Relative wages of immigrants and native-born Canadians in four major Canadian metropolitan areas: 1981 to 2006

By

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Abstract

Using data drawn from the Canadian censuses of 1981, 1991 and 2006, this paper shows the trends in the wage gaps between four major metropolitan areas (Toronto, Montreal, Calgary and Vancouver) and the rest of Canada, for both immigrants and native-born Canadians. The results show that immigrants have benefited less than non-immigrants from living in those metropolitan areas during the last thirty years. In addition, those wage gaps have been increasing since the 1980s, and they are always larger for males than for females. The paper also observes that the wage gap in Montreal is larger than in other areas of Canada, and that it is smaller in Calgary than in the other three metropolitan areas.

1. Introduction

Immigrants have become major participants in Canada's labour market. The extent to which the large number of immigrants can play a positive role in the labour market and how much those immigrants differ from the native-born Canadians are popular topics for economic researchers. Many studies have analyzed the income gap between immigrants and native-born Canadians, as well as other aspects of immigrants' labour market performance. Those studies have shown that wage gaps between immigrants and native-born have consistently widened in recent decades. Other studies have focused on the immigrants' labour market performance in different geographical areas and have found that immigrants are likely to live in large metropolitan areas when they arrive in Canada, because large metropolitan areas might have more job opportunities for immigrants.

This paper compares wages between the Canadian metropolitan areas of Toronto, Montreal, Calgary and Vancouver, and the rest of Canada, for immigrants and native-born Canadians respectively, during the last three decades, and tries to determine if the wage gap in metropolitan areas is related to migration patterns. The reasons I chose those four metropolitan areas are as follows: Toronto and Vancouver are the two largest metropolitan areas in Canada, as far as their immigrant populations are concerned; they have been attracting large numbers of immigrants over the past 40 years. Montreal is also an important immigrant metropolitan area, with its own linguistic and demographic characteristics. Calgary's population has been growing, both immigrants and native-born, in the 21st century due to its energy industry.

Using the public use micro-data files of the Canadian Census, I chose three sample years from the last thirty-five years: 1981, 1991 and 2006. Labour market conditions were

relatively similar during these three years, and they were reflective of typical labour market circumstances. In contrast, in the first half of the 1980s and 1990s, there were two economic recessions, and so it is preferable not to use data near those periods. This paper also includes some control variables to analyze the trends in the wage gap variables, such as education level, marital status, knowledge of languages, and so on.

The paper is organized as follows. In Section 2, I summarize some of the literature associated with the labour market performance of immigrants in metropolitan areas; more precisely, I look at the income gap between immigrants and native-born Canadians, and also at the distribution of immigrants across metropolitan areas in the country. The second part is devoted to the presentation of the data and the descriptive statistics. Then I discuss the econometric model and empirical strategy in Section 4. In Section 5, the empirical results of the paper are presented. The conclusions are listed in the last section.

2. Literature review

This section surveys some of the literature associated with immigrants' labour market performance, and some of the literature associated with immigrants' economic impact on the host society. Researchers have spent time studying the distribution of immigrants in metropolitan areas as well as the performance of immigrants in the host country labour market. They found that immigrants' wages in relatively small areas are lower than in large metropolitan areas. They also found that immigrants are more likely to live in large metropolitan areas because of the social network effects, such as ties with family members and social communications that can facilitate in finding work.

With data drawn from the 1970 United States Census, Chiswick (1978) did a comparative analysis of the earnings of immigrants and native-born white men in the

United States and found that immigrants tend to earn much less than native-born Americans when they first arrive. The number of years of schooling, the total years of labour market experience, and the country of birth are the major factors that affect the income gap. However, the earnings levels of immigrants exhibit an upward trend as the number of years since migration increase. It takes immigrants ten to fifteen years after they arrive in the US to reach the same income level as native-born Americans, and this process is called assimilation. After the assimilation process, immigrants' earnings levels may even exceed those of the native-born Americans due to various reasons, such as having higher innate ability, being more highly motivated, and so on.

Borjas (1985) analyzed 18 specific immigrant cohorts by combining the 1970 and 1980 Public Use Samples of the U.S Census, and stressed the differences between cross-sectional and cohort based analyses of earnings determination. The author criticizes two major points of view which are found in cross-section empirical studies: immigrants' earnings grow rapidly as they assimilate into the US, and after 10 to 15 years, immigrants' earnings overtake those of the native-born. Borjas concluded that the earnings growth of cohorts of immigrants is much lower than that predicted by cross-section regressions. The earnings growth of immigrant cohorts relative to the native cohorts is also overestimated, but the performance of immigrants can be improved as they assimilate into the United States.

Bloom and Gunderson (1991) examined the earning levels of Canadian immigrants in comparison to those of non-immigrant populations and focused on whether there is a relationship between earnings and year of immigration. With data from the 1971 and 1981 Canadian censuses, they drew a similar conclusion as Chiswick (1978) and found that it

took immigrants ten to fifteen years to reach full assimilation. In addition, like Borjas (1985), they found that the quality of immigrants has declined since the 1970s when the immigration policies changed. Before the 1970s, most immigrants were well educated and arrived from developed countries such as those of Western Europe. Those immigrants had similar cultural backgrounds as native-born Canadians, and most of them did not have language barriers--they could speak either English or French when they arrived in Canada. However, the New Immigration Act (1976, proclaimed in 1978) set up the basic framework of Canada's modern immigration policy that exists to this day, and it divided immigrants into four categories: Independent Class, Family Class, Assisted Relative Class, and Humanitarian Class. After the 1970s, the number of immigrants admitted on the basis of family ties increased, and the composition of source countries changed. In particular, the number of visible minority immigrants from less developed countries increased; most of them had language barriers and experienced difficulty being integrated into the labour market.

Baker and Benjamin (1994) analyzed the performance of immigrants in Canada's labour market. Using the data from the 1971, 1981 and 1986 Canadian censuses, the authors indicated that immigrants first enter the Canadian labour market with relatively low earnings, a finding which is similar to those reported in the previous studies. However, Baker and Benjamin hold a pessimistic view that immigrants are unlikely to ever reach the same earning levels as natives based on the low assimilation rate, and the fact that the gap between immigrants' and natives' earning profiles is increasing.

Using data from the Canadian censuses of 1971, 1981 and 1996, Bloom, Grenier, Gunderson (1995) found that it took immigrants from Asia, Africa and Latin America

more years to achieve the same earning levels as native-born Canadians than immigrants from the US and Europe. They also suggested that the decreasing quality of immigrants (immigrants being from developing countries and having less skills that can be used in the Canadian labour market), discrimination, and the economic recessions accounted for the low assimilation rate of the post-1970 immigrants compared with immigrants who came earlier.

Grant (1999) examined the micro-data files of the Canadian censuses of 1981, 1986 and 1991 and obtained different results from the previous ones. She asserted a more favorable perspective than did the preceding studies, based on the finding that the assimilation rates of the new male immigrants who arrived in Canada during the early 1980s were rising and that there seemed to be no downward trend in entry earnings. Because Grant added data from the 1991 Census, she found that the immigrants who arrived in the early 1980s appear to have avoided the plight of immigrants who arrived just before them; their entry earnings stopped decreasing, and she estimated a 17% assimilation rate.

Using Canadian Census data from the years 1981 to 2001, Aydemir and Skuterud (2005) analyzed the reasons for the drop in initial earnings of recent immigrants. They found three major reasons for the overall deterioration in the entry earnings of Canada's immigrants: one third of the decline is accounted for by lower language ability; another third can be explained by the shift away from traditional European countries to Asian countries; and the remainder of the decline in immigrants' entry earnings is due to the declining returns to foreign labour market experience.

Grenier and Nadeau (2011) found that the employment gap (defined as the native-born Canadians' employment rate minus the immigrants' employment rate) is larger in Montreal than in Toronto. Using micro data from the 2006 Census, their work shows that the large employment rate gap in Montreal is due to language skills and to labour market discrimination. Immigrants in Montreal are less likely to speak French than immigrants in Toronto to speak English, and the labour market discrimination faced by the immigrants in Montreal would also be French language related. The authors found that immigrants' labour market performance is also related to where those immigrants come from.

Bonikowska, Green and Riddell (2010) provided new insights on the performance of immigrants by using data from the International Adult Literacy and Skills Survey (IALSS) and the Canadian component of the Adult Literacy and Life Skills Survey (ALL, 2003). Their data include standard demographic and labour market information for native-born and immigrants, along with results from tests of literacy, numeracy and problem-solving skills. The authors found that work experience, skills and education are three major factors determining the labour market performance for immigrants. Their work shows that immigrants who completed their higher education in Canada have more highly remunerated skills in Canada's labour market, and are likely to earn more than foreign-educated immigrants. The authors also obtain the results that language is an important factor influencing immigrants' performance in Canada's labour market.

According to Citizenship and Immigration Canada (2005), immigrants are becoming more geographically concentrated in major centers. Using data from the Canadian Census of 2001, they show that more than 70% of immigrants were living in the three largest metropolitan areas of Toronto, Montreal and Vancouver. One-half of Canada's population

lives in close proximity to recent immigrants with diverse geographic origins and cultural backgrounds. Until 2001, one-half of recent immigrants were working-age adults 25 to 44 years, and only a few of the recent immigrants were older than 45. Results also show that 90 percent of the recent immigrants who have arrived since the 1990s can speak English or French, and that women are somewhat less likely than men to have conversational knowledge of English or French. The research also shows that immigrants are more likely to have a university degree than the native-born (one-third of very recent immigrants compared to 14% of Canadian-born); this phenomenon is more apparent for immigrants who landed in Canada after 1996. On the other hand, immigrants are less likely to have an intermediate level of education (high school, college diploma or trade certificate) than the native-born.

Gilmore (2008) noted that immigrants from Asia are the largest immigration group in Canada, but their employment rate was much lower than that of the native-born Canadians (the employment rate were 63.8% for Asian immigrants and 83.1% for native-born in 2006). Gilmore also indicates that immigrant males are more likely to be working than immigrant females, and that the unemployment rate for immigrant females is about 2.8 times higher than that of native-born females. Most immigrants are more likely to work in high population density areas than in low population density areas; they prefer Ontario, British Columbia and Quebec.

Xue (2008) analyzed the relationship between social capital and the labour market outcomes of immigrants. According to Xue, social capital can be categorized into Kinship Network (relationships with family members and relatives), Friendship Network (relationship with friends and workmates), and Organizational Network (religious groups,

immigrant associations). Using data from the Longitudinal Survey of Immigrants to Canada (a survey designed to study how newly arrived immigrants adjust to living in Canada during their first four years of settlement), Xue reveals that social capital plays an important role on the labour market, especially for job opportunities for the first four years after the immigrants landed. The author also concludes that social capital effects are different between genders; metropolitan areas attract female immigrants more than they attract male immigrants.

Hou (2007) did similar research about immigrants' concentration and labour market performance. Using the data from consecutive censuses of Canada between 1981 and 2001, Hou concluded that most immigrants in Canada during the last two decades were likely to live in Toronto and Vancouver. However, Hou reveals that the relative labour market performances of immigrants in Toronto and Vancouver have worsened since the 1990s due to the large number of new immigrants from less developed countries during that period.

To conclude, although the wage gap between immigrants and native-born remains large in the Canadian major metropolitan areas, which means that immigrants' labour market performances are not as favorable as those of the native-born, immigrants still prefer to live in those metropolitan areas because of the perceived benefit that the social network can provide.

3. Data, Sample and Descriptive Statistics

The data used in this paper are taken from the public use micro-data files on individuals of three Canadian censuses. These files contain a great deal of information on demographic characteristics, education, immigration status, sources of income, and labour market activity.

In order to compare over time the earnings of immigrants and native-born Canadians among several major metropolitan areas, this paper chooses three representative years over the last 30 years: 1981, 1991 and 2006. As I mentioned in the first section, labour market conditions were relatively similar during these three years, and they were reflective of typical labour market circumstances. One difficulty is that the definitions of the variables for the three sample years are not exactly the same. So the first step is to recode the data, trying to reconcile the differences as much as possible. During the recoding process, I focus on individuals aged 24 to 65 years, which are considered to be the standard working ages of participants in the full time labour market. In addition, I excluded individuals from the Atlantic Provinces because the information from those provinces is not consistent for all the three census years. Due to geographic characteristics (such as the absence of big cities) and to the development situation of these areas, few immigrants live in those provinces. A good example is Newfoundland and Labrador, whose population is only around 0.5 million, which is about 1.5% of Canada's population. The immigrants in this province represent an even lower proportion. Being only 8000 in 2001, they account for about 1% of total Canadian immigrant population (Citizenship and Immigration Canada, 2005). Thus, data from those areas cannot influence our results much.

After recoding the values of the variables for all three sample years, the following two tables show some summary information. Table 1 presents the proportion of immigrants in the representative metropolitan areas and in the rest of the Canada for the years 1981, 1991 and 2006.

Table 1. Proportion of Immigrants in some Metropolitan Areas and in the Rest of Canada

	1981	1991	2006
Toronto	48.3%	47.3%	51.9%
Montreal	21.3%	18.7%	19.5%
Calgary	24.6%	24%	22.9%
Vancouver	35.2%	35.1%	41.1%
Rest of Canada	14.7%	12.8%	8.2%

Source: Author's calculations from the public use micro-data file of Canadian Census, 1981,1991, 2006

In 1981, of all people living in Toronto aged 24 to 65, 48% were immigrants, and this proportion was 35% in Vancouver. The proportion is much lower in the other two metropolitan areas, at 25% in Calgary and 21% in Montreal. However, compared to the rest of Canada, the immigrant proportions in those four metropolitan areas are very large.

In 1991, the immigrant proportion in all these metropolitan areas declined slightly, due to the relatively low immigration levels during the 1980s. Similarly to 1981, Toronto and Vancouver had the largest immigrant proportions. However, the immigrant proportion in the rest of Canada declined to 13%.

In 2006, due to the high immigration levels over the 1990s and early 2000s, the immigrant proportion in the four metropolitan areas increased except in Calgary. The reason the proportion is not increasing in Calgary is that it is also attracting a lot of Canadian-born people from other regions of the country. More than half of the people who

live in Toronto are immigrants, and about 41% of the people in Vancouver are immigrants. The immigrant proportion in the rest of Canada declined again, from 13% to 8% between 1991 and 2006.

To summarize our findings in Table 1, the immigrant proportions in Toronto and in Vancouver are much higher than in the rest of Canada during the entire period. They registered a slight decrease in 1991 and a large increase in 2006. In Montreal and Calgary, the immigrant proportion did not change much. However, for the rest of the country, the immigrant proportion declined. We can conclude that immigrants steadily prefer living in the large metropolitan areas than in the rest of the country.

Table 2 compares the distributions of immigrants and native-born Canadians among the regions of the country.

Table 2. Distribution of Immigrants and Native-Born across regions

	1981		1991		2006	
	Immigrant	**Native-born**	**Immigrant**	**Native-born**	**Immigrant**	**Native-born**
Toronto	33.9%	10.6%	37.8%	11.4%	45.5%	10.8%
Montreal	12.6%	13.6%	11.2%	13.2%	12.2%	13%
Calgary	3.4%	3.1%	3.8%	3.3%	4.6%	4%
Vancouver	10.05%	5.39%	11.20%	5.61%	14.53%	5.34%
Rest of Canada	40.1%	67.4%	37%	66.5%	23.2%	66.9%
Total	100%	100%	100%	100%	100%	100%

Source: Author's calculations from the public use micro-data file of Canadian Census, 1981, 1991, 2006

More than one in three Canadian immigrants has lived in Toronto during the last three decades. That share goes from 34% in 1981, to 38% in 1991, and to a huge 46% in 2006. There are also large proportions of immigrants who live in Montreal, and

Vancouver, with a similar evolution as in Toronto. We can also see that slightly more immigrants have been migrating to Calgary in the last thirty years.

The majority of the native-born Canadians do not live in these four metropolitan areas, and this phenomenon has not changed much since the 1980s. In 1981, 67 % of the native-born Canadians lived in areas other than Toronto, Montreal, Calgary and Vancouver. This share remained almost the same in 1991 and in 2006. Another difference between the immigrant and native-born Canadians distribution is that the largest share among these four metropolitan areas of native-born Canadians lives in Montreal, with about 13% in all three sample years.

Calgary maintains a low population share for both immigrants and native-born Canadians. However, what we should notice is that in Calgary, for both immigrants and native-born Canadians, the proportion in 2006 increased, from which we can infer that people have been more likely to migrate to Calgary in recent years; its population is growing rapidly.

To conclude, since the 1980s, most immigrants have preferred to live in these four metropolitan areas, while the proportion of native-born Canadians living in the rest of the country remained stable. The immigrant populations become even more concentrated in those four metropolitan areas.

4. Empirical Strategy and Models

To compare the wage gap between the four Canadian metropolitan areas and the rest of Canada for immigrants and native-born Canadians across decades, the econometric method that I use in this research is a wage regression that is estimated via the Ordinary Least Squares method (OLS). The model includes the log wage of the individuals as the

dependent variable, and dummy variables for the metropolitan areas of Toronto, Montreal, Calgary, Vancouver (with the rest of Canada as reference category), education effects, age effects, interaction variables between marital status and gender, the number of years since migration, the number of hours worked for pay or in self-employment during the reference week, and the knowledge of languages as independent variables.

The econometric model is specified as follows:

$$LW = \alpha_1 AGE + \alpha_2 AGE^2 + \alpha_3 YM + \alpha_4 YM^2 + \alpha_5 TOR + \alpha_6 MOT + \alpha_7 CAL + \alpha_8 VAN + \alpha_9 MAN + \alpha_{10} MARRIED + \alpha_{11} NEAF + \beta_1 EDU_i + \varepsilon$$

Dependent variable:

LW : Log of Wages and Salaries Income.

During recoding of the dependent variable, I exclude observations with earnings of either less than 500 dollars or more than 200,000 dollars per year for all the three sample years.

Independent variables:

AGE: Age of the Respondents in Years.

I select the age group from 25 to 64 years old, because people younger than 25 or older than 64 are not expected to work full time in Canada's labour market (being either students or retired). In the years of 1981 and 1991, the variable "age" is given in single years and we can use it directly. However, in 2006, the information for age is classified into five-year groups. I take the midpoints of each age group; for example, for the group that includes ages ranging from 25 to 29 years old, I recode to age 27. I also use age squared to capture non-linear effects.

YM: Years since Migration.

An important variable in the model for immigrants is the number of years since migration, and I use it to capture the assimilation effect. Because the categories of Years since Migration are different in each census year, I recoded it to YM for all the sample years. For example, some data of Year of immigration are defined into ranges, such as "1967 to 1969"; in this situation, I use the midpoint "1968" to define YM. The earliest year of immigration in our sample data is 1945; I exclude the years before 1945 because immigrants who immigrated to Canada before 1945 are not supposed to be in the labour market in our sample years (1981, 1991 and 2006). YM is set to zero for the native-born Canadians, so it can measure the changes of log income for immigrants as the number of years living in Canada increases.

Metropolitan Area Variables:

A group of categorical variables captures the regional effects. In this paper, I compare four metropolitan areas: Toronto (TOR), Montreal (MOT), Calgary (CAL), and Vancouver (VAN). Toronto, the largest metropolitan area in Canada, has a large number of immigrants. Montreal, a representative metropolitan area in a French-Speaking area, has a bilingual labour market. Employment opportunities have expanded in Calgary due to rapid growth in the energy industry. Vancouver is the third largest metropolitan area in the country, with a huge immigrant population coming from Asia, due in part to the Chinese government's decision to cede control of Hong Kong back to China in 1997.

Education Indicators:

The education level is also an important potential determinant of wages. The higher the level of education, the more likely an individual is to find a good job and earn a higher

income. Thus, I divide education levels into four categories: no degree, high school diploma (denoted by HS), the college degree or equivalence (denoted by COL), and university degrees or higher (denoted by UNI), and I use no degree as the benchmark.

Gender and Marital Status:

Gender and marital status are important determinants of an individual's incomes. In this paper, I define a dummy variable MALE, which is equal to 1 for a male and 0 for a female. I expect a positive sign for MALE, which indicates that holding other variables constant, males will earn more than females. I also create a dummy variable to represent the marital status. If MARRIED is equal to 1, this means the person is currently married or in common law (in 1981, common law was not specified, but in practice, those living common law were considered as married). If MARRIED is equal to 0, this means the person has never been married, is divorced or widowed.

Weeks Worked in Previous Year:

In order to capture the effect of the amount of time worked on the wage, I defined the variable "LNWK", which represents the log of the number of weeks worked in the previous year. Here I take the log for the weeks worked in order to get the elasticity of the wage with respect to previous year's weeks worked. The coefficient is expected to be greater than 1 if wage with respect to weeks is elastic, and to be less than 1 if it is inelastic.

Knowledge of Official Languages:

Furthermore, knowledge of the official languages is another important variable for the analysis. I defined a dummy variable "NEAF" to represent a person who can speak neither English nor French. If NEAF is equal to 1, this means that the representative individual can speak neither English nor French. If NEAF is equal to 0, that means the

representative individual can speak at least one of these two languages. In the results, I expect the sign of NEAF to be negative, because an individual who cannot speak English or French will have obviously less opportunity to find a highly remunerated job.

The analysis of all three sample years (1981, 1991 and 2006) is conducted separately but in a similar way. I first estimate the model which pools the genders, then I estimate it for males and females separately. There are separate regressions for native-born Canadians and for immigrants.

5. Empirical Results

The regression results are shown in this section. First, I analyze the coefficients showing the wage gaps between the metropolitan areas and the rest of the country in the three periods for immigrants and native-born respectively. Second, I analyze the effects of some other control variables such as education, years since migration and knowledge of official languages in order to better model the determination of wages for immigrants and native-born.

5.1 Empirical Results for the Metropolitan Area Variables

For the interpretation of the four metropolitan area (Toronto, Montreal, Calgary and Vancouver) wage coefficient, I use the rest of Canada as the benchmark.

5.1.1 Results for 1981

The results for the metropolitan areas variables for 1981 are shown in Table 3. For both genders combined, the coefficient of Toronto in 1981 is 0.049 for immigrants, which means that immigrants who live in Toronto will earn approximately 4.9% more than immigrants who live in the rest of the country. The corresponding coefficient is larger for non-immigrants at 9.7%. The coefficient of Montreal is 0.01, but this estimated coefficient

is not statistically significant, meaning the wages of immigrants in Montreal were not much different than they were in other areas of the country. However, non-immigrants who live in Montreal earn 5.4% more than non-immigrants in the rest of the country. In Calgary, there is not much difference in the estimated wage coefficient; immigrants have an 11% wage premium while natives have a 14% premium. In Vancouver, immigrants earn 10% more than their counterparts in the rest of the country, and native-born Canadians earn about 16% more. To summarize, in 1981, immigrants in Toronto earn more than in the rest of the country, and this gap is smaller than for native-born Canadians. The result for Montreal is different as immigrants' wages are the same as they are in the rest of the country. In Calgary and Vancouver, both immigrants and non-immigrants earn comparatively more than their counterparts in the rest of Canada, and we can say that these two metropolitan areas have higher wages than the rest of Canada.

Comparing the results for males and females, immigrant males who live in Toronto earn about 1% less than immigrant males who live in the rest of Canada, but the estimated coefficient is not statistically significant. Then we see that immigrant females in Toronto earn about 12.5% more than immigrant females who live in the rest of the country; there is a large difference between males and females. For non-immigrants, females also earn more money in Toronto than in the rest of the country.

For people who work in Montreal, the coefficient for immigrant males is -0.1, and for immigrant females it is 0.1. Similar to the results in Toronto, there is a large wage difference between immigrant males and females. We can observe that, compared to immigrants who live in the rest of Canada, immigrant females' wage in Montreal is relatively higher, and immigrant male's income is lower in 1981.

Immigrant males in Vancouver earn about 6% more than immigrant males in the rest of the country, and this percentage is about 13% for immigrant females. We also observe similar results for immigrants in Calgary. The wages for immigrant males are about 9% higher in Calgary than in the rest of Canada; comparatively, immigrant females in Calgary earn even higher wages, about 13% more than immigrant females who live in the rest of the country.

In conclusion, for both immigrants and non-immigrant Canadians, females who live in Toronto, Montreal, Calgary and Vancouver receive relatively higher wages than females who live in the rest of Canada in 1981. In contrast, males' wages in these four metropolitan areas do not vary as widely (no more than 10%) than in the rest of Canada in 1981.

Table 3: Regression Coefficients for the Metropolitan Area variables, 1981

	Both Genders		**Male**		**Female**	
	Immigrant	**Native-born**	**Immigrant**	**Native-born**	**Immigrant**	**Native-born**
Toronto	0.049***	0.097***	-0.013	0.085***	0.125***	0.120***
	(0.078)	(0.006)	(0.009)	(0.008)	(0.013)	(0.010)
Montreal	-0.014	0.054***	-0.098***	0.021***	0.103***	0.093***
	(0.107)	(0.006)	(0.013)	(0.007)	(0.018)	(0.009)
Vancouver	0.094***	0.159***	0.061***	0.167***	0.139***	0.152***
	(0.116)	(0.008)	(0.014)	(0.010)	(0.019)	(0.014)
Calgary	0.107***	0.142***	.088***	0.174***	0.135***	0.119***
	(0.019)	(0.011)	(0.0219)	(0.013)	(0.032)	(0.018)

Note: Standard errors are in parentheses. ***p<0.01, **p < 0.05, *p<0.1, the estimated coefficient is statistically significant at 1% level, 5% level and 10% level. The regression results for the other variables and the summary statistics are shown in Table 6.

Source: Canada Census 1981

5.1.2 Results for 1991

The comparative analysis for 1991 shown in Table 4 demonstrates that the earnings advantage for the metropolitan areas is larger for non-immigrants. To begin with, the coefficient for immigrants in Toronto indicates that they earn about 16% more than immigrants who live in the rest of the country. This coefficient is larger for non-immigrants, who earn about 23% more in Toronto than in the rest of Canada. In Montreal, immigrants earn 5.5% less than immigrants in the rest of Canada, and non-immigrants earn about 6% more than those who live in the rest of the country. This pattern is the same as it was in 1981. In Calgary, immigrants did not have an earning advantage relative to immigrants in other areas of Canada given that the estimated coefficient is statistically insignificant. Native-born Canadians also lost their earning advantages, as it dropped from 14% in 1981 to 11% in 1991. The same pattern is discerned in Vancouver; immigrants' earning advantage compared to the rest of Canada decreased from 9% in 1981 to 3% in 1991. Native-born Canadians in Vancouver's earning advantage decreases to about 13% more than those who live in the rest of the country.

Separate gender analysis for 1991 shows that immigrant males who live in Toronto earn about 10% more than in the rest of Canada, which is a huge change from the 1981 results. Moreover, we see that immigrant females in Toronto earn about 23.5% more than those who live in the rest of the country; the large discrepancy between males and females that was present in 1981still persists. For people living in Montreal, the coefficient for immigrant males is -0.13, and for immigrant females it is 0.03. We can observe that, compared to immigrants who live in the rest of Canada, female immigrants' wages in Montreal is relatively high, and immigrant male's wages in Montreal is low.

Immigrant males in Vancouver earn about 2% less than immigrant males in the rest of the country, and this percentage is about 8% in favor of immigrant females in Vancouver. There are similar results for immigrants in Calgary; the wage for immigrant males is insignificantly different from the level in the rest of Canada; comparatively, immigrant females in Calgary earn more, with a wage which is about 5% higher than the one of immigrant females who live in the rest of the country.

To summarize, immigrant females who live in Toronto, Montreal, Calgary and Vancouver still earn relatively more than immigrant females who live in the rest of Canada. Comparatively, immigrant males' incomes in Toronto, Calgary and Vancouver are not much different than those in the rest of the country in 1991.

Table 4: Regression Coefficients for the Metropolitan Area variables, 1991

	Both Genders		**Male**		**Female**	
	Immigrant	**Native-born**	**Immigrant**	**Native-born**	**Immigrant**	**Native-born**
Toronto	0.162***	0.229***	0.097***	0.188***	0.236***	0.278***
	(0.007)	(0.005)	(.009)	(0.006)	(0.010)	(0.007)
Montreal	-0.055***	0.060***	-0.128***	0.028***	0.030**	0.091***
	(0.010)	(0.004)	(0.012)	(0.006)	(0.015)	(0.007)
Vancouver	0.029***	0.131***	-0.020	0.117***	0.085***	0.152***
	(0.010)	(0.006)	(0.013)	(0.008)	(0.015)	(0.010)
Calgary	0.014	0.106***	-0.009	0.088***	0.048**	0.135***
	(0.015)	(0.008)	(0.020)	(0.011)	(0.023)	(0.013)

Note: Standard errors are in parentheses. ***p<0.01, **p < 0.05, *p<0.1, the estimated coefficient is statistically significant at 1% level, 5% level and 10% level. The regression results for the other variables and the summary statistics are shown in Table 7.

Source: Canada Census 1991

5.1.3 Results for 2006

Table 5 shows the results for 2006. I find that people in Toronto, Montreal and Vancouver lose the advantage in terms of immigrants' wages in comparison to other areas of the country. The coefficient of Toronto for both genders reduced to 0.035; immigrants in Toronto lost their wage advantage that they had in 1991. Furthermore, the coefficient for non-immigrants also decreased, from 0.22 in 1991 to 0.15 in 2006. Immigrants' wages in Montreal dropped significantly below the wage level for immigrants in the rest of country. They earned about 19% less than immigrants who lived in the rest of Canada. In Vancouver, immigrants' relative income declined during this period, as it was 8% less than the wage level of immigrants who live in the rest of Canada. In the meantime, native-born Canadians in Vancouver earned 7% more than those in the rest of the country. In Calgary, the wage for immigrants is 3% more than for those in the rest of Canada, and for the native- born it is 13% higher. The wage gap for both groups has increased by about 2% compared with 1991.

For the gender-specific analysis, in 2006, the Toronto and Vancouver effects are still higher for females, though they are less than they were in 1991. In contrast, in Montreal, male immigrants earned 26% less than those who lived in the rest of Canada, while female immigrants earned 10% less. Native-born people's wages were also lower than in the rest of Canada, but the difference is not significant. For Vancouver, male immigrants were affected more than female immigrants, as their wages were 17% less than those in the rest of Canada. However, wages for female immigrants in Vancouver are not much different from those in the rest of Canada.

Table 5: Regression Coefficients for the Metropolitan Area variables, 2006

	Both Genders		Male		Female	
	Immigrant	**Native-born**	**Immigrant**	**Native-born**	**Immigrant**	**Native-born**
Toronto	0.035***	0.156***	-0.041***	0.097***	0.116***	0.219***
	(0.008)	(0.005)	(0.012)	(0.007)	(0.012)	(0.007)
Montreal	-0.189***	0.018***	-0.262***	-0.004	-0.107***	0.046***
	(0.011)	(0.005)	(0.016)	(0.007)	(0.017)	(0.007)
Vancouver	-0.084***	0.069***	-0.165***	0.041***	0.006	0.100***
	(0.010)	(0.007)	(0.015)	(0.010)	(0.016)	(0.010)
Calgary	0.033**	0.129***	-0.003	0.118***	0.074***	0.145***
	(0.016)	(0.008)	(0.023)	(0.011)	(0.024)	(0.012)

Note: Note: Standard errors are in parentheses. ***p<0.01, **p < 0.05, *p<0.1, the estimated coefficient is statistically significant at 1% level, 5% level and 10% level. The regression results for the other variables and the summary statistics are shown in Table 8.
Source: Canada Census 2006

5.2 Analysis of the Effects of the Control Variables Other Than the Metropolitan Areas Variables

I also looked at other factors which affect the wage level. These control variables can help us to better understand our analysis of wage differences across metropolitan areas. The results are shown in Table 6, Table 7, and Table 8 respectively for 1981, 1991 and 2006.

First, the coefficients of the Log Worked Weeks (LNWK) represent the elasticity of the wage with respect to the number of weeks worked during the last year. As we see from Table 6, the coefficient of LNWK for immigrants is 0.87 in 1981, which means that a 1% increase in the number of weeks worked translates into a 0.87% increase in the wage. Comparatively, the coefficient of LNWK for non-immigrants is 0.91, which is closer to 1, meaning that their wage response is slightly more elastic as their number of weeks worked

changes. This result accords with my intuition that it was harder for immigrants than for native-born Canadians to increase their wages by working longer weeks. The coefficient in 1991 (Table 7) dropped to 0.8 for immigrants and to 0.84 for native-born Canadians. Compared to 1981, it was more difficult to earn a higher wage by working longer for both immigrants and non-immigrants. In 2006, although the coefficients for both immigrants and non-immigrants are still less than 1 (Table 8), we can see that they are getting closer to 1: the unitary elasticity compared to the previous years. The results of 2006 imply that the effect on the wage of working 1% longer weeks is a little lower for immigrants than for native-born Canadians. The situations are more favorable than in 1991 for both immigrants and non-immigrants.

Age is another important factor that impacts on wages. The overall partial effect of age on the income can be expressed as dLW/dAGE, which in 1981 is calculated as 0.037 + 2(-0.00042)*AGE for immigrants, and 0.048 + 2(-0.00054)*AGE for non-immigrants (from the coefficients shown in Table 6). This means that, if an immigrant is 30 years old, for example, the marginal effect on his or her wage of a one year increase in age is 1.18%; for a native-born Canadian of the same age, the marginal effect on the wage of becoming one year older is 1.56%. The negative coefficient of AGE2 indicates a concave relationship between wage and age, which means that the effect decreases as age increases. For instance, at the age of 40, the age effect becomes negative for immigrants, while this occurs at age 45 for non-immigrants. This point at which the return to age turn from positive to negative is 42 for immigrants and 50 for non-immigrants in 1991, and 53 for immigrants and 44 for non-immigrants in 2006.

For the education variable, as I mentioned in Section 4, I use NO DEGREE as the reference category. Here NO DEGREE refers to an individual who does not have any educational degree, certifications or diplomas in his or her background. We observe that for all the three sample years, the coefficients of all the education variables are positive, and that they increase with the education level. However, if we compare the education effect between immigrants and non-immigrants, we can easily see that the higher the education level, the smaller the gap between immigrants and non-immigrants. In 1981, the coefficient of High School is 0.12 for immigrants and 0.17 for non-immigrants. However, for people with a university degree, both immigrants and non-immigrants earn about 45% more than people with no education degrees. From the results of 1991, the coefficient for High School is 0.12 for immigrants and 0.17 for non-immigrants, which is similar to the findings for 1981. However, both immigrants and non-immigrants with a university degree earn about 50% more than people with no educational degrees. We can see that a university degree more strongly affected the earnings levels in 1991. In 2006, immigrants with a high school degree earned about 10% more than immigrants with no degree, and high school non-immigrant earned 17% more than those with no degree. The earnings differences have shrunk compared with 1991 for immigrants. People who go to college, whether they are immigrants or non-immigrants, earn 25% more than those with no degree in this period. Immigrants with a university degree earn 48% more than immigrants who have no degree, and this gap shrank a little bit compared with the year 1991. In contrast, the gap for non-immigrants remained the same as in the previous periods. Overall, the returns to education are slightly higher among native-born Canadians for all three census years, but the discrepancies are not that wide.

I next look at the partial effects of years since migration in order to capture the assimilation effect for immigrants. The overall partial effect of years since migration for both genders can be calculated as dLW/dYM= 0.021 + 2 (-0.00043)*YM for 1981 (Table 6). The catch-up points for the three sample years are: 25 for 1981, 38 for 1991 and 50 for 2006. These catch-up points indicate the number of years needed by immigrants to catch up to the same wage level as the native-born. For example, in 1981, it took 25 years for immigrants to catch-up to the wage level as the native-born Canadians. This assimilation effect has become longer in recent years. This finding is perfectly consistent with the findings of other researchers.

The marital status and the knowledge of official languages are other factors that impact on the wage rate. For immigrants of both genders, currently married people earn about 4% more than people who are not currently married (single, divorced or widowed). This number increased to 5.2% in 1991 and continued to increase to 5.8% in 2006. For non-immigrants, married people earn 7% more than unmarried people in 1981, and it declined by 0.2% in 1991 but increased by 4% in 2006.

The negative sign of the coefficient of the attribute of speaking neither English nor French shows that language is another important factor in influencing immigrants' wages. However, the same coefficient is not statistically significant for native-born Canadians, which follows from the fact that very few native Canadians cannot speak at least one of those two languages. In 1991, immigrants earn 14.9% less if they do not speak English or French, and non-immigrants earn 50% less. The result of 2006 shows that immigrants and non-immigrants who do not speak English or French earn over 20% less than people who speak English or French fluently.

Table 6: Regression Coefficients for Other Control variables, 1981

	Both Genders		Male		Female	
	Immigrant	Native-born	Immigrant	Native-born	Immigrant	Native-born
LNWK	0.868***	0.916***	0.853***	0.895***	0.861***	0.900***
	(0.077)	(0.004)	(0.012)	(0.006)	(0.011)	(0.005)
High School	0.117***	0.168***	0.112***	0.158***	0.123***	0.183***
	(0.104)	(0.005)	(0.014)	(0.006)	(0.016)	(0.009)
College	0.208***	0.230***	0.195***	0.178***	0.190***	0.283***
	(0.008)	(0.005)	(0.010)	(0.006)	(0.014)	(0.008)
University	0.439***	0.476***	0.372***	0.390***	0.528***	0.585***
	(0.010)	(0.006)	(0.011)	(0.007)	(0.017)	(0.010)
AGE	0.038***	0.049***	0.059***	0.072***	0.010**	0.018***
	(0.003)	(0.001)	(0.003)	(0.002)	(0.005)	(0.002)
AGE2	-0.0004***	-0.001***	-0.001***	-0.001***	-0.0001**	-0.0002***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
YM	0.022***	... ...	0.020***	... ...	0.027***	... ...
	(0.002)		(0.002)		(0.003)	
YM2	-0.0004***	... ...	-0.0003***	... ...	-0.0006***	... ...
	(0.000)		(0.000)		(0.000)	
MARRIED	0.045***	0.075***	0.177***	0.248***	-0.105***	-0.129***
	(0.009)	(0.004)	(0.011)	(0.006)	(0.013)	(0.007)
NEAF	-0.097***	-0.337***	-0.131***	-0.496***	-0.066**	-0.119
	(0.018)	(0.083)	(0.025)	(0.097)	(0.026)	(0.146)
MAN	0.597***	0.597***	... ...	... ...	... ...	... ...
	(0.007)	(0.004)				
Constant	4.611***	4.389***	4.748***	4.461***	5.299***	5.228***
	(0.064)	(0.031)	(0.081)	(0.039)	(0.104)	(0.053)
R square	0.4730	0.486	0.316	0.366	0.385	0.422
Sample size	33259	114779	19410	67960	13849	46819

Note: Standard errors are in parentheses. ***p<0.01, **p < 0.05, *p<0.1, the estimated coefficient is statistically significant at 1% level, 5% level and 10% level

Source: Canada Census 1981

Table 7: Regression Coefficients for Other Control variables, 1991

	Both Genders		Male		Female	
	Immigrant	**Native-born**	**Immigrant**	**Native-born**	**Immigrant**	**Native-born**
LNWK	0.796***	0.842***	0.792***	0.803***	0.791***	0.853***
	(0.006)	(0.003)	(0.009)	(0.005)	(0.008)	(0.004)
High School	0.117***	0.170***	0.089***	0.155***	0.147***	0.201***
	(0.009)	(0.004)	(0.012)	(0.005)	(0.012)	(0.006)
College	0.242***	0.270***	0.215***	0.222***	0.245***	0.319***
	(0.008)	(0.003)	(0.010)	(0.005)	(0.012)	(0.006)
University	0.475***	0.527***	0.436***	0.415***	0.505***	0.643***
	(0.008)	(0.005)	(0.011)	(0.006)	(0.013)	(0.007)
AGE	0.059***	0.071***	0.070***	0.085***	0.049***	0.058***
	(0.002)	(0.001)	(0.003)	(0.002)	(0.004)	(0.002)
AGE2	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
YM	0.030***	... ...	0.032***	... ...	0.028***	... ...
	(0.000)		(0.001)		(0.001)	
YM2	-0.0004***	... ...	-0.0005***	... ...	-0.0004***	... ...
	(0.000)		(0.000)		(0.000)	
MARRIED	0.052***	0.069***	0.173***	.226***	-0.082***	-0.102***
	(0.007)	(0.003)	(0.010)	(0.004)	(0.010)	(0.004)
NEAF	-0.113***	-0.449***	-0.125***	-0.475***	-0.091***	-0.401***
	(0.016)	(0.084)	(0.023)	(0.110)	(0.023)	(0.125)
MAN	0.485***	0.523***	... ...	... ...	... ...	... ...
	(0.006)	(0.003)				
Constant	4.807***	4.714***	4.971***	5.032***	5.165***	5.042***
	(0.053)	(0.026)	(0.070)	(0.034)	(0.080)	(0.040)
R square	0.386	0.385	0.338	0.3170	0.326	0.342
Sample size	62464	231127	33996	124028	28468	107099

Note: Standard errors are in parentheses. ***p<0.01, **p < 0.05, *p<0.1, the estimated coefficient is statistically significant at 1% level, 5% level and 10% level

Source: Canada Census 1991

Table 8: Regression Coefficients for Other Control variables, 2006

	Both Genders		Male		Female	
	Immigrants	Native-born	Immigrants	Native-born	Immigrants	Native-born
LNWK	0.905***	0.963***	0.911***	0.952***	0.895***	0.958***
	(0.008)	(0.005)	(0.013)	(0.007)	(0.011)	(0.006)
High School	0.105***	0.166***	0.064***	0.130***	0.163***	0.243***
	(0.012)	(0.006)	(0.017)	(0.007)	(0.017)	(0.009)
College	0.263***	0.291***	0.223***	0.248***	0.307***	0.367***
	(0.012)	(0.005)	(0.015)	(0.007)	(0.017)	(0.009)
University	0.488***	0.562***	0.415***	0.408***	0.571***	0.737***
	(0.011)	(0.006)	(0.015)	(0.008)	(0.016)	(0.009)
AGE	0.053***	0.088***	0.055***	0.095***	0.049***	0.082***
	(0.003)	(0.001)	(0.004)	(0.002)	(0.004)	(0.002)
AGE2	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
YM	0.028***	... ...	0.027***	... ...	0.030***	... ...
	(0.000)		(0.001)		(0.001)	
YM2	-0.0003***	... ...	-0.0003***	... ...	-0.0003***	... ...
	(0.000)		(0.000)		(0.000)	
MARRIED	0.031***	0.098***	0.134***	0.208***	-0.060***	-0.010**
	(0.008)	(0.003)	(0.011)	(0.005)	(0.010)	(0.005)
NEAF	-0.194***	-0.200**	-0.232***	-0.184	-0.148***	-0.229*
	(0.021)	(0.091)	(0.030)	(0.141)	(0.029)	(0.118)
MAN	0.321***	0.376***	... ...	... ...	... ...	... ...
	(0.006)	(0.003)				
Constant	4.929***	4.221***	5.239***	4.543***	4.979***	4.271***
	(0.070)	(0.032)	(0.100)	(0.046)	(0.098)	(0.046)
R square	0.31	0.291	0.255	0.228	0.318	0.297
Sample size	52591	205910	27661	107373	24930	98537

Note: Standard errors are in parentheses. ***p<0.01, **p < 0.05, *p<0.1, the estimated coefficient is statistically significant at 1% level, 5% level and 10% level

Source: Canada Census 2006

5.3 Empirical Summary

Table 9 summarizes some of the results by showing together, for both genders, the coefficients of the four metropolitan area variables for immigrants and non-immigrants in all three census years. The coefficient gap between non-immigrants and immigrants is calculated, and the trend over the three census years is analyzed. We can see that over time, those gaps are getting larger for all the four metropolitan areas.

Table 9: Relative Wage Gap between immigrants and native-born Canadians in the four Metropolitan Areas, both genders, 1981, 1991, 2006

	1981			1991			2006		
	Immigrants	Native-born	Gap	Immigrants	Native-born	Gap	Immigrants	Native-born	Gap
Toronto	0.049	0.097	0.048	0.162	0.229	0.067	0.035	0.156	0.121
Montreal	-0.014	0.053	0.068	-0.055	0.060	0.115	-0.189	0.018	0.208
Vancouver	0.093	0.159	0.065	0.029	0.131	0.102	-0.084	0.069	0.155
Calgary	0.107	0.142	0.036	0.014	0.106	0.092	0.033	0.129	0.096

Source: Canada Census.1981, 1991, 2006 (from Tables 3, 4 and 5 above).

The largest gaps are for Montreal, whether it is in 1981, 1991 or 2006. Furthermore, these gaps are becoming larger as time goes on. Although the wage gap is always slightly larger in Vancouver than in Toronto, the trends in these two metropolitan areas are similar: the wage gap increases steadily for both Toronto and Vancouver over time. Immigrants' wages in these two areas are falling for the behind those of native-born Canadians, which indicates a deceleration of the assimilation process.

The wage gap between immigrants and non-immigrants in Calgary, as measured relative to their counterparts in the rest of Canada, is also increasing through the years, but the trend is different from the other metropolitan areas. As we see from Table 9, the gap in Calgary was quite small in 1981 (0.036), and then increased substantially in 1991 (0.092), to remain almost the same in 2006 (0.096). We can observe that the wage gap between immigrants and non-immigrants in Calgary (relative to the rest of Canada) does not change much compared to 1991.

Table 10 and Table 11 display the results from repeating the analysis for males and females separately. For males only (Table 10), the gaps for all the four metropolitan areas are around 0.1 in 1981, and they have been getting larger steadily since the 1980s. As it was for both genders pooled together, the gap in Montreal is clearly larger than in the other metropolitan areas, and in Calgary it is slightly lower than in the other areas. The relative wage gap for females (Table 11) is much different. First, in 1981, the gap for females in all of the four metropolitan areas is around zero or negative. However, unlike males, the gap for females had huge increases in 1991 and in 2006.

Comparing males to females, we can see that the relative gaps for males are always larger than those for females. Although the gaps are getting larger for both males and females, the range of evolution is larger for females than for males. Since the 1990s, for both males and females, the range of evolution in Montreal has obviously been larger than in the other three areas, and the range of evolution in Calgary is obviously smaller.

Table 10: Relative Wage Gap between immigrants and native-born Canadians in the four Metropolitan Areas, males only, 1981, 1991, 2006

	1981			1991			2006		
	Immigrants	Native-born	Gap	Immigrants	Native-born	Gap	Immigrants	Native-born	Gap
Toronto	-0.013	0.085	0.098	0.097	0.188	0.091	-0.041	0.097	0.138
Montreal	-0.098	0.021	0.119	-0.128	0.028	0.156	-0.262	-0.005	0.257
Vancouver	0.061	0.167	0.106	-0.02	0.117	0.137	-0.166	0.041	0.207
Calgary	0.088	0.174	0.086	-0.009	0.088	0.097	-0.003	0.118	0.121

Source: Canada Census.1981, 1991, 2006 (from Tables 3, 4 and 5 above).

Table 11: Relative Wage Gap between immigrants and native-born Canadians in the four Metropolitan Areas, females only, 1981, 1991, 2006

	1981			1991			2006		
	Immigrants	Native-born	Gap	Immigrants	Native-born	Gap	Immigrants	Native-born	Gap
Toronto	0.125	0.12	-0.005	0.236	0.278	0.042	0.116	0.219	0.103
Montreal	0.103	0.093	-0.01	0.03	0.091	0.061	-0.107	0.046	0.153
Vancouver	0.139	0.151	0.012	0.085	0.153	0.068	0.006	0.1	0.094
Calgary	0.135	0.119	-0.016	0.048	0.135	0.087	0.074	0.145	0.071

Source: Canada Census.1981, 1991, 2006 (from Tables 3, 4 and 5 above).

Thus we can further conclude that there are not major differences in wages for females in the metropolitan areas in 1981; however, after the 1980s, the relative wage gap for females increased much faster than for males. The relative wage gap is always larger for males than for females, but the trends over the three census years vary among metropolitan areas.

6. Conclusion

Using data from the Canadian censuses of 1981, 1991 and 2006, this paper attempted to show the trends in wage gaps between four major metropolitan areas (Toronto, Montreal, Calgary and Vancouver) and the rest of Canada, for both immigrants and native-born Canadians. This was done for both genders pooled together and for each gender separately.

The results show that immigrants are geographically concentrating more and more in the large metropolitan areas, especially in Toronto and Vancouver. In contrast, native-born Canadians did not increase their concentration in those metropolitan areas. However, the wage gap between the most multicultural areas (Toronto and Vancouver) and the rest of Canada for both immigrants and non-immigrants is increasing. A possible interpretation is that, in the areas other than Toronto and Vancouver, there are relatively few job opportunities for immigrants; so immigrants are drawn to migrate to Toronto and Vancouver. Wage gaps between immigrants and native-born are getting larger, but that does not affect immigrants' choices of destinations.

People have tended to move to new areas in recent years, such as Calgary. The populations of both immigrants and non-immigrants have been increasing since the 1980s, and the wage gap between immigrants and non-immigrants did not change as much as it did in other metropolitan areas. One might expect that in the future, Calgary will become more attractive for immigrants, and the wage gap might also increase, due to the development of its energy industry. Perhaps due to the presence of the French culture against immigrants in Montreal, there is greater wage discrimination in Montreal. The

immigrants' wages are always less than in the rest of the country, and immigrant females are finding it more difficult than immigrant males to catch up to the wage level of non-immigrants in Montreal.

Education has become more important for immigrants' wage since the 1980s, especially for highly educated immigrants. We can observe that in 2006, wage advantages for immigrants with a high school degree have declined. However, immigrants who complete a university education in 2006 will earn much more than immigrants with no educational degree, and this effect is higher than it was in 1981 and 1991. We also observe that education affects immigrant females more than immigrant males, and this phenomenon of increasing returns to education is becoming more apparent in the 21st century.

As the regression results indicate, the effect of marital status on the wage decreases a bit in the 1980s, but it has become more important since the 1990s. Also, the effect of the knowledge of official languages is larger for males than for females.

Finally, we observe that immigrants are becoming more likely to live in metropolitan areas, such as Toronto and Vancouver, even if the gaps between their wages and those of non-immigrants in these areas are becoming larger. This observation suggests that the gap between the wages of immigrants and native-born Canadians does not not influence the migration patterns. Wage gaps in Montreal remains large and are increasing, perhaps because of discrimination.

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