The "Negative" Assimilation of Immigrants:

A Counter-example from the Canadian Labour Market

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Contents

Abstract

With 2006 Canadian Census data, this paper investigates the effects of the number of years since migration (YSM) and the location of study on the economic performance of English-speaking immigrants from the U.S. and the U.K. in Canada. The aim is to test whether the "negative assimilation" hypothesis proposed by Chiswick and Miller (2011) is a universal finding for immigrants from countries with similar economic standing and skill transferability to those of the destination country. Geographical, demographic, language, immigration and educational characteristics are taken into account in the models. The regressions are done for both males and females. This study finds that the negative assimilation hypothesis does NOT hold for the Canadian labour market. Specifically, the assimilation rate is close to zero for U.K. immigrants and strictly positive for U.S. immigrants (although lower than that of a comparison group of Chinese immigrants). Furthermore, the U.S. immigrants who hold a degree from the U.S. earn lower wages than those who studied in Canada, while this relationship is not significant for the U.K. immigrants.

1. Introduction

Being a geographically large country with a relatively small population, Canada has long been seen as one of the most critical immigrant destination countries. Immigration is now the most important component of the growth of the Canadian population. Immigrants represent a large and a continually increasing share of the labour force in Canada.

The research on the labour market assimilation of immigrants, initiated by Chiswick (1978), has found that the economic performance of immigrants generally shows *positive* assimilation, i.e., they improve their economic status over time. However, a recent article by Chiswick and Miller (2011) found that, in certain circumstances, *negative* assimilation may occur, in which case the earnings decline with duration in the destination country. This happens if the immigrants' skills are highly transferable across countries, i.e., "negative assimilation arises not from a deterioration of skills but from a decline in the wages afforded by skills coincident with the duration of residence" (Chiswick and Miller, 2011, page 502). The authors found evidence of negative assimilation for some English-speaking immigrants in the United States and Australia, and for some Scandinavian language-speaking immigrants in Sweden, using the U.S. Census, the Australian Census, and the SIEPS (Swedish Institute for European Policy Studies) database.

There are both similarities and differences between the Canadian and the U.S. immigrant labour markets. We know that Canada and the U.S. are similar in many fundamental aspects, such as having democratic governments, having a same primary language, being both former British colonies from which they share many fundamental beliefs and ideas, and being both large

immigration countries. However, they are also remarkably different in their immigration policies, their labour market institutions and social insurance systems. We also should notice that, because Canada does not share borders with less-developed countries, illegal immigration is much less of a problem than in the United States. Canadian immigration policy in recent decades has been based on the "point system", whose goal is to match the inflow of skilled immigrant to the observed shortages of the Canadian labour market. It is different from the family reunification emphasis of the U.S. immigration policy. The differences between the policies of the two countries affect the composition of immigration by source country and the self-selection of immigrants. In addition to the differences in immigration policy, structural and institutional dissimilarities in the labour markets of the two countries are also likely to influence the type of immigrants who are attracted to each destination. With better established labour unions, higher minimum wages, and more generous national health insurance, unemployment insurance and welfare systems, workers in the lower end of the income distribution are generally better off in Canada than in the United States (Borjas 1993; Gregory and Daly 1994; Antecol, Cobb-Clark and Trejo 2001).

Furthermore, although both countries have experienced a widening in income inequality over the past three decades, in the United States real incomes have fallen dramatically for less-skilled workers, whereas, in Canada, the decline in the bottom half of the income distribution has been much more moderate, which is to say that incomes at the bottom of the distribution are higher in Canada than in the United States (Freeman and Katz 1994; Ross et al. 2000; Foster and Wolfson 2009).

Given the similarities and differences between Canada and the U.S., one may wonder whether immigrants from English-speaking countries in Canada show negative assimilation, as

they do in the United States. Upon arrival, immigrants from English speaking developed countries meet fewer barriers and challenges than others during the transition process. Compared with their Canadian-born counterparts, they are actually “invisible” migrants. Chiswick and Miller have tested the "negative" assimilation hypothesis in the U.S. for international migrants from developed countries that possess a common language and culture. This paper tests the same hypothesis with a sample of U.S. and U.K. immigrants in Canada. Those immigrants are compared with Canadian native-born individuals and with Chinese immigrants, which are a representative group of non-English speaking immigrants from a less developed country. Two main regressions will be presented. The first one will be based on the standard concept of economic assimilation and will be specified empirically as Chiswick and Miller (2011) did. It stipulates a key predictor of immigrant earnings as human capital accumulates in the host society, which is commonly measured as the number of years since migration (YSM). In the second regression, I add another crucial measure of host society-specific human capital — location of study, to test its effects on earnings, to see whether the value of foreign credentials varies by country of origin.

From this analysis, I find that negative assimilation does not exist in the Canadian labour market. The result for the U.K. is that the assimilation rate is almost zero, which is at the border line between “positive” and “negative” assimilation. For the U.S. immigrants, there is a significant “positive” assimilation, but the rate is much lower than that of Chinese immigrants. Surprisingly, receiving a highest degree at home for the U.S. immigrants does not help to earn higher wages in Canada, in spite of the perception that U.S. education has the highest value in the world.

This paper consists of five sections. The next one is a literature review of immigrant assimilation. This is followed by a section on the data and the methodology, which includes a discussion of the data and variables, of the two models to be estimated and of the descriptive statistics. After that, the core part of the analysis presents the results of each model respectively, followed by a section on the discussion of the results. The last section is a conclusion that summarizes the key findings of this study.

2. Literature Review

Since the 1970s, economists have been conducting an extensive amount of empirical research regarding the assimilation of immigrants to the developed countries. Among these, the U.S., Australia, and Canada are the most popular countries on which research was done. These studies have focused their attention on various aspects, including educational attainment, occupational attainment, language acquisition, and earnings of immigrants. Several methods have been used to study the earnings assimilation of immigrants. The cross-section analysis, introduced by Chiswick (1978), is one of the most widely used approaches. In his pioneering work, Chiswick established a standard methodology for the analysis of immigrants' assimilation. Using U.S. 1970 census data and the human capital earnings function, he analyzed the effect of two important factors -- being an immigrant and the number of years since migration, on the earnings of white men. He restricted his analysis to only one ethnic group, white men, to "avoid a confounding of the effects of race and foreign origin in earnings" (Chiswick 1978, page 898).

Most studies on assimilation of immigrants use wages as a summary of economic performances and the number of years since migration (YSM) as a key indicator in the assimilation model. Chiswick (1978) hypothesized that the initial earnings of newly arrived

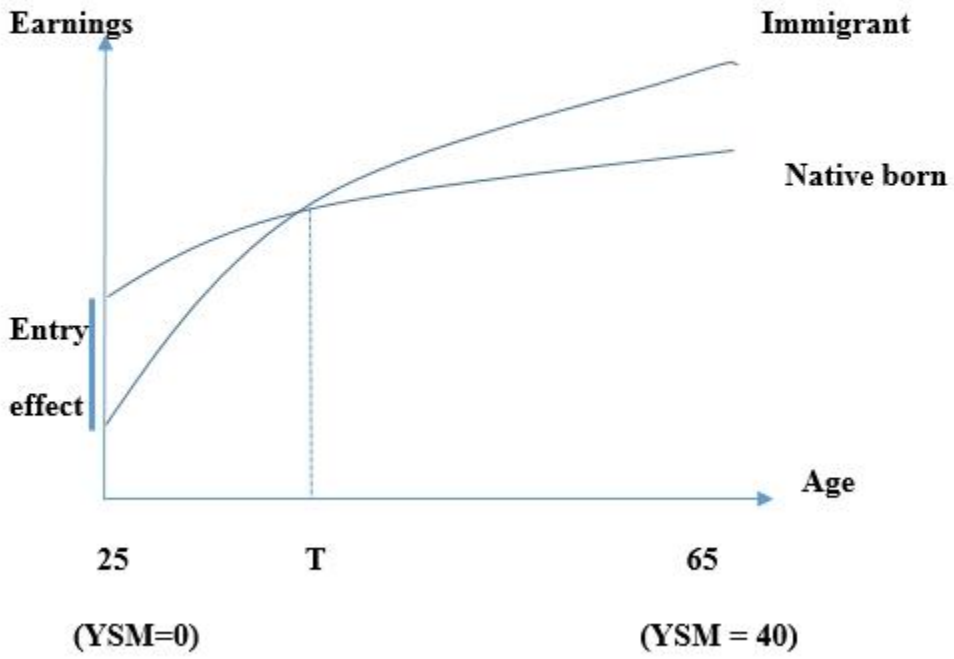
immigrants are significantly lower than those of immigrants who arrived in earlier times as well as of those of the native-born who have the same socioeconomic characteristics. The coefficient of YSM measures the extent to which immigrants assimilate to the labour market of the host country. The quadratic YSM variable is also typically included in the standard analysis of immigrant post-migration labour market adjustment to allow for a decreasing assimilation rate. A positive coefficient of YSM indicates higher earnings the longer the immigrants have lived in the country. This result was attributed mainly to the lack of directly transferable skills, such as language proficiency, jobs market information, job-specific training, and particular characteristics associated with earnings and productivity (Borjas 2006; Portes and Rumbaut 2006; Arbeit and Warren 2012; Kanas et al. 2011). Moreover, since immigrants in recent decades have tended to originate from poorer countries, the type of skills that they bring from their home countries may not be readily applicable to richer countries. With increasing duration in the destination, their economic status gradually improves, as they assimilate and obtain the skills specific to the host society (Chiswick 1978, 1979; Alba and Nee 2003). This "positive assimilation" model, consistent with classic assimilation theory, is widely accepted. According to Chiswick and Miller (2011), it has been observed for all major immigrant receiving countries and time periods, and tested with a large number of data sources.

Figure 1 shows the main features of the immigrant assimilation profile. The extent that the immigrant earnings catch up to the native-born is measured as the assimilation process. Consider two otherwise identical people at age 25, one is a native-born and the other is a new immigrant. At age 25, the immigrant's year since migration (YSM) equals zero, and his/her earnings are initially below those of the native-born, because of the "entry effect". As time goes by, the native-born wages will go up with the age for conventional reasons, as would the immigrant's.

However, with the years in Canada, the immigrants' earnings may grow even faster, with the accumulation of Canada-specific human capital. These excess returns to age, or returns to YSM, are due to the so-called "assimilation". If the rate of return is high enough, immigrant earnings will catch up, for example, at age T.

Figure 1

Immigrants' Assimilation Profile



Source: Benjamin et al (2012), page 324

Over time, as the immigrants acquire host-country specific human capital, immigrants' earnings grow rapidly and the wage gap between immigrants and natives narrows till it comes to an overtaking point (T) where the earnings of immigrants cross, and exceed in the end, the earnings of natives. According to Chiswick, this overtaking point was estimated in 1970 to occur within 10-15 years after immigration; beyond this point, immigrants may even have higher

earnings (Chiswick 1980). Holding other things equal, Chiswick states: "the earnings of the foreign born are 9.5 percent lower than the native-born after 5 years in the country, equal after 13 years, and 6.4 percent greater after 20 years" (Chiswick 1978, page 906). He explains this wage convergence between immigrants and natives by the ability and motivation hypothesis, whereas immigrants have more capability and higher incentives than natives, and to the transferability hypothesis, which states that the earnings of immigrants will be higher the more similar the country of origin to the country of destination.

Comparable studies using cross-section analysis have been conducted to investigate the assimilation process of immigrants with censuses from other countries, such as Canada (Carliner 1981; Chiswick and Miller 1988; Bloom et al. 1995; Miller 1992), Australia (Chiswick and Miller 1985; Beggs and Chapman 1988, 1991; Miller 1999), the United Kingdom and Europe (Chiswick 1980; Bauer, Lofstrom and Zimmermann 2000). Generally, all those studies have found results that are consistent with Chiswick's original findings, but with differences in the assimilation rates. Specifically, the time it takes for immigrants' earnings to converge to those of the native-born is getting longer in studies with recent data. For example, while it took 15 years for immigrants to catch up with the earnings of Canadian-born men based on the 1971 Canadian Census, it took 27 years to catch up with 1986 Census data (Bloom et al. 1995).

Although immigrants have become an increasingly critical part of the Canadian labour force, their economic performance has deteriorated starting around the early 1980s. Baker and Benjamin (1994) and Bloom et al. (1995) both found that in the 1980s and after, immigrant cohorts have not assimilated as well as the previous ones. Bloom et al. (1995) suggested three major possible reasons which might explain, but not fully, the decline in immigrant assimilation. First, the changing immigration policies in the 1980s reduced immigrant quality, as they put less

emphasis on skills and more on family reunification, human rights and humanitarian issues. That led to a decline in the share of immigrants in the skills-oriented independent category and to a shift in the composition of immigration from the industrial countries to the developing countries. Secondly, increased discrimination could have occurred due to the changed composition of immigrants towards more visible minorities. Thirdly, there was a reduced absorptivity of the labour market, especially for the less skilled class, that reflected the effect of the prolonged recession.

In the previous research, "positive assimilation" is the dominant model in explaining immigrants' economic mobility. So far, there has not been much research conducted specifically on the potential "negative assimilation" of English-speaking immigrants from developed countries. Chiswick and Miller's (2011) posit that certain immigrants who come with highly transferable skills do not necessarily follow the traditional path of upward economic assimilation. According to them, the model of negative assimilation is applicable only to immigrants from developed countries with similar culture, language, and labour market practices to those of the host society. In their model, earnings *decrease* with immigrant duration in the host society, because the economic rent that motivated the initial migration declines over time. The authors suggest a number of possible reasons for the decline in economic rent. For instance, those immigrants who experience negative assimilation are likely to be a selected group of individuals in the first place, who were attracted to the destination because of higher earnings or higher returns to their skills than expected elsewhere. A relatively high wage that motivated their initial migration, however, does not indefinitely last (Chiswick and Miller 2011, page 504). Moreover, the decline may simply indicate a selection bias in return migration. Those migrants who come in with globally transferable skills may not stay long in the destination, especially when they see

the economic rent decline as time passes; they have the ability to move to another country to pursue better work opportunities. This mobility pattern may lead to a gradual reduction in average wages by leaving behind those who are less able to receive higher wages elsewhere. The selection bias may also reflect the growing costs of return migration over time. The immigrants who stay in the host country are likely to form families or establish new personal networks and it becomes more difficult for them to move back or onward. Over time, relative to the rising costs of returning, decreasing wages may become more acceptable to immigrants.

In short, negative assimilation suggests that the accumulation of host society specific human capital may not be a necessary result of better economic mobility. Unlike the immigrants in the conventional positive assimilation model, those immigrants with readily transferable skills do not always gain economically from assimilation or duration in the host country. That is to say, immigrants from English speaking developed countries, those to which Chiswick and Miller (2011) refer to as possibly being subject to "negative assimilation", may have earnings that go through a downward path over the time they spent in the US.

Negative assimilation is expected to occur only among immigrants from countries of similar economic standing and whose skills are highly transferable to those of the destination country. For this group, what is mostly important is their foreign capital, or the skills directly brought from abroad, rather than locally specific human capital accumulated in the host society. At this point, it is interesting to see if Canada is similar to the U.S. with respect to its English speaking immigrants. I am going to use public used the 2006 Census Public Use Microdata File [PUMF] to examine the economic performance of the U.S. and the U.K. immigrants in Canada, in order to see if "negative" assimilation also happens in the Canadian labour market.

3. Data and Methodology

3.1 Data

The Census of Canada is one of the most frequently used data set in the research on Canadian immigration. Other data sets are the Longitudinal Survey of Immigrants to Canada (LSIC) and the Longitudinal Immigration Database (IMDB). The advantage of the census is that it has a large number of respondents and a lot of information on the characteristics of immigrant and domestic-born workers. Moreover, the 2006 Census took account for some important specific characteristics related to immigration, such as location of study. Following the work of Chiswick and Miller (2011) which used the U.S. Census data, the corresponding Canadian data source used in this paper is Statistics Canada 2006 Census of Population.

To compare with Chiswick and Miller (2011), I will use United States and United Kingdom immigrants to test whether "negative" assimilation exists in the Canadian labour market. The data is drawn according to the following criteria:

1) Individuals aged from 25 to 64;

2) The outliers who reported wages and salaries less than $500 or over $200,000 a year are dropped;

3) The education level is from 8 years to 22 years (for the assignment of the years of education, see Appendix B);

The total sample includes 341,419 individuals who satisfied the criteria above. However, in the first part of my analysis, I only use the U.S., the U.K. immigrants, as well as the Chinese immigrants which are used as a comparison group of immigrants from a developing country whose official language is not English; this includes 12,359 immigrants in total. Males account for 49.9 % of the sample and females represent 50.1 %. In the second part of my research, I

introduce the native-born population to compare with the U.S. and U.K. immigrants. By comparing results for immigrants with those for natives, the native-born serve as a control for cross-country differences in social or economic conditions. The population under study in each analysis differs depending on each specification.

3.2 Models

In order to address the research questions of whether or not immigrants from the U.S. and the U.K. to Canada go through "negative" assimilation, and to look at the possible reasons, I ran two sets of regression models (Models I and II).

3.2.1 Model I

The first set of regressions (Model I) is based on the standard concept of economic assimilation and is specified empirically as in Chiswick (1978), Chiswick and Miller (2011) and many others. It stipulates that human capital accumulated in the host society, commonly measured as the number of years since migration (YSM), is a key predictor of immigrant earnings. This is generally expressed in the following mathematical equation where the wage of an individual worker is a function of years since migration (YSM) and years since migration squared (YSM^2) in combination with other control variables:

I-1. The first specification contains a quadratic in years since migration (YSM):

Ln (Wage) = a (Education) + b (Experience) + c (Experience^2) + d (Married Status) +

e (Gender)+ f ln(Weeks Worked) + g (Part-time) + h (Bilingual) +

i (province_ ON.) + j (YSM)+ k (YSM)^2+ l(US or UK_ US)+ e

I-2. The second specification is the same as the first specification except that I use only a simple linear function for YSM in order to see more directly the effect of that variable.

Here Ln(Wage) represents the natural logarithm of individual annual earnings being examined, the coefficients *a* to *l* are for individual characteristics to be controlled for, such as education, experience, gender, etc., and *e* is a random disturbance with mean zero and constant variance. See Appendix A for more details on the description of these variables.

I first estimate this model with a quadratic in years since migration (YSM) (Equation I-1) and I estimate it again with only a linear variable for YSM (Equation I-2). If the coefficient of *YSM* is positive and statistically significant, and the coefficient of *YSM* square is negative, it implies that immigrants' earnings improve with duration in the host country at a decreasing rate over time (i.e., positive assimilation). If the coefficient of *YSM* is negatively significant, however, it shows evidence of negative assimilation, earnings declining with the passage of time in the destination country.

I run the regression for the two countries from which immigrants in our sample originate -- the U.S. and the U.K., together first, and then separately for the U.S. and the U.K. This is accompanied with a regression on Chinese immigrants as a point of comparison with the previous two countries. By running these separate regressions by country of origin, I aim to clarify how negative/positive assimilation works, when it occurs, and for whom.

3.2.2 Model II

For the second model (Model II), I add another crucial measure of host society-specific human capital— Location of study:

Ln (Wage) = a (Education) + b (Experience) + c (Experience^2) + d (Married Status) +
e (Gender)+ f ln(Weeks Worked) + g (Part-time) + h (Bilingual) +
i (province_ ON.) + j (YSM)+ k (YSM)^2+ l(US or UK_ US)+
m (education location)+e

Based on previous studies that found differential effects of foreign degrees, I test its effects on earnings and examine whether the value of foreign credentials varies by country of origin. Since the U.S. and the U.K. are both developed countries, and their education systems are highly valued around the world, it is interesting to see whether the degree received from these two countries will help their immigrants to earn higher wages in Canada. For this test, I only use education levels greater than 12 years, since the variable "location of study", which indicates the province, territory (inside Canada) or country (outside Canada) where the highest certificate, diploma or degree was obtained, is only reported for individuals who had completed a certificate, diploma or degree above the secondary (high) school level, which is 12 years as I assigned (Statistics Canada 2006, see Appendix B).

The education location variables are expressed as a series of dummy variables that correspond to the locations where the degrees were conferred: (1) edulocationCA, which is assigned as one if the degree was completed in Canada and to zero otherwise; (2) edulocationUS is defined similarly for a degree completed in the U.S.; (3) edulocationEU is for a degree received in Europe (location of study from Europe is a proxy for location of study from the U.K. by U.K. immigrants since the latter is not specifically identified in the census data); (4) edulocationAsia is for a degree received in Asia (a proxy for location of study from China for Chinese immigrants for the same reason as the U.K. immigrants); (5) edulocationOthers is defined the location of study other than the above places. I use these dummy variables to run the

regression for the U.S. and the U.K. together, and for the U.S. and the U.K. separately, and the Chinese immigrants, in order to see the different influences between those who received their degree from their home country and those who received it from Canada.

The positive and statistically significant coefficient of edulocationCA (compared to education received in home country) would support the view that locally obtained education helps immigrants earn higher wages. Otherwise, we would conclude that the skills and credentials specific to the Canadian labour market are not valued differently from the skills directly brought from abroad.

3.3 Variables

Table 1 reports the means and standard deviations for the natural logarithm of earnings and for the explanatory variables. The dependent variable is the natural logarithm of gross wages and salaries before deductions of income tax, pensions and employment insurance, etc. I have already dropped the outliers who reported wages and salaries less than $500 or over $200,000 a year.

One of the key independent variables, YSM, refers to the number of years since migration and is measured as the number of years since obtaining the status of immigrant in Canada. We computed duration in Canada, following Chiswick and Miller (2011), as the Census year (2006) minus the year of immigration.

Another key independent variable, the place in which the highest degree was earned, i.e. location of study, is intended to measure the specific human capital, whether it was invested and acquired pre-migration abroad or post-migration in the host society. It is expressed as a series of dummy variables that in accordance with the locations where the degrees were obtained, and is assigned as in section 3.2.2 above.

In addition to these key variables, some other variables which are considered to affect earnings are included in the models as controls. They include experience, gender, weeks worked, marital status, whether part-time or not, bilingual, and provinces (See Appendix A). Appendix B shows how we defined the year of education. In the table, we group the 13 levels of education from the Census into 9 categories and impute the number of years one would normally take to complete the corresponding diplomas.

Table 1

Means and Standard Deviations of Variables in Earnings Function, 25 to 64-Year-Old Native-born and Immigrants from the U.S., the U.K., and China, 2006 Census of Canada

Variables	**Canadian-born**	**US immigrants**	**UK immigrants**	**Chinese immigrants**
Log Wages (lnW)	10.33 (.002)	10.39 (.021)	10.51 (.013)	9.94 (.015)
WAGES	41685.92 (57.513)	46541.01 (699.524)	50134.44 (454.803)	31120.68 (394.012)
Age	42.53 (.020)	46.04 (.207)	48.73 (.132)	42.52 (.138)
Education (edu)	13.22 (.005)	14.73 (.059)	13.82 (.033)	14.37 (.051)
Experience (exp)	23.31 (.021)	25.31 (.205)	28.91 (.139)	22.15 (.159)
Years Since Migration (YSM)		27.02 (.271)	33.16 (.177)	11.95 (.150)
Log Weeks Worked (lnweeks)	3.77 (.001)	3.76 (.010)	3.79 (.006)	3.67 (.008)

Part-time	.133	.176	.149	.125
Married	.702	.824	.794	.848
Gender (female)	.490	.544	.483	.500
bilingual	.220	.161	.087	.021
Atlantic	.090	.052	.014	.0004
Prairies	.073	.040	.030	.006
Quebec	.274	.103	.026	.072
Alberta	.115	.120	.122	.093
BC	.115	.256	.235	.308
Ontario	.333	.428	.574	.520
Sample Size of Model I	257,674	2,306	5,562	4,491
Edu. Location (Canada)	.983	.610	.670	.330
Edu. Location (Home Country)		0.390	.330	.670
Sample Size of Model II	162,209	1,678	3,744	2,917

- Value of standard deviation in parentheses; however, for dummy variables, I did not put the standard deviation;
- **Atlantic:** Newfoundland and Labrador, Prince Edward Island, Nova Scotia, New Brunswick;
- **Prairies:** Manitoba, Saskatchewan;
- **Education:** The exact years assigned for education levels are shown in Appendix B;
- **Sample Size of Model II:** The sample size is smaller than for Model I, because the variable "location of study" is only reported for individuals who had completed a certificate, diploma or degree above the secondary (high) school level, which is 12 years as I assigned. I also dropped the individuals who did not acquire their degree neither in Canada or their home countries, since it only accounts for a very small number.
- **Source:** 2006 Census of Canada

3.4 Descriptive Statistics

The descriptive statistics summarized in Table 1 show that the average age of the U.S. immigrants in our sample is 46 years old. The U.S. immigrant has on average almost 15 years of education (which is between bachelor's degree and University certificate or diploma below bachelor level) and has lived in Canada for 27 years. The U.K. immigrant in our sample is 49 years old with around 14 years of education and has lived in Canada for 33 years on average. The immigrant from China in our sample is much younger, 43 years old on average, with around 14 and a half years of education and has lived in Canada for 12 years. The Canadian-born has about the same average age as Chinese immigrant, 43 years old, with 13 years of education, which is the lowest among the four countries.

Table 1 also shows a substantial difference of earnings between immigrants from the developed countries and developing country. Immigrants from the English-speaking developed countries earn more than their Chinese counterparts. Specifically, immigrant from the U.K. and U.S. earn on average $50.1 thousands and $46.5 thousands per year respectively, while Canadian natives earn $41.7 thousands on average annually. In contrast, the immigrants from China earn much less than all of them, with an average wage of $31.1 thousands per year. For the three developed countries, this may reflect differences in human capital. As we see from Table 1, immigrants tend to be more educated than Canadian natives (13.2 years). Among these, there is an interesting phenomenon that the U.K. immigrants, with the oldest average age and the most work experience (28.9 years), earn the highest wages.

Table 2 shows the distribution of the observations in the sample by country of origin. Since our sample is limited to individuals age 25 to 64, it is not a full picture of Canadian demographic composition. The table shows that immigrants from the U.K. arrived on average

around 1972 and that those from the U.S. arrived a bit later, around 1979, whereas the majority of Chinese immigrants arrived in the 1990s.

Table 2

Distribution by place of birth, mean year of immigration and mean years since migration (YSM), 2006 Census of Canada

[POB] Place of birth of respondent	Sample frequency.	Percent	Mean year of immigration	Mean years since migration (YSM)
Canada	257,674	80.51		
United Kingdom	5,562	1.74	1972.8 (.177)	33.2 (.177)
United States of America	2,306	0.72	1979.0 (.271)	27.0 (.271)
China, People's Republic of	4,491	1.40	1994.1 (.150)	11.9 (.150)
Others	50,035	15.63	1985.2 (.056)	20.8 (.056)
Total	320,068	100	1984.5 (.055)	21.5 (.055)

Table 3 shows the location of highest diploma. Most immigrants from the U.S. and the U.K. received their highest diploma in Canada (60.07% and 65.54% respectively).The majority of the foreign-born who did not acquire their highest degree in Canada got it in their home country instead.

Table3

Distribution of immigrants' location of study, U.S., U.K., and China,

2006 Census of Canada

Country of origin / Location of study	U.S. (%)	U.K. (%)	China (%)
Canada	60.07	65.54	31.11
U.S.	38.46	1.44	2.59
Other Americas	0.12	0.03	0.10
Europe	1.06	32.22	2.46
Asia	0.06	0.16	63.23
Other countries and regions	0.23	0.63	0.52
Total	100	100	100
Total Freq.	1,703	3,830	3,092

4. Regression Analysis

4.1 Model I (Model I-1 and Model I-2)

Table 4 reports the results of the estimated earnings equations for adult immigrants from the U.K., U.S., and China, along with the t-statistics.

Table 4

Analyses of Immigrant Earnings, 25 to 64-Year-Old Immigrants from U.S., U.K., China, 2006 Census of Canada

Variable	U.S. & U.K.		U.S.		U.K.		China	
Model	**I-1**	**I-2**	**I-1**	**I-2**	**I-1**	**I-2**	**I-1**	**I-2**
Constant	6.044 (58.64)	6.108 (59.82)	5.956 (32.83)	5.989 (33.08)	6.201 (49.15)	6.274 (50.74)	5.452 (47.87)	5.520 (48.36)
Education (edu)	.0691 (20.81)	.069 (20.68)	.074 (13.18)	.075 (13.21)	.066 (15.78)	.066 (15.68)	.082 (0.65)	.079 (19.82)
Experience (exp)	.032 (7.88)	.035 (8.79)	.024 (3.14)	.027 (3.46)	.036 (7.46)	.038 (8.03)	-.004 (-0.75)	.000 (0.10)
$Exp^2/100$	-.055 (-7.39)	-.061 (-8.38)	-.045 (-2.90)	-.049 (-3.22)	-.061 (-7.07)	-.066 (-7.71)	.002 (0.26)	-.005 (-0.53)
Years Since Migration (YSM)	.012 (5.71)	.004 (4.85)	.016 (3.85)	.007 (5.14)	.009 (3.47)	.002 (2.40)	.044 (12.34)	.020 (15.24)
YSM^2/ 100	-.015 (-4.33)	*	-.019 (-2.28)	*	-.012 (-2.86)	*	-.061 (-7.20)	*
UK	.090 (4.70)	.088 (4.59)	*	*	*	*	*	*
Log Weeks Worked (lnweeks)	.786 (41.12)	.790 (41.31)	.798 (22.46)	.802 (22.61)	.779 (34.21)	.780 (34.26)	.867 (39.59)	.893 (41.12)
Part-time (parttime)	-.890 (-36.38)	-.890 (-36.32)	-.865 (-19.28)	-.861 (-19.20)	-.904 (-0.88)	-.905 (-30.89)	-.686 (-20.04)	-.685 (-19.90)
Married	.128 (6.10)	.123 (5.85)	.131 (3.13)	.130 (3.09)	.124 (5.13)	.120 (4.95)	.022 (0.70)	.001 (0.04)

Gender (female)	-.243 (-14.16)	-.242 (-14.09)	-.227 (-6.93)	-.225 (-6.87)	-.247 (-12.28)	-.246 (-12.22)	-.120 (-5.36)	-.119 (-5.28)
bilingual	.023 (0.78)	.023 (0.76)	.011 (0.21)	.013 (0.26)	.026 (0.70)	.022 (0.59)	-.004 (-0.05)	.018 (0.22)
Atlantic	-.173 (-3.23)	-.165 (-3.09)	-.217 (-2.91)	-.206 (-2.76)	-.120 (-1.46)	-.120 (-1.47)	-.065 (-0.13)	-.094 (-0.18)
Prairies	-.103 (-2.20)	-.102 (-2.18)	-.075 (-0.90)	-.069 (-0.83)	-.122 (-2.12)	-.122 (-2.13)	-.230 (-1.66)	-.240 (-1.72)
Quebec	-.122 (-2.84)	-.125 (-2.89)	-.136 (-2.21)	-.139 (-2.25)	-.114 (-1.76)	-.117 (-1.81)	-.260 (-5.63)	-.268 (-5.77)
Alberta	-.021 (-0.81)	-.022 (-0.84)	-.030 (-0.58)	-.033 (-0.64)	-.020 (-0.65)	-.021 (-0.69)	-.002 (-0.06)	-.016 (-0.41)
BC	-.060 (-2.95)	-.062 (-3.04)	-.083 (-2.09)	-.084 (-2.10)	-.050 (-2.13)	-.053 (-2.25)	-.116 (-4.62)	-.122 (-4.82)
Sample Size	7,868	7,868	2,306	2,306	5,562	5,562	4,491	4,491

- Value of heteroskedasticity-consistent t-statistics in parentheses
- Asterisk indicates variable not entered
- **Source:** 2006 Census of Canada

My analysis begins with the classic model (Models I-1 and I-2), with the U.S. and the U.K. immigrants, to assess whether the assimilation effect is positive or negative. An important result is that the estimates for the variables for the duration in Canada (YSM) do NOT support the negative assimilation hypothesis proposed by Chiswick and Miller (2011). For the regression with the U.S. & the U.K. immigrants together, neither the model with squared YSM term nor the linear model has a negative coefficient. For the model with a quadratic in years since migration (YSM) (Models I-1), the coefficient of YSM is 0.012 and it is statistically significant, and the coefficient of the $YSM^2/100$ is -.015 (also statistically significant). When only a linear duration

variable (YSM) is employed (Models I-2), the statistically significant coefficient of .004 indicates an increase of earnings at 0.4 percent per year in Canada. Table 5 reports the F-test for the joint significance of YSM and $YSM^2/100$ in Model I-1 which shows that the effect of years since migration is significant. Those results show a small positive assimilation.

Table 5

F-test for the joint significance of YSM and $YSM^2/100$

	U.S. & U.K.	**U.S.**	**U.K.**	**China**
F-test (YSM & $YSM^{2/}100$)	21.17 (Prob> F = 0.0000)	15.85 (Prob>F= 0.0000)	6.96 (Prob>F= 0.0010)	143.33 (Prob>F= 0.0000)

In the separate regressions, when a quadratic YSM specification is used, for the U.S., the U.K. and China, all coefficients of YSM and $YSM^2/100$ are statistically significant (both individually and jointly) and the coefficients of YSM are positive for all three countries. Among these, the coefficient for the U.K. is the smallest (0.009), and the squared YSM is negative for the three countries. When a linear specification is used (Models I-2), the statistically significant coefficient of 0.007 indicates an increase in earnings at 0.7% per year for the U.S. immigrants and the statistically significant coefficient of 0.002 indicates an increase of earning at 0.2% per year for the U.K. immigrants. We should notice that it is almost zero for the U.K. immigrants, which is at the border between "negative" and the "positive" assimilation. Not surprisingly, the Chinese immigrants show a large positive coefficient of 0.02, i.e., an increase at 2% per year. Thus, the coefficients in the quadratic specification and the linear specification both indicate a positive effect of duration on earnings, which diminishes with duration. These results reject the hypothesis of negative assimilation in the Canadian labour market. However, the positive assimilation for the U.K. immigrants is small.

Looking at the other control variables, the coefficients of the variables included in the models are mostly significant, except for the bilingualism for all three countries, and the marital status and experience for Chinese immigrants. Being female or doing part-time work decrease wages; more experience, or being married (except for Chinese immigrants) increase wages, as does working in Ontario (which is the reference variable for provinces). One also earns more by working more weeks. Higher education, regardless of where it was received, also increases wages. We should also notice that the coefficients for the dummy variable UK in the U.S. & U.K. joint regression is positive for both the regressions with squared YSM and the one with only YSM, which indicates that U.K. immigrants do better than U.S. immigrants (as the reference variable is US).

To better compare with Chiswick and Miller (2011), I regress only for the males, and the results are shown in Table 6. As Chiswick and Miller did, I restricted the analysis to the male between the ages of 25 and 65 in order to minimize biases arising from selective labour force participation. The findings for the U.S. and Chinese immigrants are consistent with the prior regression that included both males and females, but with lower significance levels. Table 7 reports the F-test for the joint significance of YSM and $YSM^2/100$. We notice that both the t-tests and the F-test for the U.K. immigrants are not significant, which means that the U.K. male immigrants here show a zero assimilation.

Table 6

Analyses of Immigrant Earnings, 25 to 64-Year-Old MALE Immigrants only from The U.S., the U.K., China, 2006 Census of Canada

variable	U.S. & U.K.		U.S.		U.K.		China	
Model	**I-1**	**I-2**	**I-1**	**I-2**	**I-1**	**I-2**	**I-1**	**I-2**
constant	6.241 (40.83)	6.300 (41.63)	6.253 (21.99)	6.330 (22.40)	6.367 (34.82)	6.406 (35.66)	5.276 (32.08)	5.359 (32.46)
Education (edu)	.058 (13.05)	.058 (12.96)	.062 (8.02)	.062 (8.00)	.056 (10.15)	.056 (10.10)	.084 (15.35)	.081 (14.68)
Experience (exp)	.039 (6.60)	.041 (7.03)	.039 (3.26)	.039 (3.29)	.041 (5.87)	.042 (6.10)	-.014 (-1.88)	-.008 (-1.17)
$Exp^2/100$	-.065 (-6.07)	-.070 (-6.55)	-.073 (-3.06)	-.073 (-3.10)	-.067 (-5.39)	-.069 (-5.64)	.025 (1.74)	.016 (1.13)
Years Since Migration (YSM)	.009 (3.13)	.002 (1.82)	.020 (3.11)	.007 (3.34)	.004 (1.07)	.0004 (0.03)	.048 (9.19)	.019 (9.98)
YSM^2 /100	-.013 (-2.67)	*	-.026 (-2.14)	*	-.006 (-1.12)	*	-.073 (-5.92)	*
UK	.097 (3.45)	.095 (3.38)	*	*	*	*	*	*
Log Weeks Worked (lnweeks)	.754 (25.26)	.758 (25.41)	.706 (12.12)	.714 (12.26)	.766 (22.00)	.768 (22.04)	.922 (28.07)	.950 (29.02)
Part-time (parttime)	-1.119 (-21.33)	-1.119 (-21.30)	-1.069 (-10.96)	-1.068 (-10.94)	-1.147 (-18.35)	-1.146 (-18.33)	-.662 (-10.80)	-.663 (-10.74)
Married	.204 (6.31)	.198 (6.14)	.203 (3.17)	.200 (3.11)	.205 (5.46)	.202 (5.40)	.062 (1.21)	.030 (0.59)

bilingual	.014 (0.31)	.010 (0.23)	.078 (1.00)	.079 (1.01)	.026 (0.70)	-.031 (-0.57)	.055 (0.47)	.073 (0.61)
Atlantic	-.161 (-2.09)	-.152 (-1.96)	-.336 (-3.02)	-.321 (-2.89)	.017 (0.15)	.021 (0.19)	.468 (0.63)	.453 (0.60)
Prairies	-.095 (-1.36)	-.095 (-1.36)	-.051 (-0.41)	-.035 (-0.28)	-.120 (-1.43)	-.123 (-1.46)	-.260 (-1.20)	-.264 (-1.21)
Quebec	-.079 (-1.27)	-.079 (-1.26)	-.109 (-1.19)	-.111 (-1.20)	-.091 (-1.00)	-.092 (-1.02)	-.347 (-5.38)	-.352 (-5.42)
Alberta	.011 (0.30)	.010 (0.26)	.022 (0.30)	.018 (0.24)	.010 (0.24)	.009 (0.22)	-.023 (-0.43)	-.044 (-0.80)
BC	-.096 (-3.32)	-.098 (-3.38)	-.085 (-1.44)	-.085 (-1.45)	-.098 (-2.93)	-.099 (-2.97)	-.187 (-5.08)	-.193 (-5.21)
Sample Size	3,925	3,925	1,052	1,052	2,873	2,873	2,247	2,247

- Value of heteroskedasticity-consistent t-statistics in parentheses.
- Asterisk indicates variable not entered
- **Source:** 2006 Census of Canada

Table 7

F-test for the joint significance of YSM and $YSM^2/100$

for the Male Immigrants regression

	U.S. & U.K.	**U.S.**	**U.K.**	**China**
F-test (YSM & $YSM^{2/}100$**)**	5.23 (Prob > F = 0.005)	7.87 (Prob > F= 0.000)	0.62 (Prob >F = 0.537)	68.12 (Prob > F= 0.000)

The main result is that, unlike Chiswick and Miller's finding, where English-speaking developed countries' immigrant in the U.S. typically experience negative assimilation, those immigrants in Canada, at least from the U.S. and the U.K., seem to undergo a different process of economic assimilation. However, compared to the group of Chinese immigrants, the rates of

assimilation are small, and the estimate is actually zero for the U.K. male immigrants.

4.2 Model II

To further investigate the issue, another model is estimated, with the help of the new explicit question in the 2006 Canadian Census about where one's highest degree was obtained. It has been shown in previous research that location of study among immigrants is strongly linked to the years since migration; immigrants who came earlier are more likely to receive their highest degree in Canada. "In particular, more than 62% of all immigrants who arrived before 1990 obtained their highest diploma in Canada. That number is around 55% for immigrants who arrived between 1990 and 2000, and it drops to 26% for immigrants who arrived after 2000." (Fortin, et al. 2013, page 7). Table 8 shows the regression results with that variable added to the previous ones.

Table 8

Analyses of Immigrant Earnings with variables for education location, 25 to 64-Year-Old Individuals from Canada, U.S., U.K., China, 2006 Census of Canada

Variables	**Canada**	**U.S.**	**U.K.**	**China**
constant	5.653 (241.28)	5.765 (24.25)	6.309 (37.72)	5.175 (30.18)
Education (edu)	.096 (89.46)	.080 (9.30)	.066 (9.84)	.078 (10.32)
Experience (exp)	.044 (60.74)	.032 (3.55)	.042 (7.01)	.018 (2.63)
$Exp^2/100$	-.079 (-49.41)	-.058 (-3.07)	-.074 (-6.57)	-.054 (-3.40)
Years Since Migration (YSM)		.014 (2.60)	.008 (2.38)	.057 (11.19)

YSM^2 /100		-.019 (-1.88)	-.010 (-1.93)	-.090 (-7.77)
Log Weeks Worked (lnweeks)	.816 (197.55)	.818 (18.37)	.744 (26.64)	.907 (34.75)
Part-time	-.792 (-146.36)	-.891 (-16.47)	-.940 (-25.10)	-.714 (-16.32)
Married	.125 (32.92)	.151 (3.01)	.124 (4.07)	.099 (2.44)
Gender (female)	-.227 (-64.60)	-.152 (-3.89)	-.233 (-9.26)	-.121 (-4.27)
bilingual	.053 (12.23)	-.028 (-0.48)	.038 (0.94)	-.077 (-0.85)
Atlantic	-.218 (-33.56)	-.138 (-1.53)	-.154 (-1.64)	-.084 (-0.16)
Prairies	-.143 (-19.81)	-.063 (-0.64)	-.056 (-0.80)	-.231 (-1.52)
Quebec	-.158 (-34.10)	-.188 (-2.61)	-.157 (-2.13)	-.267 (-4.67)
Alberta	.035 (5.93)	-.022 (-0.36)	-.027 (-0.72)	-.053 (-1.12)
BC	-.065 (-11.16)	-.092 (-1.98)	-.074 (-2.57)	-.165 (-5.12)
Edu. Location (Canada)	Reference Variable	.105 (2.29)	-.016 (-0.48)	.127 (3.46)
Edu. Location (Europe)	-.040 (-1.42)	*	Reference Variable	*
Edu. Location (U.S.)	-.106 (-6.94)	Reference Variable	*	*
Edu. Location (Asia)	*	*	*	Reference Variable

Sample Size	162,209	1,678	3,744	2,917

- Value of heteroskedasticity-consistent t-statistics in parentheses;
- Asterisk indicates variable not entered;
- For Canada, I regress for individuals who receive their degree from their home country or the U.S. or the U.K.;
- For the U.S., U.K. and China, I only regress for immigrants who receive their degree from their home country or Canada;
- **Source:** 2006 Census of Canada.

In the regressions, I set the individuals who studied in their home country as the reference group for each source country of immigrants. The results show that for U.K. immigrants the coefficient of edulocationCA is negative (compared with the U.K. immigrants who studied in Europe) but statistically insignificant. Perhaps surprisingly, the coefficient of the edulocationCA is positive and statistically significant for the U.S. immigrants. In other words, U.S. immigrants who received their highest degree in the U.S. earn less than those who received it in Canada. Even for the Canadian born individuals, the coefficient of edulocationUS is significantly negative (compared with that of natives who studied in Canada). As most previous studies about immigrants from developing countries, the coefficient of the edulocationCA is a large positive number and significant for Chinese immigrants. Overall, the effect of education obtained in Canada for the UK immigrants is ambiguous. Some researches, such as Fortin et al. (2013), find it to be significantly negative, perhaps because of the difference in the sample base (They use 20 to 64–year-old individuals with an education level higher than high school and who were full-time workers with positive wage income in 2005). As in Fortin et al. (2013), I find that the effect of education in Canada is positive for the US and Chinese immigrants.

Taken together, surprisingly but consistent with the conventional view on immigration, the education received from the U.K. and the U.S. has either an insignificant or a negative effect on

earnings. Locally acquired human capital contributes more to wages than skills brought from abroad, i.e. locally obtained education helps immigrants earn higher wages. This may be because the government tries to lure and cultivate foreign talents via local education. What this implies is that skills brought from more developed countries do not necessarily, at least for the U.S., contribute to higher wages in Canada. However, this might reflect a phenomenon related to the brain drain issue, which I am going to discuss this in the next section.

5. Discussion

The U.K. and the U.S. are as developed countries as Canada, and the skills that immigrants bring to Canada are expected to be valued highly when they first arrive. Since they can expect favorable wage rewards at the time of entry, they are more likely to see their wages decline or remain constant than immigrants from less developed countries who start at the bottom of the host country labour market. Canada, therefore, may provide an interesting example for the examination of the mechanism of negative assimilation proposed by Chiswick and Miller (2011). For sure, it is not necessarily the case that one should expect to find the same pattern of immigrant assimilation in Canada to that observed in the United States, despite the close ties and similarities between the two countries. But why did we fail to confirm the "negative" assimilation hypothesis in the Canadian labour market?

Immigration policy has an important effect on the society. Due to the reforms of Canadian immigration policy from the 1960s to the 1980s, the nature of Canadian immigration has changed dramatically (Mapleleafweb 2010). Between 1900 and 1965, Europe (to a large extent, Britain) was the primary source of immigrants to Canada. Changes took place between 1962 and 1967 as the national-origin restrictions were removed and the emphasis was shifted towards the

skills of immigrants. The point system that aimed at selecting immigrants with desirable skills was introduced in 1967 (Green and Green 1995). The 1976 *Immigration Act* established four categories of immigrants, which are: (1) family class migrants, covering immediate family members; (2) nominated relatives, covering close relatives; (3) independent migrants, covering various subcategories of skilled workers as well as entrepreneurs and investors; and (4) refugees. Individuals applying under the categories of nominated relatives or independent migrants are subject to the point system (Aydemir and Borjas 2007). It was the first time that Canada formally recognized refugees as a legitimate class of immigrants to Canada. In the 1980s, the *Immigration Act* was further amended to include a fifth immigration category: the business class. This new method of immigration has been used widely by Chinese immigrants, particularly during the period before the handover of Hong Kong to China in 1997 (Canada in the Making 2009). By the end of the century, Asia represented the largest region of origin for new Canadians. Other areas, including Africa, the Middle East, and South and Central America, have also become important source countries of immigration to Canada.

Chiswick and Miller stated: "Note that if the higher initial wages in the destination of the migrants are due merely to their higher level of ability (or unmeasured dimensions of human capital) their earnings would not decline with duration" (Chiswick and Miller 2011, page 504). Since the 1965 Amendments to the Immigration and Nationality Act in the U.S., the skilled category has made up a very small percentage of U.S. immigration (Reitz 1998). Less than 10 percent of the U.S. immigrants in 1990 were admitted as the skilled class, while, at the same time, nearly 40 percent of Canadian immigrants were admitted because of their skills. Conversely, two-thirds of U.S. immigrants were admitted on the basis of their family relationships, as compared to 37 percent of Canadian immigrants (Antecol et al. 2001). Thus, immigrants in the

Canadian labour market possess a high level of skills on average, and the skills brought by the U.S. and the U.K. immigrants may be higher than average.

Moreover, even though the years of schooling variable that I constructed may not be exactly similar to the one used by Chiswick and Miller, some comparisons still can be made. The average education attainment (from 2000 U.S. Census data) of the U.K. (15.2 years) and the Canadian immigrants (14.8 years) to the U.S. is higher than that the U.K. (13.8 years) and the U.S. (14.7 years) immigrants to Canada (from 2006 Canadian Census data). However, because of the relatively high education level of U.S. natives, immigrants to the U.S. remain somewhat less educated than U.S. natives (Borjas 1993). In Canada, immigrants, on average, have almost one more year of schooling than Canadian natives (13.2 years). In other words, while immigrants in the U.S. are less educated than their native counterparts, it is the reverse in Canada: immigrants in Canada are more educated than natives.

Another important difference between the United States and Canada is that Canada used to tie the levels of immigration explicitly to the macroeconomic climate before 1990, the level being increased during economic booms and reduced during slowdowns. These adjustments were accomplished by tailoring the number of immigrants admitted under the independent migrant class. The U.S. may have implicitly done so through tightening the criteria of skill workers' visas, but this only constitutes a small portion of total migration to the US (Chiswick et al. 1997, Aydemir 2003). Because of these adjustments and other changes in policy, the share of immigrants belonging to each of the categories has fluctuated significantly in Canada through time. For instance, the share of independent migrants rose from 21% in 1984 to 59% in 2000 (Citizenship and Immigration Canada 2001), and more than 75% of those admitted in this category were skilled workers (Aydemir and Borjas 2007). Chiswick and Miller's finding of

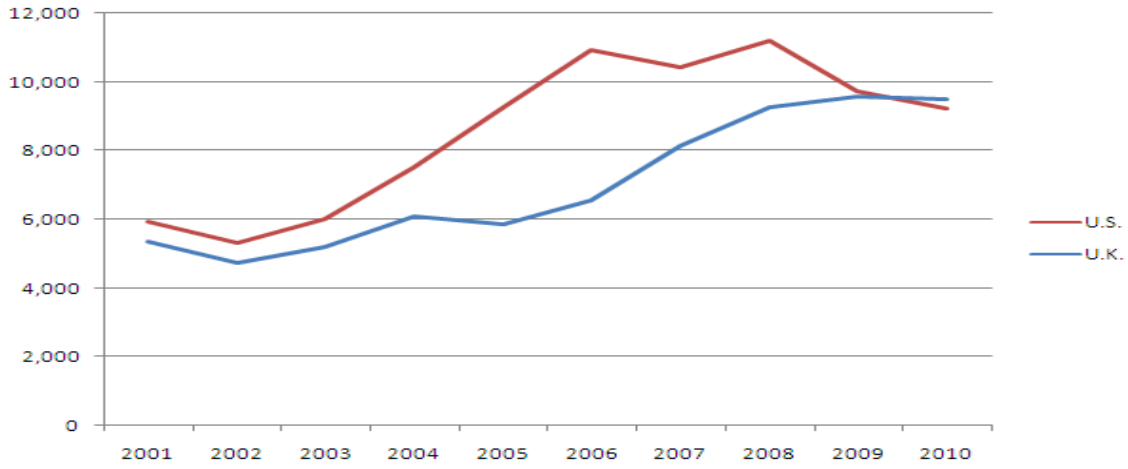
"negative" assimilation is based on high initial wage offer in the destination rather than random wage draws; as many of the developed countries' immigrants who move to the U.S. may receive their work offers before they immigrate, they are more likely to receive high wages at the first place. However, immigrants who move to Canada may come before they find a job. Chiswick and Miller also mentioned: "For example, it might arise from an unanticipated exogenous increase in demand in the destination labor market for workers with a particular set of skills, perhaps specific to a particular occupation or industry. If so, with the passage of time, as the labor market adjusts, the wages of the immigrants would regress to the mean. Compared to mean wages in the labor market, the relative decline in immigrant wages in these sectors would give the appearance of negative assimilation" (Chiswick and Miller 2011, page 504). Thus, because of the government-adjusted Canadian immigrant policy, the Canadian immigrant labour market is more stable than the self-adjusted U.S. immigrant labour market.

The U.S. now is Canada's fourth biggest source of immigrants (after the Philippines, China, and India), and it is followed closely by the U.K. As shown in Graph 2, each accounts for almost 10,000 new permanent residents per year. The number of U.S. immigrants soared slightly during the recession, but both source countries had a rising number over the last decade. In the early 2000s, around 6,000 and 5,000 new immigrants came in from each country respectively. By 2010, those numbers both increased by nearly 80%, to more than 9,000 (Citizenship and Immigration Canada 2011). I now discuss specifically the situation of the U.S. and the U.K.

Graph 2

Inflow of U.S. and U.K. immigrants to Canada

(2001 – 2010)



Source: Citizenship and Immigration Canada, 2011

5.1 The U.S.

Although the U.S. immigration policy is known to emphasize family reunion, in the context of a growing worldwide competition for global talent, the winner is still the U.S., which has the ability to attract PhDs and graduates not only from emerging countries, but also from Europe and Canada. Some emerging economies are also successfully attracting highly skilled migrants, while they continue to experience significant outflows of high-skilled workers. In this context, Europe may be the loser to attract the talent that is going either to the U.S. or to other immigrant-friendly countries, such as Canada or Australia, due to their time-consuming and strict immigration policies. Canada, with a centralized and clear immigration program for professionals, attracted many skilled immigrants from the rest of the world, even though it was once in the headlines and vigorous debates took place across the country about the migration of highly skilled Canadians to the United States. This "brain drain" issue of the 1990s has now

largely died out (Davies et al. 2013). Reciprocal migration suggests that Canadians need not worry about the brain drain anymore. "The trend increase of education premia in most advanced economies suggests that the supply of highly educated workers is falling short of demand. Countries are just not increasing their stock tertiary educated individuals fast enough. Selective immigration can reduce this skill shortage" (Boeri et al. 2012, page 2).

We know that even if the point system used in Canada might be particularly effective at screening out immigrants from the bottom tail of the education distribution, with the high-tech industries and intensive job market competition, the skilled immigrants to the U.S. are more likely than the immigrants to Canada to possess relatively high levels of schooling. Canadians, on average, earn less than Americans, so the U.S. attracts a large number of talented Canadians who want to enjoy higher wages and lower taxes. Based on this background, the U.S. has a highly competitive labour market and serious polarization, and only highly skilled people may choose to stay in the U.S. In contrast, with a more equal society and a more peaceful social and economic environment, Canada may also attract some U.S. immigrants who come to Canada for the less aggressive life; they might be less paid, but they can live in peace and happiness. It is a sure thing that immigrant's motivations are personal. A leading American geographer said: "The US immigrants come to Canada not for economic opportunities, but for the country's set of values" (Globe and Mail 2010). Americans are attracted by their perspective of Canada's more liberal culture, such as the universal public health-care system, more rigorous gun control laws, positive attitudes toward gays and lesbians and multiculturalism. (Hardwick 2010). Professor Hardwick, for example, found that most "recent arrivals from the U.S. reported their primary reason for leaving was the idea that Canada is a safe refuge for liberal thinkers and idealists" (Globe and Mail 2010).

In contrast, the high Canadian tax rates, the complex and multi-jurisdictional regulations of the Canadian economy and the low value of the Canadian dollar, at least during some periods (such as the 1990s), are still an obstacle for the highly talented U.S. people to have the willingness to move to Canada. Thus the people who want to migrate to Canada might be from the less-highly capable class, or from those who experience a hard time to find a job in the U.S

In addition, some U.S. immigrants may come to Canada during periodic economic recessions (such as the early 1980s and the early 2000s). Thus, they may not receive the high initial wages that is assumed by the "negative" assimilation hypothesis. Borjas (1993) noted: "In general, Canadian immigrants in the United States do quite well in the labor market. The most recent arrivals enumerated in the 1980 census earn about 20 percent higher wages than American natives and have about two more years of schooling. In contrast, American immigrants in Canada are less successful. The most recent arrivals enumerated in the 1981 census earn 4.5 percent less than Canadian natives, yet have 4.5 years more schooling" (Borjas 1993, page 37). In his previous work, he argued that the return migration propensity and the skill mix of immigrants are the main determinants of the skill composition of immigrant flows (Borjas 1987). The evidence indicates that the Canadian income distribution is more compressed than that of the United States, so that skilled Canadians are likely to have a greater motivation to migrate to the United States than low-skilled Canadians (McWatters and Beach 1989). This can explain why the low-skilled Americans may have higher willingness to come to Canada than the high-skilled ones. The self-selection generated by the differential economic opportunities available to skilled and unskilled workers in the two countries greatly dilutes the expected impact of Canada's point system, which is supposed to bring highly skilled talents.

There is also an interesting phenomenon: “Every four years, like clockwork, disillusioned Americans make the same tired threat: if their presidential candidate of choice does not win, then, screw it, they are moving to Canada. While the vast majority of them do not, there has been a measurable increase in the number of both American and British immigrants coming to Canada over the last decade. Now those increases could pick up even more, thanks to a change in Canada’s immigration rules” (Melanson 2013). The dissatisfaction with the government is also a reason for U.S. immigrants to come to Canada. “By 2006, Statistics Canada reported that the highest number of Americans had moved to Canada in over 30 years, with a 20 percent increase over the previous year and almost double the number who had arrived five years earlier (Statistics Canada 2001, 2006). This period corresponds closely with the US presidential election of conservative candidate George W. Bush in 2000 and his subsequent reelection four years later” (Hardwick 2010, page 91).

5.2 The U.K.

According to the above results, it appears that the U.K. immigrants are doing well in the Canadian labour market. It might be because of the long history of the British-friendly environment in Canada. The reason why the coefficient of the education location in the U.K. is insignificant is because the U.K. education is valued equivalent to that of Canada.

As seen in Table 2, U.K. immigrants arrived in Canada earlier than those from the other two countries. Canada, as a former British colony, was familiar and friendly to them. The U.K. primary language is English and their lifestyle was not entirely “foreign”. The U.K. immigrants in Canada might have difficulty adjusting to the climate and to the greater degree of equality in society, but they were familiar not only with the dominant language, but also with the political

institutions and the legal system. They were seen as culturally similar to Canadians. The U.K. immigrants in Canada were "invisible immigrants", much more than would probably have been the case in the United States (Erickson and Gables 1972).

The U.K. was considered distinct from the other countries' immigrants by the early writers that studied immigrant assimilation. Most of the early commentators suggested that the U.K. immigrants were most likely able to fit into the Canadian labour market on terms similar to the native-born English-speaking Canadians. Thus, most British immigrants arrived with, or rapidly developed, skills that allowed them to fit into a better paid end of the Canadian labour market. To the extent that many Canadian-born were the children or grandchildren of earlier generations of British immigrants, it is not surprising that their relatives arriving in the 20th century assimilated easily.

Canadian studies tend to find that until about 1970, immigrants in Canada were at less of an initial disadvantage than immigrants to the United States, or than more recent immigrants to Canada, but that they also experienced relatively low rates of assimilation (Baker and Benjamin 1994; Bloom et al. 1995). Using data for 1971, Bloom et al. (page 994) estimate that it took about 15 years for immigrants to reach wage equality with the Canadian-born. These immigrants were mainly from Britain and Northwestern Europe.

As already noted, British immigrants to Canada formed a much larger proportion of the total stream of immigration to Canada than to the United States. However, there is very limited information on the types of British immigrants moving to Canada rather than the U.S. It is possible that Canada attracted English immigrants with less human capital than did the United States (Fitzpatrick 1980, page 131).

All these phenomena above may explain why the U.K. immigrants in Canada did not show "negative" assimilation as they did in the U.S. labour market. However, unlike most other immigrants, there is no sign of positive assimilation either. Thus, as "invisible" migrants who have been in Canada for a relatively long time, the U.K. immigrants live as native-born Canadians.

Summary and Conclusion

Canada takes pride in being a country of immigrants. The policy and structural differences between the Canadian and U.S. labour markets provide suitable conditions to study the existence of "negative" assimilation for Canadian immigrants. The standard labour market adjustment literature on immigration has focused on the positive assimilation hypothesis. For almost all the major immigrant destination countries, there is evidence that earnings improve with duration in host countries. However, the "negative" assimilation hypothesis under the assumption of highly transferable skills concludes that immigrants may go through decreasing wages as their economic rent goes down.

In the Chiswick and Miller (2011) model, negative assimilation happens in the context of similar earnings, cultures, and labour market institutions, which are the conditions of highly transferable skills. The Canadian labour market, in my current study, provides a counter example to the negative assimilation hypothesis.

Based on immigrants from English-speaking developed countries – the U.S. and the U.K., the analyses did not show a negative sign for the years since migration coefficient in any of the regressions run in the two models that I estimated. As Chiswick and Miller (2011) discussed in their paper, that kind of migration takes place when a worker gets a job offer that provides

higher earnings than that of the native born. Afterwards, with the passage of time the economic rent diminishes, earnings undergoing a relative decline. This may not the case for Canada: as an immigrant friendly country, the fact that immigrants usually come before they receive a high wage work offer in Canada might be the most important reason to explain the absence of negative assimilation. Moreover, the Canadian immigration policy, which aims at adjusting the particular skills so as to have stable wages on average, can also be a reason to explain the absence of "negative" assimilation. Another possibility is that there might have been an increase in the unmeasured dimensions of the quality of immigrants as time goes by that pushes down their initial high wages. Alternatively, there could have been return migration because the successes of immigrants in the destination countries attracted even better wage offers from other countries. However, Canada's sound social insurance security may induce most of the immigrants to choose to stay once they settle down in Canada. According to the Globe and Mail (2010), "Early research results show that American immigrants are not inclined to move back, especially in light of Canada's stronger economy." Even if some of them choose to work outside Canada, they may still keep their Canadian citizenship so as to enjoy the Canada's world-famous social insurance system.

Regarding education location, the results suggest that the education that U.K. and U.S. immigrant acquired in Canada is as valued (for U.K. immigrants) or more valued (for U.S. immigrants) than that acquired in their countries of origin, even if they come from similar cultural background and have highly transferable skills. The lower value attached to the U.S. education may reflect an invisible self-selection system; immigrants who came from the U.S. may not have come to Canada only for the success of their career, but for a more relaxing society and a less competitive job market.

Appendix A:

Data sources and definitions

The data are drawn from the 2006 Canadian Census Public Use microdata file maintained by Statistics Canada. The public use sample represents a proportion of 2.7% of the Canadian population. The analysis is restricted to males and females aged from 25 to 64 with positive wages between $500 and $200,000. A person is classified as an immigrant if he/she reports being a landed immigrant in the Canadian census and is either a noncitizen or a naturalized Canadian citizen; all other persons are classified as native-born Canadians.

Description of Variables for Analysis for Canada

Definition of Population: Foreign-born and native-born males and females aged 25 to 64 with positive wages from $500 to $200,000. The foreign-born are limited to those born in the United Kingdom, the United States, and China.

Dependent Variable

Earnings (WAGES): Refers to gross wages and salaries before deductions for such items as income tax, pensions and employment insurance. Included in this source are military pay and allowances, tips, commissions and cash bonuses, benefits from wage-loss replacement plans or income-maintenance insurance plans, supplementary unemployment benefits from an employer or union as well as all types of casual earnings during calendar year 2005. Other employment income such as taxable benefits, research grants and royalties are included.

Independent Variables

Years of Education (edu): Information indicating the person's most advanced certificate, diploma or degree. This has been constructed from the Census data on highest certificate, diploma or degree (**HDGREE**) by assigning values to the Census categories (See Appendix B).

Experience (exp): This is the individual's **age** minus years of education (**edu**) minus six. For the **age**, I took the midpoints of the age group (**AGEGRP**).

Years Since Migration (YSM): This is computed from the year the foreign-born person came to Canada to stay. I computed it as the Census year (2006) minus the year of immigration (**YRIMM)**.

Log of Weeks Worked (lnW): This is the natural logarithm of the number of weeks the person worked in the year prior to the census year (2005, **WKSWRK)**. It refers to the number of weeks in 2005 during which persons worked for pay or were self-employed at all jobs held, even if only for a few hours. It includes weeks of paid vacation, weeks on sick leave with pay, and all weeks in which training was paid for by the employer.

Marital Status (married): Marital status of the person – Historical (**MARSTH)**. The categories are: Married or common-law; Separated; Divorced; Widowed; Never married (single). I set the dummy variable Married equals 1 if individuals belong to the "married or common-law" category, and 0 otherwise. Since 2001, same-sex common-law partners are included in the category 'Married or common-law'. In 2006, same-sex married spouses are included in the category 'Married or common-law'.

Bilingual: Knowledge of official languages refers to the ability to conduct a conversation in English only, in French only, in both English and French or in none of the official languages of Canada **(KOL).** I set bilingual equals 1 if the individual can speak both English and French, and 0 otherwise.

Place of Birth: Place of birth of respondent **(POB),** refers to the country where the respondent was born.

Province (PR): Refers to the major political division of Canada where the current residence is located (on May 16, 2006).

Location of Study (LOCSTUD): This variable indicates the province, territory (in Canada) or country (outside Canada) where the highest certificate, diploma or degree was obtained. It is only reported for individuals who had completed a certificate, diploma or degree above the secondary (high) school level.

Appendix B:

Assumed correspondence between highest degree and years of education, 2006 Census of Canada

Code	Highest Degree Achieved	Years of Education Assigned
1	None	8
2	High school graduation certificate or equivalency certificate	12
3	Other trades certificate or diploma	13
4	Registered apprenticeship certificate	13
5	College, CEGEP or other non-university certificate or diploma from a program of 3 months to less than 1 year	13
6	College, CEGEP or other non-university certificate or diploma from a program of 1 year to 2 years	14
7	College, CEGEP or other non-university certificate or diploma from a program of more than 2 years	14
8	University certificate or diploma below bachelor level	15
9	Bachelor's degree	16
10	University certificate or diploma above bachelor level	17
11	Degree in medicine, dentistry, veterinary medicine or optometry	22
12	Master's degree	18
13	Earned doctorate degree	22

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