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THE LINK BETWEEN IMMIGRATION AND EMIGRATION IN CANADA, 1945-1986

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Résumé — A base de données sur l'arrivé des immigrants et leurs nombres aux divers recencements, nous estimons que 15 à 25 pour cent des immigrants sont partis après 10 ans. Les départs sont plus fréquents pour ceux des pays semblables au Canada et pour les personnes qui avaient plus que 50 ans au moment de l'arrivée. Environ 60 pour cent de l'émigration du Canada dans la période 1961 à 1986 consiste en départs d'immigrants. En partie à cause de cette composante de l'émigration, le rapport entre l'émigration et l'immigration a été haut dans l'historie du Canada, et demeure aux environs de 30 à 45 émigrants pour 100 immigrants. L'étude termine par une discussion de la dynamique de la migration de retour et son importance à la politique d'immigration canadienne.

Abstract — Using data on the flow of immigrants and their stock at a given point in time, it has been estimated that 15 to 25 per cent of immigrants have departed after 10 years. Departures are somewhat higher for immigrants from countries culturally similar to Canada, and for persons who are over 50 years of age on arrival. About 60 per cent of emigration from Canada in the period 1961-86 consists of the departure of previous immigrants. Partly because of this component of emigration, the extent of emigration relative to immigration has been high in Canadian history, and remains in the range of 30 to 45 emigrants per 100 immigrants. The paper ends with a discussion of the dynamics of return migration and its importance to Canadian immigration policy.

Key Words — **emigration, return migration, Canada**

Partly because Canada is seen as a country of immigration, the phenomenon of emigration tends to be insufficiently recognized. As statisticians and demographers, life is easier if we treat immigration as a permanent move. As a consequence, insufficient attention is paid to the subsequent departure of immigrants. The Immigration Act itself is written in terms of accepting "landed" immigrants who obtain the right to establish "permanent" residence in Canada. Citizens probably have a certain blindness toward emigration of immigrants and of the Canadian-born because voluntary departures bring into question their own sense of national identity.

On the other hand, recent arrivals can be expected to be particularly prone to emigration. Some may have come with the intention of residing for only a limited period, possibly out of a sense of adventure or for a work experience to bring back home or to a third country. Others may not achieve the objectives which had initially brought them to Canada. Many persons retain a foot in each of two countries and at some point, possibly surrounding some significant life event, the pull to go back home will predominate. They may achieve economic assimilation in Canada, but culturally they may continue to identify with the language, traditions, setting, and obviously the family connections, of their home country. With modern means of communication and travel, it is easier to retain links to one's place of origin and also easier to return as circumstances change.

While it is the most difficult of the population processes to measure, the appreciation of emigration is important. The current Canadian legislation eloquently indicates the importance of immigration to Canada through the requirement that the minister make an annual "statement to Parliament" outlining the government's proposed immigration level for the following year. This statement needs to justify the proposed level in terms of foreseeable demographic, social and economic conditions. The demographic impact of a given level of immigration can only be appreciated in the context of the corresponding level of emigration.

The objective of this paper is to focus on the link between immigration and emigration. First, an historical view to determine the extent of a relationship between these two types of international population movements is taken. Then the subsequent emigration of immigrants themselves is estimated. In so doing, the "flow" of immigrants from various parts of the world along with their "stock" at the subsequent censuses is looked at.

Total Emigration Relative to Immigration

Three authors have reconstituted the historical series in immigration and emigration over the period 1851 to 1951 (Camu *et al.*, 1964:59; George, 1976:7; Keyfitz, 1950:62; see also Lavoie, 1972). The statistics for given decades vary considerably, but each series indicates that net losses are restricted to the periods 1861-1901 and 1931-1941. The sources also agree that total emigration per 100 immigrants is relatively high. According to Keyfitz it would be 93.2 emigrants per 100 immigrants in the period 1851-1950, while Camu *et al.* and George give figures of 82.9 and 83.2 respectively for the period 1851-1951. These sources also agree that emigration per 100 immigrants is above 40 for each ten-year period. While Canada is seen as a country of immigration, five of the decades between 1851 and 1951 involve net losses, in each decade there are more than 40 departures for every 100 immigrant arrivals, and over the whole period there were over 80 emigrants for every 100 immigrants.

The various estimates of emigration for the more recent period are presented in Table 1, along with the implied emigration per 100 immigrants. For the period 1961-71, the various techniques indicate an overall departure of some 50 or more emigrants per 100 immigrants. For the 1971-81 period, the estimates range between 35 and 45 departures per 100 arrivals. In the 1981-86 period the estimates range considerably, but the three most secure estimates suggest 27 to 58 departures per 100 arrivals. Clearly, emigration continues to be high relative to immigration.

The figures at the bottom of the table are restricted to the departures of the post-war immigrants themselves, as estimated through the survival technique (see description in the next section). These are here called return migrants, even though some may have moved to a third country. This return migration amounts to 509,000 persons in the period 1961-71, 342,000 persons in the period 1971-81 and 114,000 in the 1981-86 period. The figures imply that there were 35.6, 24.0 and 22.9 return migrants for every 100 immigrant arrivals in the three periods. Stated differently, in order to retain 100 persons, Canada needed to admit 155 persons in the 1961-71 period, 132 persons in the 1971-81 period and 130 in the 1981-86 period, to make up for the emigration of post-war immigrants themselves.[1]

As a proportion of total emigration, return migration (or more accurately net immigrant departures) represents between 56 and 73 per cent of total emigration in 1961-71, between 53 and 69 per cent in the following decade and between 40 and 85 per cent in 1981-85 (using denominators entries 2 through 5 of Table 1). This rather clearly indicates that return migration is the largest component

of emigration; the average of these six figures implying that 63 per cent of emigration involves the return of post-war immigrants.

TABLE 1. EMIGRATION ESTIMATES, CANADA, 1961-1986

	1961-1971			1971-1981			
	1961-66	1966-71	1961-71	1971-76	1976-81	1971-81	1981-86
1. Immigration	538.6	890.3	1428.9	841.0	588.4	1429.4	499.8
2. Emigration using residual method	279.8	426.3	706.1	363.4	277.6	641.0	476.4
Emigrants per 100 immigrants (2/1)	51.9	47.9	49.4	43.2	47.2	44.8	95.3
3. Emigration using residual adjusted for census underenumeration	364.2	540.4	904.5	311.2	197.0	508.2	134.9
Emigrants per 100 immigrants (3/1)	67.6	60.7	63.3	37.0	33.5	35.5	27.0
4. Annual post-census estimates of emigration	377.6	317.1	694.7	217.1	278.6	495.7	235.5
Emigrants per 100 immigrants (4/1)	70.1	35.6	48.6	25.8	47.3	34.7	47.1
5. Reverse record check	-	530.3	-	358.3	296.7	655.0	288.4
Emigrants per 100 immigrants (5/1)	-	59.6	-	42.6	50.4	45.8	57.7
6. Reverse record check of immigrants of five previous years	-	167.9	-	83.8	54.5	-	36.2
Emigrants per 100 immigrants of past five years (6/1)	-	18.9	-	10.0	9.3	-	7.2
7. Estimated emigration of post-war immigrants, adjusted for census underenumeration							
1946-60 immigrants	-	-	155.6	-	-	0.0	0.0
1961-70 immigrants	-	-	353.0	-	-	55.3	6.8
1971-80 immigrants	-	-	-	-	-	287.3	31.0
1981-86 immigrants	-	-	-	-	-	-	76.5
Total	-	-	508.6	-	-	342.6	114.3
Emigration of post-war immigrants per 100 immigrants of the period (7/1)	-	-	35.6	-	-	24.0	22.9

Sources: Statistics Canada, 1988; Kelly, 1977; Taylor and Timonin, 1979; Statistics Canada, 1987: 76, Taylor, 1978; Verma and Raby, 1987; Raby, 1987; Statistics Canada, 1988b; Beaujot and Rappak, 1988: Appendix A

- = not available or not applicable

Table 1 also gives the number of departures among the immigrants of the past five years, as determined by the reverse record check taken after the census. The departures of the most recent immigrants constitute a reasonable share of the total emigration. Taking the average of the extreme estimates indicates that 27 per cent of emigration in 1971-81 consisted of the departure of persons who arrived in the five previous years. Using the estimates from columns 6 and 3 would suggest again that 27 per cent of departures for 1981-86 had arrived in this same period.

Return Migration: A Cohort Approach

Having established that some 60 per cent of emigration consists of the net departures of immigrants themselves (called return migration for simplicity), it is worth analyzing further this component of the link between immigration and emigration. This analysis requires a comparison between the flow of immigrants and their stock at given points of time. Comparable data were obtained from immigration and census sources on immigrants by sex, year of arrival, year of birth and place of birth. For given persons, these attributes should normally be constant. Thus the various immigration cohorts, by year of birth cohort, can be followed over time, and for the various places of origin. In order to account for the fact that the census misses some immigrants, the census figures are adjusted using the estimate for under-enumeration. Since the mortality of the foreign-born is very similar to that of the Canadian-born (Trovato, 1986, Table 2), the immigrants are survived through the corresponding Canadian life tables (Nagnur, 1986). Emigrants who would have subsequently died are counted here as deaths rather than as departures. This produces a slight under-estimate of the departure rate. However, since the deaths involve a small proportion of the total — especially over the short term — the estimates are not greatly affected by the crudity of the mortality assumptions.[2]

The data are shown in terms of retention rates — that is, the census count is divided by the expected number of survivors at a given time (Table 2). The departure rate is obviously the complement of the retention rate. The overall departure rate is basically 30 per cent for the immigration cohorts 1956 to 1970. The departure rate as of 1986 is already 18.1 per cent for the 1976-80 cohort and 15.1 per cent for the 1981-85 cohorts respectively. This is similar to an earlier follow-up of the 1969-71 arrivals which found a 14 per cent departure after three years (Motuz, 1975:9,37).

These data represent considerable consistency. Between 1971 and 1986 the departure rates are very low for the 1946-65 cohorts, which would imply that

the right survival rates were chosen and that people are still declaring themselves foreign-born even if they have been in Canada for a long period. Some persons who were away for one census may have even returned by a subsequent census. The fact that departure rates increase slightly over the cohorts 1946-50 to 1956-70 appears reasonable given our knowledge of the changing composition of these immigrant groups. The immediate post-war arrivals are more likely to have been refugees while the arrivals of the 1960's involved a concentration of well-educated professionals whose re-migration is more common.

TABLE 2. RETENTION RATES OF IMMIGRANT COHORTS 1946-50 TO 1981-85, TO THE FOLLOWING CENSUSES, ADJUSTING FOR CENSUS UNDERENUMERATION

	RETENTION RATES				
Immigration Cohort	to 1961 census	from 1961 to 1971	from 1971 to 1981	from 1981 to 1986	total rate to 1986[1]
1946-50	76.1	93.3	103.6	102.1	75.1
1951-55	75.6	93.8	101.3	102.6	73.7
1956-60	80.6	82.3	101.5	101.4	69.1
1961-65	-	72.3	96.8	100.3	70.2
1966-70	-	74.9	93.3	98.7	69.0
1971-75	-	-	75.9	98.0	74.4
1976-80	-	-	85.1	96.2	81.9
1981-85				84.9	84.9

1. Produced by multiplying the previous rates for the given cohort.

Source: Based on special tabulations from immigration and census sources, see Beaujot and Rappak, 1988: Appendix A.

For the earlier periods, these estimates are also similar to those obtained by other authors. Motuz (1975:167) cites a 1961 census report indicating a 22 to 28 per cent loss of immigrants. Our comparable figure is 22.3 per cent for only post-war immigrants departing by 1961. Richmond (1967:229) gives a figure of 23 per cent for post-war immigrant departures by 1961. St. John Jones

(1979:118) estimates that 26.7 per cent of the 1961-71 immigrants had left by 1971, while our figure is 26.0. Richmond calculates that one out of three post-war immigrants have left by 1971 (cited in Taylor, 1978:142). From the data underlying Table 2, the comparable figure would be one out of 3.5 immigrants. Michalowski (1988) estimates the return migration of 1981-86 at 218,600, including 61,000 who arrived in the period. The comparable figures here are 114,300 returns among post-war migrants including 76,500 who arrived in the period (Table 1).

The results presented here are also comparable to those for the United States and Australia. Among the 1960-70 admissions to the United Kingdom, Warren and Peck (1980:77) calculate that 18.0 per cent had left by 1970. For the period 1970-79, there were 27.1 departures of foreign-born persons for every 100 immigrants (Warren and Kraly, 1985:5). In Australia the "settler loss" would have been approximately 25 per cent until the late 1960's (Price and Martin, 1976). The departures would have been lower since the early 1970s due to a lower and more selective intake, government commitment to combatting discrimination and a greater proportion of sponsored immigrants. Yet, among the persons who arrived in 1980, 9.0 per cent departed by 1984, or 12.4 per cent if refugees are excluded from the calculations (Lukamskyj and Richards, 1986).

Since immigrants from various parts of the world may have different rates of departure, similar analyses are here undertaken for given birth places of immigrants. The data are not completely consistent, in part due to differential classification of given birth places from census to census, and in the immigration statistics.

The departure rates are highest for persons born in the United States and lowest for persons from Asia (Table 3). As approximate figures, for persons arriving in the period 1951 to 1970, the departure rate is 50 to 62 per cent for persons from the United States compared to 1 to 17 per cent for persons from Asia. The departure over this period would be 34 to 40 per cent for persons from the United Kingdom and about 19 to 32 per cent for persons from the remainder of Europe. For Latin America, the departure rate would be between 5 and 12 per cent over the arrivals of 1956-70. The data for Africa are based on smaller numbers, but would indicate departures of 26 to 43 per cent. The high departure rates of American-born in Canada also applies to the Canadian-born in the United States. Of the Canadian-born who moved south over the perod 1955-60, some 34.6 per cent had already returned to Canada or moved on to a third country by the time of the 1960 United States census (Comay, 1971; Samuel, 1969; see also Jasso and Rosenzweig, 1982).

TABLE 3. RETENTION RATES OF IMMIGRATION COHORTS TO 1986, BY PLACE OF BIRTH

		IMMIGRANT COHORT							
Place of Birth	Retention	1946-50	1951-55	1956-60	1961-65	1966-70	1971-75	1976-80	1981-85
United States	to 1971	34.3	41.0	45.3	58.4	79.4			
	1971-81	95.2	86.1	85.7	82.5	68.8	56.0	84.3	
	1981-86	109.3	107.1	100.2	97.7	92.5	90.1	80.2	88.1
	to 1986	35.7	37.8	38.9	47.1	50.5	50.5	67.6	88.1
United Kingdom	to 1971	65.5	61.6	58.5	62.0	71.9			
	1971-81	102.9	101.1	103.2	101.2	94.2	76.9	89.9	
	1981-86	101.9	101.5	99.1	97.6	97.2	98.5	89.8	82.8
	to 1986	68.7	63.2	59.8	61.2	65.8	75.7	80.7	82.8
Other Europe	to 1971	85.5	76.9	72.9	77.6	73.3			
	1971-81	103.1	102.2	101.7	97.1	93.1	73.3	80.4	
	1981-86	102.9	102.6	102.4	101.3	99.8	97.0	95.7	85.5
	to 1986	90.7	80.6	75.9	76.3	68.1	71.1	76.9	85.5
Traditional immigrant groups	to 1971	73.3	71.4	67.2	71.2	73.7			
	1971-81	102.7	101.5	101.5	96.6	90.0	70.2	84.2	
	1981-86	102.8	102.5	101.5	100.1	98.2	96.1	90.6	85.3
	to 1986	77.4	74.3	69.2	68.8	65.1	67.5	76.3	85.3
Oceania and 'other'	to 1971	8.4	15.8	24.0	33.7	49.1			
	1971-81	100.3	88.3	81.8	105.3	94.4	76.7	94.5	
	1981-86	110.9	80.0	91.5	81.1	77.2	84.1	79.5	83.0
	to 1986	9.3	11.2	18.0	28.8	35.8	64.5	75.1	83.0
Latin America	to 1971	73.2	101.8	84.6	91.7	86.6			
	1971-81	91.7	94.2	100.7	95.9	105.1	81.9	85.7	
	1981-86	129.5	109.2	103.8	105.5	104.3	100.9	103.2	84.2
	to 1986	86.9	104.7	88.4	92.8	94.9	82.6	88.4	84.2
Africa	to 1971	89.3	75.0	63.2	80.2	79.4			
	1971-81	54.2	75.0	91.7	90.3	96.8	78.7	84.8	
	1981-86	150.6	110.9	99.1	102.2	96.4	99.7	95.5	81.0
	to 1986	72.9	62.4	57.4	74.0	74.1	78.5	81.0	81.0
Asia	to 1971	119.4	94.4	93.6	95.8	82.5			
	1971-81	97.0	98.0	103.7	96.7	99.9	84.1	86.1	
	1981-86	111.8	106.9	101.9	103.9	101.0	100.3	100.3	85.7
	to 1986	129.5	98.9	98.9	96.3	83.2	84.4	86.4	85.7
New immigrant groups	to 1971	46.5	68.2	70.7	83.0	80.2			
	1971-81	93.0	94.4	99.4	95.6	100.9	82.4	86.1	
	1981-86	117.2	105.8	101.3	102.6	100.3	99.9	100.0	85.0
	to 1986	50.7	68.1	71.2	81.4	81.2	82.3	86.1	85.0
Total	to 1971	71.0	70.9	67.1	72.3	74.9			
	1971-81	103.6	101.3	101.5	96.8	93.3	75.9	85.1	
	1981-86	102.1	102.6	101.4	100.3	98.7	98.0	96.2	84.9
	to 1986	75.1	73.7	69.1	70.2	69.0	74.4	81.9	84.9

Notes: 1. The "traditional immigrant groups" are defined as United States and Europe, all other are "new immigrant groups". The Canadian born immigrants are excluded for the period 1946-70.
2. For the earlier periods, especially 1946-50, the "other" category contains people who should have been classified in Asia, Africa and Latin America.
3. For cohorts 1946-80, the retention rate to 1986 is obtained by multiplying the rates for each period.
4. Adjustments are made for census underenumeration.

Source: Same as Table 2

The arrivals from the United States and Europe have been combined as the "traditional immigrant groups" in order to present a contrast to the "new immigrant groups" from other parts of the world. The data for the 1956-70 arrivals indicate departure rates of 31 to 35 per cent for the traditional immigrant

groups and 19 to 29 per cent for the new immigrant groups. In general, over the periods of arrival preceding 1971, the overall difference between these two groups is not large, except for the higher departure for persons from the United States and the lower rates for persons from Asia. The slight differences between traditional and new immigrant groups persists to the more recent arrivals. For instance, for the 1976-80 cohort, the departure amounts to 14 per cent for the new groups and 24 per cent for the traditional groups. Among the traditional groups, the more recent departure rates have been highest for Europe outside of the United Kingdom, followed by the United Kingdom and the United States. Among the new groups, the departure rate are highest for Oceania and lowest for Asia and Latin America. The data for the 1981-85 cohort show very little variation. The total for both traditional and new immigrant groups is 15 per cent departure by the 1986 census. By sub-group, the figures vary from 19 per cent for Africa to 12 per cent for the United States.

Lukamskyj and Richards (1986) have found that departure from Australia is higher for persons who were older on arrival. To check this in the Canadian data, Table 4 presents estimates of retention rates by year of birth and sex, for the migration cohorts 1971, 1976 and 1980. First, it would appear that a certain number of children are reported as foreign-born by their parents on the census while they did not arrive as immigrants. Also, the oldest age group, "born before 1920," is a poorly defined category for which mortality estimates are less reliable. However, at least in the short term, very few would have died in any case. We do see that departure rates are higher for older immigrants. For the 1980 cohort, where 9 per cent have left, the departure of persons over 50 years of age averages at 21 per cent. Also, the departures are higher for men at these older ages, amounting to 25 per cent.

Summary and Discussion

There are important empirical links between immigration and emigration. Over the period 1851-1951, the various estimates of emigration imply that the average for the period involved over 80 emigrants for every 100 immigrants. In the post-war years there were close to 50 emigrants per 100 immigrants. The figures are lower for 1971-81, but the estimates are still in the range of 35 to 45 emigrants per 100 immigrants.

One aspect of the link has been found to be the return and re-migration of the immigrants themselves. Over the period 1961-86, some 60 per cent of emigration consisted of the departure of post-war immigrants. About a quarter of emigration consists of the departure of the immigrants of the five previous

TABLE 4. RETENTION RATES OF IMMIGRATION COHORTS 1971, 1976 AND 1980, BY YEAR OF BIRTH AND SEX, TO 1981 CENSUS

Year of Birth and Sex	IMMIGRATION COHORT		
MALES	1971	1976	1980
1970-80*	120.3	92.2	102.1
1960-69	84.8	83.8	89.5
1950-59	90.4	82.7	90.8
1940-49	68.7	75.8	86.6
1930-39	71.3	73.3	88.8
1920-29	72.8	77.0	75.5
Prior to 1920	71.1	60.4	75.0
Total	76.9	79.9	89.9
FEMALES			
1970-80*	121.7	98.7	104.0
1960-69	82.5	83.4	93.2
1950-59	86.5	79.7	95.8
1940-49	71.1	77.1	86.1
1930-39	77.1	83.0	88.2
1920-29	76.0	75.0	77.2
Prior to 1920	63.5	63.4	88.6
Total	77.6	80.3	92.5

* Refers to 1970-71 for 1971 cohort, 1970-76 for 1976 cohort and 1970-80 for 1980 cohort.

Source: Based on special tabulations from immigration and census sources, see Beaujot and Rappak 1988: Appendix A.

Note: These figures are not corrected for underenumeration. Adjustments for underenumeration would increase the retention rates by slightly less than two percent.

years. For immigration cohorts 1956-70, close to 30 per cent had left by 1986. Among the more recent cohorts, 15 per cent are gone within five years. For those who have been in Canada 6 to 10 years, close to 20 per cent have left.

Stated differently, over the period 1946-85, Canada admitted 5,368,000 immigrants — of these some 407,000 would have died by the time of the 1986 census. Among the survivors, some 1,372,000 were not counted in the 1986 census, even after adjusting for census underenumeration. That would mean a departure rate of 27.7 per cent. Some who have departed will come back, but more will depart in the ensuing period. Therefore, we could expect that about three out of ten immigrants from the 1946-85 period will eventually depart.

Return migration does not vary greatly from group to group, but it has been higher for persons from the United States and lower for persons from Asia. Departure rates are also higher for persons who arrive after age 50, confirming that adaptation would be harder for older people.

Like migration itself, return migration is a complex and inadequately understood phenomenon. A useful summary is provided by Rogers (1984) who starts by proposing that immigration occurs when persons feel a sense of deprivation and expect that they would be better off elsewhere while the costs would not be unacceptably high. Thus return may follow a failure either on the part of the migrant to adapt or on the part of the receiving society to integrate its newest members from abroad. However, return could also follow the successful accomplishment of the migrant's objectives and it may have been part of migrant's original plan. Alternatively, needs and preferences may change, bringing migrants to reconsider their decision, possibly surrounding a threshold in the life cycle. Finally, the conditions themselves may change, either in the host or sending country. Obviously, migrants retain ties to their places of origin and in fact modern means of communication and travel make it easier to retain these ties (Richmond, 1984). Freer trade and the international recognition of specialized skills promotes more movement in various directions (Richmond, 1981). Already some twenty years ago, Richmond had coined the term "transilient" to refer to the migrant populations of the modern world.

When the places of origin and destination are more different and distant, the move involves a greater investment, and the return may be more difficult. More return migration could be expected when the places of origin and destination are more similar (Motuz, 1975; Richmond, 1967). Returns would be more common if the original migration was mostly a function of pull factors (Samuel, 1969). In the extreme case of push factors, refugees are prevented from returning unless conditions change in their place of origin. However, given the attachment to one's place of origin, it may not take a large improvement in the home conditions to provoke a return (Gmelch, 1983). Like non-migration,

return migration may be less a function of economics and more a function of social integration. Uhlenberg (1973) argues that non-migration is best understood as resulting from social integration in one's place of residence, often in spite of economic factors which would promote movement. Similarly, return migration may be an attempt to re-establish this social integration. As an indicator of the attachment to the home country, some 46 per cent of immigrants who arrived in the 1970-77 period had not adopted Canadian citizenship by the 1981 census, even though they became eligible after three years (Statistics Canada, 1984: Table 5).

Thus, the pull of return migration is strong and it is far from necessarily implying a failure of integration. It is an outdated notion to think of immigrants as "settlers" who never look back after making a "fresh start" in their chosen country. In the modern world, the forces making for a greater propensity to return include the increasing ease of communication and air travel, the greater level of international trade and the reduction of differences in opportunity structures between receiving and sending countries. The factors operating to decrease return migration would include the greater importance of family class migration, the larger importance of arrivals from non-traditional source countries and the higher predominance of political rather than economic factors (or push rather than pull factors) involved in the migration process. At the present time, much of the international migration follows the North/South divisions in the world (Chepulis, 1984). In part, the migration pressures result from the markedly higher rates of natural increase in the population of the South. As the balance of the world economy shifts, or as population growth declines in the South, we could see a greater pull of return migration toward the more hospitable climates of the South.

This analysis is not able to determine the socioeconomic characteristics of emigrants, nor the reasons for leaving. Studies in the 1960s found that Canada was losing professional and skilled manpower to the United States (Hans, 1968; Parai, 1965; see also McKee and Woudenberg, 1980). The flows in the 1970s would be more balanced in these regards (Taylor, 1982). Brox (1983) qualifies migration between the United States and Canada over the period 1947-72 as a labour market adjustment, following especially on differences in levels of income. The analyses by Pryor *et al.* (1988) update the results on exchanges between these two specific countries. However, with tighter controls on migration to the United States and with greater diversity in the countries of origin, the flow from Canada to the United States becomes considerably less representative of the total emigration from Canada.

Immigration and emigration are important for Canada. Over the period 1976-86, the official estimates indicate that average annual immigration was

108,800 persons with an average emigration of 51,700 persons, for a net gain of 57,100 persons per year (Statistics Canada, 1987:60) This net migration has constituted about a quarter (22.0 per cent) of the total population growth, and it has kept population growth close to one per cent per year. It has been estimated that, if fertility remains around its current level of 1.7 births per woman, it would take an average net migration of 125,000 persons per year in order to have a stable population of 25 million over the very long term (Employment and Immigration Canada, 1983:6). If this is the goal, what should be the level of immigration?

The extent of emigration is difficult to predict because we do not understand the major causes of either emigration or of its return migration component. Emigration partly depends on economic conditions in Canada and elsewhere and on the immigration policies of other countries. All these factors are difficult to predict. However, the past levels and trends that have been reviewed here would imply that a reasonable projection would be 30 to 45 emigrants per 100 immigrants. For the immigrants themselves, we could predict that about 15 to 25 per cent will leave after some 10 years. Only if a very high proportion of immigrants involve refugees could these figures be expected to be substantially lower than this range. Thus, to use the example of 125,000 net immigrants, Canada would need 147,000 to 167,000 arrivals to make up for the return migration of the immigrants themselves. Compensating for both return migration and the emigration of Canadians would require some 179,000 to 225,000 arrivals per year. This is markedly above the average of 108,000 arrivals per year of the 1976-86 period.

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Footnotes

1. Note that the figures used to compare immigration and emigration are to be seen as ratios (presenting the order of magnitude of two numbers) rather than rates. The calculation of rates would require that the numerator and denominator refer to the same population.
2. A longer description of the methodology is presented in Beaujot and Rappak (1988: Appendix A). Given that estimates of underenumeration are not available for the foreign-born, the estimates for the entire population are used. It must be noted that immigration data exclude

temporary workers. student visa holders and other visitors who may stay in Canada for more than one year. In some cases, these may have considered themselves residents and thus have inappropriately completed the census forms. These are also potential confusions between the year of "arrival" and the year of "landing," which can affect comparisons between the immigration and census data for a given immigrant cohort. Note also that persons may enter and leave the country several times; the census simply provides the stock of persons at a given point in time.

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