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The effect of immigration on population

Warren E. Kalbach



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Introduction

Canada is a product of immigration. Originally settled by the French at the beginning of the 17th century, it began to take on its British complexion after the Seven Years War which ended in 1763. However, the character of the population was essentially established during the heavy immigrations of the 19th century and the first decades of the 20th.

Estimated annual growth rates based on decennial censuses, starting with the first census in 1871, show the effects of poor economic conditions during the latter decades of the 19th century, and of economic revival and mass migrations during the early decades of the 20th century. Note in Table 1.1 that the smallest estimated average annual growth rate of 1.04 per cent occurred during the depression decade of 1931-41, while the largest rates occurred during the decades of heavy immigration, i.e. 2.98 per cent for the period 1901-11 and 2.68 per cent for the 1951-61 decade of heavy immigration after the Second World War.

TABLE 1.1
ESTIMATED AVERAGE ANNUAL RATES OF POPULATION GROWTH BY
DECADE, AND IMMIGRATION AS A PERCENTAGE OF MID-DECADE POPULATION,
CANADA, 1871-81 TO 1961-71

Decade	Estimated Average Annual Rate of Population Increase	Immigration as a Percentage of Average Decade Population
1871-81	1.60	8.8
1881-91	1.12	19.7
1891-1901	1.06	6.4
1901-11	2.98	28.0
1911-21	2.00	20.2
1921-31	1.68	12.6
1931-41	1.04	1.4
1941-51	1.72	4.4
1951-61	2.68	9.6
1961-71	1.70	7.2

Comparing decade immigration with estimates of average population for these periods presents a very similar picture insofar as the decades of highest growth during the pre- and post-world war periods are the same decades in which immigrants constitute the largest percentage of the average population. Nothing since Confederation has quite matched the gross contribution of immigration during the first two decades of the 20th century.

To clarify the relative significance of the several demographic factors affecting

Canada's population growth, it is necessary to examine the data in Table 1.2 which include estimates of natural increase, immigration, emigration, and population change for each decade following 1891.

Since 1891, it is clear that immigration has exceeded the natural increase of the population during only two decades, 1901-11 and 1911-21. While emigration varied considerably during this period, reducing the net effect of immigration, it must be remembered that the data on immigration do not reveal its full significance. Children born to immigrants in Canada would be included in the natural-increase column because it is not possible to separate births to foreign-born women from those to the native-born women for the entire data series. It is known, however, that in 1931, 25.9 per cent of all births were to foreign-born women, but such births declined rather sharply during the Depression and war decades when immigration was minimal. By 1951, they constituted only 10 per cent of total births.

Periods when growth rates are high are also associated with relatively high immigration and fertility. Of course, immigration is relatively independent of the size of the resident population in contrast to fertility (when measured by number of births). Nevertheless, the heavy-growth decades are also characterized by levels of immigration and fertility that exceed the normal trend line. This does not obscure the fact, however, that immigration actually exceeded natural increase in only two decades, 1901-11 and 1911-21. During the last two decades the level of immigration was only about half of the natural increase. With continuing population growth and an expanding population base, the contribution of immigration — if it continues at its present level — will become smaller relative to the components.

One implicit assumption underlying any discussion of the general significance of immigration vis-à-vis the resident population is that immigrants are uniformly distributed throughout Canada with respect to the country's geography and its social, economic and political systems. That this is not so is common knowledge. For example, immigrants during the early 1900s settled mainly in the Prairie provinces; births and deaths have a much greater impact on the younger and older segments of the age-sex structure; and immigration more directly affects the younger age groups of the labour force.

Thus, in attempting to assess the relative impact of immigration on the population as a whole, a balance sheet of the type presented above does not in itself reveal its full significance. Immigrants are neither distributed uniformly nor randomly throughout the population. Their demographic, social, economic, and political effects depend on their relative degree of concentration in geographical space and in certain subgroups within the total social structure.

The following analyses examine various characteristics of immigrants and the foreign-born population for recent decades and attempt to determine the nature of the changes that have occurred and their effect on the total population. Special emphasis will be placed on the intercensal decade 1961-71 because of its particular significance with respect to changes in Canada's evolving immigration policies.

On February 1, 1962, the immigration regulations were amended to specify that "anyone, regardless of origin, citizenship, country of residence, or religious belief, who is personally qualified by reason of education, training, skills, or other special qualifications" is eligible for admission to Canada as a permanent resident.

TABLE 1.2
COMPONENTS OF POPULATION CHANGE, CANADA: 1891-1971
(Population in Thousands)

Decade	Natural Increase	Immigration	Natural Increase plus Immigration	Decade Increase	Estimated Emigration
1891-1901	718 (670) ³	326 (250) ³	1,044	538	506 (380) ³
1901-11	1,120 (1,030)	1,759 (1,550)	2,879	1,836	1,043 (740)
1911-21	1,230 ¹ (1,270)	1,612 (1,400)	2,842	1,581	1,261 (1,090)
1921-31	1,360	1,203	2,563	1,589	974
1931-41	1,222	150	1,372	1,130	242
1941-51	1,972	548	2,520	2,141 ²	379
1951-61	3,148	1,543	4,691	4,229	462
1961-71	2,606 ⁴	1,429	4,035	3,330	705

¹ Includes war deaths.

² Excludes Newfoundland.

³ Corrected estimates, by Z. Sametz published in P. Camu, E.P. Weeks, and Z. Sametz, *Economic Geography of Canada* (Toronto: Macmillan of Canada, 1964), Table 3.

⁴ Dominion Bureau of Statistics, and Statistics Canada, *Vital Statistics*, 1961 to 1971 annual reports, Ottawa.

Source: Department of Manpower and Immigration, *1971 Immigration Statistics*, (Ottawa: 1972), Table 1.

Furthermore, an elaborate "point" system was introduced in 1967 that spelled out the factors to be taken into consideration when assessing an immigrant's suitability, and the weights to be assigned to each.

An attempt will be made to show to what extent these changes produced observable effects in the character of immigrant streams into Canada and to determine their direct impact on the foreign-born population resident in Canada during the same period of time, i.e. during the 1961-71 decade. The new regulations were designed to make it easier for the more highly educated and skilled workers to gain admission regardless of ethnic origins and to provide the same opportunity for both citizens and permanent residents to bring their dependants to Canada. Within the constraints imposed by limited access to the 1971 Census data during the first few months of 1974, the following analysis will attempt to show what effects, if any, were produced or occurred at the same time as major policy changes were implemented and to provide some basis for the evaluation of the consequences of these changes on future policy considerations. It is unfortunate that the most recent

data on income, occupations, and fertility of the foreign-born could not be incorporated in this study. These shortcomings can, of course, only be eliminated when the relevant data from the 1971 Census are made available.

IMMIGRANT ARRIVALS AND THE FOREIGN-BORN POPULATION OF CANADA

Perhaps the most important characteristic of Canadian immigration during the 20th century is its variability, reflecting in general the sensitivity of migration to the economic and political conditions in Canada relative to those abroad. Major wars, and economic recessions, have been very effective in reducing the flow of immigrants. Thus, as might be expected, when one of the worst economic recessions during the 1930s was followed by a major global outbreak of hostilities, the flow of immigrants to Canada almost ceased. It was, in fact, the only decade of the 20th century in which emigration exceeded immigration. By contrast, the longest period of sustained large-scale immigration occurred between 1903 and 1915, when immigration exceeded 100,000 annually and reached a maximum of 400,870 in 1913, just before the outbreak of the First World War. The next longest period occurred during the decade 1951-61, a time of rapid economic expansion following the Second World War. The range of immigration during this period was from a high of 282,164 in 1957 to a low of 104,111 in 1960. The variability of immigration between 1867 and 1971 is graphically illustrated in Chart 2.1.

ETHNIC AND CULTURAL ORIGINS OF CANADIAN IMMIGRANTS

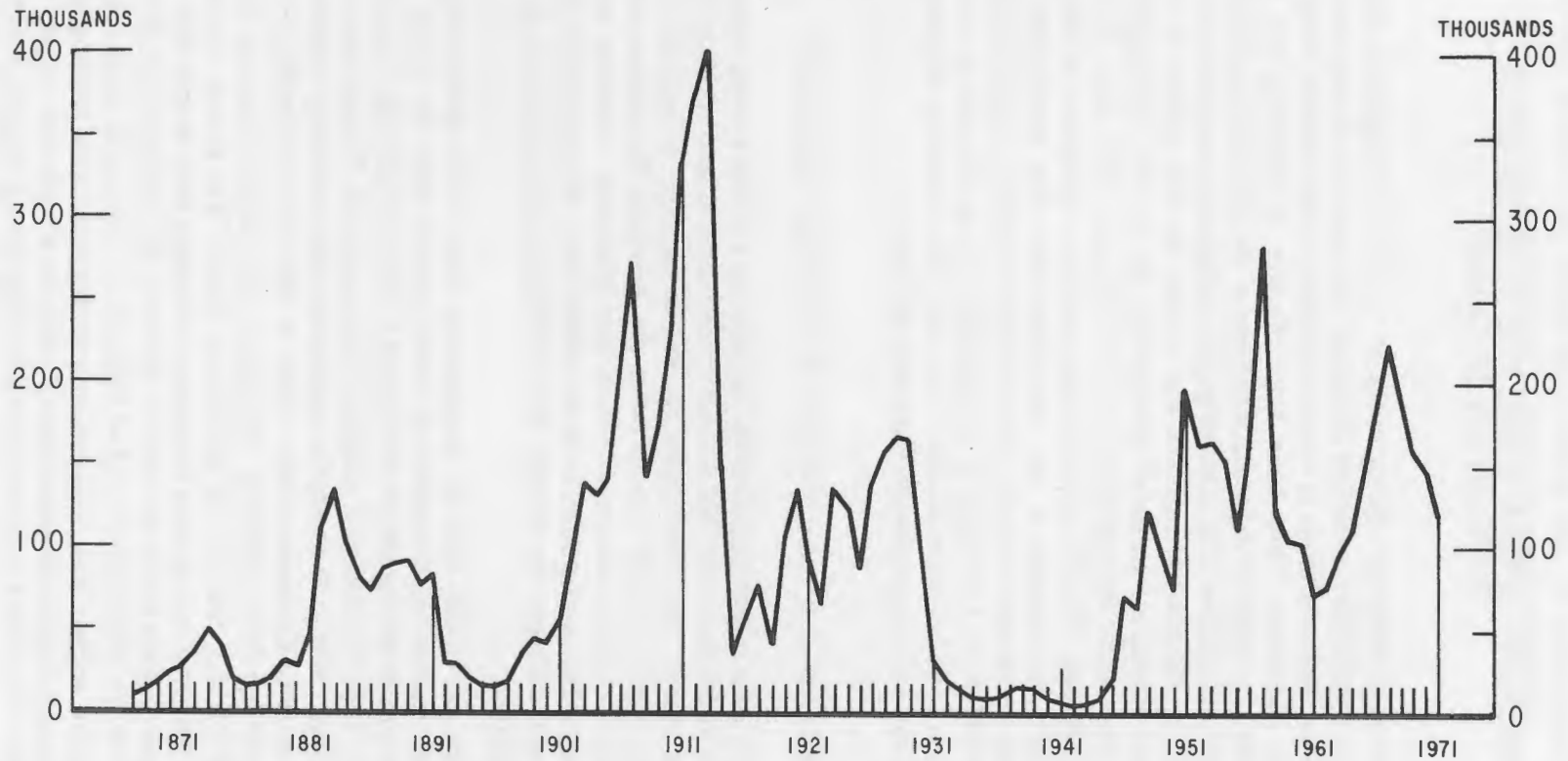
Immigration data reflect considerable variation in Canada's attractiveness as a destination for immigrants from the various ethnic, cultural, and racial populations throughout the world. The French were the first to establish a foothold, but they were unable to retain political control. After the American Revolution, when the British Empire Loyalists emigrated from the American Colonies and with subsequent large-scale immigration from the British Isles, the population of British origin finally outnumbered the French thus establishing their physical, as well as political, dominance.

Examination of ethnic data on immigration since 1926 reveals significant changes in the relative contributions of ethnic groups over the years. Of the 3,650,000 immigrants during the 40-year period to 1966, 37 per cent were of British origins, 25 per cent western and northern European, and 35 per cent of other European origins. While this clearly establishes the persisting dominance of northern and western European ethnic origins, it obscures the significant fact that their dominance has been declining throughout this historical period. Note, for example, in Table 2.1, that for the pre-Second World War period, 1926-45, the proportion of northern and western Europeans (including both British and French) was almost three-fourths (or 72 per cent) of the total. By the latter part of the post-war period, 1946-66, their proportion had declined to 54 per cent. Both central and eastern European origins also declined, but immigrants with southeastern and southern European origins increased from 42,644, or 4.5 per cent of the total for 1926-45, to 441,431, or 29.9 per cent of those arriving during the period 1956-66.

In addition to this shift in European origins from the "old" to the "new" patterns, an even greater increase has been occurring for those of Asiatic and

Chart 2.1

NUMBER OF IMMIGRANT ARRIVALS, CANADA, 1867-1971



SOURCE: Canada Censuses, Department of Manpower and Immigration Annual Reports.

TABLE 2.1
IMMIGRATION BY ETHNIC ORIGIN GROUPS FOR CANADA:
1926-45, 1946-55 AND 1956-66

Period	Total Immigrants	British Isles	North-western European	Central & Eastern European	Southeastern and Southern European	Jewish	Asian and Others
1926-45	950,944	454,149	232,640	181,193	42,640	32,492	7,826
1946-55	1,222,318	417,164	368,382	184,918	187,437	43,314	21,103
1956-66	1,476,444	486,261	305,953	113,873	441,431	32,490	96,436
Total	3,649,706	1,357,574	906,975	479,984	671,512	108,296	125,365
	%	%	%	%	%	%	%
1926-45	100.0	47.8	24.4	19.1	4.5	3.4	0.8
1946-55	99.9	34.1	30.2	15.1	15.3	3.5	1.7
1956-66	99.9	32.9	20.7	7.7	29.9	2.2	6.5
Total	100.0	37.2	24.8	13.2	18.4	3.0	3.4

"other" ethnic origins. During the first 20 years following 1926, they constituted only 0.8 per cent of total immigration; but, between 1956 and 1966, their proportion increased to 6.5 per cent. The accelerating nature of this increase in the number of arriving immigrants each year is underscored by the statistics for the last year during which ethnic-origin data were collected. In 1966, the Asiatic and "other" ethnics (including Negro, Mexican, and others) comprised 12.8 per cent of all immigrants arriving in Canada.

The recency of this influx of Asians is also born out by the fact that 63 per cent of all the Chinese and Japanese coming to Canada since 1926 arrived during the 1956-66 period. The corresponding percentage for all other Asiatic origins (including East Indian, Middle Eastern origins, etc.) was 86 per cent. To place this in its proper perspective, it should be remembered that two-thirds of all the Italian immigrants coming to this country also arrived during the 1956-66 period and that the Italians outnumbered the Asiatics by about four to one. Thus, while they were similar to each other with respect to their recency of arrival in Canada, the impact of the Asians has been considerably less because of their smaller numbers.

IMMIGRANT ARRIVALS BY COUNTRY OF LAST PERMANENT RESIDENCE (CLPR): 1955-71

Limitations of CLPR Data

Political considerations underlying recent changes in immigration regulations in 1967 brought an end to the long historical series of data on ethnic and cultural origins of immigrants. For this reason, the analysis of the effects of changes in policy in recent years must utilize the most relevant of the remaining data which are still collected. "Country of last permanent residence" is preferred to "country of citizenship" for the simple reason that data for the former are cross-tabulated with data on "intended occupation" while the latter are not. However, to gain a better basis for interpretation within the limitations of these substitute data, the analysis covered the period 1955-71, in order to provide an overlap of 12 years for both sets of data. This permitted a comparison for the same time period, and provided a basis for an extension of estimates beyond the cut-off point — at least for those ethnic-origin groups that are roughly comparable to some countries of last permanent residence.

Since the analysis must rely on CLPR data for any extension beyond 1966, it is appropriate to consider the extent to which the two sets of data are related. For some countries, but not all, there is almost total correspondence between the dominant ethnic population and the ethnic origins of immigrants coming to Canada from that country. For example, 97.5 per cent of those whose last place of permanent residence was Italy were of Italian ethnic origin, 99.1 per cent of those from Greece were of Greek origin, and 99.6 per cent of immigrants from Portugal were Portuguese.

For other countries, the corresponding percentages were somewhat lower. For example, of those arriving from Great Britain, 89.1 per cent were British in origin, 80.1 per cent from India were of East Indian origins, and 69.6 per cent of those from Germany were of German origin. More important, there are other countries where the emigrants, immigrating to Canada, were not representative of the dominant ethnic populations in those countries. For example, only 27.4 per cent of immigrants from Egypt in 1966 were Egyptians. The others represented minority ethnic and cultural groups such as Armenians and Lebanese. Similarly, only 25 per cent of those from Brazil were Portuguese and only 10 per cent of those coming from Argentina were of Spanish origin. In fact, more than half of those coming from Argentina were of Italian origin. Brazil and Argentina are not unlike the United States with respect to the significance of immigrants for settlement and population growth. All three countries were settled by European immigrants, and do not possess a unique ethnic identity of their own within the definition of the concept of ethnic and cultural origins as used in Canadian censuses and immigration statistics. For the United States, those of British origins have tended to make up the bulk of immigrants coming to Canada. In 1966, 48 per cent were of British origin and the next largest percentage, 17 per cent, were German in origin.

On the basis of these data, it would seem obvious that one cannot assume that the ethnic character of immigrants from any particular country will be representative of the majority of the population. Furthermore, there is no reason to

suspect that the character of emigration from any of these countries would necessarily remain constant. Changes in economic conditions, political climate, and attitudes towards ethnic and religious minorities have become more the norm in some areas than the exception. The Ugandan Asians are not likely to be the last ethnic minority to be forced to emigrate from their "homeland". However, without ethnic origin data, it will not be possible to comprehend many of the forces working to make immigration to Canada a possible solution to the problems of certain ethnic populations in the world today.

In addition, lacking the more relevant ethnic data, CLPR data must serve as a basis for estimating ethnic-origin trends among immigrant arrivals since 1966. As these data are only roughly comparable with respect to certain groupings of ethnic origins, it is necessary to compare trends in CLPR data before and after the 1966 cut-off date. To the extent that trends observable in ethnic-origin data between 1955 and 1966 are reflected in CLPR data for the same period, subsequent trends for the latter will provide some basis for estimating trends in ethnic composition of recent immigrants.

Analysis of CLPR Data: 1955-71

Data in Table 2.2 show the familiar downward trend in the proportion of immigrants arriving from Great Britain, northern and western Europe, central and eastern Europe and an increase in proportions coming from southeastern and southern European countries for the 1955-66 period. The countries experiencing declines continued to do so during 1966-71 and, in addition, the southern and southeastern European group followed suit. During 1955-66, the proportion of immigrants from this latter group of countries was 25 per cent and for 1966-71 it had dropped to 22 per cent. Data in Table 2.2 show that the percentage coming from southeastern and southern Europe had reached a peak of 29 per cent in 1961-65, before it dropped.

The CLPR data also show increases in proportions of immigrants arriving from Australia and New Zealand, and the United States for which no directly comparable category exists in the ethnic-origins classification. On the basis of the 1966 data, one would expect to find a predominance of British still arriving from these areas. More spectacular are the increases for Asian, African, and "other" countries, i.e. the West Indies, Central and South America, etc.

Some of these trends are also observable in the last few years of the ethnic-origin data, with the exception of the reversal for southern and southeastern Europeans, and the rapid increase in Asiatics and other origins that appears to have occurred during the most recent period, i.e. 1966-71, for which ethnic data are lacking.

In view of the changes in immigration regulations in 1967, it is not likely that the rapid increase in the proportion of immigrants coming from Asian, African, West Indian, and Central and South American countries after 1966 was coincidental. The proportion coming from these combined categories increased from 5.9 per cent in 1955-60 to 12.4 per cent in 1961-65 and to 22.7 per cent in 1966-71. This surpasses the 230,000 from the United States during the latest period, but falls just short of the 246,000 who came from the British Isles.

TABLE 2.2
IMMIGRATION BY COUNTRY OF LAST PERMANENT RESIDENCE
1955-60, 1961-65 AND 1966-71

Period	Total Immigrants	British Isles	Northwestern European	Central & Eastern European	Southeastern and Southern Europe	Australia & N.Z.	United States	Asian & Others
1955-60	892,855	262,810	210,708	84,641	204,708	12,482	64,611	52,895
1961-65	498,790	124,210	72,193	25,548	142,941	9,522	62,603	61,773
1966-71	1,032,737	246,213	116,120	50,876	229,579	26,738	128,549	234,662
Total	2,424,382	633,233	399,021	161,065	577,228	48,742	255,763	349,330
1955-60	% 99.9	% 29.4	% 23.6	% 9.5	% 22.9	% 1.4	% 7.2	% 5.9
1961-65	100.0	24.9	14.5	5.1	28.7	1.9	12.5	12.4
1966-71	99.8	23.8	11.3	4.9	22.2	2.6	12.4	22.7
Total	99.9	26.1	16.5	6.6	23.8	2.0	10.5	14.4

Trends for major groupings of immigrants by country of last permanent residence for the period 1955 to 1971 are shown for numbers of immigrants and percentage composition in Charts 2.2 and 2.3, respectively.

AGE AND SEX CHARACTERISTICS OF ARRIVING IMMIGRANTS

Age

Immigrants tend to be relatively young adults, and the median age of 24.9 years for all immigrants arriving during 1971 bears this out. During the post-Second World War period, the median age has remained relatively stable after decreasing from its immediate post-war high of 27.7 years in 1948, to slightly less than 25.0 between 1965 and 1971.

As with other traits of the immigrant, the age distributions were disturbed by the Second World War. From 1933 to 1937 the median age for immigrants followed closely that of the total population, which increased from 25 to 27 years between 1931 and 1941. However, from 1938 to 1941 the median age peaked at around 28 years, and did so again immediately after the war in 1947. During the intervening years, it dropped to a low of 22.7 years in 1946 as a result of an influx of servicemen's dependants. After 1948, the median age for arriving immigrants dropped below the median age for the total population where it has remained up to 1971. Median ages for both arriving immigrants, 1945-71, and the resident foreign-born at the time of the censuses since 1941, are presented in Table 2.3.

The significance of the age of arriving immigrants depends both on its relation to the average age of the foreign-born and native-born components of the total population, and their numbers. If immigrants are younger on the average than the native-born, as they have been since 1949, continuing immigration will tend to counter other factors contributing to the aging of the population. Thus, in a period of declining fertility, such as that experienced by Canada since the latter part of the 1950s, increases in the number of arriving immigrants will help retard the normal aging process and, in addition, maintain a more favorable ratio between the size of the working and dependent populations, because the dependency ratios for arriving immigrants are quite low relative to that for the total population. Dependency ratios for arriving immigrants were 33.6 and 37.7 respectively for 1961 and 1966, while for the total population the ratios were 71.2 and 68.4 for the same years.

Sex Ratios

In addition to being concentrated in the younger adult-age groups, international migrants have traditionally been predominantly male. As with the size and age distributions of migrant streams, wars and economic depressions tend to disrupt the "normative" patterns. In this case, the expected excess of males was displaced by disproportionate numbers of women during the relatively small flow of immigrants into Canada during the Depression and the Second World War years. During the mid-30s, the sex ratio varied from approximately 70 males per 100 females to a low of 40 in 1946 following a brief interruption in 1941 when the sex ratio returned to a level approximately equal to that for the total population of Canada.

Chart 2.2

NUMBER OF IMMIGRANTS BY COUNTRY OF LAST PERMANENT RESIDENCE: CANADA, 1955-71

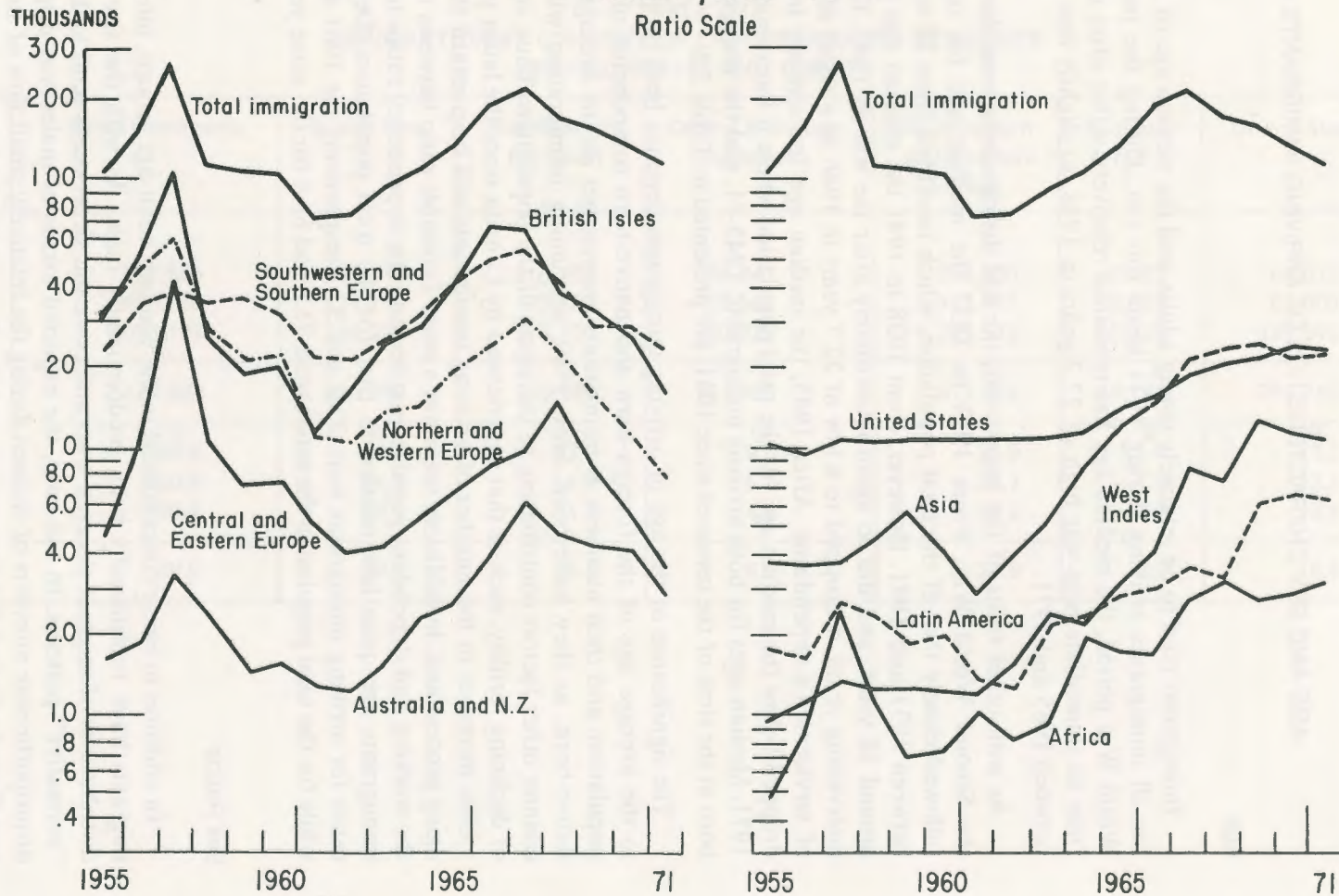
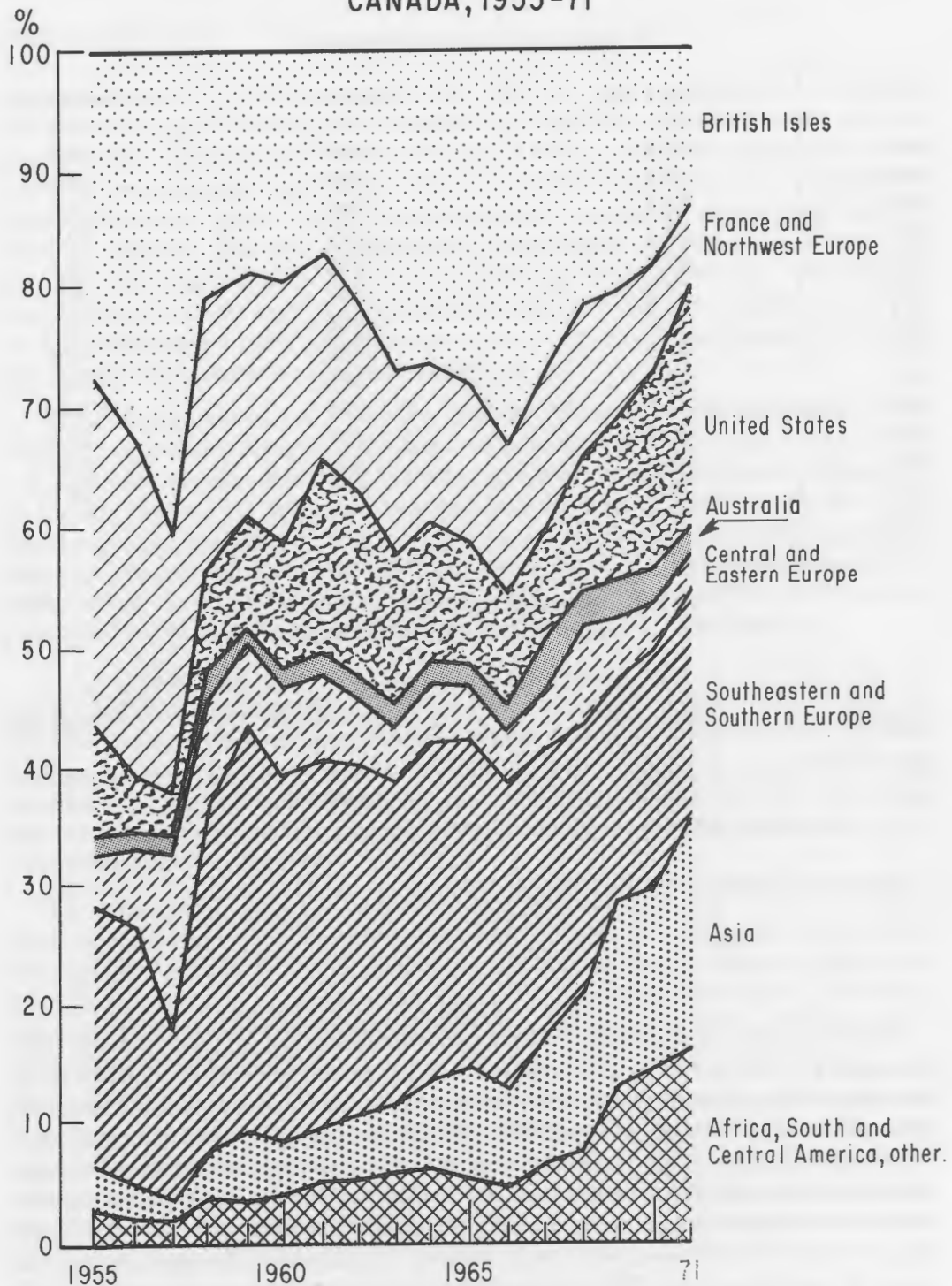


Chart 2.3

PERCENTAGE COMPOSITION OF IMMIGRANT ARRIVALS
BY COUNTRY OF LAST PERMANENT RESIDENCE
CANADA, 1955-71



SOURCE: Annual Reports, Department of Manpower and Immigration

TABLE 2.3
MEDIAN AGE OF ARRIVING IMMIGRANTS, 1945-71, AND THE
RESIDENT FOREIGN-BORN POPULATION AT THE TIME OF
CANADIAN CENSUSES

a) Median Age of Arriving Immigrants

Year	Median Age	Year	Median Age
1945	22.9	1959	24.9
1946	22.7	1960	24.8
1947	28.3	1961	24.9
1948	27.7	1962	24.1
1949	27.4	1963	25.2
1950	27.0	1964	25.0
1951	26.7	1965	24.7
1952	26.4	1966	24.8
1953	25.7	1967	24.8
1954	25.6	1968	24.8
1955	25.6	1969	24.8
1956	25.0	1970	24.7
1957	25.1	1971	24.9
1958	24.7		

b) Median Age of Resident Foreign-Born
Population, Censuses of Canada:
1941 to 1971*

Census Year	Median Age	Census Year	Median Age
1941	46.5	1961	44.8
1951	50.2	1971	42.4

* Includes Newfoundland in 1951, 1961, and 1971.

After the influx of servicemen's wives and their children in 1946, the sex ratio rose rapidly to 108.9, and by 1951 had reached a post-war peak of 161.9 when large numbers of Germans, Italians, and eastern Europeans arrived in Canada. This unusually large post-war peak partially reflects the easing of restrictions against former enemy aliens and the movement of large numbers of males who were displaced economically, socially, and politically by the war and its aftermath. Despite some minor fluctuations, the long-term trend between 1951 and 1961 was sharply downward. Between 1957 and 1958 the surplus of males gave way to an excess of females and by 1961 the sex ratio had reached its post-war low of 81.1. Thereafter, the trend reversed and by 1967 had again peaked, this time at 106.9.

Since 1968 the sex ratio has varied above and below the point of equality in numbers of males and females. The maximum and minimum sex ratios of the cycles during the post-war period, plus the major reversal in the downward trend between 1955 and 1956 that may be seen in Chart 2.4, appear to coincide roughly with cycles in unemployment levels.

Child-Woman Ratios

The number of children under five years of age per thousand women in childbearing age (15-49 years) provides a basis for comparing the relative distributions of populations which have special relevance for the assessment of their levels of reproductive behaviour. While the child-woman ratio is an admittedly crude measure of actual reproductive behaviour, it is useful where more relevant data are lacking, and where intergroup comparisons are being made as in the present case with respect to Canada's arriving immigrants and the resident population. However, as in most analyses of imperfect data, the conclusions as well as their implications must be tempered by an awareness of the limitations of both the data and the particular measures employed.

Child-woman ratios for Canada's arriving immigrants and estimates for the resident populations are presented for each year between 1955 and 1971 in Table 2.4. The most obvious difference between these two groups is the much higher level of fertility implied for the resident population vis-à-vis that reflected in the ratios for the arriving immigrants. The former were, in most cases, about twice as large as those for immigrants between 1955 and 1964. Thus, immigrant women, at least upon arrival in Canada, would tend to lower the "apparent" overall level of reproductive behaviour as reflected in the combined age-sex distributions.

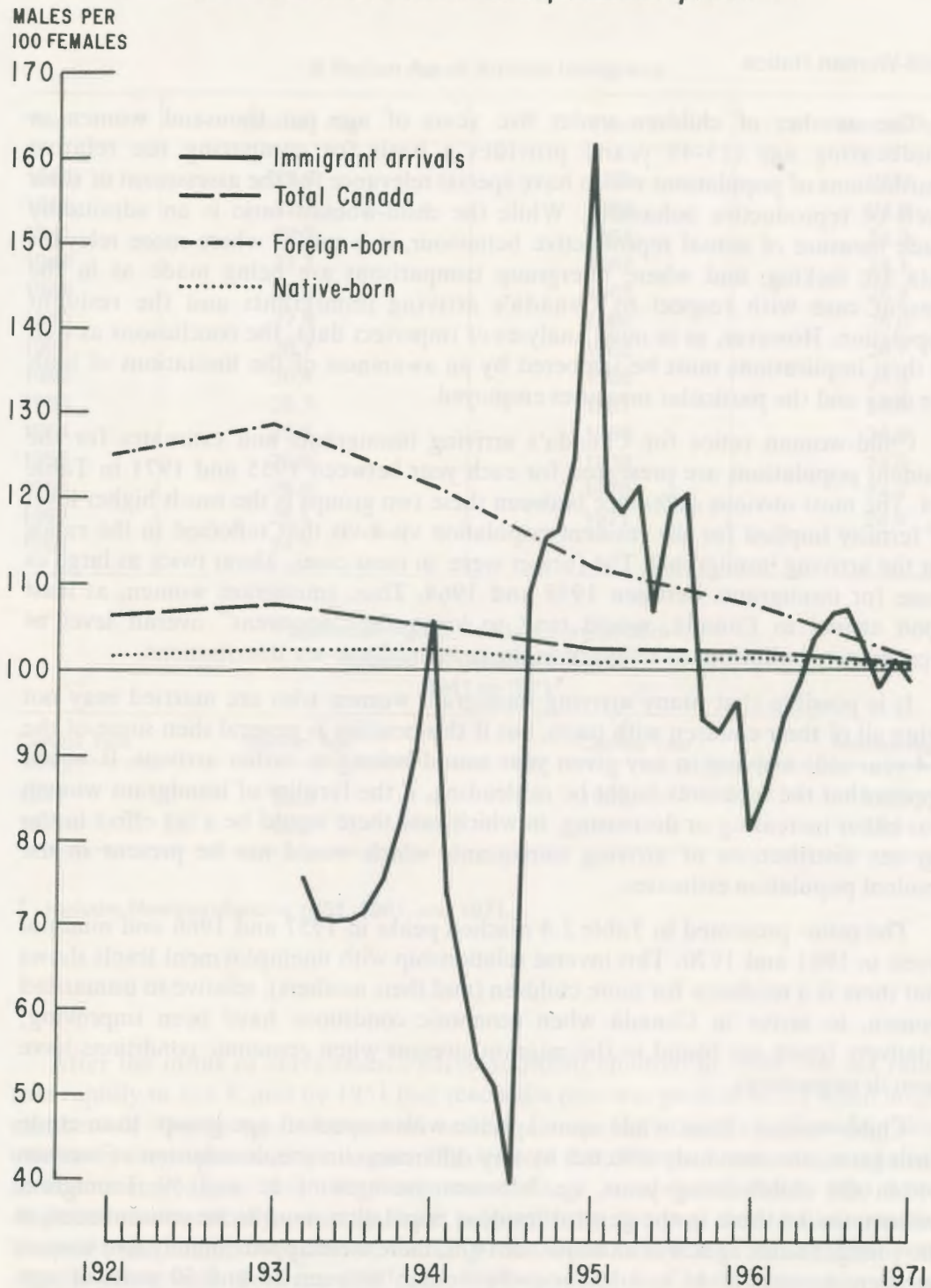
It is possible that many arriving immigrant women who are married may not bring all of their children with them, but if this practice is general then some of the 0-4-year-olds arriving in any given year would belong to earlier arrivals. It would appear that the measures might be misleading, if the fertility of immigrant women was either increasing or decreasing, in which case there would be a lag effect in the age-sex distributions of arriving immigrants which would not be present in the resident population estimates.

The ratios presented in Table 2.4 reached peaks in 1957 and 1966 and minimal levels in 1961 and 1970. This inverse relationship with unemployment levels shows that there is a tendency for more children (and their mothers), relative to unmarried women, to arrive in Canada when economic conditions have been improving; relatively fewer are found in the migrant streams when economic conditions have been deteriorating.

Child-woman ratios, while more specific with respect to age groups than crude birth rates, are obviously affected by any differences in the distribution of women within the childbearing years, i.e. between the ages of 15 and 50. Immigrant women, unlike those in the general resident population, tend to be concentrated in the younger adult ages. For example, in 1971, there were approximately five women between the ages of 15 and 35 for every woman between 35 and 50 years of age. The corresponding ratio for the total population in 1971 was approximately two to one. With such a disproportionate number of immigrant women in the younger and

Chart 2.4

SEX RATIOS FOR NATIVE AND FOREIGN-BORN POPULATIONS AND IMMIGRANT ARRIVALS, CANADA, 1921-71



SOURCES: DBS 99-517, 1961 Census, Bul. 71-7, p.7-13, Department of Citizenship and Immigration, Statistics Section, and 1971 Census of Canada.

TABLE 2.4
CHILD-WOMAN RATIOS* FOR ARRIVING IMMIGRANTS AND
CANADA'S RESIDENT POPULATION, 1955-71

Arriving Immigrants		Total Resident Population	
Year	Child-Woman Ratio	Year	Child-Woman Ratio
1955	248.1	1955	515.9
1956	273.6	1956	518.2
1957	298.4	1957	524.4
1958	249.5	1958	533.3
1959	246.5	1959	534.7
1960	244.2	1960	534.6
1961	223.5	1961	534.5
1962	242.5	1962	531.4
1963	268.1	1963	524.6
1964	297.9	1964	511.8
1965	324.3	1965	494.1
1966	329.1	1966	468.3
1967	288.5	1967	439.6
1968	264.7	1968	409.3
1969	245.2	1969	381.0
1970	238.5	1970	358.1
1971	240.3	1971	343.8

* Child-woman ratios indicate the number of children under five years of age per 1,000 women in the childbearing ages (15-49 years of age).

Sources: Department of Manpower and Immigration, Annual Immigration Reports; Statistics Canada, *Population Estimates by Age and Sex for Canada and Provinces*.

more fertile age groups, it is even more surprising to find that their child-woman ratios are so much lower than those of the resident population. Since previous studies of fertility by Henripin have shown foreign-born women to have had consistently lower fertility than the native-born, it would appear that the differences between these two groups with respect to their child-women ratios can not be totally dismissed as lacking in significance.

Another important aspect of the two data series in Table 2.4 is the apparent convergence of the child-woman ratios since 1955. Both series have fluctuated over time. For the immigrant arrivals, the fluctuations have appeared to vary with changes in levels of unemployment, while the ratios for the resident population have reflected the consistent decline in fertility observed in Canada since 1960. Thus, the "convergence" would appear to be more the result of the downward movements of general population fertility than an upward turn in fertility among arriving immigrants.

Immigration would not appear to be a direct solution to Canada's sagging fertility rates. However, it should be remembered that the contribution made by immigrant women to the nation's population growth in absolute terms is greater than that reflected in their child-woman ratios at the time of their arrival in Canada. However, until special tabulations are made available from the 1971 Census, it is not possible to determine whether the fertility of immigrant women did change after their arrival in Canada. The vital statistics are limited in that they report children born to foreign-born women as "native-born". However, evidence from the 1961 Census did show that foreign-born women who spent most of their childbearing years in Canada tended to achieve reproductive levels closer to those characteristic of the native-born than those who spent only part of their reproductive years in this country.¹

The nature of the changes, if any, that have occurred during the past decade will have to await the availability of more detailed data from the 1971 Census. Data on the age and sex of the population by nativity of parents will permit the identification of the children of foreign-born women born in Canada, i.e., the second generation, as well as the foreign-born children who accompanied them to Canada. This will permit the comparison of child-women ratios which, in the case of immigrant women, will be more reflective of their fertility experience in Canada as well as abroad.

Dependency Ratios

The distribution of a population by age can show the extent of balance between its economically active and inactive components, and provides data for a relative measure of the dependency burden which must be assumed by the former in providing care and services for the latter. Since the burden of social services is carried by the community at large through income, sales, and property taxes, the "dependency" ratio as such makes sense mainly when it is derived on the basis of the total population that provides the tax base for the community in question. However, looking at dependency ratios for subpopulations reveals the extent to which these groups make disproportionate contributions to the dependent population relative to other subgroups in the community and indirectly to its existing social and economic problems.

Generally, immigrants tend to be concentrated in the younger labour force age groups. Thus their dependency ratios, i.e. the numbers under 15 and 65 years of age and over as a proportion of the total population in the labour force age range, 15-65 years, are usually low. For example, in 1971 the dependency ratio for immigrant arrivals was 0.33 compared with 0.65 for the total resident native-born population. Hence, if all those in the labour force age range do in fact seek employment, their relative contribution to the dependent population can be considerably less than that for the native-born.

Using the dependent foreign-born population as a percentage of the total foreign-born population provides a similar means for examining the net effect of the immigrants' yearly contribution to the maintenance of its dependent, or its potentially active, population over the years. For the foreign-born, the relative size

¹ W.E. Kalbach, *The Impact of Immigration on Canada's Population*, 1961 Census Monograph (Ottawa: Information Canada, 1970), p. 107.

of its dependent population has gradually increased from 15 per cent in 1921 to 28 per cent in 1971. By contrast, the proportion of native-born in the combined dependent age groups decreased from 46 per cent to 39 per cent during the same period. However, to the extent that this standard measure of dependency suggests only the minimal limits of the dependent population, its use is rather limited.

An alternative to the standard dependency ratio can be developed using data collected from immigrant arrivals concerning their intentions vis-à-vis labour force participation. While these data do not reveal the ultimate participation rates by immigrants after their initial period of adjustment, they do provide a benchmark for evaluating subsequent changes in their labour force status.

Data in Table 2.5 show numbers of immigrants “intending” and “not intending” to work, and non-workers as a percentage of workers and of total immigrants. Comparing these data with variations in sex ratios presented earlier, the same general cyclical variations may be noted, i.e. both achieve minimum or maximum values of recurring cycles in 1951, 1961 and 1967. Since low sex ratios indicate an excess of women (as was the case in 1961), and because women are less likely to enter the labour force than men, one would expect a peak in the proportion of non-workers, as was in fact the case.

These variations also appear to follow variations in levels of unemployment. In this case, the proportion of non-workers among immigrants increased during a period of rising unemployment between 1957 and 1961; and, from 1961 to 1967, as unemployment decreased, so did the proportion of non-workers. For the 20-year period, 1951-71, the degree of association between the percentage unemployed and the proportion of non-workers is indicated by a product-moment correlation coefficient (r) equal to 0.67. This is somewhat less, but consistent with, a correlation of 0.78 observed between the sex ratios of arriving immigrants and the percentage unemployed in the total labour force, i.e. as unemployment drops (and economic conditions improve) more males relative to females are attracted as immigrants to Canada. That the proportion of non-workers among arriving immigrants should increase as economic conditions deteriorate may seem a bit strange at first glance since the dependency burden would appear to increase among immigrants at the very time economic conditions are worsening. On the other hand, it seems quite logical to observe an increase in the sex ratio when economic conditions improve and more jobs become available. The explanation may lie partly in the fact that male immigrants, who tend to be disproportionately represented among immigrant arrivals during periods of improving economic conditions, are joined by their dependants at a later date after they have become established.

The above observations are visually born out by data presented in Chart 2.5 which show variations in numbers of workers, non-workers, and its two subcategories “wives and children” and “other dependants”. The maximum and minimum points of the cycles clearly coincide in 1957, 1961 and 1967 with variations in the percentage unemployed. While the peak for workers and total non-workers coincided with the low point in unemployment in 1967, the curve for “other dependants” continued to rise sharply until 1968, and then declined at a somewhat lower rate than for either workers or “wives and children”.

While it is not possible to say with complete certainty, it is quite probable that the continued sharp increase in numbers of “other dependants” up to 1968 reflects

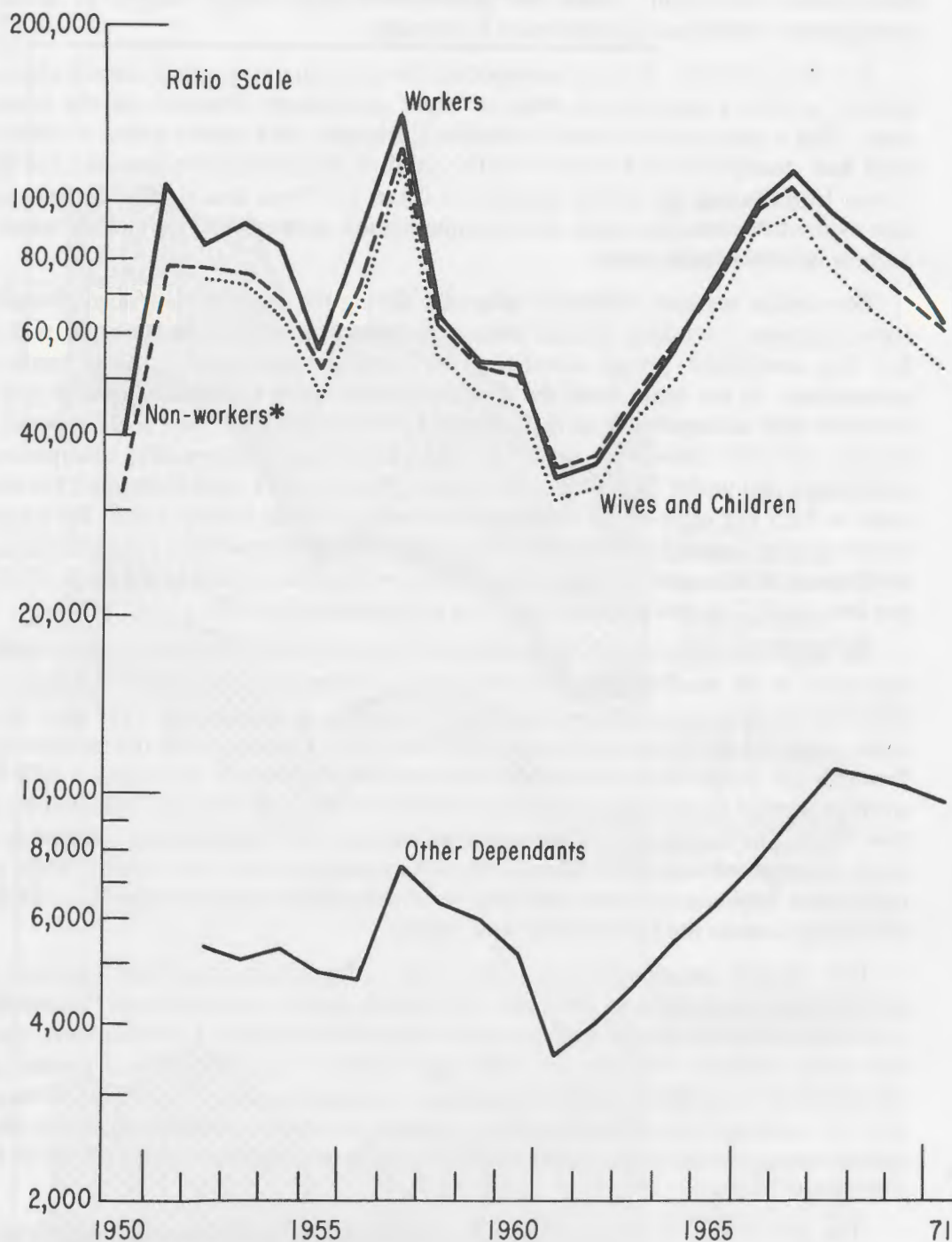
TABLE 2.5
INTENDED LABOUR FORCE STATUS OF ARRIVING IMMIGRANTS AND
NON-WORKERS AS A PERCENTAGE OF TOTAL IMMIGRATION AND
TOTAL WORKERS, CANADA: 1950-71

Year	Total Non-Workers	Total Workers	Total Immigration	Non-Workers as a Percentage of Total Immigration	Non-Workers as a Percentage of Total Workers
1950	33,039	40,873	73,912	44.7	80.8
1951	79,605	114,786	194,391	40.9	69.4
1952	79,469	85,029	164,498	48.3	93.5
1953	77,735	91,133	168,868	46.0	85.3
1954	69,851	84,376	154,227	45.3	82.8
1955	51,959	57,987	109,946	47.3	89.6
1956	73,818	91,039	164,857	44.8	81.1
1957	130,653	151,511	282,164	46.3	86.2
1958	61,773	63,078	124,851	49.5	97.9
1959	53,377	53,551	106,928	49.9	99.7
1960	50,538	53,573	104,111	48.5	94.3
1961	36,880	34,809	71,689	51.4	105.9
1962	37,838	36,748	74,586	50.7	103.0
1963	47,285	45,866	93,151	50.8	103.1
1964	56,416	56,190	112,606	50.1	100.4
1965	72,563	74,195	146,758	49.4	97.8
1966	95,533	99,210	194,743	49.1	96.3
1967	103,337	119,539	222,876	46.4	86.4
1968	88,528	95,446	183,974	48.1	92.8
1969	77,182	84,349	161,531	47.8	91.5
1970	69,990	77,723	147,713	47.4	90.0
1971	60,618	61,282	121,900	49.7	98.9

Source: Department of Manpower and Immigration, Annual Immigration Reports, 1950-71.

changes in immigration regulations making it easier for non-citizen permanent residents to sponsor the immigration of relatives from abroad. On the other hand, since the numbers of other dependants had been increasing since 1961, the failure to show a downturn in 1967 might simply reflect a lag effect resulting from the process of application and time required for approval. However, after 1957 the trend reversal for "other dependants" occurred at the same time as it did for total workers. This would suggest that policy changes might have been the more important factor in 1967. Also note that in 1957, as in 1968, the rate of decline after the trend reversal was considerably less than that for total workers.

Chart 2.5
**NUMBER OF WORKERS, NON-WORKERS, AND OTHER DEPENDANTS
 AMONG IMMIGRANT ARRIVALS
 CANADA, 1950-71**



*NON-WORKERS INCLUDES WIVES, CHILDREN AND OTHER DEPENDANTS

SOURCE: Annual Reports, Department of Manpower and Immigration.

INTENDED OCCUPATION OF ARRIVING IMMIGRANTS

The types of occupational skills among immigrants attracted to Canada should reflect internal changes in the structure of the labour market that have occurred with continuing economic development and urbanization. In addition, it would not be expected that the occupational skills of immigrants should be representative of the labour force itself, since the government has always sought to attract immigrants in those occupations most in demand.

For these reasons, it is not unexpected that certain occupations should show a decline in their proportionate share of those immigrants destined for the labour force. This is the case for farmers, fishermen, trappers, and miners whose combined total has clearly declined relative to the total of all immigrants destined for the labour force during the period depicted in Chart 2.6. Note that similar declines are also evident for transportation and communication workers, service and recreation, and for labourers and others.

For similar reasons, consistent increases during the same period were observed for immigrants intending to enter managerial and professional positions, as well as for the combined group consisting of clerical, commercial, and financial occupations. In the latter case, the overall increase from 13.7 to 20.2 per cent was nowhere near as impressive as the increase in the former from 14.7 to 32.3 per cent during 1955-71. However, in 1955, these combined white-collar occupations constituted just under 30 per cent of the total; but, by 1971, they accounted for over half, or 52.5 per cent, of all immigrants destined for the labour force. By way of contrast, the combined blue-collar workers, i.e. construction, manufacturing, mechanical trades, plus labourers and others, varied from a combined peak of 49.2 per cent in 1957 to less than one-third, or 31.9 per cent, in 1971.

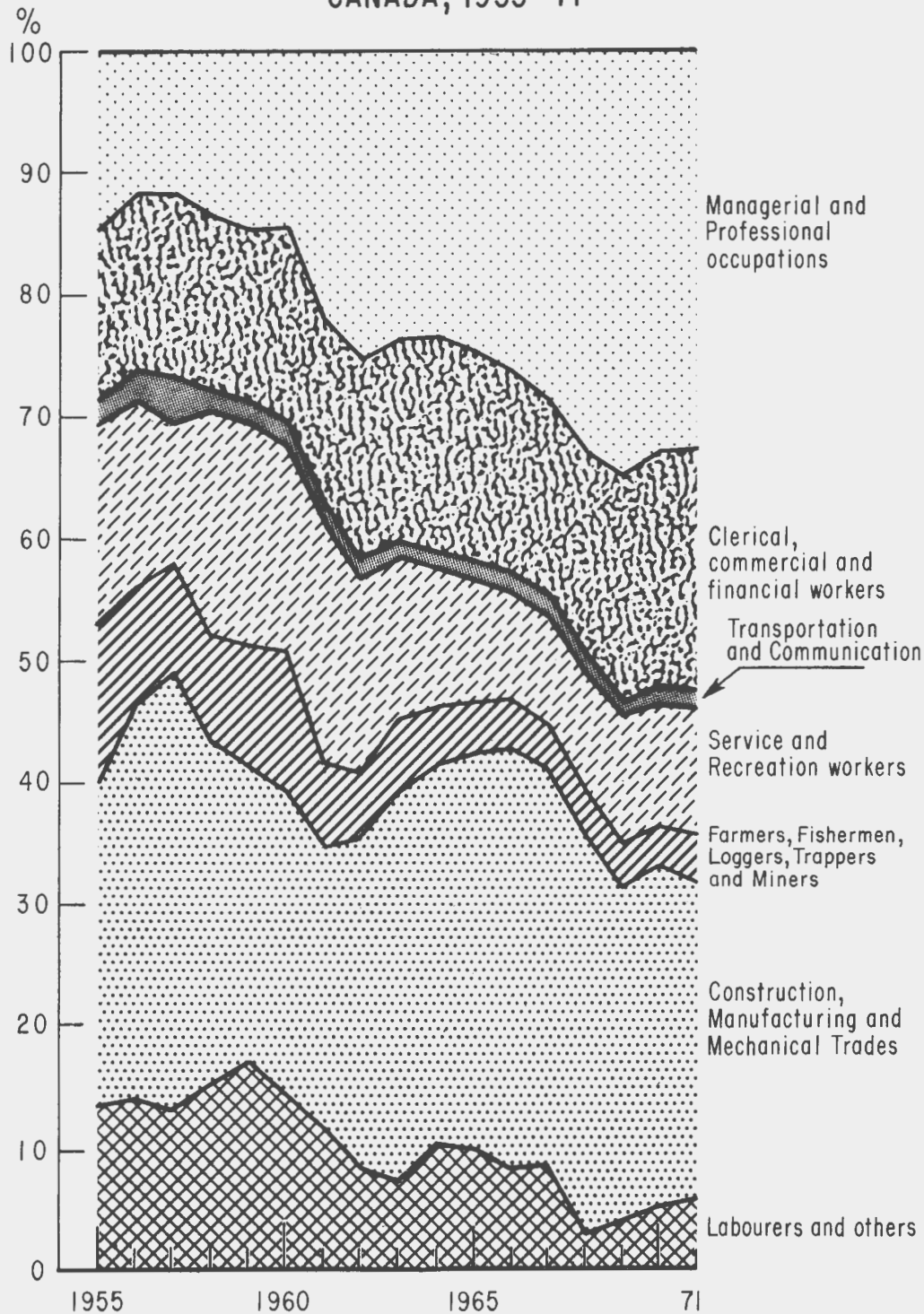
As might be expected, the construction, manufacturing, and mechanical trades appeared to be most sensitive to variations in unemployment levels. Immigrants destined for these occupations comprised the highest proportions in 1957 and 1966, while reaching their lowest relative share in 1961. The extent of the relationship between the proportion destined for this combined group of occupations and the average annual percentage unemployed between 1951 and 1971, is indicated by an $r = -0.75$. The correlation between unemployment and the proportion intending to enter managerial and professional jobs was essentially zero ($r = -0.06$), while the correlation between the unemployment level and total annual immigration of those intending to enter the labour force was -0.60 .

One would anticipate some observable effects resulting from changes in immigration regulations in 1962 and 1967 which placed more stress on "education, training, and skills" as opposed to ethnic and cultural origins. Unfortunately, these two dates coincide with the low and high points of average annual percentage unemployed respectively, so that increasing immigration after 1962 would reflect in part the consequences of an improving level of economic activity; and, after 1967, deteriorating employment conditions would mask, in part, the positive effects of the new "point" system.

The proportion of managerial and professional workers increased significantly between 1960 and 1962, and then after a small decline resumed its upward trend, increasing from 23.5 per cent in 1963 to 28.3 per cent in 1967. The percentage continued to increase after 1967, reaching 34.9 per cent in 1969 before declining to 32.2 in 1971.

Chart 2.6

PERCENTAGE COMPOSITION OF IMMIGRANT ARRIVALS
BY INTENDED OCCUPATIONS
CANADA, 1955-71



SOURCE: Annual Reports, Department of Manpower and Immigration.

In retrospect, it seems that the implementation of the new regulations, which were to encourage those with education and technical skills, did not have an immediate effect in increased proportions of immigrants intending to enter managerial or professional positions upon arrival in Canada. The trend towards an increasing proportion had started in 1958, and actually increased significantly between 1958 and 1962, during a period of rising unemployment. Their proportion increased steadily up to 1967, with an additional boost being given by the new point system in 1968, when a further significant increase was observed at a time when unemployment was just beginning to show another increase. By 1969, the worsening economic picture was reflected in the slight decline in the proportion destined for these two occupational groups.

VARIATIONS IN INTENDED OCCUPATION BY COUNTRY OF LAST PERMANENT RESIDENCE

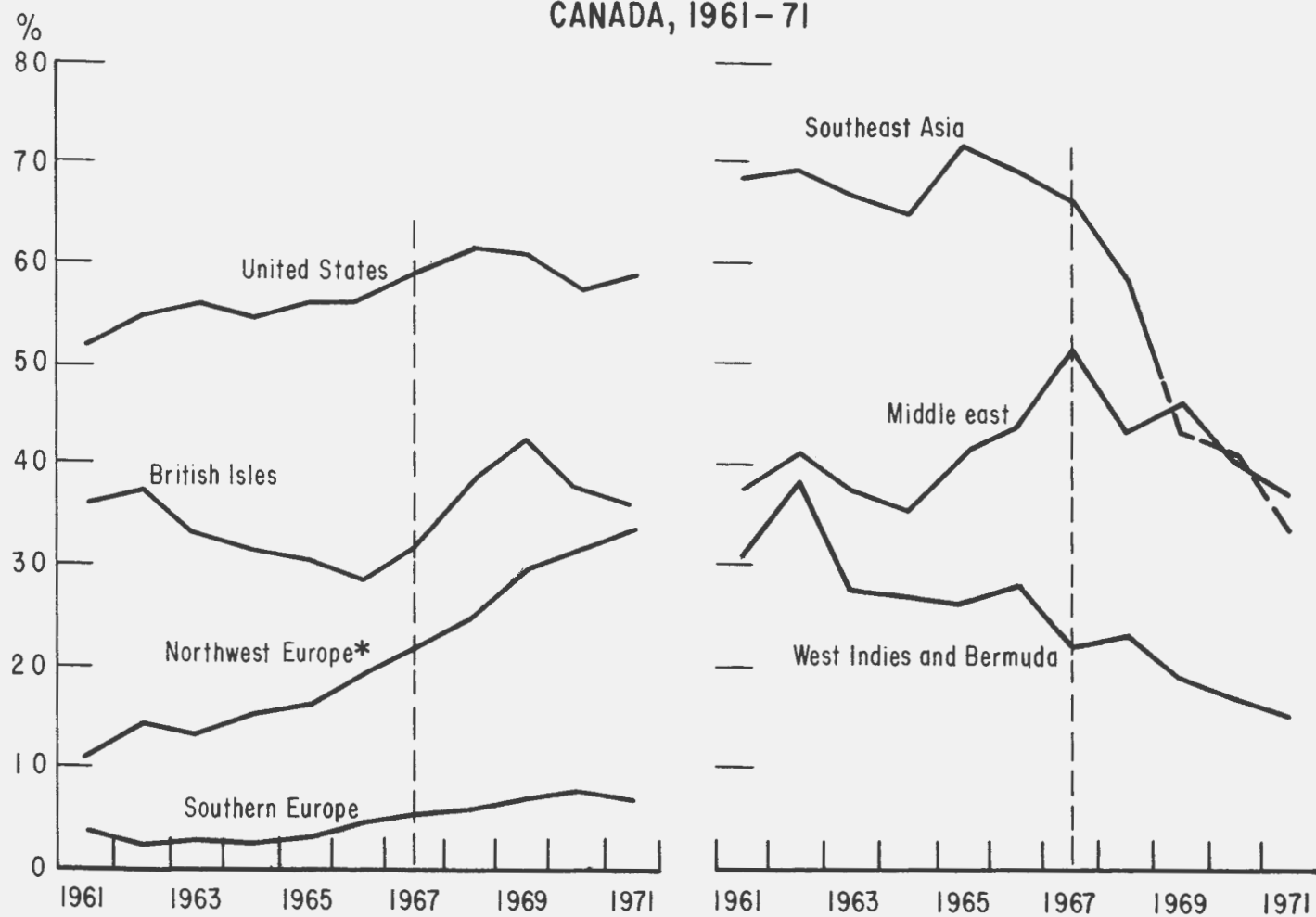
If revisions were made in immigration regulations with the intention of maximizing selection of immigrants on a skills and educational basis while minimizing ethnic and cultural origin considerations, one would expect to increase the number of immigrants seeking employment in managerial, professional, and technical occupations. This did happen as indicated by the preceding discussion. In addition, one would also expect a relatively greater increase in the proportion of highly educated and skilled from those ethnic and cultural origin groups that had previously been discouraged, or at least not actively encouraged, from immigrating to Canada. If all immigrants were now being selected on this basis, the proportion of such skilled and educated workers should show increases for all countries, especially those that might expect to have built up a backlog of qualified persons wanting to immigrate to Canada. This should be so even if the total number of arriving immigrants should actually decline in response to worsening economic conditions, as it did from 1967 to 1971.

No systematic pattern can be found in the data concerning numbers destined for the labour force and proportions of managerial and professional workers that would appear to be valid for all the groupings of selected countries of last permanent residence shown in Chart 2.7. The data for those arriving from the United States are consistent with the hypothesized effects of changes in immigration regulations, but appear relatively unaffected by cyclic variations in economic conditions as reflected in unemployment data. Those from northern, western, and southern European countries also show increasing proportions of managerial and professional workers, regardless of whether the number of arrivals is increasing or decreasing.

The number of immigrant workers from the Middle East and Southeast Asia had been increasing steadily since 1961 and had peaked in 1969 before showing fairly rapid declines in 1970 and 1971. The proportions of these workers intending to enter managerial and professional jobs were relatively high from both areas before the 1967 changes in policy, but following 1967 their proportions declined from a peak of 51.2 to 37.2 per cent of all workers from the Middle East in 1971, and from 66.2 to 33.5 per cent for workers arriving from Southeast Asian countries.

Data for the West Indies and Bermuda show a significant increase starting in

PERCENTAGE OF TOTAL IMMIGRANTS INTENDING TO ENTER MANAGERIAL AND
PROFESSIONAL OCCUPATIONS FOR SELECTED COUNTRIES OF LAST PERMANENT RESIDENCE:
CANADA, 1961-71



*Includes France

SOURCE: Annual Reports, Department of Manpower and Immigration.

1961 with 911 immigrants and peaking in 1969 when 8,349 entered Canada destined for the labour force. As with most other countries of last permanent residence, the numbers declined in the last two years. However, it is interesting to note that for the period 1961-71, the proportion intending to obtain managerial and professional positions declined by about one-half.

THE FOREIGN-BORN POPULATION: 1851-1971

The foreign-born population residing in Canada at any particular time represents the net effects of immigration, emigration, and deaths on the foreign-born. Thus, the historical trend with respect to the growth of this population has been one of considerable variation, including periods of extremely rapid growth as well as declines, since 1851.

The changing size of the foreign-born population since 1851 is shown in Chart 2.8. Relative to the steady growth of the native-born, its growth over time has been erratic. Positive effects, i.e. where the rate of growth of the foreign-born exceeds that of the native-born and contributes to a faster rate of growth for the total population, are evident wherever the slope of the curve for total population is greater than that of the adjacent curve for native-born. Such conditions existed between 1851 and 1861, 1901 and 1911, and to a lesser extent between 1911 and 1921, and 1951 and 1961. The effects of numerical declines in the numbers of foreign-born, as occurred in 1860-70 and 1931-40, are clearly apparent in the reduced rates of growth for the total population during the corresponding periods.

Chart 2.9 presents data on immigration juxtaposed on the trend in foreign-born population expressed as a percentage of the total population. Even though immigration is only one of the three factors contributing to the size of the foreign-born population, it does show the correspondence between periods of heavy immigration and increases in the proportion of foreign-born as well as declines during periods of light immigration and possible net out-migration.

It becomes quite clear that for the foreign-born population to maintain its relative size, there must be a constant input to make up for losses due to mortality and emigration, as well as a sufficient increment to maintain a rate of growth equivalent to that of the native-born. A constant net input from immigration would not be adequate to maintain its proportionate share of the total, if the natural increase exceeds the contribution from net migration.

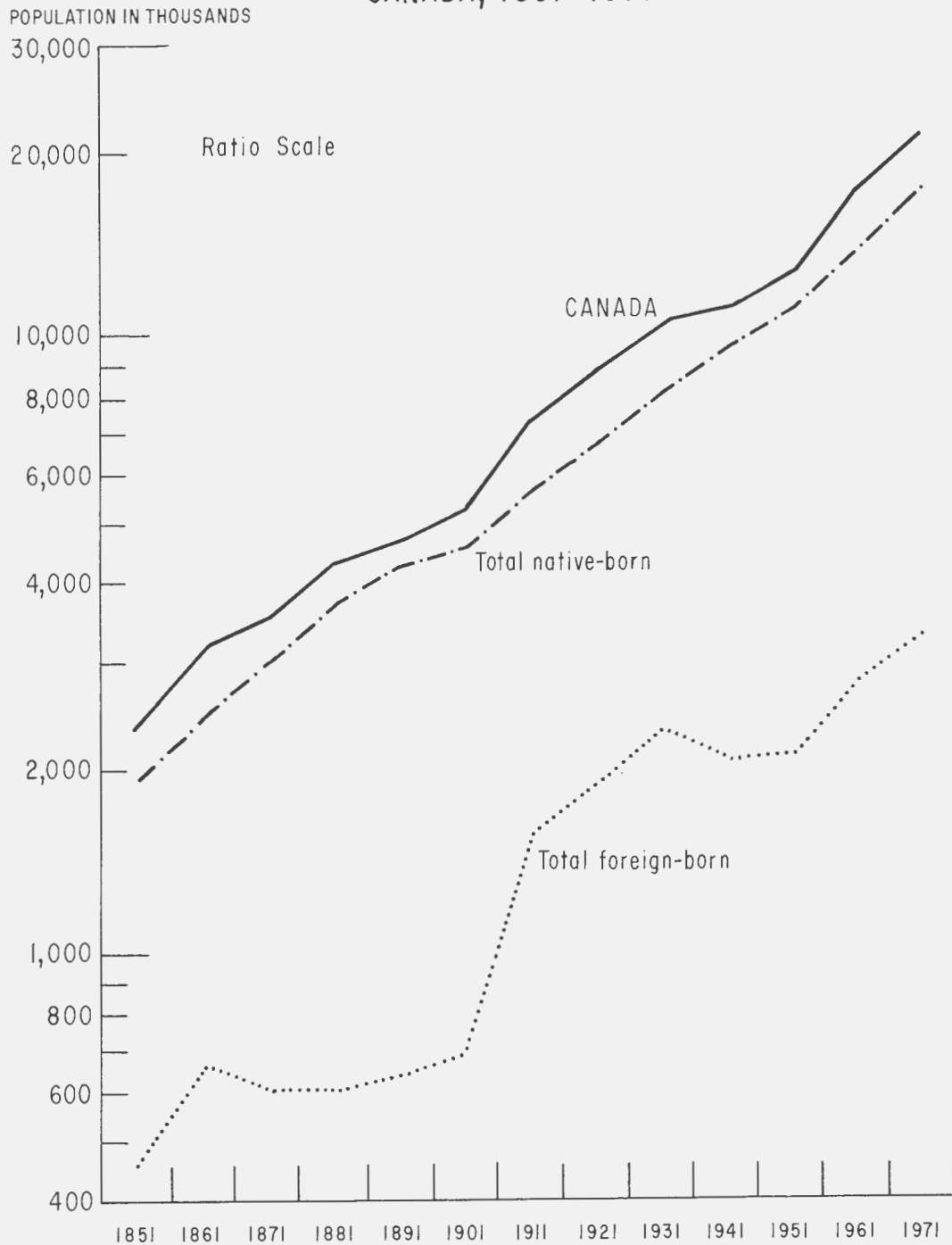
Data on size, and foreign-born population as a percentage of the total population, in Table 2.6, show that the input through immigration has not been generally sufficient since 1921 to maintain its relative size. Only during the 1951-60 decade was it sufficient to increase its proportionate share, but the increase was minor compared with the effects of immigration between 1901 and 1911.

Geographical Distribution

The present distribution of the foreign-born by province and territory shows the net effect of original settlement patterns plus subsequent mobility, i.e. internal migration. The data in Table 2.7 clearly show the long-range preference on the part of immigrants for Quebec and Ontario, interrupted only by the settlement of the

Chart 2.8

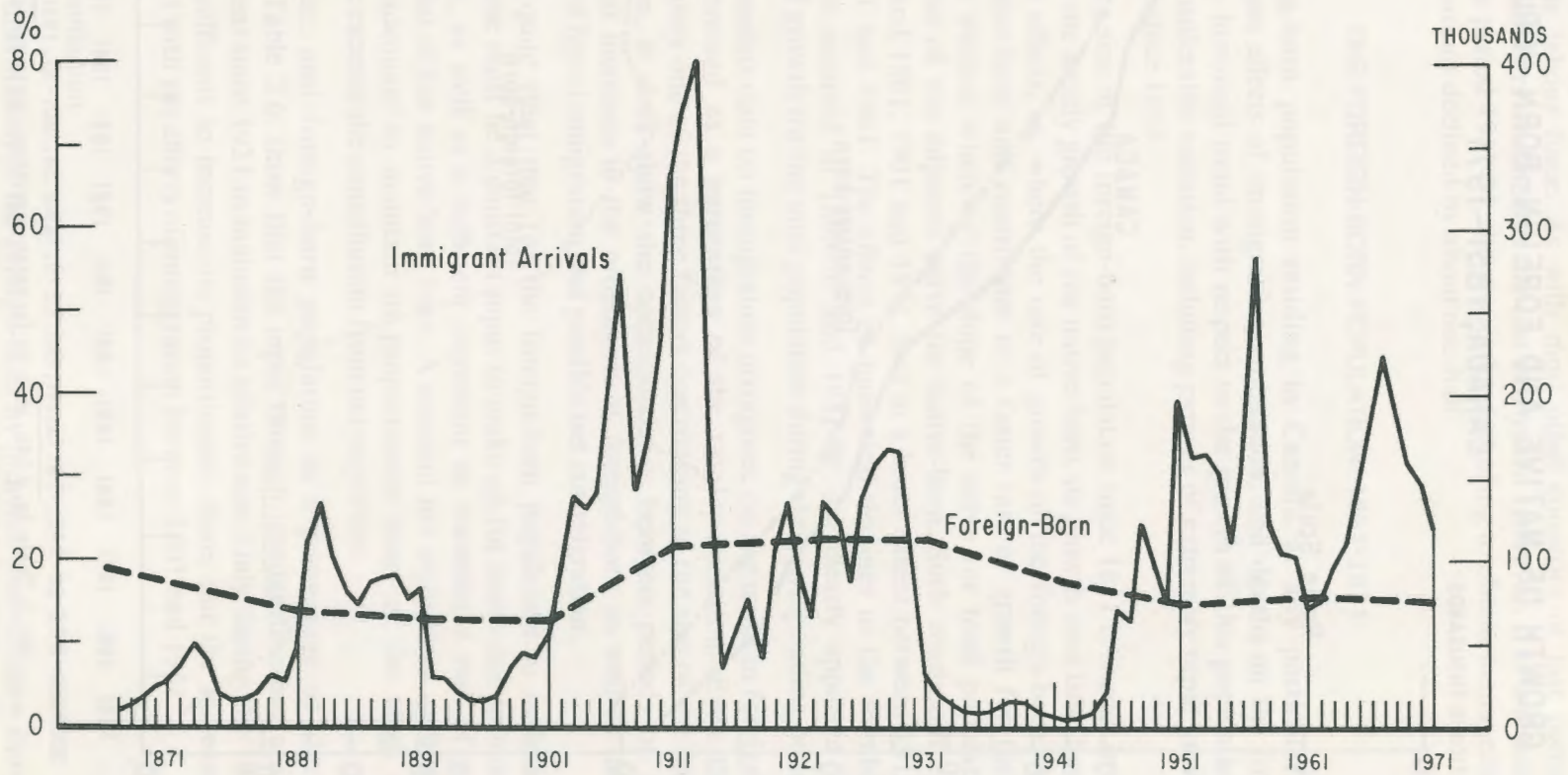
GROWTH OF NATIVE AND FOREIGN-BORN POPULATIONS, CANADA, 1851-1971



SOURCES: DBS 92-545, 1961 Census, Bul. 1.2-5, Table 34, 1901-61, 1931 Census of Canada, Vol. I, Table 1a, p. 348, 1851-91 for total population. Data for foreign born are also contained in this volume, but only for 1871-91. 1971 Census of Canada

Chart 2.9

PERCENTAGE FOREIGN-BORN AND NUMBER OF IMMIGRANT ARRIVALS, CANADA, 1867-1971



SOURCE: Canada Censuses, Department of Manpower and Immigration Annual Reports.

TABLE 2.6
GROWTH OF FOREIGN AND NATIVE-BORN POPULATION,
CANADA, 1851-1971

Year	Total	Foreign-born	Native-born	Per Cent Foreign-Born
1851	2,436,000	460,000	1,976,000	18.9
1861	3,230,000	683,000	2,547,000	21.1
1871	3,605,000	602,000	3,003,000	16.7
1881	4,325,000	603,000	3,722,000	13.9
1891	4,833,000	644,000	4,189,000	13.3
1901	5,371,000	700,000	4,672,000	13.0
1911	7,207,000	1,587,000	5,620,000	22.0
1921	8,788,000	1,956,000	6,832,000	22.3
1931	10,377,000	2,308,000	8,069,000	22.2
1941	11,507,000	2,010,000	9,400,000	17.5
1951	14,009,000	2,060,000	11,950,000	14.7
1961	18,238,000	2,844,000	15,394,000	15.6
1971	21,569,000	3,296,000	18,273,000	15.3

Source: Dominion Bureau of Statistics, Censuses of Canada, 1851 to 1971.

Note: All figures rounded to the nearest 1,000.

Prairie provinces during the 1901-10 decade. The distribution of immigrants has changed less through their subsequent movement than through changes in patterns of intended destinations upon first arriving in Canada. Newly arrived immigrants can respond more readily than the native-born to changing economic conditions and move directly to those areas with the greatest economic activity and potential.

For the period since 1946, 52.7 per cent of the 3.5 million immigrants arriving in Canada indicated that they intended to settle in Ontario. The net result of this preference may be seen from the fact that over half, or 51.8 per cent, of the 3,296,000 foreign-born living in Canada at the time of the 1971 Census were residents of Ontario. The Prairie provinces still had the second largest proportion, 16.5 per cent, followed closely by British Columbia and Quebec with 15.1 and 14.2 per cent, respectively.

The patterns of growth for the foreign-born have not been consistent over time, or by region, as may be seen in Table 2.8. The largest percentage increases took place in the Prairie provinces and British Columbia during the 1901-10 decade. However, the Prairies never regained their position of eminence. They showed the greatest losses during the Depression decade of any region as they also did in 1941-50. Even during the favorable growth period of the 1951-60 decade, the Prairies experienced only minimal change (4.1 per cent), and between 1961 and 1971 were the only region to show a loss of foreign-born population.

The overall growth for the most recent census decade was only half of that for the previous 10-year period, and the provinces with the best growth records were Ontario, with 26.2 per cent; Quebec, 20.7 per cent; and, British Columbia, with 17.4

TABLE 2.7
POPULATION OF CANADA BY NATIVITY AND REGIONS, 1901 TO 1971

Nativity and Region	1901	1911	1921	1931	1941	1951*	1961*	1971*
Native-Born	%	%	%	%	%	%	%	%
Atlantic Provinces	18.1	15.7	13.7	11.6	11.2	13.1	11.9	10.9
Quebec	33.4	33.0	31.8	32.5	32.8	32.0	31.6	30.4
Ontario	39.8	35.9	33.5	32.6	32.2	31.4	31.7	32.8
Prairie Provinces	6.0	12.0	17.0	18.5	18.2	16.4	16.7	16.4
British Columbia	2.1	3.0	3.9	4.6	5.4	6.9	7.8	9.2
Yukon and N.W.T.	0.6	0.4	0.1	0.2	0.2	0.2	0.2	0.3
Total								
Percentage	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number ('000)	4,672	5,620	6,832	8,069	9,488	11,950	15,394	18,272
Foreign-Born	%	%	%	%	%	%	%	%
Atlantic Provinces	6.7	3.6	3.4	3.0	3.2	2.7	2.3	2.2
Quebec	12.7	9.2	9.7	10.9	11.1	11.1	13.6	14.2
Ontario	46.3	32.0	32.8	34.9	36.3	41.2	47.6	51.8
Prairie Provinces	20.3	40.8	40.7	37.3	34.2	28.4	21.4	16.5
British Columbia	11.3	14.1	13.3	13.8	15.1	16.5	14.9	15.1
Yukon and N.W.T.	2.7	0.3	0.1	0.1	0.1	0.1	0.2	0.1
Total:								
Percentage	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9
Number ('000)	700	1,587	1,956	2,308	2,019	2,060	2,844	3,296

* Includes Newfoundland in 1951, 1961 and 1971.

Source: Dominion Bureau of Statistics, Censuses of Canada, 1901 to 1971.

per cent. Table 2.9 shows that in terms of actual numbers, the Prairies had the second largest foreign-born population, after Ontario, followed by British Columbia and Quebec. Relative to their total population, British Columbia still had the largest proportion of foreign-born with 22.7 per cent, but a simple extrapolation of the historical trends would indicate that Ontario, which has 22.2 per cent, and has been increasing since 1951, will take over first place very shortly. Quebec and the Atlantic provinces are the only other areas that have shown gains in the relative size of their foreign-born populations. Their increases, however, have been very modest.

In summary, the evidence points to a continuation of the long-term trend of an increasing proportion of foreign-born since 1911 in Ontario and Quebec, long-term declines in the Atlantic and Prairie provinces, and continuing fluctuations for both British Columbia and the Territories. Whether the proportion of foreign-born in Ontario and Quebec continues to increase will depend upon the relative size of growth from natural increase and the internal migration of the native-born. Present

TABLE 2.8
PERCENTAGE INCREASE IN FOREIGN-BORN BY DECADES FOR CANADA AND
REGIONS, 1901-71

Region	Decades						
	1901 -11	1911 -21	1921 -31	1931 -41	1941 -51	1951 -61	1961 -71
Canada	126.9	23.2	18.0	-12.5	2.0*	38.1*	15.9
Atlantic Provinces	22.7	17.8	2.5	- 7.6	-13.8*	21.4*	10.3
Quebec	65.2	28.7	33.5	-11.0	2.2	69.7	20.7
Ontario	56.7	26.4	25.3	- 8.8	15.9	59.2	26.2
Prairie Provinces	356.3	23.0	8.2	-19.8	-15.4	4.1	-10.5
British Columbia	182.3	16.8	22.6	- 4.6	11.3	24.8	17.4
Territories	-72.0	-67.2	19.7	6.4	19.0	75.0	2.1

* Includes Newfoundland. Excluding Newfoundland, percentage increases are 1.8 and 38.0 for Canada in 1941-51 and 1951-61 respectively. For Atlantic Provinces, percentage increases are - 19.8 and 18.2 for 1941-51 and 1951-61 respectively.

Source: Dominion Bureau of Statistics, Censuses of Canada, 1901 to 1971.

trends suggest that the proportion will continue to increase in the immediate future.

Ethnic and Cultural Origins

Perhaps the most notable effect resulting from the decade's immigration, emigration, and mortality, was the continuing decline of the British-origin population from 40.5 to 36.1 per cent. The other most significant change from earlier trends was the increase in Asiatic and other origins from 2.8 to 7.3 per cent. The long-term increase in major central, eastern, and southern European origins was not affected by the very small decline between 1961 and 1971 though the data indicate that the increase for those of Italian origin compensated for declines in proportions for others in this combined-origin grouping.

Some comment must be made relative to the native-born population inasmuch as they serve as the standard against which the foreign-born are compared. During the 1961-70 period, the slight increase in British origins almost totally compensated for the decline in French origins so that the combined total for these two founding groups is estimated to have dropped by about one percentage point from 80 to 79 per cent. The remaining major ethnic-origin combinations changed only slightly.

However, when the foreign-born and native-born are combined, the significance of recent immigration and fertility trends becomes clear. Total British origins remained relatively unchanged, but those of French origins declined from 30.4 to

TABLE 2.9
NUMBER OF FOREIGN-BORN AND PERCENTAGE OF THE POPULATION FOREIGN-BORN,
CANADA'S REGIONS, 1901-71

Region	1901	1911	1921	1931	1941	1951	1961	1971
Number **								
Atlantic Provinces*	46,600	57,200	67,300	69,000	63,800	55,000	66,700	73,600
Quebec	88,700	146,500	188,600	251,700	223,900	228,900	388,400	468,900
Ontario	324,200	507,800	641,700	804,300	733,300	850,000	1,353,200	1,707,400
Prairie Provinces	141,800	646,900	795,400	860,900	690,900	584,200	608,100	544,200
British Columbia	79,000	223,200	260,500	319,500	304,700	339,200	423,100	496,700
Territories	19,200	5,400	1,800	2,100	2,200	2,700	4,700	4,800
Percentage of Regional Population								
Atlantic Provinces*	5.2	6.1	6.7	6.8	5.6	3.4	3.5	3.6
Quebec	5.4	7.3	8.0	8.8	6.7	5.6	7.4	7.8
Ontario	14.8	20.1	22.0	23.4	19.4	18.5	21.7	22.2
Prairie Provinces	24.2	48.9	20.7	36.6	28.5	22.9	19.1	15.4
British Columbia	44.2	56.9	49.7	46.0	37.3	29.1	26.0	22.7
Territories	36.5	20.0	14.5	15.1	13.3	10.6	12.4	9.0

* Includes Newfoundland in 1951, 1961, and 1971.

** All figures rounded to the nearest 100.

Source: Dominion Bureau of Statistics, Censuses of Canada, 1901 to 1971.

28.7 per cent of the total population, with most of the remaining groups showing consistent increases at the expense of the French who gained little from immigration and whose declining fertility no longer would compensate for a traditional lack of immigration. There is no question that present immigration and fertility trends for Quebec were distinctly unfavourable during the 1961-70 decade for the maintenance of its traditional share of approximately 30 per cent of the country's total population. However, the proportion for Quebec was previously as low as 27.9 per cent in 1921 when the effects of migration cancelled out the advantage of higher fertility. The proportion of "other" ethnic origins in the population is approaching that of the French origins, having reached 26.7 per cent, compared with 28.7 per cent for the French. Trends in composition of native- and foreign-born populations by major ethnic-origin groups are presented in Chart 2.10 for 1921 to 1971.

Sex and Age

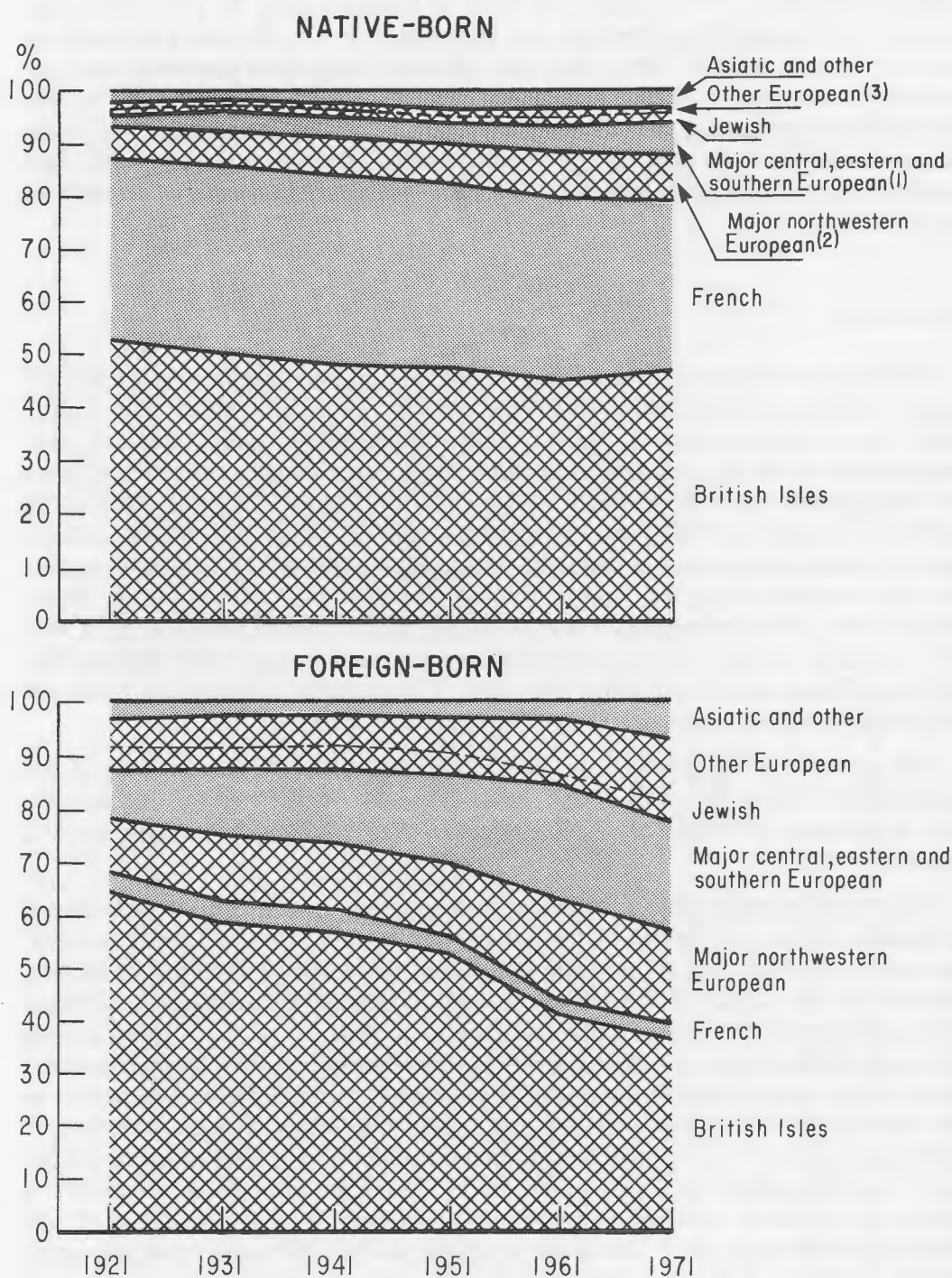
The characteristically high sex ratios for the foreign-born populations have been steadily declining towards parity since 1931, and by 1971 had reached 101. This is partly due to the increasing mortality of the aging surplus of males from the early immigrations of the 20th century, and partly due to the changing character of post-war immigration which has varied from the relatively high sex ratios in 1951 to the surplus of women in 1961, and subsequent cycles in which the deviation from equality between the sexes, in numbers, has gradually decreased. It would appear that the surplus of males, which was so characteristic of the early heavy immigrations, will not happen in the future for any extended period of time, nor will it continue to characterize the resident population of foreign-born after the last survivors of that record migration have died. Comparisons between sex ratios for the foreign-born, immigrants, and native-born can be made in Chart 2.4.

The census of 1951 reflected the maximum aging effect of the survivors of the immigrations during the early 1900s. Since then, the median age of the foreign-born population has declined to 42.4 years in 1971 from the maximum of 50.2 recorded in 1951.

This, in combination with a declining birth rate during the 1960s, which caused an increase in the median age of the native-born from 22.2 to 23.3 years in 1971, allowed the median age of the total population to remain unchanged from that reported for the Canadian population in 1961. Since the median age of arriving immigrants tends to remain fairly constant at around 25 years of age, as was previously seen in Table 2.3, the only way in which immigrants can have an unusual effect on the aging of the foreign-born population is through cyclical variations in the numbers of immigrants arriving in Canada. The effect of large numbers of arriving immigrants is not unlike that of an increase in the numbers of births for the native-born population in that it would tend to lower the average age. Similarly, a decline in numbers of immigrants would contribute to a rapid aging of the population of foreign-born. The more rapid the decline, the more rapid the aging process. In Chart 2.11, the rapid increase in median age for the foreign-born between 1931 and 1941 reflects the low level of immigration during this same period; and the less rapid increase between 1941 and 1951 reflects the revival of immigration during the immediate post-war period. Between 1951 and 1961, not

Chart 2.10

COMPOSITION OF NATIVE AND FOREIGN-BORN POPULATIONS BY MAJOR ETHNIC ORIGIN GROUPS, CANADA, 1921-71



(1) HUNGARIAN, ITALIAN, POLISH, RUSSIAN AND UKRAINIAN

(2) GERMAN, NETHERLANDS AND SCANDINAVIAN

(3) OTHER EUROPEAN ORIGINS NOT INCLUDED IN (1) OR (2)

SOURCE: Census of Canada.

only did increased immigration contribute to an actual reversal of the average age, but so did the increasing mortality experience of the aging survivors of the peak immigration during the years 1911-13.

Trends for the 1961-70 decade visible in Chart 2.11 suggest some further convergence in the median age of native- and foreign-born populations. This, in part, would be contingent upon further declines in fertility and immigration, but also upon the sharp reduction in numbers of immigrants from the late 1920s to the early 1930s which will significantly reduce the number of older foreign-born population.

Data on age distributions by broad age categories are given in Table 2.10 for native-born and foreign-born populations, and clearly reveal the major distinctions between these two groups. While having roughly comparable proportions in the younger adult working ages between 15 and 45 years, the native-born have disproportionately more under 15 years of age, and the foreign-born have relatively more in the 45-and-over groups.

TABLE 2.10
MEDIAN AGE OF FOREIGN AND NATIVE-BORN POPULATIONS,
CANADA, 1921-71*

Year	Foreign-Born	Native-Born	Total
1921	34.7	19.4	23.9
1931	38.6	19.8	24.7
1941	46.5	22.8	27.0
1951	50.2	23.9	27.7
1961	44.8	22.2	26.3
1971	42.4	23.3	26.3

* Includes Newfoundland in 1951, 1961, and 1971.

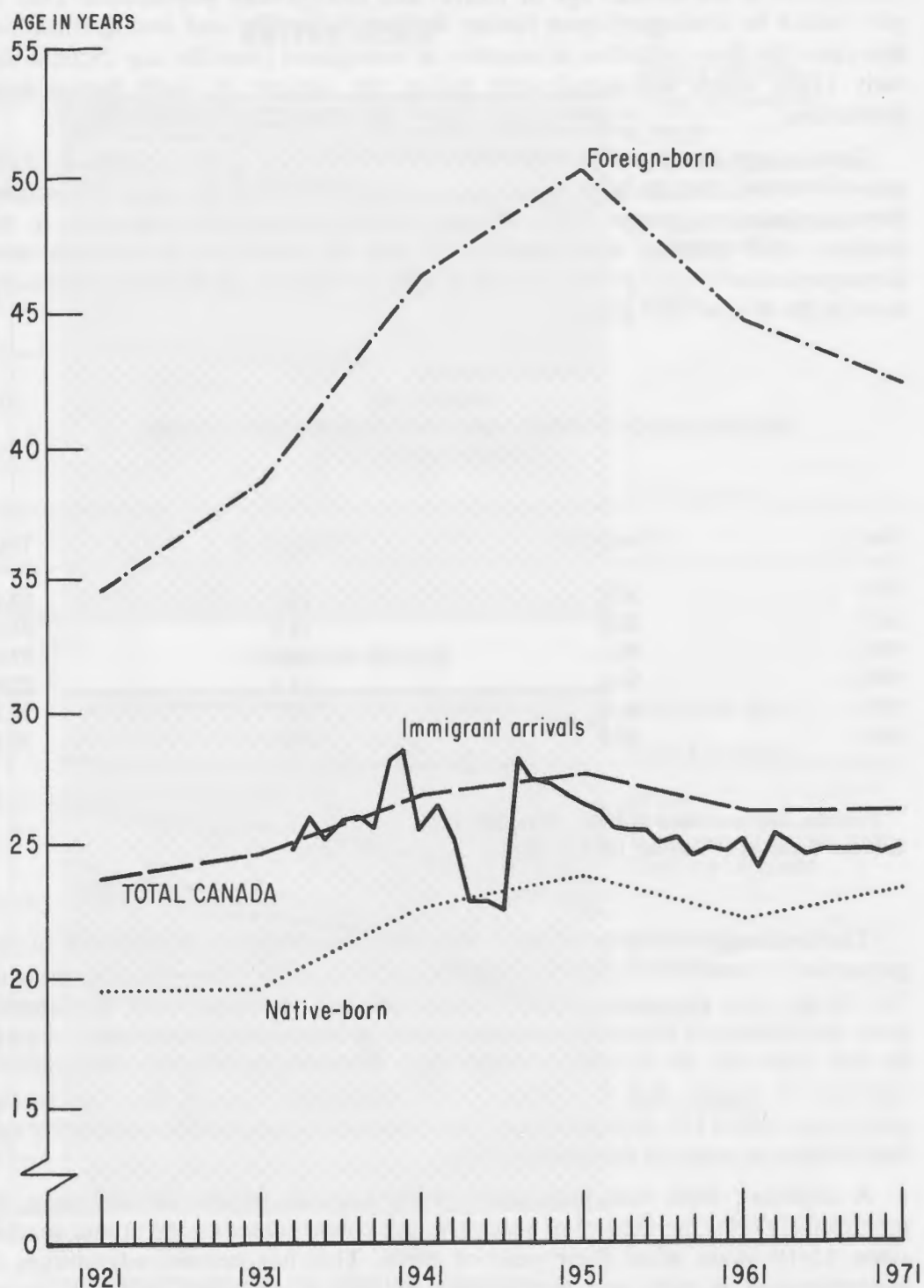
Source: Censuses of Canada, 1921 to 1971.

The declining birth rate of the 1960s has contributed to a reduction in the proportion of native-born under 15 years of age; and, if the native-born offspring of the foreign-born population could be identified and combined with the foreign-born, the differences between these two nativity groups would not be quite as great as they presently are for the younger ages. However, as long as the evidence continues to suggest that the fertility of the foreign-born is less than that of the native-born, these two groups will no doubt continue to differ in their respective age distributions as much as they did in 1971.

A declining birth rate eventually affects the size of the labour force by progressively reducing the size of successive age cohorts entering the labour market some 15-19 years after their year of birth. This has certain advantages if unemployment is high and the number of jobs is declining. However, these conditions have not been synonymous with good economic health or an increasing gross national product. On the other hand, an expanding job market would also

Chart 2.11

MEDIAN AGE OF ARRIVING IMMIGRANTS, NATIVE AND FOREIGN-BORN POPULATIONS, CANADA, 1921-71



SOURCE: Censuses of Canada, Annual Reports of Department of Manpower and Immigration.

present difficulties if the numbers entering the labour force for the first time were both decreasing and failing to replace those retiring from the labour market in the older age groups. For these, and other reasons, the relatively stable age characteristics of immigrants would appear to make immigration a particularly useful and efficient means for controlling the rate of growth of the labour force. Certainly control of immigration is more feasible than control of fertility under present conditions.

TABLE 2.11
PERCENTAGE AGE DISTRIBUTIONS FOR NATIVE AND FOREIGN-BORN
POPULATIONS, CANADA, 1921-71

Age Group	1921	1931	1941	1951	1961	1971
Native-Born						
Under 15	41.5	38.8	33.2	34.8	38.5	33.4
15-44	40.3	42.6	47.6	46.1	41.1	43.3
45-64	13.4	13.4	13.7	13.4	14.9	17.3
65 and over	4.6	5.2	5.6	5.8	5.5	6.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Foreign-Born						
Under 15	9.5	6.6	2.5	4.7	9.5	8.6
15-44	64.4	58.3	44.0	33.1	40.9	45.9
45-64	20.5	28.4	41.7	43.0	30.7	26.2
65 and over	5.5	6.7	11.8	19.2	19.0	19.3
Total	100.0	100.0	100.0	100.0	100.0	100.0

Totals may not add to 100 due to rounding.

Source: Dominion Bureau of Statistics, 1961 Census of Canada, Bulletin 7:1-7 (Ottawa: The Queen's Printer, 1965). Table VIII, p. 7-16; 1971 Census of Canada, Special tabulations.

There are, obviously, other factors which must be taken into account when dealing with such considerations as optimal size or growth rate of the labour force under given economic conditions. Increasing labour force participation on the part of women, and particularly immigrant women, would be an important factor. However, these would be beyond the scope of this discussion which is primarily concerned with the significance of the characteristics of immigrants for the Canadian population.

IMMIGRATION AS A COMPONENT OF GROWTH AND DISTRIBUTION OF CANADA'S POPULATION, 1941-71

The increase in the foreign-born population from just under one-half million in 1851, to slightly more than 3.25 million in 1971, has been examined in terms of the character of immigration and its cumulative effects on the resident foreign-born population. At this point, the recent contributions of Canada's immigrants to population growth since the Second World War are examined more closely.

Over the 30 years from 1941 to 1971, the population of Canada nearly doubled. During this period, the various components of population growth, i.e. births, deaths, immigration, and emigration, had significantly different effects on population change: As a consequence, the decade of the 1960s stands out in remarkable contrast from the two previous decades. While the native- and foreign-born populations in the 1940s and 1950s showed increased rates of growth over the previous decades, both populations experienced reversals in this trend during the 1960s. In addition, and contrary to the earlier post-war experience, emigration as a proportion of immigration rose between 1961 and 1971. The net result was that Canada's population increased by only 18.3 per cent or from 18.2 million to 21.6 million people over the decennial period 1961-71. This stands in sharp contrast to the 30.2 per cent increase registered during the preceding decade, 1951-61, and 21.8 per cent recorded for the earlier decade, 1941-51.

The following analyses examine the nature of the post-war immigrant contribution to overall growth in relation to emigration and natural increase, as well as its part in the changing regional distribution of the population.

NATIVE- AND FOREIGN-BORN POPULATIONS

The 9.5 million native-born residents in Canada in 1941 were augmented by the population of Newfoundland in 1949 (which had a population of 361,000 in 1951 shortly after joining Confederation), and by approximately 11.8 million births in the following 30 years. After taking into consideration the losses due to mortality and emigration, the native-born population reached 18,273,000 in 1971. That the rate of increase was not uniform during this period, is indicated by the rates of increase for the three intervening decades which were 25.9, 28.8, and 18.7 per cent respectively.

In contrast, the growth rate for the foreign-born experienced even greater variation with growth rates of 2.0, 38.1, and 15.9 per cent for the same decades respectively. Had all the 3.5 million immigrants, who arrived in Canada between 1946 and 1971, either remained in Canada or stayed alive, the foreign-born population would have been almost 4.5 million instead of the 3,296,000 actually enumerated in 1971. In fact, it is a bit surprising to realize that more immigrants actually arrived in Canada after 1945 than the number of foreign-born enumerated as residents in the 1971 Census. Because of the continuing flow of arrivals, the post-war immigrant component of the population continued to increase at decennial rates of 2.0, 38.1, and 15.9 per cent respectively, even though only 67 per cent of all

the arrivals were enumerated as residents in 1971.

However, while post-war immigrants were increasing in numbers, the pre-war component was declining rapidly, primarily through the effects of mortality on a rapidly aging population. During the 1940s the pre-war immigrants declined by a sixth, during the 1950s by a fifth, and during the 1960s by a quarter. By 1971, they numbered only 954,000, or just 28.9 per cent of the total foreign-born population.

The significance of this rapid decline in the size of the pre-war immigrant group and rapid gains for post-war immigrants lies not so much in the imbalance in numbers, which is inevitable given continuing immigration, but in the changing character of society itself as it continued its transition from agriculture to an economy increasingly dominated by extractive, manufacturing, and service activities. The shift from a predominantly rural to a predominantly urban economy occurred during the 1920s and 1930s. A relatively high proportion of farmers characterized the pre-war immigrants in contrast to an decreasing proportion among successive waves of post-war immigrants. Consistent with this was the under-representation of pre-war immigrants in the professional and technical occupations. During the post-war years and under the impetus of the post-war economic boom this deficiency gradually disappeared until the 1956-61 period when arriving immigrants were disproportionately concentrated in this occupational group.¹

IMMIGRATION, EMIGRATION AND NET MIGRATION

Canadian immigration seems likely to become increasingly important as a determinant of population growth in the face of declining birth rates and continuing losses through emigration.² During the post-war years of high fertility, the percentage of the annual increase in population attributable to net migration managed to reach a high of 40.9 per cent in 1951, and 37.8 in 1956. The fact that the contribution of net migration did not exceed these levels during the declining fertility of the 1960s is only indicative of the complexities of the interrelationships between the components of population change, and the fact that the historical trends suggest that periods of high fertility tend to be associated with periods of high immigration. Both, of course, react in much the same way to changes in the basic economic climate. For the entire 30-year period, over one-fifth of the population growth in Canada was due to net immigration. Using quinquennial periods for analysis, it may be seen that net migration comprised its greatest share of the increase during the 1966-71 period, and to a slightly lesser extent in the 1951-61 decade, i.e. 30 and 29 per cent of the increase respectively. On the other hand, the smallest contribution occurred during the 1941-51 decade during which there was an actual net out-migration between 1941 and 1946.

A number of changes have occurred during the post-war years in Canada which appear to have enhanced the nation's attractiveness to immigrants and her holding

¹ W.E. Kalbach, *The Impact of Immigration on Canada's Population*, 1961 Census monograph (Ottawa: Information Canada, 1970), pp. 263-7.

² The Honourable Robert K. Andras, Minister of Manpower and Immigration, statement to the press, September 15, 1973.

TABLE 3.1
COMPONENTS OF POPULATION GROWTH, CANADA, * 1941-71

Period	Natural Increase (000)	Net Migration (000)	Population Increase (000)	Migration as a Percentage of Total Increase
1961-71	2,607	723	3,330	21.7
1966-71	1,090	463	1,553	29.8
1961-66	1,517	260	1,777	14.6
1951-61	3,149	1,080	4,229	25.5
1956-61	1,674	483	2,157	22.4
1951-56	1,475	597	2,072	28.8
1941-51	1,993	164	2,157	7.6
1946-51	1,197	175	1,372	12.8
1941-46	796	-11	785	- 1.4
1941-71	7,749	1,967	9,716	20.2

* Includes Newfoundland from 1949 to 1971.

power upon them. Both her internal economy and international markets altered in form and substance. The war effort gave her secondary manufacturing industry a momentum for continuing growth, and the discoveries of substantial oil and mineral deposits during the post-war years enhanced her foreign trade. The movement of the population to the cities rapidly accelerated after the war, reaching a level of urbanization of more than 75 per cent compared with somewhat less than 55 per cent in 1946. In foreign affairs, the post-war transition has seen Canada firmly establish itself among the middle powers in world politics, with a reputation of working for and maintaining the "peace" in the world's trouble spots. In addition to all of this, Canada increasingly appears to be in the enviable position of being a modern industrialized nation without the problems besetting either the U.K. or the United States and maintaining a relatively open-door, non-discriminatory immigration policy based on educational and occupational skills, and labour-market needs.

Insofar as the ratio of emigration to immigration may be taken as an index of a country's holding power, or attractiveness, Canada has probably never done better than it has during the post-war period. The ratio of emigration to immigration reached a low of .30 during the 1951-61 decade, followed by 1961-71, with a ratio of .49. Emigration had exceeded immigration both in the 1891-1901 decade, and again during the Great Depression era, underlining the importance of a healthy economy in attracting and holding immigrants.

The fact that six in 10 of those who emigrated to Canada between 1946 and 1955 were Canadian residents in 1971, and that a similar proportion may be found to be residents among those who arrived during the latter half of the 1950s, may provide evidence to bolster the national ego. However, there is no evidence that a one-way flow of totally committed migrants has ever occurred under conditions of relatively free movement. For every migrant stream in one direction there exists a counter-stream in the opposite direction, and the relationships which determine their relative sizes have yet to be determined. Perhaps it is reasonable to say that the

importance of migration vis-à-vis Canada's social and economic problems is not to be found so much in the permanence of the "residual" net in-migration, as in the number of man-hours contributed to the labour force between immigration and emigration, and all the problems of housing, schooling, health care, etc., associated with an increasingly mobile population.

Emphasizing the two-way nature of migration does not detract from the importance of emigration's direct effect in reducing the contribution of migration to Canada's population growth. Emigration during 1961-71 reduced the numerical impact of immigrants by 49 per cent, i.e. the net addition to the population was 49 per cent smaller than what it would have been had no emigration occurred. For the 1951-61 decade, emigration caused a reduction of just 30 per cent, but for the earlier decade, 1941-51, reduced the original numbers by 69 per cent. It should not be assumed that all those leaving Canada during any period are just recent immigrants. Additional evidence suggests that between 300 to 350 thousand of those leaving Canada between 1961 and 1971, or between 43 and 50 per cent of the emigrants, were Canadian residents during the 1961 Census.¹

Annual data presented in Table 3.2 for the period 1941 to 1971 emphasizes the variable nature of the migrant component of population growth, and its contribution as a proportion of the annual increase. Note that in five of the post-war years, net migration accounted for between 30 and 41 per cent of the annual population growth, and that three of those five years occurred in the 1960s. Yet, the second lowest number of immigrants in the post-war period arrived between June 1961 and May 1962, while the second highest number of 223,000 arrived in 1967, compared with the post-war peak of 282,000 reached in 1957.

BIRTHS, DEATHS AND NATURAL INCREASE

In spite of the recent decline in fertility, the actual numbers of births still constitute the major share of the yearly increments to Canada's population. Between 1966 and 1971, when fertility rates declined from 26.1 to 17.4 births per 1,000 population in 1970, 1,864,549 births were added to the population compared with 910,837 immigrants. Thus births constituted 67 per cent of the total gross input. However, during the same period, the effectiveness of each factor was diminished by deaths and emigration. The potential of the birth increment for growth was reduced by 763,780 deaths, while the immigration component was reduced by approximately 448,000. Of the total loss, 63 per cent was due to mortality and 37 per cent to emigration. Thus, it can be seen that the net effects are the crucial factors, and that the net measures presented in Table 3.1, i.e. natural increase and net migration, are crucial for this type of analysis.

At a time when the country has been experiencing a decline in fertility rates, it might be expected that net migration would increase in relative importance in relation to total population growth. That this is partially true is supported by the data in Table 3.1. Note that during the first half of the 1961-71 decade net migration accounted for only 14.6 per cent of the quinquennial increase in population while its contribution increased to 29.8 per cent during the second half. Note that the share contributed by net migration would have increased even if the

¹Strategic Planning and Research Division, Department of Manpower and Immigration, Ottawa.

ultimately become a negative factor as deaths exceeded the number of births.

Previous estimates have indicated that the proportion of total deaths which had occurred to the foreign-born population increased from 0.256 in 1941, to 0.311 in 1961. The proportion of births contributed by the foreign-born increased slightly from 0.111 in 1941 to 0.114 in 1961 after declining to 0.096 in 1951.¹ Over this same period, the foreign-born's contribution to natural increase (i.e. excess of births over deaths) varied between zero in 1941 to just three per cent in 1961.

Assuming that the differentials in age-specific rates for native- and foreign-born populations continued through the 1960s, the changes in their relative age-sex structures were of such a nature as to increase their share of the natural increase by a very slight amount, i.e. from .030 to .032. Going one step further would be to assume that the trends in child-woman ratios shown in Table 2.4 indicate convergence in the fertility behaviour of native- and foreign-born women. This assumption would only boost the foreign-born's contribution to natural increase to 4.0 per cent.

There is, of course, no way to determine precisely the extent to which these rough estimates for 1971 are representative of the levels of vital rates for the native- and foreign-born populations, or indicative of recent trends. It is fairly certain, however, that because of their relative magnitudes the foreign-born population will never approach the size of the contribution to natural increase made by the native-born. In addition, because of the relative sizes of the numbers of births and deaths attributable to the foreign-born, it is much more likely that this component of the population will contribute a negative natural increase from time to time, depending upon its rate of aging and fluctuations in numbers of immigrant arrivals. Estimates of the contributions by the foreign-born to births and deaths for selected years are summarized in Table 3.3.

IMMIGRATION AND THE REGIONAL DISTRIBUTION OF FOREIGN-BORN

The growth and distribution of the foreign-born population by provinces has already been examined in a previous section for the historical period 1851 to 1971. The focus here shifts to the post-war period and a more detailed analysis of the regional dispersion of the foreign-born and changes by period of immigration.

Comparison of the distributions of total foreign-born for Canada's regions in 1961 and 1971 has already shown the relative gains made by Ontario, Quebec, and British Columbia and losses for the other provinces. All regions, except the Prairies, experienced increases in the absolute size of their foreign-born population. However, in the Atlantic provinces and the Territories the increases were not sufficient to increase their proportionate share of the total. Out of every 100 foreign-born living in Canada in 1971, 52 lived in Ontario, 17 in the Prairies, 15 in British Columbia, and 14 in Quebec.

The overall significance of the changing distribution of the foreign-born can only be seen in relation to the native-born. The regional distribution of the bulk of the country's population is somewhat less lopsided, yet like the foreign-born, is

¹ Warren E. Kalbach, *The Impact of Immigration on Canada's Population* (Ottawa: Information Canada, 1970), Table 3.7, p. 114.

TABLE 3.3
ESTIMATED PROPORTIONS OF TOTAL BIRTHS, DEATHS, AND NATURAL INCREASE
ATTRIBUTABLE TO THE FOREIGN-BORN POPULATION FOR
SELECTED YEARS

Year	Births	Deaths	Natural Increase
1971*	0.157	0.238	0.040
1971**	0.119	0.238	0.032
1961	0.114	0.311	0.030
1951	0.096	0.279	0.011
1941	0.111	0.256	0.000

* Assuming convergence in fertility rates of native and foreign-born women.

** Assuming continuation of the same differentials in age-sex specific fertility and mortality rates as observed in 1961.

Source: For years prior to 1971, see W.E. Kalbach, *The Impact of Immigration on Canada's Population*, (Ottawa: The Queen's Printer, 1970), Table 3.8, p. 115.

found with the relatively greatest numbers in Ontario, 33 per cent, followed by Quebec with 30 per cent. The interesting aspect of the change between 1961 and 1971 is that Quebec lost ground while Ontario gained. Of the remaining regions, as may be seen in Table 3.4, only British Columbia and the Territories actually gained in relative size.

TABLE 3.4
PERCENTAGE DISTRIBUTIONS OF THE NATIVE AND FOREIGN-BORN BY
REGIONS, CANADA, 1961 AND 1971

Region	Native-Born		Foreign-Born	
	1961	1971	1961	1971
Atlantic	11.9	10.8	2.3	1.2
Quebec	31.6	30.4	13.6	14.2
Ontario	31.7	32.8	47.6	51.8
Prairies	16.7	16.5	21.4	16.6
British Columbia	7.8	9.2	14.9	15.1
Territories	0.2	0.3	0.2	0.1
Total	99.9	100.0	100.0	100.0

Using measures of relative concentration gives a slightly different perspective to the distributional picture. Data in Table 3.5 show that British Columbia had the highest relative concentration of foreign-born of any province in 1971, closely followed by Ontario. Thus it may be said that the relative concentration of the foreign-born population in British Columbia was 48 per cent greater than its

proportionate share of the total Canadian population. Similarly, the proportion of foreign-born in the Atlantic region was slightly less than one-quarter of the total proportion for Canada.

TABLE 3.5
PERCENTAGE OF THE POPULATION FOREIGN-BORN FOR CANADA'S REGIONS,
AND INDICES OF RELATIVE CONCENTRATION, 1961 AND 1971

Region	Foreign-Born as a Percentage of the Regional Population		Index of Relative Concentration	
	1961	1971	1961	1971
Atlantic Provinces	3.5	3.6	22	24
Quebec	7.4	7.8	47	51
Ontario	21.7	22.2	139	145
Prairie Provinces	19.1	15.4	122	101
British Columbia*	26.0	22.7	167	148
Territories	12.4	9.0	80	59
Total Canada	15.6	15.3		

* The IRC for British Columbia = $\frac{26.0}{15.6} \times 100 = 167$

By this measure, British Columbia has the highest relative concentration of foreign-born, while the Atlantic provinces show the least. Furthermore, by comparing these data with similar indices calculated on the 1961 census data, it may be readily seen that British Columbia experienced a relatively sharp drop during the decade, along with the Prairies and Territories. On the other hand, Ontario showed an increase in its relative concentration of foreign-born, as did Quebec and the Atlantic provinces which have had the lowest relative concentrations of foreign-born in the past.

Data on the foreign-born population, by period of immigration, permit an examination of the relative contributions of the various "period of immigration" groups to the changes in the distributions of the foreign-born by regions, during the 1961-71 decade. However, it must be remembered that these changes reflect more than shifts in distributions through migration. They also reflect regional differences in mortality and emigration from the country as well as to other provinces. Thus, the changes in the regional distributions of the foreign-born shown in Table 3.6, between 1961 and 1971 reflect the net effect of a combination of factors acting on the population. For example, the older foreign-born population, i.e. pre-war immigrants, because of the combined effects of mortality and migration, have increased their proportions of the Canada total living in Ontario and British Columbia. The slight increase for the latter, from 18.4 to 19.3 per cent, is consistent with British Columbia's reputation as a destination for retired persons.

The same pattern of change is considerably more apparent for the post-war immigrants arriving in Canada between 1946 and 1961. In addition, these post-war immigrants exhibit a much greater concentration in Ontario than either the earlier

TABLE 3.6
PERCENTAGE DISTRIBUTIONS OF PRE-WAR AND POST-WAR IMMIGRANTS BY
PROVINCE AND RESIDENCE IN 1961 AND 1971

Region	Pre-War Immigrants		Post-War Immigrants		
	1961	1971	Arriving 1946-61		Arriving 1961-71
			1961	1971	1971
Atlantic Provinces	2.6	2.5	2.1	1.7	2.4
Quebec	10.5	10.2	16.4	14.4	17.7
Ontario	38.9	40.0	55.3	57.4	55.7
Prairie Provinces	29.5	27.8	14.1	12.7	11.0
British Columbia	18.4	19.3	11.8	13.5	13.1
Territories	0.1	0.1	0.2	0.1	0.2
Total	100.0	99.9	99.9	99.8	100.1

or the most recent arrivals. In 1971, 57.4 per cent of their numbers were residing in Ontario, compared with 40.0 per cent of the pre-war group, and 55.7 per cent of those arriving during the 1961-71 decade. In contrast, the most recent immigrants had higher proportions of their total numbers residing in the Atlantic provinces, Quebec, and the Territories, than did the earlier group of post-war immigrants. The pre-war immigrants are still characterized by their relatively greater proportions residing in the Atlantic and Prairie provinces, as well as British Columbia which was previously mentioned.

Thus it has been shown that the changes in the distribution of the foreign-born have not been consistent between the groups who have been in Canada for differing lengths of time. The oldest group of immigrants show a shift to British Columbia and Ontario as do the immediate post-war immigrants, but both groups differ somewhat from the most recent immigrants of the 1961-71 period who showed a somewhat greater net preference for Quebec and the Atlantic provinces. While indicative of new trends in regional preferences, these findings should not detract from the very significant fact that Quebec and Ontario combined accounted for 73 per cent of the net immigrants who had arrived during the 1961-71 period. With British Columbia, their total share increased to 86 per cent of the total decade's immigrants still residing in Canada at the time of the 1971 Census.

It cannot be too strongly emphasized at this point that the differences in regional distributions noted above are the result of more than the original preferences for regions of settlement. Changes in plans leading to settlement in some other province, subsequent emigration from the country or to some other province, and differences in the number of deaths, each affect the final distribution observed at the time of the census.

Using statements of intended destinations made by immigrants who arrived during the 1956-61 period and comparing these data with the actual settlement

patterns of those still residing in Canada in 1961 showed Quebec to have the largest discrepancy, i.e. relatively fewer living in that province at the time of the census than originally intended to do so. All other regions showed larger proportions in residence than would have been expected on the basis of original intentions. These data are summarized in Table 3.7 along with similar data for the 1961-71 decade and the 1971 Census.

TABLE 3.7
PERCENTAGE DISTRIBUTION BY PROVINCE OF INTENDED DESTINATION OF
IMMIGRANTS ARRIVING IN CANADA IN 1956-61 AND 1961-71 AND
ACTUAL PROVINCE OF RESIDENCE IN 1961 AND 1971

Region	Immigrant Arrivals 1956-61		Immigrant Arrivals 1961-71	
	Intended Destination	Residence in 1961	Intended Destination	Residence in 1971
Atlantic Provinces	2.0	2.1	2.5	2.4
Quebec	21.1	19.1	20.1	17.7
Ontario	52.8	53.6	53.3	55.7
Prairie Provinces	12.5	13.3	11.6	11.0
British Columbia	11.5	11.7	12.4	13.1
Territories	0.1	0.2	0.1	0.2
Total	100.0	100.0	100.0	100.1

Data on intended destination during the 1961-71 decade show much the same thing, except that the differences between original intentions and actual residence appear to be somewhat greater for the three largest provinces in 1971 than they were in 1961. Even though Quebec has slowly increased its share of the foreign-born over the recent decades, it appears to be losing ground with respect to its ability to hold immigrants who originally planned to settle there. British Columbia, and especially Ontario, would seem to be gaining at Quebec's expense.

The effects of subsequent migration on earlier settlement patterns can also be seen, perhaps more explicitly, in data on residence of foreign-born by period of immigration for the same general cohort in 1961 and 1971. Basic to the interpretation of these data is the fact that for Canada as a whole, 85 per cent of those who had arrived during the post-war years 1946-61, and were enumerated in 1961, were still resident in Canada in 1971. Their numbers had been depleted from 1,507,116 to 1,286,350 during the decade through death and emigration from Canada. Similar ratios for regions, based on the size of the 1946-61 cohort of immigrants in 1971 relative to its size in 1961, are presented in Table 3.8. The considerable variation between regions in these "retention-redistribution" ratios reflect differences in mortality, emigration abroad, and migration to other provinces outside the particular region of residence. As would be expected, Ontario's foreign-born in 1971 who had migrated to Canada in 1946-61 was 89 per cent of its total at the time of the 1961 Census. It has obviously benefited from the internal migration

of this particular cohort of immigrants. Apart from British Columbia, which showed a rather phenomenal "retention-redistribution" ratio of 98 per cent, all other regions had ratios smaller than that for Canada as a whole.

TABLE 3.8
PERCENTAGE DISTRIBUTION OF THE 1946-61 COHORT OF IMMIGRANTS IN
1961 AND 1971 AND "RETENTION-REDISTRIBUTION" RATIOS, CANADA'S REGIONS,
1961 TO 1971

Region	1961 Census		1971 Census		Cohort in 1971 Cohort in 1961
	Number	%	Number	%	
Atlantic Provinces	32,346	2.1	23,245	1.8	.719
Quebec	247,762	16.4	184,655	14.4	.745
Ontario	833,303	55.3	738,305	57.4	.886
Prairie Provinces	213,050	14.1	163,800	12.7	.769
British Columbia	177,544	11.8	174,395	13.6	.982
Territories	3,111	0.2	1,945	0.1	.625
Total	1,507,116	99.9	1,286,350	100.0	.854

In summary, the data indicate that while the proportion of the total foreign-born living in Quebec has gradually increased every decade since 1911, its growth in recent years, relative to the other provinces, would have been somewhat greater had those either intending to settle in Quebec or first settling there not changed their minds or moved to some other part of Canada. Only the distribution of the 1961-71 immigrants in 1971 gives some indication that the positive attraction of Ontario is not as great as it has been in the past.

EFFECTS OF RECENT IMMIGRATION AS REFLECTED IN THE 1971 CENSUS

Changes in the foreign-born population between censuses are the result of immigration, emigration, and mortality.¹ Thus a direct comparison of the foreign-born populations on two census dates does not provide a direct estimate of the effects of immigration alone. However, with additional information on period of immigration for the foreign-born resident in Canada at the time of the census, it is possible to answer two important questions concerning the significance of immigration: (1) What would have been the nature of the foreign-born population in 1971 had no further immigration occurred during the intercensal period and, (2) In what ways did the immigration of the 1961-71 period change the foreign-born population? Being able to identify those foreign-born in 1971 who had been residents of Canada at the time of the 1961 Census, as well as those who arrived in Canada during the intercensal period, allows us to determine the nature of the change contributed by recent immigrants, as well as the consequences of halting the inflow of immigrants for a definite period of time. Regardless of the likelihood of the latter occurring, it does provide a benchmark against which the actual changes can be measured. Thus, the differences between the two, i.e. the actual foreign-born population in 1971 and what it would have been under conditions of zero immigration, represent the net effects of immigration, both being subjected to the same mortality conditions and having similar opportunities for emigration during the intercensal period.

ETHNIC ORIGINS OF THE FOREIGN-BORN

Data in Table 4.1 permit us to answer the question "How different would the ethnic-origin composition have been had no immigration occurred during the intercensal decade?" or "How much did immigration affect the ethnic composition of Canada's population during the last decade?". This is not quite the same as noting the percentage change in the two distributions of the foreign-born populations in 1961 and 1971. What the latter procedure would fail to take into account would be the effects of emigration and mortality. Generally, the number of foreign-born who were residing in Canada in 1961, and were still residents in 1971, would be less at the latter date than at the former, since their numbers can change only through deaths or emigration. Thus, to affect the proportionate share of a particular ethnic group in a positive sense, immigration must not only make up the deficit incurred through emigration and mortality, but provide an additional increment that would produce a rate of growth as large as or larger than that experienced by the total foreign-born population.

Comparing columns 1 and 4 of Table 4.1 will show that of the five major ethnic groupings presented, only the foreign-born of Italian and other European ethnic origins, and Asiatic and other origins experienced sufficient gains through

¹ Changes may also reflect response and sampling errors, errors of enumeration and processing, as well as changes in definitions and enumeration procedures. For purposes of this analysis, variations from these sources are assumed to be relatively unimportant.

TABLE 4.1
MAJOR ETHNIC ORIGIN GROUPINGS FOR NATIVE-BORN AND FOREIGN-BORN,
BY PERIOD OF IMMIGRATION, CANADA: 1961 AND 1971
(Percentage Distribution)

Ethnic Origin	Foreign-Born				Native-Born		Total	
	1961 Census	1971 Census			1961	1971	1961	1971
		Period of Immigration		Total				
		Prior to 1961	1961-71					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
British	40.5	38.7	30.6	36.1	44.5	46.2	43.8	44.6
French	3.1	3.1	4.0	3.4	35.4	33.2	30.4	28.7
Major Europe (except southern)*	33.6	35.6	15.2	29.2	13.8	14.0	16.9	16.3
Italian and other European	20.0	19.8	33.0	24.0	3.0	3.5	5.7	6.7
Asiatic and other Origins	2.8	2.7	17.2	7.3	3.3	3.1	3.2	3.7
Total:								
Per Cent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number ('000)	2,844	2,240	1,056	3,296	15,394	18,273	18,238	21,568

* Includes German, Netherlander, Scandinavian, Hungarian, Polish, Russian, and Ukrainian only. All other European origins are included in "Italian and Other European".

immigration to increase their proportionate share of the total. By way of contrast, only the native-born of British origins, and the two major groupings of European origins, showed increases. After combining native-born and foreign-born components, only two, the French, and the major northwestern, central and eastern European origins, showed declines in their proportion of the total population. Table 4.2 summarizes the direction of change in the proportionate distributions of ethnic-origin groupings by nativity and for total population between 1961 and 1971. Note that the same pattern of change in the foreign- and native-born components of different ethnic groupings did not always produce the same direction of overall change in total population. See, for example, the French, and Asiatic and other origins, as well as the British in comparison with the major northwestern, central, and eastern Europeans. Only the Italians and other European origins showed increases in the percentages for foreign-born, native-born, and total population.

TABLE 4.2
DIRECTION OF CHANGE IN PROPORTION OF TOTAL POPULATION IN RELATION TO
DIRECTION OF CHANGE IN FOREIGN-BORN AND NATIVE-BORN COMPONENTS
OF MAJOR ETHNIC ORIGIN GROUPINGS, CANADA, 1961-71

Ethnic Origin Group	Direction of Change in Proportion of Foreign-Born	Direction of Change in Proportion of Native-Born	Direction of Change in Proportion of Total Population
British	-	+	+
French	+	-	-
Major Northwestern, Central Eastern European*	-	+	-
Italian and other European origins	+	+	+
Asiatic and other origins	+	-	+

* Includes German, Netherlanders, Scandinavians, Hungarians, Polish, Russian and Ukrainian.

The crucial factors in determining the direction of change in the total population would appear to be the relative size and rate of growth of the component populations, and the nature of their relative changes. In the case of those of French origin, immigration was a positive force for growth, but the foreign-born component was too small relative to the native-born to compensate for the latter's declining birth rate. Among those of Asiatic and other origins, the same pattern has the reverse effect. In this case, the rate of increase in the foreign-born component is

sufficiently large to overcome the below-average increase for its native-born component and to produce an increase in its proportionate share of the total population. For the British, both foreign-born and native-born showed increases, but again the former was not sufficient relative to the growth of other foreign-born populations to produce an increase in its proportionate share. On the other hand, its native-born component was large enough, as was its relative increase, to produce an overall gain in its percentage of the total population.

Country of Birth

There is sufficient correspondence between "country-of-birth" and "ethnic-origin" data that when they are combined into relatively large groups on a roughly regional basis, the analysis of trends produces approximately the same results. While this provides mutually supportive evidence as to their respective validity, they each have their own peculiar limitations and advantages. For example, one country of birth, the United States, is not combinable with other birthplaces in any way that would be comparable to the ethnic-origin categories presented in Table 4.1. While it is important to have country-of-birth data, especially for countries of the western hemisphere which were themselves settled primarily by immigrants, it is also important to know something of the ethnic origins of immigrants from these countries in order to understand the nature of specific migrant streams.

The similarities and differences between Tables 4.1 and 4.3 suggest that the majority of immigrants who were born in the United States were of British origin; that most of those who were of French origin, but not born in France, probably came from the United States; and the balance would be categorized as one or another of the major northwestern, central, or eastern European origins. The percentage distribution by ethnic origins for immigrants coming from the United States in 1966 (the last year for which such data were published), does in fact show that 48 per cent were of British origin, six per cent French, and 33 per cent from the major northwestern, central, and eastern European origin groups. All told, they accounted for a combined total of 86.9 per cent of all immigrants coming from the United States.

The major trends for the foreign-born by place of birth are essentially the same as those for ethnic origin presented in Table 4.1. The immigration between 1961 and 1971 was not sufficient to maintain the relative position, with respect to size, of those born in the United Kingdom, the United States, and those selected countries included in "major European" countries as noted in Table 4.3. On the other hand, immigration was sufficient during this period to increase the relative size of those born in France and Italy and other European countries either combined (as shown), or separately, as was the case for Asian countries and others (non-European).

The limitations of this analysis again point out the need for information on ethnic origin of the foreign-born by country of birth. Unlike the case with immigration statistics, the problem here is one of access to data that has already been collected rather than not collected at all. Nevertheless, without both sets of data, and detailed cross-tabulations of ethnic origins by country of birth, a thorough analysis and understanding of the significance of ethnic origins of minority groups and their role in migrant streams will not be possible.

TABLE 4.3
MAJOR GROUPINGS OF THE FOREIGN-BORN POPULATION BY COUNTRY
OF BIRTH, 1961 AND 1971, AND BY PERIOD OF IMMIGRATION, 1971, CANADA
(Percentages)

Country of Birth	1961 Census	1971 Census		
		Period of Immigration		Total
		1961	1961-71	
United Kingdom	34.1	32.0	20.4	28.3
United States	10.0	9.3	9.7	9.4
France	1.3	1.2	2.4	1.6
Major European*	30.2	32.0	11.0	25.3
Italy & other European	20.1	21.0	32.3	24.6
Asian and others	4.3	4.6	24.2	10.8
Total	100.0	100.1	100.0	100.0

* Includes Germany, Netherlands, Scandinavia, Republic of Ireland, Hungary, Poland and Russia.

SEX AND AGE CHARACTERISTICS

Sex Ratios

In 1961, there were 107.4 males for every 100 females in the resident foreign-born population. Migration and mortality during the 1961-71 period caused a significant reduction in the surplus of males and a continuation of the long-term decline since 1911. By 1971, the sex ratio for the foreign-born population was 101.1. Had there been no immigration at all during this period, the sex ratio for the foreign-born in 1971 would have been only slightly higher than that which actually occurred. The sex ratio of 101.8 that would have resulted from a discontinuation of immigration after 1961 was reduced only slightly by the excess of females among those who did arrive during the intercensal period and were still resident in Canada at the time of the 1971 Census.

Left unaltered by newly arriving immigrants, sex ratios for five-year age groups of the foreign-born resident in 1961, as well as 1971, would be simply displaced along the age continuum by 10 years, with the sex ratios of the older age groups increasingly reduced because of the greater risk of mortality experienced by the older male age groups vis-à-vis females. Superimposed over this distribution is that of the resident foreign-born, in 1971, who had arrived during the preceding intercensal decade. Since this latter group is characterized by a slight deficiency of males, i.e. a sex ratio of 99.8, the net result is a combined distribution with a sex ratio of 101.1. The interesting feature of these net immigrants is the uneven

TABLE 4.4
SEX RATIOS OF FOREIGN-BORN POPULATION BY YEAR OF RESIDENCE
AND PERIOD OF IMMIGRATION FOR 1971

Year of Residence and Period of Immigration	Sex Ratio	Number
1961 foreign-born population	107.4	2,844,263
1971 foreign-born population:		
Arrived prior to 1961 Census	101.8	2,239,940
Arrived during 1961-71 period	99.8	1,055,590
Total foreign-born population	101.1	3,295,530

distribution of males and females throughout the age range. Significant deficiencies of males between 15 and 30 years of age, peaking in the 20-24 year age group, and rapid declines after the age of 50, suggest the growing importance of young female workers and older female dependants to the character of Canada's net migration. Only between the ages of 30 and 50 years are high sex ratios found, e.g. 115, and then only for the two age groups 35-39 and 40-44. Distributions of sex ratios by age for the resident foreign-born in 1971 by period of immigration, and for the combined total foreign-born population are shown in Chart 4.1.

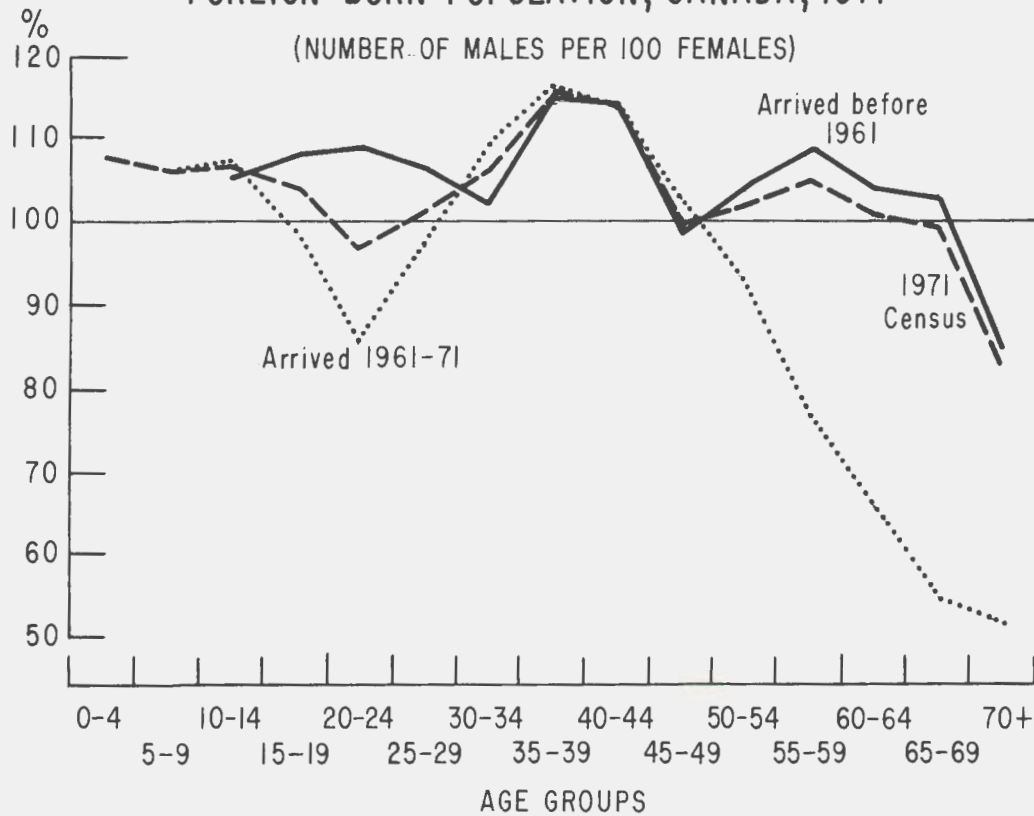
Age Characteristics

Distributions by five-year age groups for males and females are shown in Chart 4.2 for the total foreign-born population in 1971 and by period of immigration for the intercensal period. For each sex, the total distribution for 1971 is simply the sum of the two distributions for those who immigrated to Canada prior to 1961 and those who arrived between the censuses of 1961 and 1971.

The differences between the two periods of immigration age distribution are highly significant and clearly show how the age character of recent arrivals combines with earlier immigrants to produce a "younging" effect. Any change in economic or political conditions that would tend to shut off immigration, either temporarily or permanently, automatically creates an imbalance in the age structure. Cutting off immigration would, first, increase the ratio of the older dependent population to those in the labour-force age group as the foreign-born continued to age beyond 65 years; and, secondly, stopping the input of younger adults into the labour force would reduce the numbers in the productive years who contribute to the support of the dependent population. Ultimately, of course, without renewed immigration, the foreign-born would die out and this imbalance would cease. However, the disruptive effects of such an imbalance would be felt for a considerable number of years. In short, there is much to be said for minimizing the disruptive tendencies created by fluctuations in immigration through selective control; or, as has been previously suggested, using immigration to stabilize fluctuations in the age structure of the native-born caused by variations in their fertility rate.

Chart 4.1

SEX RATIOS BY AGE AND PERIOD OF IMMIGRATION, FOREIGN-BORN POPULATION, CANADA, 1971



SOURCE: 1971 Census of Canada.

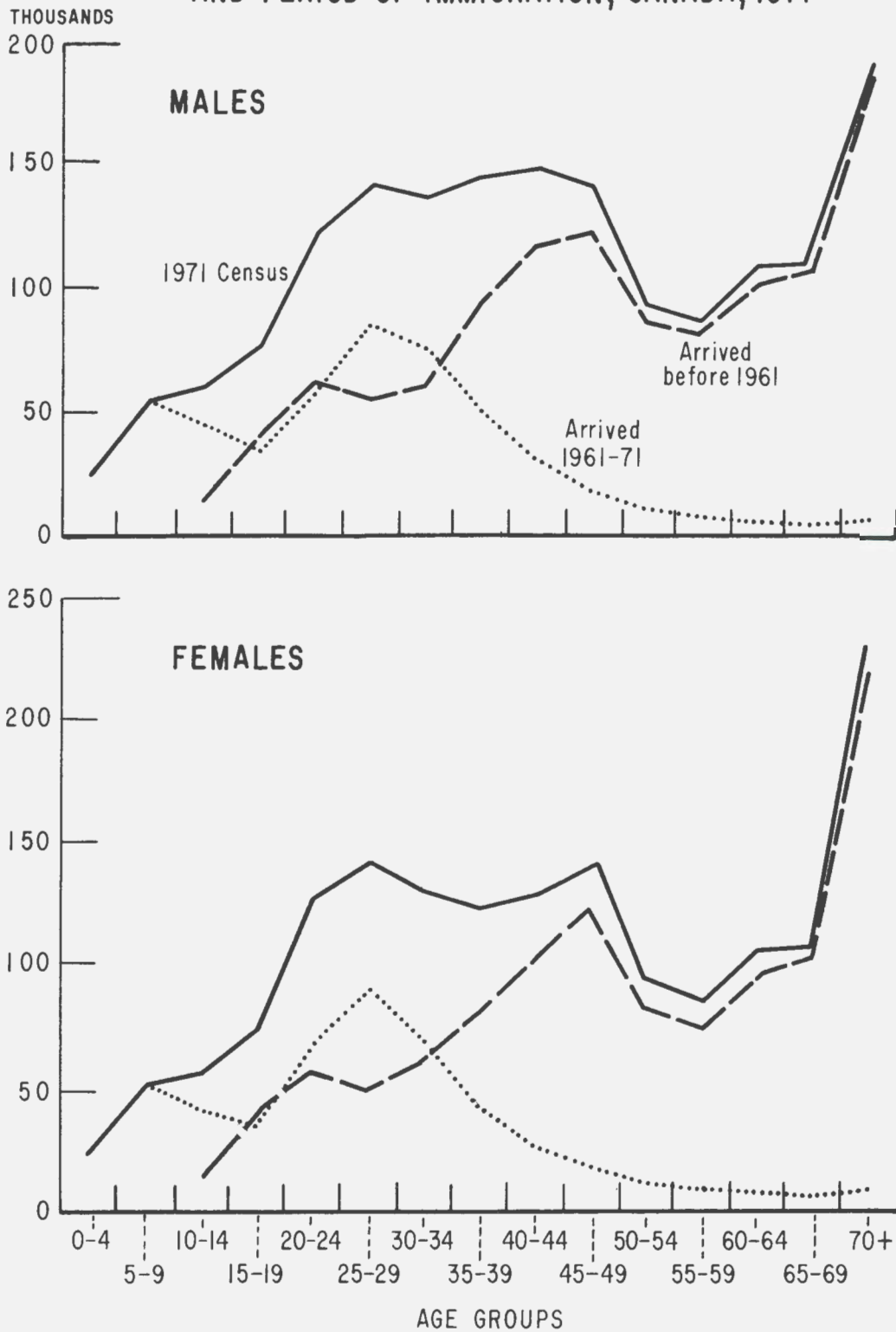
Median Age of the Foreign-Born Population. Without replacement by continuing immigration, the foreign-born population would tend to age quite rapidly. This is illustrated by the data in Table 4.5. The median age of the foreign-born in 1961 was 45.0 years for males, and 44.5 years for females. By 1971, the median age for the survivors of this foreign-born population after a decade would have increased to 49.7 and 51.3 years for males and females respectively.

Relatively heavy immigration during the 1961-71 decade by young adults (median age approximately 25 years upon arrival in Canada) had contributed approximately 1,056,000 persons to the resident population. Median ages for males and females in this population of net immigrants were 27.2 and 27.0 years respectively. Their addition to the foreign-born population surviving from the 1961 Census reduced the overall age of the foreign-born population in 1971 to below what it had been in 1961, with a greater reduction for males than females.

Considering the combined foreign-born population and the fact that the 1961-71 immigration tended to reduce the average age of the foreign-born, their contribution to the age structure of the total population was still an aging effect, since the much larger native-born population, with a median age of 26.3 years in

Chart 4.2

FOREIGN-BORN POPULATION BY AGE,
AND PERIOD OF IMMIGRATION, CANADA, 1971



SOURCE: 1971 Census of Canada.

TABLE 4.5
MEDIAN AGES OF FOREIGN-BORN POPULATION BY YEAR OF RESIDENCE
AND PERIOD OF IMMIGRATION FOR 1971

Year of Residence and Period of Immigration	Median Age	
	Males	Females
1961 foreign-born population	45.0	44.5
1971 foreign-born population:		
Arrived prior to 1961 Census	49.7	51.3
Arrived during 1961-71 period	27.2	27.0
Total foreign-born population	41.8	43.0

1971, was considerably younger. However, this aging effect is again overstated in that the native-born offspring of the foreign-born are included with the total native-born population. If the second generation could be more readily identified, and included as part of the total contribution of the foreign-born to Canada's age structure, their median age would be considerably lower than that shown in Table 4.5.

The Labour Force Age Group. Table 4.6 shows the actual distribution of males and females for the age group 15-64 years and the two subgroups comprising the younger and older segments of the traditional labour-force age range. Of interest here are the percentages in column 4 which indicate the relative increases in the size of the age group over what they would have been had no immigration occurred during 1961-71.

The percentage increases verify what one would expect to find given knowledge of the age distributions of arriving immigrants. Because of the disproportionate numbers of young adults, the immigration from 1961 to 1971 produced a 78.1-per-cent increase in the size of the male age group 15-44 years over what it would have been had no immigration occurred. The relative contribution for the older age group was only an 11.5-per-cent increase while the increase for those 65 years and over was a mere 3.2 per cent.

The pattern for females was similar, except for somewhat larger percentage increases for all age groups. In addition, immigration during the 1961-71 period had a significant effect on the 15-29 year age group of females, which is of particular interest and importance with respect to the reproductive potential of the foreign-born population. This generally high fertility age group increased by 131 per cent over what it would have been had immigration ceased. While immigration produces a favourable age distribution vis-à-vis fertility potential, other factors must be acting as effective deterrents since data from the 1961 Census clearly indicated a lower fertility for the foreign-born as opposed to native-born women.

TABLE 4.6
 SELECTED AGE GROUPS BY SEX FOR FOREIGN-BORN POPULATION, 1961 AND 1971, BY PERIOD
 OF IMMIGRATION WITH PERCENTAGE INCREASE OF TOTAL FOREIGN-BORN IN 1971 OVER
 FOREIGN- BORN RESIDENT IN 1971 BUT IMMIGRATING BEFORE 1961

Sex	Age Group	(1)	(2)	(3)	(4)	(5)	(6)
		1961 Census	1971 Census		Total Foreign-Born Population as Percentage Increase over Foreign-Born Population Immigrating Before 1961 $(3) \div (2) \times 100$	Percentage Increase In Foreign- Born 1961-71	Percentage Increase In Native- Born 1961-71
			Immigrated Before 1961	Total			
Males	15-44	596,341	435,435	778,600	78.1	30.6	25.9
	45-64	461,141	389,970	434,675	11.5	— 5.7	34.8
	15-64	1,057,482	825,405	1,213,275	47.0	14.7	28.3
	65	275,949	288,770	297,965	3.2	8.0	21.7
Females	15-29	220,173	149,885	346,420	131.1	57.3	44.3
	30-44	345,951	245,495	387,455	57.8	12.0	1.2
	15-44	566,124	395,380	733,875	85.6	29.6	24.1
	45-64	411,758	378,750	429,350	13.4	4.3	40.8
	15-64	977,882	774,130	1,163,225	50.3	19.0	28.5
	65	263,930	320,995	338,440	5.4	28.2	37.5

HOUSEHOLD AND FAMILY CHARACTERISTICS¹

Trends in Households¹

Between 1961 and 1971, the number of households in Canada increased by 32.6 per cent, while the total population increased by 18.3 per cent. Because of the difference in growth rates, it was inevitable that the average persons per household should decline. During the 1961-71 decade, the average appeared to decline at an almost constant rate, from 3.9 to 3.5. However, rates of increase in households and declines in average size were not uniform throughout the country. As in 1961, the provinces of eastern Canada had the largest households, with Newfoundland at 4.6 persons being the largest in Canada. Of the three provinces receiving the most immigrants during this period, Quebec was the only one with a rate of increase in households and an average size above the national average. While the number of households increased at an above-average rate in both Ontario and British Columbia, their average household size was lower than that for Canada as a whole. With an average size of 3.2, British Columbia had the smallest households.

Rural-urban differences are evident with all urban areas showing an average household size of 3.4 versus 3.9 for rural areas. The former is itself an average of values ranging from 3.2 for urban populations of 500,000 or more, to 3.6 for those under 30,000. Regional variations in rural-urban differences similar to those already mentioned may be observed with the highest averages for rural and urban populations found in Newfoundland with 4.5 and 4.8 respectively, and the lowest in British Columbia at 3.1 and 3.5.

Households with Foreign-Born Heads. In 1971, there were approximately 1,404,000 households, or 23 per cent, with immigrant heads, compared with 25 per cent in 1961. This indicates that the number of households with foreign-born heads failed to increase as rapidly as those with native-born heads during the intercensal decade. The population and number of households for foreign-born and native-born for 1961 and 1971, with percentage change for the 1961-71 period, are presented in Table 4.7.

Comparisons of the percentage increases for native- and foreign-born households and populations would suggest that the decline in average household size for the foreign-born head was not as great as that for the native-born. Comparable data on average (mean) size of household by nativity is not available

¹ For purposes of the Census, a household consists of a person or group of persons occupying one dwelling. It usually consists of a family group (with or without lodgers, employees, etc.) but may consist of two or more families, a group of unrelated persons, or one person living alone. Census household reports exclude "collective" households (i.e. hotels, large lodging houses, institutions, hospitals, military camps, etc.).

For census purposes every household must have a head. It is the husband if both husband and wife are present, the parent if living with unmarried children, or any member of a group sharing a dwelling equally.

A family is defined as a husband and wife (with or without children) or a parent with one or more children never married, living in the same dwelling, or a man or woman living with a guardianship child or ward under 21 years for whom no pay is received.

Families are classified as primary families, if they maintain their own household, or secondary families. Secondary families are classified on the basis of their relationship to the household head.

See Census of Canada, 1971, (Catalogue No. 93-712, vol. 2, *Household and Family Status of Individuals*.)

TABLE 4.7
POPULATION AND NUMBER OF HOUSEHOLDS BY NATIVITY OF HEAD, 1961 AND 1971,
AND PERCENTAGE CHANGE, CANADA, 1961-71

Population	Number		Percentage Change
	1961	1971	1961-71
Households with foreign-born heads	1,137,208	1,404,020	23.5
Foreign-born population	2,844,000	3,296,000	15.9
Households with native-born heads	3,417,528	4,637,282	35.7
Native-born population	15,394,000	18,273,000	18.7
Total households	4,555,000	6,041,000	32.6
Total population	18,238,000	21,569,000	18.3

for both 1961 and 1971, nor is the average (mean) size of native-born household heads for 1971. However, it is available for total households and for households with foreign-born heads in 1971, and these are shown in Table 4.8, along with median sizes of households by nativity of household head, which can be calculated from available data.

TABLE 4.8
MEAN AND MEDIAN NUMBER OF PERSONS PER HOUSEHOLD BY NATIVITY OF HEAD
AND FOR URBAN AND RURAL AREAS

Area	Total Households	Foreign-Born Heads	Native-Born Heads
<u>Mean Size</u>			
Canada	3.5	3.2	—
Urban	3.4	3.2	—
Rural	3.9	3.1	—
<u>Median Size</u>			
Canada	3.2	2.8	3.3
Urban	3.1	2.9	3.1
Rural	3.5	2.5	3.6

From the "mean" size of household data, it can be inferred that households with native-born heads were larger than those with foreign-born heads, and that the differences would be greater in rural areas than in urban areas. Keeping in mind

the fact that the number of households with native-born heads is considerably larger than those with foreign-born heads, the average household size for the native-born should be as large, or slightly larger, than the average size for total households given in Table 4.8.

"Median" size of household was also calculated, and the results are consistent with those using the "mean". In addition, the median reveals more clearly the fact that the relationship for foreign-born heads between household size and rural-urban residence is the reverse of that for households with native-born heads, i.e. foreign-born households in urban areas tend to be somewhat larger than those in rural areas. While those in either urban or rural areas are still smaller than households with native-born heads in urban areas, it is difficult to say what selective factors might be responsible for this "contrary" finding. Perhaps the older immigrant, i.e. 45 years and older, who becomes the head of a household is less likely to settle in urban areas than his younger counterpart of 35-44 years who tends to have a larger number of children still living at home.

Trends in Number of Families

The number of families in Canada increased from 4,147,000 in 1961 to 5,071,000 in 1971, or an increase of 22 per cent for the 10-year period. The number of persons in families increased by 17 per cent, so that like households, the average number of persons reported as living in families declined from 3.9 to 3.7 persons during this intercensal decade. With the more rapid growth of households vis-à-vis families and approximately equivalent rates of growth for populations in households and families, it is clear why average household size experienced the greater decline during this period.

As with household size, the provinces of eastern Canada still had the largest families in 1971, as they did in 1961. Newfoundland, with an average of 4.4 persons per family at the time of the 1971 Census, had the largest average size, while Nova Scotia, with 3.8, had the smallest.

All of eastern Canada showed smaller percentage increases in the number of families and the number of persons in families than for Canada as a whole, with the exception of Quebec. While the number of families in Quebec showed a slightly above-average increase, the percentage increase in number of persons in families was below average for the decade. These variations from the national norm produced a significant drop in average family size for Quebec from 4.2 to 3.9 persons.

Of the remaining provinces, Ontario, Alberta, and British Columbia showed above-average increases in both numbers of families as well as numbers of persons in families, yet their families ranged in size from 3.5 to 3.7. Even where the rates of change fell below the national average in Manitoba and Saskatchewan, the net effect was a smaller decline in average size of family than that which occurred in eastern Canada. Average family size for Ontario remained at 3.6, while it declined from 3.6 to 3.5 in British Columbia — the smallest family size for any province in 1971.

Regional variations in average family size and rural-urban differences are similar in pattern to those for average household size.

Families with Foreign-Born Heads. The same variations in size by nativity are as apparent for families as for households in the 1971 Census data. Average family size for those with foreign-born heads in 1971 was smaller with 3.38 compared with 3.82 for the native-born. In addition, the data presented in Table 4.9 show that the larger family size for the native-born persists for all age groups, being relatively largest in the 35-44 year age group.

TABLE 4.9
AVERAGE SIZE OF FAMILY BY AGE AND NATIVITY, AND PERIOD OF
IMMIGRATION FOR FOREIGN-BORN HEADS, CANADA, 1971

Age of Family Head	Foreign-Born				Native-Born
	Period of Immigration			Total	
	Pre—1946	1946—60	1961—71		
Under 25	—	2.55	2.50	2.53	2.65
25—34	3.53	3.59	3.24	3.39	3.70
35—44	4.64	4.40	4.14	4.35	4.91
45—54	3.94	3.88	3.96	3.90	4.31
55—64	2.73	2.90	3.01	2.82	3.11
65 and over	2.24	2.30	2.38	2.25	2.39
TOTAL	2.76	3.76	3.48	3.38	3.82

Of more significance is the fact that while families with native-born heads declined in size between 1961 and 1971, the average size of those with foreign-born heads increased, thus narrowing the gap between them. Note in Table 4.10 that the average size of families with native-born heads declined by 6.1 per cent, while the foreign-born increased by 2.7 per cent. However, it is important to point out that most of the increase in family size (78 per cent) for foreign-born heads was due to the growth of those families who were already in Canada in 1961. Without any immigration during the 1961-71 period, family size would have increased to 3.36. The addition of another 265,120 families during the most recent decade, with an average family size of 3.48, helped increase the average for all families with foreign-born heads to 3.38, and accounted for 22 per cent of the total decade's increase.

With information on the average family size by age of family head, provided by Table 4.9, it is possible to estimate the effect produced by changes in the age structure of family heads relative to the effect attributable to actual changes in family size during the decade. For example, had the average family size by age of head remained constant between 1961 and 1971, the average family size for foreign-born heads in 1971 would have been 3.34 instead of 3.38; and for native-born heads 4.00 instead of 3.82.

From Table 4.11, it may be seen that the change in the age distribution of

TABLE 4.10
AVERAGE SIZE OF FAMILY BY NATIVITY OF HEAD AND PERCENTAGE CHANGE,
1961 TO 1971

Nativity	Year		Percentage Change 1961-71
	1961	1971	
Native-born	4.07	3.82	-6.1
Foreign-born	3.29	3.38	2.7
With zero immigration	—	3.36	2.1
Total families	3.9	3.7	-5.1

foreign-born family heads was slightly more significant as a factor in accounting for change in the overall average family size than were changes in actual size within specific age-of-head categories. Age-distribution changes accounted for a 1.5-per-cent increase in family size, while the latter accounted for just a 1.2-per-cent increase. The situation was just the reverse for the families with native-born heads. In this case, changes in the age distribution of family heads accounted for a decrease of 1.7 per cent compared with a decline of 4.4 per cent attributed to age-of-head specific changes in family size. Looking at it in another way, of the amount of change in average family size which actually occurred, in the case of families with foreign-born heads, 56 per cent of the increase was due solely to a shift in the age distribution of family heads. In the case of families with native-born heads, 72 per cent of the decrease in family size was due to actual age-of-head specific changes in family size, and only 28 per cent of the decline could be attributed to shifts in the age structure of family heads.

Number of Children at Home

The average number of children under 25 years of age at home for families with foreign-born heads was 1.38 compared to 1.85 for native-born heads in 1971. This represented an increase from 1.26 for families with foreign-born heads in 1961 and an increase over the number of children, 1.34, that would have been expected had no immigration occurred during the 1961-71 period.

In other words, the immigration of the most recent intercensal decade contributed to an increase in families with larger numbers of children still living at home, which augmented the normal tendency for foreign-born families resident in 1961 to grow as they continued through the childbearing stage of the family life-cycle. At the same time, the average number of children at home in families with native-born heads declined from 2.07 to 1.85.

As in the case of family size, the trend was towards a convergence in characteristics of families with native- and foreign-born heads. In this case, the trend towards convergence vis-à-vis number of children still at home was not apparent for all age groups of family heads, but was strongest for those between 35 and 55 years of age.

TABLE 4.11
EFFECTS OF THE CHANGING AGE STRUCTURE OF FAMILY HEADS ON AVERAGE
FAMILY SIZE FOR ALL FAMILIES WITH NATIVE- AND FOREIGN-BORN HEADS, 1961-71

	Foreign-Born Heads	Native-Born Heads
1. Size of families enumerated in 1961	3.29	4.07
2. Size of families enumerated in 1971	3.38	3.82
3. Size of family expected in 1971 on basis of changes in age distribution of family heads	3.34	4.00
4. Influence of demographic factor (changes in age structure of heads): line 3 minus line 1	0.05	-0.07
5. Influence of changes in family size by age of head: line 2 minus line 3	0.04	-0.18
Percentage change, 1961-71 due to:		
Changing age distribution of family heads	+ 1.5	-1.7
Changing family size, by age of head	+ 1.2	-4.4

Type of Family

Two factors already considered bear on a discussion of trends in family types. First, it has already been shown that households declined in average size faster than families did; and, secondly, that the numbers of households with foreign-born heads failed to increase as rapidly as those with native-born heads during the 1961-71 decade. The first suggests that the decline in household size was mostly due to secondary-type families leaving, i.e. related families moving out to establish their own primary family unit in a separate household, rather than being due to an actual decline in family size. The second point suggests that this decline was less true of those households with foreign-born heads than it was for native-born heads.

Data in Tables 4.12 and 4.13 show changes in percentage distributions for both foreign-born and native-born family heads by type of family in 1961 and 1971, and percentage increases in numbers by type between the two years. The percentages of primary-type families increased for both native- and foreign-born, 94.7 to 97.1 for the former, and 93.0 to 96.0 for the latter; but the percentage increase in the number of primary families was greater for native-born than for the foreign-born, being 28.0 and 18.2 per cent respectively. Conversely, the proportions of secondary families declined during the decade for families with native-born as well as foreign-born heads; and the percentage decline in secondary families was greatest for those with foreign-born heads. The latter was due to greater relative losses in lodging and other types of secondary families, as "related" families with foreign-born heads declined only 9.3 per cent compared to a decline of 26.4 per cent for those with

native-born heads. It would appear that the tendency for households with foreign-born heads to increase at a slower rate than those with native-born heads was due to a preference among the foreign-born for related families to live together, either through choice or because they couldn't afford to establish separate households.

TABLE 4.12
PERCENTAGE DISTRIBUTION OF FAMILY TYPES BY NATIVITY OF
FAMILY HEAD, 1961 AND 1971, AND PERIOD OF IMMIGRATION FOR
FOREIGN-BORN HEADS IN 1971

Type of Family	Foreign- Born Population 1961	1971 Foreign-Born Population			Native-Born Population	
		Arrived Prior to 1961	Arrived 1961-71	Total	1961	1971
Primary	93.0	97.4	92.0	96.0	94.7	97.1
Secondary:	7.0	2.6	8.0	4.0	5.3	2.9
Related	3.7	2.0	5.4	2.9	3.8	2.2
Lodging	3.1	0.5	2.5	1.0	1.3	0.6
Other	0.2	0.1	0.1	0.1	0.1	0.1
TOTAL:						
Percentage	100.0	100.0	100.0	100.0	100.0	100.0
Number ('000)	1,009	850	305	1,154	3,139	3,922

Effects of Recent Immigration on Family Types. If no immigration had occurred during the 1961-71 period, the proportion of primary families among families with foreign-born heads would have been as great as that for the native-born in 1971. The percentage increased from 93.0 per cent to 97.4 per cent during the decade for families who had been in Canada in 1961 and were still living in this country at the time of the 1971 Census. However, since those that did come subsequent to the 1961 Census established fewer primary-type families, their proportion of the total was somewhat lower in 1971 with 96.0 per cent of all families with foreign-born heads being primary-type families.

The proportion of secondary families tends to be greatest among the most recent immigrants. In Table 4.12, note that 8.0 per cent of those families with foreign-born heads who arrived in Canada since 1961 were secondary types compared with only 2.6 per cent of those who had arrived in Canada prior to the 1961 Census. Similar data from the 1961 Census show much the same thing, i.e. 11.8 per cent of the post-war immigrant families were secondary types compared with 3.2 per cent for families with pre-war immigrant heads. Because arriving immigrants tend to be younger than those who have been in the country for some time, the above differences may simply be a reflection of their younger age and a less favourable financial position vis-à-vis income and savings. The extent to which this may be the explanation, rather than cultural differences with respect to preferences for certain kinds of family living arrangements, can be partly determined by examining data on family types by age of family head.

TABLE 4.13
PERCENTAGE CHANGE IN NUMBERS OF FAMILIES BY TYPE FOR FOREIGN-
BORN AND NATIVE-BORN FAMILY HEADS, 1961-71

Type of Family	1961 Foreign-Born and Same Cohort in 1971 Still Resident in Canada	Foreign-Born 1961 and 1971	Native-Born 1961 and 1971
Primary	-11.7	18.2	28.0
Secondary:	-69.1	-34.9	-30.2
Related	-53.7	-9.3	-26.4
Lodging	-88.2	-64.6	-42.3
Other	-50.5	-35.4	-21.0
TOTAL	-15.8	14.4	24.9

Type of Family by Age of Head. There is no doubt that the predominant family form is the single household occupied by a primary-type family. However, there are significant variations by age of the family head which appear to be related to the family life-cycle and the relative degree of economic independence attained by the family head.

Generally speaking, the proportion of primary-type families increases with age of family head until about middle age, at which point it begins to decline. The proportion of secondary families, i.e. related, lodging, and others, will of course vary in reverse fashion as one is the complement of the other. Most of the upturn in the proportion of secondary families past middle age is a result of an increasing proportion of related families rather than lodging or other types. Younger persons, who are not heads of primary families themselves, would more likely be heads of related families living with parents or parents-in-law. Likewise, there seems to be a preference on the part of older family heads to live in the same household with a son's or daughter's family; and the preference of both the younger and older heads of families for this form of living arrangement in comparison to lodging-type families was stronger in 1971 than in 1961.

The proportion of primary families increased from 88.5 per cent for all heads under 25 years of age in 1971 to a maximum of 98.7 per cent for heads 45-54 years of age, and then declined to 95.9 per cent for those 65 years of age and older. While foreign-born heads had somewhat smaller proportions in the younger and older age groups, their maximum of 98.3 per cent for the 45-54 year age group was almost identical to the native-born.

Consistent with trends in household and family size, both native-born and foreign-born heads of families showed reductions in the relative numbers of secondary families at all age levels between 1961 and 1971. The reduction was

particularly significant for the younger family heads. For example, the percentage of secondary families with heads under 25 years of age declined from 31.8 to 15.9 per cent between 1961 and 1971. Corresponding percentages for the same age group of native-born family heads were 20.2 and 10.9 per cent. This trend would appear to reflect improvements in general economic conditions during part of this period, as well as continuing improvements in the supply of housing.

When recent immigrants are compared with that part of the foreign-born population which immigrated to Canada prior to 1961 and was still resident in 1971, a familiar pattern is revealed. Without immigration during the 1961-71 decade, the distribution of immigrant families by type approaches that of the native-born population. In 1971, in spite of this convergence, families with immigrant heads under 35 years of age still had higher proportions of secondary families, even though they had higher proportions of primary families for the two age groups of family heads between 35 and 54 years of age. In the latter case the difference in percentages was not significant.

The 1961-71 immigrant heads of families were significantly different from both native-born and the other foreign-born heads of families with respect to their distributions by family types. These most recent immigrants not only had a higher proportion of secondary families for family heads under 35 years of age, but also a much more significant difference for heads 55 years of age and older. For those 65 years of age and older, only 65 per cent were heads of primary families compared with 96.5 and 96.3 per cent for other foreign-born and native-born heads, respectively. In addition, 32.4 per cent were heads of related families compared with just 2.9 per cent for each of the other groups of family heads. It seems clear that the older of the most recent immigrants neither have the time nor the resources to establish themselves as separate families in their own households to the same extent that either the earlier immigrants or the native-born have done. Distributions of family types by age of family head by nativity for 1961 and 1971, and by period of immigration for the foreign-born in 1971, are presented in Table 4.14.

EDUCATIONAL ATTAINMENT OF THE FOREIGN-BORN

During the most recent intercensal decade, changes were made in immigration policy and regulations that gave greater weight to an applicant's educational attainment and occupational skills in the determination of his suitability. The success of this change in criteria for admission is readily apparent in the fact that the proportion of recent immigrants still living in Canada (1971) who have a university degree increased markedly over the level reported for recent immigrants in the 1961 Census. To be more specific, 13.8 per cent of the foreign-born residing in Canada in 1971, who had arrived during the previous decade, had university degrees. This is a sharp increase over the 5.1 per cent reported for post-war immigrants in 1961. The net result of the 1961-71 immigration was to raise the proportion with degrees, for all foreign-born, to 6.4 per cent from 3.4 per cent in 1961. By contrast, the proportion of the native-born with degrees, in the comparable age group, i.e. 25 years of age and over, rose from 3.4 to 5.0 per cent in the same period.

It may be noted in Table 4.15 that had there not been any immigration since 1961, the proportion of foreign-born with a degree would not have exceeded that

TABLE 4.14
PERCENTAGE DISTRIBUTIONS OF FAMILY TYPES OF AGE OF FAMILY HEAD AND NATIVITY,
1961 AND 1971 AND BY PERIOD OF IMMIGRATION FOR FOREIGN-BORN, 1971

Age of Family Head	Total 1961 Foreign-Born		1971 Foreign-Born Population				Total 1971 Foreign-Born		Native-Born Population			
			Arrived Prior to 1961		Arrived 1961–71				1961		1971	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
Under 25	68.2	31.8	86.8	13.2	81.1	18.9	84.1	15.9	79.8	20.2	89.1	10.9
25–34	85.4	14.6	94.8	5.2	92.7	7.3	93.6	6.4	92.8	7.2	96.3	3.7
35–44	93.7	6.3	98.6	1.4	96.4	3.6	97.8	2.2	96.3	3.7	98.1	1.9
45–54	95.9	4.1	99.0	1.0	95.0	5.0	98.3	1.7	97.4	2.6	98.8	1.2
55–64	96.2	3.8	98.2	1.8	81.3	18.8	96.6	3.4	97.4	2.6	98.7	1.3
65 and over	94.9	5.1	96.5	3.5	65.1	34.9	95.4	4.6	94.6	5.4	96.3	3.7
TOTAL	93.0	7.0	97.4	2.6	92.0	8.0	96.0	4.0	94.7	5.3	97.1	2.9
	Related	Lodging & Other	Related	Lodging & Other	Related	Lodging & Other	Related	Lodging & Other	Related	Lodging & Other	Related	Lodging & Other
Under 25	16.8	15.0	10.5	2.7	12.1	6.7	11.3	4.6	14.3	5.9	8.3	2.6
25–34	6.7	7.9	4.2	1.0	4.2	3.1	4.2	2.2	5.3	2.0	2.9	0.8
35–44	2.6	3.6	1.0	0.5	2.0	1.7	1.3	0.9	2.7	1.0	1.4	0.5
45–54	2.0	2.1	0.6	0.4	3.5	1.5	1.1	0.6	1.8	0.8	0.9	0.4
55–64	2.4	1.3	1.4	0.3	17.0	1.8	2.9	0.5	1.8	0.8	1.1	0.2
65 and over	3.8	1.4	2.9	0.6	32.4	2.6	4.0	0.7	4.5	0.9	3.0	0.7
TOTAL	3.7	3.4	2.0	0.5	5.4	2.6	2.9	1.1	3.8	1.4	2.2	0.7

for the native-born. Only 4.2 per cent of the resident foreign-born had degrees compared with 5.0 per cent of the native-born in 1971. The educational upgrading of the resident foreign-born population between 1961 and 1971 would appear to have been the result of greater access to higher education enjoyed by the younger foreign-born of school age who completed their education during this period. In addition, it is quite clear that recent immigration did make a significant contribution to the rising average educational attainment reported for the total foreign-born population 25 years of age and older.

TABLE 4.15
EDUCATIONAL ATTAINMENT OF THE POPULATION, 25 YEARS OF AGE AND
OVER, BY NATIVITY, 1961 AND 1971, AND PERIOD OF IMMIGRATION FOR THE
FOREIGN-BORN, 1971

Level of Schooling	Foreign-Born Population 1961	1971 Foreign-Born Population			Native-Born Population	
		Arrived Prior to 1961	Arrived 1961-71	Total	1961	1971
No schooling	2.8	3.9	3.4	3.8	1.4	1.4
Elementary schooling	50.5	41.7	27.6	38.4	45.9	37.6
Secondary or post- secondary schooling	43.2	50.2	55.2	51.4	49.3	56.0
University degree	3.4	4.2	13.8	6.4	3.4	5.0
TOTAL:						
Percentage	100.0	100.0	100.0	100.0	100.0	100.0
Number ('000)	2,324	2,003	604	2,607	7,105	8,584

For secondary and post-secondary schooling combined, the proportions increased over the decade from 43.2 to 50.2 per cent for the foreign-born population who had been living in Canada since 1961. At the same time the proportion for the native-born increased from 49.3 to 56.1 per cent, or by an equivalent number of percentage points. In other words, the educational upgrading of the native-born and the foreign-born who had been in Canada during the intercensal period was almost the same.

While the most recent immigrants had a proportion with secondary or some post-secondary education almost as high as that of the native-born in 1971, their numbers were not sufficient to raise this particular index of educational attainment much above that found for those foreign-born in 1971 who had been in Canada since 1961.

At the opposite end of the educational attainment continuum, there are several anomalies that invite comment. For the total foreign-born population, it is not surprising to find a higher proportion with no schooling than is the case for the native-born, since there are proportionately more immigrants in the older age groups for whom access to formal education had been rather limited. On the other

hand, it is somewhat disturbing to find that the proportion of the foreign-born reporting that they had no schooling was higher in 1971 than that reported in 1961 (see the first two columns in Table 4.15).

Since there were actually more persons in 1971 reporting no schooling than in 1961, and since the size of this group could only decline through deaths and emigration, there is obviously a reporting problem. The most obvious explanation would appear to lie in the different procedures used to obtain data in the two censuses. Since self-enumeration was first employed in 1971, for the urban population, it seems quite likely that more of the foreign-born were willing to indicate that they had no formal schooling in their questionnaires than they were willing to admit in the interview situation in 1961. If this was in fact the case, then the 1971 data should provide a better estimate of the lack of formal education among the foreign-born.

Apart from the problem of comparability of data from the 1961 and 1971 censuses, comparisons of data within the 1971 Census pose some interesting problems. Some may find the disproportionate numbers of foreign-born having no schooling, and with a university degree, to be somewhat inconsistent for any population. However, it does, in this case, seem quite consistent with an immigration policy that places a premium on educational attainment and skilled occupations, while at the same time making it relatively easy for residents of Canada to bring in their close or older dependent relatives. Thus, what might appear to be a discrepancy may only reflect normal generational differences between the younger and better educated immigrant, and his older, and generally less educated dependants.

SUMMARY

An analysis of changes in the total foreign-born population from one point in time to another is not sufficient to permit an adequate understanding of the effects of immigration on Canada's population. Given the appropriate data, it is more revealing to examine the two basic components of the immigrant population, i.e. that part comprised of the most recent immigrants, e.g. those who arrived during the 1961-71 period, and the survivors of the foreign-born population who had arrived at some point in time prior to the recent arrivals, e.g. prior to 1961. Thus the latter would show what the characteristics of the foreign-born would have been had immigration come to a standstill; and the former would reveal any changes in the characteristics of recent immigrants. The combined or total population would indicate the relative importance of the two components in that it represents a weighted average, and in combination with the preceding census permits an evaluation of their relative significance.

The following statements summarize the major findings of the analyses presented in Chapter 4:

1. *Ethnic Origins.* Recent immigration during 1961-71 was a positive growth factor for the Italian and other (misc.) European origins, and the "Asiatic and other non-European" origins. In the absence of immigration, only the major European origins (excluding southern European origins) would have shown increases in their proportionate share of the foreign-born population. Combined with changes in the

native-born, the only ethnic origin groups to show an overall increase were the British, Italian and other (mostly southern) European, and Asiatics and other non-European origins. Each of these achieved higher proportions of the total population in 1971 than they had in 1961.

2. *Country of Birth.* Immigration had a negative effect on the relative sizes of the foreign-born population born in the United Kingdom, the major European countries (excluding those of southern Europe), and to a lesser extent, those born in the United States. In other words, in the absence of immigration these groups would not have declined as much. Conversely, immigration made significant contributions to the increasing proportions of those born in France, Italy and other (lesser) European countries, and in Asian and other non-European countries.

3. *The Balance between Males and Females.* The excess of males, which has been the traditional distinguishing characteristic of Canada's foreign-born, continued to decline. The excess of females among immigrants arriving during the 1961-71 period contributed to a further decline in the overall sex ratios and reduced the ratio by approximately one per cent less than it would have been had no immigration occurred. A continuation of this trend, plus the continuing effects of mortality and emigration, should bring the sex ratio to parity, or below, in the not-too-distant future.

4. *Changes in the Age Structure.* Without continuing immigration, the foreign-born population ages rapidly. Immigration during the 1961-71 intercensal period effectively reduced the average age of the foreign-born population by approximately eight years below what it would have been with no immigration. Not only does immigration bring in individuals of prime working ages but this injection of young adults tends to counteract the aging effects of the foreign-born and at the same time reduces the dependency ratios among this segment of the population.

5. *Households with Foreign-Born Heads.* These households failed to keep pace with the growth of households with native-born heads. However, the general decline in household size was not as great for the foreign-born as it was for the native-born.

6. *Family Size.* Families with foreign-born heads were generally smaller than those with native-born heads, and this was true for all ages of family heads. Recent immigrants, with family heads under 45 years of age, reported smaller families than those who had been in Canada for a longer period of time, i.e. prior to 1961. On the other hand, recent immigrants over 45 years of age reported larger families than those of similar age who had been living in Canada since 1961. The overall effect of immigration has been a convergence in family size between those with native-born and foreign-born heads. Changes in the age distribution of family heads over the 10-year period were the most significant factor for foreign-born heads, while changing family size appears to have been the major factor underlying changes in the size of families with native-born heads.

7. *Number of Children under 25 Years of Age at Home.* The trends for number of children at home are consistent with those for family size reported above. The trend is also towards convergence with families having native-born heads where the number of children has been declining. Without immigration, the number of children still at home in families with foreign-born heads would have continued to increase, but the influx of recent immigrants with greater numbers of children

produced an even greater increase than would have otherwise occurred. In this instance, recent immigration contributed to an increasing similarity with families having native-born heads.

8. *Type of Family.* Aging of the resident foreign-born population produces a rapid convergence with the distribution of family types for those with native-born heads. Without the influx of more immigrants, the proportion of foreign-born families that were "primary" type families increased, and even surpassed that for the native-born heads. However, since immigrants tend to be younger adults and not yet fully established, there is a greater tendency on the part of many young family heads to form related or lodging and other family-type units until they are able to establish their own independent household. In this case, continuing immigration tends to reduce the overall proportion of primary-type families. Similarly, a low proportion of primary families were found among older immigrants, i.e. those 65 years of age and older. The latter can be expected whenever immigration policy encourages new residents of Canada to bring their closest family relatives with them or to send for them after they become established.

9. *Educational Attainment.* Recent immigration clearly reflects the impact of policy changes during the 1961-71 decade. Without immigration, the upgrading of the educational attainment levels for the foreign-born population as a whole would not have matched that of the native-born population 25 years of age and older. However, the recent immigrants boosted the overall attainment levels of the foreign-born population beyond that of the native-born as a consequence of the unusually high proportion with university degrees and somewhat greater than average proportion having secondary or some post-secondary education. The somewhat high proportion among immigrants reporting no education was tentatively attributed to the relatively large numbers of older persons among recent immigrant arrivals.

Because of continuing difficulties and delays in the processing of the 1971 Census data, it was not possible to analyze additional social and economic characteristics of recent immigrants at this time.

POPULATION PROJECTIONS AND THEIR IMPLICATIONS

Accurate information on the future growth and characteristics of Canada's population would be of undeniable value to the social and economic planners. However, attempts to forecast future population have been notable mainly for their failures. Because of this, and the increasing awareness of the tremendous complexity of demographic factors operating at both national and regional levels, attention has shifted to the development and refinement of population *projections* for use as guidelines by planning agencies.

Population projections, rather than attempting to forecast future population size in any precise sense, attempt to determine the limits within which future population growth may be expected to fall given the continuation of specified trends with respect to mortality, fertility, and migration. The most elementary type of projection would be the simple extension of present levels of mortality, fertility, and migration forward in time to specified dates. Such projections would provide information on what the size and character of the population would be, given the continuation of present levels of vital and migration rates.

Obviously, since these population components rarely remain the same for any length of time, this type of projection is not very useful as a "predictive" device. However, by developing a series of projections, based on alternative assumptions regarding future levels of vital and migration rates, the implications of deviations from present levels can be assessed. In practice, the assumptions utilized incorporate recent trends rather than current levels *per se*. In addition, the range of assumptions is selected to approximate reasonable maximums and minimums that may be expected in the near future. It is often understood, though seldom explicitly stated, that the medium assumption will provide the best approximation of the actual course of population growth. Even when this is not intended to be the case, the user of population projections often will make this assumption himself since he generally needs a single "best" figure for his own planning purposes.

Not to be lost sight of in the attempt to find the "best" estimate, is the fact that the projected upper and lower limits of possible growth have considerable significance for policy and programming decisions. For example, in the case of budget planning, the minimum population projection would be the more appropriate figure to use when committing future anticipated tax revenues. On the other hand, when planning for the expansion of sewers, water supply and storage facilities, the maximum population projections might be more appropriate.

A number of population projections have been developed in the past 20 years. The results of the more important ones, shown below, give rise to two observations. The first is the large spread between the high and low projected populations. Depending on the assumptions used, the projected figures for 1981 vary by as much as four million and for 2001 the spread between the high and low projections is as much as 18 million. The second point of interest is that the upper limits of earlier projections have been cut back by one to two million in the more recent studies. This is a reflection of the sharp decline in crude fertility rates since the late 1950s.

TABLE 5.1
SELECTED POPULATION PROJECTIONS

Source	Base Year	Projected Population (in millions)	
		1981	2001
Canadian Immigration and Population Study ¹	1971	23 to 27	26 to 44
Statistics Canada ²	1966	25 to 28 (1984)	—
Systems Research Group ³	1966	25 to 27	30 to 44
Economic Council of Canada ⁴	1965	24 to 27	—
Royal Commission on Health Services ⁵	1961	28 (1980)	35 (1991)
Royal Commission on Canada's Economic Prospects ⁶	1955	24 to 28 (1980)	—

¹ Unpublished

² A. Romaniuk, *Fertility Projections by the Cohort Method for Canada – 1961–84*, (Ottawa: Dominion Bureau of Statistics, Population Estimates and Projections Section, November 1970).

³ Systems Research Group, *Canada: Population Projections to the Year 2000*. (Toronto, 1970).

⁴ Wolfgang M. Illing, (with technical contributions by Yoshiko Kasahara, Frank T. Denton and M. V. George), *Population, Household and Labour Force Growth to 1980*, Staff Study No. 19, Economic Council of Canada (Ottawa: Queen's Printer, 1967).

⁵ A. Stukel, "Population Projections, Canada, 1961–1991" in T. M. Brown, *Canadian Economic Growth*, Royal Commission on Health Services (Ottawa: Queen's Printer, 1965).

⁶ Wm. C. Hood, and A. Scott, "The Population and the Labour Force" in *Output, Labour and Capital in the Canadian Economy*, Royal Commission on Canada's Economic Prospects (Ottawa, 1957).

To obtain projections updated to take advantage of the 1971 Census data, the Canadian Immigration and Population Study commissioned a special set of projections in late 1973. This necessitated the use of existing statistical models into which fertility, mortality and migration assumptions were already built. At the time of writing these were the only projections available based on the 1971 census, which provided figures for both population and labour force, and had details for provinces and large municipal areas. The projections were produced as a preliminary data base for study pending the publication of more sophisticated projections by Statistics Canada and were made available on this basis to consultants who were examining various aspects of the subject.

The spread of all projected populations is a function of the number and kind of assumptions that are made about mortality, fertility and migration – the more variation there is in the assumptions, the greater the variation in the target-year populations. In the CIPS projections there is a spread of 18 million between the high and low figures for 2001 reflecting, in part, the fact that 10 different assumptions were used. These assumptions are shown in the accompanying box. While there are, theoretically, 24 possible combinations of these assumptions, several could not be expected to occur together in the real world. For example, high

ASSUMPTIONS USED IN THE CANADIAN IMMIGRATION AND POPULATION STUDY PROJECTIONS

Mortality

A gradual and moderate further decline in mortality from present levels, and regional convergence of survival ratios.

Fertility

- | | |
|-----------|--|
| 1. High | A total fertility rate rising to 2.4 children per woman by the year 2001. |
| 2. Medium | Total fertility rate to reach 2.0 by 1986 and remain steady until 2001. |
| 3. Low | Total fertility rate falling to 1.8 by 1986 and then remaining constant by 2001. |

Migration

- | | |
|-----------|---|
| 1. High | Net immigration 0.8 per cent of Canada's population per annum over the projection period. In absolute numbers this would produce a range from 170,000 in 1971 to 380,000 in 2001. |
| 2. Medium | 0.5 per cent per annum (105,000 to 183,000). |
| 3. Low | 0.2 per cent per annum (42,000 to 64,000). |
| 4. Zero | 0.0 per cent per annum. |

Internal Migration

- | | |
|---------|--|
| 1. High | Same as the period 1951-56, when unemployment averaged 3.7 per cent of the labour force. |
| 2. Low | Same as the period 1956-61, when unemployment averaged 6.4 per cent of the labour force. |

fertility and high net immigration would not likely occur at the same time as low internal migration. Neither would one expect to find low net immigration while internal migration is high since both types of migrants tend to respond to changes in economic conditions by moving to areas where there are opportunities. On the other hand, while certain combinations and assumptions may not be realistic (e.g. zero net immigration in combination with high fertility, high internal migration, etc.) they are useful in assessing the relative combinations of any specific factor while holding other variables constant.

THE PROJECTION ASSUMPTIONS

The utility of population projections for policy decisions depends on the validity of their underlying assumptions, and it may be useful to pause briefly to look at those used in the CIPS projections. "Best guesses" often have to be made where reliable opinion is lacking or to simplify the rather complex calculations that would have to be made to take into account the known differences between all relevant variables. An example of the simplification process is the practice of assuming that fertility and mortality of the native- and foreign-born components of the population are equivalent. The CIPS projections discussed here assumed no

differences between nativity groups, though they acknowledged regional differences and incorporated them into the projections. This was done not so much because the former were thought to be less significant but because data were more readily available for the latter. Since there is some evidence in the 1961 census monographs that the foreign-born in Canada had lower mortality and lower fertility than native-born, it is possible that the projected contribution by immigrants to the number of births and deaths might be overstated. However, since there was also some evidence of convergence, the extent of possible overassumption would tend to decrease towards the year 2001.

Whatever the merits of the decision in this case to assume no difference in the vital experiences of native- and foreign-born populations, the failure to separate the two major components of the population in these projections was unfortunate. A study of population *and* immigration implies an interest in and concern over the latter's affect on the former, and a parallel set of projections for the native- and foreign-born populations would be invaluable for showing the manner by which the foreign-born population is maintained by immigration and the means by which it indirectly contributes to the growth of the native-born component through fertility.

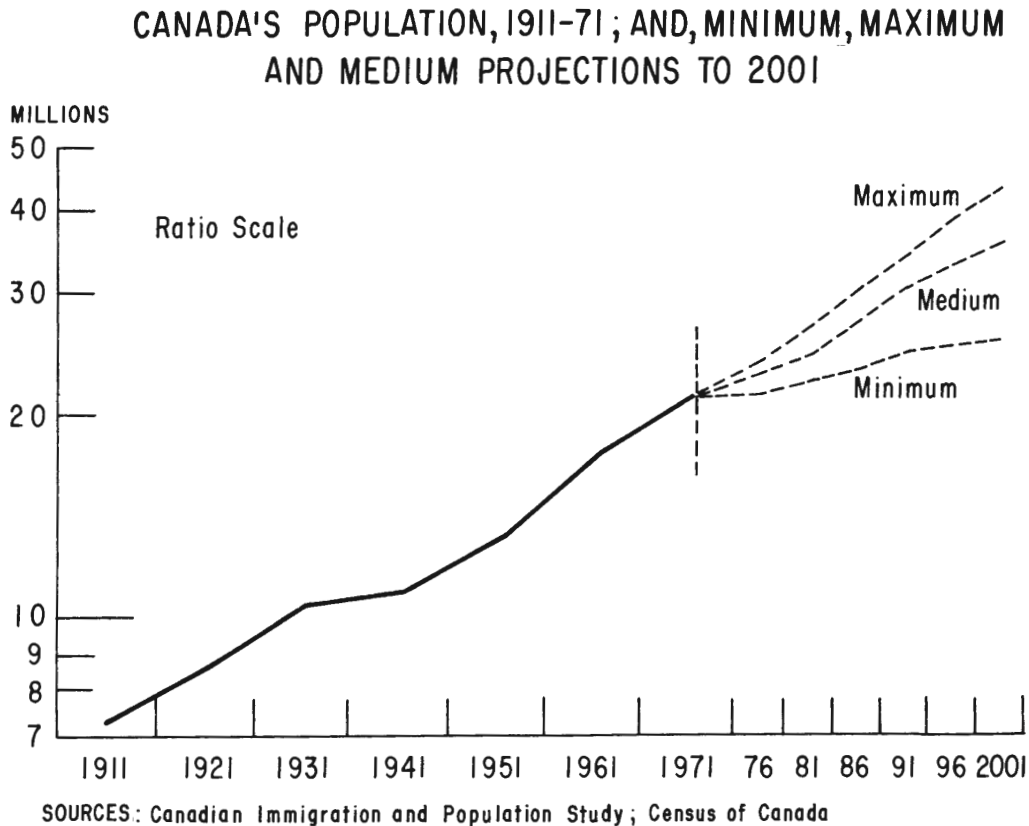
By separating the two basic population components, attention is focused on both their similarities and differences, as well as on the possible consequences. The value of such an analytical separation would not be lessened by any assumption of equal mortality, fertility and immigration rates for the two component populations. In fact, their respective contributions to the growth of population could be assessed for any combination of vital rates and immigration inputs that might be thought to have relevance. Since the evidence from the 1961 Census and vital statistics does suggest lower mortality and fertility for immigrants, and high participation in the labour force, the introduction of some such set of alternative assumptions would appear to be desirable.

An additional point may be made with respect to the migration assumptions. For the projection period, migrant assumptions were made in terms of rates or proportions of the total population rather than in absolute numbers, as is the usual practice. Thus the low migration assumption of 0.2 per cent of the total population represents an annual increment that starts at 42,000 in 1971 and increases to 64,000 at the end of the projection period. The ranges for annual increments under the assumed levels of net migration of 0.5 per cent and 0.8 per cent are proportionally larger. It may be true in general that a larger population can attract and hold more immigrants than a smaller population but there is little evidence to support such an assumption in past Canadian experience. Both in absolute numbers and as a proportion of population, immigration has in fact been more noted for its irregularities during the past century. However, while the validity of the assumption may be questioned, this particular projection model is still quite a helpful tool. It is especially useful in this study, the purpose of which is not to find a "best" projection but to show the relative importance of immigration to the future Canadian population.

POPULATION PROJECTIONS

Of the many series in the CIPS projection, three have been selected for purposes of illustration. These are the “limiting” projections, i.e. the highest, the lowest and the “medium” projections. The latter consists of “medium” assumptions with respect to fertility and net migration, and high internal migration. These projections are shown graphically in Chart 5.1.

Chart 5.1



According to this particular projection model, therefore, the possible population at the end of the century, and at the half-way point of the projection period, is as follows:

	1986 (millions)	2001 (millions)
Minimum	24.1	25.9
Medium	28.3	36.2
Maximum	30.9	43.7

As we have indicated, users of these projections who want a single figure will probably choose the “medium” projection as the most likely outcome. The

ASSUMPTIONS FOR PROJECTIONS PRESENTED IN CHART 5.1

"Minimum" Projections

- Very low fertility (1.8 children per woman).
- Zero net immigration.
- Low internal migration same as the period in 1958–63).

"Medium" Projections

- Medium fertility (2.0 children per woman).
- Medium net immigration = 0.5% per annum.
- High internal migration (same as the period in 1950–57).

"Maximum" Projections

- High fertility (2.4 children per woman).
- High net immigration = 0.8% per annum.
- High internal migration (same as the period 1950–57).

difference of 18 million between the projected maximum and minimum populations at the end of the century serves as a reminder of the increasing uncertainty attached to projections that are carried this far into the future.

THE CONTRIBUTION OF IMMIGRATION

The effect of immigration on the projected population has been isolated in Table 5.2. The table shows the populations that would result from three different immigration assumptions while holding fertility and internal migration conditions constant. To illustrate, given "medium" fertility and "low" internal migration, the population in 2001, with an annual net migration equal to 0.8 per cent of the population, would be 40.1 million, as opposed to 27.3 million with zero net migration. The contribution of immigration in this case would be 12.8 million over the 30-year period. Similarly, the contribution of a net immigration of 0.5 per cent of the population over the same period would be 8.9 million (36.2-27.3); and for 0.2 per cent, the contribution would be 4.9 million. Because of the nature of the immigration assumption the relative differences remain the same with any given levels of fertility and internal migration.

What this projection tells us is that if fertility and internal migration are constant at any level, high net immigration will produce an end-of-century population that is approximately 47 per cent higher than that produced by zero net immigration; medium net immigration produces a population in 2001 that is about 33 per cent above the population that would result from zero net immigration; and low net immigration produces a population in 2001 that is 18 per cent higher than it would be without immigration. These results are illustrated in Chart 5.2.

The effects of fertility can be isolated in a similar way. By examining the differences in projections for different levels of fertility while holding constant net

TABLE 5.2
ILLUSTRATIVE POPULATION PROJECTIONS FOR CANADA RESULTING
FROM FOUR RATES OF NET IMMIGRATION UNDER CONDITIONS
OF CONSTANT FERTILITY AND INTERNAL MIGRATION*

Total Fertility**	Rate of Net Immigration (Per Cent)	Population in 2001 (millions)	Percentage Increase*** 1971 – 2001
Very Low (1.8)	Zero	26.0	20.3
	0.2	30.6	41.7
	0.5	34.4	59.7
	0.8	38.2	76.9
Medium (2.0)	Zero	27.3	26.8
	0.2	32.2	49.3
	0.5	36.2	68.1
	0.8	40.1	86.0
High (2.4)	Zero	29.9	38.8
	0.2	35.2	63.4
	0.5	39.6	83.5
	0.8	43.7	102.7

* Internal migration is assumed to be equal to that experienced in Canada during 1950–56 when the average unemployment rate was 3.7 per cent of the labour force. This "high" internal migration assumption applies to all projections.

** Total fertility is the number of children a woman has during the course of her child-bearing experience between the ages of 15 and 49 years.

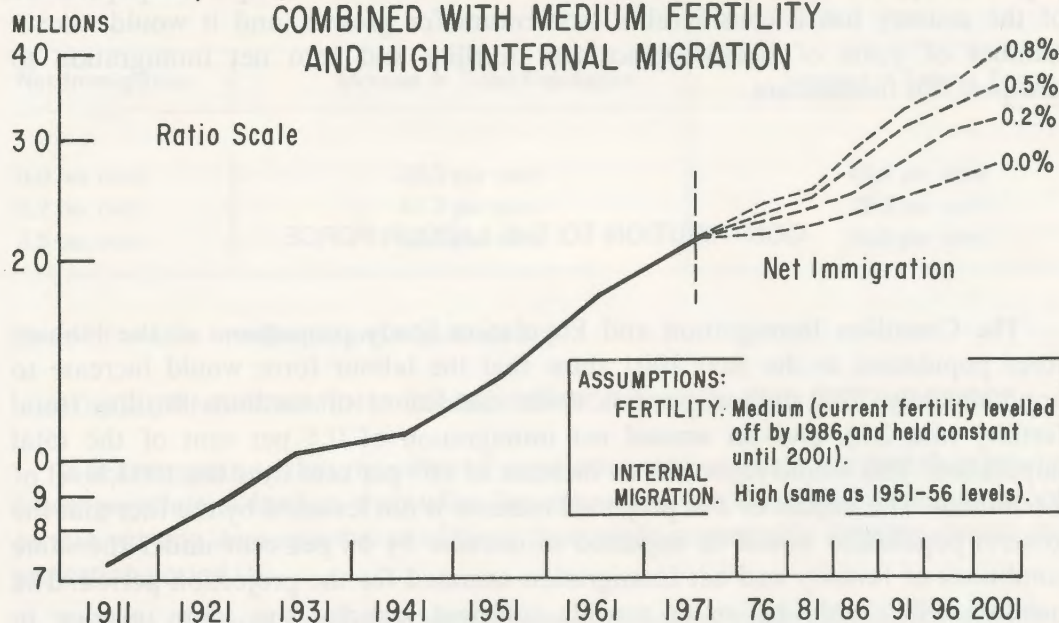
*** The 1971 population = 21,568,300.

immigration and internal migration, it becomes clear that, at least for the levels of fertility included in the CIPS projections, the direct effect of fertility on the projected population is less than that produced by the two levels of positive net immigration employed. Note in Table 5.3, for example, that by increasing the level of fertility from a very low level (total fertility rate of 1.8 children per woman) to a moderately low level (total fertility rate of 2.0), the total projected population in 2001 increased by only five per cent. A total fertility rate of 2.4 produces a final total population approximately 15 per cent larger than that produced by the very low fertility assumption.

For the projection period, therefore, the assumed levels of net migration would appear to have considerably greater impact on the resulting population growth than the particular levels of fertility which were selected. Even the lowest net immigration assumption (0.2 per cent per annum) produced a somewhat higher relative change in the final projected total in comparison to the zero net immigration condition than did the highest fertility assumption in relation to the lowest fertility level employed, the differences being approximately 18 and 15 per cent respectively. This may reflect, in part, the fact that two of the three assumed fertility levels are below that required for population replacement. In other words, if

Chart 5.2

**CANADA'S POPULATION, 1911-71 AND PROJECTIONS TO 2001
BASED ON ZERO, LOW, MEDIUM AND HIGH NET IMMIGRATION ASSUMPTIONS
COMBINED WITH MEDIUM FERTILITY
AND HIGH INTERNAL MIGRATION**



SOURCES: Canadian Immigration and Population Study; Census of Canada

**TABLE 5.3
LABOUR FORCE PROJECTIONS UNDER CONDITIONS OF LOW FERTILITY AND
VARIABLE NET IMMIGRATION 1971-2001**

Net Immigration	1971	1986	2001
0.0 per cent	8,600,000	11,399,000	12,591,000
0.2 per cent	8,600,000	12,240,000	14,819,000
0.5 per cent	8,600,000	13,174,000	17,165,000

Source: Canadian Immigration and Population Study.

fertility does fall to below replacement levels, any net immigration would represent a more significant contribution to population growth.

Another interesting and often overlooked fact becomes obvious after examining these population projections, especially the projections based on the zero net immigration assumption. Even in the absence of any net immigration, and with fertility levels at about or below replacement levels, the population will continue to

increase. With very low fertility, i.e. total fertility rate 1.8, and zero net immigration, the total population will increase by 20.3 per cent over the total 30-year projection period. With fertility just below replacement level, i.e. total fertility rate 2.0, the percentage increase would be 26.8 per cent. It would seem that zero population growth is not just around the corner for Canada. The present population of the country has a considerable momentum for growth, and it would take a number of years of below-replacement fertility and zero net immigration to dissipate this momentum.

CONTRIBUTION TO THE LABOUR FORCE

The Canadian Immigration and Population Study projections of the labour-force population to the year 2001 show that the labour force would increase to approximately 17.8 million persons under conditions of medium fertility (total fertility rate 2.0), and an annual net immigration of 0.5 per cent of the total population. This would represent an increase of 107 per cent over the 1971 level of 8.6 million. The impact of this projected increase is not lessened by the fact that the general population would be expected to increase by 68 per cent under the same conditions of fertility and net immigration assumed for the projection period. The pressure will clearly be on to provide sufficient jobs for this large increase in available workers. Failure to do so would obviously pose serious problems for the young workers who have entered the labour force for the first time as well as arriving immigrants who do not possess the skills currently in demand.

An earlier discussion of arriving immigrants destined for the labour force, and dependants, emphasized the importance of prevailing economic conditions on the size and nature of the immigrant stream. Their ultimate participation rates are clearly affected by their experiences during their attempts to get settled in their new homes. That this is not an easy process is attested to by the fact that the participation rate for female immigrants rises sharply after their arrival in Canada, and is generally higher than that of native-born women.

Projections of the labour force under conditions of low fertility (a total fertility rate of 1.8) and variable net immigration inputs are presented in Table 5.4 to show the relative effects of immigration on the size of the labour force during the projection period.

With zero net immigration, and fertility below replacement levels, the total population will increase by 20.3 per cent, and the labour force by 46.4 per cent between 1971 and 2001. A net immigration of 0.2 per cent per year would increase the projection for the total population in the year 2001 by 18 per cent over what it would have been without any net immigration. Similarly, the labour force would have been 18 per cent greater. An increase of net immigration to 0.5 per cent per year, assuming the same low fertility levels, would boost the final projected population total by 33 per cent over the zero net immigration condition, and the labour force by 36 per cent.

TABLE 5.4
POPULATION AND LABOUR FORCE PERCENTAGE INCREASES UNDER
CONDITIONS OF LOW FERTILITY AND VARIABLE NET IMMIGRATION, 1971–2001

Net Immigration	Increase in Total Population	Increase in Labour Force
0.0 per cent	20.3 per cent	46.4 per cent
0.2 per cent	41.7 per cent	72.3 per cent
0.5 per cent	59.7 per cent	99.6 per cent

Source: Canadian Immigration and Population Study.

CONCLUDING COMMENTS ON SIZE OF POPULATION AND LABOUR FORCE

It bears repeating that the value of population projections is not that they *predict* future population. Rather, their value lies in pointing out the broad consequences of certain varying demographic conditions that might conceivably develop during the projection period.

Perhaps the most significant implication of the many projections that have been made — and it matters little which of them one chooses to examine — is that the Canadian population has considerable momentum for growth. This is best illustrated by the fact that if net immigration were reduced to zero, and if fertility were to fall below replacement levels, the population would still continue to increase significantly. Using the CIPS projections, such conditions were shown to be capable of producing a 20-per-cent increase in population by the year 2001. And with fertility at the approximate replacement level (instead of below it) and zero net immigration, a 27-per-cent increase by 2001 was shown to be possible.

Secondly, the projections show that the effect of what is called low annual net immigration (0.2 per cent of population) and medium fertility (2.0) is to produce a 2001 population which is 18 per cent higher than it would be with zero net immigration. The medium level of annual net immigration (0.5 per cent of population) would raise this figure to 33 per cent. Immigration has an even greater relative effect on the size of the labour force, and its effect escalates rapidly at higher levels of immigration.

Finally, by separating the influence on the projections of the underlying assumptions it was shown that if fertility changes do not go beyond the range envisaged, they will have relatively little effect on total population, and the levels of immigration will be the main determinant of the size of Canada's population.

IMMIGRATION AND THE FUTURE CHARACTER OF CANADA'S POPULATION

It may be appropriate to conclude this paper with a few comments about the probable effect of varying levels of immigration on the characteristics (as opposed to their size) of Canada's future population and labour force.

Population projections of the type previously discussed are generally limited in their analysis to the most basic population variables, e.g. numbers, age, and sex. Often they will deal with race, nativity, or the major ethnic and language groups, depending upon the relevance of these characteristics for the particular population being analyzed, and the availability of the requisite data. It is generally the absence of data that prevents the incorporation of many relevant variables into the projection models.

It is indeed unfortunate that vital statistics are no longer reported for the native- and foreign-born components of the population. The ability to distinguish between these two groups relative to their contributions to the nation's deaths and births would permit the development of much more relevant and useful projection models for the Canadian population. The failure to collect and publish country-of-birth data in the vital statistics is inexcusable in a country where immigration has been of major importance to its growth. Similarly the lack of ethnic-origin data is another serious gap in the statistics of a country in which biculturalism and cultural pluralism are such persistent and sensitive issues.

Relatively Invariant Characteristics

There are a few characteristics of immigrants which remain relatively invariant, and continue to distinguish immigrants as a group from the general resident population. The most obvious of these is age, for immigrants have always tended to be young adults. While not totally homogeneous in this respect, the age distributions of immigrant streams have a relatively unique profile.

While the input with respect to the age distribution tends to be constant, its effect on the total age distribution varies as the rate of net immigration varies. Any reduction in the rate would tend to produce an aging foreign-born population, while increases would tend to reduce the aging process by moving the average age of the foreign-born closer to that of the arriving immigrants.

Historically, these young adult immigrants have also been predominantly male and single. However, with increasing urbanization throughout the world, and availability of air travel, this characterization of the international immigrant has given way to a more even distribution of the sexes and marital statuses.

Variable Characteristics

Other characteristics of immigrants tend to be more variable over time, and more difficult to predict since they change in response to (1) the selective and restrictive policies implemented by the government of the receiving country, and (2) the characteristics of populations where the social, economic and political pressures for emigration are greatest. The latter, of course, does not always correspond to the criteria employed by the former in the selective process. The major characteristics of concern here are ethnic and cultural origins, religion, occupation, and educational attainment.

Partly because of the wide range of characteristics to be found among potential immigrants, Canada's efforts to regulate immigration have centered around the problem of selecting those immigrants who are (1) most compatible to the

Canadian way of life, and (2) possess the skills most in demand in the labour force.

The history of Canadian immigration amply demonstrates the government's ability to restrict or exclude certain ethnic-origin and cultural groups, and to encourage the immigration of certain types of workers, e.g. farmers and farm labourers, etc. Recent developments in immigration policy have also reflected these concerns. Both the *White Paper* in 1966 and the "point system" implemented in 1967 were expressly designed to remove any signs of preferential treatment for the traditionally favoured ethnic origins, and to establish educational and occupational skills as the criteria for selection, vis-à-vis manpower needs. That these new objectives were partially achieved can be attested to by the examination of recent vital and census data. Significant increases in educational attainment levels and apparent upgrading of occupational skills were observed for recent immigrant arrivals, as was an increase in the numbers of immigrants whose ethnic and cultural origins would have been a major handicap prior to the policy change in 1962.

The Problem of Quality versus Quantity

Because economic and political conditions have markedly improved in western and northern European countries relative to conditions in North America, the traditionally preferred sources for immigrants have declined in importance. The remaining sources, including most of the developing countries, do not have unlimited numbers of highly qualified potential emigrants. Putting the emphasis on quality in the selection process will not insure a dependable supply of acceptable immigrants.

On the other hand, the ability to attract larger numbers of immigrants to Canada (to do the relatively unskilled work, or to help fill Canada's so-called empty spaces) would seem to be limited only by a reluctance to accept large numbers of the less educated, and less skilled. So the problem is not so much the lack of potential immigrants, as the difficulty in deciding what the minimally acceptable requirements should be. In lowering the requirements, whether for humanitarian reasons or in self-interest, the numbers of immigrants from the underdeveloped regions of the world will certainly increase. Canada's inability to supply its own labour force needs through natural increase or continuing immigration from such traditional sources as the United States and the United Kingdom will increase the pressure to reduce the level of skill required. Past experience has shown that low levels of immigration tend to be characterized by relatively high proportions of immigrants from the United States and the United Kingdom. To this relatively stable substratum in the immigrant stream are added the varying numbers of immigrants recruited from the less developed and more unstable areas of the world, e.g. Uganda, India, West Indies, etc., as the volume of immigration changes.

The continued reliance upon immigration to provide manpower needs will contribute in the long run to the slow alteration of the basic character of Canadian society with respect to its basic ethnic, cultural and occupational composition. The slight gain in the proportion of total population of British origins during the 1960s would appear to be only a temporary respite from its continuing decline. The population of French origin continues to decline relatively through a continuing drop in its fertility. The net result, obviously, is the gradual ascendancy of the other ethnic populations through both immigration and natural increase to an

increasingly significant position in Canadian society. If these immigrants tend to be highly educated and possess important occupational skills, their influence on Canadian society will far exceed their numbers, as has been demonstrated by the Americans in Canada. The presence of less skilled workers, while presenting certain kinds of employment problems, would not seem to present the same kind of problems for the survival of the Canadian identity.

Obviously, the successful projection of future composition of the Canadian population with respect to these kinds of characteristics is possible only with knowledge of future immigration policy. Only with the continuation of present policy would one project a continuation of the trends observed during the 1961-71 intercensal decade. However, policy changes and their manner of implementation often have unintended consequences which tend to reduce their effectiveness in achieving their stated objectives. Such was the case with "nominated" immigrants, and the procedural changes which permitted visitors in Canada to apply for "landed" status, and to take advantage of very liberal appeal procedures. The quality of immigrants from certain areas, after 1967, fell considerably short of the levels expected under the new regulations.

The lesson to be learned is not so much a new one as it is a reminder that the full consequences of policy decisions can seldom be anticipated. For this reason, it is important to monitor changes in the population and in the character of immigration through an appropriate system of data collection and analysis. Population projections can narrow the range of probable outcomes, but the collection of relevant data and their continuing analyses is required to fully understand and assess the effects of governmental policies.

Appendix A

DATA REQUIREMENTS, DEFICIENCIES, AND IMPLICATIONS FOR POLICY EVALUATION

The introduction of new policies or modification of existing ones to solve social and economic problems presupposes detailed knowledge of the present population, and the nature of changes which have been occurring. A responsible government is also interested in reviewing and evaluating its policies to determine their effectiveness in achieving stated objectives. Thus the completeness and relevance of the government's data-collection procedures, their internal co-ordination, and the degree of access to these data either in their original or published form, are of crucial importance.

In the process of researching this paper for the Canadian Immigration and Population Study, a number of problems have been encountered related to data collection, processing, and publication practices which tend to restrict the scope and lessen the utility of analytical studies which are attempted. It is the purpose of this appendix to discuss these problems, and some of their implications for achieving a better understanding of Canada's demographic character and the impact of its immigration policy.

BASIC DATA REQUIREMENTS

To account fully for changes in Canada's population, and to assess properly the significance of the contribution made by the major demographic components, it is necessary to collect data for each of the terms in the following demographic equation:

$P_2 = P_1 + \text{Births} - \text{Deaths} + \text{Immigration} - \text{Emigration}$, where,

P_1 = population at time t_1

P_2 = population at time t_2

and, births, deaths, immigration and emigration refer to the numbers of events occurring during the time interval $t_1 - t_2$.

The Census Field of Statistics Canada provides data on P_1 and P_2 , for quinquennial periods (as of June 1), while vital statistics provide numbers of births and deaths, as well as age of mother, and age and sex of deceased, on an annual basis. The Department of Manpower and Immigration provides data on the number of immigrants by year, and on a quarterly basis. The only term for which data are not available, and are not collected, is "emigration". Without such data, emigration can only be reliably estimated for the periods between the decennial or quinquennial censuses. Even here, however, the estimation of emigration — a residual term — will include all the errors of estimation and data collection related to recording and reporting births and deaths, immigration, and population. Attempts to derive *annual* estimates of emigration as a residual are considerably more unreliable, because they must depend on annual population estimates which are themselves comprised, by necessity, of an estimated "emigration" factor.¹

¹ Statistics Canada develops independent estimates of annual emigration based on information from the two major countries of destination of emigrants, i.e. the United States and the United Kingdom. The major source of error lies in the estimate that Statistics Canada makes of emigration to all other destinations.

Because of errors in recording and collecting data on births, deaths, immigration, and the characteristics of the resident population, and variations in procedures for correcting these errors, the 10-year estimates of net migration have varied significantly over the earlier decades of Canada's demographic history.² Furthermore, the amount of information on the character of emigration which it is possible to derive on the basis of these data is generally limited to age and sex characteristics only. In addition, the relative error of estimation tends to increase as the units of analysis decrease in size, e.g. working with five-year age and sex groups instead of the total population.

The problem, very simply stated, is that the lack of actual data on the numbers and characteristics of emigrants, as well as native-born Canadians leaving for and returning from extended stays abroad, introduces a considerable error of estimation at any given time, and thwarts any attempts to understand the nature of migration as it affects the Canadian population. Our understanding is directly proportional to the amount and quality of the relevant data at our disposal. Before one can fully understand the migration process, i.e. why people come to Canada, or leave it, one must know who they are, and where they are going, as well as where they have come from.

Past attempts to understand the nature of immigration have shown little more than that Canada's ability to retain its immigrants, as well as its native-born population, has varied considerably over the years. For clues, the government, as well as the academic researcher, has had to rely on information provided by other countries, but these attempts have mainly been restricted to the United States and United Kingdom as the principal countries of destination.

It would seem that the historical tendency to ignore the emigration factor has been, in part, a reflection of the traditional attitude towards emigration in general, i.e. that the immigrant is usually perceived as a person making a *permanent move* from one country to another. Those who do not stay, but choose to return, or move on, often do not leave any statistical evidence of their presence, or their importance. The cumulative evidence of many studies has emphasized that those who establish permanent residence are perhaps the exception, rather than the rule, e.g. aged parents or refugees who cannot return to their country of birth as opposed to young, highly mobile workers. Even the well-founded suspicion that Canada served as a stepping-stone to the United States did little to focus official attention on the increasing importance of mobility and multiple moves as an inevitable characteristic of populations undergoing urbanization and industrialization.

A further consequence of this emphasis on the desirability of permanent migrants was a perpetuation of the myth of the "one-way" nature of migration. Research has shown increasing evidence that population movements in the modern world are two-way phenomena, and that periods of heavy immigration can occur at the same time that heavy emigration is taking place. Furthermore, this research has clearly indicated that the relationship between immigration and emigration is still

²W. E. Kalbach and W. W. McVey Jr., *The Demographic Bases of Canadian Society* (Toronto: The McGraw-Hill Co. of Canada Ltd., 1970), Table 2.4, p. 41.

not fully understood, and prediction of the latter from the former is highly unreliable.

The importance of information on emigrants has been constantly reiterated by a series of international conferences over the past half century, but Canada has not been a forerunner in its efforts to correct the inadequacies of its migration statistics. This may, of course, reflect the fact that Canada's geographical location next to the United States poses particularly difficult problems for the collection of emigration statistics, in addition to a lack of appreciation for their importance. However, recent interest in the "brain-drain" and its Canadian economic and educational institutional effects has stimulated research on emigration problems and re-emphasized the need for more comprehensive emigration statistics.

Beginning with the Fourth Session of the International Labour Conference in 1922, recommendations have been made pertaining to the collection of data on both immigrants and emigrants and the need for achieving comparability in definitions and data-collection procedures. Special attention has been focused on such categories of migrants as (1) immigrants-emigrants, (2) temporary-permanent, (3) transmigrants, and (4) citizens-aliens. Of relevance here is the fact that any suggested minimal list has always included questions for collecting data on emigrants. In this respect, Canada has been deficient, and as a consequence has had to rely on the United States and the United Kingdom for such information concerning residents of Canada who have left the country.

Whatever the reasons, and they appear to be numerous, the simple fact is that Canada knows very little about the basic nature of its migration streams on a continuing basis. No single study has ever been able to handle adequately the problem of out-migration, or return-migration. While rough estimates of the number of emigrants can be made for single five- or 10-year periods, information on their destinations, occupational characteristics, and reasons for leaving remain unknown. Individual studies by the Department of Manpower and Immigration staff, and academics such as Anthony Richmond and Louis Parai, while making significant contributions to our limited knowledge, have suffered alike from sampling limitations.

CHARACTERISTICS OF MIGRANTS

Immigration Statistics

There are two major problems with the data collected by the Department of Manpower and Immigration at the present time. First, the data on occupation pertains to "intended" occupation rather than to "actual" occupation at the time of leaving the country of previous residence. While it is perhaps essential for the government to know the occupational intentions of arriving immigrants vis-à-vis the current market situation, these statements may be a better reflection of one's perception of the Canadian job market than of the actual occupational qualifications and experience of those seeking admission to Canada. Also, it is interesting to note that while occupational information is generally collected only from male heads of families (in addition to single adults of labour-force ages),

analyses have shown that foreign-born women have high labour-force participation rates in those age groups which also have high proportions married.¹ Perhaps the educational attainment of all immigrants prior to arrival would provide a more general means of assessing their potential contribution to the labour force. This would be especially true if they are not able to pursue either their former, or intended occupations, yet must still seek employment to help insure their families' economic survival during the initial period of adjustment to Canadian society. While there are some difficulties in achieving international comparability in measures of educational attainment, the Census has achieved some progress in this matter for the resident foreign-born population.

The second major problem is related to the determination of the ethnic origin and cultural character of the immigrants, and the limitations of citizenship and former country of residence data. As is well-known, ethnic- and cultural-origins data had always been collected until the changes in the immigration regulations which occurred in 1967. At that time, not only were all references to ethnic origins dropped as part of the qualification for admission, but all questions pertaining to ethnic origins in the admission forms were omitted so that subsequent to 1967, no further data were collected, and this long historical series came to an abrupt end.

It is interesting to note that the reasons for dropping ethnic-origin questions were not the reasons for which these data had long been criticized.² There is ample evidence that ethnic-origin data have long suffered from ambiguities in definition and response, but the criticisms have been mainly directed towards the improvement of these data through the use of other or supplementary questions, e.g. mother tongue, country of birth, etc., rather than the elimination of ethnic-origin data per se.

The decision in 1967 to stop collecting ethnic-origin data would appear to have been a political one made to maintain consistency between policy and data-collection procedures, where the latter may have been seen as a screening device for keeping out the less-desired type of immigrant, even after ethnic origins were no longer to be used as admissions criteria. The unfortunate consequences of this decision are quite clear to the analyst who is concerned with determining the effect of policy change on the character of immigration. He can no longer identify those ethnic origins which constituted minority groups in their last country of permanent residence. Analysis of ethnic-origin data by country of last permanent residence, which was possible for 1967 and earlier years, shows that these minority groups often comprise the majority of the immigrants from these areas. Such minority groups, often under pressure to emigrate, would most likely be faced with a totally different set of problems than the more usual migrant who is a member of the dominant ethnic group, e.g. the Italian emigrating from Italy.

For certain countries, e.g. Italy and India, there would be a fair degree of correspondence between the country-of-birth statistics, and ethnic origin. For

¹Since a high proportion of married immigrant women ultimately join the labour force, it would be valuable to have information on their educational attainment, and work experience.

²For early criticisms of ethnic-origin data see N. Ryder, "The Interpretation of Origin Statistics", *The Canadian Journal of Economic and Political Science* (November 1955), pp. 466-79. Arguments favouring their use may be found in the author's monograph based on the 1961 Census of Canada, *The Impact of Immigration on Canada's Population* (Ottawa: Information Canada, 1970), pp. 4-6.

others, who receive large numbers of immigrants themselves, such data are not too helpful. In addition, there are groups which are simply not identifiable by these questions, e.g. Ukrainians, Jewish, as well as anyone coming from the United States, or the Latin American countries. Where the ethnic origin is not consistent with the dominant ethnic population in the country of last permanent residence, or is unidentifiable, the analyst is *unable* to link the input data (provided by the Department of Manpower and Immigration) with data on population characteristics published in the decennial censuses.

Language behaviour is another area which has received considerable attention of late. However, as far as improving the accuracy of ethnic classification is concerned, the use of "mother tongue" has introduced considerable error in the reporting of Jewish origins and is quite useless in differentiating between the various English-speaking ethnic and cultural origin groups such as the Welsh, Scottish, Irish, etc. However, the recent introduction of census questions concerning the language spoken in the home, in addition to mother tongue and ability to speak one or both of the official languages of Canada, are opening new research possibilities. Attempts to assess the significance of language behaviour for Canada's immigrant population would be considerably enhanced if similar data were made available for arriving immigrants.

In summary, the disadvantages accruing from the dropping of the ethnic-origins question are considerable. Analysts are deprived of an important data source for the evaluation of immigration policies and practices in a country which is placing increasing stress on its culturally pluralistic nature. Not only are these data needed in order to study the retention of ethnic characteristics among second and later generations, but the questions used in their collection need strengthening to increase their validity, utility and comparability to census data. The current language crisis in the province of Quebec certainly suggests the need for collecting more detailed data on the language behaviour of arriving immigrants as well as data concerning their ethnic origins.

PROBLEMS IN COMPARABILITY OF IMMIGRATION AND CENSUS DATA

In addition to comments already made, there are several additional and important problems dealing with the comparability of data which affect their utility in research. Obviously, the needs of the various data-collecting agencies differ from one another, and dictate the form of the data to be collected, as well as the procedures to be used. However, since data from these several sources are often used in the same analyses, and even in the same measures of demographic events, their comparability is essential.

The following comments refer to a number of problems which present difficulties of varying degree for the researcher in the areas of population and migration:

(1) *Country of Birth*. It should be made clear in the annual reports of immigration whether or not "country of birth" is defined in terms of the country's present boundaries, as is the case with its use in the census.

(2) *Ethnic Origin*. It appears that the concept of ethnic origin is treated similarly by both the census and the Department of Manpower and Immigration. However,

it is not clear to what extent the actual data-collection procedures are similar. With the employment of "self-response" for the first time in the 1971 Census, it is possible that new problems of comparability may have been introduced. Also, the use of language by census enumerators to assist those respondents having difficulty in identifying their ethnic origins may have introduced an additional disparity, the implications of which will need to be investigated. The procedures used, and the definitions employed while collecting these data at points of entry should be clearly explained in the annual reports of immigration statistics. Where differences exist between immigration and census procedures and terminology, they should be clarified (and justified).

(3) *Intended Occupation versus Actual Occupation.* While "intended" occupation has value for government and researcher alike, much would be gained by collecting data more comparable to that collected at the time of the census. Knowledge of an immigrant's actual occupation prior to his departure for Canada might better reflect his potential for contributing to the country's labour force needs than what he states as his intentions upon arrival. The latter might tend to reflect Canada's current occupational priorities to a greater degree than his actual experience, skills, and socio-economic background.

In addition, the immigrant's actual occupation prior to his departure for Canada would be more consistent with the census definition which asks about the nature of the work that one was engaged in during the week prior to the census date. Knowledge of the immigrant's prior occupation would seem to be more crucial in determining the degree of adjustment achieved in Canada than what he intended to do after he arrived, although the latter, reflecting his aspirations, would have considerable significance for the immigrant's assessment of his degree of adjustment. The concern here is not that data be collected to replace information on intended occupation, but to supplement it with data more comparable to that collected in the census, thus enhancing its research utility.

(4) *Calendar Year versus Census Year.* While a minor problem, this difference in the time base for immigration and census statistics still presents a number of methodological frustrations. While the necessary data exist, they are not available to the general user of immigration data since the annual reports are preceded by quarterly reports which do not break conveniently at the census date of June 1.

The problem is partly overcome by the use of intercensal periods in Table 1 of the annual immigration reports. However, for the investigator interested in annual estimates of natural increase, immigration, and emigration, there should be a table of annual immigration based on the intercensal year, i.e. June 1 to May 31. The annual vital statistics reports avoid this problem by providing birth and death data by month so that the researcher can recombine the data as his needs dictate. The publication of monthly immigration totals in the annual reports would provide similar advantages to the population researcher.

(5) *Ethnic Origins and Nativity for Vital Statistics.* The census can and has provided fertility data by ethnic origin of mother, which is of considerable value in assessing the relative contributions made by Canada's ethnic populations. However, a basic inconsistency is introduced because the data published equate the child's ethnic origin to that of the mother's, while the method of determining ethnic origin for any census individual requires the identification of ethnic origin on the male

side. Thus the researcher can assess the relative fertility of women of various ethnic-origin groups, but he can not estimate the contribution made by births to the various ethnic populations without knowledge of the father's ethnic origin. For the sake of consistency this could be partly resolved if vital statistics were published, as in the past, giving the ethnic origin of the father by the ethnic origin of the mother.

Similarly, information on the nativity and ethnic origins of the deceased should be collected, as it was prior to 1959, to permit the assessment of relative contributions to natural increase by the foreign-born and native-born components of the population. The present case against the collection of such information would appear to be somewhat weakened in the face of the current interest in immigration and cultural pluralism. Certainly the original objections to the collection of these data by British Columbia and Ontario (who were the first to drop these items from their vital statistics forms) were not sufficiently strong to compensate for their loss to the social scientist doing research on Canadian society.

SUMMARY COMMENT

The current state of data collection, processing, and publication in Canada is a mixed one. From an *overall* perspective, both quality and quantity of statistical data in Canada are relatively good. However, even though significant improvement has been made in recent decades there still remain problem areas that require resolution.

Most frustrating perhaps, is the lack of information on emigration. While efforts are being made to improve this situation by increasing co-operation with the countries of destination, much more might be done to increase our knowledge through the application of sample survey techniques and more specialized studies similar to the current longitudinal study of immigrants being conducted by the Department of Manpower and Immigration.

Further improvements can be made through closer co-operation between departments collecting similar data, and through more effective liaison with social scientists who use these data in their research. It is imperative that the government know what current data needs are, and for the scientist to have a thorough understanding of the data-collection and processing procedures. If this cannot be achieved through the publication program, then perhaps it can be accomplished through government-sponsored seminars. The latter course would have the additional value of providing for a continuing exchange of ideas between the data producer and the data analyst or consumer. This problem is further complicated by the expansion of the "in-house" research program on the part of the government whose needs tend to be assigned higher priorities vis-à-vis the needs of the non-governmental researcher.

