The Making of New Chinese Immigrants in Canada

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Introduction

Canada is home to about 1.5 million Chinese (Statistics Canada 2011a), who have settled either in their own generation or in past generations but trace or claim their ancestry to Chinese. Historically, most Chinese in Canada were from China's southern provinces of Guangdong and Fujian, but from the end of World War II to the 1980s, Hong Kong became the main source. The term "new Chinese immigrants" refers to those who have immigrated from the People's Republic of China (PRC) to Canada since the 1980s. Throughout the 1980s, direct immigration from the PRC to Canada was relatively limited. Since the mid-1990s, however, the PRC has replaced Hong Kong as the main source. In the 24-year period between 1990 and 2014, 647,728 immigrants from the PRC arrived in Canada, according to official statistics.

This chapter raises two questions. First, what forces explain the rise in the number of new Chinese immigrants in Canada? Second, how have they performed in the country's labor market since their arrival?

Two main factors account for the rapid increase in the number of new Chinese immigrants in Canada. The first has to do with the country's growing emphasis on admitting immigrants with educational credentials

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and skills as a means of strengthening the information-based economy. The second relates to China's reform of the university system after the 1990s, which resulted in a substantial increase in university enrolment over a short period of time. The oversupply of university graduates in China, and the rising number going abroad to study and remaining abroad, created a surplus pool of highly trained potential workers which easily met the new immigration demands of Canada and other developed countries. Thus the combination of Canada's demand for highly trained workers and China's abundant supply of university graduates produced the conditions that facilitated the rise of the new Chinese in Canada.

To address the two questions, this chapter makes use of several types of data. The first is based on landing records of immigrants collected by Citizenship and Immigration Canada that have background information on all immigrants who have landed in Canada. The second type is from the Census of Canada up to 2006, and, after 2006, the 2011 Canada Household Survey, a national survey used to collect the detailed information formerly covered in the national sample of the census. The census data are used to estimate the economic performance of the new Chinese immigrants compared with other types of Chinese immigrant who immigrated from elsewhere and at other times. China's university enrolment data are also used to show the growing supply of university graduates in China.

Landing data in Canada indicate that the new Chinese immigrants from the PRC who came to Canada between 1990 and 2009 were better educated and younger than their predecessors, and more likely to be admitted under the economic class. The 2011 National Household Survey indicates that there were 653,012 Chinese, measured by Chinese visible minority status, in the Canadian labor force. Of these, 21 % were Canadian-born Chinese Canadians, 24 % were Chinese immigrants who came to Canada before 1990, and 54 % were Chinese immigrants who immigrated between 1990 and 2009. In Canada's 2011 labor force, PRC-born immigrants accounted for 29 % of those who moved to Canada before 1990 and 65 % of those who immigrated between 1990 and 2009. In short, PRC-born immigrants made up about two-thirds of Chinese who immigrated to Canada between 1990 and 2009 and participated in Canada's labor force in 2011.

The impact of PRC-born immigrants on the Canadian labor force is evident. About 60 % of these new Chinese immigrants were in middle-class higher-paying occupational groups including management, business, natural and applied sciences, health, and social sciences and education.

However, sales and service occupations continued to account for about a quarter of the new Chinese in Canada's labor market in 2010. The self-employment rate was higher among Chinese men (14.6 %) than among women (9 %), and Chinese employees earned more than Chinese self-employed persons in the case of both men and women.

Like other Chinese before them, the new Chinese immigrants tended to reside in the metropolitan centers of Canada; Toronto and Vancouver alone accounted for 72 % of all Chinese in the country (Lindsay 2001). Their arrival altered the social and economic composition of the Chinese community in Canada. Historically, Cantonese was widely used in the Chinese community but, after the 1990s, Mandarin was commonly adopted. Data on linguistic characteristics from the 2011 Census indicate that 25 % of the Chinese in Toronto and 30 % in Vancouver spoke Mandarin most often at home (Statistics Canada 2011b). *Singtao* and *Mingpao*, the two leading Chinese daily newspapers in Canada, frequently run advertisements for services provided in Mandarin and Cantonese. Professionals such as lawyers, real estate agents and automobile dealers often say in advertisements that they can provide both Cantonese and Mandarin language services. This further indicates the linguistic influence of immigrants from mainland China in the Chinese-Canadian community.

Chinatown has long ceased to be the area where most Chinese reside in the major metropolitan centers. The new Chinese immigrants, mostly middle class, tend to reside in more affluent areas of cities traditionally dominated by white Canadians. Affluent suburbs or areas such as Richmond in Vancouver and Markham and Richmond Hill in Toronto attract many middle-class Chinese as choice locations. Geared to the affluent Chinese clientele, the number of upscale restaurants and shops as well as professional services has grown rapidly in these areas. The arrival of new Chinese immigrants has contributed to an emerging image of an affluent Chinese community able to afford luxurious homes in desirable urban neighborhoods. In reality, despite their middle-class status, many new Chinese immigrants encounter obstacles in the Canadian labor market, such as difficulties in finding jobs to match their credentials and receiving remuneration lower than that of other Canadians.

EARLY CHINESE IMMIGRATION AND RACIALIZATION

The history of Chinese immigrants in Canada dates back to 1858 when gold mining shifted north from the USA's west coast to British Columbia. During the completion of the trans-Canadian railroad between 1881 and

1885, large numbers of Chinese workers were shipped from China to Canada. Economic development in British Columbia required a large labor supply. Fresh workers, mainly from south China, provided low-cost labor to satisfy the industrial needs of Canada's west. However, the Chinese in British Columbia quickly became racial targets of white workers and politicians, who sought to exclude them. When the Canadian Pacific Railway was completed in 1885, the federal government began to impose a Head Tax of \$50 on every Chinese entering Canada. The Head Tax was raised to \$100 in 1900 and to \$500 in 1903. British Columbia imposed other restrictions on Chinese, barring them from various livelihoods and restricting their civic and political rights. Between 1886 and 1924, a total of \$22.5 million in Head Tax was collected from 82,379 Chinese entering Canada (Li 1998: 42). From 1924 onwards, Chinese were essentially barred from entering Canada, until 1947. The Chinese population in Canada shrank from 46,519 in 1931 to 32,528 in 1951 (Li 1998: 67). The gender imbalance remained high during the exclusion period: the ratio of Chinese men to Chinese women was 12 to 1 in 1931 and 9 to 1 in 1941 (Li 1998: 67). As a result of the gender imbalance and the absence of fresh immigration, there was a serious delay in the growth of a second generation among the Chinese. As a result, the proportion of foreign-born Chinese remained high throughout the exclusion period: 88 % of the Chinese were foreignborn in 1931, 80 % in 1941 and 69 % in 1951 (Li 1998: 67).

Before the twentieth century, more than 90 % of the Chinese in Canada lived in British Columbia (Li 1998: 55). After 1901, the Chinese in British Columbia began to move east and settled in other provinces. The early Chinese were mainly manual workers. Records of the Chinese entering Canada between 1885 and 1903 indicate that most were workers and laborers, with merchants and shopkeepers making up fewer than 6 % (Li 1998: 24). In the face of racial discrimination and exclusion from many jobs in the mainstream economy, the Chinese community used improvised means to survive, retreating to the Chinese enclave, moving to ethnic businesses in the service sector, relying on voluntary organizations for self-help and revitalizing the image of Chinatown to meet white expectations (Li and Li 2011).

Restrictions on Chinese immigration were removed after World War II, and the Chinese in Canada began to gain civic and political rights. However, the migration of the Chinese to Canada, mainly through Hong Kong, was limited during the Cold War era. It was not until 1967 that Canada adopted a universal "points system" of immigrant selection, allowing Chinese immigrants to be assessed on the basis of equal criteria.

The 1970s and 1980s witnessed a surge of immigration from Hong Kong, which eventually peaked shortly before the return of Hong Kong to China in 1997 (Li 2005). Thereafter, immigration from mainland China began to rise, first slowly and then rapidly, after the 1990s (Li and Li 2008). Since the 1970s there has been a conspicuous growth in Canada's Chinese population. It was 124,600 in 1971, 633,933 in 1991, 1.03 million in 2001 and 1.22 million in 2006 (Li and Li 2011; Statistics Canada 2008). By 2011 the number of Chinese in Canada had reached 1.48 million (Statistics Canada 2011a).

EMERGENCE OF CANADA'S NEW CHINESE IMMIGRANTS

Different waves of Chinese immigrants arrived in Canada over time, regulated by conditions in China and Canada's admission policy. These waves brought different types of Chinese, and the development of the Chinese community was shaped partly by Canada's policy of admission and integration of the Chinese and partly by the composition of the Chinese arriving there.

Three Waves of New Arrivals

Three types of Chinese immigrant arrived in Canada over time. From the second half of the nineteenth century until the end of World War II, the Chinese who migrated to Canada were mainly peasants and workers from Fujian and Guangdong. Between the end of World War II and the mid-1990s, Hong Kong was the main source. These post-war Hong Kong immigrants were more diversified in occupation than their predecessors. After the 1980s, immigrants from mainland China to Canada, many of them highly educated, began to replace those from Hong Kong. This latest wave produced what is often referred to as the "new Chinese immigrants" in the overseas Chinese population, to distinguish them from earlier waves.

The conclusion of World War II put an end to Canada's policy of excluding Chinese, and limited numbers, mainly relatives of those already in Canada, were allowed to enter. However, the Cold War of the 1950s and 1960s made direct immigration from mainland China difficult. Despite the establishment of formal diplomatic relations between Canada and the PRC in 1971, the volume of immigration from the PRC to Canada remained small in the 1970s and 1980s. Between 1968 and 1976, immigrants from Hong Kong accounted for more than two-thirds of the total number of

immigrants from Hong Kong, Taiwan and mainland China to Canada (Li 1998: 99).

Immigrant landing data indicate that the level of immigration from Hong Kong was several thousand annually in the early 1980s but began to rise after the mid-1980s, eventually peaking at more than 44,000 in 1994 before dropping to 22,000 in 1997 (Fig. 17.1). Thereafter, immigration from Hong Kong to Canada kept falling and remained insignificant, at a level of fewer than 1000 a year after 1999. In contrast, immigration from the PRC was below 5000 a year between 1982 and 1989 but rose to more than 14,000 in 1991, largely because Canada allowed several thousand visa students from the PRC at Canadian universities at the time to remain as permanent residents in Canada as a result of the 1989 student protest and crackdown in China. After 1993, the immigration level from the PRC continued to rise, reaching almost 20,000 in 1998 and more than 40,000 in 2001, before falling back to 33,231 in 2002. The number continued to exceed 36,000 in 2003 and 2004, and was more than 42,000 in 2005. The annual number of immigrants from the PRC has declined slightly since but

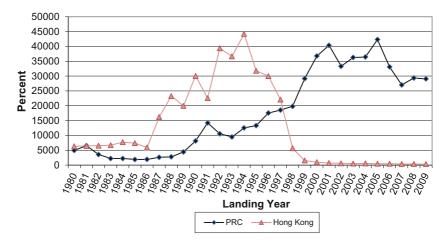


Fig. 17.1 Immigrants from the PRC and Hong Kong admitted annually to Canada by landing year, 1980–2009 (Source: Data from 1980 to 2009 compiled from microdata file of Permanent Immigrants Data System, 1980–2009, Citizenship and Immigration Canada; data from 2010 to 2013 updated from Facts and Figures: Immigrant Overview Permanent Residents, 2014, Citizenship and Immigration Canada, 2015)

remains at a relatively high level, close to 30,000 per year (Fig. 17.1). In the 24 years (1990–2014) after 1989, 647,728 immigrants arrived in Canada from the PRC, accounting for 11 % of the total number of immigrants admitted. Immigrants from Hong Kong made up only 4.6 % of Chinese immigrants to Canada between 1990 and 2014, and only 0.25 % of the total between 2000 and 2014.

Forces in the Making of New Chinese Immigrants

Immigrants to Canada are admitted under three broad categories: family class, economic class and refugee class (Statutes of Canada 2001). Admissions under the family class are usually restricted to close family members of a resident or citizen of Canada, such as a spouse, common-law partner, child, parent or other prescribed family member. Economic-class admission is premised on education, labor-market skills, or financial or investment capacity. Refugees are admitted based on the United Nations' criteria of refugee or on humanitarian grounds. Between 1980 and 2000, the component of family-class immigrants made up about 36 % of all immigrants, and economic-class immigrants and up about 36 % of all immigrants. Between 2001 and 2010, economic-class immigrants made up 55 % to 66 % of all immigrants annually while family-class immigrants declined to 22% to 27 % per year (Citizenship and Immigration Canada 2011).

Two forces, related to the rising demand for skilled immigrants in Canada and the oversupply of university graduates in China, explain the rise of new Chinese immigrants in Canada. The emergence of what is called the new economy or information-based economy has increased the demand for skilled workers in Canada. Virtually all jobs created in Canada in the 1990s were knowledge-based (Zhao 2000). Canada also faced the problem of a brain drain to the USA throughout the 1990s. However, it managed to bring in an even larger number of immigrants with university degrees to offset out-migration: a ratio of four immigrants coming to Canada to one lost to the USA (Zhao 2000). Thus admitting well-educated immigrants allowed Canada to recuperate its human-capital loss and to sustain continuous growth in the country's knowledge-based sectors. It responded to this rising demand by investing heavily in higher education (Zhao 2000) as well as by focusing more closely on the human-capital dimension of new immigrants.

Revamping Canada's immigration system at the beginning of the twenty-first century led to a growth in the number of economic-class immigrants—that is, those admitted on human-capital grounds and to

meet labor-market needs. Both the Immigration Act of 2001 (Statutes of Canada 2001) and the revised immigration regulations of 2002 (Privy Council 2002) reinforced immigrant selection on the basis of educational qualifications and work experience. The 2002 points system used to assess prospective immigrants allotted up to 70 of the 100 points to education, knowledge of languages and work experience, as opposed to 39 points in the old system (Li 2003: 41). Canada had been increasing the intake of economic-class immigrants ever since the late 1990s, even before the new system was implemented. Subsequent changes, including broadening the Provincial Nominee Program and introducing the federal immigration category of Canadian Experience Class to facilitate those on temporary visas to apply for permanent residency, further expanded the admission of skilled immigrants needed in the Canadian labor market (Li 2012).

Immigrant landing records indicate that between 1980 and 1986, annual economic-class immigrants made up 30 % to 40 % of all categories of immigrants admitted to Canada, although the percentage for immigrants from Hong Kong was larger (Fig. 17.2). From 1987 to 1994, economic-class immigrants accounted for 40 % to 50 %. After 1995, annual economic-class immigrants made up more than 50 %, and after 2007 more than 60 %,

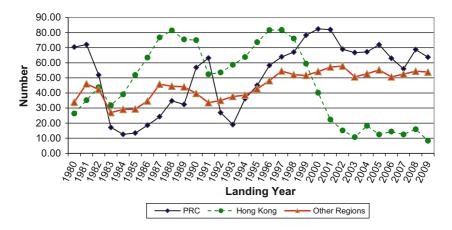


Fig. 17.2 Percentage of economic class immigrants from the PRC, Hong Kong and other regions, as county of last permanent residence, admitted annually to Canada, by landing year, 1980–2009 (Source: Data from 1980 to 2009 compiled from microdata file of Permanent Immigrants Data System, 1980–2009, Citizenship and Immigration Canada)

of all immigrants arriving in Canada. This increase in the proportion of economic-class immigrants reflects Canada's growing emphasis on admitting immigrants with skills and credentials as it seeks to strengthen the information-based economy. Figure 17.2 shows that after 1993 the percentage of immigrants from the PRC admitted under the economic-class criterion rose rapidly every year, from 20 % in 1993 to 80 % in the early 2000s, and remained at a level of between 60 % and 70 % from 2002 to 2009.

As the share of economic-class immigrants rose over time, the proportion of immigrants arriving with a university degree also increased. Immigrant landing data indicate that those from the PRC were more likely to have a university degree than those from other regions. Figure 17.3 shows that before 1989, fewer than 10 % of immigrants from the PRC arrived in Canada with a university degree. The percentage of PRC immigrants with a degree rose sharply in 1990 and 1991, probably as a result of Canada accepting PRC students in Canada as permanent residents after the 1989 student protests. The number of PRC immigrants with a degree continued to grow proportionally after the mid-1990s, from 27 % in 1995 to 39 % in

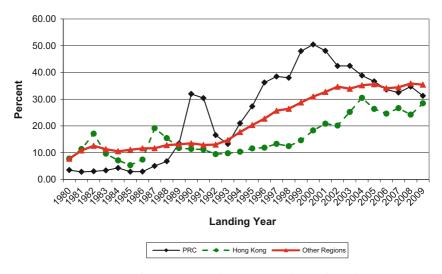


Fig. 17.3 Percentage of immigrants with a university degree from the PRC, Hong Kong and other regions admitted to Canada by landing year, 1980–2009 (Source: Data from 1980 to 2009 compiled from microdata file of Permanent Immigrants Data System, 1980–2009, Citizenship and Immigration Canada)

1997, and to nearly 50 % in 1999, 2000 and 2001. From 2002 to 2009, the number of PRC immigrants with a degree declined but continued to account for 30 % to 40 % of all immigrants from the PRC annually. The proportion of university-educated immigrants from all sending countries has also been rising since the mid-1990s. However, the proportional increase for the PRC tended to be substantially larger for most years after the early 1990s.

China's University Graduates and Chinese Students as Potential Immigrants

The rise of the new Chinese immigrant in Canada was also facilitated by the growing supply of university graduates in China since the 1990s. China substantially modernized its higher-education system in the 1990s. The changes were essentially components of market reform to widen university funding options, including increasing direct state investment, decentralizing central financing, allocating more power to local governments, diversifying financing sources to allow universities to generate revenue, and shifting much of the financial cost to students (Li et al. 2007; Wang 2001). Along with changes in university financing, the state also stopped providing free university education and guaranteeing job assignment in 1997 (Li et al. 2007). Reforms in higher education resulted in universities accepting more students and raising tuition fees to generate revenue.

Before 1993 some 600,000 students graduated at undergraduate and postgraduate levels in China annually. By 2001 the number had increased to 1.1 million (Fig. 17.4). The number continued to skyrocket, rising to 2.5 million in 2004, 4.8 million in 2007, 6.5 million in 2011 and more than 7 million in 2014. Other sources indicate that the gross enrolment ratio for tertiary education in China increased almost by three times from 8 % in 2000 to 23 %, compared with a global increase from 19 % in 2000 to 26 % in 2007 (United Nations Educational, Scientific and Cultural Organization 2009).²

Expansion in universities after the 1990s produced an abundant supply of university graduates every year. Even before the 2008 global financial crisis, employers' demand for new graduates in China increased only marginally while supply shot up, resulting in fresh undergraduate degree-holders facing a highly competitive job market (Chen 2004; Ding 2004). Prevailing market pressures compelled many university students to consider further study at home or abroad to increase their chances on the job market (Li et al. 2007).

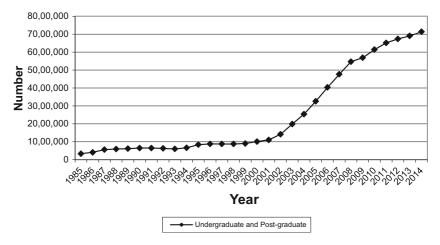


Fig. 17.4 Number of students graduated from institutions of higher education, undergraduate and graduate levels, the PRC, 1985–2014 (Source: Data between 1985 and 2013 are from the *China Statistical Yearbook*, 2014, chapter 21, Education, National Bureau of Statistics, China Statistics Press; data for 2014 were retrieved from http://data.stats.gov.cn/english/easyquery.htm?cn=C01)

Data on the number of students from China going abroad to study and returning annually indicate a substantial pool of highly trained students remaining abroad (Fig. 17.5). Before the mid-1990s, fewer than 20,000 students went abroad annually, but by 2001 the number had reached 84,000, and by 2006 it was 134,000. After that the number rose rapidly to 229,000 in 2009, 400,000 in 2012 and 460,000 in 2014. In contrast, the number of students returning to the PRC annually rose at a much slower rate between 2000 and 2011 (Fig. 17.5). The space separating the two curves in Fig. 17.5 indicates the cumulative stock of students staying abroad as a result of the disparity between students going abroad from the PRC and returning home. Between 2002 and 2014, the difference between PRC students going abroad and returning added roughly 1.4 million students to the number of PRC students abroad.

Data on PRC students enrolled in Canada also indicate a rising trend since the 1990s. Between 1994 and 1999, visa students from the PRC in Canada numbered fewer than 7000 (Fig. 17.6). This increased to 29,739 in 2002, 40,021 in 2005, 50,446 in 2009 and 95,731 in 2013. Before

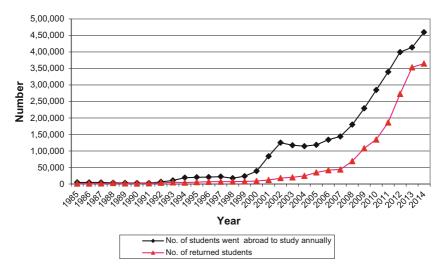


Fig. 17.5 Number of PRC students who went abroad to study and number returned annually, 1985–2014 (Source: Data between 1985 and 2013 are from the *China Statistical Yearbook*, 2014, Chapter 21, Education, National Bureau of Statistics, China Statistics Press; data for 2014 are retrieved from http://data.stats.gov.cn/english/easyquery.htm?cn=C01)

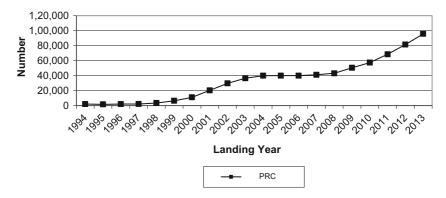


Fig. 17.6 Total number of international students from the PRC in Canada with a valid permit by year end, 1994–2013 (Source: Compiled from Facts and Figures, 2003 to 2013 (yearly), Temporary Residents, Citizenship and Immigration Canada)

the changes in immigration regulations in 2001 and 2002, international students who had completed their studies in Canada typically had to return to their home country if they wanted to apply for immigration. The changes in immigration regulations in early 2002 allowed them to apply for permanent residence in Canada after graduation. Thus international students became a fresh pool of human capital from which Canada could draw economic immigrants.

The number of university graduates in the PRC and of PRC students staying abroad has been growing since the mid-1990s. The surplus of university graduates, both graduates from the PRC and PRC students abroad, produced a pool of potential immigrants for Canada. A combination of Canada's renewed demand for human capital and China's surplus of university graduates created the conditions for a rise in the number of new Chinese immigrants in Canada.

PRC Immigrants in Canada's Labor Market

Between 1980 and 2009 more than 0.5 million immigrants from the PRC arrived in Canada, accounting for 51 % of all Chinese immigrants from the PRC, Hong Kong and Taiwan in this period (Citizenship and Immigration Canada 2010). However, between 2000 and 2009, PRC immigrants made up 89 %. The proportion going to Canada as economic-class immigrants also increased among PRC immigrants. For example, 43.4 % of those arriving in Canada between 1980 and 1999 were economic class. The number increased to 56.8 % between 1990 and 1999, and to more than 70 % between 2000 and 2009 (Citizenship and Immigration Canada 2010). This rise reflected the growing emphasis in Canada on admitting immigrants with credentials and skills.

Thus far, data for PRC immigrants to Canada are based on the PRC as the country of last residence, as recorded on landing records in Canada. The profile of PRC-born immigrants may also be constructed from the 2011 National Household Survey. However, Canadian Census data, including this survey, report only immigrants' country of birth. Using the PRC as the country of last permanent residence produces a smaller number of PRC immigrants in Canada than does using the PRC as country of birth, especially for the 1980s and 1990s. The reason is that some PRC-born immigrants moved elsewhere, notably to Hong Kong, before immigrating to Canada.

Table 17.1 Number of PRC immigrants, landed in Canada, 1990–2009, estimated from Permanent Residents Data System, and National Household Survey

	Immigrants from the PRC as country of last permanent		
	Residence	Birth	Birth
Source of data	Permanent resident data system	Permanent resident data system	2011 National household survey
Date data collected	Landing vear	Landing vear	2011
Number landed in Canada, 1990–2009, all ages	497,041	557,145	392,403
% female	53.3	53.1	55.0
Mean age at landing	30.9	33.6	30.5
Mean age in 2010	39.4	42.8	39.4
% with university degree	37.7	34.6	41.0
% admitted under economic class	66.1	63.6	_
% destined to Toronto, Vancouver, Montreal	78.3	79.2	_
% residing in Toronto, Vancouver, Montreal, 2011	-	_	81.8
Number of PRC-born immigrants, 1990–2009 landed, ages 20–64 in 2010	_	_	293,273
Number of PRC-born immigrants, 1990–2009 landed, ages 20–64 in 2010 worked in non-primary sector with 2010 employment income	-	_	211,525

Source: Calculations based on microdata file of Permanent Residents Data System, 1980–2009, Citizenship and Immigration Canada, and microdata file of 2011 National Household Survey, Statistics Canada

Table 17.1 indicates the number of PRC immigrants in Canada in the period between 1990 and 2009 using different estimates. Landing data show that 497,041 PRC immigrants went to Canada between 1990 and 2009, based on the PRC as the country of last permanent residence, compared with 557,145 based on the PRC as the country of birth. However, the 2011 National Household Survey reported only 392,403 PRC-born immigrants for the same period. In short, about 70 % of PRC-born immigrants who immigrated to Canada between 1990 and 2009 may be retrieved from the 2011 National Household Survey. The

discrepancy can perhaps be explained partly by deaths and return migration of PRC-born immigrants.

Table 17.1 indicates that of the 392,403 PRC-born immigrants who landed in Canada between 1990 and 2009 and were still in Canada in 2011, 293,273 were between 20 and 64 years of age in 2010. Of these, 211,525 worked in non-primary sectors in Canada's labor market in 2010 and earned an income from employment. In other words, the participation rate in the non-primary sectors in Canada was 72 % among PRC-born immigrants between 20 and 64 years of age in 2010.⁴

Profiles of New Chinese Immigrants

Landing records show that the proportion of PRC immigrants going to Canada with a university degree increased from 5 % in 1980–1989 to 33% in 1990–1999, and to 40 % in 2000–2009. More recent immigrants from the PRC tended to be younger at the time of immigration. The mean age was 59.5 for immigrants who landed between 1980 and 1989, 45 for those between 1990 and 1999, and 35 for those between 2000 and 2009 (Citizenship and Immigration Canada 2010).

Data from the 2010 National Household Survey show that the average age of PRC-born immigrants was 30.5 at the time of landing and, at the time of the 2011 survey, 39.4, very similar to findings from the landing records. As expected, the 2011 National Household Survey indicates a higher proportion of PRC-born immigrants with a degree in 2011 (41 %) than the landing data, since the former was collected in 2011. By 2011, some immigrants may have obtained a degree after arriving.

Data from different sources confirm that PRC immigrants who came to Canada between 1990 and 2009 tended to be better educated, slightly younger than their predecessors at the time of immigration and more likely to be admitted as economic-class immigrants. The question remains as to how well these new Chinese immigrants perform in the Canadian labor market.

Table 17.2 shows the occupational distribution and selected labor-market features of PRC-born immigrants in non-primary sectors of Canada's labor market in 2010.⁵ The data indicate that occupations in management, business, finance and administration accounted for about 27 % of PRC immigrants (Column 6 in Table 17.2). Another 24 % were in occupations related to health and to natural and applied sciences. In other words, more than half of the PRC immigrants were in these four

Table 17.2 Occupations and selected labor market features of PRC immigrants, landed in Canada 1990–2009, and in 2010 Canada labor force, non-primary sector, ages 20–64, by employment and self-employment status, and by gender

	Male		Female		Total	
	Employed	Self- employed	Employed	Self- employed	-	
	[1] %	[2] %	[3]	[4] %	[5] N	[6] %
Occupations in:						
Management	8.2	31.3	5.6	23.8	19,703	9.4
Business, finance & administration	10.8	9.6	26.2	13.5	37,735	17.9
Natural and applied sciences	29.3	15.6	12.3	4.4	40,614	19.3
Health	1.7	3.8	7.7	8.2	10,380	4.9
Social Science, edu- cation, government service & religion	5.3	4.5	8.4	10.4	14,513	6.9
Art, culture, recreation and sport	1.5	2.4	1.9	4.4	3935	1.9
Sales & service	24.3	17.9	27.7	31.7	54,212	25.8
Trades, transportation & equipment operators	11.6	14.6	1.7	2.4	14,311	6.8
Processing, manufacturing & utilities	7.2	0.4	8.6	1.3	14,876	7.1
Total % by column	100.0	100.0	100.0	100.0		100.0
All occupations (number of cases) Selected labor market features	88,263	15,131	97,232	9653	210,279	
% self-employed Mean employment/ self-employment income	\$44,326	14.6 \$25,293	\$32,786	9.0 \$17,138	11.8	

Source: Microdata file of 2011 National Household Survey, Statistics Canada

occupational groups. Sales and service occupations accounted for 25.8 % of occupations. This high concentration reflects the continuing importance of service and sales occupations among the Chinese in Canada. When the occupational distribution is classified by gender, and employment and self-employment status, the data show some similarities and differences among the four groups (Columns 1 to 4 in Table 17.2). For example, the first five occupational groups, consisting mainly of middle-class high-paying jobs, accounted for 60 % to 67 % of the Chinese, depending on gender, and employment and self-employment status. Sales and service occupations continued to account for more than a quarter of all jobs, except for men who were self-employed.

Income Level of New Chinese Immigrants

To assess the economic performance of PRC-born immigrants in Canada's labor market, their income is compared to that of immigrants from other regions who immigrated in the same period. Table 17.3 shows the mean yearly employment income for employees and self-employed persons for 11 immigrant groups from different countries and areas, separated by gender. Column 1 indicates that PRC male immigrants who were employees earned \$1877 a year less than the mean income of \$46,203 for all groups and \$13,346 a year less than white immigrants from the USA and Europe. The income disparity between the two groups was \$15,223 a year. PRC male employees earned less than those from Hong Kong, though at a much smaller magnitude of \$3824 a year, but more than those from the Philippines, West Central Asia, the Middle East, Central and South America, Africa and some parts of Asia. Female employees from the PRC earned less than white female employees from the USA and Europe, but since women tend to have a lower income than men, the difference was smaller, at \$6598 a year. PRC female employees earned \$3824 less than their counterparts from Hong Kong but more than those from most parts of Asia, Central and South America, and Africa.

Self-Employment among New Chinese Immigrants

Historically, Chinese immigrants entered self-employment to avoid unequal competition in the labor market, although it has been suggested that

Table 17.3 Actual mean yearly employment income of PRC immigrants and other immigrant groups, landed in Canada 1990–2009, and in 2010 Canada labor force, non-primary sector, ages 20–64, for employees and self-employed persons, and by gender

	Dollars above (+) or below (–) grand mean					
	Employed		Self-employed			
	Male	Female	Male	Female		
	[1]	[2]	[3]	[4]		
Immigrant groups						
White, USA and Europe	13,346	6726	7054	2043		
White, other area	9644	3707	11,259	10,573		
PRC	-1877	128	-7119	-5154		
Hong Kong	1947	3952	-2670	-3723		
Philippines	-6558	1254	1686	1186		
India	1152	-1886	-185	-2469		
West Central Asia and Middle East	-2909	-5243	-6420	6193		
Central and South America	-6039	-2025	-6115	-3662		
Africa	-2867	-2866	-4146	19,623		
Other Asia	-7071	-5917	-984	-4303		
Other	-5652	1313	1588	13,173		
Grand mean (all groups)	46,203	32,659	32,412	22,292		
Number of cases	794,950	778,766	112,568	54,875		

Source: Microdata file of 2011 National Household Survey, Statistics Canada

immigrant enclave businesses in more recent times may bring lucrative economic opportunities for immigrant entrepreneurs (Li 2000).

The 2011 National Household Survey indicates that the Chinese self-employment rate tended to be higher among men than women; 14.6 % of PRC-born men, compared with 9 % of women, were self-employed. Those who worked for pay earned more than those who were self-employed. The mean income was \$44,326 a year in 2010 for male employees and \$25,293 for self-employed men. Female employees earned \$32,786, about 25 % lower than their male counterparts, but higher than self-employed women, who earned only \$17,138 a year. For PRC male immigrants, those who were self-employed earned \$19,033 less than their counterparts who were employed. Self-employed women from the PRC also earned \$15,012 less than female employees from the PRC.

Self-employed PRC immigrants earned less than immigrants from other places, as shown in Table 17.3. For example, PRC male self-employed immigrants earned \$14,173 a year less than white immigrants from the USA and Europe, \$18,368 less than white immigrants from other regions, and \$4449 less than those from Hong Kong. Female self-employed immigrants from the PRC also earned \$7197 less than white female immigrants from the USA and Europe, and \$15,727 less than white female immigrants from other regions, but only \$1431 less than their counterparts from Hong Kong.

The relatively high rate of self-employment among new Chinese immigrants who arrived in Canada between 1990 and 2009, and their lower returns to self-employment as compared to the Chinese who worked for pay, suggests that some new Chinese immigrants probably chose self-employment as an alternative to employment as a result of employment obstacles in Canada's labor market. That self-employed Chinese immigrants, men and women, earned less than immigrants from other regions who entered Canada in the same period indicates that even in self-employment new immigrants from the PRC faced marked inequalities.

Income Disparity between PRC Immigrants and White Immigrants

The yearly income difference between PRC immigrants and other immigrants has two probable sources. The first has to do with the fact that different immigrant groups have, on average, different levels of schooling; the number of weeks worked in a year; the length of time in Canada within the landing period of 1990 to 2009; and other factors. The difference in the distribution of these factors across incomes will result in different income levels. The second source has to do with different groups having unequal returns to the same level in each factor. For example, a percentage increase in immigrants with a bachelor's degree may increase the average income of white immigrants more than that of PRC immigrants, in the same way as a university degree may bring a higher return for men than for women. Thus the income difference between two groups may be partitioned into two components: an explained difference resulting from differences in levels of influencing variables, and an unexplained difference owing to unequal returns.

To further explore the components of income disparity, the employment income of PRC immigrants is compared with that of white immigrants from

the USA and Europe. The former may be seen as an income-disadvantaged group, while the latter is an advantaged group.

The mean (for scale variables) or proportion (for variables coded 0 and 1) of the following variables are given in Table 17.4 for male immigrants and Table 17.5 for female immigrants:

- 1. The highest level of schooling (13 categories, omitted "no certificate, diploma or degree");
- 2. The number of weeks worked in 2010 (6 categories, <u>reference category</u> "1 to 9 weeks worked";
- 3. Worked full time or not in 2010 (2 categories, reference category "part time")
- 4. The number of years in Canada since landing (scale variable)
- 5. The age at immigration (scale variable)
- 6. The city of residence (4 categories, <u>reference category</u> "other cities or areas")

The first two columns of Table 17.4 show the mean or proportion of different variables for white male employees from the USA and Europe, and male employees from the PRC. The figures indicate similarities and differences in the mean or proportion of variables. For example, both groups had about 16 % with a high-school diploma as the highest level of schooling, but white immigrants from the USA and Europe had 8.1 % with medical degrees and 13.9 % with master's degrees, compared with 4.0 % with medical degrees and 18.2 % with master's degrees in the case of PRC immigrants. PRC immigrant employees were more likely to reside in Toronto and Vancouver, and they had on average 1.7 years less experience in Canada since landing than white employees. Similarly, white male selfemployed persons from the USA and Europe and male self-employed persons from the PRC show both differences and similarities in variables (Columns 3 and 4 in Table 17.4). PRC self-employed men were more likely to have a bachelor's degree or master's degree than white self-employed men, but the former had spent, on average, two years less in Canada since landing and tended to immigrate to Canada when two years older. Undoubtedly, differences in the mean and proportion of variables for the two groups produce some of the differences in average income.

Table 17.5 also indicates differences in the mean and proportion for female immigrants in the two groups. PRC female employees were more

Table 17.4 Mean (or proportion) of variables for USA and Europe white immigrants and PRC immigrants, landed in Canada 1990–2009, and in 2010 Canada labor force, non-primary sector, ages 20–64, male

	Male employed		Male self-employed	
	US and Europe white immigrants	PRC immigrants	US and Europe white immigrants	PRC immigrants
	[1]	[2]	[3]	[4]
High school diploma	0.1659	0.1624	0.1952	0.1800
Trades certificate or diploma	0.0491	0.0092	0.0769	0.0214
Registered apprentice- ship certificate	0.0451	0.0121	0.0396	0.0171
<1 year non-university certificate/diploma	0.0093	0.0033	0.0024	0.0064
1–2 years non-university certificate/diploma	0.0668	0.0224	0.0598	0.0171
>2 years non-university certificate/diploma	0.0908	0.0380	0.1125	0.0296
University certificate/ diploma below bachelor	0.0553	0.0743	0.0624	0.0893
Bachelor's degree	0.2103	0.3146	0.1727	0.3370
University certificate/ diploma above bachelor's	0.0677	0.0312	0.0668	0.0278
Medical degree	0.0081	0.0040	0.0157	0.0043
Master's degree	0.1388	0.1822	0.1116	0.1363
Earned doctorate degree	0.0389	0.0522	0.0228	0.0278
10–19 weeks worked	0.0421	0.0579	0.0238	0.0536
20-29 weeks worked	0.0535	0.0629	0.0617	0.0642
30-39 weeks worked	0.0460	0.0601	0.0856	0.0961
40-48 weeks worked	0.1643	0.1846	0.2793	0.2643
49-52 weeks worked	0.6770	0.5940	0.5377	0.4874
Worked full time or not	0.9098	0.8852	0.8680	0.8479
Number of years in	10.7314	9.0599	11.5990	9.5745
Canada since landing				
Age at immigration	28.9752	31.1429	31.1861	33.4437
Montreal	0.1898	0.0646	0.1758	0.0795
Toronto	0.4187	0.4792	0.4893	0.5177
Vancouver	0.1086	0.2661	0.1218	0.3190
Mean employment income	59,558	44,318	39,423	25,293
Weighted N	142,052	88,197	26,997	15,132

Source: Microdata file of 2011 National Household Survey, Statistics Canada

Table 17.5 Mean (or proportion) of variables for USA and Europe white immigrants and PRC immigrants, landed in Canada 1990–2009, and in 2010 Canada labor force, non-primary sector, ages 20–64, female

	Female employed		Female self-employe	ed
	US and Europe white immigrants	PRC immigrants	US and Europe white immigrants	PRC immigrants
	[1]	[2]	[3]	[4]
High school diploma	0.1447	0.1648	0.1025	0.1389
Trades certificate or diploma	0.0372	0.0137	0.0612	0.0235
Registered apprentice- ship certificate	0.0131	0.0097	0.0197	0.0067
<1 year non-university certificate/diploma	0.0194	0.0098	0.0144	0.0139
1–2 years non-university certificate/diploma	0.0903	0.0396	0.0887	0.0302
>2 years non-university certificate/diploma	0.0990	0.0600	0.0693	0.0579
University certificate/ diploma below bachelor's	0.0738	0.1063	0.0928	0.1281
Bachelor's degree	0.2580	0.3156	0.2310	0.3256
University certificate/ diploma above bachelor	0.0697	0.0315	0.0566	0.0134
Medical degree	0.0111	0.0113	0.0332	0.0168
Master's degree	0.1260	0.1212	0.1865	0.1162
Earned doctorate degree	0.0204	0.0152	0.0197	0.0067
10–19 weeks worked	0.0581	0.0749	0.0257	0.0848
20-29 weeks worked	0.0686	0.0803	0.0870	0.0772
30-39 weeks worked	0.0591	0.0687	0.0757	0.0973
40-48 weeks worked	0.1653	0.1658	0.2266	0.1795
49-52 weeks worked	0.6134	0.5620	0.5451	0.5085
Worked full time or not	0.7736	0.7870	0.6118	0.6625
Number of years in	11.0686	9.0262	11.1328	9.2014
Canada since landing				
Age at immigration	27.7461	30.1864	31.6695	32.2265
Montreal	0.1787	0.0667	0.1792	0.1174
Toronto	0.4546	0.4718	0.5247	0.4960
Vancouver	0.1146	0.2702	0.1243	0.3182
Employment income	39,309	32,818	24,916	17,090
Weighted N	139,709	97,232	13,173	9654

Source: Microdata file of 2011 National Household Survey, Statistics Canada

likely to reside in Toronto and Vancouver, and were two years older than white employees from the USA and Europe at the time of immigration. PRC self-employed women were more likely to have a bachelor's degree but less likely to have a master's degree, and had also spent two years less in Canada since landing than their white counterparts.

To assess the differences in returns of variables, separate regressions are used to estimate the coefficients for PRC immigrants and white immigrants from the USA and Europe, controlling for employment and self-employment as well as for gender (Appendix 1). The regression coefficients for men are reported in Appendix 2 and those for women in Appendix 3.

The data show that the returns for some variables were much higher for white male employees than for employees from the PRC (Columns 1 and 2 in Appendix 2). For example, holding other variables constant, the returns on a medical degree were \$57,387 and those on a doctorate were \$60,613 for white male employees, compared with \$32,274 on a medical degree and \$42,818 on a doctorate for male employees from the PRC. Residing in Toronto and Vancouver brought a lower return for PRC male employees than for white male employees, and age at immigration also brought unequal returns. White male employees working full time earned \$30,679 more than part-time workers, while PRC male employees working full time earned \$14,954 more than their part-time counterparts. A comparison of regression coefficients also indicates similar differences between the two male self-employed groups, with white self-employed men having higher returns in many similar variables than self-employed men from the PRC.

The data also show higher returns for many variables for white female employees compared with female employees from the PRC (Columns 1 and 2 in Appendix 3). Advanced degrees in general and working full time brought higher returns for the former group, and residing in Toronto and Vancouver brought lower returns for the latter group. For self-employed persons, a medical degree and a doctorate still brought higher returns for white women than for women from the PRC, but a master's degree yielded a higher return for the latter. Residing in the three metropolitan centers brought higher returns to PRC self-employed women, but working full time produced lower returns for them than for white self-employed women.

Given the data, it can be concluded that the income disparity between white immigrants from the USA and Europe and immigrants from the PRC came from two sources: differences in levels of variables as given in Tables 17.4 and 17.5, and differences in returns on variables as given in

Appendices 2 and 3. Using the Blinder–Oaxaca method of decomposition (Blinder, 2003; Oaxaca, 1973), the income difference between the two groups can be divided into (1) explained differences owing to unequal levels and (2) unexplained differences owing to differential returns.

Using the values of mean in Tables 17.4 and 17.5 and the regression coefficients in Appendices 2–4, the income difference between white immigrants from the USA and immigrants from the PRC for male employees, male self-employed, female employees and female self-employed are decomposed into explained and unexplained differences (Appendix 1).

The decomposition indicates that white male employees earned \$15,240 a year more than male employees from the PRC. Unequal levels of variables in the two groups accounted for minus \$2613, and differences in returns produced a difference of \$17,856 a year. In other words, the PRC immigrants actually had higher levels in some variables than white immigrants that produced a compensatory effect to offset the total income disadvantage resulting from unequal returns. Put another way, having higher levels in some variables allowed PRC immigrants to make up some income disadvantages. Otherwise the income inequality would have been even greater. It can be concluded that the entire income disparity (100 %) between white male employees and male PRC employees can be attributed to unexplained differences arising from unequal returns.

For male self-employed persons, 84 % of the total income difference of \$14,130 between the two groups was the result of an unexplained difference, while 16 % of the income difference had to do with unequal levels of variables or an explained difference. For female employees, 68 % of the difference of \$6491 came from an unexplained difference, and 32 % from differences in variable levels. Finally, 89 % of the income difference of \$7826 between self-employed women from the USA and Europe and PRC self-employed women had to do with an unexplained difference resulting from unequal returns.

Thus only a small part of income difference between white immigrants from the USA and Europe and immigrants from the PRC can be attributed to the way influencing variables are distributed in the two groups or to unequal levels in various variables for the two groups. Most of the income differences have to do with unexplained differences arising from unequal returns.

The question of what unequal returns means is often difficult to answer. In this comparison, unequal returns in credentials may be understood as PRC immigrants who have the same level of credentials not receiving the

same returns in income as white immigrants from the USA and Europe. Such a difference may be because the credentials of PRC immigrants are not valued in the same way in the Canadian labor market as credentials of immigrants from the USA and Europe, or owing to discrimination against PRC immigrants as a result of race, accent and fluency in the official languages. It has been pointed out that the problem of foreign credential devaluation in Canada goes beyond just credentials, since the racial features of holders of credentials often become inseparable from their credentials in the course of being evaluated in the labor market (Li 2001, 2008). Similarly, lower returns as a result of higher concentration in the metropolitan centers of Vancouver and Toronto suggest that local racial sentiment in cities of high Chinese concentration might negatively affect the labor market returns for Chinese immigrants, or might indicate keener competition and lower wages among these individuals in the immigrant enclaves of large cities.

It is not clear how new Chinese immigrants cope with unequal conditions in Canada's labor market. Their high rate of self-employment despite lower returns than other self-employed immigrants suggests that some new Chinese immigrants might be using self-employment as an adaptive strategy to avoid even more unfavorable conditions of employment. Other indications suggest that the new Chinese immigrants face harsh criticism in metropolitan centers such as Toronto and Vancouver, where housing prices have risen quickly in recent years, and where public demand for controls on "foreign" ownership has mounted.

Conclusion

Since the 1990s, a new wave of Chinese immigrants from the PRC has arrived in Canada, and the PRC, and not Hong Kong, has become the main source of Chinese immigration. The new Chinese immigrants tend to be better educated and more likely to be admitted into Canada as economic immigrants than their predecessors. They also tend to be more diverse in terms of place of origin and occupational background. Like other Chinese in Canada, new Chinese immigrants are likely to live in Vancouver and Toronto. The rise of this new wave of Chinese immigration has been assisted by two forces: Canada's rising demand for skilled labor in the information age and China's graduate surplus as a result of the higher education reform.

Despite arriving with better credentials than their predecessors, the new Chinese immigrants receive less income than white immigrants. When the employment income of new immigrants from mainland China was compared with that of immigrants from other regions and countries, as listed in Table 17.3, new Chinese immigrants from mainland China fared slightly worse than immigrants from Hong Kong but much better than immigrants from Asia, the Middle East, Central and South America, and Africa. Yet they tended to do much worse than white immigrants from the USA, Europe and other regions.

A detailed decomposition of the factors that cause these differences indicates that the main source of the disparity (controlling for gender, and employment and self-employment status) is unequal returns that cannot be explained by differences in human capital and other variables in the analytical model. Intergroup differences in the distribution of education and other relevant factors account for only a small proportion of the income disparity.

Despite good credentials and relative youth at the time of arrival, new Chinese immigrants were disadvantaged in Canada's labor market compared with white immigrants from the USA and Europe. It is not entirely clear what the exact sources of income disadvantage were, but they were probably related to race, foreign credentials and language. These factors probably combine to produce complex racial inequality in the labor market. The level of educational credentials of PRC immigrants, combined with other features, produced some compensatory effects for the PRC male immigrant employees, without which the income disadvantage would have been greater.

Meanwhile, the arrival of substantial numbers of immigrants from the PRC since the 1990s has altered the composition of the Chinese community in Canada. Affluent residential areas traditionally occupied by white Canadians are becoming choice locations for many new Chinese immigrants. Suburbs such as Richmond in Vancouver and Markham and Richmond Hill in Toronto now have high concentrations of the Chinese, with expensive Chinese restaurants, shops and professional services. The Mandarin language has also become popular in the Chinese community of Canada as businesses and service workers cater to the new clientele. At the same time, there are emerging signs that the Chinese newcomers are largely being blamed for driving up house prices in major metropolitan centers to the point that houses have become unaffordable for average Canadians. There are also occasional complaints about the rapid growth of Chinese businesses in heavily Chinese neighborhoods. Complaints focus on issues such as "traditional" Canada rapidly being changed by Asian immigrants and the "excessive" use of Chinese language by Chinese businesses in public signs. As more Chinese immigrants arrive in Canada from the PRC, the Chinese community will continue to be shaped and reshaped, and public reactions to their presence will likely continue.

Finally, as Canada continues to rely on the new economy, its demand for immigrants with professional and technical skills is likely to increase. Thus far the PRC has furnished Canada with a substantial supply of university-educated immigrants, partly as a result of an abundance of university graduates in China and the large number of Chinese students going abroad to study. However, as China's transitional economy continues to undergo restructuring, its demand for professional and technical workers will also increase, and the improved remuneration offered to highly skilled professionals will persuade more Chinese to stay. The continuing improvement in economic opportunities in China and the persistence of income inequality for new Chinese immigrants in Canada may trigger return migration and a slowing down of future Chinese immigration to Canada.

APPENDIX 1. REGRESSION MODELS AND METHOD OF DECOMPOSITION

The mean income of white immigrants from the USA and Europe and that of PRC immigrants, controlling for employment and self-employment status, and gender, may be expressed as follows:

$$\bar{Y}^{US,Europe} = a^{US,Europe} + \sum \left(b_i^{US,Europe} \bar{X}_i^{US,Europe} \right) \tag{1}$$

$$\bar{Y}^{PRC} = a^{PRC} + \sum \left(b_i^{PRC} \bar{X}_i^{PRC} \right), \tag{2}$$

where $a^{US,Europe}$ and a^{PRC} are regression intercepts; $\bar{X}_i^{US,Europe}$ and \bar{X}_i^{PRC} are the mean of variable X_i for the two respective groups; and $b_i^{US,Europe}$ and b_i^{PRC} are regression coefficients associated with X_i for the two groups.

Subtracting Eq. 2 from Eq. 1 gives the total income difference between the groups as follows:

$$\begin{split} & \bar{Y}^{US,Europe} - \bar{Y}^{PRC} \\ &= a^{US,Europe} + \sum \left(b_i^{US,Europe} \bar{X}_i^{US,Europe}\right) - \left[a^{PRC} + \sum \left(b_i^{PRC} \bar{X}_i^{PRC}\right)\right] \\ &= \left(a^{US,Europe} - a^{PRC}\right) + \sum \left(b_i^{US,Europe} - b_i^{PRC}\right) \bar{X}_i^{PRC} \\ &+ \sum b_i^{US,Europe} \left(\bar{X}_i^{US,Europe} - \bar{X}_i^{PRC}\right) \end{split}$$

The first two components are differences owing to unequal returns; the last component measures differences owing to unequal levels of variables as follows:

$$\begin{split} \text{Explained difference} &= \sum b_i^{\textit{US},\textit{Europe}} \big(\bar{X}_i^{\textit{US},\textit{Europe}} - \bar{X}_i^{\textit{PRC}} \big) \\ \text{Unexplained difference} &= \big(a^{\textit{US},\textit{Europe}} - a^{\textit{PRC}} \big) \\ &+ \sum \Big(b_i^{\textit{US},\textit{Europe}} - b_i^{\textit{PRC}} \Big) \bar{X}_i^{\textit{PRC}} \end{split}$$

Appendix 2. Regression Coefficients on Employment Income FOR US AND EUROPEAN IMMIGRANTS AND PRC IMMIGRANTS, MALE EMPLOYED AND MALE SELF-EMPLOYED

	Male employed		Male self-employ	yed
	US, European immigrants	PRC immigrants	US, European immigrants	PRC immigrants
	[1]	[2]	[3]	[4]
Intercept No certificate, diploma or degree (reference)	-23142.443	-18346.565	-23142.443	-18346.565
High school diploma	-3698.266	5352.58	-3698.266	5352.58
Trades certificate or diploma	808.257	12376.838	808.257	12376.838
Registered apprenticeship certificate	1760.556	17636.208	1760.556	17636.208
<1 year non-university certificate/diploma	6853.875	18100.529	6853.875	18100.529
1–2 years non-university certificate/diploma	-1856.926	5383.262	-1856.926	5383.262
>2 years non-university certificate/diploma	1441.054	11443.024	1441.054	11443.024
University certificate/diploma below bachelor's	3264.984	15267.894	3264.984	15267.894
Bachelor's degree	21090.584	23213.501	21090.584	23213.501
University certificate/	28203.972	32964.51	28203.972	32964.51
diploma above bachelor's				
Medical degree	57386.77	32273.933	57386.77	32273.933
Master's degree	35225.516	36357.057	35225.516	36357.057

(continued)

APPENDIX 2 (CONTINUED)

	Male employed		Male self-employ	yed
	US, European immigrants	PRC immigrants	US, European immigrants	PRC immigrants
	[1]	[2]	[3]	[4]
Earned doctorate degree Worked 1–9 weeks in 2010 (reference)	60612.796	42818.253	60612.796	42818.253
Worked 10–19 weeks in 2010	-4332.248	1976.073	-4332.248	1976.073
Worked 20–29 weeks in 2010	5201.031	7334.847	5201.031	7334.847
Worked 30–39 weeks in 2010	3367.434	9774.074	3367.434	9774.074
Worked 40–48 weeks in 2010	20841.024	20792.51	20841.024	20792.51
Worked 49–52 weeks in 2010 Part-time work in 2010 (reference)	27365.629	33381.226	27365.629	33381.226
Full-time work in 2010	30679.219	14953.581	30679.219	14953.581
Years in Canada since landing (scale variable)	832.165	887.966	832.165	887.966
Age at immigration (scale variable) Resided in other areas (reference)	551.977	161.878	551.977	161.878
Resided in Montreal Resided in Toronto Resided in Vancouver R squared Weighted N	-17557.093 -7408.04 2621.196 0.137 142,052	-14622.671 -9022.756 -13108.875 0.288 88,197	-17557.093 -7408.04 2621.196 0.137 142,052	-14622.671 -9022.756 -13108.875 0.288 88,197

Source: Microdata file of 2011 National Household Survey, Statistics Canada

APPENDIX 3. REGRESSION COEFFICIENTS ON EMPLOYMENT INCOME FOR US AND EUROPEAN IMMIGRANTS AND REGRESSION COEFFICIENTS ON EMPLOYMENT INCOME FOR US AND EUROPEAN IMMIGRANTS AND PRC IMMIGRANTS, FEMALE EMPLOYED AND FEMALE SELF-EMPLOYED

	Female employed		Female self-employed	
	US, European immigrants	PRC immigrants	US, European immigrants	PRC immigrants
	[1]	[2]	[3]	[4]
Intercept No certificate, diploma or degree (reference)	-29919.748	-19680.22	19141.175	-22210.213
High school diploma	9067.949	4143.369	-21826.165	11848.255
Trades certificate or diploma	7307.058	4249.67	-16675.208	16010.241
Registered apprenticeship certificate	7193.521	6430.063	-33668.486	-7249.264
<1 year non-university certificate/diploma	6723.737	10866.005	-15678.197	270.393
1–2 years non-university certificate/diploma	10113.838	11701.568	-21742.838	10985.479
>2 years non-university certificate/diploma	15716.02	8206.178	-7223.052	15876.964
University certificate/ diploma below bachelor	16169.421	11386.545	-20253.867	8283.154
Bachelor's degree	23315.869	20786.518	-10263.863	16883.779
University certificate/ diploma above bachelor's	26125.986	22077.889	-21580.157	9619.841
Medical degree	39553.874	30657.622	71341.18	1286.4
Master's degree	33406.297	31154.013	-7038.947	18608.326
Earned doctorate degree Worked 1–9 weeks in 2010 (reference)	44791.19	32515.69	16104.412	1684.856
Worked 10–19 weeks in 2010	4082.482	1020.038	5555.412	-2447.072
Worked 20–29 weeks in 2010	9917.052	5608.231	8472.108	4964.889
Worked 30–39 weeks in 2010	11943.844	8596.827	9586.668	14120.916
Worked 40–48 weeks in 2010	23294.084	15959.781	25629.204	9613.937

(continued)

Appendix 3	(CONTINUED)
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	Female employed		Female self-emp	oloyed		
	US, European immigrants	PRC immigrants	US, European immigrants	PRC immigrants		
	[1]	[2]	[3]	[4]		
Worked 49–52 weeks in 2010			16137.218	12564.955		
Part-time work in 2010 (reference)						
Full-time work in 2010	19246.391	14771.6	11880.319	1977.42		
Years in Canada since landing (scale variable)	789.043	891.121	221.407	1083.381		
Age at immigration (scale variable)	200.025	149.063	-153.061	156.079		
Resided in other areas (reference)						
Resided in Montreal	-6711.519	-9741.093	-17189.396	1692.075		
Resided in Toronto	-1915.475	-2448.084	-2100.32	2214.615		
Resided in Vancouver	-340.042	-7944.132	-3736.741	-256.706		
R squared	0.235	0.305	0.229	0.106		
Weighted N	139,709	97,232	13,173	9654		

Source: Microdata file of 2011 National Household Survey, Statistics Canada

Appendix 4. Decomposing Employment Income Difference between US and European Immigrants and PRC Immigrants, for Male and Female Employed and Self-Employed

	employed ———	Male self- employed		
		[2]	[3]	[4]
US and Europe immigrants' mean income: Y ^{US} , Europe	59,558	39,423	39,309	24,916
PRC immigrants' mean income: Y ^{PRC}	44,318	25,293	32,818	17,090
Difference in mean income: Y ^{US, Europe} -Y ^{PRC}	15,240	14,130	6491	7826

(continued)

PENDIX 4 (CONTINUED)
PENDIX 4 (CONTII

	Male employed [1]	Male self- employed ————[2]		Female self- employed [4]
Explained difference owing to distribution of levels of independent variables in the two groups	-2613	2284	2101	862
Unexplained difference owing to differential returns in unitary change of independent variables	17,856	11,842	4387	6964
% Income difference owing unexplained difference (or unequal returns)	100	84	68	89

Source: Calculated from Tables 17.4 and 17.5, Appendices 2 and 3

Notes

- 1. See Li (2005, 2008) for a more thorough analysis of these factors.
- 2. UNESCO defines Gross Enrolment Ratios or (GER) as "the total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given year" (United Nations Educational, Scientific and Cultural Organizations 2009: 193). For China, the number of students enrolled in post-secondary education in 2009 made up 23 % of the post-secondary school-age population in 2009, compared to 8 % in 2000.
- 3. In 2011 the Government of Canada replaced the compulsory Census long-form questionnaire with the non-compulsory National Household Survey. The data released under the 2011 National Household Survey are essentially the same as those released under recent past censuses, but the response rate tended to be lower in the 2011 National Household Survey. Statistics Canada releases a sample weight for each individual in the microdata file to compensate for non-responses in the 2011 National Household Survey.
- 4. When other variables are included in subsequent analysis, the number of PRC-born immigrants who immigrated to Canada between 1990 and 2009, ages 20 to 64 in 2010 and participated in Canada's labor market, non-primary sector, with employment or self-employment, may become slightly less than 211,525, owing to a small number of missing values in some variables.
- 5. Only 1003 PRC-born immigrants were in occupations unique to the primary sector in 2010. They were not included in the analysis.

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