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1 Immigration Policy, National Origin, and Immigrant Skills: A Comparison of Canada and the United States

George J. Borjas

1.1 Introduction

Both Canada and the United States are important participants in the immigration market. These two countries admitted over 12 million immigrants between 1959 and 1981. In recent years, their immigration policies have diverged considerably. Prior to the early 1960s, both Canada and the United States used national origin to allocate the scarce number of visas among the many applicants, preferring persons originating in northwestern European countries.[1] During the 1960s, the two countries enacted major immigration policy changes. As a result, the United States began to award entry permits on the basis of the applicant's family ties with U.S. residents or citizens, whereas Canada began to allocate visas on the basis of the applicant's observable socioeconomic characteristics.

The historical comparison of immigrant skills and labor market performance between Canada and the United States, therefore, can provide useful lessons in the benefits and costs of skill-based immigration policies. Earlier work has documented important differences between the Canadian and U.S. experiences.[2] This paper continues this line of research and documents that many of the differences in the economic impact of foreign-born workers on Canada and the United States can be understood in terms of a simple hypoth-

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1. There was also a sizable transnational migration between Canada and the United States. The size and skill composition of this flow is discussed in detail below.

2. See Abbott and Beach 1987; Bloom and Gunderson 1991; Borjas 1990; Chiswick 1987; and Tandon 1978.

esis: the national-origin composition of immigrants in the two host countries is different.

The source-country distribution of immigrant flows plays a crucial role because of substantial dispersion in skills and labor market performance among national-origin groups (Borjas 1987; Jasso and Rosenzweig 1986). In general, immigrants originating in industrialized economies are more skilled and are more successful in the host country's labor market than are immigrants originating in the less-developed countries. The empirical analysis below shows that the observed differences between Canada and the United States in the average skill level of foreign-born workers can mostly be "explained" by differences in the national-origin mix of the immigrant flows admitted into the two countries.

This finding raises important questions about the efficacy of Canada's point system. My empirical analysis indicates that the point system works not because it attracts more skilled workers from a particular source country, but because it alters the national-origin mix of the immigrant flow.[3] This implication of the empirical evidence provides a very different understanding of how a point system increases the average skills of foreign-born workers.

1.2 Immigration Policies between 1960 and 1980

Prior to the 1965 amendments to the Immigration and Nationality Act, U.S. immigration policy was guided by the national-origins quota system.[4] Entry visas allocated to countries in the Eastern Hemisphere depended proportionately on their representation in the national-origin composition of the U.S. population in 1920. Because the ancestors of the great majority of U.S. residents originated in northwestern Europe, the United Kingdom was allocated 65,721 visas (almost half of the 150,000 available visas) and Germany was allocated 25,957 visas, whereas Italy was allocated 5,802 and Russia was allocated 2,784 visas. To prohibit the entry of Asian immigrants, Asian countries were generally allocated 100 visas per year.

The national-origins quota system applied only to visa applicants originating in countries in the Eastern Hemisphere. Applicants from North and South America were exempt from the quotas and faced no numerical restrictions on the number of visas, presumably because of the close economic and political ties between the United States and its geographic neighbors. These visas were awarded on a first-come, first-served basis as long as the applicants satisfied a long list of requirements regarding their health and their political and moral backgrounds.

3. See Duleep and Regets (1990) for additional evidence that the skills of immigrants from specific source countries vary little between Canada and the United States.

4. Borjas (1990) presents a comparative review of Canadian and U.S. immigration policies. See also Boyd (1976) and Keely and Elwell (1981).

The 1965 amendments (and subsequent revisions) regulated the process of legal immigration throughout the 1970s and 1980s. Under the 1965 amendments, the United States permitted the entry of 270,000 persons per year, with no more than 20,000 immigrants originating in any particular country of origin. Instead of emphasizing national origin, the 1965 amendments made family reunification the central objective of immigration policy. This was accomplished through several provisions. First, 80 percent of the 270,000 numerically limited visas were awarded to "close" relatives of U.S. citizens or residents. These close relatives included unmarried adult children of U.S. citizens, siblings of adult U.S. citizens, and spouses of resident aliens. The remaining 20 percent of the visas were allocated to persons on the basis of their skills. A large number of these 54,000 visas, however, went to the families of the skilled workers who qualified for the visa.

Furthermore, parents, spouses, and minor children of adult U.S. citizens could bypass the numerical restrictions specified in the legislation. These "immediate" relatives automatically qualified for entry and did not have to apply for one of the 270,000 numerically limited visas. By the late 1980s, more immigrants were entering under this single provision of the law than under all the family reunification preferences combined.

Until 1961, Canadian immigration policy, like that of the United States, permitted the entry of persons originating in only a few selected countries, such as the United Kingdom, Ireland, and the United States, or of persons who were dependents of Canadian residents. Major policy changes in 1962 and 1967 removed the national-origin restrictions and shifted the emphasis in the visa allocation system toward skills requirements. Under the new regulations, applicants for entry into Canada were classified into three categories: sponsored immigrants (which included close relatives of Canadian residents), nominated relatives (which included more distant relatives of Canadian residents), and independent immigrants.

Beginning in 1967, visa applicants in the last two of these categories were screened by means of a point system. Potential immigrants were graded and given up to 100 points. Points were awarded according to the applicant's education (a point per year of schooling, up to 20 points), occupational demand (up to 15 points if the applicant's occupation was in strong demand in Canada), age (up to 10 points for applicants under the age of 35, minus 1 point for each year over the age 35), arranged employment (10 points if the applicant had a job offer from a Canadian employer), a "personal assessment" by the immigration officer based on the applicant's motivation and initiative (up to 15 points), and other factors. Generally, an applicant needed to obtain 50 out of the 100 total points in order to pass the test and be awarded an entry visa.

In 1976, Canada amended its Immigration Act and made it easier for the families of Canadian residents to migrate there. This was accomplished through a revised point system that, in essence, awarded extra points to nom-

inated relatives. To some extent, Canada enacted a weak version of the 1965 amendments eleven years after the United States.

Certainly the most noticeable consequence of the major policy shifts in Canada and the United States is the change that occurred in the national-origin mix of the immigrant flow. Table 1.1 summarizes the national-origin distribution of the immigrant flows admitted between 1959 and 1981. During the 1960s, about 40 percent of immigrants entering the United States originated in Europe. This had declined to 17 percent by the 1970s. In contrast, only 12.8 percent of immigrants in the 1960s originated in Asian countries, and this tripled to 37.2 percent by the 1970s.

Similar changes were also observed in Canada. For instance, 70 percent of immigrants entering Canada in the 1960s originated in the United Kingdom or in other European countries. During the 1970s, the fraction of the immigrant flow originating in Europe was cut by half, to 37 percent. On the other hand, the fraction of immigrants originating in Asia almost quadrupled, from 8 percent in the 1960s to 29 percent in the 1970s.

Although the trend away from European immigration and toward Asian immigration characterizes the experience of both Canada and the United States, it is important to note that there were significant differences in the national-origin mix of the immigrant flow between the two host countries in the 1970s. The fraction of immigrants originating in Europe was more than twice as large

Table 1.1 **Migration Flows into Canada and the United States, 1959–81**

	1959–70		1971–81	
Origin	Number (in 1000s)	% of Total	Number (in 1000s)	% of Total
	Canada			
Africa	34.1	2.1	71.5	4.6
Americas	283.5	17.5	427.9	27.3
Asia	136.3	8.4	457.3	29.1
United Kingdom	381.2	23.5	237.8	15.2
Europe (excluding United Kingdom)	745.4	46.0	340.1	21.7
Oceania and other	40.2	2.5	34.3	2.2
Total	1,620.7		1,568.9	
	United States			
Africa	43.2	1.1	106.5	2.0
Americas	1,792.0	46.6	2,175.7	42.7
Asia	492.2	12.8	1,898.1	37.3
United Kingdom	268.8	7.0	138.5	2.7
Europe (excluding United Kingdom)	1,228.2	31.9	729.5	14.3
Oceania and other	23.4	0.6	41.5	0.8
Total	3,847.8		5,089.8	

Sources: Leahy (1983); U.S. Immigration and Naturalization Service (various years).

in Canada, while the fraction of immigrants originating in the Americas (primarily Latin America) was almost three times as large in the United States. I will show that these national-origin differentials explain a major portion of the gap in average skills between immigrants in Canada and the United States.

1.3 Education and the "Choice" of a Host Country

As a result of changes in immigration policy (as well as changes in economic conditions in the host and source countries), the relative size and skill composition of immigrant flows into Canada and the United States changed drastically in recent years. This section and the next describe the extent of these changes.

Consider the population of persons who immigrate at any given time period into either Canada or the United States. These data can be used to calculate the fraction of immigrants who "choose" one country over the other. Table 1.2 reports the fraction of immigrants, by cohort and educational attainment, who migrated to the United States.

I estimate the fraction of immigrants who chose the United States using the public use samples of the 1971 and 1981 Canadian censuses and the 1970 and 1980 U.S. censuses. The 1971 data are drawn from a 1/100 random sample of the Canadian population, while the 1981 data are drawn from a 2/100 sample. The 1970 U.S. census data for immigrants are a 2/100 random sample of the immigrant population, while the 1980 data are a 5/100 sample. The 1970/71 censuses are used to estimate the choice probabilities for the cohorts that migrated during the 1960s, and the 1980/81 censuses are used for estimating the choice probabilities of the cohorts that migrated in the 1970s.[5] Finally, the probabilities are calculated in the sample of immigrants (both men and women) aged 18–64.

Between 1960 and 1980, 81.5 percent of the immigrants "chose" to reside in the United States. Note, however, that this statistic increased rapidly during the period. In the early 1960s, 77.2 percent of the sample migrated to the United States, while in the late 1970s 86.1 percent chose the United States. This reallocation of immigrants in the North American continent is due to policy changes in the United States that increased the annual number of immigrants, while the size of the annual immigrant flow in Canada remained relatively constant (see table 1.1).

A more interesting result revealed by table 1.2 concerns the differential trends in the choice probability across schooling groups. Although the fraction of immigrants ending up in the United States increased in most schooling

5. The intervals reporting the immigrant's year of entry into the host country differ between the Canadian and U.S. censuses. For the post-1960 cohorts, however, these variations are relatively unimportant. The probabilities reported in table 1.2 weigh the observations in each of the censuses so as to ensure that the underlying time period defining each cohort has the same duration in the two host countries.

Table 1.2 **Immigration to Canada and the United States, by Cohort and Education (fraction of immigrants "choosing" the United States)**

	Education				
Cohort	Less than High School	High School	Some College	College Graduate	All
1960–64	.721	.864	.750	.824	.772
1965–70	.719	.780	.578	.770	.719
1970–74	.821	.798	.740	.828	.804
1975–80	.869	.851	.831	.890	.861
All	.815	.825	.765	.849	.815

Sources: The data for the 1960–64 and 1965–70 cohorts are drawn from the 1971 Canadian census and the 1970 U.S. census. The data for the 1970–74 and 1975–80 cohorts are drawn from the 1981 Canadian census and the 1980 U.S. census. The statistics are calculated in the sample of immigrants aged 18–64.

groups, the increase was largest among the least educated. In the early 1960s, 72.1 percent of immigrants who did not have a high school diploma migrated to the United States. By the late 1970s, this statistic was 86.9 percent, an increase of almost 15 percentage points. In contrast, in the early 1960s, 82.4 percent of immigrants with a college diploma chose the United States, but by the early 1970s, the fraction increased to only 89.0 percent, less than 7 percentage points.

Immigration policy reforms in Canada and the United States are probably responsible for these trends. Prior to the enactment of the point system in Canada, relatively more college graduates "chose" the United States as a destination point. By the late 1970s, after Canada began to restrict the entry of high school dropouts, the fraction of persons choosing the United States was the same for high school dropouts as for college graduates.

1.4 Immigrant Earnings in Canada and the United States

Suppose two census cross-sections are available in a particular host country (the 1971 and 1981 censuses in Canada, or the 1970 and 1980 censuses in the United States), and the following regression model is estimated within a host country:

$$\log w_{ij} = X_j\beta_i + \alpha_1 y_j + \alpha_2 y_j^2 + \sum_j \beta_t C_t + \gamma_i \pi_j + \varepsilon_{ij}, \tag{1}$$

and

$$\log w_{n\ell} = X_\ell \beta_n + \gamma_n \pi_\ell + \varepsilon_{n\ell}, \tag{2}$$

where w_{ij} is the wage rate of immigrant j; $w_{n\ell}$ is the wage rate of native person ℓ; X is a vector of socioeconomic characteristics (e.g., education, age); y is a variable measuring the number of years that the immigrant has resided in the

host country; C is a vector of dummy variables indicating the calendar year in which the migration occurred; and π is a dummy variable set to unity if the observation is drawn from the 1980/81 census, and to zero otherwise. The vector of parameters (α_1,α_2), along with the age coefficients in the vector X, measures the assimilation effect (i.e., the rate at which the age-earnings profile of immigrants is converging to the age-earnings profiles of natives), while the vector of parameters β estimates the cohort effects. The period effects are given by γ_i for immigrants and by γ_n for natives.

It is well known that the parameters of the system in (1) and (2) are not identified unless some normalization is made about either the aging, cohort, or period effects (Borjas 1991). In other words, two cross-sections cannot identify three separate sets of coefficients, and something must be assumed about one of the effects in order to identify the other two. I chose the normalization that the period effect experienced by immigrants (γ_i) is identical to the period effect experienced by natives (γ_n). This normalization, of course, implies that the relative wage differential between immigrants and natives is invariant to the business cycle.

The data used to estimate (1) and (2) are drawn from the Canadian and U.S. censuses described in section 1.3. The regression analysis is restricted to prime-age men (aged 25–64) who are not self-employed, whose records report the relevant information needed to calculate a wage rate in the year prior to the census, and who are not residing in group quarters. Although all immigrant observations are used in the analysis, I use random samples of the native population in the United States because of the large number of natives surveyed.[6]

The mean characteristics in these samples are reported in table 1.3 for the post-1960 cohorts. The descriptive data yield a number of important results. The U.S. census clearly documents the importance of cohort effects in immigrant labor market performance. The most recent arrivals in the 1970 census (i.e., the 1965–69 cohort) have -0.3 fewer years of education than natives and earn about 16 percent less than natives. By 1980, the most recent arrivals (i.e., the 1975–79 cohort) have -0.8 fewer years of schooling and earn almost 30 percent less than natives.

Remarkably, despite the enactment of the point system, the Canadian data show a somewhat similar pattern. The educational attainment of the most recent immigrants in 1971 is 12.0 years, while that of the most recent immigrants in 1981 is 12.6 years, an increase of over half a year in schooling. At the same time, however, the educational attainment of recent immigrants relative to Canadian natives declined from a 2.1-year advantage in 1971 to a 1.3-year advantage in 1981, and the relative wage of recent immigrants decreased from -2.1 percent in 1971 to -17.2 percent in 1981. Although the educa-

6. The 1970 U.S. native sample is a 1/1,000 extract, while the 1980 U.S. native sample is a 1/2,500 extract.

Table 1.3 **Education and Wages of Immigrants in Canada and the United States, by Cohort**

	1971			1981		
Cohort	Education	Relative Education	Relative Wage	Education	Relative Education	Relative Wage
			Canada			
1960–64	10.506	0.599	−.008	11.217	−0.086	.048
		(4.51)	(−0.44)		(−0.94)	(3.37)
1965–70	12.043	2.136	−.021	12.351	1.048	.065
		(21.34)	(−1.51)		(15.69)	(6.24)
1970–74	—	—	—	12.370	1.067	−.084
					(13.55)	(−6.83)
1975–80	—	—	—	12.603	1.300	−.172
					(16.32)	(−13.86)
			United States			
1960–64	10.959	−0.556	−.051	11.913	−0.793	.009
		(−9.21)	(−5.79)		(−14.91)	(1.18)
1965–70	11.179	−0.336	−.160	11.418	−1.288	−.069
		(−6.01)	(−19.75)		(−25.75)	(−9.90)
1970–74	—	—	—	11.091	−1.614	−.200
					(−33.31)	(−29.43)
1975–80	—	—	—	11.859	−0.846	−.299
					(−17.54)	(−44.28)

Notes: The *t*-ratios are reported in parentheses. The sample sizes are 1971 Canadian census, 8,018 immigrants and 28,049 natives; 1981 Canadian census, 17,417 immigrants and 61,205 natives; 1970 U.S. census, 32,491 immigrants and 20,978 natives; 1980 U.S. census, 134,254 immigrants and 15,071 natives.

tional attainment of successive immigrant waves rose over time, the educational attainment of the native Canadian population was rising even faster.

This result, however, should not obscure the fact that the point system "attracted" a more educated immigrant flow into Canada. In the early 1960s, prior to the immigration reform in Canada, the typical immigrant entering Canada had 0.4 fewer years of schooling than did the typical immigrant entering the United States (where the educational attainment is measured as of 1970/71). The Canadian disadvantage in immigrant schooling disappeared by the late 1960s, when the typical new immigrant in Canada had almost 1 year more schooling than did the typical new immigrant in the United States, and this gap remained roughly constant throughout the 1970s.

The dependent variable in equations (1) and (2) is the logarithm of the wage rate. I use two different specifications for the vector X. The first includes an intercept, age, and age squared, while the second adds education, marital status, whether the individual lives in a metropolitan area, and whether the individual's health limits work (available only for the United States). The estimated regressions are presented in appendix Table 1A.1 for Canada and 1A.2

Table 1.4 **Predicted Entry Wages and Growth Rates for Immigrants in Canada and the United States**

	Canada		U.S.	
	(1)	(2)	(1)	(2)
Cohort				
1960–64	−.0325	−.0242	−.0975	−.0932
	(−1.16)	(−0.90)	(−5.18)	(−5.22)
1965–69	.0045	−.0255	−.1547	−.1200
	(0.20)	(−1.13)	(−9.23)	(−7.53)
1970–74	−.1043	−.1320	−.2353	−.1632
	(−4.33)	(−5.69)	(−15.08)	(−10.97)
1975–80	−.1531	−.1839	−.2941	−.2290
	(−7.32)	(−9.11)	(−20.18)	(−17.21)
Growth rate at y = 10 years	.0032	.0006	.0051	.0054
	(2.09)	(2.81)	(5.01)	(9.23)
Growth rate at y = 20 years	.0033	.0008	.0020	.0027
	(2.08)	(2.75)	(5.09)	(9.21)
Holds constant demographic characteristics	No	Yes	No	Yes

Notes: The t-ratios are reported in parentheses. The vector X in the regressions underlying the estimates in column 1 includes age and age squared. The regressions in column 2 add education, marital status, metropolitan residence, and an indicator of whether health limits work (available only in the United States).

for the United States. Table 1.4 summarizes the implications of the regressions by reporting the wage differential between immigrants and natives at the time of entry into the host country (assuming immigration takes place at age 20), and the rate of growth of immigrant earnings relative to natives at $y = 10$ and $y = 20$.[7]

The results indicate that immigrants in Canada have substantially higher entry wages (relative to natives) than immigrants in the United States if the regressions do not control for differences in educational attainment and other socioeconomic characteristics. For instance, the typical person who migrated to Canada in the late 1970s earned about 15 percent less than natives at the time of arrival, while the typical person who migrated to the United States at the same time earned about 29 percent less than natives. The superior economic performance of immigrants in Canada, however, largely disappears after controlling for differences in observed demographic characteristics (particularly education) between immigrants and natives in each host country. The predicted difference between the (log) wage of immigrants who arrived in the

7. The growth rates are evaluated by calculating the slope of the age earnings profile at the relevant age and years-since-migration values. The statistics reported in table 1.4 differ slightly from those that can be calculated from tables 1A.1 and 1A.2 because of rounding errors in the reporting of the regression coefficients.

late 1970s and demographically comparable natives is −0.18 in Canada and −0.23 in the United States. The skill-filtering explicit in Canadian immigration policy, therefore, leads to higher-wage immigrants not because of unobserved factors such as ability and training, but because of more education.

The data in table 1.4 indicate that the enactment of a point system in Canada could not prevent a decline in the relative skill level of immigrants across successive waves. In both countries, the entry wage of immigrants is higher for the earlier cohorts than for the later cohorts. The decline in immigrant skills (as measured by the unadjusted wage), however, is much steeper in the United States, where the (relative) entry wage fell from −0.10 in the early 1960s to −0.29 in the late 1970s. By contrast, in Canada, the entry wage fell from −0.03 to −0.15 during the same period.

1.5 National Origin and the Canada-U.S. Skill Differential

This section shows that one single factor, the different national-origin mix of immigrants in Canada and the United States, explains most of the differences in skills and relative wages of the foreign-born between these two countries. In section 1.2 I documented that the national-origin mix of the immigrant flow differs between Canada and the United States. Substantial dispersion in skills and wages also exists across national-origin groups in each of the host countries.

I focus on three measures of skills: years of educational attainment, the log wage rate (relative to natives), and the log wage differential between immigrants and natives adjusted for differences in socioeconomic characteristics (such as education and age) between the two groups. To calculate the adjusted wage, I first estimated log wage regressions separately for each national origin group and for natives in each of the four censuses available (two censuses per host country). Using the estimated coefficients, I calculated the wage differential between each immigrant cohort and natives using the mean of the socioeconomic characteristics observed in the immigrant population. The statistics for the cohorts that migrated during the 1960s are obtained from the 1970/71 censuses, while the statistics for the cohorts that migrated in the 1970s are obtained from the 1980/81 censuses. To illustrate the large dispersion that exists across national-origin groups, table 1.5 reports the educational attainment, relative wage, and adjusted wage for the cohort that migrated in the late 1970s for fifteen national-origin groups (which are the fifteen groups that can be matched exactly among the four censuses).[8]

The average educational attainment level of immigrants from Greece who arrived in Canada in the late 1970s was 8.3 years, while the average education

8. The U.S. census reports many more source countries than the Canadian census does. The main drawback of the Canadian census is that the specific source country of Asian or Latin American immigrants is not identified.

Table 1.5 **Schooling and Wages by National Origin, 1975–80 Cohort**

	Canada			U.S.		
Country of Origin	Education	Relative Wage	Adjusted Wage	Education	Relative Wage	Adjusted Wage
Europe						
Belgium	16.600	.661	.411	16.239	.456	.293
France	13.359[a]	−.004[a]	−.037[a]	15.626	.252	.161
Germany	13.705[a]	.084	−.008	15.237	.293	.171
Greece	8.271[a]	−.482	−.310	11.058	−.311	−.183
Ireland	13.333	−.443	−.514	13.803	−.114	−.121
Italy	9.833	−.212	−.153	10.567	−.133	−.065
Netherlands	13.333[a]	−.194[a]	−.235[a]	15.939	.311	.172
Poland	14.500[a]	.096[a]	−.049[a]	12.742	−.342	−.339
United Kingdom	13.068[a]	.062[a]	−.021[a]	15.047	.221	.118
USSR	14.455	−.099	−.311	14.328	−.257	−.386
Other Europe	9.648[a]	−.101	−.026	11.118	−.141	−.061
Africa	13.772[a]	−.159	−.264	15.362	−.210	−.268
Asia	12.860[a]	−.290	−.348[a]	13.966	−.250	−.294
Latin America	11.706[a]	−.354[a]	−.369	8.551	−.532	−.365
Other	12.698	−.062	−.103	12.017	−.230	−.126

[a]The difference between Canada and the United States is significantly different from zero at the 5 percent level.

level of immigrants from Belgium was 16.6 years. Similarly, in the United States, the average education level of immigrants who arrived in the same period ranged from 8.6 years for immigrants from Latin America to 16.2 years for immigrants from Belgium. The relative wage of immigrants exhibits similar dispersion across national origin groups. The relative (log) wage ranges from −0.48 (Greek immigrants) to 0.66 (Belgian immigrants) in Canada, and from −0.53 (Latin American immigrants) to 0.46 (Belgian immigrants) in the United States.

As suggested by these descriptive data, there is a very strong correlation between the skills of national-origin groups in Canada and the skills of the corresponding group in the United States. Table 1.6 presents regressions that describe the relationship between the skills of national-origin groups across host countries. These regressions are of the form

$$y_{iu}(t) = \rho_0 + \rho_1 y_{ic}(t) + \nu_i, \tag{3}$$

where y_{iu} is the value of the skill variable for immigrants belonging to national-origin group i who migrated to the United States at time t; $y_{ic}(t)$ is the value of the skill variable for the same immigrant cohort in Canada.[9] The

9. Because the dependent variables are themselves estimates of the true means, the regressions are estimated using generalized least squares. It is worth noting, however, that the unweighted regressions lead to the same qualitative conclusions as the GLS regressions.

regressions reported in table 1.6 provide one very interesting insight. For the post-1965 cohorts, with only one exception, the slope coefficient ρ_1 is insignificantly different from unity, and the intercept is insignificantly different from zero. Moreover, the explanatory power of these regressions is quite high: the R^2 is on the order of .5 to .8. These results imply that the expected skills or wages of a specific national-origin group in Canada and the United States (in the 1965–80 period) are identical. There is no evidence, therefore, to suggest that the point system generated a more skilled flow into Canada from *within* a source country.

The finding that, on average, immigrants in Canada are more skilled than immigrants in the United States is attributable to another factor. I now show that the different national-origin composition of immigrant flows in the two countries accounts for much of the Canadian advantage. Let $Y_r(t)$ be the average value for a particular characteristic (i.e., education or wage) observed in the immigrant flow in year t in host country r. By definition, $Y_r(t)$ can be written as

$$Y_r(t) = \sum_j p_{jr}(t)\, y_{jr}(t), \tag{4}$$

Table 1.6 **Relationship between Skills and Wages of National-Origin Groups in the United States and Canada, by Cohort**

Variable	1960–64	1965–70	1970–74	1975–80
Dependent variable = mean education of national-origin group in United States				
Intercept	3.864[a]	0.471	−0.502	−1.832
	(1.298)	(1.646)	(2.963)	(4.556)
Canada mean	0.670[b]	0.954	1.072	1.196
	(0.120)	(0.139)	(0.241)	(0.366)
R^2	.708	.785	.602	.451
Dependent variable = mean wage of national origin group in United States				
Intercept	.040	−.016	.070[a]	.063
	(.030)	(.043)	(.033)	(.057)
Canada mean	0.349[b]	0.910	1.469[a]	1.275
	(.197)	(.283)	(.215)	(.228)
R^2	.195	.443	.782	.707
Dependent variable = adjusted wage of national origin group in United States				
Intercept	.043	.032	.031	.065
	(.027)	(.042)	(.027)	(.042)
Canada mean	0.426	1.017	0.799	1.068
	(.259)	(.259)	(.128)	(.150)
R^2	.173	.543	.751	.797

Note: The standard errors are in parentheses.

[a]Significantly different from zero at the 5 percent level.

[b]Significantly different from one at the 5 percent level.

where $y_{jr}(t)$ is the average value for the labor market characteristic observed among persons who migrated from source country j into host country r in year t; and $p_{jr}(t)$ is the fraction of the host country's immigrant flow in year t originating in source country j.

It is useful to define the average labor market performance that would have been observed if a different national-origin mix had migrated to host country r, such as the national-origin mix observed in host country s, $p_{js}(t)$. This is given by

$$Y(t,s) = \sum_j p_{js}(t)\, y_{jr}(t). \tag{5}$$

The impact of a changing national-origin mix is then given by the difference between equations (4) and (5):

$$Y_r(t) - Y(t,s) = \sum_j y_{jr}(t)\,[p_{jr}(t) - p_{js}(t)]. \tag{6}$$

The decomposition implicit in equation (6) is similar to that commonly used to measure wage discrimination (Oaxaca 1973) and has its roots in the statistical literature (Kitigawa 1955). Using this methodological framework, table 1.7 decomposes the differences observed in educational attainment and relative wages between Canada and the United States for each of the immigrant waves arriving between 1960 and 1980.

To understand the nature of the results, it is instructive to consider first the cohort that migrated to Canada or the United States in the late 1970s. The average education level of those who migrated to Canada was 12.6 years, while the average education level of those who migrated to the United States was 11.9 years, a difference of 0.7 years. Column 3 of table 1.7 reports the prediction of what the education level of immigrants in Canada would have been had Canada admitted immigrants on the basis of the U.S. national-origin mix. In other words, it presents the prediction from equation (5) using the 1975–80 means of educational attainment in Canada and the 1975–80 national-origin mix observed in the United States. This prediction is 12.3 years, so that the average educational attainment of this immigrant wave would have been 0.3 years lower. National-origin differences, therefore, explain almost half of the observed gap between the educational attainment of the 1975–80 immigrant wave in Canada and the United States.

It is also possible to estimate what the average educational attainment of immigrants in the United States would have been had the United States accepted immigrants on the basis of Canada's national-origin mix. In other words, equation (5) is estimated using the 1975–80 means of educational attainment in the United States and the national-origin mix observed in Canada in 1975–80. This prediction, reported in column 4 of table 1.7, is 13.1 years. In other words, the educational attainment of U.S. immigrants would have increased from 11.9 to 13.1 years due solely to changes in the national-origin

Table 1.7 **Decomposition of Differences between Canada and the United States**

Cohort	Canada Average (1)	U.S. Average (2)	(1) − (2)	Predicted Averages: If Canada Had U.S. Mix (3)	Predicted Averages: If U.S. Had Canada Mix (4)	(4) − (2)	(1) − (3)
Education							
1960–64	10.506	10.959	−0.453	11.202	10.768	−0.191	−0.696
1965–70	12.043	11.179	0.864	11.818	11.694	0.515	0.225
1970–74	12.370	11.092	1.278	12.042	12.602	1.510	0.328
1975–80	12.603	11.860	0.743	12.302	13.102	1.242	0.301
Wage							
1960–64	−.008	−.051	.043	.053	.038	.089	−.061
1965–70	−.021	−.160	.139	−.087	−.044	.116	.066
1970–74	−.084	−.200	.116	−.174	−.070	.130	.090
1975–80	−.172	−.299	.127	−.254	−.161	.138	.082
Adjusted wage							
1960–64	−.049	−.063	.014	−.063	.029	.092	.014
1965–70	−.097	−.159	.062	−.155	−.070	.089	.058
1970–74	−.161	−.159	−.002	−.233	−.094	.065	.072
1975–80	−.224	−.258	.034	−.293	−.170	.088	.069

mix. This increase is greater than the observed difference between Canada and the United States, so that national origin overexplains the observed difference.

Table 1.7 reports a similar decomposition for both wages and adjusted wages for the 1975–80 cohort, as well as for all other post-1960 cohorts. It is evident that differences between the two host countries in the national-origin mix are largely responsible for the post-1965 differences in educational attainment, wages, and adjusted wages. For instance, the difference in relative wages between the immigrant wave that arrived in Canada and the United States in 1965–70 is 0.139, of which at least one-half is attributable to differences in national origin. The observed difference for the waves that arrived during the 1970s is around 0.12, and over two-thirds of this gap is attributable to national origin.[10]

In contrast to the post-1965 cohorts, the results in table 1.7 show that national origin played a different role among persons who migrated in the early 1960s. These data do not indicate that immigrants in Canada were unambiguously more skilled than immigrants in the United States. Moreover, the differences in the national-origin mix of this immigrant flow sometimes worked to the advantage of the United States. The mean educational attainment of immigrants in Canada would have increased from 10.5 to 11.2 years if Canada had had the national-origin mix of the United States. The decomposition of the wage differential between the two host countries, however, does not yield an unambiguous indication that either country had a more "desirable" national-origin mix.

The central implication of these results is clear. Differences in the national-origin mix of immigrants arriving in Canada and the United States since 1965 are mainly responsible for the higher average skills and relative wages of immigrants in Canada. In view of this finding, it is worth reassessing the role that immigration policy, and in particular a point system, can play in generating a more skilled immigrant flow. To the extent that the point system is intended as a way of increasing the skill level of immigrants from a given source country, the results in tables 1.6 and 1.7 are discouraging. A point system seems to have little effect on the education level or relative wages of specific national-origin groups.

This does not imply, however, that the point system is ineffective. An alternative, though little discussed, effect of the point system is to reallocate visas *across* source countries. Consider, for instance, the impact of the educational requirements in the point system. A visa applicant is given one point per year of education, and only fifty points are needed to "pass the test." Persons originating in countries with high mean educational attainment are more likely to qualify for entry into Canada than persons originating in countries with low educational attainment. The population of the source countries differs sub-

10. These education data are reported in Borjas (1991, table 2) and give the average educational attainment of the population of the source countries in the late 1970s.

stantially in mean education levels. For instance, the average educational attainment is 3.2 years in Haiti, 6.1 years in Mexico, 10.7 years in the United Kingdom, and 11.1 years in France.[11] It is likely, therefore, that the point system plays an important role in determining the national-origin mix of the immigrant flow.

The extent to which the point system actually redistributes visas among source countries has not been analyzed. As a preliminary way of establishing this link, I calculated the fraction of immigrants that migrated to Canada (out of the total number of immigrants into Canada and the United States) for forty source countries in the late 1970s.[12] The relationship between this "choice" variable and mean educational attainment in the source country is summarized by

$$\log[P/(1-P)] = \underset{(-3.58)}{-2.3035} + \underset{(2.67)}{.1971\,\bar{S}}, \qquad R^2 = .178, \tag{7}$$

where P is the fraction of the immigrant flow that "chose" Canada, $\bar{S}$ is the mean educational attainment in the source country, and the t-statistics are reported in parentheses. Equation (7) was estimated using a minimum χ^2 grouped-logit estimator. Evaluated at the mean probability, an increase of one year in the average schooling level of the source country increases the likelihood that immigrants "choose" Canada by about 3.6 percentage points.

This preliminary analysis thus suggests that the point system plays a subtle, but crucial, role: it biases the admission of immigrants toward national-origin groups that originate in high-income, high-skill countries. My findings imply that it is this feature of the point system that is mostly responsible for the different performance of immigrants in Canada and in the United States during the post-1965 period.[13]

11. It is of interest to determine the extent to which these findings are driven by the presence of large numbers of relatively unskilled Latin American immigrants in the United States. I reestimated the statistics reported in table 1.7 after omitting the sample of Latin Americans from the analysis. Suppose, for instance, that there were no Latin American immigrants in the 1975–80 cohort in either Canada or the United States. The average wage of immigrants would be −0.144 in Canada and −0.173 in the United States. If Canada had the same national-origin mix as the United States, the predicted wage would be −0.198, while if the United States had the same national-origin mix as Canada the predicted wage would be −0.099. Therefore, the results indicate that, although Latin American immigrants in the United States substantially reduce the average skill level of U.S. immigrants, differences in the national-origin composition of the immigrant flow *still* favor Canada.

12. The forty countries included in this analysis are listed in Borjas (1987).

13. The empirical analysis presented in section 1.4 also indicated a sizable decline in skills among successive immigrant waves in both host countries, with the decline being much steeper in the United States. I have shown elsewhere (Borjas 1992) that much of the U.S. trend can be attributed to the changing national-origin mix of immigrant flows. Preliminary calculations (not reported) indicate that national origin plays a weaker (though still important) role in explaining the declining skills of immigrants in Canada.

1.6 Migration Flows between Canada and the United States

The large migration flows between Canada and the United States provide further evidence on the limitations and effectiveness of Canada's point system.[14] In 1980–81, nearly 850,000 persons born in Canada resided in the United States, and over 300,000 persons born in the United States resided in Canada. The emigration of Americans accounted for 8 percent of the foreign-born population in Canada, while the emigration of Canadians accounted for 6 percent of the foreign-born population in the United States.

Table 1.8 reports the mean educational attainment and relative wages for several waves of transnational migrants. These data yield several interesting facts. 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 2 years more 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.

In addition, the data indicate little growth in immigrant earnings over time (relative to natives). For instance, the U.S. census shows that the most recent arrivals enumerated in the 1970 census had 14.9 percent higher wages than natives. By 1980, this differential had increased to only 17.2 percent. In Canada, the typical immigrant who arrived in the late 1960s earned 30 percent more than natives in 1970, but earned only 10.6 percent more than natives in 1980. There is little evidence of assimilation in these data. In fact, the Canadian census suggests the possibility of "disassimilation."

Finally, there was a sizable decline in skills among successive waves of American immigrants in Canada, but an increase among successive waves of Canadians in the United States. In 1970, the newly arrived Americans had 6.5 more years of schooling and earned 29 percent more than natives, but by 1980 the most recent American immigrants had 4.5 more years of schooling and earned 4.5 percent less than natives. In contrast, the newly arrived Canadians enumerated by the 1970 U.S. census had 1.4 more years of schooling and 14.9 percent higher wages than natives, but the most recent Canadian immigrants in 1980 had 1.9 more years of schooling and earned 20.2 percent more than natives.

Some of the statistics in table 1.8 may be contaminated by the migration of draft avoiders to Canada in the late 1960s and early 1970s. A presidential pardon allowing their reentry into the United States was declared in 1978. Because the empirical analysis below uses the 1971–81 Canadian censuses to track the wages of cohorts of American migrants, it is possible that the influx

14. These flows have long been of interest to Canadian demographers. See Boyd (1981), Lavoie (1972), and the many references in U.S. Bureau of the Census (1990).

Table 1.8 **Education and Wages of Transnational Immigrants, by Cohort**

	Americans in Canada				Canadians in U.S.			
	1971		1981		1971		1981	
Cohort	Education	Relative Wage	Education	Relative Wage	Education	Relative Wage	Education	Relative Wage
1960–64	15.698	.3924	15.262	.0248	11.366	.1248	12.756	.1427
		(5.01)		(0.34)		(4.21)		(7.13)
1965–70	16.444	.2897	16.205	.1059	12.599	.1488	12.599	.1722
		(6.14)		(2.59)		(4.72)		(7.00)
1970–74	—	—	15.985	.0819	—	—	13.748	.1124
				(1.81)				(3.35)
1975–80	—	—	15.809	−.0454	—	—	14.604	.2021
				(−0.89)				(7.90)

Notes: The *t*-ratios are reported in parentheses. The mean educational attainment of natives in Canada was 9.907 in 1971 and 11.303 in 1981. The mean educational attainment of natives in the United States was 11.515 in 1971 and 12.706 in 1981. The sample sizes are 1971 Canadian census, 511 American immigrants and 28,049 natives; 1981 Canadian census, 924 American immigrants and 61,205 natives; 1970 U.S. census, 3,430 Canadian immigrants and 20,978 natives; 1980 U.S. census, 7,083 Canadian immigrants and 15,071 natives.

of the draft avoiders enumerated in the 1971 Canadian census, and their possible return migration to the U.S. prior to the 1981 census, biases the analysis.

There are no reliable estimates of the number of draft avoiders nor of their return migration rates. The 1971 Canadian census enumerated only 4,800 American-born young men (aged 18–25) who had migrated between 1966 and 1971. The 1981 Canadian census enumerated 4,250 American-born men aged 28–35 (who had migrated in 1966–71). Both the size of this migration flow and the return migration rate are relatively small. It is unlikely, therefore, that the migration of Vietnam draft avoiders is driving the results of the analysis (and this flow could certainly not explain the increasing skills of Canadian immigrants in the United States).

Within each host country, the samples of natives and of transnational migrants were used to estimate the earnings functions (1) and (2). I then predicted the (relative) entry wage of the transnational migrants in each of the host countries, as well as the growth rate after ten and twenty years in the host country. These summary statistics are reported in table 1.9.

The most recent Canadian immigrants in the United States (i.e., the 1975–80 wave) entered the labor market with essentially the same wage as natives, while the most recent Americans in Canada entered the Canadian labor market with much lower wages than natives. This situation is quite different from what was observed in the early 1960s. At that time, the most recent Canadians in the United States had slightly lower wages than natives (though the differ-

Table 1.9 **Predicted Entry Wages and Growth Rates for Transnational Immigrants in Canada and the United States**

	Americans in Canada		Canadians in U.S.	
	(1)	(2)	(1)	(2)
Cohort				
1960–64	.2055	.0607	−.0509	−.0952
	(1.90)	(0.59)	(−1.10)	(−2.21)
1965–69	.1098	−.0426	−.0150	−.0509
	(1.29)	(−0.52)	(−0.37)	(−1.36)
1970–74	.0120	−.1174	−.0674	−.1182
	(0.14)	(−1.34)	(−1.47)	(−2.78)
1975–80	−.2368	−.3275	.0521	−.0231
	(−2.79)	(−4.06)	(1.45)	(−0.81)
Growth rate at y = 10 years	−.0053	−.0084	.0097	−.0119
	(−6.79)	(−5.98)	(0.37)	(1.55)
Growth rate at y = 20 years	−.0018	−.0018	.0046	.0059
	(−6.68)	(−5.91)	(0.22)	(1.69)
Holds constant demographic characteristics	No	Yes	No	Yes

Notes: The t-ratios are reported in parentheses. The vector X in the regressions underlying the estimates in column 1 include age and age squared. The regressions in column 2 add education, marital status, metropolitan residence, and an indicator of whether health limits work (available only in the United States).

ence was not statistically significant), while Americans in Canada entered the labor market with much higher wages than natives.

The relatively better performance of recent Canadian immigrants in the U.S. labor market may be a result of a different selection process guiding the migration of persons across the U.S.-Canada border. In earlier work (Borjas 1987), I argued that international differences in the rate of return to skills are the main determinants of the skill composition of immigrant flows. The results presented in tables 1.8 and 1.9 are consistent with this hypothesis if Canada has a lower rate of return to skills than does the United States. In fact, the available evidence suggests that the Canadian income distribution is more compressed than that of the United States, so that skilled Canadians are likely to have greater incentives to migrate to the United States than unskilled Canadians do (McWatters and Beach 1989).

Regardless of the validity of this hypothesis, the results presented in this section suggest that the point system plays a much weaker role than would have been presumed. Because of the skill filters explicitly built into Canadian immigration policy and the absence of such filters in U.S. immigration policy, it is not unreasonable to expect that American immigrants in Canada would do well in the Canadian labor market and that Canadian immigrants in the

United States would be less successful. The facts, however, are exactly the opposite. 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.

1.7 Summary

Because immigration policies in Canada and the United States differ in their objectives, the comparison of the economic impact of immigrants in the two countries provides a benchmark for assessing the role played by policy in determining the skill composition of the immigrant flow. This paper presented a description of the trends in immigrant skills and labor market performance in both Canada and the United States, and interpreted these trends in terms of the underlying policy changes that occurred between 1960 and 1980 in both host countries.

The data provide a clear and unambiguous picture of the skills and labor market performance of immigrants in the two countries. Immigrants in Canada are, on average, more skilled than immigrants in the United States. This result is evident from comparisons of educational attainment, where immigrants in Canada have about a year more schooling at the time of arrival than immigrants in the United States, as well as in terms of immigrant wages, where the wage disadvantage of immigrants (relative to natives) is substantially greater in the United States.

The empirical analysis suggests a simple explanation for the skill differential. The average skill level of specific national-origin groups is about the same in Canada and the United States, so that Canada's point system does not attract more skilled workers from a given source country. The national-origin mix of the Canadian immigrant flow, however, is more heavily weighted toward national-origin groups that tend to perform well in both the Canadian and U.S. labor markets. It is this compositional effect that explains most of the observed differences in the educational attainment and wages of immigrants in Canada and the United States.

In effect, the point system works because it alters the national-origin mix of immigrant flows. This finding has important, if unpalatable, implications for the ongoing debate over the role that the skills of visa applicants should play in determining entry into Canada or the United States. To a large extent, skill filters are effective because they alter the allocation of visas across source countries. The data analyzed in this paper, therefore, suggest an important tradeoff between the average skill level of immigrant flows and their ethnic diversity. The existence and implications of this tradeoff are likely to play an important role in future discussions of immigration policy.

Appendix

Table 1A.1 **Log Wage Regressions on Pooled 1971 and 1981 Canadian Censuses**

	(1)		(2)	
Variable	Natives	Immigrants	Natives	Immigrants
Intercept	1.0613	.9275	.3231	.4655
	(36.37)	(15.52)	(11.17)	(7.96)
Education	—	—	.0438	.0344
			(84.79)	(43.25)
Age	0.0563	.0556	.0564	.0498
	(36.89)	(19.16)	(40.49)	(17.80)
Age squared	−0.0006	−.0006	−.0006	−.0005
	(−36.55)	(−19.08)	(−36.12)	(−17.07)
Years since migration	—	.0043	—	.0054
		(2.06)		(2.72)
Years since migration, squared	—	.00002	—	−.00003
		(.39)		(−0.76)
1970–74 cohort	—	.0488	—	.0519
		(2.73)		(3.05)
1965–69 cohort	—	.1576	—	.1584
		(9.66)		(10.17)
1960–64 cohort	—	.1206	—	.1597
		(5.84)		(8.06)
1950–59 cohort	—	.1139	—	.1597
		(5.04)		(7.32)
Pre-1950 cohort	—	.1046	—	.1773
		(3.28)		(5.71)
Observation from 1971 census	−0.9651	−.9651	−.9427	−.9427
	(−248.35)	(−248.35)	(−238.28)	(−238.28)
R^2		.399		.456
holds constant demographic characteristics		No		Yes

Notes: The *t*-ratios are reported in parentheses. The regressions in column 2 also control for marital status, metropolitan residence, and an indicator of whether health limits work (available only in the United States). The index indicating if the person migrated after 1975 is the omitted dummy variable. The sample size is 114,689.

Table 1A.2 **Log Wage Regressions on Pooled 1971 and 1981 U.S. Censuses**

	(1)		(2)	
Variable	Natives	Immigrants	Natives	Immigrants
Intercept	.8298	.4387	−.1012	−.0483
	(17.43)	(17.41)	(−2.18)	(−1.99)
Education	—	—	.0558	.0442
			(63.12)	(143.54)
Age	.0560	.0628	.0490	.0494
	(24.05)	(50.88)	(22.31)	(42.24)
Age squared	−.0006	−.0007	−.0005	−.0005
	(22.27)	(48.82)	(−18.91)	(−38.05)
Years since migration	—	.0053	—	.0090
		(5.07)		(9.16)
Years since migration, squared	—	−.0001	—	−.0001
		(−4.00)		(−7.34)
1970–74 cohort	—	.0588	—	.0659
		(7.95)		(9.43)
1965–69 cohort	—	.1395	—	.1090
		(14.86)		(12.31)
1960–64 cohort	—	.1967	—	.1358
		(15.64)		(11.44)
1950–59 cohort	—	.2414	—	.1554
		(15.08)		(10.26)
Pre-1950 cohort	—	.2798	—	.1523
		(12.92)		(7.44)
Observations from 1971 census	−.6837	−.6837	−.6105	−.6105
	(−133.23)	(−133.23)	(−125.07)	(−125.07)
R^2	.192		.289	
holds constant demographic characteristics	No		Yes	

Notes: The *t*-ratios are reported in parentheses. The regressions in column 2 also control for marital status, metropolitan residence, and an indicator of whether health limits work (available only in the United States). The index indicating if the person migrated after 1975 is the omitted dummy variable. The sample size is 210,732.

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