indicates that a Canadian engineering credential may imply better employment prospects than for those with

foreign degrees. However, the gap between this rate and the rate for their Canadian-born counterparts (2.9%) also points to the barriers faced by Canadian-educated immigrant engineers in the Canadian labour market.

In contrast, looking at another related field of engineering technologies and technicians reveals a somewhat smaller gap between Canadian-educated immigrants (4.6%) and the Canadian-born (4.0%). It is interesting to note that immigrants with degrees in this field had relatively better outcomes than those in other fields, no matter where they completed their degrees. The gap between the unemployment rate for the immigrant average (4.8%) and the rate for the Canadian-educated immigrants in this field was negligible (0.2%).

China

Immigrants with a Chinese postsecondary degree seem to face greater challenges in the Canadian labour market, compared to their counterparts with a Canadian degree. In 2006, 76.2% of those working age immigrants with a Chinese degree participated in the labour market, and 69.1% were working. Both participation and employment rates of this group were significantly lower than the rates of immigrants with Canadian degrees (85.8% and 81.7%) and the Canadian-born (86% and 82.4%). Furthermore, the unemployment rate for those who had a degree from China was nearly twice as high as the rate for those immigrants with a Canadian credential (9.3% vs. 4.8%), and more than double the rate for the Canadian-born population at 4.2%.

Engineering was the most popular field of study among immigrants with a Chinese degree. In 2006, 39,320 immigrants had their highest degree or diploma in engineering from China, which accounted for nearly one third of all Chinese degree holders. However, this did not present promising job prospects, as their unemployment rate was 8.5%, significantly higher than the rate for their immigrant counterparts with a Canadian engineering degree (4.8%).

The major field of business, management, marketing and related support services followed as the second most popular field of study among Chinese postsecondary degree holders. Of the 20,765 immigrants with a Chinese business degree, only 68.1% participated in the labour market and 60.4% were employed in 2006. The unemployment rate of this group was among the highest of all Chinese degree holders (11.2%).

Immigrants with Chinese degrees in computer and information sciences and support services showed very similar labour market performance to that of immigrants in a related field of study – engineering. The gap between the unemployment rates for Chinese computer sciences degree holders and their Canadian-born counterparts was 3.4 percentage points. Compared to their Canadian-educated immigrant counterparts, this gap remained at 2.2 percentage points.

Immigrants who studied social sciences and English language and literature/letters in China encountered significant challenges finding employment, as unemployment rates of 13.8% and 11.8% were recorded, respectively.

Table 2: Labour force statistics by main fields of study for the working age PSE immigrants who obtained their highest degree in China, 2006

Fields of study	All PSE immigrants	Employment rate	Unemployment rate	Participation rate
Engineering	39,320	74.6%	8.5%	81.6%
Business, management, marketing and related support services	20,765	60.4%	11.2%	68.1%
Computer and information sciences and support services	10,620	75.9%	8.5%	82.9%
Health professions and related clinical sciences	10,185	66.6%	8.4%	72.8%
Physical sciences	5,700	73.9%	7.7%	80.1%
Social sciences	3,995	64.6%	13.3%	74.6%
Education	3,845	61.9%	8.6%	67.8%
English language and literature/letters	3,140	65.8%	11.8%	74.5%
Aboriginal and foreign languages, literatures and linguistics	2,665	63.2%	8.4%	69.2%
Visual and performing arts	2,620	65.8%	9.0%	72.3%
Other	18,875	67.6%	9.5%	74.6%
Total	121,730	69.1%	9.3%	76.2%

Source: Census 2006

India

Of the 137,667 immigrants who acquired their highest degrees in India, 84.7% participated in the labour market in 2006, and 78.5% were employed. Both of these rates were much higher than those for immigrants with Chinese degrees. The overall unemployment rate for Indian PSE degree holders was 7.4% in 2006, which was 2.6 percentage points higher than that for immigrants with Canadian degrees, but outperformed their Chinese counterparts by almost 2 percentage points.

Immigrants who acquired their highest degrees in India in the top fields of study exhibited different labour market outcomes. Looking at unemployment rates, immigrants with an Indian degree in engineering were the least likely to be unemployed (5.5%), followed by those in computer and information sciences and support services (6.4%), multidisciplinary studies (6.6%) and physical sciences (6.9%). In contrast, immigrants who studied in education, biological and biomedical sciences, health professions and related clinical sciences, liberal arts and sciences, general studies and humanities, social sciences and business, management, marketing and related support services were more likely to be unemployed.

The unemployment rates for immigrants with an engineering (5.5%) or computer science (6.4%) degree from India were very close to the rates for Canadian-educated immigrants in the same fields (4.8% and 6.3%, respectively).

Table 3: Labour force statistics by main fields of study for the working age PSE immigrants who obtained their highest degree in India, 2006

Fields of study	All PSE immigrants	Employment rate	Unemployment rate	Participation rate
Business, management, marketing and related support services	26,270	81.1%	7.0%	87.2%
Engineering	18,965	87.9%	5.5%	93.0%
Liberal arts and sciences, general studies and humanities	16,835	74.7%	8.2%	81.3%
Social sciences	9,320	77.1%	7.5%	83.4%
Health professions and related clinical sciences	8,925	72.3%	8.3%	78.9%
Education	7,200	65.6%	10.2%	73.1%
Multidisciplinary/interdisciplinary studies	6,040	80.4%	6.6%	86.1%
Computer and information sciences and support services	4,785	79.2%	6.4%	84.6%
Physical sciences	4,615	82.3%	6.9%	88.4%
Biological and biomedical sciences	3,600	75.4%	9.8%	83.5%
Other	31,110	77.1%	7.8%	83.6%
Total	137,665	78.5%	7.4%	84.7%

Source: Census 2006

The Philippines

According to the 2006 Census, an estimated 132,540 immigrants aged 25 to 64 acquired their highest postsecondary education in the Philippines. Of them, 85.7% participated in the labour market in 2006 and 82.1% were employed. The unemployment rate for these Filipino degree holders was 4.2%. These outcomes are comparable to the rates for immigrants with a Canadian postsecondary degree and much better than those of their Chinese and Indian educated counterparts.

Immigrants with their highest degree from the Philippines in most of the leading fields of study exhibited very low unemployment rates (lower than 5%). Specifically, the lowest unemployment rates were in health professions and related clinical sciences, engineering, social sciences, engineering technologies/technicians, and agriculture related sciences. In contrast, immigrants with a Filipino degree in computer and information sciences and support services, mechanic and repair technologies/technicians, and architecture and related services showed relatively higher unemployment rates compared to their counterparts in other fields of study.

Table 4: Labour force statistics by main fields of study for the working age PSE immigrants who obtained their highest degree in the Philippines, 2006

Fields of study	All PSE immigrants	Employment rate	Unemployment rate	Participation rate
Business, management, marketing and related support services	38,845	81.7%	4.6%	85.6%
Health professions and related clinical sciences	27,425	81.5%	3.6%	84.6%
Engineering	21,110	85.9%	3.5%	89.0%
Education	9,700	76.3%	4.3%	79.8%
Computer and information sciences and support services	3,755	82.2%	5.9%	87.4%
Social sciences	3,320	84.9%	3.6%	88.0%
Engineering technologies/technicians	3,070	86.8%	3.4%	89.7%
Mechanic and repair technologies/technicians	2,300	83.7%	5.6%	88.7%
Agriculture, agriculture operations and related sciences	2,245	83.1%	3.9%	86.2%
Architecture and related services	1,900	81.1%	5.2%	85.5%
Other	18,870	80.8%	4.9%	85.1%
Total	132,540	82.1%	4.2%	85.7%

Source: Census 2006

The United States

The 2006 census enumerated 103,700 immigrants aged 25-64 with their highest educational attainment from the United States. Overall, these immigrants showed lower-than-average participation and employment rates and a slightly higher-than-average unemployment rate, compared to all working age PSE immigrants.

Of the immigrants with a US degree in the top 10 major fields of study, most immigrants showed comparable employment outcomes to their counterparts with a Canadian degree. A few exceptions were noted in engineering and business, management, marketing and related support services. Immigrants with US degrees in these two fields had to face much higher unemployment rates (6.3% and 6.1% respectively) than their counterparts in other fields.

Immigrants who obtained a social science degree in the US had superior outcomes in terms of a lower unemployment rate (3.3%). This was much lower than the rates for immigrants with social sciences degrees from Canada (5.0%) and even the Canadian-born in the same field (3.9%).

Table 5: Labour force statistics by main fields of study for the working age PSE immigrants who obtained their highest degree in the United States, 2006

Fields of study	All PSE immigrants	Employment rate	Unemployment rate	Participation rate
Business, management, marketing and related support services	20,600	78.0%	6.1%	83.0%
Health professions and related clinical sciences	10,605	75.7%	4.1%	78.9%
Engineering	10,565	82.3%	6.3%	87.8%
Education	9,355	73.4%	3.9%	76.3%
Computer and information sciences and support services	5,550	81.0%	5.0%	85.2%
Visual and performing arts	5,550	76.8%	4.3%	80.2%
Social sciences	4,830	76.7%	3.3%	79.3%
Psychology	2,880	74.8%	5.1%	78.8%
Biological and biomedical sciences	2,765	77.9%	3.8%	81.0%
Theology and religious studies	2,550	82.5%	3.0%	84.9%
Other	28,450	75.0%	4.9%	78.9%
Total	103,700	77.0%	5.0%	81.0%

Source: Census 2006

Pakistan

In 2006, an estimated 46,285 working age immigrants acquired their highest postsecondary degree in Pakistan. Of them, 70.9% participated in the labour market in 2006 and 63.8% were employed. The unemployment rate for these immigrants was 10%, the highest among the top 10 countries of study for immigrants.

Immigrants who studied engineering had the highest participation and employment rates (88.6% and 81.7%, respectively) and the lowest unemployment rate among all the immigrants in all fields of study from Pakistan (7.9%).

Table 6: Labour force statistics by main fields of study for the working age PSE immigrants who obtained their highest degree in Pakistan, 2006

Fields of study	All PSE immigrants	Employment rate	Unemployment rate	Participation rate
Business, management, marketing and related support services	7,620	74.1%	8.7%	81.2%
Engineering	6,815	81.7%	7.9%	88.6%
Liberal arts and sciences, general studies and humanities	5,100	45.9%	11.4%	51.7%
Social sciences	3,575	60.4%	12.4%	69.0%
Health professions and related clinical sciences	3,560	57.7%	12.4%	65.9%
Computer and information sciences and support services	2,320	73.9%	9.2%	81.7%
Education	2,265	43.0%	13.7%	49.9%
Multidisciplinary/interdisciplinary studies	1,585	62.8%	11.6%	70.7%
Physical sciences	1,450	73.8%	9.7%	81.4%
Biological and biomedical sciences	1,420	49.6%	10.2%	55.3%
Other	10,575	59.4%	10.4%	66.3%
Total	46,285	63.8%	10.0%	70.9%

Source: Census 2006

The United Kingdom

Employment outcomes for immigrants who completed their postsecondary degrees in the United Kingdom were much better than for immigrants with postsecondary degrees from other countries, including Canada. In 2006, of the estimated 119,390 immigrants with a UK degree, 80.1% participated in the labour force and 77.1% were employed. The unemployment rate among these immigrants was particularly low, and at 3.7% was the lowest among all immigrant groups, even lower than the overall unemployment rate of their Canadian-born counterparts (4.2%).

Immigrants with a UK degree in health professions and related clinical sciences and engineering technologies and technicians outperformed Canadian-educated immigrants in these fields in terms of much lower unemployment rates (2.3% and 2.7% for UK-educated immigrants, compared to 3.8% and 4.6% for Canadian-educated immigrants). This outcome may relate to the overrepresentation of established immigrants among immigrants who completed their highest education in the UK.

Table 7: Labour force statistics by main fields of study for the working age PSE immigrants who obtained their highest degree in the United Kingdom, 2006

Fields of study	All PSE immigrants	Employment rate	Unemployment rate	Participation rate
Business, management, marketing and related support services	24,265	74.2%	4.4%	77.6%
Health professions and related clinical sciences	14,740	73.5%	2.3%	75.3%
Engineering	12,915	83.3%	3.7%	86.5%
Engineering technologies/technicians	9,230	81.6%	2.7%	83.8%
Mechanic and repair technologies/technicians	5,470	81.3%	2.4%	83.3%
Construction trades	4,885	80.9%	3.5%	83.8%
Education	4,765	67.9%	4.0%	70.7%
Precision production	4,415	76.1%	3.9%	79.2%
Personal and culinary services	4,375	73.1%	2.9%	75.2%
Computer and information sciences and support services	3,980	82.4%	4.5%	86.4%
Other	30,350	77.2%	4.4%	80.8%
Total	119,390	77.1%	3.7%	80.1%

Source: Census 2006

Section 2: Occupational outcomes and education

The Census 2006 collected job information for persons who worked any time from January 1, 2005 to the Census reference week. One of the job characteristics, occupation, describes the kind of work performed by individuals. In this section, the population of analysis is immigrants (aged 25-64) with a postsecondary degree who have worked since January 1, 2005, regardless of whether they were in the labour force in the reference week.

The occupation data are classified according to the National Occupational Classification 2006 (NOC 2006) and the analysis that follows is based on the 26 major groups of NOC. NOC 2006 identifies four occupational skill level categories (A, B, C and D), based mainly on the amount and type of education and training required to enter and perform the duties of an occupation. These occupations span the entire classification structure and are found in all sectors or areas of the labour market. Skill level A occupations usually require a university degree (bachelor's, master's or doctorate), while skill level B occupations usually require a college education or apprenticeship training. Skill level C occupations usually require secondary school and/or occupation-specific training. The lowest skill level D corresponds to occupations where on-the-job training is necessary. Management occupations (NOC-O) are not assigned to a skill level category, on the basis that factors other than education and training, such as previous experience, ownership of real property and capital, inherent decision-making skills and organizational capabilities, are usually the most significant determinants for employment in management occupations. In this paper, management occupations are considered equivalent to skilled occupations which normally require some postsecondary education.

Skill level of occupation and highest level of educational attainment

Table 8: Skill level of occupation by highest level of educational attainment, PSE immigrants vs. Canadian-born

	All skill levels	NOC O	NOC A	NOC B	NOC C	NOC D	NOC O, A & B
Bachelor's degree	756,650	13.1%	35.7%	21.7%	23.1%	6.3%	70.6%
Degree in medicine, dentistry, veterinary medicine or optometry	40,125	3.5%	70.5%	10.8%	11.5%	3.8%	84.7%
Master's degree	265,600	14.9%	50.4%	15.6%	14.7%	4.3%	80.9%
Earned doctorate degree	60,565	9.8%	76.1%	7.6%	4.8%	1.7%	93.6%
Immigrants with university education	1,122,940	13.0%	42.6%	19.1%	19.7%	5.5%	74.8%
Trades or college diploma	1,158,760	9.9%	11.5%	36.4%	32.9%	9.3%	57.7%
All PSE immigrants	2,281,700	11.4%	26.8%	27.9%	26.4%	7.4%	66.1%
Bachelor's degree	1,874,400	15.5%	51.3%	18.5%	12.8%	1.8%	85.4%
Degree in medicine, dentistry, veterinary medicine or optometry	61,675	2.0%	92.4%	3.2%	2.0%	0.4%	97.6%
Master's degree	419,040	21.5%	62.2%	10.1%	5.5%	0.8%	93.8%
Earned doctorate degree	64,235	9.9%	80.1%	5.7%	3.4%	0.9%	95.7%
Canadian-born with university education	2,419,350	16.1%	55.0%	16.3%	11.0%	1.6%	87.4%
Trades or college diploma	4,593,350	9.6%	11.9%	43.1%	28.7%	6.7%	64.5%
All PSE Canadian-born	7,012,700	11.8%	26.8%	33.9%	22.6%	5.0%	72.4%

Source: Census 2006

Table 8 shows the associations between the highest level of educational attainment and skill level of occupations for immigrant postsecondary graduates. Postsecondary graduates are presumably all qualified to work in skilled occupations (NOC O, A and B). Of the 2,281,700 PSE immigrants in the workforce, 66.1% worked in skilled jobs. In general, the higher the education level, the more likely a

PSE immigrant was to hold a skilled job. About 9 in 10 (93.6%) immigrants with doctorate degrees held skilled jobs, while the percentages for immigrants with master's degrees and degrees in medicine, dentistry, veterinary medicine or optometry were 80.9% and 84.7% respectively, dropping to 70.6% and 57.7% for graduates with a bachelor's degree and a trades or college diploma, respectively.

For skill level A jobs, more than three-quarters of immigrants with doctorate degrees worked in such jobs (76.1%), compared to 50.4% for master's degree graduates and 35.7% for bachelor's degree holders. The majority of immigrants (70.5%) with a degree in medicine, dentistry, veterinary medicine or optometry worked in skill level A jobs. It is worth noting that sizable proportions of those who had medicine related degrees (15.3%), master's (19.0%) or doctorate degrees (6.5%) also held low skilled jobs (NOC levels C and D). Noticeable proportions of these highly educated graduates were also found to have worked in skill level B occupations where they were overqualified.

Table 9: Skill level of occupation by highest level of educational attainment and period of landing

		All skill levels	NOC O	NOC A	NOC B	NOC C	NOC D	NOC O, A & B
Established immigrants	Trades or college diploma	892,620	10.6%	12.0%	38.1%	31.5%	7.9%	60.6%
	Bachelor's degree	435,370	15.5%	41.0%	21.1%	18.7%	3.6%	77.7%
	Degree in medicine, dentistry, veterinary medicine or optometry	25,010	3.3%	82.9%	6.2%	6.2%	1.4%	92.4%
	Master's degree	130,035	18.5%	55.5%	14.0%	10.1%	1.8%	88.0%
	Earned doctorate degree	34,465	11.5%	77.9%	6.0%	3.6%	1.1%	95.4%
	Total	1,517,505	12.6%	26.7%	29.9%	24.9%	5.9%	69.2%
Recent immigrants	Trades or college diploma	133,995	8.0%	10.4%	31.5%	38.3%	11.8%	50.0%
	Bachelor's degree	134,785	11.4%	32.3%	23.0%	26.1%	7.2%	66.7%
	Degree in medicine, dentistry, veterinary medicine or optometry	6,120	4.7%	53.4%	20.9%	17.1%	3.9%	79.0%
	Master's degree	55,435	13.0%	50.8%	16.6%	15.4%	4.2%	80.4%
	Earned doctorate degree	12,140	9.1%	73.8%	10.0%	5.6%	1.5%	92.9%
	Total	342,475	10.1%	28.6%	24.8%	28.2%	8.2%	63.5%
Very recent immigrants	Trades or college diploma	132,145	7.1%	9.5%	29.5%	37.3%	16.6%	46.1%
	Bachelor's degree	186,490	8.7%	25.8%	22.3%	31.3%	11.9%	56.8%
	Degree in medicine, dentistry, veterinary medicine or optometry	8,995	3.1%	47.6%	16.8%	22.4%	10.1%	67.5%
	Master's degree	80,130	10.4%	41.8%	17.6%	21.8%	8.5%	69.7%
	Earned doctorate degree	13,960	6.4%	73.7%	9.6%	7.0%	3.3%	89.7%
	Total	421,715	8.3%	25.7%	23.1%	30.4%	12.4%	57.2%

Source: Census 2006

The breakdown by period of landing (Table 9) shows that among all postsecondary degree holders, more immigrants found jobs in skilled occupations with time elapsed in Canada. From January 2005 to the Census reference week in 2006, nearly 7 in 10 PSE immigrants who had landed in Canada in 1996 or earlier with a postsecondary degree had worked in a skilled job which requires at least some postsecondary education, compared to 63.5% among those who landed from 1996 to 2001, and 57.2% among PSE immigrants who landed after 2001.

For immigrants with a bachelor's degree, the percentage of those working in skilled jobs was 77.7% for established immigrants, 10 percentage points higher than that for recent immigrants and 20.9 percentage points higher than the proportion for very recent immigrants.

Among immigrants with a degree in medicine, dentistry, veterinary medicine or optometry, the proportion of those working in skill level A was 82.9% for established immigrants, decreasing

considerably, to 53.4% for recent immigrants and to 47.6% for very recent immigrants. In contrast, the percentage of those with a medicine related degree who worked in skill level B occupations was significantly higher for recent cohorts (20.9% and 16.8% for recent and very recent immigrants, respectively) than for established immigrants (6.2%). Similarly, health related degree holders working in lower skilled occupations (C and D) were over-represented among recent and very recent immigrants (21.0% and 32.5%, respectively) compared to 7.6% among established immigrants.

For master's degree holders, the percentage of those who worked in management occupations was 18.5% for established immigrants, and dropped to 13.0% and 10.4% for recent and very recent immigrants. The percentage of those who worked in skill level A was 55.5% for established immigrants, dropping about five percentage points for recent immigrants, and another nine percentage points for very recent immigrants. The proportion of those with a master's degree working in low skilled jobs rose from 12% for established immigrants to 19.6% for recent immigrant and 30.3% for very recent immigrants.

For immigrants with a doctorate degree, 11.5% of established immigrants worked in management jobs, compared to 9.1% for very recent immigrants and 6.4% for very recent immigrants. Recent and very recent immigrants had similar percentages working in skill level A (74%), about four percentage points lower than that for established immigrants. The proportion of those who worked in low skilled jobs increased from 4.6% among established immigrants to 7.1% and 10.3% among recent and very recent immigrants, respectively.

Skill level of occupation and field of study

Table 10 presents the distribution of skill levels of jobs held by immigrants with postsecondary degrees in the top 20 fields of study.

Table 10: Skill level of occupation by field of study

	All skill levels	NOC					
		O	A	B	C	D	O, A & B
Business, Management, Marketing and Related Support services	473,110	17.1%	20.0%	22.0%	33.6%	7.3%	59.1%
Engineering	278,720	12.8%	37.9%	24.8%	18.2%	6.3%	75.5%
Health Professions and Related Clinical Sciences	254,310	4.4%	38.9%	20.0%	30.5%	6.2%	63.3%
Computer and Information Sciences and Support Services	127,245	10.1%	40.5%	21.5%	22.1%	5.8%	72.1%
Education	115,015	8.4%	42.6%	20.1%	21.6%	7.3%	71.1%
Engineering Technologies/Technicians	97,250	12.0%	11.3%	42.9%	26.0%	7.8%	66.2%
Social Sciences	95,040	15.8%	26.6%	22.3%	28.0%	7.2%	64.8%
Mechanic and Repair Technologies/Technicians	81,945	8.3%	2.1%	55.6%	24.7%	9.3%	66.0%
Visual and Performing Arts	65,055	9.9%	22.7%	35.4%	25.4%	6.6%	68.0%
Personal and Culinary Services	60,775	7.1%	2.2%	50.4%	28.3%	11.9%	59.8%
Construction Trades	52,110	9.4%	1.8%	61.8%	16.2%	10.8%	73.1%
Precision Production	50,125	7.3%	2.5%	59.3%	23.5%	7.5%	69.0%
Physical Sciences	43,955	12.8%	43.6%	20.1%	17.4%	6.1%	76.5%
Liberal arts and Sciences, General Studies and humanities	43,335	11.1%	12.9%	23.3%	39.3%	13.5%	47.2%
Family and Consumer Sciences/Human Sciences	39,645	7.4%	8.2%	41.3%	30.0%	13.0%	56.9%
Biological and Biomedical Sciences	38,300	10.7%	43.6%	23.4%	17.6%	4.7%	77.8%
Legal Professions and Studies	34,520	9.1%	33.4%	27.8%	23.5%	6.3%	70.2%
Agriculture, Agriculture Operations and Related Sciences	31,080	11.2%	12.0%	34.3%	29.3%	13.2%	57.5%
Multidisciplinary/Interdisciplinary Studies	30,895	12.3%	29.4%	23.0%	27.9%	7.5%	64.7%
Psychology	27,390	12.3%	38.1%	23.5%	21.8%	4.2%	74.0%
Other fields	241,880	10.9%	31.6%	24.6%	25.6%	7.3%	67.0%
All fields	2,281,700	11.4%	26.8%	27.9%	26.4%	7.4%	66.1%

Note: Fields of study were ranked based on the number of all immigrant postsecondary graduates in workforce.

Occupational skill level distribution patterns of PSE immigrants varied substantially across fields of study. Of all PSE immigrants who had worked during 2005 and 2006, those who held degrees in biological and biomedical sciences had the highest proportion working in skilled occupations (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%). In contrast, immigrants were less likely to acquire a skilled job if they held degrees in liberal arts and sciences, general studies and humanities (47.2%), family and consumer sciences/human sciences (56.9%), agriculture, agriculture operations and related sciences (57.5%), business, management, marketing and related support services (59.1%) and personal and culinary services (59.8%). It is worth mentioning that business, management, marketing and related support services was the most popular postsecondary field of study for immigrants, but 40.9% of graduates in this field worked in low skilled jobs. Similarly, 36.7% of those in the third most popular field - health professions and related clinical sciences - worked in low skilled occupations.

Table 11: Skill level of occupation by field of study and by period of landing

	All skill levels	NOC					
		O	A	B	C	D	O, A & B
Established immigrants							
Business, Management, Marketing and Related Support Services	317,035	18.6%	19.8%	23.8%	32.2%	5.7%	62.1%
Health Professions and Related Clinical Sciences	180,120	4.7%	41.2%	20.4%	29.0%	4.7%	66.3%
Engineering	124,870	17.1%	41.0%	23.8%	13.9%	4.1%	82.0%
Education	83,215	9.4%	48.4%	18.8%	18.6%	4.9%	76.6%
Engineering Technologies/Technicians	78,290	13.1%	11.8%	44.2%	24.2%	6.7%	69.1%
Computer and Information Sciences and Support Services	73,325	11.9%	37.8%	23.2%	22.2%	4.9%	72.9%
Mechanic and Repair Technologies/Technicians	69,080	8.6%	2.2%	57.2%	23.5%	8.5%	68.0%
Social Sciences	62,545	18.1%	28.2%	23.9%	25.2%	4.7%	70.1%
Personal and Culinary Services	49,055	7.4%	2.4%	51.4%	27.8%	11.0%	61.2%
Visual and Performing Arts	45,360	10.5%	23.3%	36.6%	24.5%	5.2%	70.3%
Other fields	434,610	11.4%	25.1%	34.2%	22.9%	6.4%	70.7%
All fields	1,517,505	12.6%	26.7%	29.9%	24.9%	5.9%	69.2%
Recent immigrants: 1996-2000							
Business, Management, Marketing and Related Support Services	68,415	15.3%	21.4%	19.3%	35.5%	8.5%	56.0%
Engineering	66,175	10.7%	40.6%	24.9%	18.4%	5.4%	76.2%
Health Professions and Related Clinical Sciences	33,870	4.4%	33.0%	20.4%	34.3%	7.9%	57.8%
Computer and information Sciences and Support Services	25,450	8.8%	48.7%	18.7%	19.0%	4.8%	76.2%
Social Sciences	14,145	13.0%	24.5%	21.4%	32.1%	9.0%	58.9%
Education	14,105	6.6%	28.1%	26.4%	28.4%	10.5%	61.2%
Engineering Technologies/Technicians	9,655	7.8%	9.7%	39.8%	32.6%	10.1%	57.3%
Physical sciences	9,275	11.5%	45.8%	20.3%	16.2%	6.1%	77.6%
Visual and Performing Arts	9,145	9.0%	21.4%	32.6%	28.5%	8.4%	63.0%
Liberal arts and Sciences, General Studies and Humanities	7,665	7.6%	8.0%	21.8%	43.6%	19.0%	37.4%
Other fields	84,575	8.9%	20.9%	31.2%	29.2%	9.9%	61.0%
All fields	342,475	10.1%	28.6%	24.8%	28.2%	8.2%	63.5%
Very recent immigrants: 2001-2006							
Engineering	87,675	8.2%	31.4%	26.2%	24.2%	10.0%	65.8%
Business, Management, Marketing and Related Support Services	87,660	13.0%	19.6%	17.8%	37.4%	12.1%	50.4%
Health Professions and Related clinical Sciences	40,320	3.2%	33.5%	17.7%	33.9%	11.6%	54.5%
Computer and Information Sciences and Support Services	28,475	6.5%	40.3%	19.7%	24.4%	9.0%	66.6%
Social Sciences	18,350	10.2%	23.0%	18.0%	34.3%	14.6%	51.2%
Education	17,695	5.6%	26.6%	21.2%	30.2%	16.4%	53.3%
Physical Sciences	12,155	7.6%	40.0%	18.5%	23.7%	10.2%	66.1%
Visual and Performing Arts	10,555	8.4%	21.1%	32.6%	26.6%	11.2%	62.2%
Engineering Technologies/Technicians	9,305	6.6%	8.9%	36.1%	34.0%	14.6%	51.5%
Liberal arts and sciences, General Studies and Humanities	8,385	6.4%	7.1%	17.5%	44.8%	24.0%	31.1%
Other fields	101,140	7.4%	21.2%	28.3%	29.0%	14.1%	56.9%
All fields	421,715	8.3%	25.7%	23.1%	30.4%	12.4%	57.2%

Note: The top 10 fields are selected based on the numbers of PSE immigrants in workforce among each immigrant cohort

A further breakdown by immigrant landing period shows that the top 10 most frequently studied fields for immigrant graduates in the workforce changed marginally across three landing cohorts. Mechanic and repair technologies/technicians and personal and culinary services that were among the top 10 most popular fields among established immigrants phased out for recent and very recent immigrants, and liberal arts and sciences, general studies and humanities and physical sciences emerged at the same time.

Among established immigrants, on average, 69.2% of postsecondary graduates in the workforce were employed in skilled occupations. Among the 10 most popular fields, graduates who studied in engineering had the highest share (82.0%) working in skilled occupations, followed by those who studied education (76.6%) and computer information sciences and support services (72.9%). However, the percentages were relatively lower for immigrant graduates with degrees in personal and culinary services (61.2%), business, management, marketing and related support services (62.1%) and health professions and related clinical sciences (61.2%).

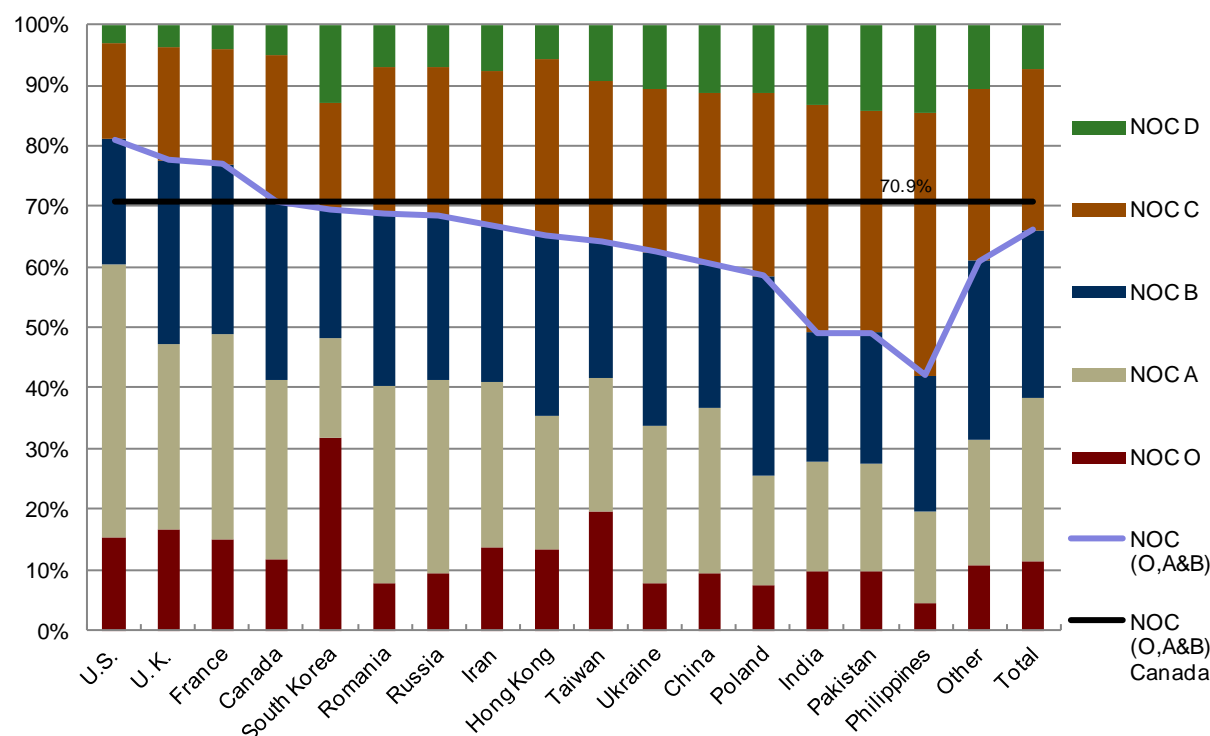
Among recent immigrants, 63.5% of postsecondary graduates had jobs in skilled occupations during 2005 and 2006, 5.7 percentage points lower than established immigrants. Among the top 10 most popular fields of study, the highest shares of those working in skilled occupations were found in physical sciences (77.6%), engineering (76.2%) and computer and information sciences and support services (76.2%). The majority of immigrant graduates who studied visual and performing arts (63%), business, management, marketing and related support services (56%), engineering technologies/technicians (57.3%) and health professions and related clinical sciences (57.8%) had worked in skilled occupations during 2005 and 2006. Those who held degrees in liberal arts and sciences, general studies and humanities had the lowest proportion working in skilled occupations compared to their counterparts with other major fields of study (37.4%). Compared to established immigrants, the proportion of recent immigrant workers in skilled jobs dropped 15.5 percentage points for graduates in education, and by 11.8, 11.2 and 8.5 percentage points for those in engineering technologies/technicians, social sciences and health professions and related clinical sciences, respectively.

Overall, 57.2% of very recent PSE immigrants had worked in skilled occupations during 2005 and 2006, about 12 percentage points lower than the share for established immigrants and 6.3 percentage points lower than that for recent immigrants. Among all very recent immigrant workers, postsecondary graduates in computer and information sciences and support services had the highest proportion working in skilled occupations (66.6%), closely followed by those in physical sciences (66.1%) and engineering (65.8%). Compared to proportions of recent and established immigrants working in skilled occupations, significant gaps exist for very recent immigrants. For example, the proportion of very recent immigrants with degrees in the leading field “computer and information sciences and support services” working in skilled occupations was nearly 10 percentage points lower than that for recent immigrants in the same field of study.

Skill level of occupation and location of study

Figure 7 shows that the distribution of occupational skill levels among PSE immigrants varies significantly by location of study. Compared to 70.9% for those with a Canadian degree, the percentages in skilled occupations of those who had studied in the United States, the United Kingdom and France were substantially higher, while immigrants with Chinese, Indian and Pakistan degrees had much lower shares working in skilled occupations. Immigrant workers who received their highest education from the Philippines had the lowest percentage in skilled occupations among all the main locations of study. During 2005 and 2006, only 42.1% of immigrant workers with postsecondary degrees from the Philippines worked in skilled occupations.

Figure 7: Skill level of occupation by location of study



Source: Census 2006

It is noteworthy that immigrants with their highest education from South Korea had a unique occupational distribution. Nearly one-third of immigrant graduates from South Korea 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%). However, the majority of those immigrants who held South Korean degrees and worked in management occupations were self-employed (72.9%); a percentage about 2.7 times higher than that for immigrants as a whole (27.0%).

Table 12 shows a further breakdown by immigrant landing period, revealing differences in occupation skill level distribution across countries of study among different landing cohorts.

Table 12: Skill level of occupation by location of study and period of landing

	Total	NOC					
		O	A	B	C	D	O, A & B
Established immigrants							
Canada	962,130	12.3%	29.1%	30.2%	23.6%	4.7%	71.7%
P.R. China	13,115	13.7%	23.0%	27.0%	27.0%	9.3%	63.7%
India	44,120	12.5%	14.6%	24.4%	38.1%	10.4%	51.5%
Philippines	60,280	5.4%	15.6%	24.0%	41.6%	13.3%	45.0%
U.S.A.	55,965	15.7%	44.6%	21.2%	15.5%	3.0%	81.5%
Pakistan	7,525	13.0%	15.1%	26.8%	37.8%	7.3%	54.8%
United Kingdom	76,365	16.6%	29.2%	32.3%	18.5%	3.5%	78.0%
Romania	10,330	11.4%	34.6%	29.7%	18.4%	5.9%	75.7%
Russian Federation	5,985	12.2%	33.9%	24.5%	24.2%	5.2%	70.6%
South Korea	7,645	38.8%	13.5%	19.9%	16.2%	11.8%	72.1%
France	14,030	17.7%	29.4%	31.9%	16.3%	4.7%	79.0%
Other countries	260,015	12.2%	18.1%	32.7%	28.1%	8.9%	63.0%
All countries	1,517,505	12.6%	26.7%	29.9%	24.9%	5.9%	69.2%
Recent immigrants: 1996-2000							
Canada	92,805	8.2%	32.3%	25.4%	27.8%	6.3%	65.9%
P.R. China	33,030	10.2%	33.8%	23.7%	25.1%	7.2%	67.7%
India	29,345	9.6%	20.8%	21.5%	36.6%	11.4%	52.0%
Philippines	22,770	3.1%	15.4%	23.1%	44.4%	14.0%	41.6%
U.S.A.	14,005	16.6%	44.9%	19.6%	16.2%	2.6%	81.1%
Pakistan	11,925	9.8%	20.3%	22.1%	35.5%	12.3%	52.2%
United Kingdom	10,255	17.6%	36.0%	24.7%	18.2%	3.6%	78.3%
Romania	7,970	7.0%	45.3%	24.8%	18.4%	4.5%	77.1%
Russian Federation	10,455	9.6%	33.6%	29.0%	22.2%	5.6%	72.2%
South Korea	7,240	32.1%	17.5%	19.9%	17.9%	12.6%	69.5%
France	6,580	15.4%	36.8%	26.2%	19.0%	2.6%	78.4%
Other countries	96,095	10.4%	24.9%	26.9%	28.1%	9.6%	62.3%
All countries	342,475	10.1%	28.6%	24.8%	28.2%	8.2%	63.5%
Very recent immigrants: 2001-2006							
Canada	57,415	7.1%	35.7%	23.0%	26.5%	7.7%	65.8%
P.R. China	53,235	8.1%	23.9%	23.4%	30.2%	14.4%	55.3%
India	47,205	7.1%	19.7%	18.6%	37.7%	17.0%	45.4%
Philippines	36,265	3.5%	14.1%	20.0%	45.4%	17.0%	37.6%
U.S.A.	18,805	13.7%	46.3%	19.5%	16.4%	4.0%	79.6%
Pakistan	14,880	7.9%	17.2%	18.7%	37.2%	19.1%	43.8%
United Kingdom	14,945	15.4%	35.5%	24.5%	20.7%	3.9%	75.4%
Romania	14,195	5.5%	24.0%	29.5%	32.0%	9.0%	59.0%
Russian Federation	10,205	7.3%	29.2%	26.9%	26.8%	9.9%	63.4%
South Korea	9,110	25.9%	17.9%	23.4%	18.7%	14.1%	67.2%
France	11,455	11.0%	37.9%	24.4%	22.3%	4.4%	73.3%
Other countries	134,000	8.1%	23.9%	25.3%	29.4%	13.3%	57.3%
All countries	421,715	8.3%	25.7%	23.1%	30.4%	12.4%	57.2%

Source: Census 2006.

Among established immigrants, about 8 in 10 postsecondary graduates from the United States (81.5%), France (79.0%) and the United Kingdom (78.0%) worked in skilled occupations, followed by Romania (75.7%), South Korea (72.1%) and Canada (71.7%). Postsecondary graduates from the Philippines, in contrast, had the lowest share (45.0%) working in skilled occupations, followed by immigrants who studied in India (51.5%) and Pakistan (54.8%).

The picture for recent immigrants was slightly different as the overall percentage of recent immigrants in skilled occupations was 63.5%, about six percentage points lower than that for

established immigrants. Recent immigrants with degrees from the United States, France and the United Kingdom similarly had the highest proportions working in skilled jobs. The most remarkable difference was present for immigrants who had their highest education in Canada: the percentage in skilled jobs dropped from 71.7% among established immigrants to 65.9% among recent immigrants. In contrast, compared to established immigrants, there was a four percentage-point increase in the share of recent immigrants working in skilled occupations among those with degrees from China (67.7%). The gain in the share of skilled occupations for the graduates with Chinese degrees was likely due to the much higher educational level of recent immigrants compared to the earlier arrivals. For example, among recent immigrants, three quarters of immigrants with a Chinese degree had bachelor's degree level, or higher education (75.7%), an increase of more than 20 percentage points compared to the share among established immigrants (54.2%). This shift in educational attainment across cohorts was less profound for immigrants with degrees from other countries. The Philippines stayed in the last position among the main countries of study, with the percentage in skilled occupations dropping from 45.0% to 41.6% from established immigrant to recent immigrants. Immigrant graduates who received their highest education in India and Pakistan also had relatively lower shares working in skilled occupations (52.0% and 52.2%, respectively).

Regardless of where very recent immigrants obtained their highest education, the percentages working in skilled occupations were lower than those for recent and established immigrants. Compared to immigrants who landed in Canada from 1996 to 2001, the decreases in proportions working in skilled occupations were substantial for those who studied in Romania (18.1 percentage points) and China (12.4 percentage points), Russia (8.8 percentage points), Pakistan (8.4 percentage points) and India (6.6 percentage points). Based on the percentages working in skilled occupations, the top three countries stayed the same as for established or recent immigrants: the United States (79.6%), the United Kingdom (75.4%), and France (73.3%). More than 6 in 10 immigrants with a degree from the most popular location of study, Canada, had worked in a skilled occupation (65.8%). Immigrants with degrees from the Philippines continued to have the lowest percentage working in skilled occupations: 37.6% for very recent immigrants.

Among very recent immigrants, the percentage of PSE immigrants in skill level A jobs was the highest for those with degrees from the United States (46.3%). France ranked as a distant second (37.9%) and was closely followed by Canada (35.7%) and the United Kingdom (35.5%). Of these four locations, France and Canada had slightly higher percentages in skill level A jobs among very recent immigrants than among recent immigrants. For immigrants with degrees from most of the non-traditional source countries, the shares in skill level A jobs decreased across landing cohorts during the last decade. The largest gap (21 percentage points) occurred for those with their highest degrees from Romania: 24.0% for very recent immigrants, compared to 45.3% for recent immigrants. Those who studied in China had the second largest gap (9.9 percentage points) from 33.8% for recent immigrants to 23.9% for very recent immigrants. While the proportion of immigrants with bachelor's degree level, or higher, education did not change much during the last decade, large decreases in the shares working in skill level A among very recent immigrants points to the deteriorating employment outcomes of immigrants who arrived after 2000, especially from these non-traditional source countries.

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

In the following section, we focus on the transferability of educational credentials by analysing the occupational distribution of PSE immigrants by country of the highest educational attainment for the five most popular fields of study.

Business, management, marketing and related support services

Table 13: Skill level of occupation by country of highest educational attainment, immigrants with degrees in business, management, marketing and related support services

	Total	NOC					O, A & B
		O	A	B	C	D	
Canada	247,655	18.8%	23.3%	22.6%	30.7%	4.6%	64.6%
U.S.	17,840	26.8%	30.9%	19.8%	19.7%	2.7%	77.6%
U.K.	19,965	21.5%	20.6%	26.7%	27.9%	3.3%	68.7%
France	7,270	22.9%	18.8%	24.9%	29.3%	4.0%	66.6%
Russia	1,465	14.7%	24.9%	21.2%	33.1%	6.1%	60.8%
Romania	2,570	8.0%	24.5%	19.3%	40.9%	7.4%	51.8%
China	15,460	13.0%	15.1%	20.1%	36.8%	15.0%	48.2%
South Korea	3,095	38.1%	12.3%	18.3%	19.5%	12.0%	68.7%
India	23,610	13.2%	17.0%	18.0%	39.9%	12.0%	48.2%
Pakistan	6,350	16.9%	16.9%	16.7%	37.2%	12.4%	50.4%
Philippines	34,845	5.9%	11.4%	18.2%	49.3%	15.2%	35.5%
Other countries	92,985	14.8%	14.1%	22.9%	37.6%	10.6%	51.8%
All countries	473,110	17.1%	20.0%	22.0%	33.6%	7.3%	59.1%

Source: Census 2006.

Immigrants who studied in this field in the United States performed best in acquiring skilled occupations, with 77.6% of them employed in skilled jobs during 2005 and 2006, nearly 20 percentage points higher than the immigrant average for this field. Immigrants with a degree from the United Kingdom, South Korea, France, Canada and Russia also did relatively well: more than 6 in 10 immigrants from these groups worked in skilled occupations during 2005 and 2006.

Compared to the immigrant average of 59.1% working in skilled occupations for this field, those with degrees from India, China, Pakistan and Romania, had sub-par performances, with around 50% working in skilled jobs. Among the 11 main locations of study, immigrants with Filipino degrees seemed to confront the most difficulties in “translating” their education into occupational status: from January 2005 to the Census reference week in 2006, only 35.5% worked in skilled jobs, far behind any other country, and 23.1 percentage points lower than the immigrant average for this field.

A breakdown by occupational skill level shows that among immigrants with a business degree, those who graduated from the United States had the highest share working in skill level A occupations (30.9%) and the second highest share (26.8%) in management occupations. Immigrants with postsecondary degrees in business and management from the Philippines, in contrast, had the lowest percentages in management (5.9%) and skill level A occupations (11.4%). Nearly half of this group worked in jobs requiring secondary school and/or occupation-specific training (skill level C).

Table 14 further shows the occupational distribution of immigrants with degrees in business, management, marketing and related support services. The most common occupations for PSE immigrants in this field included clerical occupations (17.7%), management occupations (17.1%),

professional occupations in business and finance (13.1%), skilled administrative and business occupations (10.6%) and intermediate sales and service occupations (9.7%).

On one hand, more than 4 in 10 immigrants with a business and management degree worked in their field, if management occupations, professional occupations in business and finance and skilled administrative and business occupations are considered occupations matched with this education. On the other hand, among the top occupational groups, quite a few require only secondary school and/or occupation-specific training (e.g. clerical occupations, intermediate sales and service occupations and processing and manufacturing machine operators and assemblers), and one occupational group – elemental sales and service occupations – requires no formal education. The large proportions of PSE immigrants working in these occupations suggest “transferability” challenges for immigrants who studied in the field.

Table 14: Major occupational groups by country of highest educational attainment, immigrants with degrees in business, management, marketing and related support services

	2-digit NOC	All countries of study	Canada	China	India	Philippines	U.S.	Pakistan	U.K.	Romania	Russia	South Korea	France	Other
Clerical occupations	14	17.7%	18.2%	13.3%	18.6%	23.3%	9.6%	14.4%	17.6%	22.6%	10.9%	4.5%	14.0%	17.3%
Management Occupations	0	17.1%	18.8%	13.0%	13.2%	5.9%	26.8%	16.9%	21.5%	8.0%	14.7%	38.1%	22.9%	14.8%
Professional Occupations in Business and Finance	11	13.1%	16.0%	9.9%	10.8%	7.9%	17.6%	12.2%	12.1%	18.5%	17.1%	4.4%	8.0%	8.4%
Skilled Administrative and Business Occupations	12	10.6%	11.4%	7.8%	7.3%	7.5%	9.1%	4.6%	16.7%	10.7%	10.2%	4.8%	13.2%	10.2%
Intermediate Sales and Service Occupations	64	9.7%	8.5%	14.2%	9.2%	12.7%	7.0%	9.4%	8.4%	9.1%	14.3%	11.1%	12.8%	11.5%
Elemental Sales and Service Occupations	66	5.8%	3.8%	10.1%	8.3%	12.6%	2.1%	10.6%	2.7%	6.4%	5.8%	10.0%	3.4%	8.4%
Skilled Sales and Service Occupations	62	5.5%	5.9%	6.1%	4.8%	4.2%	4.7%	5.4%	4.3%	1.2%	4.4%	6.5%	5.3%	5.3%
Professional Occupations in Social Science, Education, Government Services and Religion	41	3.0%	3.3%	1.7%	2.2%	1.1%	6.9%	1.3%	3.8%	2.1%	4.4%	3.6%	5.4%	2.5%
Professional Occupations in Natural and Applied Sciences	21	2.8%	3.0%	2.7%	3.3%	1.5%	4.9%	2.9%	3.2%	3.1%	2.4%	2.6%	2.3%	2.1%
Processing and Manufacturing Machine Operators and Assemblers	94/95	2.7%	1.4%	6.7%	6.2%	7.0%	0.9%	5.2%	0.5%	4.3%	2.7%	1.1%	1.0%	3.8%
Other major occupational groups		12.1%	9.7%	14.7%	15.9%	16.3%	10.5%	17.2%	9.2%	14.0%	13.0%	13.2%	11.8%	15.7%
Immigrants in all major occupational groups		473,110	247,655	15,460	23,610	34,845	17,840	6,350	19,965	2,570	1,465	3,095	7,270	92,985

Source: Census 2006.

The occupational outcomes of immigrants in business and management vary with the country of the highest educational attainment. Of the 247,655 immigrants who acquired their highest degrees in business and management in Canada, 18.8% worked in management occupations, followed by clerical occupations (18.2%) and professional occupations in business and finance (16%). Compared to the occupational distributions of all immigrants in this field, immigrants with a Canadian degree

had larger proportions working in an occupation related to their field of study, such as management occupations (18.8%), professional occupations in business and finance (16%) and skilled administrative and business occupations (11.4%). Furthermore, smaller proportions of immigrants are observed working in lower skilled occupations, such as intermediate sales and service occupations (8.5%), elemental sales and service occupations (3.8%) and processing and manufacturing machine operators and assemblers (1.4%).

Immigrants with a business and management degree from the main source countries – China, India, Philippines and Pakistan – had lower proportions working in an occupation related to their field of study. Particularly, PSE immigrants working in intermediate sales and service occupations, clerical occupations, elemental sales and service occupations were overrepresented among these immigrants. For example, one in 7 immigrants with a Chinese business and management degree worked in intermediate sales and service occupations (14.2%), and nearly a quarter of immigrants with a Filipino business and management degree worked in clerical occupations (23.3%).

In contrast, immigrants who studied business and management in the United States and the United Kingdom were more likely to work in an occupation related to their education, such as management occupations (26.8% and 21.5%), professional occupations in business and finance (17.6% and 12.1%), and skilled administrative and business occupations (9.1% and 16.7%). Immigrants with Canadian degrees in this field also had greater match rates than those with degrees earned in some of the main source countries, such as China, India and Pakistan, in terms of higher shares working in skilled occupations and occupations related to their education. This result may be associated with a familiarity with the Canadian and North American business environment among immigrants with degrees from Western countries.

It is worth mentioning that immigrants with a Korean business degree had the highest proportion working in management occupations (38.1%), while the second and third most common occupations among this group were intermediate sales and service occupations (11.1%) and elemental sales and service occupations (10%). This distribution pattern warrants further investigation of occupational outcomes for Korean business degree holders.

Engineering

Table 15: Skill level of occupation by country of highest educational attainment, immigrants with degrees in engineering

	Total	NOC					O, A & B
		O	A	B	C	D	
Canada	75,765	14.3%	52.7%	20.6%	9.5%	2.8%	87.7%
U.S.	9,480	17.6%	51.1%	17.0%	12.3%	2.0%	85.8%
U.K.	11,705	24.4%	47.0%	18.8%	8.1%	1.7%	90.2%
France	3,575	18.9%	50.5%	18.0%	11.3%	1.1%	87.4%
Russia	9,250	10.6%	30.6%	30.1%	21.2%	7.6%	71.3%
Romania	13,210	9.3%	40.1%	28.0%	17.8%	4.7%	77.4%
China	34,025	8.3%	31.4%	26.7%	24.3%	9.2%	66.4%
South Korea	4,710	32.8%	19.1%	20.8%	15.0%	12.3%	72.7%
India	17,925	11.3%	29.0%	26.3%	26.7%	6.8%	66.6%
Pakistan	6,290	7.4%	23.4%	25.7%	32.5%	11.0%	56.4%
Philippines	19,605	4.7%	13.0%	32.7%	35.5%	14.1%	50.5%
Other countries	73,180	13.2%	33.6%	27.1%	19.0%	7.1%	73.9%
All countries	278,720	12.8%	37.9%	24.8%	18.2%	6.3%	75.5%

Source: Census 2006.

The 2006 census enumerated 278,720 immigrants with a postsecondary degree in engineering who had worked during the period from January 1, 2005 to the census reference week. Of these immigrants, more than three quarters worked in skilled occupations (75.5%). The highest percentages of immigrants working in skilled occupations were found for those with degrees from the United Kingdom (90.2%), Canada (87.7%), France (87.4%) and the United States (85.8%). Immigrants with engineering degrees from Romania, South Korea, and Russia had average shares working in jobs requiring post-secondary or above education. In contrast, immigrants with engineering degrees from main source countries – Pakistan (56.4%), China (66.4%) and India (66.6%) – had lower proportions working in skilled occupations. Among all main countries of study, immigrants with Filipino engineering degrees had the lowest proportion working in skilled occupations (50.5%).

Table 16: Major occupational group by country of highest educational attainment, immigrants with degrees in engineering

	2-digit NOC	All countries of study	Canada	China	India	Philippines	U.S.	Pakistan	U.K.	Romania	Russia	South Korea	France	Other
Professional occupations in natural and applied sciences	21	30.8%	42.4%	26.1%	25.2%	10.4%	38.1%	21.1%	38.0%	34.9%	25.5%	13.9%	34.3%	27.4%
Management occupations	0	12.8%	14.3%	8.3%	11.3%	4.7%	17.6%	7.4%	24.4%	9.3%	10.6%	32.8%	18.9%	13.2%
Technical occupations related to natural and applied sciences	22	9.7%	8.8%	11.1%	9.3%	12.5%	7.5%	10.8%	7.5%	13.4%	9.8%	4.7%	7.7%	9.8%
Trades and skilled transport and equipment operators	72/73	7.9%	6.3%	7.8%	9.0%	12.2%	2.5%	8.2%	5.3%	7.4%	10.9%	6.4%	2.9%	9.3%
Processing and manufacturing machine operators and assemblers	94/95	5.8%	2.2%	10.2%	9.9%	16.2%	2.8%	10.5%	1.1%	4.9%	4.2%	2.5%	2.7%	5.1%
Clerical occupations	14	4.6%	3.1%	5.3%	5.4%	9.3%	3.4%	4.1%	2.7%	6.2%	4.7%	3.1%	2.7%	4.7%
Elemental sales and service occupations	66	4.6%	2.1%	6.3%	4.7%	10.0%	1.5%	9.1%	1.1%	3.4%	5.6%	10.6%	1.0%	5.2%
Professional occupations in social science, education, government services and religion	41	4.5%	7.5%	2.9%	1.7%	0.8%	9.1%	1.3%	5.3%	2.5%	2.1%	3.0%	12.3%	3.6%
Intermediate sales and service occupations	64	3.8%	2.2%	6.0%	3.4%	3.8%	3.6%	5.8%	2.8%	3.0%	5.1%	6.6%	4.6%	4.3%
Intermediate occupations in transport, equipment operation, installation and maintenance	74	3.4%	1.8%	2.2%	7.7%	4.2%	2.1%	11.8%	1.5%	2.9%	6.2%	2.5%	1.0%	4.2%
Other major occupational groups		12.1%	9.3%	13.7%	12.5%	15.7%	11.7%	9.9%	10.3%	12.2%	15.4%	13.9%	12.0%	13.1%
Immigrants in all major occupational groups		278,720	75,765	34,025	17,925	19,605	9,480	6,290	11,705	13,210	9,250	4,710	3,575	73,180

Source: Census 2006.

Of immigrants who complete their highest education in engineering, three in ten worked in professional occupations in natural and applied sciences (30.8 %), which include all engineers and computer and information systems professionals. Management occupations were the second most common occupational group among immigrants who studied engineering (12.8%). About one in ten

of these immigrants worked in technical occupations related to natural and applied sciences (9.7%). Counting all three top common occupational groups together, more than half of immigrants with an engineering degree worked in professions commensurate with their educational fields.

Immigrants with a Canadian engineering degree had the largest proportion working in professional occupations in natural and applied sciences (42.4%). Immigrants with US or UK engineering degrees had similar proportions working in this occupational group (38.1% and 38%, respectively). Immigrants who obtained their engineering degrees in Romania and France were also more likely than some other countries to work in professional occupations in natural and applied sciences (34.9% and 34.3%, respectively). Of immigrants with Chinese, Indian and Russian engineering credentials, about a quarter worked in this professional group.

In contrast, engineering graduates from the Philippines and South Korea had much lower proportions working in professional occupations in natural and applied sciences (10.4% and 13.9%). However, the occupational distributions were quite different for immigrants in engineering from these two countries. The most common occupational group for immigrants with a Filipino engineering degree was processing and manufacturing machine operators and assemblers (16.2%), while for those with an engineering degree from South Korea, over 30% worked in management occupations (32.8%).

The 2006 Census results indicate that immigrants who studied engineering were more likely than others to work in a profession related to their education. In particular, those with a Canadian, US, UK, or French degree had above-average proportions working in professional occupations related to engineering.

Health professions and related clinical sciences

Table 17: Skill level of occupation by location of study for field of health professions and related clinical sciences

	Total	NOC					
		O	A	B	C	D	O, A & B
Canada	138,465	3.8%	38.9%	19.9%	32.9%	4.5%	62.5%
U.S.	8,840	6.2%	56.4%	19.7%	14.7%	3.0%	82.3%
U.K.	12,005	5.8%	58.2%	15.8%	18.5%	1.7%	79.8%
France	1,880	9.0%	50.8%	19.7%	16.2%	4.3%	79.5%
Russia	2,080	4.3%	31.7%	24.3%	31.5%	8.2%	60.3%
Romania	2,275	3.3%	35.4%	24.4%	27.5%	9.5%	63.1%
China	8,020	6.9%	26.3%	28.6%	28.4%	9.8%	61.8%
South Korea	1,800	22.8%	29.2%	19.4%	17.5%	11.4%	71.4%
India	7,525	5.0%	34.9%	17.0%	30.8%	12.3%	56.9%
Pakistan	2,510	4.6%	33.3%	18.5%	27.3%	16.5%	56.4%
Philippines	24,695	2.4%	30.7%	18.3%	39.0%	9.6%	51.4%
Other countries	44,215	5.3%	38.6%	20.9%	26.3%	8.8%	64.8%
All countries	254,310	4.4%	38.9%	20.0%	30.5%	6.2%	63.3%

Source: Census 2006.

Health professions and related clinical sciences were the third most common field of study among PSE immigrants. About 254,310 immigrants with a postsecondary health related diploma or degree had worked in a job. Of them, more than 6 in 10 worked in a job requiring at least some postsecondary education. Immigrants with degrees in this field of study from the United States, the United Kingdom, and France did best in acquiring skilled jobs: about 80% worked in skilled occupations during 2005 and 2006. Immigrants who studied health related professions in South

Korea ranked as a distant fourth, at 71.4%. Immigrants who studied in the Philippines again had the lowest proportion (51.4%) among the 11 locations working in skilled occupations. Again, of those who studied health related professions in the Philippines, a large proportion worked in skill level C occupations (39%). Immigrants who completed their education in health related professions in Romania, Canada, China and Russia had similar shares working in skilled jobs with the immigrant average, at 63%.

However, the situation is different looking at shares employed at skill level A. Immigrants who completed degrees in health-related professions from China had the lowest share working at skill level A (26.3%), followed by those who graduated from South Korea (29.2%) and the Philippines (30.7%).

Immigrants who studied in this field in South Korea still showed the highest percentage in management jobs (22.8%), about five times higher than the immigrant average (4.4%), and much higher than any other selected location.

Table 18: Major occupational groups by country of highest educational attainment, immigrants with degrees in health professions and related clinical sciences

	2-digit NOC	All countries of study	Canada	China	India	Philippines	U.S.	Pakistan	U.K.	Romania	Russia	South Korea	France	Other
Professional occupations in health	31	33.7%	34.7%	10.7%	30.6%	27.8%	44.8%	27.9%	52.7%	29.7%	23.3%	23.9%	34.0%	32.5%
Assisting occupations in support of health services	34	13.0%	16.4%	8.0%	6.7%	13.6%	4.2%	5.6%	5.2%	11.4%	10.1%	5.3%	6.9%	8.9%
Technical and skilled occupations in health	32	9.6%	10.4%	17.8%	5.7%	9.4%	7.1%	5.8%	5.4%	13.8%	10.8%	7.2%	6.4%	8.2%
Intermediate sales and service occupations	64	8.2%	7.9%	8.4%	6.5%	13.9%	4.4%	7.8%	6.2%	5.9%	12.3%	6.4%	4.5%	7.7%
Clerical occupations	14	6.1%	6.3%	4.9%	7.1%	7.2%	4.9%	6.8%	6.2%	5.5%	5.0%	2.5%	4.0%	5.3%
Elemental sales and service occupations	66	4.9%	3.7%	7.0%	7.9%	7.5%	2.4%	12.7%	1.6%	6.2%	8.2%	10.8%	4.0%	6.9%
Management occupations	0	4.4%	3.8%	6.9%	5.0%	2.4%	6.2%	4.6%	5.8%	3.3%	4.3%	22.8%	9.0%	5.3%
Skilled administration and business occupations	12	3.9%	4.0%	3.2%	2.7%	2.5%	5.2%	2.6%	5.4%	3.5%	3.8%	3.1%	6.9%	4.1%
Professional occupations in social science, education, government services and religion	41	3.1%	2.5%	8.9%	1.5%	1.4%	8.4%	3.0%	3.5%	2.6%	4.8%	3.9%	10.6%	3.6%
Processing and manufacturing machine operators and assemblers	94/95	2.0%	1.3%	5.7%	6.0%	3.8%	0.4%	4.6%	0.4%	3.1%	1.9%	1.7%	F	X
Other major occupational groups		11.1%	8.9%	18.5%	20.3%	10.5%	12.1%	18.7%	7.6%	14.9%	15.4%	12.5%	X	X
Immigrants in all major occupational groups		254,310	138,465	8,020	7,525	24,695	8,840	2,510	12,005	2,275	2,080	1,800	1,880	44,215

F: Too unreliable to be released.

X: Suppressed for confidentiality

Source: Census 2006.

Of all immigrants with degrees in health related professions, one third worked in professional occupations in health (33.7%), 13% worked in assisting occupations in support of health services, and 9.6% were employed in technical skilled occupations in health. All three top occupational groups are health related professions, with different requirements for skill levels. Considering all immigrants under analysis are postsecondary graduates, it could be argued that about 43% of immigrants who studied in a health related field were working in an occupation commensurate with their education (33.7% in professional occupations in health and 9.6% in technical and skilled occupations in health).

Immigrants with a Canadian degree in health had slightly higher-than-average proportions working in the top three occupational groups. Compared to immigrants with Canadian health degrees, immigrants with a health credential from the United States or the United Kingdom were much more likely to work in professional occupations in health (44.8% and 52.7%, respectively). Similar to immigrants with a Canadian degree in health, large proportions of those who acquired their health degrees in France, India and Romania worked in professional occupations in health (34%, 30.6% and 29.7%, respectively).

Consistent with the results on skill level distribution, immigrants with a Chinese health-related education had difficulties finding jobs in professional occupations in health (10.7%), which usually require university education. This proportion is much lower than for immigrants with a similar degree from any other main source country. However, immigrants with Chinese education had the highest proportion (17.8%) working in technical and skilled occupations in health.

Computer and information sciences and support services

An estimated 127,245 working age immigrants with postsecondary degrees in computer and information sciences and support services had worked during the period between January 1, 2005 and the Census reference week in 2006.

Table 19: Skill level of occupation by country of highest educational attainment, immigrants with degrees in computer and information sciences and support services

	Total	NOC					O, A & B
		O	A	B	C	D	
Canada	75,495	10.4%	39.3%	23.5%	22.1%	4.8%	73.1%
U.S.	4,935	12.5%	49.9%	19.5%	14.8%	3.3%	81.9%
U.K.	3,595	19.6%	47.7%	15.3%	14.9%	2.4%	82.6%
France	2,080	11.1%	58.4%	17.5%	13.0%	0.0%	87.0%
					(C&D)*		
Russia	1,375	9.8%	58.2%	16.0%	12.7%	2.5%	84.0%
Romania	1,765	8.8%	60.1%	17.0%	12.2%	1.7%	85.8%
China	9,245	6.7%	48.5%	16.8%	19.5%	8.6%	71.9%
South Korea	1,015	19.7%	22.7%	29.6%	15.8%	11.8%	71.9%
India	4,195	9.3%	29.8%	14.9%	33.7%	12.2%	54.0%
Pakistan	1,995	7.5%	33.8%	16.8%	31.3%	10.3%	58.1%
Philippines	3,390	4.6%	20.2%	18.6%	41.2%	15.6%	43.4%
Other countries	18,160	9.1%	40.5%	21.0%	24.0%	7.1%	70.6%
All countries	127,245	10.1%	40.5%	21.5%	22.1%	5.8%	72.1%

* To meet the confidentiality requirements, percentages in skill level C and D were combined for France.

Source: Census 2006.

Unlike the three fields discussed earlier, immigrants with degrees in computer and information sciences and support services who completed their education in France had the highest percentage working in skilled occupations (87.0%). Immigrants with degrees from Romania, the United

Kingdom and the United States also had large proportions (over 80%) working in skilled occupations. Over 7 in 10 immigrants who acquired their computer sciences degrees in Canada (73.1%), China (71.9%) and South Korea (71.9%) worked in a skilled job during 2005 and 2006. In contrast, immigrants with computer sciences degrees from Pakistan (58.1%), India (54%) and the Philippines (43.4%) were much less likely to work in skilled occupations.

Looking at major occupational groups (Table 20), one third of immigrants with postsecondary degrees in computer sciences worked in professional occupations in natural and applied sciences (33.8%), followed by those in clerical occupations (10.5%), technical occupations related to natural and applied sciences (10.1%), and management occupations (10.1%).

The occupational distribution among immigrants who obtained their computer science degrees in Canada mimics the pattern for all immigrants, with professional occupations in natural and applied sciences, clerical occupations and technical occupations related to natural and applied sciences as the most common occupations.

Over 4 in 10 immigrants with computer sciences degrees from Romania (55.8%), Russia (54.2%), France (46.4%) and China (44.2%) worked in professional occupations in natural and applied sciences, while those with a similar degree from South Korea (16.3%) and the Philippines (17.1%) were much less likely to work in this professional group.

Immigrants who studied computer and information sciences and support services in the Philippines had much higher proportions working in occupations with lower skill requirements such as clerical occupations (18%), intermediate sales and service occupations (10.8%) and elemental sales and service occupations (11.8%), compared to their counterparts with same degrees from other countries.

Table 20: Major occupational groups by country of highest level of educational attainment, immigrants with degrees in computer and information sciences and support services

	2-digit NOC	All countries of study	Canada	China	India	Philippines	U.S.	Pakistan	U.K.	Romania	Russia	South Korea	France	Other
Professional occupations in natural and applied sciences	21	33.8%	32.1%	44.2%	25.6%	17.1%	38.0%	30.8%	39.2%	55.8%	54.2%	16.3%	46.4%	34.3%
Clerical occupations	14	10.5%	11.5%	6.8%	13.7%	18.0%	7.3%	9.3%	7.1%	5.9%	4.7%	5.9%	5.8%	9.8%
Technical occupations related to natural and applied sciences	22	10.1%	11.6%	8.3%	6.2%	F	11.9%	8.8%	6.3%	7.4%	9.8%	4.4%	9.1%	X
Management occupations	0	10.1%	10.4%	6.7%	9.3%	4.6%	12.5%	7.5%	19.6%	8.8%	9.8%	19.7%	11.1%	9.1%
Intermediate sales and service occupations	64	5.4%	5.2%	6.4%	4.9%	10.8%	4.2%	9.5%	5.1%	1.7%	1.8%	5.9%	5.8%	5.5%
Elemental sales and service occupations	66	4.3%	3.6%	5.6%	7.5%	11.8%	3.1%	8.3%	1.5%	1.4%	1.5%	10.8%	F	X
Skilled administration and business occupations	12	3.6%	4.4%	1.5%	2.7%	3.7%	2.5%	1.5%	3.6%	1.4%	2.2%	3.9%	2.4%	2.9%
Professional occupations in social science, education, government services and religion	41	3.4%	3.7%	1.4%	1.7%	1.0%	6.6%	1.5%	3.3%	F	1.5%	4.4%	8.7%	X
Processing and manufacturing machine operators and assemblers	94/95	2.9%	2.4%	4.9%	5.1%	8.4%	1.6%	5.8%	1.3%	2.3%	4.0%	F	F	3.5%
Skilled sales and services occupations	62	2.6%	2.7%	2.2%	1.9%	2.5%	1.7%	2.8%	1.8%	2.5%	F	5.4%	2.9%	X
Other major occupational groups		13.2%	12.6%	12.2%	21.3%	X	10.6%	14.3%	11.1%	X	X	X	X	X
Immigrants in all major occupational groups		127,245	75,495	9,245	4,195	3,390	4,935	1,995	3,595	1,765	1,375	1,015	2,080	18,160

F: Too unreliable to be released.

X: Suppressed for confidentiality

Source: Census 2006.

Education

115,015 working age PSE immigrants with degrees in education had worked during 2005 and 2006, 71.1% worked in a job requiring postsecondary or above education. The highest proportions of immigrants with education degrees working in skilled occupations were found for those with degrees from France, the United States, and Canada, all around 85%. Immigrants who completed their education degrees in the Philippines (31.6%), India (46.8%), China (47.8%) and Pakistan (50.0%) had the lowest percentages working in a skilled job.

Table 21: Skill level of occupation by country of highest level of educational attainment, immigrants with degrees in education

	Total	NOC					
		O	A	B	C	D	O, A & B
Canada	53,630	8.9%	60.4%	16.1%	12.6%	2.0%	85.4%
U.S.	7,750	11.7%	57.9%	15.9%	12.3%	2.3%	85.5%
U.K.	3,745	10.3%	42.6%	22.7%	20.0%	4.4%	75.6%
France	900	8.9%	51.7%	25.0%	12.2%	2.2%	85.6%
Russia	1,640	7.3%	25.6%	32.0%	24.7%	10.1%	64.9%
Romania	670	4.5%	36.6%	33.6%	20.9%	3.7%	74.6%
China	2,815	7.8%	17.2%	22.7%	35.3%	16.9%	47.8%
South Korea	1,750	32.0%	12.9%	19.7%	18.9%	16.9%	64.6%
India	5,570	6.1%	20.6%	20.1%	33.2%	20.1%	46.8%
Pakistan	1,250	5.6%	17.6%	26.8%	34.4%	15.2%	50.0%
Philippines	8,280	2.2%	9.7%	19.8%	47.4%	21.0%	31.6%
Other countries	27,015	7.6%	23.9%	27.3%	30.1%	11.1%	58.8%
All countries	115,015	8.4%	42.6%	20.1%	21.6%	7.3%	71.1%

Source: Census 2006.

Overall, immigrants with degrees in education had the highest proportion (42.6%) working in skill level A occupations among all the major fields of study analyzed. Immigrants with Canadian degrees had the highest proportion working in occupations requiring university degrees, followed by those who studied in the United States and France. The percentage was the lowest for those who studied education in the Philippines - less than 10% of them worked in skill level A occupations. Proportions for those who studied in South Korea (12.9%), China (17.2%) and Pakistan (17.6%) were also relatively low.

As shown in Table 22, among all PSE immigrants who studied in the field of education, 37.4% were employed in professional occupations in social science, education, government services and religion, followed by 9.2% in intermediate sales and service occupations and 8.4% in management occupations. The proportion of immigrants employed in the top occupational group – professional occupations in social science, education, government services and religion – does vary significantly across countries of highest educational attainment. Immigrants with an education degree from Canada had the highest share working in this professional occupation. Significant proportions of those PSE immigrants who had an education credential from the US (49.2%), France (45%), the UK (34%) and Romania (32.8%) also worked in this field. In contrast, immigrants obtaining their education degrees from leading source countries were much less likely to work in professional occupations in social science, education, government services and religion: 9.6% among immigrants with a Chinese degree, 17.5% among those with an Indian degree, and 5.7% among those with a Filipino degree.

Table 22: Major occupational groups by country of highest level of educational attainment, immigrants with degrees in education

	2-digit NOC	All countries of study	Canada	China	India	Philippines	U.S.	Pakistan	U.K.	Romania	Russia	South Korea	France	Other
Professional occupations in social science, education, government services and religion	41	37.4%	55.9%	9.6%	17.5%	5.7%	49.2%	13.6%	34.0%	32.8%	16.2%	6.9%	45.0%	18.5%
Intermediate sales and service occupations	64	9.2%	6.5%	15.6%	8.3%	19.1%	5.6%	12.0%	10.5%	7.5%	9.5%	10.9%	9.4%	11.5%
Management occupations	0	8.4%	8.9%	7.8%	6.1%	2.2%	11.7%	5.6%	10.3%	4.5%	7.3%	32.0%	8.9%	7.6%
Paraprofessional occupations in law, social services, education and religion	42	8.3%	8.2%	7.5%	6.0%	6.6%	3.4%	13.6%	8.3%	17.9%	10.4%	4.9%	12.8%	10.3%
Clerical occupations	14	6.3%	4.1%	8.7%	8.8%	10.3%	4.9%	8.0%	7.5%	7.5%	7.6%	4.9%	2.8%	8.9%
Elemental sales and service occupations	66	5.7%	1.6%	11.5%	12.3%	17.9%	1.9%	11.2%	3.1%	2.2%	8.8%	15.4%	2.2%	8.8%
Skilled administration and business occupations	12	4.6%	3.6%	4.3%	5.8%	3.7%	5.5%	2.8%	7.2%	7.5%	9.1%	7.1%	2.2%	5.6%
Skilled sales and services occupations	62	2.7%	1.4%	5.9%	3.4%	4.0%	2.3%	5.2%	1.6%	F	4.0%	4.0%	2.2%	4.3%
Processing and manufacturing machine operators and assemblers	94/95	2.6%	0.5%	8.5%	7.5%	7.6%	0.6%	8.0%	F	3.7%	2.1%	0.9%	F	4.6%
Professional occupations in art and culture	51	2.0%	1.7%	3.6%	0.4%	0.8%	4.6%	F	4.0%	F	5.5%	3.1%	2.8%	2.2%
Other occupational groups		12.8%	7.6%	17.1%	23.8%	22.0%	10.2%	X	X	X	19.5%	10.0%	X	17.7%
Immigrants in all major occupational groups		115,015	53,630	2,815	5,570	8,280	7,750	1,250	3,745	670	1,640	1,750	900	27,015

F: Too unreliable to be released.

X: Suppressed for confidentiality

Source: Census 2006.

Social sciences

Social sciences were the sixth most common field of study among all working age immigrants who completed a postsecondary education. The 2006 Census enumerated 95,040 of these immigrants who had worked during January 1, 2005 to the census reference week. Immigrants with degrees in this field were less successful in obtaining skilled occupations, compared to any other major field of study, if assessed by the percentages in skilled occupations.

Table 23: Skill level of occupation by country of highest level of educational attainment, immigrants with degrees in social sciences

	Total	NOC					O, A & B
		O	A	B	C	D	
Canada	45,315	18.0%	33.0%	23.6%	22.1%	3.2%	74.7%
U.S.	4,070	16.7%	44.8%	19.2%	16.6%	2.8%	80.7%
U.K.	2,625	17.7%	42.3%	17.7%	20.0%	2.1%	77.7%
France	1,320	16.3%	40.2%	20.8%	20.5%	2.7%	77.3%
Russia	1,365	12.1%	30.8%	23.4%	28.6%	5.1%	66.3%
Romania	1,670	8.4%	28.1%	22.8%	34.7%	6.0%	59.3%
China	3,190	16.9%	20.5%	17.1%	32.3%	13.2%	54.5%
South Korea	1,290	43.8%	11.2%	17.4%	19.4%	8.1%	72.5%
India	8,105	10.5%	10.7%	19.4%	45.3%	14.1%	40.6%
Pakistan	2,570	13.8%	10.1%	17.7%	39.9%	18.5%	41.6%
Philippines	3,005	7.0%	8.5%	21.1%	47.8%	15.8%	36.6%
Other countries	20,515	13.0%	18.5%	23.8%	32.9%	11.8%	55.3%
All countries	95,040	15.8%	26.6%	22.3%	28.0%	7.2%	64.8%

Source: Census 2006.

The top three countries of study with the highest percentages of immigrants with social sciences degrees working in skilled occupations were the United States (80.7%), the United Kingdom (77.7%), and France (77.3%); Canada ranked fourth, at 74.7%. Immigrants who studied social sciences in South Korea also had a relatively high percentage working in skilled occupations (72.5%), largely due to the high proportion of these immigrants working in management occupations (43.8%). Those who studied in the Philippines (36.6%), India (40.6%), and Pakistan (41.6%) had the lowest percentages working in skilled occupations.

Table 24: Major occupational groups by country of highest level of educational attainment, immigrants with degrees in social sciences

	2-digit NOC	All countries of study	Canada	China	India	Philippines	U.S.	Pakistan	U.K.	Romania	Russia	South Korea	France	Other
Management occupations	0	15.8%	18.0%	16.9%	10.5%	7.0%	16.7%	13.8%	17.7%	8.4%	12.1%	43.8%	16.3%	13.0%
Clerical occupations	14	12.4%	12.0%	12.4%	15.9%	19.5%	7.5%	11.1%	10.9%	18.6%	11.7%	6.6%	11.0%	12.4%
Professional occupations in social science, education, government services and religion	41	12.3%	16.4%	6.4%	4.1%	1.5%	26.9%	3.5%	21.5%	5.1%	7.3%	4.3%	22.0%	6.7%
Intermediate sales and service occupations	64	8.5%	7.2%	9.2%	8.0%	12.1%	6.4%	12.3%	7.0%	10.2%	9.2%	10.5%	7.2%	10.7%
Skilled administration and business occupations	12	8.2%	9.8%	5.2%	6.1%	5.3%	5.3%	4.7%	6.1%	10.2%	8.8%	5.4%	8.7%	7.5%
Professional occupations in business and finance	11	7.5%	8.8%	6.9%	3.3%	3.0%	7.7%	3.5%	11.2%	15.6%	12.1%	3.5%	6.1%	6.2%
Elemental sales and service occupations	66	5.6%	2.6%	10.7%	8.0%	13.0%	1.8%	14.4%	1.9%	4.5%	4.0%	7.4%	2.3%	9.7%
Skilled sales and services occupations	62	4.6%	4.5%	5.2%	5.1%	5.0%	3.9%	4.3%	4.2%	2.4%	5.1%	4.3%	3.0%	4.8%
Professional occupations in natural and applied sciences	21	4.1%	4.7%	4.5%	2.0%	3.3%	4.8%	1.8%	4.6%	6.6%	8.4%	1.9%	4.9%	3.6%
Intermediate occupations in transport, equipment operation, installation and maintenance	74	3.2%	1.3%	3.0%	11.0%	3.0%	1.7%	10.5%	1.0%	3.3%	3.7%	F	1.5%	X
Other occupational groups		17.9%	14.6%	19.6%	26.1%	27.3%	17.2%	20.2%	13.9%	15.3%	17.6%	X	17.0%	X
Immigrants in all major occupational groups		95,040	45,315	3,190	8,105	3,005	4,070	2,570	2,625	1,670	1,365	1,290	1,320	20,515

F: Too unreliable to be released.

X: Suppressed for confidentiality

Source: Census 2006.

Among this group of immigrants with social sciences degrees, management occupations was the most common occupational group (15.8%), followed by clerical occupations (12.4%) and professional occupations in social science, education, government services and religion (12.3%). Compared to those in the other popular fields, immigrants with a degree in this major field of study were less likely to work in the field in which they had been trained.

Compared to the average for all immigrants, immigrants working in professional occupations in social science, education, government services and religion were over represented among those with social sciences degrees from Canada (16.4%), the United States (26.9%), the United Kingdom (21.5%), and France (22%). Immigrants with similar degrees from other main source countries had much more difficulty finding employment in this professional group.

Conclusion

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 PSE immigrants. In the first part of this project we looked at statistical variations in country of highest educational attainment and field of study among PSE immigrants. We found that, in 2006, immigrants were more likely than the Canadian-born to have a bachelor's degree or university certificate or diploma above the bachelor level as their highest educational attainment. Moreover, there were some noticeable differences in distribution across fields of study among immigrants and the Canadian born (e.g., there were a larger proportion of immigrants who studied engineering compared to among the Canadian-born). Given the fact that more than half of PSE immigrants were found to have attained their highest level of education in their country of birth, we were interested to explore, in this second part of our project, 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 overall goal of this second paper was to explore 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. Among the results of this analysis were the following observations:

- 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 (e.g. English and French language ability, city of residence, visible minority status, etc.).