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# Current Demographic Analysis

Report on the Demographic Situation in Canada 1986

Jean Dumas Demography Division

with the collaboration of Réjean Lachapelle Social and Economic Studies Division

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# **Symbols**

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- ... figures not appropriate or not applicable.
- nil or zero.
- -- amount too small to be expressed.

The last data analysed in this report were those available at time of writing.

#### **Preface**

Though demographic trends are not subject to rapid and dramatic fluctuations, it is important to recognize those changes which are likely to have long-term implications. In the three years since the publication of the *Demographic Situation in Canada*, 1983, some trends have been confirmed, others have changed course, and new patterns have emerged. The present report highlights a number of important demographic developments.

In recent years, the incidence of both marriage and divorce has declined, but that of common-law union formation has increased. Several years of precipitous decline in fertility have given way to stability, but at a level that is insufficient to ensure the renewal of generations. Important changes in internal migration have taken place in recent years: Quebec has returned to a near balance in population exchanges, while Ontario has regained its strong attraction for migrants. Other significant demographic developments include the continuation of the decline in deaths due to motor vehicle accidents, and unexpected progress in male longevity.

Ivan P. Fellegi Chief Statistician of Canada

#### **ACKNOWLEDGEMENTS**

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#### HIGHLIGHTS

The population of Canada, according to the 1986 final census counts, was 25,354,064 persons, yielding an average annual growth rate since the 1981 Census of 0.84%. This is the lowest growth rate in Canada's modern history. From a high of about 3% in the 1950s, the average annual rate of increase fell gradually to 2% in the 1960s, and to 1.3% in the 1970s. One has to go back to the Great Depression of the 1930s to find such a low rate of increase.

Underlying this slowdown is a significant shift in the determinants of population growth. In the 1960s and partly in the 1970s, the deceleration in growth was due primarily to a rapid decline in birth rates – from about 28 births per 1,000 population in the late 1950s, to about 16 per 1,000 in the late 1970s. The birth rate subsequently stabilized at about 15 per 1,000, whereupon the decline in number of immigrants – from 135,000 in 1981-82 to 85,000 in 1985-86 – became the most important factor in the deceleration of growth.

#### XXX

The aging of the Canadian population began later than that in Europe, but aging here is proceeding at a more rapid pace. To the low level of fertility, which is the main determinant of aging, is added the increase in life expectancy at retirement age and beyond. The number of persons in Canada aged 75 and over has increased by 140 percent in ten years, and now stands at more than one million.

#### XXX

The current pattern of fertility is characterized by stability at the national level. The total fertility rate (TFR), over the first half of the 1980s, has hovered around 1.7 births per woman – below the replacement level of 2.1 required to ensure the renewal of generations. An increasing percentage of women are having their first child after the age of 30, reflecting the emergence of an older pattern of childbearing. Quebec, with a TFR of 1.4, exhibits the lowest fertility rate of all the provinces. A cohort analysis of childbearing for Canadianborn women reveals that at least some of the youngest birth cohorts of women (those born after 1952) will not yield enough births to replace themselves.

#### XXX

Nuptiality (the rate of marriage) continues to decline, and Quebec exhibits the lowest rate among the provinces. In terms of divorce, 14 years of uninterrupted annual increases in both absolute numbers and rates have given way to annual decreases beginning in 1983. In contrast, there has been a significant rise in the incidence of common-law union formation.

The last half of the decade of the seventies saw an unexpected increase in longevity, with the current trend pointing towards a larger relative contribution from mortality reduction at advanced ages. In 1981, newborn females could expect to live for 78.98 years, while males could expect 71.88 years. For the first time ever in Canada, however, the gain in life expectancy over a five-year period (1976-1981) was greater for males than for females.

Over a recent 10-year period, the percentage increase for certain smoking-related cancers was more than three times higher for females than for males. Of all the recent and unexpected changes in mortality patterns, the most striking has been the drop in deaths due to motor vehicle accidents. Mortality from this cause plummeted by more than forty percent over a ten-year period, and is still in decline.

#### XXX

Population movements, both into and within Canada, have recently hit very low levels by historical standards. The number of immigrants to Canada in 1985 was among the lowest of any year in the post-war era. The average age of immigrants has increased, and 1984 marked the first time ever that Canada admitted more immigrants at retirement age and over than immigrants under 5 years of age.

Internal migration has returned to more traditional patterns following the slowdown in the oil-boom in Western Canada. Ontario, Canada's most populous province, has regained its strong attraction for migrants. In Alberta, the recent population outflows have given way to a return to near equilibrium in exchanges with other areas of the country. The recent turnaround in the net migration picture in Quebec is noteworthy. After several years of heavy losses, Quebec has almost reached parity between out- and in-migration. As a region, the Atlantic Provinces has returned to a negative net migration scenario. Of special note is the fact that British Columbia, for the first time, recently recorded a period of negative net migration.

#### XXX

Since 1971, the share of anglophones in the country as a whole has increased, whereas that of francophones has diminished. The proportion of the latter, however, has increased in all areas where francophones already constituted a majority of the population.

During the years preceding 1971, as well as in the decade ending in 1981, linguistic transfer favoured the English language — even in the province of Quebec. With few exceptions, however, internal migration gave an advantage to the French language, in relative terms, in the three quinquennial periods between 1966 and 1981.

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#### POPULATION GROWTH

#### National

The population of Canada, according to the final 1986 Census counts<sup>1</sup>, was 25,354,064 persons. The average annual growth rate since the 1981 Census, on the basis of these figures, is 0.84%, the lowest rate of growth in recent history (Table 1). As low as the current rate of growth is, it is not entirely without precedent. At the advent of World War I, as well as during the Great Depression of the thirties, growth either dipped below, as in the current period, or was at the threshold of, the 1% level.

In examining the pattern of population growth in Canada since the beginning of this century it is evident that relatively low growth has been the norm, although two periods with exceptionally high growth rates stand out: the years preceding World War I, and the roughly 15 years of the post-World War II "baby-boom" (Chart 1). Both of these periods displayed the phenomenon of concurrently high fertility and high international immigration, coupled with low rates of emigration.

The annual growth rate peaked at 3.29% in 1956-57, and remained at a high level until the start of the decade of the 1960's. Growth then declined to low levels in tandem with, and in response to, the decline in fertility. Since then, the small fluctuations in the level of growth have been determined primarily by movements in international migration.

The net effect of declining fertility, when coupled with an increase in the number of women in the reproductive years, is that the number of births has varied little over the last dozen years. On the other hand, progress against mortality has provided a hedge against the rise in the number of deaths which accompanies an aging population. The overall result has been a noticeable stability in natural increase<sup>2</sup> (varying between the highest value of 202,900 and the lowest value of 176,000, over the past 12 years).

Further observations include the fact that periods of slow growth in Canada have historically been associated with economic downturns, leading to a feeling of uneasiness about sustained periods of low growth. It also appears that low levels of immigration have frequently coincided, on average, with periods characterized by low birth rates (Chart 2).

The analyses of demographic change in this report are based on the estimated population of Canada as of June 1, 1986 since these were the only detailed figures available at the time of writing.

<sup>&</sup>lt;sup>2</sup> For definitions and explanations of the demographic terminology in this report, the reader may wish to consult, Peron, Yves and Claude Strohmenger, *Demographic and Health Indicators: Presentation and Interpretation*. Statistics Canada, Catalogue 82-543E.

Table 1. Demographic Accounts of Canada, 1951-1986

Year <sup>1</sup>	Population at June 1	Total Annual Increase <sup>1</sup>	Rate of Total Annual Increase <sup>2</sup>	Births <sup>1</sup>	Deaths <sup>1</sup>	Natural Increase <sup>1</sup>	Net Migration <sup>1</sup> , <sup>3</sup>
1951	14,009,4004						
1971	21,568,3004	377,9005					***
1972	21,801 3006	233,000	1.07	353,500	159,100	194,400	38,600
1973	22,043 0006	241,700	1.10	345,400	162,300	183,100	58,600
1974	22,363,9006	320,900	1.45	342,000	166,000	176,000	144,900
1975	22,697,1006	333,200	1.48	354,200	169,200	185,000	148,200
1976	22,992,6004	295,500	1.29	363,000	166,600	196,400	99,100
1977	23,272,8006	280,200	1.21	358,500	166,000	192,500	87,700
1978	23,517,0006	244,200	1.04	358,500	168,500	190,000	54,200
1979	23,747,3006	230,300	0.97	364,600	165,900	198,700	31,600
1980	24,042,5006	295,200	1.24	367,200	171,300	195,900	99,300
1981	24,343,2004	300,700	1.24	371,500	170,300	201,200	99,500
1982	24,631,8007	288,600	1.18	372,500	172,500	200,000	88,600
1983	24,884,5007	252,700	1.02	373,100	175,800	197,300	55,400
1984	25,124,2007	239,600	0.96	374,700	174,200	200,500	39,100
1985	25,359,8007	235,700	0.93	380,900	178,000	202,900	32,800
1986	25,591,1007	231,300	0.91	376,600	182,800	193,800	37,500

<sup>&</sup>lt;sup>1</sup> From June 1 of the preceding year to May 31 of the year indicated.

Sources: Statistics Canada, Censuses of Canada.

Statistics Canada, Catalogues 91-201 and 91-210 (annual).

### An International Perspective

Even though the growth rate in Canada is considered to be low, it is actually near the top among industrialized countries, and for the period 1980-1984, only Australia had a higher growth rate. Among these countries, seven had zero or negative growth, and the United States, over the same period, experienced lower growth than Canada (Table 2).

<sup>2</sup> Percent.

<sup>&</sup>lt;sup>3</sup> Difference between total increase and natural increase.

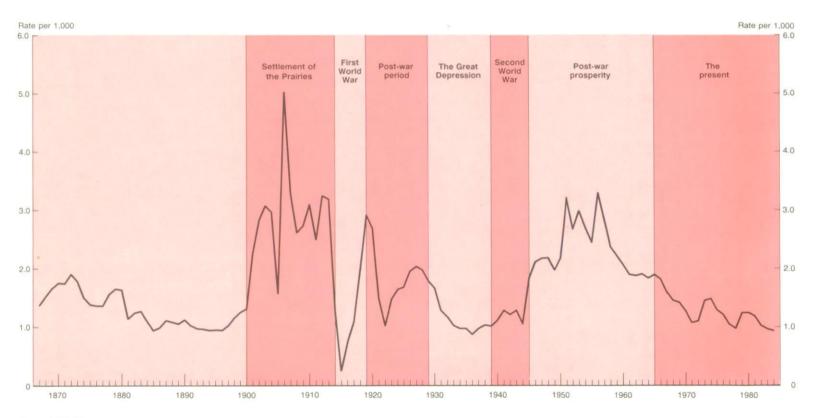
<sup>&</sup>lt;sup>4</sup> Census data.

<sup>&</sup>lt;sup>5</sup> Average annual growth, June 1, 1951 to May 31, 1971.

<sup>&</sup>lt;sup>6</sup> Intercensal estimate.

<sup>&</sup>lt;sup>7</sup> Preliminary postcensal estimate.

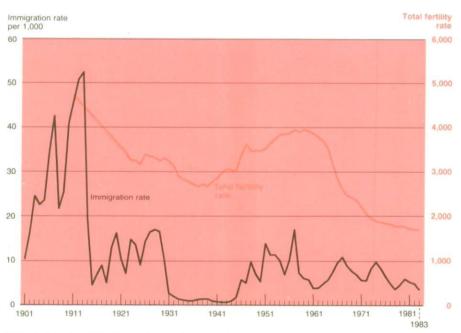
Chart 1 Annual Rate of Growth, Canada, 1867-1984



Source: Table A1.

The list of countries with higher growth rates than Canada's doesn't stop at Australia, however. A number of countries in the less developed areas of the world have much higher rates of natural increase and higher overall growth rates than does Canada. This accounts for the change between 1950 and 1984 in the comparative ranking of Canada with other countries in terms of the size of their populations (Table 3). Canada fell back only slightly in its relative rank over the 34 year period, having surpassed the low-fertility, low-growth European countries of Yugoslavia and Romania in size, while having been

Chart 2 Immigration Rate and Total Fertility Rate, Canada(1), 1901-1983



<sup>(1)</sup> In calculating the total fertility rate for Canada, Newfoundland has been excluded.

surpassed by the high-fertility, high-growth countries of South Africa, Zaire and Columbia (Bangladesh, currently ranked 8<sup>th</sup>, was not a separate state in 1950). For Canada, this surprising relative stability in rank, especially when considering the very high fertility of the world's underdeveloped nations, is due to the high concentration of the Third World in a few populous nations.

#### **Provincial Patterns**

As for the country as a whole, provincial growth depends on the levels of natural increase and net migration. As the pattern of fertility and mortality become increasingly uniform across the country, regional differences in growth

Table 2. Average Annual Growth Rate for the 1980-1984 Period Among the World's Largest Industrialized Countries

Country	Growth (in%)
Canada	1.1
Australia	1.4
Austria	0.0
Belgium	0.1
Bulgaria	0.3
Czechoslovakia	0.2
Denmark	-0.1
Federal Republic of Germany	-0.2
France	0.6
German Democratic Republic	-0.1
Greece	0.7
Hungary	-0.1
Ireland	1.0
Japan	0.7
Luxembourg	-0.1
Netherlands	0.5
New Zealand	0.9
Norway	0.3
Poland	0.9
Portugal	0.7
Romania	0.8
Spain	0.8
Sweden	0.1
Switzerland	0.2
United Kingdom	-0.1
United States	1.0
U.S.S.R.	0.9
Yugoslavia	0.7

Source: United Nations, Demographic Yearbook, 1984.

become, generally, the product of regional variations in international and internal migration. The 1983 report described the changes between 1977 and 1981, and the current report considers the most recent developments in this domain. (Detailed data can be found in Appendix Table A3.)

In 1985-86, the Atlantic Provinces experienced a rate of population increase well below the national level. This was primarily the result of losses through migration, but a decline in natural increase also played a part.

Table 3. World Population, Canada and Countries with Larger Populations, 1950 and 1984

	1950			1984		
Rank	Country	Population (in thousands)	Rank	Country	Population (in thousands)	
	WORLD	2,504,000		WORLD	4,763,000	
1	China	463,500	1	China	1,051,550	
2	India	358,000	2	India	746,740	
3	U.S.S.R.	193,000	3	U.S.S.R.	275,000	
4	United States	151,689	4	United States	236,680	
5	Japan	82,900	5	Indonesia	159,900	
6	Pakistan	75,040	6	Brazil	132,580	
7	Indonesia	73,500	7	Japan	120,020	
8	Brazil	52,124	8	Bangladesh	96,730	
9	United Kingdom	50,616	9	Pakistan	93,290	
10	G.D.R.	47,607	10	Nigeria	92,040	
11	Italy	46,272	11	Mexico	76,790	
12	France	41,934	12	West Germany	61,180	
13	Rep. of Korea	29,500	13	Vietnam	58,300	
14	Spain	28,287	14	Italy	56,980	
15	Mexico	25,368	15	United Kingdom	56,490	
16	Vietnam	25,000	16	France	54,940	
17	Poland	24,977	17	Philippines	53,350	
18	Nigeria	24,000	18	Thailand	50,400	
19	Turkey	20,935	19	Turkey	48,260	
20	Egypt	20,439	20	Egypt	45,660	
21	Philippines	19,557	21	Iran	43,410	
22	Iran	18,772	22	Rep. of Korea	40,580	
23	Burma	18,489	23	Spain	38,720	
24	Thailand	18,313	24	Burma	37,610	
25	Argentina	17,196	25	Poland	36,910	
26	Yugoslavia	16,250	26	Ethiopia	35,420	
27	Romania	16,094	27	Zaire	32,080	
28	Ethiopia	15,000	28	South Africa	31,590	
29	Canada	13,845	29	Argentina	30,100	
			30	Columbia	28,220	
			31	Canada	25,150	

Source: United Nations, Demographic Yearbook.

In Quebec, a turnaround in migration flows has meant a larger population increase than has been seen in any of the previous five annual periods, despite a persistent decline in natural increase. The net loss through migration of 13,900 persons in 1982 became progressively smaller in succeeding years, and finally turned positive in 1985-86 with a net gain of 3,900 persons.

Ontario, on the other hand, continued the strong growth trend exhibited during recent periods, due primarily to substantial gains through migration (53,100 in 1985-86). Ontario continues to exert a powerful attraction on migrants and remains the leader in growth.

In the West, population growth in every province and territory, with the exception of Alberta, was lower in 1985-86 than in either 1983-84 or 1984-85. In Saskatchewan, growth dipped to one-third of its 1984-85 level following several years of substantial gains. While still positive, this reduced growth can be attributed to a turnaround in net migration, as a loss in excess of 6,000 persons was recorded in the 1985-86 period. The swing in absolute numbers was not as great in Manitoba, but the year 1985-86 saw a small net loss to migration and a slight drop in natural increase. British Columbia, for the first time, recorded negative net migration (-1,700 in 1985-86). Its rate of total increase for 1985-86 stood at 0.78%, down from 1.14% for the year before.

In contrast, growth in Alberta rebounded to its earlier levels. The recent and short-lived slowdown in growth, which began in the 1982-83 period, can largely be attributed to migration. After having made large net gains through population exchanges in previous years, Alberta suffered unprecedented net losses for three years in a row during 1982-83, 1983-84 and 1984-85. With a migration balance of almost zero in 1985-86, the full weight of growth in Alberta's population was borne by natural increase. Its 1985-86 rate of increase stands at 1.3%, which, with that of Ontario, is the highest rate recorded in Canada for that year.

Small population declines were recorded in both the Yukon and Northwest Territories in 1985-86, but because of the small numbers involved, these trends should be interpreted with caution.

Table 4 gives a synoptic presentation of the principal demographic indicators for the provinces and territories, as well as for Canada overall.

#### POPULATION STRUCTURE

## Age

The aging of a population is a slow process, but one that has tremendous momentum. The Canadian population began to age some time ago, and the

Table 4. Rates<sup>1</sup> and Summary Demographic Indicators, Canada, Provinces and Territories, 1981-1985

	Year	New- found- land	Prince Edward Island	Nova Scotia	New Bruns- wick	Quebec	Ontario
Birth Rate (per 1,000)	1981 1982 1983 1984 1985	17.8 16.1 15.4 14.8 14.6	15.5 15.7 15.4 15.6 15.8	14.3 14.5 14.4 14.2 14.1	15.1 15.0 14.9 14.5 14.1	14.8 14.0 13.5 13.4 13.1	14.2 14.3 14.4 14.7 14.6
Total Fertility Rate	1981 1982 1983 1984 1985	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1.91 1.93 1.89 1.89 1.90	1.64 1.67 1.66 1.63 1.62	1.71 1.70 1.69 1.65 1.60	1.61 1.52 1.47 1.46 1.43	1.63 1.65 1.66 1.69 1.68
Total First Marriage Rate <sup>2</sup> (per 1,000)	1981 M F 1982 M F 1983 M F 1984 M F 1985 M	675.6 648.4 682.5 646.4 661.7 624.6 607.4 657.1 554.6 532.1	718.8 689.6 722.5 665.8 795.4 746.2 805.4 783.6 722.5 731.2	706.7 685.2 674.6 658.3 655.0 641.2 656.8 677.3 651.0 661.9	689.1 667.6 652.4 645.1 672.5 664.7 659.3 673.4 658.7 668.9	570.5 578.0 523.4 535.0 492.1 504.7 494.7 520.6 487.8 515.4	734.2 715.9 731.2 723.7 705.7 701.2 700.3 709.8 695.0 708.0
Rate of Natural Increase (per 1,000)	1981 1982 1983 1984 1985	12.2 10.2 9.4 8.7 8.5	7.4 7.7 6.9 6.7 7.1	6.7 6.3 6.2 6.3 5.8	7.7 7.6 7.5 7.1 6.8	8.2 7.3 6.7 6.6 6.2	6.9 7.0 7.1 7.4 7.2
Total Growth Rate (per 1,000)	1981 1982 1983 1984 1985	0.4 10.7 7.5 2.4 2.6	1.6 8.1 13.7 14.3 6.3	4.0 9.2 11.1 11.0 6.4	1.3 10.7 10.6 8.5 3.6	7.4 5.0 5.1 5.9 6.9	8.3 12.7 12.7 14.2 13.0
Net Migration Rate (per 1,000)	1981 1982 1983 1984 1985	-11.8 0.5 -1.9 -6.3 -5.9	-5.8 0.4 6.8 7.6 -0.8	-2.7 2.9 4.9 4.7 0.6	-6.4 3.1 3.1 1.4 -3.2	-0.8 -2.3 -1.6 -0.7 0.7	1.4 5.7 5.6 6.8 5.8
Population Aged 65+ as a Per- centage of the Total Population on June 1	1981 1982 1983 1984 1985	7.7 7.9 8.0 8.2 8.5	12.2 12.4 12.4 12.4 12.5	10.9 11.1 11.2 11.3 11.5	10.1 10.3 10.4 10.6 10.8	8.8 9.0 9.2 9.4 9.6	10.1 10.2 10.3 10.5 10.7
Life Expectancy at Birth <sup>3</sup>	1981 M F 1982 M F 1983 M F 1984 M F	71.95 78.65 72.08 78.81 72.37 78.70 72.37 78.63	72.83 80.49 72.83 80.45 72.70 80.27 72.63 79.92	70.96 78.37 71.12 78.88 71.34 79.24 72.15 79.20	71.08 79.19 71.51 79.08 71.91 79.24 72.30 79.88	71.08 78.71 71.46 79.12 71.77 79.41 71.92 79.58	72.28 79.03 72.63 79.33 72.92 79.59 73.25 79.78
Infant Mortality Rate (per 1,000)	1981 1982 1983 1984 1985	9.7 10.8 10.6 9.2 10.8	13.2 7.8 8.4 8.2 4.0	11.5 8.6 9.4 7.8 7.9	10.9 10.5 10.6 7.8 9.6	8.5 8.8 7.7 7.3 7.2	8.8 8.3 8.0 7.6 7.3

Table 4. Rates<sup>1</sup> and Summary Demographic Indicators, Canada, Provinces and Territories, 1981-1985 - Concluded

	Manitoba	Saskat- chewan	Alberta	British Columbia	Yukon	North- west Terri- tories	Canada
Birth Rate (per 1,000)	15.7 15.6 15.8 15.8 16.0	17.8 18.1 18.0 17.9	19.1 19.4 19.4 18.8 18.6	15.1 15.3 15.2 15.3 14.9	23.2 22.1 24.2 23.8 20.4	28.5 28.9 30.8 29.2 28.2	15.3 15.1 15.0 15.0 14.8
Total Fertility Rate	1.86 1.84 1.87 1.86 1.88	2.14 2.17 2.13 2.11 2.09	1.94 1.96 1.96 1.92 1.93	1.71 1.74 1.73 1.76 1.73	2.14 2.04 2.36 2.25 1.97	3.00 3.00 3.20 2.99 2.86	1.70 1.69 1.68 1.69 1.67
Total First Marriage Rate <sup>2</sup> (per 1,000)	745.8 728.3 744.8 728.3 718.3 716.5 715.5 723.4 689.7 700.9	727.3 708.3 727.3 719.5 701.9 699.9 656.4 671.7 634.3 658.8	676.4 716.8 659.1 714.4 621.8 672.4 609.6 663.5 605.3 656.4	734.6 736.8 694.0 708.4 678.1 695.0 667.3 695.0 638.0 665.2	753.3 739.9 723.2 688.4 696.4 800.0 674.8 658.5 588.3 588.3	479.1 500.3 467.6 477.6 488.3 503.0 409.9 468.0 347.5 394.5	679.2 679.2 656.8 663.2 632.4 640.8 626.3 647.7 615.4 638.1
Rate of Natural Increase (per 1,000)	7.2 7.4 7.7 7.9 7.8	10.0 9.7 10.3 10.2 9.9	13.3 13.8 14.0 13.4 13.0	7.9 7.9 8.2 8.1 7.5	17.1 17.1 19.1 18.8 15.0	24.2 24.0 25.8 24.4 24.0	8.2 8.1 8.0 8.0 7.7
Total Growth Rate (per 1,000)	6.5 12.3 10.8 11.1 8.9	11.4 12.8 13.6 13.3 4.8	39.0 20.2 4.4 -0.6 11.3	21.3 11.5 12.2 11.4 7.8	34.6 -34.6 -17.8 35.2 -17.5	32.8 35.9 26.6 22.0 5.9	11.9 11.0 9.6 9.6 9.4
Net Migration Rate (per 1,000)	-0.7 4.9 3.1 3.2 1.1	1.4 3.1 3.3 3.1 -5.1	25.7 6.4 -9.6 -14.0 -1.7	13.4 3.6 4.0 3.3 0.3	17.5 -51.7 -36.9 16.4 -32.5	8.6 11.9 0.8 -2.4 -18.1	3.7 2.9 1.6 1.6
Population Aged 65 + as a Per- centage of the Total Population on June 1	11.9 12.0 12.1 12.2 12.4	12.0 12.2 12.2 12.3 12.4	7.3 7.3 7.4 7.6 7.9	10.9 11.0 11.3 11.5	3.2 3.4 3.4 3.4 3.4	2.9 2.8 2.7 2.6 2.5	9.7 9.9 10.0 10.2 10.4
Life Expectancy at Birth <sup>3</sup>	72.24 78.77 72.24 79.19 72.71 79.62 73.08 80.15	72.43 79.61 72.76 80.10 73.10 80.35 73.78 80.67	71.96 79.06 72.66 79.47 73.22 79.88 73.51 80.18	72.62 79.55 73.04 79.91 73.42 80.47 73.80 80.54			71.88 78.98 72.23 79.32 72.57 79.53 72.70 79.65
Infant Mortality Rate (per 1,000)	11.9 9.1 10.4 8.6 9.9	11.8 10.5 10.1 9.4 11.0	10.6 9.8 8.4 9.6 8.0	10.2 9.9 8.8 8.6 8.1	14.9 21.0 18.5 13.5 10.8	21.5 16.2 20.8 17.3 16.7	9.6 9.1 8.5 8.1 7.9

Source: Various Statistics Canada Publications.

The rates are calculated for the calendar year.
 Calculated for ages 15-49.
 For 1982 to 1984, these figures should be considered estimates, since the denominators used in their calculation were estimates.

process has continued into the present. Evidence is provided by examination of the change in the age structure of the population over the past 25 years. During this period, the median age at the national level has increased by 4 years for males and 5 years for females (Table A4). On June 1, 1986, Canadian males had a median age of more than 30 years (30.4) and Canadian females, almost 32 years (31.9). These values represent the highest median ages in Canada's history.

Of the three principal factors having an influence on aging (mortality reduction, the age structure of migrants, and the low rate of fertility), without question it is the low level of fertility that has had the greatest effect on the observed changes, just as it was the high rate of fertility during the baby-boom that produced the low median age during that period. The 1961/1985 comparative age pyramid illustrates the transformations that have taken place in the age structure of the Canadian population (Chart 3).

#### Fewer Young, More Elderly

Clearly, the fall in the birth rate has resulted in a smaller base for the 1986 pyramid, in comparison with the broad 1961 base. Furthermore, as the youths of 1961 are now in the adult group, the youth dependancy ratio (those aged 0-14 expressed as a percent of those aged 15-64) has been reduced considerably, from 58.1% in 1961, to 31.2% in 1986. Progress in the area of mortality has had an effect on the top of the pyramid, such that more persons now reach an advanced age than ever before. The 1961 adult cohorts have a higher proportionate share of the 1986 elderly population than would have been anticipated, since not only has the mortality experience become slightly more favourable, but the decline in fertility has reduced the proportionate share of the young. Consequently, the elderly dependancy ratio increased from 13.1 to 15.6 percent during the period (the elderly dependancy ratio is the ratio of persons age 65 + to those aged 15-64). The total dependancy ratio (the sum of the youth and elderly ratios), as a result of the above changes, decreased to 46.8 "dependents" per 100 adults in 1986, representing the lowest rate in Canadian history. While this situation leads to a favourable economic climate in terms of a reduction in the dependancy burden for those in the "productive years", at the same time it presents a challenge for job creation.

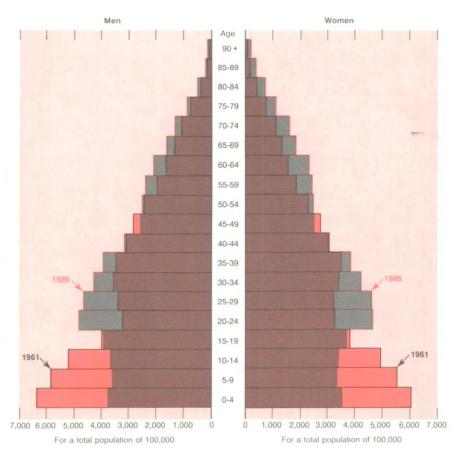
The large number of births which occurred during the nearly twenty years of the baby-boom resembles a large wave moving through the various phases of the life cycle (Chart 4). At each juncture in the aging process, the needs of the individuals in this huge cohort change, and with each change come new challenges.

Pre-schoolers (aged 0-5) have never accounted for as large a proportion of the population as they did in 1961, when 14.7% of Canadians were below school age. Their portion has also decreased considerably, but less than would be expected based on the low level of fertility. This attenuated decline is due

to the fact that the current pre-schoolers are children whose parents are part of the large "baby-boom" cohorts, a substantial number of whom have postponed childbearing. Pre-schoolers, as a consequence, accounted for 7.5% of the 1986 population, and are part of what has been called the "echo effect" of the baby-boom. This phenomenon is also clearly visible in Chart 4.

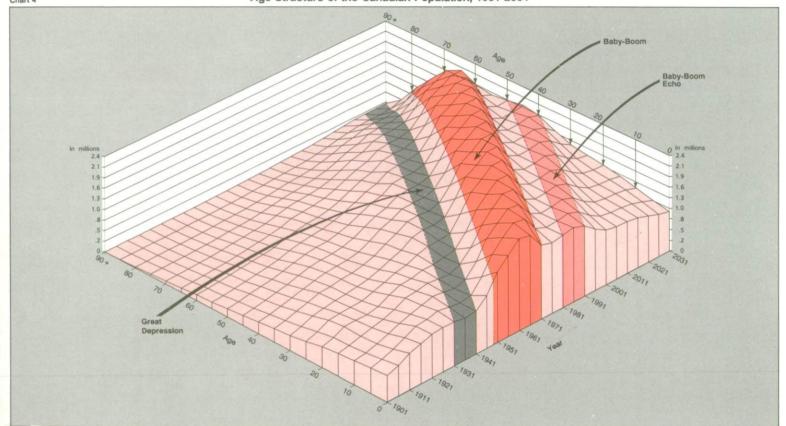
The broader youth segment (those aged 0-14) attained its greatest share of the population in 1961, while among the school-aged population (those aged 6-15), the peak was reached in 1971. At that time, 21.3% of Canadians were of school age. In 1986, only 12% were in this age group.

Chart 3 Age Pyramid of the Canadian Population, June 1, 1961 and June 1, 1985



Source: Statistics Canada, Census of Canada.





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The 17-24 age group, which largely represents entrants into the job market, attained its maximum in 1981, and its numbers will continue to diminish until the end of the century.

The adult group (15-64) represents a much broader age segment than that of the youth group, and as a consequence, variations in its size have lead to smaller relative changes in its proportion. As a result of the baby-boom "wave" this group has practically reached its maximum (at about 68% in 1986) after having reached a minimum (in recent history) of 58.4% in 1961. Only unforeseen changes in migration or fertility are capable of slowing down the rate of decline in its proportion. A rise in fertility would reduce its share, as will the decline in mortality at advanced ages.

The elderly are currently attracting much interest, due to the rapid increase in their numbers, and the broad implications that such an increase has. The 65+ age group grew from 7.6 to 10.4 percent of the overall population in 25 years, which represents a 143% increase in number. Even more impressive has been the increase in the 75+ subgroup. Its ranks, currently numbering close to 1.1 million persons, is expected to increase in the near future as a result of the double effect of the arrival of a large number of persons at the age threshold, as well as increases in life expectancy at age 75 and beyond.

## An International Comparison

Few countries in the Western world have a population age distribution histogram that can justify being called a "pyramid". In addition to the general decline in fertility, there have been fluctuations in birth rates and a thinning-out of some age groups. The pyramids for Canada and the United States, however, are not as irregular as those for European countries (Chart 5). For both Canada and the United States, the imbalance between the sexes in the upper age range is small, the indentations are shallow, and the base of the pyramid is larger. But this situation does not mean that North America is immune to important transformations in demographic structure, and in particular, to rapid aging.

### A North American Peculiarity

Not long ago the Canadian public became aware of the fate that weighs upon all populations: grow in size or grow old. The effects were first noted around the end of the 1960's with the emptying of the large schools that had been built to accommodate the baby-boom cohorts. Such school closures made visible the changes in the birth rate that had begun several years earlier. Currently, it is the arrival at retirement age of larger and larger contingents each year that has caught the attention of policy makers.

That the countries of Europe are farther along the aging path is well known. What requires more attention is the speed at which the aging process is progressing. In effect, it is more or less the speed with which the ratio of the group sizes change, that determines the extent of transformations in the socioeconomic

life of individuals, and in society in general. If one uses the youth dependancy ratio as a measure of aging "from the bottom, up", and that of the elderly as a measure of aging "from the top, down", then aging progresses over any period to the extent that the former decreases, in combination with an increase in the latter. The contrast between the Western European countries and North America in this regard is striking, especially in terms of aging "from the bottom, up" (Chart 6). In Europe, the youth dependancy ratio dropped during the 20 years between 1961 and 1981 from 37.8% to 32.5% (a slight decline of 5.3%) while that of the United States fell from 51.6% to 33.9% (a drop of 17.7%), and that of Canada from 58.2% to 33.2% (a drop of 25.0%).

For the elderly, the opposite held true. Over the same period, Europe experienced a greater increase (3.3 percent) in the ratio of the elderly than did North America. The increases recorded for the same period of time were 2.4 percent for the United States, and 1.3 percent for Canada. The youth and elderly dependancy ratios are indicators of the two unique ways in which a single phenomenon (aging) evolves, and, as a consequence of the precipitous decline in the youth ratio, the total aging process in North America has been proceeding at a more rapid pace than that in Europe.

#### Marital Status

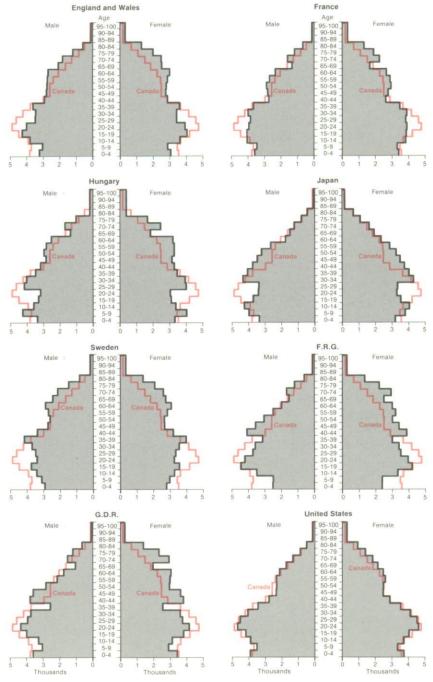
Marital status is a transitory state, and with the exception of the status of single, is reversible. This leads to difficulty in measuring, with any precision, changes in propensity over time, since it is not known exactly to what to attribute any increase or decrease in numbers in the different categories of marital status. For example, the number of divorced persons results from the combined propensities to divorce and to remarry. The same is true for the status of widowed. At any time, the situation is comparable to a balance sheet in which the contribution of the "debits" and the "credits" to the total are unknown.

The comparison of the age distribution of singles over a thirty-five year period delivers a clear message on the behaviour of different birth cohorts with regard to marriage (Chart 7). An important observation is that recent generations are marrying later than earlier ones (Table A7). It is also apparent that these older generations married more than their elders. The 1928-29 male cohort<sup>3</sup> saw 26% of its numbers married by age 23, while that of 1963-64, at the same age, had only 15% married. In the same way, the 1923-24 cohort, at age 28, saw 65% married, while that of 1958-59 had only 56% married, etc. By contrast, the 1888-89 generation had 12% of its members single at age 63, while that of 1923-24 had only 7%.

It is this simultaneous presence of the proportion still single, among

<sup>3</sup> In this discussion, the proportions referred to are the mid-point generation of a 5-year generation group.

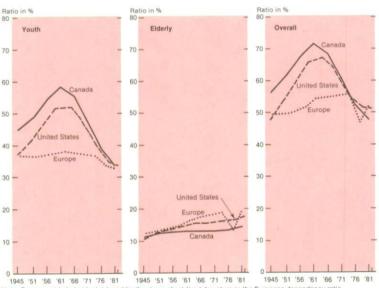
Chart 5
Population Pyramids for Selected Industrialized Countries, 1983 (Approximately)



Source: Data published by national statistics agencies.

different generations, that explains the age pyramid of singles at two dates. The 1985 pyramid has a much larger proportion of persons in the 20-24 age group than does that of the 1951 pyramid. To explain this disparity in proportion single between generations, one can cite the existence of common-law unions, the widespread use of contraception (which has reduced the risk of premarital pregnancy and, therefore, the rate of first marriage), and the generally more "permissive" social environment in which today's young find themselves. For the more aged, the explanations are less abundant. It may well be that many abandoned the idea of marriage once they had aged past the period of life when marriage is generally at its peak. For these cohorts, the peak occurred during the Great Depression.

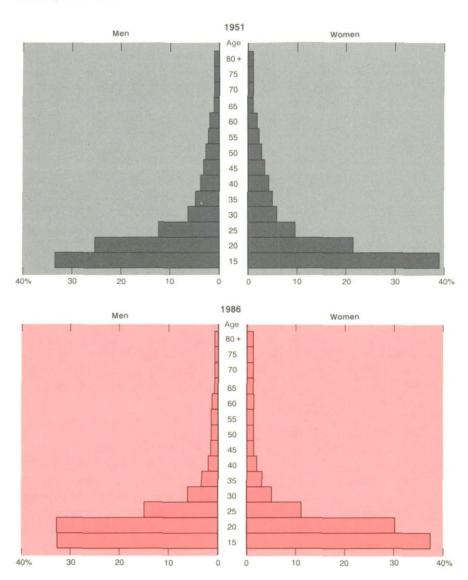
Chart 6
Dependency Ratios, Europe, the United States and Canada, 1945 to 1981



Note: One cannot help but be intrigued by the steep, short-lived downturn in the European dependency ratio roughly between 1970 and 1975, which does not appear in the North American curve. There is no simple explanation for this, but three possibilities come to mind. First, the decrease in the elderly population may be due to the decline in births during World War I, which produced the small cohorts that were, secondly, the hardest hit by the casualties of World War II. Thirdly, the ranks of the adult population were swollen by the lage baby-boom cohorts, which further reduced the ratio.

Source: Table A5.

Chart 7
Age Pyramid of Single Persons 15 years and Over, Canada, 1951-1986



Source: Table A6.

An age and sex-specific comparison of the marital status distribution of Canadians at different points in time yields some interesting observations (Table A7). First, in spite of remarriages, there have been important increases for both sexes in the proportion divorced, especially since 1971. Second, there has been a reduction in the proportion widowed, again for both sexes, which can partially be attributed to the reduction in mortality among adults, as well as, to a certain extent, to remarriage. The result of these complex and intertwined changes has been an increase in the number of married persons at advanced ages.

Today, fewer people than ever approach old-age in solitude, and this holds true for both sexes. During the last part of life, however, the increased life expectancy of females means that the vast majority of elderly women are living alone. In fact, half of all elderly women living alone are widowed.

#### MARRIAGE AND DIVORCE

The annual number of marriages in Canada is subject to random fluctuations (Table 5). Therefore, slight annual increases or decreases should not be interpreted as signifying the beginning of a trend. However, since 1972 (a record high year in Canadian history), the number of years in which a decline has been recorded (9) exceeds the number in which an increase has been noted (4), and a general downward trend in the number of marriages is evident.

For both sexes, the number of marriages of people who had never been married before follows the same general trend. Such marriages have never been as numerous as in 1972, and their decline is the major factor in the overall downward movement, which has been particularly strong since 1976. In fact, since 1972, decreases from the previous year have been noted in all years, with the exception of 1979 and 1980.

To date, when a decline in the number of marriages has been recorded in a given year, the decrease in the number of first marriages has always been larger, and when the number of marriages has increased, the increase in the number of first marriages has been smaller. Remarriages, therefore, cushion fluctuations in first marriages. In addition, since most remarriages involve divorced persons, it would appear that the propensity of the divorced population to remarry is more constant than is the propensity to marry of those who have always been single.

# First Marriages

For decreases in the total rate of first marriage, it is not possible to distinguish the effect of postponed marriages from that of marriages that will never take place, since marriages that are put-off may never occur, and no "catch-up"

Table 5. Marriages, First Marriages, Remarriages, Canada, 1967-1985

Year	Number of Marriages		r of First riages	Number of Marriages in Which at Least One of the Spouses had Previously Been Married		
		Males	Females	Number	070	
1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983	165,879 171,766 182,183 188,428 191,324 200,470 199,064 198,824 197,585 186,844 187,344 185,523 187,811 191,069 190,082 188,360 184,675 185,597	151,883 157,309 162,853 167,267 168,944 176,537 173,355 170,678 167,022 155,679 154,906 151,884 152,731 154,138 151,978 149,419 144,960 144,674	151,488 156,783 162,690 167,421 169,072 177,155 174,135 172,107 168,817 157,412 156,854 154,016 154,982 156,918 154,506 152,825 147,968 147,907	20,417 21,133 27,494 29,975 31,698 33,582 36,047 39,063 42,300 43,098 44,750 46,254 48,309 50,600 52,340 52,979 53,342 55,436	12.3 12.3 15.1 15.9 16.6 16.8 18.1 19.6 21.4 23.1 23.9 24.9 25.7 26.5 27.5 28.1 28.9 29.9	
1985	184,096	144,009	146,718	54,632	29.7	

Source: Statistics Canada, Vital Statistics, Catalogue 84-205 Annual.

effect will ever be observed. Whatever the role of postponement or non-entry may be, comparisons of annual values for the same population over time, or of different populations in a given year, will indicate whether people are marrying more or less. Canadians abandoned the single life less in 1985 than they ever have, as the rate fell to 615 per thousand – a record low. At 638, the rate for females was almost identical to that in 1984, and forms part of the downward movement we have been seeing since 1967.

The national rate of first marriage has been strongly influenced in recent years by Quebec (Table 6), since that province contains more than a quarter of Canada's population, and has not only the lowest rate of all the provinces, but one of the lowest rates in the world (488 per thousand for males and 515 for females). Among males, only two other provinces – Newfoundland and Alberta – have a rate of first marriage lower than the Canadian average, and even there the difference is very small. Were it not for Quebec, the national rate would be 661 per thousand, and no province would be far off this figure. A comparison of the two provinces with the largest populations reveals a striking contrast: the rate for Ontario males is more than 40% higher than that in Quebec. Between the Yukon and the Northwest Territories (the most sparsely populated regions) the contrast is also very strong, reflecting the large sociocultural differences between the two.

Table 6. Total First Marriage Rate, Canada, Provinces and Territories, 1985 (in thousands)

Province	Male <sup>1</sup>	Female <sup>2</sup>
Newfoundland	555	532
Prince Edward Island	722	731
Nova Scotia	651	662
New Brunswick	659	669
Quebec	488	515
Ontario	695	708
Manitoba	690	701
Saskatchewan	634	659
Alberta	605	656
British Columbia	638	665
Yukon	588	588
Northwest Territories	348	394
Canada	615	638
Canada excluding Quebec	661	682

<sup>&</sup>lt;sup>1</sup> Ages 17-49 inclusive.

Source: Statistics Canada, Vital Statistics, Vol. II, Marriage and Divorce, Catalogue 84-205.

No clear explanation has been found for the long-term fluctuations in marriage. In the short-term, economic prosperity is the most frequently cited factor. The nuptiality level in Quebec therefore, might be linked to the economic problems that, more than any other province, Quebec has encountered in recent years. The same explanation might also apply to the situation in Newfoundland.

Both marriages and common-law unions are an entry into the status of "living as couples". On the basis of the findings from the "Family History Survey", an increasing number of persons, and especially young persons, are opting for the latter. This trend provides part of the explanation for declines in the marriage rate.

Except in certain special circumstances (for instance, where the members of all cohorts have departed from their age-specific marriage rate), the movement in nuptiality over the years has been a fluctuation in the trend to marry young or to marry late. At present in Canada, the more recent the cohort, the less its members marry young. At age 20, for example, the 1955 male cohort was

<sup>&</sup>lt;sup>2</sup> Ages 15-49 inclusive.

<sup>&</sup>lt;sup>4</sup> T.K. Burch and A.K. Madan. *Union Formation and Dissolution in Canada: Results from the* 1984 Family History Survey. Statistics Canada, Catalogue 99-963.

marrying at the rate of 71 per 1,000 (in 1975), while the 1961 cohort, who were at the same age in 1981, was marrying at the rate of 41 per 1,000 (Table A8). The cohorts that had not been marrying at a high rate when they were young, however, were marrying at a higher rate around age thirty than had their elders. This leads to the observation that the marriage rate curves of recent cohorts intercept those of older cohorts. For example, the curve for the 1953 male cohort intercepts the curves of the 1948, 1943 and 1938 male cohorts (Chart 8A). The 1958 curve intercepts that for 1953, and the 1959 curve intercepts that for 1958.

It follows that the average age of people entering a first marriage is increasing. It went from 23.5 years in 1980 to 24.3 in 1984 for females, and from 25.7 in 1980 to 26.6 in 1984 for males. The average age of females at marriage is currently close to the maximum of 24.9 years, which was reached in 1942. Males are still quite far from the 1938 situation, when their average age at marriage reached an all-time high of 28.3, and, if the current rates are the beginning of a trend, that peak may not be reached again. In 1983, it was only at age 27 that the rates exceeded those in the previous year. In 1984, this occurred at age 25. The rates for 1985 show little, if any, difference.

## Remarriages

Remarriages, which used to occur more frequently because higher mortality rates led to an increased likelihood that the remaining spouse was still young, have declined considerably with the reduction in mortality. Subsequently, the increase in divorce produced a large number of candidates for a second or third marriage. In 1967, in 1 out of 8 marriages, one of the spouses had been married previously (Table 7). Seventeen years later, in 30% of all marriages (roughly 1 in 3), one of the spouses had been married before, and in 9 out of 10 of these cases, they had been divorced. The proportion is growing all the time. By way of comparison, at the beginning of the 1950s, fewer than 1 in 2 remarriages (48%) included one spouse who had been divorced.

To qualify what has been said about the remarriage of divorced persons, it should be pointed out that the propensity of the divorced population to remarry has decreased. Since it is difficult to assess the number of persons who have divorced status in a given year, Pressat<sup>5</sup> suggests using the total number of persons granted divorces over the preceding six years as the population at risk of remarriage. This figure serves as the denominator in the calculation of the rate of remarriage among the divorced in any given year. Using this method, one can see that interest in remarriage in Canada has been declining appreciably over the recent past. The reasons for this are no doubt the same as those given to explain the decrease in nuptiality among those who had not previously been married.

<sup>&</sup>lt;sup>5</sup> Pressat, R., "Treizième rapport sur la situation démographique de la France", *Population*, 1984 (July-October), pp. 669-732.

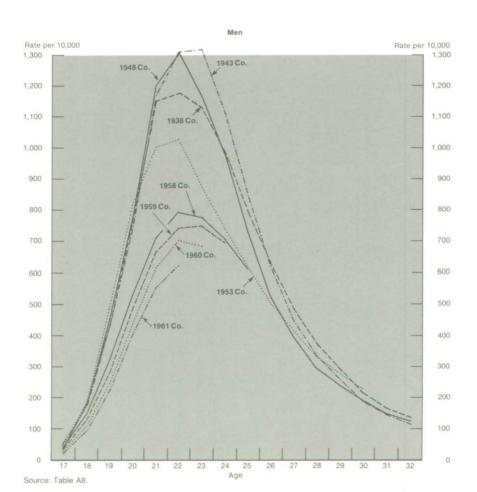
### **Divorces**

In 1983, the number of divorces declined from the previous year (a drop of 1,869; Table 8). This was the first time there had been such a decline since 1969. In 1984 and 1985, the decreases were larger (3,395 and 3,192, respectively), however, it would be premature to conclude that divorce is declining, even though a few observations indicate a trend in that direction.

It is true that the decrease in divorce relates not only to numbers, but also to rates. For example, the overall divorce rate per 1,000 married women went from 11.6 in 1982 to 11.3 in 1983 and declined further to 10.6 in 1984. A decline in the crude rate has been observed in the United States, where, after having risen regularly since the end of the 1950s (2.1 in 1958), the rate has declined

Chart 8A

Age-Specific First Marriage Rates for Recent Cohorts, Canada



from 5.3 per 1,000 in 1981 to 5.0 in 1984. Even though there has been a decrease each year since 1981 in the total divorce index in Canada (Table 9), we cannot be sure that there has been a profound change in the attitude of Canadians towards divorce. Ordinarily, such major changes take place over generations, with the rates for younger people changing first, while the others remain more or less stable.

We can consider some factors exogenous to divorce in an effort to explain the sudden slowdown in rates. One factor discouraging divorce may be that some couples have been waiting for the recent Divorce Act amendments before starting divorce proceedings. The fact that property acquired during the

Chart 8B
Age-Specific First Marriage Rates for Recent Cohorts, Canada

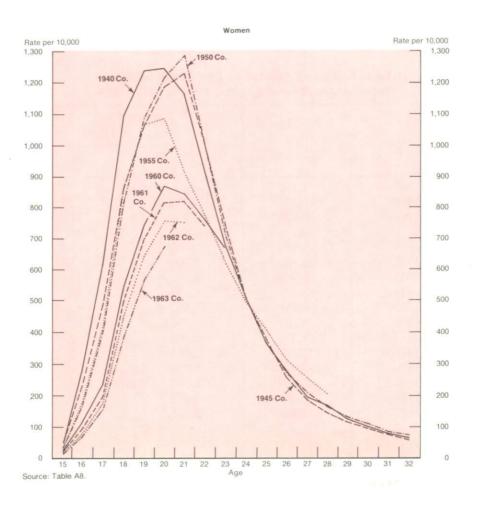


Table 7. Number and Frequency of Remarriage of Divorced Persons, Canada, 1977-1985

37	Number of	Remarriages	Frequency of	Remarriage (%)
Year	Males	Females	Males	Females
1977	26,227	23,555	63.0	56.6
1978	27,713	24,931	60.6	56.7
1979	29,220	26,492	58.6	53.1
1980	31,043	27,993	57.9	52.2
1981	32,405	29,517	57.4	52.3
1982	33,334	29,951	56.2	50.5
1983	34,483	31,397	55.6	50.6
1984	35,276	31,760	54.9	49.5
1985	34,780	32,018	53.1	48.8

**Source:** Statistics Canada, Catalogue 84-205; some data have been calculated by the author.

Table 8. Annual Number of Divorces Granted and Increase over Preceding Year, Canada, 1967-1985

Year	Number	Increase Precedin	
	Divorces	Number	97/0
1967	11,165		
1968	11,343	178	2
1969	26,093	14,750	130
1970	29,775	3,682	14
1971	29,685	-90	-0.3
1972	32,389	2,704	9
1973	36,704	4,315	13
1974	45,019	8,315	23
1975	50,611	5,592	12
1976	54,207	3,596	7
1977	55,376	1,163	2
1978	57,155	1,785	3
1979	59,474	2,319	4
1980	62,019	2,545	4
1981	67,671	5,652	9
1982	70,436	2,765	4
1983	68,567	-1,869	-3
1984	65,172	-3,395	-5
1985	61,980	-3,192	-5

Source: Statistics Canada, Vital Statistics, Vol. II, Marriages and Divorces, Catalogue 84-205.

marriage must be divided may also be a consideration. It may also be that, in contemporary Canadian society, some couples who are breaking up no longer feel compelled to get a divorce, since they can form another couple without going through the formalities.

One might initially be tempted to attribute the reduction in the divorce rate to the increase in cohabitation. Many people who cohabit today would formerly have married, and the break-up of such unions would have involved divorces, while today they pass unnoticed. This reasoning does not hold, however, since there has been a reduction not only in numbers, but also in rates, for which the denominators are the marriages involved. Nevertheless, common-law unions would have some reducing effect, if in fact, they are more likely to replace marriages for which the risk of divorce is high.

Interprovincial variations are generally not of substantive importance, since they may simply be the result of differences in the way the courts operate. In addition, migratory movements make it impossible to say that the differences observed are a result of regional differences in behaviour. It should be noted, however, that there were decreases in divorce rates for all provinces in 1984 and, except for Prince Edward Island and Nova Scotia, in 1985 (Table A9).

### Common-law Unions

Mentioned several times as having a disruptive effect on the usual nuptiality and fertility statistics, common-law unions remain a type of civil status about which we have little information. By their very nature, their distribution in the population is difficult to measure. The 1981 Census attempted to establish, for the first time and in an indirect way, the number and characteristics of persons living as couples without being legally married. The probable differential under-reporting of common-law status by certain socioeconomic groups does not allow a sufficiently clear picture of the situation to be drawn in Canada. However, it is known that on Census Day in 1981 approximately 6% of the couples enumerated were not legally married, and half of the 704,000 or so persons involved were between 20 and 30 years of age (Table 10). The Family History Survey conducted in 1983 by Statistics Canada provides more detailed information on cohabitation.

## **FERTILITY**

Except for 1985, the number of births in Canada has been growing since 1973, the year in which the lowest number (343,373 births) since the 1959 babyboom peak (479,275 births) was reached. The numbers had been rising

<sup>6</sup> Burch and Madan, op. cit.

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Table 9. Duration-specific Divorce Rate (per 10,000), Canada, Marriage Cohorts 1943-44 to 1984-85

	Number of Marriages	Marriage	Cohort											Ma	rria	ige	Du	ırat	ior											Year of	Total
Year	per Cal- endar Year	Cohort	Marriages	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	Observa- tion	Divorce
1044	104,656	1943-44	109,241																										44	1969	1,370
1944	1.50	1944-45	108,016																									51	50	1970	1,863
1945	111,376	1945-46	124,387																								52	56	48	1971	1,885
946	137,398	1946-47	133,899																							48	55	49	46	1972	2,007
947	130,400	1947-48	128,259																						47	56	50	50	54	1973	2,233
948	126,118	1948-49	125,102																					50	58	56	52	60	58	1974	2,673
949	124,087	1949-50	124,585																				51	60	55	58	59	68	64	1975	2,932
950	125,083	1950-51	126,745																			51	64	61	59	60	73	69	71	1976	3,072
951	128,408	1951-52	128,441																		53	65	63	62	63	74	74	76	69	1977	3,063
952	128,474	1952-53	129,754																	54	69	70	64	67	75	80	76	69	55	1978	3,103
953	131,034	1953-54	129,381																50	70	64	62	71	86	82	78	75	70	62	1979	3,180
954	128,629	1954-55	128,329															57	73	65	68	69	85	85	83	75	70	68	65	1980	3,277
955	128,029	1955-56	130,271														59	83	71	73	77	87	90	90	89	78	74	69	71	1981	3,529
956	132,713	1956-57	132,949													67	82	76	75	78	92	105	96	87	85	84	75	74	66	1982	3,655
957	133,186	1957-58	132,355												61	79	81	81	83	91	101	97	92	84	82	77	78	73	66	1983	3,522
958	131,525	1958-59	131,999											68	91	82	80	86	96	105	103	92	89	80	78	83	75	67	67	1984	3,306
	132,474	1959-60	131,406										70	93	95	91	97	111	111	110	100	95	90	84	91	87	76	67	64	1985	3,121
1960	130,338	1960-61	129,406									73	97	95	95	97	119	119	116	108	100	95	94	95	94	81	76	64			
1961		1961-62	128,928								71	105	99	106	103	121	133	123	115	108	97	96	98	105	88	79	71				
1962	129,381	1962-63	130,246							71	114	113	112	114	131	133	134	124	118	104	99	107	105	91	85	78			,		
1963 1964	131,111	1963-64	134,623						68	106	109	113	124	142	136	140	128	126	114	110	113	109	100	93	82						

Source: See end of table

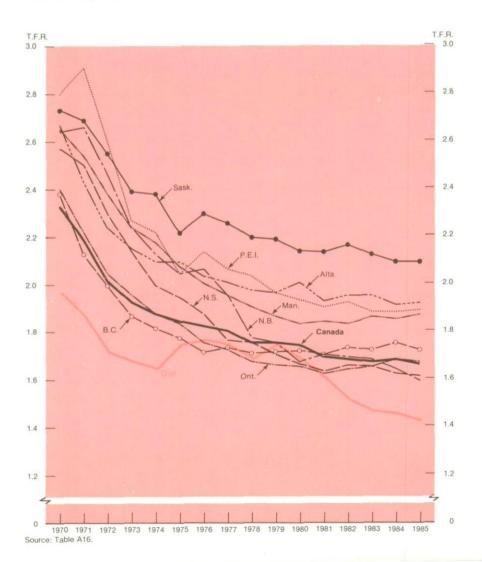
Table 9. Duration-specific Divorce Rate (per 10,000), Canada, Marriage Cohorts 1943-44 to 1984-85 - Concluded

	Number of Marriages	Marriage	Cohort											Ma	rria	age	Dι	ıraı	tioi	1											Year of	Total Divorc
Year	per Cal- endar Year	Cohort	Marriages	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	2 23	24	1 2	.5	Observa- tion	Index
1965	145,519	1964-65	141,827					61	98	112	121	134	150	153	153	139	134	124	117	118	8 113	100	96	9	1							
		1965-66	150,557				42	93	112	128	143	156	162	163	148	137	130	120	121	11:	5 112	10	92	2								
1966	155,596	1966-67	160,737			31	68	102	126	139	166	177	171	155	145	136	132	130	128	11	7 10:	9.	1									
1967	165,879	1967-68	168,823		17	49	75	115	142	162	183	173	165	156	151	136	138	138	117	109	9 9	5										
1968	171,766	1968-69	176,974	3	22	53	83	122	158	182	184	171	165	160	152	147	144	132	111	10	3											
1969	182,183	1969-70	185,305	3	25	55	92	151	177	192	192	176	174	163	162	157	139	128	113	2												
1970	188,428	1970-71	189,876	4	28	61	106	161	186	189	191	184	180	172	166	150	130	116	5													
1971	191,324	1971-72	195,907	4	33	74	117	174	193	196	197	191	187	185	168	144	125			Г				Г					T			
1972	200,490	1972-73	199,777	5	36	83	129	181	203	212	203	205	204	180	155	135						T	T	Т					T			
1973	199,064	1973-74	198,944	5	44	94	136	184	213	223	228	218	189	168	146										T	T	T		T	T		
1974	198,824	1974-75	198,205	6	52	104	147	199	224	243	232	214	185	162		$\vdash$										T	T		T	T		
1975	197,585	1975-76	195,464	8	59	111	161	208	234	246	226	193	167											T		T			T	$\top$		
1976	193,343	1976-77	190,343	+-	-	-	+	_	-	+	+	180	-							T	1			T					1	$\top$		
1977	187,344	1977-78	186,434	+	65	-	-	_	+	+	+	_												T			1		T	1		
1978	185,523	1978-79	186,667	-	64	-	-	-	-	-	-		$\vdash$							T		T		T	T	T			T			
1979	187,811	1979-80	189,440	_	68	_	-	-	_	-							$\vdash$		$\vdash$	T				T					T	$\top$		
1980	191,069	1980-81	190,575	+	74	-	_	-	_	$\vdash$	$\vdash$		$\vdash$	$\vdash$		$\vdash$	$\vdash$		T	T	$\top$	T	$\top$	T	$\top$	T	T		+	$\top$		
1981	190,575	1981-82	188,217	+	69	-	-	_		$\vdash$	$\vdash$		$\vdash$			$\vdash$			T	T	$\top$	$\dagger$	+	T	$^{\dagger}$	T	T	$^{\dagger}$	+	$\top$		
1982	188,360	1982-83	186,518	-	67	-	-			$\vdash$			$\vdash$			$\vdash$			T	1	+	$\top$	+	+	$\dagger$	T	$\dagger$	$^{\dagger}$	+	$\top$		
1983	184,675	1983-84	185,136	+	66	-					$\vdash$								1	1		1	+	$^{\dagger}$	$\dagger$	$\dagger$	$\dagger$	$\dagger$	+	$\top$		
1984	185,597	1984-85	184,846	10	-											$\vdash$			1	+	+		+	$\dagger$	+	$\dagger$	$\dagger$	$^{\dagger}$	+	+		

Source: Table A10.

slowly, however, as indicated by the small difference between the 1984 and 1983 figures. This was an increase in *number*, however, and should not be interpreted as an increase in the propensity to bear children. The crude birth rate, in fact, declined to 14.8 per thousand in 1985 from 15.3 in 1981, and the single most important measure of the level of fertility, the total fertility rate (TFR), currently stands at 1.67 births per woman, essentially the same as the 1981 value of 1.70 (Table A16). The precipitous decline in the TFR in Canada since 1959 has given way to a recent stability, with a pattern of minor fluctuations resembling that of most European countries in this regard.

Chart 9
Total Fertility Rates, Canada, Provinces and Territories, 1970-1985



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Table 10. Distribution of Persons Living in Common-Law Unions by Age, Canada, Based on 1981 Census Data

		Males			Females	
Age Groups	Common-law	Total Now Married	Ratio = (1) ÷ (2) x 100	Common-law	Total Now Married	Ratio = (1) ÷ (2) x 100
	(1)	(2)		(1)	(2)	
15-19	7,900	13,900	56.83	32,000	66,900	47.83
20-24	83,200	306,600	27.14	108,900	524,400	20.77
25-29	87,100	676,600	12.87	77,000	785,300	9.80
30-34	60,400	791,900	7.63	46,900	807,600	5.81
35-39	37,700	678,900	5.55	29,200	655,100	4.46
40-44	24,000	562,100	4.27	18,100	536,900	3.37
45-49	17,400	528,200	3.29	13,100	494,400	2.65
50-54	12,900	509,300	2.53	10,200	477,000	2.14
55-59	8,900	465,600	1.91	7,200	443,000	1.62
60-64	5,600	374,400	1.50	4,600	333,900	1.38
65-69	3,700	306,300	1.21	2,700	244,100	1.11
70+	3,400	397,800	0.85	2,400	243,000	0.99
Total	352,200	5,611,500	6.28	352,200	5,611,500	6.28

A comparison between Canada and the United States indicates very little difference in total fertility rate. The slightly higher rate for the white U.S. population (a TFR of 1.72) does not represent a significant difference, and the rate for the total population (1.81), is due to the fact that the non-white segment has, at 2.22, an appreciably higher TFR (Table 13).

Even though not substantial, some provincial differences in fertility exist in Canada. Briefly, the 1985 figures indicate a slightly lower fertility rate in the East, and a higher rate in the West, with Ontario at the fulcrum, almost exactly representing the national average (Chart 9). Quebec, however, deserves special attention since in 1985 this province had the lowest TFR of any province or territory in Canadian history. Since 1978, the national TFR has decreased at a rate of 1.6 percent per annum; in Quebec the decline has been 4.8 percent. At 1.43, the TFR in Quebec pulls down the national average, which, if Quebec were excluded, would approach 1.76 births per woman (Table 13).

Examination of fertility by birth order and age of mother affords an opportunity to gain a better understanding of the difference between Quebec and the other Canadian provinces. In the recent past, the TFR's by birth order for the rest of Canada became relatively stable, and, if there was any trend, it was towards a slight tendency to increase (Table 13). For Quebec, on the

Table 11. Births by Province, 1981-1985

			Year		
Province	1981	1982	1983	1984	1985
Newfoundland	10,130	9,173	8,929	8,560	8,500
Prince Edward Island	1,897	1,924	1,907	1,954	2,008
Nova Scotia	12,079	12,325	12,401	12,378	12,450
New Brunswick	10,503	10,489	10,518	10,360	10,121
Quebec	95,322	90,800	88,154	87,839	86,340
Ontario	122,183	124,856	126,826	131,296	132,208
Manitoba	16,073	16,123	16,602	16,651	17,097
Saskatchewan	17,209	17,722	17,847	18,014	18,162
Alberta	42,638	45,036	45,555	44,105	43,813
British Columbia	41,474	42,747	42,919	43,911	43,127
Yukon	536	525	540	519	464
Northwest Territories	1,302	1,362	1,491	1,444	1,437
Canada	371,346	373,082	373,689	377,031	375,727

Source: Statistics Canada, Vital Statistics, Births and Deaths, Catalogue 84-204.

Table 12. Total Fertility Rate (TFR) and Age-specific Fertility Rate of Mothers, by Race of Child, United States, 1976-1984

	15-19	20-24	25-29	30-34	35-39	40-44									
Year		F	er 1,000	Women	1		TFR								
		7	White Po	pulation	1										
1976	44.1	105.3	105.9	52.6	17.8	3.9	1.652								
1977	44.1	107.7	110.9	55.3	18.0	3.8	1.703								
1978	42.9	104.1	107.9	56.6	17.7	3.5	1.668								
1979	43.7	107.0	110.8	59.0	18.3	3.5	1.716								
1980	44.7	109.5	112.4	60.4	18.5	3.4	1.748								
1981	44.6	106.3	111.3	60.2	18.7	3.4	1.726								
1982	44.6	105.9	110.3	63.3	20.0	3.5	1.742								
1983	43.6	102.6	108.0	64.0	21.0	3.5	1.718								
1984	42.5	101.4	107.7	66.1	21.7	3.5	1.718								
		Non-white Population													
1976	99.9	138.9	107.6	59.5	26.9	6.9	2.222								
1977	99.5	142.3	111.5	63.4	27.3	6.9	2.278								
1978	96.0	142.1	111.9	65.2	26.9	6.4	2.264								
1979	96.5	144.3	114.6	68.3	27.3	6.4	2.310								
1980	94.6	145.0	115.5	70.8	27.9	6.5	2.323								
1981	91.8	140.8	115.9	68.5	27.6	6.3	2.274								
1982	91.5	139.3	114.9	69.0	28.0	6.2	2.265								
1983	89.3	136.8	112.1	68.4	28.6	5.9	2.225								
1984	89.0	136.4	111.5	68.5	29.2	6.0	2.224								
				All Ra	ces										
1976	52.8	110.3	106.2	53.6	19.0	4.3	1.738								
1977	52.8	112.9	111.0	56.4	19.2	4.2	1.790								
1978	51.5	109.9	108.5	57.8	19.0	3.9	1.760								
1979	52.3	112.8	111.4	60.3	19.5	3.9	1.808								
1980	53.0	115.1	112.9	61.9	19.8	3.9	1.840								
1981	52.7	111.8	112.0	61.4	20.0	3.8	1.815								
1982	52.9	111.3	111.0	64.2	21.1	3.9	1.828								
1983	51.7	108.3	108.7	64.6	22.1	3.8	1.802								
1984	50.9	107.3	108.3	66.5	22.8	3.9	1.805								

Source: NATIONAL CENTER FOR HEALTH STATISTICS (1984). Monthly Vital Statistics Report. Vol. 35, No. 4, supplement: Advance Report on Final Natality Statistics, 1984. Hyattsville: Public Health Service.

other hand, the rates declined uniformly. The maternal age and birth order-specific rates declined at the national level (including in Quebec) for all ages up to and including 25. For ages over 25, the rates for the remainder of Canadian women increased (indicating a "catch-up" effect at older ages), whereas those for Quebec women over age 25 continued to decline. Thus, for Quebec, the TFR at all ages and birth orders has been decreasing.

The only notable change in the 1985 figures involves an increase in the fertility of Quebec women over age 25 at birth order 1. The increase was too small, however, to have had any impact on the decline in the overall TFR for Quebec.

In summary, there does not appear to be any indication that fertility is on the rise in Canada. On the other hand, the decline appears to have slowed, or even stopped. With the exception of Quebec, the national picture shows very little variation. Part of the small overall change in the recent period can be attributed to a change in tempo, whereby an apparent delay in childbearing has produced the effect that some births, and even some first births, are occurring later than they did among previous generations of Canadians.

## MORTALITY

### Introduction

The stabilization of the crude death rate at 7 per 1,000 in recent years has occurred at the same time that the population has been aging, reflecting the overall reduction in mortality in Canada. Differences in the crude death rate between provinces can largely be attributed to different age structures. The provinces with older populations (Prince Edward Island, Nova Scotia and Manitoba) have relatively high rates in comparison with those parts of the country with younger populations (Newfoundland, Alberta, and in particular, the Yukon and the Northwest Territories). In 1982, however, Saskatchewan had an unusually high rate, the origin of which was an increase of almost 700 deaths from the previous year. The return of the crude death rate to the 1981 level in 1983 and 1984 confirmed the existence of an anomaly, and subsequent analysis of deaths by cause revealed that deaths associated with respiratory problems, which mainly affect the elderly, accounted for 70% of this isolated increase.

# **Unexpected Changes**

The best description of the current state of mortality is provided by the life table, from which the most widely known indicators – expectation of life at different ages, and especially at birth – are taken.

Table 13. Age-specific Fertility Rates by Birth Order, Quebec and Canada Excluding Quebec and Newfoundland, 1981-1985

		15-	-19	20-	-24	25-	29	30-3	34	35-3	39	40-4	14	Total Fert	ility Rate
Order	Year	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)
1	1981	13.1	24.6	57.4	54.4	55.4	47.7	16.6	16.8	3.5	3.6	0.5	0.5	732.5	738.0
	1982	13.1	24.7	54.4	54.6	50.7	48.4	15.9	17.8	3.9	3.9	0.5	0.5	692.5	749.5
	1983	12.6	23.0	53.1	53.1	51.3	49.4	16.3	19.2	3.8	4.5	0.5	0.5	688.0	748.5
	1984	13.8	24.4	52.3	54.2	50.0	50.3	15.6	20.1	3.8	4.4	0.5	0.5	680.1	769.6
	1985	12.7	22.2	48.1	49.6	51.2	51.2	17.1	21.4	4.0	4.8	0.5	0.6	667.4	748.6
2	1981	1.6	4.4	25.1	32.2	54.1	47.0	28.1	24.9	6.2	5.7	0.6	0.6	578.5	574.0
	1982	1.6	4.4	23.5	31.5	50.4	46.5	26.0	26.0	5.8	6.1	0.6	0.6	539.5	575.5
	1983	1.6	4.2	22.6	30.8	48.8	46.9	25.4	27.3	5.3	6.6	0.6	0.7	521.5	582.5
	1984	1.8	4.5	23.2	32.4	48.8	48.4	26.0	28.3	5.4	6.9	0.6	0.7	528.9	606.0
	1985	1.7	4.2	21.0	30.0	48.3	49.7	26.5	30.8	5.8	7.8	0.6	0.8	519.4	616.4
3	1981	0.2	0.4	4.6	8.6	17.7	19.7	16.9	15.6	4.6	4.7	0.6	0.7	223.0	248.5
	1982	0.1	0.5	4.5	8.6	16.1	19.9	14.8	16.0	4.6	5.2	0.6	0.6	203.5	254.0
	1983	0.1	0.4	4.0	8.2	15.0	19.7	14.2	16.3	4.1	5.4	0.5	0.6	189.5	253.0
	1984	0.1	0.5	4.0	8.6	14.2	19.9	13.5	17.0	4.1	5.2	0.5	0.6	182.1	259.2
	1985	0.2	0.5	3.7	8.2	14.0	20.2	13.4	17.9	4.3	5.9	0.5	0.7	180.6	267.0
4	1981	-		0.6	1.6	3.0	5.3	4.6	5.6	2.3	2.6	0.4	0.5	54.5	78.0
	1982	-		0.6	1.6	2.9	5.3	4.3	5.8	2.0	2.7	0.4	0.5	52.0	79.5
	1983	1-		0.6	1.5	2.8	5.2	3.9	5.8	2.0	2.7	0.3	0.5	48.0	78.5
	1984	-		0.6	1.6	2.6	5.5	3.6	5.7	1.7	2.6	0.3	0.4	43.8	79.2
	1985			0.5	1.5	2.5	5.4	3.6	6.2	1.8	2.9	0.3	0.5	43.4	82.9
5 and	1981	-		0.1	0.4	0.8	1.8	1.6	3.2	1.6	2.7	0.6	1.0	23.5	45.5
over	1982	-	-	0.1	0.4	1.0	1.9	1.4	3.0	1.4	2.6	0.5	1.0	22.0	44.5
	1983	-	-	0.1	0.3	0.7	1.9	1.4	3.1	1.3	2.3	0.5	0.8	20.0	42.0
	1984			0.1	0.4	0.7	1.9	1.3	2.9	1.2	2.2	0.4	0.8	17.9	41.4
	1985	-	-	0.1	0.4	0.7	1.9	1.2	3.0	1.1	2.2	0.4	0.7	16.8	41.6
All	1981	14.9	29.4	87.8	97.2	131.0	121.5	67.8	66.1	18.2	19.3	2.7	3.3	1612.0 <sup>1</sup>	1684.0
Orders	1982	14.8	29.6	83.1	96.7	121.1	122.0	62.4	68.6	17.9	20.5	2.6	3.2	1509.51	1703.0
	1983	14.3	27.6	80.4	93.9	118.6	123.1	61.2	71.7	16.5	21.5	2.4	3.1	1467.0 <sup>1</sup>	1704.5
	1984	15.8	29.4	80.1	97.1	116.2	125.9	60.0	74.1	16.2	21.4	2.2	3.0	1452.81	1771.5
	1985	14.5	26.9	73.4	89.6	116.6	128.5	61.8	79.3	17.0	23.6	2.2	3.4	1427.71	1756.5

(A) Quebec.

(B) Canada excluding Quebec and Newfoundland.

Not including births where age of mother and/or birth order are unknown.

Source: Statistics Canada, Special Tabulations.

After a rapid rise in the value of life expectancy at birth until about 1956, the rate of improvement for Canadian males slowed considerably, leading many demographers around the 1960's to predict that further gains would be progressively less significant. The substantial gains made during the second half of the 1970's were, therefore, largely unexpected. Nonetheless, the provisional tables calculated for the early years of the 1980's seem to indicate that the pattern of increase is being maintained (Table 4).

The evolution of life expectancy for females has been different. Until recently, female gains were greater than those for males, even though females also experienced a slowdown during the 1960's. In the most recent period, however, the change for females was not as pronounced as that for males. Consequently, the 1976-81 period saw, for the first time, the 5-year gain in life expectancy for males exceed that for females (Chart 10).

Chart 10 Increase in Life Expectancy at Birth by Five-Year Intervals, Canada, 1931-1981



Source: Table A12.

In the period up to the mid-1970s, the largest part of the gains in life expectancy for both sexes were the result of declines in infant mortality, with the gains made at other ages providing a relatively smaller contribution. Progress in the area of infant mortality has by no means stopped, but the impact of the changes made in recent years has become weaker and is now overshadowed by improvements made at the more advanced ages. For example, females made a gain of 2.28 years in life expectancy at birth between 1946 and 1951, of which 19 percent was attributable to mortality reduction in the first year of life. In contrast, the percent attributable reduction for those aged 65 to 80 was only 11 percent. Between 1976 and 1981, however, the figures changed to 18 and 23 percent, respectively. The situation for males is even more striking, with the reduction in infant mortality accounting for 39 percent of the gain between 1946 and 1951, while the figure for the 65 to 80 group was only 8 percent. Between 1976 and 1981 the corresponding percentages were 16 and 18, respectively.

The gains in life expectancy at younger ages are only slightly less remarkable. Here again, the life table provides a clear indication. Out of 100,000 life table males subject to the risk of dying at various ages in 1946, fully 64,613 were still living at age 65. For 1981, the figure had increased to 74,718 – representing an increment of more than 10,000 (or 16%).

# **Infant Mortality**

Infant mortality has declined almost without interruption since the collection of information on the subject began. Over the past ten years, the rate has again dropped by almost 50% (Chart 11). With a rate of 7.9 per 1,000 in 1985, Canada's rate is lower than that in the United States (10.8 in 1984) and most of the countries of Western Europe, with the exception of Sweden.

Quebec, which once had the highest provincial rate of infant mortality, now has the lowest rate in Canada. This, above all, is the result of very low postneonatal mortality (2.1 per thousand live births in Quebec vs. 3.0 for Canada overall, in 1984). When such low levels are reached, annual variations should come as no surprise. For the most part, they reflect random fluctuations as a function of the small numbers involved.

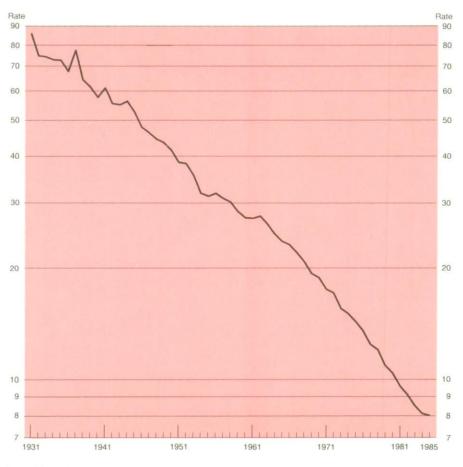
Neonatal mortality (deaths in the first month of life), while more resistant to the efforts of the sciences, is also declining throughout Canada. The 1984 Quebec rate equalled the national average for neonatal infant mortality (5.2 per thousand), but the lowest rate was found in New Brunswick (4.0).

# Causes of Death by Province: Changes over Ten Years

Description of mortality in terms of cause by province is generally of limited interest due to the high mobility of the population. Provincial measurements are made for the purpose of comparison, and such comparisons give rise to

questions. The matter of genetic inheritance aside, these questions relate mainly to life styles (work and so on) and to the effectiveness of a province's health and medical services. Deaths, however, are classified by the deceased person's place of residence, and there is no indication how long the person had been living there. There is a great deal of interprovincial migration, and it is known that such migration can be directly or indirectly based, to some extent, on health considerations. Therefore, in principle, a province's mortality level cannot be closely linked to the effectiveness of its medical system. If decennial

Chart 11 Infant Mortality Rate Per 1,000 Live Births, Canada, 1931-1985



Source: Table A13.

measurements based on standardized rates are compared, however, the provincial mortality levels by major causes of death yield interesting information<sup>7</sup>. Table A14 shows the 1983 number and percentage distributions for the major causes of death by province and territory, and for Canada overall. Detailed discussion of standardized mortality rates by cause, province and time period follows below.

#### Cancer

Table 14 shows that there has been little change in the pattern of cancer mortality for Canada as a whole over the 10-year period from 1972-73 to 1982-83. Only very small changes in an upward direction for males, and in a downward direction for females, occurred. As far as males are concerned, Quebec has the highest provincial rate – appreciably higher than the national average – while the westernmost provinces (Saskatchewan, Alberta and British Columbia) have distinctly lower rates. Whereas the respective positions of the provinces changed very little in ten years, the level in each has risen – appreciably so in New Brunswick and Saskatchewan. For females, the slight decrease at the national level is the result of decreases in only a few provinces, Quebec in particular. The fact that Quebec has the lowest mortality connected with uterine and breast cancer has played a major role in the maintenance of a low overall rate of cancer in that province. Nova Scotia experienced an increase over the ten-year period, and now has the highest provincial rate.

It should be noted that mortality connected with cancer of the respiratory system has increased appreciably at the national level. Male deaths from cancers of this kind have increased from 50 to more than 60 per 100,000 in ten years (Table 15). All of the provinces, at various levels, have experienced increases. New Brunswick had one of the lowest rates ten years ago, but has experienced the most rapid increase. Quebec has by far the highest rate of all the provinces (77.5 per 100,000). Next in line is Nova Scotia, with a rate of only 63.3. The high mortality rate from this type of cancer is solely responsible for Quebec's high mortality rate for all types of cancer combined.

For the female population, the ten-year period saw a large increase in respiratory system cancer. Fortunately, the level was low to begin with. However, if this cause of death continues to advance in the next ten years

<sup>7</sup> The standardized rate is an artificial summary index obtained by applying to a standard population the age-specific rates observed in the populations to be compared (which may be different populations or the same population at two different times). The differences observed can therefore not be ascribed to different age structures. This is important since some diseases affect certain age groups more than others.

Table 14. Standardized Mortality Rates1 (per 100,000) for Cancer, Canada, the Provinces and Territories, 1972-73 and 1982-83

For 1972-1973 - Causes 45 to 61, List A (8th revision) For 1982-1983 - Causes 37 to 93, List A (9th revision)

			Males					Females		
Province	1972	-1973	1982	-1983	Change	1972-	1973	1982	-1983	Change
	Rank	Rate	Rank	Rate	(%)	Rank	Rate	Rank	Rate	(%)
Newfoundland	4	170.0	4	176.7	3.9	4	142.1	7	131.2	-7.7
Prince Edward Island <sup>2</sup>	7	151.6	7	171.1	12.9	10	120.0	3	140.6	17.2
Nova Scotia	2	176.0	2	188.4	7.0	2	150.1	1	159.5	6.3
New Brunswick	9	148.2	5	176.3	19.0	3	143.0	6	132.8	-7.1
Quebec	1	199.2	1	202.8	1.8	1	154.2	5	138.7	-10.1
Ontario	3	172.8	3	177.1	2.5	5	137.7	4	139.5	1.3
Manitoba	5	163.7	6	171.8	4.9	6	137.4	2	142.2	3.5
Saskatchewan	10	125.5	9	157.8	25.7	8	123.0	10	121.1	-1.5
Alberta	8	148.9	10	156.8	5.3	9	120.5	9	125.7	4.3
British Columbia	6	155.4	8	160.7	3.4	7	130.4	8	130.6	0.2
Yukon <sup>2</sup>		149.3		201.4	34.9		123.0			
Northwest Territories <sup>2</sup>		179.3		242.5	35.2		192.9			
Canada		171.6		178.6	4.1		139.8		136.5	-2.4
Coefficent of Variation <sup>3</sup> (%)		12.0		8.1			13.0		7.8	

Age structure of Canada in 1976 was used as standard.
 Because of the small numbers, the fluctuations may be random.
 Excluding the Yukon and the Northwest Territories.

Table 15. Standardized Mortality Rates1 (per 100,000) for Cancers of the Larynx and Bronchial Tubes, Canada, the Provinces and Territories, 1972-73 and 1982-83

For 1972-1973 - Causes 50 and 51, List A (8th revision) For 1982-1983 - Causes 56 and 57, List A (9th revision)

			Males							
Province	1972	-1973	1982	-1983	Change	1972-	1973	1982	-1983	Change
	Rank	Rate	Rank	Rate	(%)	Rank	Rate	Rank	Rate	(%)
Newfoundland	6	37.9	5	57.8	52.5	10	5.6	10	10.0	78.6
Prince Edward Island <sup>2</sup>	8	36.0	6	55.5	54.2	9	6.8	9	10.7	57.4
Nova Scotia	3	47.6	2	63.3	33.0	3	10.4	4	17.4	67.3
New Brunswick	9	35.3	3	62.2	76.2	6	9.5	5	16.2	70.5
Quebec	1	57.4	1	77.5	35.0	2	10.7	7	15.1	41.1
Ontario	2	50.8	4	59.4	16.9	4	10.1	2	19.7	95.0
Manitoba	5	46.9	7	54.7	16.6	5	9.9	3	18.0	81.8
Saskatchewan	10	33.9	9	47.7	40.7	8	7.9	8	14.6	84.8
Alberta	7	36.6	10	46.6	27.3	7	9.1	6	16.0	75.8
British Columbia	4	47.2	8	51.4	8.9	1	12.6	1	21.7	72.2
Yukon <sup>2</sup>	720	49.9		84.1	68.5				26.8	
Northwest Territories <sup>2</sup>		62.2		87.2	40.2		53.0		60.5	14.2
Canada		49.2		61.4	24.8		10.2		18.5	81.4
Coefficent of Variation <sup>3</sup> (%)		18.9		15.6			21.9		22.8	

 $<sup>^{1}</sup>$  Age structure of Canada for 1976 was used as standard.  $^{2}$  Because of the small numbers, the fluctuations may be random.

<sup>&</sup>lt;sup>3</sup> Excluding the Yukon and the Northwest Territories.

as it has in the past ten, the rate in 1993 will be 34 per 100,000, almost the same as the 1973 provincial rate for males in the least affected provinces. Nearly all studies have linked smoking with these types of cancer, and while smoking was not a widespread phenomenon among earlier generations of females, increases have been noted more recently. The increase in mortality connected with respiratory system cancers can, therefore, be regarded as being a consequence of the increased propensity to smoke observed within the female population. Cancer has a long latency period, and the number of women who smoke is still growing. Of interest is the fact that the rank order of the provinces, for both 1973 and 1983, is not the same for females and males. For females, British Columbia has the highest rate, followed closely by Ontario, where the rate almost doubled in ten years.

#### Cardiovascular Diseases

## (a) Ischaemic heart diseases

Ischaemic heart diseases have been on the decline in North America in the past several years. The death rate for this group of causes for the country as a whole is less than three-quarters what it was ten years ago, for both males and females (Table 16). Quite unexpectedly, the rate for females is the same as that for cancer mortality, whereas historically, the cardiovascular rate was distinctly higher. The size of the decrease has been almost the same for both sexes and in all provinces. However, attention should be called to the following:

- the distinctly smaller reduction in both the male and female rates in Newfoundland;
- the particularly large reduction in the female rate in Quebec and British Columbia, and;
- the generally low level in Western Canada.

# (b) Cerebrovascular diseases

As with deaths from ischaemic heart diseases, deaths from cerebrovascular diseases have decreased significantly in all provinces. Although Newfoundland still has the highest provincial rate, it is also the province that has made the most progress (Table 17). The differences between the provinces are currently very small (coefficients of variation of 12.6% for males and 8.6% for females).

#### Traffic Accidents

Traffic accident mortality rates for males have always been higher than those for females, but both have decreased dramatically (more than 40%) at the national level in the ten-year period represented in Table 18. All of the provinces

Table 16. Standardized Mortality Rates1 (per 100,000) for Ischaemic Heart Disease, Canada, the Provinces and Territories, 1972-73 and 1982-83

For 1972-1973 - Causes 83, List A (8th revision) For 1982-1983 - Causes 136 to 139, List A (9th revision)

			Males					Females		
Province	1972	-1973	1982	-1983	Change	1972-	1973	1982	-1983	Change
	Rank	Rate	Rank	Rate	(%)	Rank	Rate	Rank	Rate	(%)
Newfoundland	6	264.7	4	226.6	-14.4	4	182.0	1	167.5	-8.0
Prince Edward Island <sup>2</sup>	2	317.6	1	237.3	-25.3	7	167.8	7	121.4	-27.7
Nova Scotia	3	311.8	3	228.5	-26.7	5	178.2	4	135.6	-23.9
New Brunswick	4	307.2	5	225.5	-26.6	3	183.0	3	137.2	-25.0
Quebec	5	300.4	6	213.3	-29.0	2	197.5	5	130.7	-33.8
Ontario	1	325.1	2	230.6	-29.1	1	208.8	2	153.0	-26.7
Manitoba	8	251.8	7	206.7	-17.9	8	157.6	6	128.4	-18.5
Saskatchewan	10	214.1	10	180.2	-15.8	10	130.0	10	109.7	-15.6
Alberta	9	232.5	9	184.6	-20.6	9	146.0	9	114.1	-21.8
British Columbia	7	255.8	8	185.3	-27.6	6	171.4	8	116.6	-32.0
Yukon <sup>2</sup>		192.6		198.5	3.1		23.6		135.5	(474.2)2
Northwest Territories <sup>2</sup>		153.0		110.7	-27.6		51.9		25.6	-50.7
Canada		288.9		213.3	-26.2		189.7		136.7	-27.9
Coefficent of Variation <sup>3</sup> (%)		14.1		10.1			13.6		13.7	

Age structure of Canada for 1976 was used as standard.
 Because of the small numbers, the fluctuations may be random.

<sup>&</sup>lt;sup>3</sup> Excluding the Yukon and the Northwest Territories.

Table 17. Standardized Mortality Rates1 (per 100,000) for Cerebrovascular Disease, Canada, the Provinces and Territories, 1972-73 and 1982-83

For 1972-1973 - Cause 85, List A (8th revision) For 1982-1983 - Causes 149 to 155, List A (9th revision)

			Males			Females						
Province	1972	-1973	1982	1982-1983		1972-1973		1982-1983		Change		
	Rank	Rate	Rank	Rate	(%)	Rank	Rate	Rank	Rate	(%)		
Newfoundland	1	106.9	1	55.9	-47.7	1	112.5	1	64.6	-42.6		
Prince Edward Island <sup>2</sup>	5	75.7	10	34.4	-54.6	8	78.0	10	46.7	-40.1		
Nova Scotia	2	84.1	3	48.1	-42.8	2	98.3	2	59.6	-39.4		
New Brunswick	6	69.7	5	46.3	-33.6	6	80.3	9	52.1	-35.1		
Quebec	3	80.4	2	49.3	-38.7	3	83.3	5	54.1	-35.1		
Ontario	4	75.9	4	46.6	-38.6	4	83.3	3	56.5	-32.2		
Manitoba	9	63.1	6	46.3	-26.6	9	77.8	7	53.6	-31.1		
Saskatchewan	10	63.0	8	42.7	-32.2	10	71.7	6	54.1	-24.5		
Alberta	7	64.0	9	40.2	-37.2	7	78.9	4	55.6	-29.5		
British Columbia	8	64.0	7	44.2	-30.9	5	80.6	8	52.5	-34.9		
Yukon <sup>2</sup>		14.2		9.4	-33.8		31.8		28.1	-11.6		
Northwest Territories <sup>2</sup>		69.5		22.8	-67.2		36.2		9.5	-73.8		
Canada		73.0		46.4	-36.4		83.5		55.2	-33.9		
Coefficent of Variation <sup>3</sup> (%)		18.3		12.6			14.2		8.6			

Age structure of Canada in 1976 was used as standard.
 Because of the small numbers, the fluctuations may be random.
 Excluding the Yukon and the Northwest Territories.

Table 18. Standardized Mortality Rates1 (per 100,000) for Traffic Accidents, Canada, the Provinces and Territories, 1972-73 and 1982-83

For 1972-1973 - Causes AE 138, List A (8th revision) For 1982-1983 - Causes AE 235 to 241, List A (9th revision)

			Males			Females						
Province	1972-	-1973	1982	1982-1983		1972-1973		1982-1983		Change		
	Rank	Rate	Rank	Rate	(%)	Rank	Rate	Rank	Rate	(%)		
Newfoundland	10	29.0	8	24.0	-17.2	9	13.3	8	8.4	-36.8		
Prince Edward Island <sup>2</sup>	2	53.9	5	28.0	-48.1	1	26.1	9	7.9	-69.7		
Nova Scotia	4	50.5	3	30.5	-39.6	7	15.3	5	10.3	-32.7		
New Brunswick	1	57.3	2	33.6	-41.4	3	18.4	2	11.8	-35.9		
Quebec	3	51.3	7	25.0	-51.3	2	18.9	7	8.9	-52.9		
Ontario	8	37.1	10	20.3	-45.3	8	13.4	10	7.7	-42.5		
Manitoba	9	31.4	9	21.2	-32.5	10	11.6	6	9.5	-18.1		
Saskatchewan	7	40.9	1	36.8	-10.0	5	16.6	1	11.9	-28.3		
Alberta	6	45.7	6	26.5	-42.0	6	15.8	3	11.8	-25.3		
British Columbia	5	48.8	4	30.2	-38.1	4	18.3	4	11.4	-37.7		
Yukon <sup>2</sup>		91.8		34.2	-62.7		22.5		42.0	86.7		
Northwest Territories <sup>2</sup>		51.6		48.3	-6.4		15.2		5.3	-65.1		
Canada		43.8		24.9	-43.2		16.1		9.3	-42.2		
Coefficent of Variation <sup>3</sup> (%)		21.6		19.1			24.3		17.0			

Age structure of Canada in 1976 was used as standard.
 Because of the small numbers, the fluctuations may be random.

<sup>&</sup>lt;sup>3</sup> Excluding the Yukon and the Northwest Territories.

participated in the decrease, however, the reduction was relatively small in Newfoundland and Saskatchewan, and was largest in Quebec (51%). In 1983, Ontario had the lowest rate.

In short, after ten years of fighting the main causes of death, regional differences still remain in Canada. The convergence of the coefficients of variation at the bottom of the various tables, however, indicates a reduction in regional disparities, in keeping with that observed for other sociodemographic phenomena.

#### Suicide

Suicide, is a cause of death that has always attracted a great deal of attention, and on which a close eye has been kept. Care must be taken, however, to distinguish suicide from attempted suicide. Vital statistics tell us only how many people have died through suicide. In this context, comparison of the average for 1980-1981 with that for 1984-85 reveals a few changes, but no major transformations. In considering the age-specific trend in suicide mortality since 1981 (Table 19), with the exception of those in the oldest age group and the 45-49 age group (for which a slight decline is observed), the rates for males have increased only very slightly. As a result, the standardized rate rose from 27.5 in 1981 to 28.1 per 100,000 in 1984, but declined to 26.3 in 1985. The increase between 1981 and 1984 was certainly not negligible, but the term "epidemic" would be inappropriate, especially when considering the fact that the absolute number of suicides increased by only about 350 in the 1980 to 1983 period (1980: 2,534 cases; 1981: 2,570; 1982: 2,726; 1983: 2,885).

The increase in propensity to commit suicide observed in 1984 was part of an overall trend that had been evolving since the 1950's. The trend is in the other direction for females, for whom the standardized rate has tended to decrease (9.6 in 1976, 8.7 in 1981, 8.2 in 1984 and 7.1 in 1985). The rates are declining for women of almost all ages.

There are also marked differences among the provinces, especially for females, where the coefficients of variation were almost double those for males in both the 1972-73 and 1982-83 periods (Table 20). For both periods and both sexes, Newfoundland and British Columbia had the lowest and the highest rates respectively, and were far from the national average. The sharpest increases in suicide were noted for males, where the overall change was 19.1 percent over the ten-year period. Particularly noteworthy in this respect were: Newfoundland (57.7); New Brunswick (56.2), and; Québec (56.2). Among females, where the general trend is toward lower rates, Québec experienced an increase of 42.4 percent over the period.

Table 19. Age-specific Suicide Mortality Rates (per 100,000), Canada, 1950, 1976, 1981, 1984 and 1985

Age Group	Sex	19511	1976 <sup>1</sup>	1981 <sup>1</sup>	19841	1985
15-19	M F	3.9 1.8	18.6 4.5	20.3	22.0 3.5	20.1
20-24	M F	8.8 3.2	33.6 7.7	32.1 6.5	33.0 5.0	31.4
25-29	M F	7.6 3.9	28.1 8.6	28.9 7.5	31.0 7.0	27.7
30-34	M F	10.4	24.3 10.4	26.6 8.0	29.0 8.5	26.5 7.2
35-39	M F	13.2 4.6	25.2 10.9	24.7 8.6	24.5 9.0	23.9
40-44	M F	19.6 6.4	27.3 10.8	26.2 10.4	28.0 11.5	25.3 9.0
45-49	M F	21.6 7.2	29.3 14.0	29.1 12.4	22.5 11.5	24.9
50-54	M F	26.4 8.3	32.7 13.4	29.7 13.6	30.0 11.5	30.2
55-59	M F	27.2 7.3	26.6 13.7	29.6 12.3	32.0 11.0	29.5 9.8
60-64	M F	30.8 9.0	24.1 11.9	27.2 11.2	29.0 11.0	25.1 8.8
65-69	M F	28.2 9.3	24.3 9.9	26.8 10.3	26.0 11.5	24.2
70-74	M F	29.5 6.3	26.3 8.4	30.1 9.3	30.5 8.0	29.2 7.0
75-79	M F	32.8 5.9	24.9 5.8	34.4 7.1	35.0 6.0	28.1
80-84	M F	25.1 2.0	21.2 7.3	41.7 6.9	36.5 8.0	32.4 5.0
Standardized Rate <sup>2</sup>	M F	15.7 5.2	26.5 9.6	27.5 8.7	28.1 8.2	26.3 7.1

Averages for 1950 and 1951, 1975 and 1976, 1980 and 1981, 1983 and 1984, 1984 and 1985, respectively.

Source: Statistics Canada, Causes of Death, Catalogue 84-203.

<sup>&</sup>lt;sup>2</sup> Age structure of Canada in 1976 was used as standard.

Table 20. Standardized Mortality Rates1 (per 100,000) for Suicide, Canada, the Provinces and Territories, 1972-73 and 1982-83

For 1972-1973 - Cause AE 147, List A (8th revision) For 1982-1983 - Causes AE 264 to 270, List A (9th revision)

			Males					Females	S	
Province	1972-	1973	1982	1982-1983		1972-1973		1982-1983		Change
	Rank	Rate	Rank	Rate	(%)	Rank	Rate	Rank	Rate	(%)
Newfoundland	10	7.1	10	11.2	57.7	9	1.9	10	1.4	-26.3
Prince Edward Island <sup>2</sup>	8	15.6	9	17.7	13.5	10	0.9	7	4.3	
Nova Scotia	5	19.1	7	22.7	18.8	7	4.8	8	4.1	-14.6
New Brunswick	9	14.5	5	22.8	57.2	8	3.5	9	3.8	8.6
Quebec	7	16.2	3	25.3	56.2	6	5.9	2	8.4	42.4
Ontario	6	17.7	8	18.4	4.0	2	8.4	4	6.0	-28.6
Manitoba	4	19.7	6	22.8	15.7	3	6.8	5	5.5	-19.1
Saskatchewan	2	23.3	2	26.1	12.0	4	6.6	6	5.4	-18.2
Alberta	3	20.4	4	24.4	19.7	5	6.6	3	7.1	7.6
British Columbia	1	23.5	1	26.4	12.7	1	11.0	1	8.9	-19.1
Yukon <sup>2</sup>		62.3		50.7	-18.6		10.8		10.8	0.0
Northwest Territories <sup>2</sup>		57.2		40.2	-29.7		12.7		14.7	15.7
Canada		18.3		21.8	19.1		7.4		6.3	-14.9
Coefficent of Variation <sup>3</sup> (%)		27.1		21.8			47.0		41.1	

<sup>3</sup> Excluding the Yukon and the Northwest Territories.

Age structure of Canada in 1976 was used as standard.
 Because of the small numbers, the fluctuations may be random.

### MIGRATION

## **International Immigrants**

Since the end of World War II, immigration to Canada has behaved in a cyclical fashion. The average period for each cycle has been eight or nine years, with peaks occurring in 1951 (190,000), 1957 (200,000), 1967 and 1974 (220,000), and in 1980 (a "low peak" of only 140,000) (Chart 12). The 1983 and 1984 lows mark a departure from the established trend, insofar as they stem from a decision in November 1982 to reduce immigration levels. The brunt of this cut was borne by the "independents" and the "assisted relatives" classes<sup>8</sup>, as the combined number of immigrants in these classes dropped in the succeeding years to about half that recorded in 1982 (Table 21). The "independents" class generally contains most of those who plan to enter the labour force, and it was this group of immigrants, in particular, who were the target of the cut-back. The number of immigrants in the family class was virtually unchanged.

While all areas of origin<sup>9</sup> were affected, some experienced more reductions than others. The European countries that have traditionally supplied most of the "selected workers" group of immigrants have experienced the largest decreases. This was particularly true in the case of Great Britain, from where 19,000 such immigrants originated in 1981, but only 14,500 in 1982, and less than 5,000 in 1983 and 1984 (Table 22). In contrast, because of the political upheaval that afflicted Poland, Canada admitted 4,000 Poles in 1981, 9,000 in 1982, and an additional 5,000 in each of 1983 and 1984. This compares with annual levels of only slightly over 1,000 in previous years.

The flow of immigrants from Asia was reduced less drastically (a decrease of 18% from 1981) with fewer coming from India and slightly more from Hong Kong. Since the beginning of the decade, progressively fewer have been immigrating from the United States, and the number of immigrants from the Caribbean and South American countries has also been gradually declining.

The average age of immigrants has risen substantially over the past three years, to 31 for males and almost 33 for females (Table A15). This high average age stems from the selection process. Constricting the admissibility of "selected workers" reduces the admittance of young adults and their young children. At the same time, the "family class" is comprised of relatively older people who, consequently, account for a larger proportion of total immigrants. As a result, 1983 marked the first time ever that Canada admitted more persons over age 65 than under age 5. Since the number of immigrants is small, however, the impact on the overall age structure of the Canadian population is not significant.

 <sup>8</sup> For a definition of these classes, see *Current Demographic Analysis: Report on the Demographic Situation in Canada, 1983.* Statistics Canada, Catalogue 91-209E.
 9 Origin refers to country of birth, not country of last residence.

Chart 12
Numbers of Immigrants and Immigration Rates, Canada, 1944-1983

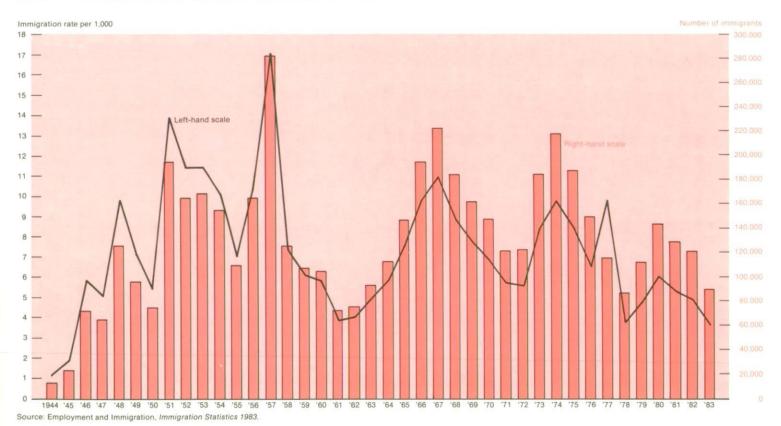


Table 21. International Immigration by Major Classes, Canada, 1970-1985

Year	Total	Fami	ly	Indepen Immigrand Ass Relativ	ants isted	Refugees and Designated Classes		
	Number	Number	070	Number	070	Number	070	
1970	147,713	32,263	21.8	115,450 <sup>1</sup>				
1971	121,900	33,450	27.4	88,450 <sup>1</sup>				
1972	122,006	33,019	27.1	83,807	68.7	5,180	4.2	
1973	184,200	41,677	22.6	140,164	76.1	2,359	1.3	
1974	218,465	54,232	24.8	162,567	74.4	1,666	0.8	
1975	187,881	64,124	34.1	118,191	62.9	5,566	3.0	
1976	149,429	60,830	40.7	76,848	51.4	11,751	7.9	
1977	114,914	51,355	44.7	56,259	48.9	7,300	6.4	
1978	86,313	45,540	52.8	36,518	42.3	4,255	4.9	
1979	112,096	46,763	41.7	37,454	33.4	27,879	24.9	
1980	143,129	51,039	35.7	51,744	36.2	40,334	28.2	
1981	128,618	51,017	39.7	62,622	48.7	14,979	11.6	
1982	121,147	49,980	41.2	54,242	44.8	16,925	14.0	
1983	89,157	48,698	54.6	26,492	29.7	13,967	15.7	
1984	88,239	43,814	49.6	29,083	33.0	15,342	17.4	
1985	84,302	38,514	45.7	29,028	34.4	16,760	19.9	

<sup>&</sup>lt;sup>1</sup> The "Refugees and designated classes" category did not exist at that time. **Source:** Employment and Immigration Canada.

Despite the reduced immigration of "selected workers", 44 percent of all 1984 immigrants were employable, since a large number, primarily from the "family" and "refugee" classes, are destined for the labour force. Relative to 1981, however, the numbers were down in every occupational category (except entrepreneurs), in some cases by as much as 50% (Table 23). The increase in the entrepreneur class is likely to continue in the future, since the 1984 Annual Report to Parliament on Future Immigration Levels<sup>10</sup> stresses the economic benefits of recruiting entrepreneurs, because entrepreneurs create jobs. Furthermore, the new category "investors" has been added alongside "selected workers" and "entrepreneurs" in the business immigration programme, in order to attract persons willing to make at least a three-year capital investment.

<sup>10</sup> November, 1984, Employment and Immigration Canada.

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Table 22. Immigrant Population by Country of Birth, 1968-1985

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Europe	118,791	87.842	75,006	52,733	51,175	70,080	84,780	68,733		40 DC7	20.002	20.722	40 510	44.704		20.771	20.20.	
Great Britain	33,814	28,790	23,688	14,230	16,637	23,533	33,088	29,454	49,470 19,257	40,967 16,634	30,003 10,698	32,633	40,210 16,445	44,784	44,356	23,664	20,581	18,530
Portugal	8,720	7.917	8,594	9,776	9,280	14,417	17,268	9,158	6,194	4,238	3,420	11,806	4,222	18,912 3,292	14,525 2,308	4,945 1,373	4,657 869	3,998
France	5,370	3,612	2,958	2,059	1,880	2,411	2,811	2,831	2,415	2,090	1,322	1,547	1,461	1,681	1,821	1,237	970	994
Greece	7,952	7,106	6,440	4,822	4,008	5,800	5,654	3,954	2,429	1.874	1,324	1,187	1,044	924	884	617	578	579
Italy	20,880	10,685	8,659	5,937	4,847	6,176	5,818	4,919	4,008	3,088	2,647	2,134	1,873	2,057	1,496	879	892	733
Poland	1,854	1,563	1,403	1,527	1,664	1,629	1.373	1,191	1,366	1,293	1,153	1,263	1,395	4,093	9,259	5,374	4,640	3,642
Others	40,201	28,163	23,264	14,382	12,859	16,114	18,768	17,226	13,801	11,750	9,439	10,954	13,770	13,825	14,063	9,239	7,975	7,667
Africa	7,002	5,953	4,017	3,463	8,504	9,977	12,792	11,715	8,617	6,595	4,561	4,412	5,383	5,901	5,196	3,913	3,851	3,912
Asia	23,775	24,451	23,682	24,230	25,938	46,777	55,290	52,024	46,482	32,904	25,332	51.740	73,026	50,759	43,863	38,183	42,730	39,438
Philippines	2,762	3,138	3,305	4,213	4,113	6,886	9,897	7,688	6,109	6,101	4,368	3,927	6,147	5,978	5,295	4,597	3,858	3,183
India	4,675	6,736	7,089	6,301	6,746	11,672	16,016	13,401	8,562	6,772	6,077	5,486	9,531	9,415	8,858	7,810	6,082	4,51
Hong Kong (C.C.B.)	3,353	3,353	2,250	2,581	3,396	9,155	7,673	6,438	6,442	3,903	2,825	3,548	3,874	4,039	4,452	4,238	5,013	5,12
China	5,401	5,610	3,397	3,694	3,813	6,842	6,581	6,235	6,003	4,037	3,181	5.821	8,965	9,798	6,295	5,321	5,769	5,160
Others	7,584	5,614	7,641	7,441	7,870	12,222	15,123	18,262	19,366	12,091	8,881	32,958	44,509	21,529	18,963	16,217	22,008	21,451
North and																		
Central America	18,482	20,927	22,670	22,508	21,137	23,861	25,147	19,268	16,494	12,755	9,713	9,128	9,442	10,183	10,030	10,200	10,223	10,898
USA	17,076	19,258	20,859	20,723	19,176	21,391	22,454	16,729	14,278	10,723	8,254	7,821	8,098	8,695	7,841	6,136	5,727	5,61
West Indies	8,904	13,803	13,286	11,202	8,696	19,809	24,441	18,790	15,066	11,822	8,330	6,535	7,515	8,797	8,717	7,258	5,696	6,240
Australasia	4,145	3,523	3,462	2,182	1,646	1,893	1,928	1,574	1,367	1,147	944	1,068	1,215	1,020	758	394	430	399
South America	2,368	4,158	4,506	4,598	4,036	10,353	12,204	13,102	10,496	7,774	6,682	5,810	5,381	6,114	6,892	4,825	4,046	4,27
Oceania							1,882	2,675	1,437	950	724	736	944	1,024	1,183	720	599	613
Others	507	874	1,084	984	874	1,450					24	34	1	36	152	-	83	
Total	183,974	161,531	147,713	121,900	122,006	184,200	218,465	187,881	149,429	114,914	86,313	112,096	143,117	128,6181	121,147	89,1571	88,239	84,302

<sup>&</sup>lt;sup>1</sup> The total differs from the sum of the column because of immigrants whose country of birth is unknown. **Source:** Employment and Immigration Canada, *Immigration Statistics*, ISSN 0576-2286.

From a numerical standpoint, the growth of the Canadian population has always been heavily dependent upon international migration. One out of every six people enumerated in the 1981 Census was born outside Canada<sup>11</sup>, and two out of three among this group were born in Europe. The volume of immigrants for 1985 conformed to the anticipated level of 85,000 (the preliminary figure is 84,273). An increase is anticipated in the next two years, however, as the maximum target number has been set at 115,000 for 1986, and subsequently to 125,000 for 1987.

The most recent population projections by Statistics Canada<sup>12</sup> show that with an annual emigration level of 50,000 persons and a total fertility rate stabilizing at the level of 1.7 births per woman, Canada will need 175,000 immigrants each year to stabilize its population at 25,000,000. Coupled with concerns over low natural increase, the demographic effects of the current immigration policy have generated sufficient interest such that "...the federal government will be giving serious early consideration to the relationship between immigration levels and Canada's demographic future" <sup>13</sup>.

## Interprovincial Migration

Migratory movements between provinces are influenced, in both the short and long run, by economic factors. Sudden demand for labour in a particular region will trigger an influx of people, occasionally followed by varying levels of return migration. A case in point is the population exchanges that have occurred between Eastern and Western Canada, especially since the early 1970's. The traditional east-to-west trickle of population, which has long contributed to rapid growth in British Columbia and Alberta, increased substantially for ten years as a result of increased exploration and development in the oil fields, particularly in Alberta, Between 1972 and 1983, British Columbia and Alberta gained half a million people through population exchanges with the rest of the country. As the world oil situation deteriorated, however, the migration balance in Alberta turned negative. In 1982-83, the absolute value of the change was 50,000 persons (Table 24). The trend intensified in 1983-84, as the province posted a net loss through migration of 32,000. Long a loser in population exchanges, Ontario was the major beneficiary of this return flow, having recorded gains of some 23,600 in 1982-83 and 36,400 in 1983-84.

The most recent figures indicate that Ontario has maintained its strong attraction on interprovincial migrants, having made net gains in excess of 30,000 in each of the last two years. Furthermore, Alberta has almost reversed its net outflow situation, having recorded a loss of only 1,480 persons in 1985-86. This turnaround in migration has contributed substantially to the strong overall growth of Alberta in the current year.

<sup>11 3,867,160</sup> persons.

<sup>12</sup> Statistics Canada, Population Projections for Canada, Provinces and Territories: 1984-2006. May, 1985, Catalogue 91-520.

<sup>13</sup> Annual Report to Parliament on Future Immigration Levels. See footnote 10.

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Table 23. Distribution of Immigrant Population Destined for the Labour Force by Occupation, Canada, 1981, 1983, 1984 and 1985

Rank -		19	81	19	83	19	84	19	85
in 1981	Occupational group	Number	Per- centage	Number	Per- centage	Number	Per- centage	Number	Per- centage
1	Fabricating, assembling and repairing	6,296	11.1	3,641	9.9	4,306	11.2	4,034	10.5
2	Clerical	7,044	12.4	3,540	9.5	3,150	8.2	3,087	8.0
3	Natural sciences, engineering and mathematics	6,932	12.2	2,749	7.4	2,059	5.3	2,097	5.5
4	Services	4,250	7.5	3,816	10.3	5,235	13.6	5,279	13.7
5	Managerial, administrative	3,601	6.3	1,934	5.2	1,529	4.0	1,497	3.9
6	Construction	2,194	3.9	1,555	4.2	1,543	4.0	1,660	4.3
7	Machining	2,529	4.4	982	2.6	972	2.5	969	2.5
8	Medicine and health	2,903	5.1	1,609	4.3	1,436	3.7	1,524	4.0
9	Sales	2,151	3.8	1,499	4.0	1,536	4.0	1,475	3.8
10	Farming, horticulture and animal husbandry	2,931	5.1	1,419	3.8	1,170	3.0	1,050	2.7
11	Teaching	1,677	2.9	1,212	3.3	1,187	3.1	1,263	3.3
12	Processing	1,170	2.1	655	1.8	175	0.5	213	0.6
13	Transport equipment operating	691	1.2	618	1.7	568	1.5	591	1.5
14	Artistic, literary, performing arts	1,131	2.0	673	1.8	645	1.7	707	1.8
15	Social sciences	555	1.0	395	1.1	300	0.8	357	0.9
16	Material handling	361	0.6	244	0.7	330	0.9	344	0.9
17	Other crafts and equipment operating	313	0.5	191	0.5	180	0.5	183	0.5
18	Religion	469	0.8	493	1.3	441	1.1	396	1.0
19	Fishing, hunting, trapping	135	0.2	50	0.1	65	0.2	112	0.3
20	Entrepreneurs	293	0.5	569	1.5	1,032	2.7	1,504	3.9
21	Sports and recreation	111	0.2	86	0.2	77	0.2	87	0.2
22	Mining and quarrying including gas and oil	67	0.1	46	0.1	56	0.1	44	0.1
23	Forestry and logging	19	-	22	0.1	16	-	20	0.1
NOTE:	Not stated and other	9,146	16.0	9,111	24.6	10,492	27.2	9,960	25.9
Γotal	Destined for Labour Force	56,969	100.0	37,109	100.0	38,500	100.0	38,453	100.0

Source: Employment and Immigration Canada, *Immigration Statistics*, 1981, op.cit. Table 11, Page 38; 1983, Table 15, Page 40; 1984, Quarterly Statistics. Unpublished data for 1985.

Table 24. Net Interprovincial Migration for Provinces and Territories, 1972-73 to 1985-86

Year	New- found- land	Prince Edward Island	Nova Scotia	New Bruns- wick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbía	Yukon and Northwest Territories
1972-73	-537	923	4,276	2,077	-20,072	960	-5,770	-16,164	5,564	27,333	1,410
1973-74	-3,316	502	1,274	1,448	-15,135	~2,886	-1,596	-11,604	2,235	30,496	-1,418
1974-75	495	1,390	2,233	6,103	-9,299	-29,535	-6,912	378	22,576	11,831	740
1975-76	591	649	3,895	6,561	-12,643	-21,179	-4,238	5,845	24,621	-4,419	317
1976-77	-4,149	154	-799	-82	-26,366	-6,402	-3,531	3,182	34,710	5,016	-1,733
1977-78	-4,311	700	-416	-1,348	-46,429	8,510	-4,674	-1,719	32,543	17,576	-432
1978-79	-3,374	-74	-357	-1,171	-30,884	~4,325	-10,746	-2,878	33,426	22,005	-1,622
1979-80	-3,597	-358	-2,732	-2,761	-29,976	-22,362	-13,864	-4,493	41,435	40,164	-1,456
1980-81	-3,552	-1,251	-2,836	-4,989	-22,841	-33,247	-9,403	-3,808	44,250	37,864	-187
1981-82	-5,693	-856	-1,936	-2,842	-25,790	-5,665	-2,625	-323	36,562	8,705	463
1982-83	1,829	636	3,791	3,554	-24,678	23,585	2,544	3,580	-11,650	-1,489	-1,702
1983-84	-2,026	797	3,804	1,792	-17,417	36,400	339	2,133	-31,986	6,636	-472
1984-85	-3,543	623	2,409	34	-9,042	37,881	1,250	-346	-27,361	-2,319	414
1985-86	-4,864	-238	-1,544	-3,021	-3,415	33,856	2,193	-7,828	-1,480	-7,657	-1,616
Total	-36,047	3,597	11,062	5,355	-293,987	15,591	-57,033	-34,035	205,445	191,742	-7,294

Source: Statistics Canada, Catalogue 91-210 annual.

British Columbia, after having reached a low in 1982-83 with a negative balance of 1,500 people, experienced a substantial turnaround in 1983-84, with a net gain of 6,600 persons. The figures for the two most recent years, however, indicate a return to net losses, with the exchange deficit reaching 7,657 persons in 1985-86. Quite the opposite situation has occurred in Quebec, however, as exchange deficits with other provinces have been progressively reduced from more than 26,000 in 1981-82, to slightly more than 3,400 in 1985-86. Moreover, this figure is substantially lower than that for any other year represented in Table 24. Prince Edward Island, New Brunswick and Nova Scotia all followed Newfoundland into the red in population exchanges in 1985-86. The latter had shown a net gain in 1982-83 for the first time since the 1975-76 period, whereas the remaining Atlantic provinces had shown net gains in each year from 1982-83 to 1984-85.

It is important to point out that interprovincial movements, which had averaged close to 375,000 persons annually for the previous 10 years, fell to 279,000 in 1983-1984, representing a 25 percent reduction (Table 25). The overall mobility rate, as a consequence, dropped from 16 to 11 per 1,000. Undoubtedly, this is a classic example of the effects of an economic recession. The 1984-85 and 1985-86 figures, however, indicate a higher level of mobility in the population (382,600 in 1984-85 and 375,800 in 1985-86), and show a return to the levels observed in the 1970's.

Table 25. Interprovincial Migration of Children and Adults, In- and Out-migration, 1972-73 to 1985-86

	nsal ear	New- found- land	Prince Edward Island	Nova Scotia	New Bruns- wick	Quebec	Ontario	Manitoba	Saskat- chewan	Alberta	British Columbia	Yukon and Northwest Territories	Total
1972-73	In	11,452	4,332	24,280	20,370	35,594	96,003	28,862	20,843	62,749	77,851	7,263	389,599
	Out	11,989	3,409	20,004	18,293	55,666	95,043	34,633	37,007	57,185	50,518	5,852	389,599
1973-74	In	12,915	4,756	26,281	21,459	40,773	104,720	32,981	27,097	72,082	88,145	5,203	436,412
	Out	16,231	4,254	25,007	20,011	55,909	107,605	34,577	38,701	69,847	57,649	6,621	436,412
1974-75	In	12,328	5,428	26,882	24,103	37,834	84,965	30,188	30,270	79,884	77,711	7,296	416,890
	Out	11,833	4,037	24,649	18,000	47,133	114,499	37,099	29,893	57,309	65,880	6,557	416,890
1975-76	In	12,112	4,392	24,847	23,369	32,915	81,141	26,565	28,459	76,210	58,276	6,244	374,528
	Out	11,520	3,742	20,952	16,808	45,557	102,321	30,803	22,614	51,588	62,695	5,927	374,528
1976-77	In	8,304	3,837	20,849	15,965	28,867	86,187	22,864	24,058	81,332	58,199	6,927	357,389
	Out	12,453	3,683	21,648	16,047	55,233	92,589	26,395	20,876	46,622	53,183	8,660	357,389
1977-78	In	8,181	3,933	20,055	15,135	23,945	97,825	20,761	20,875	83,270	63,371	7,070	364,421
	Out	12,492	3,233	20,471	16,483	70,374	89,315	25,435	22,594	50,727	45,795	7,502	364,421
1978-79	In	8,462	3,584	19,905	14,929	25,524	87,125	18,774	20,528	86,057	67,506	6,411	358,805
	Out	11,836	3,658	20,262	16,100	56,408	91,450	29,520	23,406	52,631	45,501	8,033	358,805
1979-80	In	9,066	3,185	17,682	13,855	22,018	79,556	18,690	20,293	100,710	80,656	5,677	371,388
	Out	12,663	3,543	20,414	16,616	51,994	101,918	32,554	24,786	59,275	40,492	7,133	371,388
1980-81	In	9,238	3,116	18,737	13,356	22,905	77,090	20,468	21,924	109,383	80,515	6,200	382,932
	Out	12,790	4,367	21,573	18,345	45,746	110,337	29,871	25,732	65,133	42,651	6,387	382,932
1981-82	In	8,763	3,375	18,899	13,857	21,349	83,619	21,601	21,808	100,046	57,983	6,619	357,919
	Out	14,456	4,231	20,835	16,699	47,139	89,284	24,226	22,131	63,484	49,278	6,156	357,919
1982-83	In	10,193	3,403	19,166	15,016	20,881	86,885	20,454	21,081	59,381	44,221	4,805	305,486
	Out	8,364	2,767	15,375	11,462	45,559	63,300	17,910	17,501	71,031	45,710	6,507	305,486
1983-84	In	6,753	3,219	18,024	12,450	23,031	89,002	17,731	18,901	41,126	44,088	5,047	279,372
	Out	8,779	2,422	14,220	10,658	40,448	52,602	17,392	16,768	73,112	37,452	5,519	279,372
1984-85	In	8,151	3,940	22,718	16,427	32,900	114,102	24,222	23,731	67,915	62,221	6,264	382,591
	Out	11,694	3,317	20,309	16,393	41,942	76,221	22,972	24,077	95,276	64,540	5,850	382,591
1985-86	In	8,214	3,539	20,697	15,506	33,244	109,561	22,278	21,349	75,575	60,267	5,614	375,844
	Out	13,078	3,777	22,241	18,527	36,659	75,705	24,471	29,177	77,055	67,924	7,230	375,844

Source: Statistics Canada, Cat. 91-208; Demography Division, unpublished data — available upon request.

Appendix A

Table A1. Total Growth Rate, 1901-02 to 1985-86 and Rate of Natural Increase, 1928-29 to 1985-86, Canada

Census Year	Total Growth Rate	Rate of Natural Increase	Census Total Grow	Total Growth Rate	Rate of Natura Increase
1901-02	2.26	-	44	1.28	1.33
03	2.82	-	45	1.05	1.27
04	3.07	-	46	1.82	1.51
05	2.96	_	47	2.11	1.94
06	1.57	-	48	2.17	1.84
07	5.02	_	49	2.18	1.80
08	3.28	1-1	50	1.97	1.81
09	2.61	-	51	2.17	1.84
10	2.73	-	1951-52	3.21	1.89
11	3.09	-	53	2.67	1.94
1911-12	2.49	1-1	54	2.98	2.03
13	3.24	-	55	2.69	2.06
14	3.18	-	56	2.44	1.99
15	1.29	-	57	3.29	2.05
16	0.25	-	58	2.83	2.01
17	0.73	-	59	2.36	1.96
18	1.09	-	60	2.21	1.94
19	1.98	-	61	2.06	1.90
20	2.91	-	1961-62	1.89	1.80
21	2.68	-	63	1.87	1.75
1921-22	1.48	-	64	1.90	1.66
23	1.02	-	65	1.83	1.52
24	1.47	-	66	1.89	1.29
25	1.64	-	67	1.81	1.16
26	1.68	-	68	1.59	1.05
27	1.95	-	69	1.45	1.03
28	2.03	-	70	1.41	1.02
29	1.97	1.21	71	1.27	1.02
30	1.78	1.32	1971-72	1.07	0.90
31	1.66	1.31	73	1.10	0.83
1931-32	1.28	1.29	74	1.45	0.82
33	1.17	1.23	75	1.48	0.83
34	1.02	1.12	76	1.29	0.84
35	0.97	1.09	77	1.21	0.84
36	0.97	1.08	78	1.04	0.82
37	0.87	0.98	79	0.97	0.83
38	0.97	1.03	80	1.24	0.84
39	1.03	1.09 1.11	81 1981-82	1.24 1.18	0.83
40 41	1.01 1.11	1.11	1981-82	1.02	0.82
1941-42	1.11	1.21	84	0.96	0.81
43	1.28	1.36	85	0.98	0.80
43	1.41	1.30	1985-86	0.91	0.76

Sources: Statistics Canada, Annual Population Estimates, Catalogue 91-210. Statistics Canada, Population Growth in Canada, Catalogue 99-701. Statistics Canada, Births and Deaths, Catalogue 84-204. Statistics Canada, Demography Division, unpublished data.

Table A2. Immigration Rate, 1901-1984 and Total Fertility Rate<sup>1</sup> (per 1,000), 1911, 1922-1985, Canada

Year	Immi- gration	Total Fertility	Year	Immi- gration	Total Fertility	Year	Immi- gration	Total Fertility
	Rate	Rate		Rate	Rate		Rate	Rate
1901	10.4	-	1930	10.3	3,282	1959	6.1	3,935
1902	16.2	-	1931	2.7	3,200	1960	5.8	3,895
1903	24.5	2-1	1932	2.0	3,084	1961	3.9	3,840
1904	22.5	-	1933	1.4	2,864	1962	4.0	3,756
1905	23.6	- 1	1934	1.2	2,803	1963	4.9	3,669
1906	34.7	-	1935	1.0	2,755	1964	5.8	3,502
1907	42.5	-	1936	1.1	2,696	1965	7.5	3,145
1908	21.6	-	1937	1.4	2,646	1966	9.7	2,812
1909	25.5	-	1938	1.5	2,701	1967	10.9	2,597
1910	41.0	-	1939	1.5	2,654	1968	8.9	2,453
1911	46.0	4,700	1940	1.0	2,766	1969	7.7	2,405
1912	50.9	-	1941	0.8	2,832	1970	6.9	2,331
1913	52.5	-	1942	0.7	2,964	1971	5.7	2,187
1914	19.1	-	1943	0.7	3,041	1972	5.6	2,024
1915	4.6	-	1944	1.1	3,010	1973	8.4	1,931
1916	7.0	-	1945	1.9	3,018	1974	9.8	1,875
1917	9.0	-	1946	5.8	3,374	1975	8.3	1,852
1918	5.1	-	1947	5.1	3,595	1976	6.5	1,825
1919	13.0	-	1948	9.8	3,441	1977	4.9	1,806
1920	16.2	-	1949	7.1	3,456	1978	3.7	1,757
1921	10.4	- ]	1950	5.4	3,455	1979	4.7	1,764
1922	7.2	3,402	1951	13.9	3,503	1980	6.0	1,746
1923	14.8	3,234	1952	11.4	3,641	1981	5.3	1,704
1924	13.6	3,221	1953	11.4	3,721	1982	4.9	1,694
1925	9.1	3,132	1954	10.1	3,828	1983	3.6	1,680
1926	14.4	3,357	1955	7.0	3,831	1984	3.5	1,686
1927	16.5	3,319	1956	10.3	3,858	1985	-	1,669
1928	17.0	3,294	1957	17.0	3,925			
1929	16.5	3,217	1958	7.3	3,880			

<sup>&</sup>lt;sup>1</sup> Canada excluding Newfoundland for TFR.

Sources: Employment and Immigration Canada (1985). Immigration 1983. Ottawa:

Supply and Services Canada, Table 2.

Statistics Canada, Catalogue 91-210, Table 1.

Statistics Canada, Catalogue 84-204.

Henripin, J. (1968). 1961 Census Monograph, Catalogue 91-541: Trends and Factors of Fertility in Canada, Table 2.3.

Employment and Immigration Canada (1986). *Immigration Statistics, 1984*. Ottawa: Supply and Services Canada, Table G2.

Table A3. Demographic Accounts of the Provinces and Territories, 1951-1986

Year	Population <sup>1</sup>	Total Growth <sup>2</sup>	Births <sup>2</sup>	Deaths <sup>2</sup>	Natural Increase	Net Migration <sup>2,3</sup>				
		1	Newfound	lland						
		(	in thousa	inds)						
1951	361.4 <sup>4</sup>									
1971	522.14	8.05								
1972	530.0 <sup>6</sup>	7.9	12.8	3.2	9.6	-1.7				
1973	537.26	7.2	13.0	3.4	9.6	-2.4				
1974	541.56	4.3	12.3	3.4	8.9	-4.6				
1975	549.16	7.6	11.5	3.2	8.3	-0.7				
1976	557.74	8.6	10.9	3.3	7.6	1.0				
1977	559.86	2.1	11.1	3.2	7.9	-5.8				
1978	561.56	1.7	10.8	3.1	7.7	-6.0				
1979	563.56	2.0	10.4	3.2	7.2	-5.2				
1980			10.3	3.3	7.0	-4.9				
1981			10.3	3.2	7.1	-5.0				
1982	80 565.6 <sup>6</sup> 2.1 81 567.7 <sup>4</sup> 2.1 82 568.5 <sup>7</sup> 0.8 83 576.0 <sup>7</sup> 7.5		9.7	3.3	6.4	-5.6				
1983			9.2	3.5	5.7	1.8				
1984	579.3 <sup>7</sup>	3.3	8.7	3.5	5.2	-1.9				
1985	580.77	1.4	8.5	3.4	5.1	-3.7				
1986	580.27	-0.5	7.8	3.5	4.3	-4.8				
		Prin	nce Edward Island							
1951	98.4 <sup>4</sup>	***								
1971	$111.6^4$	0.75	***	***						
1972	$112.6^{6}$	1.0	2.1	1.0	1.1	-0.1				
1973	$114.0^{6}$	1.4	1.9	1.0	0.9	0.5				
1974	115.26	1.2	1.9	1.1	0.8	0.4				
1975	$117.1^{6}$	1.9	1.9	1.1	0.8	1.1				
1976	118.24	1.1	1.9	1.1	0.8	0.3				
1977	119.36	1.1	2.0	1.1	0.9	0.2				
1978	$121.0^{6}$	1.7	1.9	1.0	0.9	0.8				
1979	$122.0^{6}$	1.0	2.0	1.0	1.1	-0.1				
1980	$122.8^{6}$	0.8	1.9	1.0	0.9	-0.1				
1981	$122.5^4$	0.3	1.9	1.0	0.9	-1.2				
1982	$122.7^{7}$	0.2	1.9	1.0	0.9	-0.7				
1983	124.37	1.6	1.9	1.0	0.9	0.7				
1984	125.9 <sup>7</sup>	1.6	1.9	1.1	0.8	0.8				
1985	127.47	1.5	2.0	1.1	0.9	0.6				
1986	128.17	0.7	2.0	1.1	0.9	0.2				

Table A3. Demographic Accounts of the Provinces and Territories, 1951-1986 - Continued

Year	Population <sup>1</sup>	Total Growth <sup>2</sup>	Births <sup>2</sup>	Deaths <sup>2</sup>	Natural Increase	Net Migration <sup>2, 3</sup>				
i cai			Nova Sc	otia						
			(in thousa	inds)						
1951	642.64		***							
1971	789.0 <sup>4</sup>	7.35								
1972	794.66	5.6	14.0	6.8	7.2	-1.6				
1973	804.36	9.7	13.4	6.9	6.5	3.2				
1974	811.56	7.2	12.9	7.0	5.9	1.3				
1975	6 828.6 <sup>4</sup> 9.1 7 833.4 <sup>6</sup> 4.8	8.0	13.1	6.8	6.3	1.7				
1976		9.1	13.1	6.9	6.2	2.9				
1977		4.8	12.7	7.1	5.6	-0.8				
1978	837.56	4.1	12.3	6.8	5.5	-1.4				
1979	841.86	4.3	12.6	6.9	5.7	-1.4				
1980	845.16	3.3	12.5	6.9	5.6	-2.3				
1981	847.44	2.3	12.2	7.0	5.2	-2.9				
1982	851.77	4.3	12.1	6.9	5.2	-0.9				
1983	861.57	9.8	12.4	7.1	5.3	4.5				
1984	871.17	9.6	12.4	7.1	5.3	4.3				
1985	879.87	8.7	12.4	6.8	5.6	3.1				
1986	883.87	4.0	12.3	7.4	4.9	-0.9				
		1	New Brunswick							
1951	515.74									
1971	634.64	6.05								
1972	640.16	5.5	12.0	5.0	7.0	-1.5				
1973	647.16	7.0	11.6	5.0	6.6	0.4				
1974	653.66	6.5	11.3	5.1	6.2	0.3				
1975	665.2 <sup>6</sup>	11.6	11.7	5.2	6.5	5.1				
1976	677.24	12.0	11.8	5.2	6.6	5.4				
1977	684.1 <sup>6</sup>	16.9	11.8	5.1	6.7	0.2				
1978	688.16	4.0	11.1	5.2	5.9	-1.9				
1979	691.96	3.8	10.8	5.1	5.7	-1.9				
1980	695.46	3.5	10.8	5.3	5.5	-2.0				
1981	696.44	1.0	10.6	5.2	5.4	-4.4				
1982	698.97	2.5	10.4	5.1	5.3	-2.8				
1983	707.77	8.8	10.6	5.3	5.3	3.5				
1984	714.67	6.9	10.4	5.2	5.2	1.7				
1985	719.67	5.0	10.5	5.3	5.2	-0.2				

Table A3. Demographic Accounts of the Provinces and Territories, 1951-1986 - Continued

Year	Population <sup>1</sup>	Total Growth <sup>2</sup>	Births <sup>2</sup>	Deaths <sup>2</sup>	Natural Increase	Net Migration <sup>2,3</sup>
			Quebe	С		
			(in thousa	inds)		
1951	4,055.74	***	***			
1971	6,027.84	98.6 <sup>5</sup>				
1972	$6,053.6^{6}$	25.8	86.4	41.4	45.0	-19.2
1973	$6,078.9^6$	25.3	83.4	42.3	41.1	-15.8
1974	$6,122.7^{6}$	43.8	83.8	42.9	40.9	2.9
1975	$6,179.0^6$	56.3	89.0	44.4	44.6	11.7
1976	6,234.44	55.4	98.6	42.5	56.1	-0.7
1977	$6,284.0^{6}$	49.6	94.1	43.1	51.0	-1.4
1978	$6,302.4^{6}$	18.4	94.7	43.7	51.0	-32.6
1979	$6,338.9^{6}$	36.5	98.1	42.5	55.6	-19.1
1980	6,386.16	47.2	98.5	44.1	54.4	-7.2
1981	$6,438.2^4$	52.1	96.8	42.7	54.1	2.0
1982	$6,479.8^{7}$	41.6	93.8	43.1	50.7	-9.1
1983	6,510.17	30.3	88.7 88.5	44.5	44.2	-13.9
1984	$6,544.9^7$	34.8		43.7	44.8	-10.0
1985	$6,582.7^7$	37.8	88.1	46.4	41.7	-3.9
1986	6,627.27	44.5	86.9	46.3	40.6	3.9
			Ontario	)		
1951	4,597.64					
1971	7,703.14	155.3 <sup>5</sup>				
1972	7,809.96	106.8	127.1	57.5	69.6	37.2
1973	7,908.86	98.9	124.0	58.8	65.2	33.7
1974	8,054.16	145.3	122.9	60.4	62.5	82.8
1975	8,172.26	118.1	126.5	61.2	65.3	52.8
1976	8,264.54	92.3	123.6	60.6	63.0	29.3
1977	8,353.16	88.6	122.7	60.3	62.4	26.2
1978	8,439.66	86.5	122.0	62.0	60.0	26.5
1979	8,501.36	61.7	121.7	60.3	61.4	0.3
1980	8,569.76	68.4	121.8	62.8	59.0	9.4
1981	8,624.74	55.0	123.0	62.6	60.4	5.4
1982	8,716.17	91.4	123.0	62.9	60.1	31.3
1983	8,825.27	109.1	126.5	64.5	62.0	47.1
1984	8,942.47	117.2	127.9	64.3	63.6	53.6
1985 1986	$9,064.2^7$ $9,181.9^7$	121.8	133.2	65.5	67.7	54.1
1900	9,181.9	117.7	130.9	66.3	64.6	53.1

Table A3. Demographic Accounts of the Provinces and Territories, 1951-1986 - Continued

Year	Population <sup>1</sup>	Total Growth <sup>2</sup>	Births <sup>2</sup>	Deaths <sup>2</sup>	Natural Increase	Net Migration <sup>2,3</sup>				
1 car			Manitol	ba						
			in thousa	nds)						
1951	776.5 <sup>4</sup>									
1971	988.2 <sup>4</sup>	10.65								
1972	991.26	3.0	17.7	8.0	9.7	-6.7				
1973	996.26	5.0	17.1	8.3	8.8	-3.8				
1974	1,007.56	11.3	17.0	8.4	8.6	2.7				
1975	1,013.66	6.1	17.3	8.4	8.9	-2.8				
1976	1,027.4 <sup>6</sup> 5.9	7.9	17.2	8.3	8.9	-1.0				
1977	1,027.46 5.9		16.6	8.2	8.4	-2.5				
1978	$1,032.0^6$	4.6	16.8	8.2	8.6	-4.0				
1979	1,028.06	-4.0	16.4	8.2	8.2	-12.2				
1980	1,024.96	-3.1	16.0	8.4	7.6	-10.7				
1981	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		16.0	8.3	7.7	-6.4				
1982	$\begin{bmatrix} 1,026.2^4 \\ 2,034.5^7 \end{bmatrix}$ 1.3		16.0	8.8	7.2					
1983	1,048.17	13.6	16.4	8.4	8.0	5.6				
1984	1,058.87	10.7	16.6	8.4	8.2	2.5				
1985	$1,070.6^7$	11.8	16.7	8.3	8.4	3.4				
1986	1,078.67	8.0	17.1	8.9	8.2	-0.2				
			Saskatchewan							
1951	831.74									
1971	926.24	4.75								
1972	914.06	-12.2	15.7	7.5	8.2	-20.4				
1973	904.56	-9.5	15.2	7.6	7.6	-17.1				
1974	899.76	-4.8	14.8	7.8	7.0	-11.8				
1975	907.46	7.7	15.1	7.7	7.4	0.3				
1976	921.34	13.9	15.7	7.8	7.9	6.0				
1977	934.96	13.6	16.3	7.9	8.4	5.2				
1978	943.56	8.6	16.4	7.6	8.8	0.2				
1979	951.36	7.8	16.9	7.4	9.5	-1.7				
1980	959.46	8.1	16.9	7.6	9.3	-1.2				
1981	968.34	8.9	17.1	7.5	9.6	0.7				
1982	979.17	10.8	17.4	7.8	9.6	1.2				
1983	993.67	14.5	17.8	8.0	9.8	4.7				
1984	$1,006.9^7$	13.3	18.0	7.6	10.4	2.9				
1985	$1,017.8^{7}$	10.9	17.8	7.9	9.9	1.0				
1986	$1,021.0^7$	3.2	18.1	8.3	9.8	-6.6				

Table A3. Demographic Accounts of the Provinces and Territories, 1951-1986 - Continued

Year	Population <sup>1</sup>	Total Growth <sup>2</sup>	Births <sup>2</sup>	Deaths <sup>2</sup>	Natural Increase	Net Migration <sup>2, 3</sup>		
			Albert	a				
		(	in thousa	nds)				
1951	939.54	***						
1971	1,627.94	34.45						
1972	1,657.36	29.4	29.6	10.7	18.9	10.5		
1973	1,689.56	32.2	29.6	10.8	18.8	13.4		
1974	1,722.46	32.9	29.1	10.9	18.2	14.7		
1975	1,778.36	55.9	30.5	11.4	19.1	36.8		
1976	$1,838.0^4$	59.7	32.4	11.5	20.9	38.8		
1977	1,912.76	74.7	33.8	11.4	22.4	52.3		
1978	1,983.16	70.4	34.7	11.8	22.9	47.5		
1979	$2,052.8^{6}$	69.7	36.1	12.0	24.1	45.6		
1980	$2,140.6^{6}$	87.8	37.8	12.3	25.5	62.3		
1981	$2,237.3^4$	96.7	41.0	12.6	28.4 68.3			
1982	$2,318.5^{7}$	81.2	43.8	13.1	30.7	50.5		
1983	$2,346.5^7$	28.0	45.3	12.8	32.5	-4.5		
1984	$2,350.2^{7}$	3.7	44.9	12.6	32.3	-28.6		
	$2,358.0^{7}$	7.8	45.4	12.7	32.7	-24.9		
	2,389.57	31.5	45.0	13.6	31.4	0.1		
		Br	itish Colu	ımbia				
1951	1,165.24	***						
1971	$2,184.6^4$	51.05						
1972	$2,241.4^{6}$	56.8	34.4	17.7	16.7	40.1		
1973	$2,302.4^{6}$	61.0	34.6	18.0	16.6	44.4		
1974	2,375.76	73.3	34.5	18.6	15.9	57.4		
1975	2,433.26	57.5	36.1	19.5	16.6	40.9		
1976	2,466.64	33.4	36.2	19.2	17.0	16.4		
1977	2,499.46	32.8	35.9	18.3	17.6	15.2		
1978	2,542.36	42.9	36.1	18.8	17.3	25.6		
1979	2,589.46	47.1	38.0	19.1	18.9	28.2		
1980	2,666.06	76.6	38.9	19.2	19.7	56.9		
1981	2,744.24	78.2	40.7	19.7	21.0	57.2		
1982 1983	2,791.1 <sup>7</sup> 2,820.6 <sup>7</sup>	46.9	42.6	20.2	22.4	24.5		
	2,820.6 <sup>7</sup> 2,857.9 <sup>7</sup>	29.5	42.4	20.3	22.1	7.4		
1984	2,857.9° 2,884.7°	37.3 26.8	43.4	20.3	23.1	14.2		
	2,884.7 $2,905.9$	26.8	44.3	20.3	24.0 22.9	2.8		
	2,903.9	21,2	44./	21.8	44.9	-1.7		

Table A3. Demographic Accounts of the Provinces and Territories, 1951-1986 - Concluded

Year	Population <sup>1</sup>	Total Growth <sup>2</sup>	Births <sup>2</sup>	Deaths <sup>2</sup>	Natural Increase	Net Migration <sup>2, 3</sup>				
			Yukor	1						
			in thousa	inds)						
1951	9.14	***								
1971	18.44	0.55								
1972	19.56	1.1	0.5	0.1	0.4	0.7				
1973	20.56	1.0	0.5	0.1	0.4	0.6				
1974	20.56	0.0	0.4	0.1	0.3	-0.3				
1975	21.36	0.8	0.5	0.1	0.4	0.4				
1976	21.84	0.5	0.4	0.1	0.3	0.2				
1977	21.86	0.0	0.5	0.1	0.4	-0.4				
1978	22.56	0.7	0.4	0.1	0.3	0.4				
1979	22.36	-0.2	0.5	0.1	0.4	-0.6				
1980	22.36	0.0	0.5	0.1	0.4	-0.4				
1981	23.24	0.9	0.5	0.1	0.4	0.5				
1982	23.77	0.5	0.5	0.4	0.1					
1983	22.47	-1.3	0.5	0.4	-1.7					
1984	22.47	0.0	0.5			-0.4				
1985	23.27	0.8	0.5	0.1	0.4	0.4				
1986	22.97	-0.3	0.5	0.1	0.4	-0.7				
		Nor	rthwest Territories							
1951	16.0 <sup>4</sup>									
1971	34.84	0.95								
1972	37.36	2.5	1.3	0.2	1.1	1.4				
1973	39.46	2.1	1.2	0.3	0.9	1.2				
1974	39.66	0.2	1.1	0.2	0.9	0.7				
1975	41.26	1.6	1.1	0.2	0.9	0.7				
1976	42.64	1.4	1.2	0.2	1.0	0.4				
1977	42.86	0.2	1.2	0.2	1.0	-0.8				
1978	43.66	0.8	1.2	0.2	1.0	-0.2				
1979	44.06	0.4	1.2	0.2	1.0	-0.6				
1980	44.76	0.7	1.3	0.2	1.1	-0.4				
1981	45.74	1.0	1.3	0.2	1.1	-0.1				
1982	47.27	1.5	1.3	0.2	1.1	0.4				
1983	48.57	1.3	1.5	0.2	1.3	0.0				
1984	49.77	1.2	1.4	0.2	1.2	0.0				
1985	51.07	1.3	1.5	0.2	1.3	0.0				
1986	50.97	-0.1	1.2	0.2	1.0	-1.1				

Source: Statistics Canada, Catalogues 91-201 and 91-210.

As of June 1st.
 From June 1st of the preceding year to May 31st of the year indicated.
 Difference between total growth and natural increase.
 Data from the Census of Canada.

<sup>&</sup>lt;sup>5</sup> Average Annual Growth from June 1st 1951 to May 31st 1971.

<sup>&</sup>lt;sup>6</sup> Intercensal Estimates.

<sup>&</sup>lt;sup>7</sup> Postcensal Estimates.

Table A4. Median Age of the Population, Canada, 1921-1986

Year	Males	Females	Year	Males	Females
1921	24.7	23.2	1954	27.4	27.5
1922	24.8	23.3	1955	27.3	27.4
1923	24.8	23.4	1956	27.2	27.3
1924	24.9	23.6	1957	26.9	27.1
1925	24.9	23.7	1958	26.6	26.9
1926	25.0	23.8	1959	26.5	26.8
1927	25.1	23.9	1960	26.3	26.7
1928	25.2	24.0	1961	26.1	26.6
1929	25.3	24.0	1962	25.8	26.4
1930	25.4	24.0	1963	25.4	26.1
1931	25.5	24.0	1964	25.2	26.0
1932	25.6	24.2	1965	25.0	25.9
1933	25.8	24.4	1966	25.0	25.9
1934	26.0	24.7	1967	25.0	26.0
1935	26.2	24.9	1968	25.1	26.1
1936	26.4	25.2	1969	25.2	26.3
1937	26.6	25.4	1970	25.4	26.5
1938	26.9	25.8	1971	25.7	26.7
1939	27.1	26.1	1972	25.9	27.0
1940	27.4	26.4	1973	26.3	27.3
1941	27.5	26.6	1974	26.6	27.7
1942	27.6	26.7	1975	26.9	28.0
1943	27.7	26.9	1976	27.2	28.4
1944	27.8	27.1	1977	27.6	28.8
1945	27.9	27.2	1978	27.9	29.2
1946	28.0	27.4	1979	28.3	29.6
1947	27.9	27.5	1980	28.6	29.9
1948	27.9	27.5	1981	29.0	30.3
1949	27.8	27.5	1982	29.3	30.7
1950	27.8	27.6	1983	29.6	31.1
1951	27.8	27.6	1984	30.0	31.5
1952	27.6	27.6	1985	30.4	31.9
1953	27.5	27.6	1986	30.7	32.3

Sources: Statistics Canada, Catalogue 91-210, Vol. 1 (1982). Statistics Canada, Catalogue 91-518 (1971-1981). Demography Division, unpublished data (1921-1970, 1983-1986).

Table A5. Evolution of Dependancy Ratios, Canada, United States and Western Europe<sup>1</sup>, 1961-1981

Country	Year	Youth Dependancy Ratio	Change Since 1961	Elderly Dependancy Ratio	Change Since 1961	Total Dependancy Ratio	Change Since 1961
Canada	1961	58.2	-	13.0	_	71.2	_
	1966	55.4	-2.8	13.0	-	68.4	-2.8
	1971	47.5	-10.7	13.0	2-3	60.5	-10.7
	1976	39.0	-19.2	13.2	0.2	52.2	-19.0
	1981	33.2	-25.0	14.3	1.3	47.5	-23.7
United	1961	51.6	-	14.9	-	66.5	-
States	1966	50.3	-1.3	15.6	0.7	65.9	-0.6
	1971	44.8	-6.8	15.9	1.0	60.7	-5.8
	1976	38.2	-13.4	16.4	1.5	54.6	-11.9
	1981	33.9	-17.7	17.3	2.4	51.2	-15.3
Europe	1961	37.8	1-1	15.9		53.7	_
	1966	37.8	-	17.2	1.3	55.0	1.3
	1971	37.1	-0.7	18.2	2.3	55.3	1.6
	1976	35.0	-2.8	16.0	0.1	51.0	-2.7
	1981	32.5	-5.3	19.2	3.3	51.7	-2.0

<sup>&</sup>lt;sup>1</sup> The dependancy ratios for Western Europe are the weighted average of the dependancy ratios of the following countries: Austria, Belgium, France, West Germany, Hungary, Italy, Netherlands, Norway, Romania, Spain, Sweden, Switzerland, United Kingdom. The weights correspond to population size.

Source: United Nations, Demographic Yearbooks.

Table A6. Distribution of Singles, Aged 15+, by Age and Sex, Canada, 1951 and 1986

	Ma	ales	Fem	ales
Age Group	1951	1986	1951	1986
15-19	33.4	31.6	39.0	36.3
20-24	25.3	32.4	21.5	30.4
25-29	12.3	16.0	9.6	11.8
30-34	6.3	6.3	5.9	5.2
35-39	4.8	3.4	5.0	3.3
40-44	3.8	2.0	4.2	2.0
45-49	3.2	1.5	3.4	1.5
50-54	2.7	1.3	2.8	1.3
55-59	2.2	1.4	2.3	1.4
60-64	1.9	1.2	1.9	1.4
65 and over	4.1	2.7	4.5	5.3
Total	100.0	100.0	100.0	100.0

Sources: Statistics Canada. 1951 Census of Canada.

Statistics Canada, Demography Division, unpublished data.

Table A7. Percentage Distribution of the Population by Marital Status, Age and Sex, Canada, 1951, 1956, 1961, 1966, 1971, 1976, 1981, 1986

Age	1951	1956	1961	1966	1971	1976	1981	1986	1951	1956	1961	1966	1971	1976	1981	1986
Male				Sin	igle							Mar	ried			
15-19	99.0	98.9	98.7	98.8	98.4	98.0	98.4	99.7	0.1	1.1	1.3	1.2	1.4	2.0	1.5	0.3
20-24	74.4	72.2	69.5	70.0	67.6	67.7	71.9	85.0	25.5	27.8	30.4	30.0	32.0	32.0	27.8	14.8
25-29	35.1	33.9	29.6	27.4	25.6	27.0	32.0	42.1	64.6	65.8	70.1	72.3	73.3	71.7	66.3	55.7
30-34	19.6	18.7	17.4	15.1	13.3	13.1	15.0	18.0	79.9	80.8	82.1	84.3	85.1	84.8	82.1	77.0
35-39	14.9	13.8	13.0	12.2	10.3	9.1	9.3	10.6	84.2	85.5	86.2	87.0	87.9	88.4	86.9	83.3
40-44	13.3	12.3	10.9	10.8	9.4	8.2	7.8	7.7	85.2	86.5	87.7	80.0	88.3	88.9	87.9	85.6
45-49	13.2	12.0	10.5	10.1	9.1	8.3	7.5	6.9	84.6	86.1	87.6	88.2	88.2	88.3	87.8	86.2
50-54	12.6	12.5	10.5	10.0	8.7	8.3	7.8	6.8	83.7	84.5	86.5	87.4	88.0	87.8	86.8	86.1
55-59	11.7	12.2	11.2	10.2	9.2	8.0	7.8	7.2	82.8	82.8	84.0	85.5	86.4	87.3	86.2	85.4
60-64	11.5	11.6	11.5	11.1	9.7	8.5	7.6	7.1	80.1	80.6	81.0	82.9	84.3	85.4	85.5	85.0
65+	11.8	11.4	10.8	11.1	10.6	9.2	8.1	7.3	65.7	66.6	68.5	69.1	71.8	74.0	76.6	76.3
				Wide	owed							Divo	rced			
15-19	-	_	1-0	_	0.1		_	_	-	0-0	_	_	-	_	_	_
20-24	_	-	_	-	0.1	_	_	==	_	_	0.1	0.1	0.2	0.2	0.3	0.2
25-29	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.9	1.2	1.6	2.1
30-34	0.3	0.2	0.2	0.2	0.3	0.1	0.1	0.1	0.3	0.2	0.3	0.4	1.3	3.4	2.8	4.8
35-39	0.6	0.5	0.4	0.4	0.4	0.3	0.2	0.2	0.4	0.3	0.4	0.5	1.5	2.3	3.5	5.9
40-44	1.0	0.8	0.9	0.6	0.7	0.5	0.4	0.4	0.5	0.4	0.5	0.6	1.6	2.4	3.9	6.3
45-49	1.8	1.5	1.3	1.1	1.1	1.0	0.8	0.8	0.5	0.5	0.6	0.6	1.6	2.4	3.9	6.2
50-54	3.2	2.6	2.4	1.9	1.8	1.7	1.6	1.4	0.5	0.5	0.7	0.7	1.5	2.3	3.8	5.7
55-59	5.1	4.5	4.2	3.7	2.9	2.7	2.6	2.5	0.4	0.5	0.6	0.7	1.5	2.7	3.3	4.9
60-64	8.0	7.3	6.9	5.3	4.7	4.4	4.2	4.1	0.4	0.4	0.6	0.6	1.4	1.8	2.8	3.9
65 +	22.3	21.7	20.4	19.4	16.7	15.2	14.1	13.9	0.3	0.3	0.4	0.4	0.9	1.2	1.8	2.4

Source: See end of table

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Table A7. Percentage Distribution of the Population by Marital Status, Age and Sex, Canada, 1951, 1956, 1961, 1966, 1971, 1976, 1981, 1986 - Concluded

Age	1951	1956	1961	1966	1971	1976	1981	1986	1951	1956	1961	1966	1971	1976	1981	1986
Female				Sin	gle							Mar	ried			
15-19	92.1	91.6	91.3	92.4	92.5	91.8	93.4	97.8	7.9	8.4	8.7	7.6	7.3	8.1	6.6	2.1
20-24	48.5	44.3	40.5	44.2	43.5	45.3	51.1	67.1	51.2	55.5	59.2	55.4	55.7	53.9	48.0	32.0
25-29	20.7	18.7	15.4	14.9	15.4	16.3	20.1	25.3	78.5	81.0	83.8	84.1	82.5	81.0	76.8	70.
30-34	13.8	11.6	10.6	9.3	9.1	9.1	10.5	11.9	84.4	87.0	88.1	89.1	88.1	86.8	84.3	81.
35-39	12.4	10.3	9.2	7.9	7.3	6.8	7.3	8.2	84.8	87.2	88.5	89.5	89.0	88.1	85.9	83.
40-44	12.3	10.6	8.9	7.6	6.9	6.2	6.1	6.4	83.2	85.1	87.0	88.3	88.3	87.9	85.9	83.
45-49	11.7	10.9	9.5	7.9	7.0	6.2	5.8	5.6	81.2	82.3	83.7	85.3	86.0	85.7	84.7	82.
50-54	10.9	11.0	10.4	9.5	7.7	6.5	6.0	5.5	77.6	78.0	79.2	80.0	81.6	82.3	81.6	80.
55-59	10.2	10.2	10.5	10.2	9.0	7.3	6.3	5.8	72.7	72.6	73.0	73.9	74.8	76.2	76.8	76.
60-64	9.8	9.9	10.2	10.7	10.2	8.7	7.1	6.0	65.5	65.2	64.8	64.2	65.8	67.2	68.7	70.
65 +	10.4	10.0	10.2	10.3	10.7	10.2	9.3	8.5	41.6	41.4	41.2	39.1	39.2	39.0	39.9	41.
				Wide	owed							Divo	orced			
15-19	-	-		-	0.2	0.1	0.1	-	-	1-1	-	-	0.1	-	-	
20-24	0.2	0.2	0.2	0.1	0.3	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.6	0.7	0.8	0.
25-29	0.5	0.4	0.4	0.4	0.5	0.4	0.3	0.3	0.4	0.3	0.4	0.6	1.5	2.4	2.9	3
30-34	1.2	0.9	0.8	0.8	0.9	0.7	0.6	0.5	0.6	0.5	0.6	0.7	2.0	3.5	4.7	6
35-39	2.1	1.9	1.6	1.8	1.6	1.3	1.1	1.0	0.7	0.7	0.7	0.9	2.1	3.8	5.7	7
40-44	3.7	3.5	3.3	3.2	2.7	2.5	2.2	1.9	0.8	0.8	0.8	0.9	2.1	3.8	5.8	8
45-49	6.5	6.1	5.9	5.8	5.0	4.6	4.1	3.6	0.7	0.8	0.9	1.0	2.0	3.5	5.4	8
50-54	11.0	10.5	9.5	9.5	8.8	8.2	7.6	6.8	0.6	0.6	0.9	1.0	1.9	3.1	4.7	7
55-59	16.7	16.8	15.9	15.0	14.5	14.0	13.0	12.2	0.4	0.5	0.7	0.9	1.7	2.5	3.9	5
60-64	24.4	24.5	24.4	24.5	22.6	22.0	21.1	19.4	0.3	0.3	0.6	0.7	1.5	2.1	3.1	4
65 +	47.9	48.5	48.4	50.3	49.4	49.8	49.0	48.1	0.1	0.1	0.2	0.3	0.7	1.0	1.5	2

Source: Statistics Canada, Censuses of Canada, Catalogue 99-704, Vol. 1, Table 36, 1978, Catalogue 92-825, Table 22, 1976, Catalogue 92-901, Table 4, 1981, and unpublished estimates of Population by Sex, Age and Marital Status, June 1986.

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Table A8. Age-specific First Marriage Rates (per 1,000) for Male Cohorts, 1938-1968 and Female Cohorts 1940-1970, Canada

														M	ales																
															Year	of I	Birth														
Age	1968	1967	1966	1965	1964	1963	1962	1961	1960	1959	1958	1957	1956	1955	1954	1953	1952	1951	1950	1949	1948	1947	1946	1945	1944	1943	1942	1941	1940	1939	19
Age														Year	of	17th	Birtl	nday													
	1985	1984	1983	1982	1981	1980	1979	1978	1977	1976	1975	1974	1973	1972	1971	1970	1969	1968	1967	1966	1965	1964	1963	1962	1961	1960	1959	1958	1957	1956	19
17	0.6	0.6	0.7	0.9	1.2	1.7	1.6	2.0	2.5	3.3	3.9	4.5	4.9	4.7	4.3	4.3	4.0	3.8	3.9	3.9	3.9	4.0	3.8	4.0	4.4	4.9	4.9	5.0	4.7	4.9	
18		3.7	4.0	4.5	0.7.2	6.8	8.6	9.6		13.0	15.0			20.6	21.9				16.9	17.8	18.1			15.3		18.0	19.2	19.0	19.2	19.3	1
19			10.2	The same		2000	19.9	C. 1200	C C C C C	- C	32.4				48.0	48.7			39.8	41.0	10,000	0.77				43.1	42.6	44.5	43.9	44.2	4
20				22.1	24.8	29.4	35.4				53.4											82.8	1000	70.6	1 777	1,000		75.5			
21					38.2	42.4	48.3		10000000	68.1	71.6	75.0	79.4					116.5	A. A. A. A. A. A.										114.7	112.9	1
22						53.1	57.8	62.4			80.5	82.4	83.2		100000	100 PM		100000000000000000000000000000000000000	100000000000000000000000000000000000000	1.30000			128.6	100000000000000000000000000000000000000	10000000	130.6	122.6	121.1	118.4	118.6	1
23	1 1						64.4		1000		77.7	81.3			84.7	65.1.46		101.0						119.6			121.9	119.4		114.5	1
24	1 1							67.0	100		70.4	0.0500		13/10/201		0.000	75.2	82.4	87.3	22.00	2007	200	98.3	2227134	106.0	1000	108.3	106.0	101.1	98.5	
25									62.8		61.2	62.4						61.9	67.0	3.27				75.2	0.7177.77	2000	85.5		83.9	82.2	1
26										55.5	52.8	52.7	53.5	0.000			48.8	49.8	48.7	51.4	200			56.2		62.0	64.3			65.2	
27											46.4	45.0	42.7	42.5	4 7 7 7	41.5	40.4	39.0	38.9	38.2	39.8	40.7	42.4	42.3	100000000	44.9	46.7	47.8	0.157.75	49.2	1
28												37.8	36.2	35.2			32.9	31.8	31.5	31.3	29.7	30.7	31.1	31.3				35.9		37.2	1
29													31.4		1000000		27.4	26.4	25.0		23.6	23.2	24.1	23.3	A	200	77799731	27.5			1
30														24.4			21.8	21.0	20.6	10000		18.3	18.3	18.5	18.6	0.000	7.07.7	10212220	22.4	21.5	
31															19.2	100	18.0	16.8	16.1	15.7	14.7	14.3	14.6	14.2	14.1	14.5		15.3		16.5	
32																15.5	15.2	13.4	13.3	500000000000000000000000000000000000000	12.0	11.3	11.3	11.2	11.3		11.4	12.4	12.6	12.5	
33	1 1																12.1	11.6		10.3	9.8	9.4	9.3	8.7	9.2		9.3	10.2	22.337	10.8	1
34 35																		9,7	9.0	8.8	8.0	7.9	7.6	7-3	7.1	152.535	7.4	8.1	7.8	8.6	1
36	1 1																		7.8		6.9	6.5	6.3	6.3	6.1	6.0	6.0	6.2	22.023	6.4	
37	1 1																			6.3	5.9	5.6	5.7	5.2	4.6		4.8	5.0		5.8	
38																					4./	4.5	4.6	4.0		12772	4.3	4.2	1/4/1/5	4.3	1
39																						3.5		3.5			3.4	3.4		4.0	1
40						l i																	3.4	3.3 2.5	200	-	3.1 2.3	2.8		3.0	1
41																								2.5	2.1		2.1	2.2	97.0	2.8	1
42																									2.1	2.0	1.8			2.1	
43																										2.0	1.7	1.6	127 25	1.9	1
44																											1./	1.5	10.75	1.3	1
45																												1.0	1.0	550	
																													1.1	1.3	
																															ı

Table A8. Age-specific First Marriage Rates (per 1,000) for Male Cohorts, 1938-1968 and Female Cohorts 1940-1970, Canada

														Fen	nales																
															Year	of E	Birth														
	1970	1969	1968	1967	1966	1965	1964	1963	1962	1961	1960	1959	1958	1957	1956	1955	1954	1953	1952	1951	1950	1949	1948	1947	1946	1945	1944	1943	1942	1941	19
Age														Year	of 1	5th	Birth	nday													
	1985	1984	1983	1982	1981	1980	1979	1978	1977	1976	1975	1974	1973	1972	1971	1970	1969	1968	1967	1966	1965	1964	1963	1962	1961	1960	1959	1958	1957	1956	19
15	0.3	0.3	0.5	0.5	0.5	0.5	0.5	1.1	1.8	2.2	2.5	2.8	3.5	3.5	3.4	3.5	3.5	3.2	3.3	3.4	3.4	4.1		5.4	100000				- A	6.3	
16		3.1	3.6	3.9	4.6	5.0	5.9	6.6	7.8	9.2	11.4	13.9			18.6	17.6	17.7	16.7			16.8	17.6		21.6				26.7			
17			7.6	8.5	9.6	11.1	12.8	15.3	17.2	19.7	23.7	27.4	33.0		39.9	41.8	40.1	40.6	38.6	39.7	40.8								59.2		
18				24.7	25.8	29.8	34.6	39.1	45.4	49.8		61.6							82.7					93.6					104.6		
19	1 1				41.1	44.4	49.8	56.8	64.2	70.5	74.5	79.6												123.1					120.2		1
20						58.1	61.6	67.1	76.0	81.4	87.4	90.0	92.4	96.2	97.2	108.7													124.0		
21	1 1						69.7	74.3	75.6	81.8	84.7	89.3				91.1	102.5	109.0	2000										119.5		
22								73.1	74.1	74.3	76.7	80.0	79.0	79.4	76.5	77.5	79.1	86.2	89.9					115.9	105.1			104.4	3	94.1	1 9
23	1 1								69.5	68.4	67.1	68.4	67.5	66.5	64.8	62.0	63.2	61.6	66.5	68.2	71.0	74.0	73.4	83.0	76.3	74.1		78.0			
24										59.6	58.2	56.2	55.7	53.0	52.9	49.9	48.1	47.7	46.8	50.4	50.6	51.0	51.8	49.9	53.4		53.6				
25	1 1										49.8	47.4	44.5	43.3	42.2	40.8	38.4	37.0	36.5	35.7		36.5	36.3	36.5	38.2	37.7					3
26												39.9	37,4	35.4	33.7	31.6	30.2	29.3	27.8	28.2	27.2	27.2	26.1	25.7	27.7						
27													30.2	29.1	27.0	25.9	24.5	24.3	22.2	21.6	21.0	20.3	20.0	18.8	20.1	18.9			10000		1
28														23.4	22.8	20.8	19.7	18.6	18.0	16.9	16.3	15.6	14.9	15.1	15.7	14.8	15.5	14.9	15.3	15.8	1
29															18.5	17.3	16.3	15.7	14.8	13.9	12.9	12.4	12.0	11.1	11.9	11.7	11.4	11.6	12.6	12.6	1
30																14.5	14.0	12.5	12.0	11.4	10.8	9.9	9,4	9.3	9.4	9.5	8.9	9.2	9.4	9.6	1
31						1											10.8	10.6	9.7	9.0	8.6	7.8	7.5	6.9	7.4	7.5	7.3	7.3	7.8	7.8	
32																		8.4	8.0	7.6	7.2	6.5	6.2	5.9	6.1	5.9	5.9	5.9	6.2	6.0	
33																			6.8	6.5	5.9	5.5	5.5	5.0	4.9	4.7	4.7	5.2	4.8	4.9	1
34																			-	5.4	5.2	4.6	4.4	4.1	4.0	4.0	4.1	4.1	3.9	4.5	
35	1 1																				4.2	4.0	3.6	3.3	3.6	3.3	3.4	3.3	3.7	3.6	
36																						3.3	2.9	3.0	3.1	2.5	2.7	2.7	2.6	3.0	1
37	1 1																						2.5	2.2	2.4	2.2	2.3	2.0	2.3	2.2	
38																								2.3	2.3	2.0	2.1	2.0	2.2	2.1	1
39	1 1																								2.0	1.8	1.7	1.4	1.6	1.7	1
40																										1.5	1.3	1.3	1.5	1.5	1
41																											1.3	1.1	1.2	1.1	1
42						"																						1.2	1.1	1.3	
43																													0.9	0.9	
44																														1.0	
45	1																														

Source: Statistics Canada, unpublished data.

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Table A9. Number of Divorces Granted, Canada, Provinces and Territories, 1979-1985

Province	1979	1980	1981	1982	1983	1984	1985	Change from 1983 to 1984	Change from 1984 to 1985
Newfoundland	483	555	569	625	711	590	561	-121	-29
Prince Edward Island	144	163	187	206	215	195	213	-20	18
Nova Scotia	2,275	2,314	2,285	2,281	2,340	2,264	2,337	-76	73
New Brunswick	1,223	1,326	1,334	1,663	1,942	1,427	1,360	-515	-67
Quebec	14,379	13,899	19,193	18,579	17,365	16,845	15,814	-520	-1,031
Ontario	21,793	22,442	21,680	23,644	23,073	21,636	20,854	-1,437	-782
Manitoba	2,152	2,282	2,399	2,392	2,642	2,611	2,314	-31	-297
Saskatchewan	1,528	1,836	1,932	1,815	2,000	1,988	1,927	-12	-61
Alberta	6,531	7,580	8,418	8,882	8,758	8,454	8,102	-304	-352
British Columbia	8,826	9,464	9,533	10,165	9,348	8,988	8,330	-360	-658
Yukon	62	82	75	117	88	100	96	12	-4
Northwest Territories	78	76	66	67	85	74	72	-11	-2
Canada	59,474	62,019	67,671	70,436	68,567	65,172	61,980	-3,395	-3,192

Source: Statistics Canada, Vital Statistics, Vol. II, Marriages and Divorces, Catalogue 84-205.

Table A10. Divorces by Duration of Marriage, Canada, 1969-1985

25 26+ Not Stated	485 4,083 40	543 4,286 58	594 3,840 27	621 4,152 39	696 4,539 29	5,598	6,141	6,294	6,223	6,046	5,951	5,898 79	6,542 97	6,335	6,108 85	6,173	5,89
26+	485						12.00.700		6,223	6,046	5,951	5,898	6,542	C.N.* (L.N.)		6,173	- SW (2)
	485						12.00.700		6,223	6,046	5,951	5,898	6,542	6,335	6,108	-	- SW (2)
25		543	594	621	696	120	120	001								007	- STV (2)
	2.10					725	798	887	881	848	799	830	927	876	846	887	84
24	546	692	650	636	753	841	863	963	892	913	875	896	986	966	892	886	82
23	642	730	641	646	732	912	938	991	973	902	966	998	1,027	995	997	982	90
22	642	713	700	720	744	936	1,038	1,010	961	1,014	1,121	1,020	1,093	1,145	1,045	1,020	1,0
21	598	731	687	737	793	971	1,066	1,062	1,154	1,128	1,080	1,028	1,201	1,219	1,133	1,107	1,1
20	624	749	761	781	874	1,116	1,091	1,177	1,152	1,118	1,050	1,107	1,228	1,360	1,186	1,258	1,2
19	641	796	795	828	916	1,097	1,171	1,275	1,215	1,175	1,184	1,216	1,259	1,365	1,346	1,355	1,3
18	631	821	902	804	884	1,131	1,398	1,286	1,216	1,254	1,233	1,232	1,397	1,470	1,469	1,527	1,5
17	674	892	837	872	998	1,228	1,333	1,362	1,320	1,290	1,253	1,295	1,519	1,604	1,682	1,687	1,61
16	700	959	837	949	1,039	1,206	1,390	1,450	1,396	1,390	1,353	1,481	1,675	1,725	1,883	1,837	1,83
15	649	933	920	994	1,093	1,269	1,465	1,500	1,484	1,542	1,535	1,660	1,818	2,051	1,976	1,960	2,0
14	735	1,083	1,005	1,075	1,137	1,458	1,541	1,589	1,619	1,701	1,764	1,807	2,091	2,328	2,339	2,364	2,1
13	766	1,092	1,067	1,050	1,277	1,538	1,718	1,751	1,726	1,904	1,953	2,120	2,324	2,550	2,583	2,476	2,4
12	894	1,051	1,082	1,193	1,260	1,554	1,733	1,886	1,967	2,070	2,191	2,302	2,597	2,912	2,852	2,823	2,6
11	805	1,206	1,249	1,230	1,332	1,707	1,830	2,163	2,229	2,328	2,549	2,692	2,998	3,154	3,291	3,092	2,9
10	892	1,224	1,230	1,364	1,484	1,911	2,165	2,456	2,492	2,640	2,824	3,023	3,262	3,625	3,590	3,346	3,2
9	918	1,251	1,271	1,466	1,664	2,129	2,435	2,741	2,782	2,921	3,231	3,413	3,670	4,071	3,750	3,663	3,2
8	916	1,352	1,400	1,524	1,900	2,356	2,839	2,919	3,032	3,270	3,497	3,735	4,090	4,327	4,236	3,780	3,4
6	918 916	1,430 1,479	1,586 1,468	1,926 1,718	2,237 2,146	2,731	3,096	3,259	3,583 3,565	3,630	3,855	4,487	4,545	4,593	4,424	3,979	3,6
5	909	1,389	1,688	2,022	2,403	2,797 2,731	3,277 3,216	3,525 3,558	3,779	4,064 3,847	4,243	4,487	4,809	4,700	4,538	4,101	3,9
4	867	1,406	1,639	1,950	2,152	2,794	3,063	3,411	3,610	3,669	3,940 4,245	4,264 4,469	4,420 4,873	4,425 4,766	4,257 4,687	3,913 4,206	3,62
3	636	1,094	1,258	1,466	1,712	2,019	2,285	2,585	2,701	2,916	3,144	3,144	3,263	3,493	3,364	2,944	2,77
2	505	834	931	1,023	1,165	1,457	1,662	1,863	2,061	2,163	2,214	2,340	2,517	2,586	2,540	2,259	2,05
1	281	390	473	524	645	716	872	1,026	1,144	1,204	1,216	1,124	1,282	1,403	1,306	1,246	1,22
0	51	58	75	84	99	105	129	153	148	139	157	152	163	195	162	174	17
tion years)	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985

Source: Statistics Canada, Health Division, Vital Statistics Section, unpublished data; Statistics Canada, Vital Statistics, Catalogue 84-205, 1984, Table 18.

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Table A11. Deaths and Crude Death Rates (per 1,000), Canada, Provinces and Territories, 1981-1985

Year	New- foundland	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Yukon	Northwest Territories	Canada
							Death	S					
1981	3,230	992	6,958	5,139	42,684	62,838	8,648	7,523	12,823	19,857	141	196	171,029
1982	3,385	980	6,941	5,197	43,497	63,696	8,490	8,202	12,968	20,707	118	232	174,413
1983	3,498	1,050	7,047	5,206	44,275	64,507	8,521	7,611	12,588	19,827	113	241	174,484
1984	3,520	1,109	6,913	5,272	44,449	64,703	8,290	7,710	12,730	20,686	108	237	175,727
1985	3,557	1,110	7,315	5,230	45,707	66,747	8,756	8,031	13,231	21,302	123	214	181,323
							Crude deat	h rate					
1981	5.7	8.1	8.2	7.4	6.6	7.3	8.4	7.8	5.7	7.2	6.1	4.3	7.0
1982	5.9	8.0	8.1	7.4	6.7	7.3	8.2	8.4	5.6	7.4	5.0	4.9	7.1
1983	6.1	8.5	8.2	7.4	6.8	7.3	8.1	7.7	5.4	7.0	5.1	5.0	7.0
1984	6.1	8.9	7.9	7.4	6.8	7.2	7.8	7.7	5.4	7.2	5.0	4.8	7.0
1985	6.1	8.7	8.3	7.3	6.9	7.4	8.2	7.9	5.6	7.4	5.4	4.2	7.2

Source: Statistics Canada, Vital Statistics, Births and Deaths, Catalogue 84-204.

Table A12. Life Expectancy 1931-1981 and Increase in Life Expectancy 1931-36 to 1976-81, Canada

Year	Life Exp	pectancy	The second secon	ife Expectancy ceding 5 Years
	Male	Female	Male	Female
1931	60.00	62.06	_	-
1936	61.34	63.66	1.34	1.60
1941	63.04	66.31	1.70	2.65
1946	65.06	68.62	2.02	2.31
1951	66.40	70.90	1.34	2.28
1956	67.68	72.95	1.28	2.05
1961	68.44	74.26	0.76	1.31
1966	68.73	75.25	0.29	0.99
1971	69.40	76.45	0.67	1.20
1976	70.26	77.70	0.86	1.25
1981	71.88	79.06	1.62	1.36

Source: Nagnur, D. (1986) Longevity and Historical Life Tables, 1921-1981, Canada and the Provinces. Table C1. Statistics Canada, Catalogue 89-506.

Table A13. Infant Mortality Rate (per 1,000 Live Births), Canada, 1931-1985

Year	Rate	Year	Rate
1931	86.0	1959	28.4
1932	74.6	1960	27.3
1933	74.1	1961	27.2
1934	72.7	1962	27.6
1935	72.5	1963	26.3
1936	67.7	1964	24.7
1937	77.4	1965	23.6
1938	64.2	1966	23.1
1939	61.4	1967	22.0
1940	57.6	1968	20.8
1941	61.1	1969	19.3
1942	55.4	1970	18.8
1943	55.0	1971	17.5
1944	56.3	1972	17.1
1945	52.5	1973	15.5
1946	47.8	1974	15.0
1947	46.2	1975	14.3
1948	44.4	1976	13.5
1949	43.4	1977	12.4
1950	41.5	1978	12.0
1951	38.5	1979	10.9
1952	38.2	1980	10.4
1953	35.6	1981	9.6
1954	31.9	1982	9.1
1955	31.3	1983	8.5
1956	31.9	1984	8.1
1957	30.9	1985	7.9
1958	30.2		

Source: Statistics Canada, Catalogues 84-204 and 84-206.

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Table A14. Distribution of Deaths by Major Causes, Canada, Provinces and Territories, 1983

Cause	Canada	New- foundland	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Yukon	Northwest Territories
Ischaemic Heart Disease	47,949 (27%)	994	316	1,904	1,508	11,387	19,396	2,341	1,904	3,000	5,163	20	16
Cerebro- vascular Disease	14,086 (8%)	327	70	545	418	3,358	5,426	684	660	891	1,694	3	10
Cancers	43,282 (25%)	806	252	1,715	1,163	11,543	16,132	2,107	1,735	2,808	4,951	24	46
Traffic Accidents	4,156 (2%)	94	27	171	117	1,158	1,185	147	226	432	582	8	9
Others	65,011 (37%)	1,277	385	2,712	2,000	16,829	22,368	3,242	3,086	5,457	7,137	58	160
TOTAL	174,484 (100%)	3,498	1,050	7,047	5,206	44,275	64,507	8,521	7,611	12,588	19,527	113	241

Source: Statistics Canada, Vital Statistics, Causes of Death, Catalogue 84-203.

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Table A15. Age-sex Distribution per 1,000 Immigrants to Canada, 1970, 1980, 1983, 1984, 1985

	1	970	1	980	1	983	1	984	1	985
Age	Males	Females								
0-4	43	40	35	32	24	24	25	23	25	24
5-9	39	37	43	38	30	29	31	30	32	29
10-14	26	25	42	37	34	34	34	32	36	33
15-19	33	40	57	49	46	47	44	43	44	43
20-24	106	124	74	75	67	86	65	84	66	78
25-29	105	87	72	66	70	77	72	80	76	78
30-34	60	46	50	46	50	49	51	54	54	54
35-39	34	25	29	25	29	30	30	33	34	35
40-44	19	16	19	17	18	20	18	21	20	22
45-49	10	11	13	17	13	18	13	18	15	19
50-54	6	9	15	23	14	23	13	23	13	20
55-59	6	10	17	24	18	30	17	28	16	24
60-64	6	10	16	18	21	26	21	25	18	23
65+	10	17	22	29	31	42	31	42	27	39
Mean	25.5	26.3	27.8	30.0	30.9	32.7	30.6	32.8	30.1	32.3

Source: Employment and Immigration Canada, Immigration Statistics, ISSN 0576-2286.

Table A16. Total Fertility Rate, Canada, Provinces and Territories, 1978-1985

D				Ye	ear			
Province	1978	1979	1980	1981	1982	1983	1984	1985
Newfoundland	2.18		2.03	1.86	1.79			
Prince Edward Island	2.04	1.97	1.94	1.91	1.93	1.89	1.89	1.90
Nova Scotia	1.77	1.71	1.67	1.64	1.67	1.66	1.63	1.62
New Brunswick	1.78	1.76	1.68	1.71	1.70	1.69	1.65	1.60
Quebec	1.69	1.75	1.70	1.61	1.52	1.47	1.46	1.43
Ontario	1.68	1.67	1.66	1.63	1.65	1.66	1.69	1.68
Manitoba	1.91	1.88	1.84	1.86	1.84	1.87	1.86	1.88
Saskatchewan	2.20	2.19	2.14	2.14	2.17	2.13	2.11	2.09
Alberta	1.98	1.97	2.01	1.94	1.96	1.96	1.92	1.93
British Columbia	1.72	1.72	1.73	1.71	1.74	1.73	1.76	1.73
Yukon	2.03	2.19	2.09	2.14	2.04	2.36	2.25	1.97
Northwest Territories	3.04	3.30	3.37	3.00	3.00	3.20	2.99	2.86
Canada	1.76	1.76	1.75	1.70	1.69	1.68	1.69	1.67

..: unavailable.

Source: Statistics Canada, Vital Statistics, Catalogue 84-204.



# CHILDBEARING PERFORMANCE OF MARRIED CANADIAN-BORN WOMEN

Nuptiality and fertility have always been closely related, the sanction of the first providing the basis for full realization of the potential in the second. Today, however, statistics show that because of the availability of contraceptives, and perhaps because of changes in attitude, the relationship is weakening. Out-of-wedlock births are increasing at the same time as the general fertility rate is declining – although the increase should not be exaggerated, for married couples still account for the vast majority of births. Moreover, since a large proportion of out-of-wedlock births are "redeemed" by late marriages which are often the legalization of common-law unions, fertility statistics relating only to married women are still, for all practical purposes, a good single measure of the reproductive performance of the population as a whole.

This section analyses the changes that have occurred in the number - and when possible the timing - of births to married women who were born in Canada<sup>1</sup>. All too often, published data on childbearing present only a snapshot for a single period of time - for instance, the number of births in a given year classified by marital status and age of mother. Yet, the events in every succeeding year can be very different, and we may wonder to what extent the data for a single period in time will be indicative of the completed fertility of each woman once her reproductive years are over. In other words, it is important to understand how the reproductive performance of married couples evolves from one generation to the next. The total fertility rate, which is one of the most frequently quoted measures of fertility, is a fickle measure. While certainly informative, it can easily be misinterpreted. For instance, most laymen, upon being told that the total fertility rate is currently less than 2 children per woman, might jump to the conclusion that couples are no longer replacing themselves. This may or may not be correct, but it cannot be ascertained without an analysis of cohort behaviour - that is to say an analysis of the fertility patterns of women who have completed their reproductive period and of variables indicating what the ultimate fertility levels of younger cohorts might be. In both the 1971 and 1981 Census questionnaires, married women were asked how many children they had ever borne. This information provides a reasonably precise reading of their fertility and can be used to compare the reproductive performances of homologous groups of women from different periods of time.

When age at immigration and period of immigration are taken into account, the fertility of foreign-born women has not been consistently similar to that of Canadian-born women. For this reason, this chapter deals only with the fertility experience of women who were born and currently reside in Canada, thereby allowing the reader to evaluate the impact of any eventual disparity in the total fertility experience attendant upon this strategy.

#### Comparability of Data

Specifically, the two questions addressed to ever-married women<sup>2</sup> in both the 1971 and 1981 Censuses were: "How many children were ever borne to you?" and "What were the month and year of your first marriage?". The point to note is that the wording of these questions was the same in both censuses, but the responses were not processed in exactly the same way. This raised problems. Upon close examination<sup>3</sup> it was concluded that the two data series could be used for an analysis of the type proposed here, provided the deficiencies were taken into consideration. Crosstabulating the information on parity<sup>4</sup> against age at the time of the census and age at marriage yielded a wealth of information, which served as the basis for the analysis that follows.

### Fertility and Marriage

Even a fecund woman is infertile until she has borne her first child. Since natural sterility among young women is rare, and furthermore since fecundity during this period is high, the number, or proportion, of childless married women after a certain number of years of marriage can be attributed mostly to voluntary infertility. The changes that have occurred recently with respect to voluntary infertility are depicted in Chart 1, which shows the percentages of childless women after five years of marriage (1946 and 1956 birth cohorts) and ten years of marriage (1941 and 1951 birth cohorts)<sup>5</sup>.

Clearly, no matter which cohort is examined, the proportion of married women who are childless at age 25 (or age 30) is related to the duration of marriage. A curve fits the data well, indicating that the younger the age at time of marriage, the greater the chances of having a first child within the first five (or ten) years of marriage.

It is also obvious that the more recent the cohort, the higher the level of childlessness for a given age at marriage, and for a given duration of marriage. In the two graphs, this is reflected in the fact that the curve for the younger cohort is consistently above the curve for the older cohort.

At the very least, it can be said that women in more recent cohorts seem less eager to have their first child than were their predecessors.

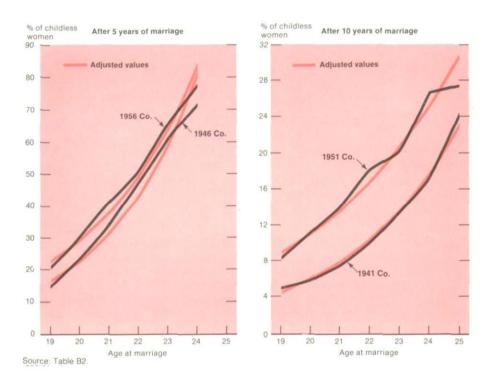
<sup>&</sup>lt;sup>2</sup> Includes divorced and widowed.

<sup>&</sup>lt;sup>3</sup> For a detailed discussion of the related data see Appendix B.

<sup>&</sup>lt;sup>4</sup> A woman's parity is the number of children she has borne or the number of deliveries she has had. For example, a woman who has borne two children is said to be "at parity two".

The marriage durations are approximate. The Census provides the age and age at marriage of each respondent in complete years lived (age at last birthday), so that subtracting one figure from the other yields only the average length of time that the respondents have been married. Within the group married at age 19 and now aged 20, some have been married for only one day, while others have been married for two years less a day. As the durations become larger, the margin of error becomes proportionately smaller; the figures obtained by subtracting one age from the other have a greater probability of reflecting the true duration. Duration 0 – for example, women married at age 19 and still aged 19 – is excluded.

Chart 1
Proportion of Childless Women in Selected Generations After 5 and 10 Years of Marriage in Two Like Birth-Marriage Cohorts, Canada



# Completed Fertility and Age at Marriage

The fact that more recent cohorts are remaining childless longer than did their counterparts in the past provides no information about the total number of children that may in fact be borne to these cohorts by age 50. Where birth control is practiced, the interval between marriage and first birth is, in theory, not very strongly correlated with completed fertility; no longer at the mercy of nature, women can either have the child or children they want early and then stop reproducing, or they can postpone childbearing until later, but still have a family that is reasonably large by current standards. Also, not all women decide, before the end of their reproductive period, that they will have no more children. As a result, individual histories intertwine to produce a statistical picture with subtle shadings. Nevertheless, the data on completed fertility

<sup>6</sup> However, the information collected on births does not differentiate between first and subsequent marriages.

(Table 1) reveal that as a general rule, the earlier women marry, the more children they have. With remarkable consistency over time, the average completed fertility of women born in the same year and married at age 18 is roughly twice as high as that of women married at age 30. This is not a complete surprise: the earlier the age at marriage, the greater the exposure to the risk of pregnancy since fecundity decreases with age. Moreover, women who at an early age want (or at least are not opposed to) large families, usually marry young.

This information is important since the proportion of women who marry at a later age has been rising in recent years, as indicated by the increase in the current mean age at first marriage.<sup>7</sup>

These two observations give rise to an interesting question: since women who had married at the age of 30 in the mid-1960s (and were 40 in 1981) had almost replaced themselves, will the cohorts that are currently in their most fertile years replace themselves too?

Table 1. Final or Completed Fertility of Married Women at Certain Ages at Marriage for Selected Cohorts, Canada

	1	eted Fer omen b	1700			All	Age of
Cohort	18 years	21 years	25 years	27 years	30 years	Ages at Marriage	Women in 1981
1913	4,833	3,879	3,087	2,713	2,253	3,224	68
1916	4,480	3,731	3,009	2,575	2,151	3,237	65
1919	4,522	3,744	3,157	2,826	2,562	3,392	62
1922	4,436	3,921	3,143	2,878	2,472	3,563	59
1925	4,448	3,723	3,202	2,921	2,247	3,571	56
1928	4,607	3,765	3,167	2,730	2,337	3,614	53
1931	4,331	3,645	2,869	2,620	2,049	3,514	50
1934	4,183	3,436	2,798	2,489	1,944	3,438	47
1937	3,870	3,108	2,379	1,954	1,880	3,156	44
1940	3,441	2,704	2,083	1,926	1,601	2,833	41
1943	3,095	2,389	1,894	1,717	1,531	2,468	38

Source: Statistics Canada, 1981 Census of Canada.

<sup>7</sup> The completed fertility of a marriage cohort is a weighted average of the fertility levels by age at marriage, for which the weighting factors are the ratios of the number of women married at a particular age to the total number of married women in the cohort. The higher the proportion in a cohort of women who marry late, the lower will be the average fertility rate of the cohort.

#### **Cohort Fertility**

Cohort fertility can be properly understood only within its historical perspective. The tables that follow in the text and Appendix B relate the fertility of women during the 1920s and 1930s to the economic and social context in which they lived. The mere fact that women, or rather couples, now have almost complete control over their fertility does not mean that the birth rate will be inexorably reduced until society dies out. Like couples of the past, though probably in different ways, every new generation of couples is subject to subtle pressures, currents of thought, needs and events that shape their reproductive considerations.

The analysis in this section is based on that population of female respondents who had reached, or had almost reached, the end of their reproductive period at the time of the 1981 Census, and who were born between 1904 and 1943. These women lived through three events, different in nature, that had a major impact on fertility: 1) the severe economic difficulties of the 1930s; 2) the prosperity of the postwar era; and 3) the increased use of contraceptives during the 1960s.

When one examines these cohorts within the context of these events, one discovers a correspondence between the events and the fertility of the cohorts likely to have been most affected by the events. This observed correspondence, it must be cautioned, should not be overstated: it requires careful interpretation.

For a long time, researchers have been looking for a theory that could explain variations in fertility, as well as fluctuations in fertility rates. None has succeeded. The underlying influences behind variations in fertility are obscure. They are probably diverse, vary according to circumstance, and sometimes work in combination with factors which are determinants under one set of circumstances, but have no effect under others. Also, one must take as facts those events that seem to have had an impact, but avoid the temptation of discovering ingenuously through them "laws" associating periods of prosperity or recession to a certain level of fertility.

Census data do not lend themselves very well to a reconstruction of the fertility profiles of past generations. The data provide only final balances in terms of the number of children born: other relevant characteristics are not disclosed.

The three events in question are represented in Table 2 by the single years that it was felt best capture the essence of each event. For example, 1933 was chosen because it was, although arguably, the harshest year of the Depression which started in 1929 and lasted until the outbreak of the war. Similarly, 1950 was chosen because it more or less approximates the blossoming of the era of prosperity that took hold after the war and persisted over a considerable number of years; and, 1968 was chosen because it was around this time that oral contraceptives, though known and used earlier, became widely publicized and commonly prescribed by the medical profession.

Table 2. Correspondence Between the Age of Women Belonging to Certain Cohorts (Married Between 18 and 24), Certain Dates and Their Completed Fertility, Canada

Cohort		Age of V	Completed Fertility		
	1933	1950	1968	1981	per 1,000 Ever-married Women
1904	29	46			3,990
1907	26	43			3,859
1910	23	40			3,677
1913	20	37	55	68	3,650
1916	17	34	52	65	3,597
1919		31	49	62	3,645
1922		28	46	59	3,756
1925		25	43	56	3,747
1928		22	40	53	3,802
1931		19	37	50	3,690
1934		16	34	47	3,544
1937			31	44	3,238
1940			28	41	2,871
1943			25	38	2,485

<sup>1933 -</sup> period of economic crisis.

To simplify matters, we have confined our analysis to the correlation between these events and the fertility of women who married between the ages of 18 and 24. For any generation, as previously shown, this is the age group that is the most prolific. Fluctuations in fertility in this one subgroup of the generation explain a good part of the fluctuations in fertility of the entire generation.

Those women born in 1904 had the highest fertility (almost four children per woman). They passed through their reproductive years at a time when contraceptives were difficult to obtain and less effective than they are today, and the social setting was, for the most part, favourable to large families. The Depression did not have an appreciable effect on the fertility of these women, because by then their prime childbearing years were behind them; furthermore, the Depression was, for all intents and purposes, quite brief, so that it was possible to "recoup" some births.

<sup>1950 -</sup> post-war period of prosperity.

<sup>1968 -</sup> coincides approximately with the introduction of widespread oral contraceptives.

<sup>8</sup> As early as 1934, the economic climate experienced some improvement, as registered by certain indices (e.g. unemployment, marriage rate, etc.).

The women born between 1913 and 1916 were at the peak of their fertility during the Depression, and were still only 24 to 27 years old in 1940 when the Depression was superseded by the war. However, the prosperity that flowered in the 1950s had little impact on this generation since its members were then approaching age 40 (although it is a fact that some of them were in their 30s when they gave birth). The completed fertility for this generation was slightly lower than for the one born in 1904: just over 3.5 children per woman (if this level seems to be quite high it is because this analysis is restricted to women who married young).

By comparison with the above cohorts, women born between 1919 and 1928 encountered fewer obstacles to reproduction. They were still children when the Depression hit, but close to their peak fecundity during the prosperous 1950s. By the mid-1960s when contraceptives had become readily available, these women had already had fairly large families. The 1922 cohort, for instance, averaged 3.8 children per woman — a level only 5% lower than that of the 1904 cohort.

Women born in 1934, 1935 and subsequent years show a very sharp decline in fertility. As they were approaching peak fecundity the blossom of post-war prosperity had already begun to fade. At the same time, changing attitudes towards birth control enabled them to prevent the birth of more children than planned. Accordingly, for women marrying between the ages of 18 and 24, those born in 1943 will not average much more than 2.5 children per woman.

In short, then, it appears that: 1) "exogenous" or "environmental" factors may have an influence upon the number of children born — even to women with the highest likelihood of becoming mothers (i.e. 18-24 year age group), but this influence is moderate; 2) the low level of fertility among recent generations is solely responsible for the decline in fertility recorded by the annual indices. Considering the rate of the decline, the question can be asked:

# Will Recent Cohorts Replace Themselves?

Now let us consider whole generations and not just respective subgroups of women who married between the ages of 18 and 24. The completed fertility of a cohort cannot, of course, be known until its members have reached the age of 50. With rare exceptions age 50 marks the end of the reproductive period. Accordingly, the latest cohort for which completed fertility measures can be computed on the basis of 1981 Census data is for women born prior to 1932. Nevertheless, it was possible to determine which cohorts had already replaced themselves by giving birth to an average of two children per woman<sup>9</sup>.

<sup>&</sup>lt;sup>9</sup> This is an approximation. An exact measure involves the impact of mortality.

We see that women of the 1947 cohort – who were 34 years of age in 1981 – had already borne sufficient offspring (2.07 per woman) to replace themselves (Table 3). In respect of more recent cohorts, available data on cumulative fertility to 1981 allow only a speculative assessment as to whether these cohorts will attain replacement level fertility. Without resorting to sophisticated mathematics, we have reason to believe that the birth cohorts for 1948 to 1951 will probably do so; but the 1952 cohort may not. By 1981 this cohort had already averaged 1,589 children per 1,000 women: to achieve replacement level, these 1,000 women would have to bear approximately 400 more children. Is this likely to happen?

#### Fertility and Birth Order

More precise estimates of fertility than the foregoing can be derived from parity progression ratios <sup>10</sup>. Stated one way, the parity progression ratio is the probability that the number of children born to a woman close to, or at, completed fertility, might have been greater by one child; stated another way, the parity progression ratio is the proportion of women with "n" children who go on to have one more.

When "n" equals zero, the ratio  $a_0$  denotes the proportion of women who go on to have at least one child;  $a_1$ , the proportion of women who have had one child but go on to have at least a second one;  $a_2$ , the proportion who have had two but go on to have at least a third one; etc...

In calculating parity progression ratios, the data are arranged to show the distribution of women by the exact number of children they have borne, as well as the average number of births per woman. For instance, the figures below (from Table 6) show the childbearing history in 1981 for married women belonging to the 1952 birth cohort.

Tot	al	1.000	vield	1.588	children
7+	children:	1	yield	8	children
6	children:	2	yield	12	children
5	children:	6	yield	30	children
4	children:	30	yield	120	children
3	children:	135	yield	405	children
2	children:	385	yield	770	children
1	child:	243	yield	243	children
0	children:	198			

<sup>10</sup> These ingenious relationships were first used by Louis Henry (France) and Norman Ryder (United States).

Table 3. Completed Fertility by the Same Cohort After the 1971 and 1981 Censuses (Cohorts 1912 to 1953, All Ages at Marriage), Canada

Cohort	Age in 1971			Number of Children per Woman	Difference	Difference (%)
1953	18	0.610	28	1.458	0.848	139.0
1952	19	0.629	29	1.589	0.960	152.6
1951	20	0.697	30	1.710	1.013	145.3
1950	21	0.756	31	1.831	1.075	142.2
1949	22	0.835	32	1.913	1.078	129.1
1948	23	0.958	33	1.993	1.035	108.0
1947	24	1.110	34	2.073	0.963	86.8
1946	25	1.337	35	2.161	0.824	61.6
1945	26	1.560	36	2.279	0.719	46.1
1944	27	1.730	37	2.351	0.621	35.9
1943	28	1.961	38	2.468	0.507	25.9
1942	29	2.159	39	2.567	0.408	18.9
1941	30	2.413	40	2.701	0.288	11.9
1940	31	2.573	41	2.833	0.260	10.1
1939	32	2.760	42	2.951	0.191	6.9
1938	33	2.887	43	3.030	0.143	5.0
1937	34	3.022	44	3.156	0.134	4.4
1936	35	3.139	45	3.236	0.097	3.1
1935	36	3.213	46	3.313	0.100	3.1
1934	37	3.329	47	3.438	0.109	3.3
1933	38	3.400	48	3.473	0.073	2.1
1932	39	3.408	49	3.515	0.107	3.1
1931	40	3.472	50	3.514	0.042	1.2
1930	41	3.513	51	3.529	0.016	0.5
1929	42	3.541	52	3.594	0.053	1.5
1928	43	3.539	53	3.614	0.075	2.1
1927	44	3.510	54	3.589	0.079	2.3
1926	45	3.540	55	3.543	0.003	0.1
1925	46	3.524	56	3.571	0.047	1.3
1924	47	3.487	57	3.551	0.064	1.8
1923	48	3.448	58	3.503	0.055	1.6
1922	49	3.450	59	3.563	0.113	3.3
1921	50	3.382	60	3.456	0.074	2.2
1920	51	3.357	61	3.420	0.063	1.9
1919	52	3.329	62	3.392	0.063	1.9
1918	53	3.284	63	3.348	0.064	1.9
1917	54	3.207	64	3.285	0.078	2.4
1916	55	3.163	65	3.237	0.074	2.3
1915	56	3.132	66	3.224	0.092	2.9
1914	57	3.131	67	3.138	0.007	0.2
1913	58	3.113	68	3.224	0.111	3.6

Source: From 1981 Census data.

These women were still fecund in 1981: at least theoretically the 1952 birth cohort should still have about ten years of fertility left in 1981. The objective, then, is to estimate the distribution according to parity at completed fertility and to calculate how many children the members of the cohort will have borne.

The only plausible means of accomplishing this is by extrapolating the trend of parity ratios from cohorts of women who have already attained completed fertility, or have already passed through the most prolific phases of it. Obviously, there is no full guarantee that these estimates will be accurate.

Considering that few women have a first child after 35, the trend observed for the cohorts from 1932 to 1946 provides the basis for estimating the expected  $a_0$  for the 1952 generation. The estimate of  $a_1$  for the 1952 generation is based on observation of the 1932 to 1945 cohorts; the estimate of  $a_2$  on cohorts from 1932 to only 1944; and so on. Thus the values of a series that could still undergo considerable change are excluded. This was the method used for calculating the parity ratios as they appear in the bottom line of Table 5, and from them the distribution of women in the 1952 birth cohort by the number of children they will have borne at completed fertility.

Tot	al	1,000	yield	2,111	children
7+	children:	1	yield	- 8	children
6	children:	5	yield	30	children
5	children:	16	yield	80	children
4	children:	71	yield	284	children
3	children:	251	yield	753	children
2	children:	405	yield	808	children
1	child:	148	yield	148	children
0	children:	103			

Comparing this projected distribution at completed fertility to the distribution as it actually appeared in 1981 shows that 95 women belonging to the 1952 birth cohort, who were childless in 1981, would have a child; and 95 who had one child in 1981 would have at least one more. Similarly, the number of parity-two women is expected to increase by 19; parity-three women by 116; and parity-four women by 41. Viewed from a 1984 standpoint, these last two increases seem to have little chance of occurring, although this is what would have to happen if the generation is to be replaced.

Census statistics for 1971 and 1981 (Table 4) show that when they were between the ages of 29 and 39, married women born in 1942 increased their progeny by 400 children, or 19%, from the number of children (2,153) already born by 1971. If one assumes a similar outcome for the 29-39 age group in the 1952 cohort (i.e. a 20% increase over the 1,588 children already born) this would result in only 1,905 births, short of replacement level for the generation.

Table 4. Changes in the Parity Distribution per 1,000 Women in the 10-Year Period Framed by the 1971 and 1981 Censuses

			Parity								Number		
		0	1	2	3	4	5	6	7	8	9+	of Children	
C.1942	in 1971	131	176	336	210	89	36	13	5	2	1	2,153	
	in 1981	78	112	343	255	124	49	22	9	4	2	2,551	
Change		-53	-64	7	45	35	13	9	4	2	1	398	

#### Discussion

A cohort analysis of fertility for Canadian-born women reveals three features: first, women are remaining childless for longer and longer periods of time; second, from one generation to the next, the proportion of women who marry late increases; and, third, the longer that marriage is deferred, the lower is the completed fertility. As for the average number of children born per woman, this has fluctuated over time, in part because of "environmental" circumstances that were favourable or unfavourable to fertility, or because of technological innovations with respect to either partial or virtually total control over childbirth. If it is true that until now the effect of birth control has been to reduce population growth, there is nothing to support the view that this is the only effect that it will have in the future. Although tenuous, there are signs of a reappraisal among "three-parity" (and higher) women which may foreshadow a rise in the total fertility of young cohorts<sup>11</sup>. An infatuation with maternity cannot be totally discounted, but if the available statistics are taken into account, the married women of the 1952 generation (that is to say, women aged 32 in 1984) are barely replacing themselves.

The analysis thus far has dwelt upon married women only. If unmarried women (who make up a certain proportion of each cohort) have fewer children than married women, the evidence is stronger yet that overall current generations will not replace themselves: nor – taking into account the tendency of today's generation to postpone childbearing – will those that follow. Dumas and Boyer<sup>12</sup> show that the fertility of married women is slightly higher than that of married women and women living in common-law unions taken together, and even higher than that of single women living alone. As only Canadian-born women were considered, it would be necessary to impute an unreasonably high fertility to the relevant foreign-born cohorts in order to markedly change the picture.

<sup>11</sup> See first part of the report.

<sup>12</sup> Cahiers québécois de démographie, Vol. 13:2, Table 7.

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Table 5. Parity Progression Ratios for Cohorts of Married Women Born in Canada

Cohort	Age in 1981	a <sub>0</sub>	a <sub>1</sub>	a <sub>2</sub>	a <sub>3</sub>	a <sub>4</sub>	a <sub>5</sub>	a <sub>6</sub>	a <sub>7</sub>	a <sub>8</sub>	a <sub>9+</sub>
1924	57	.908	.894	.751	.681	.659	.658	.660	.678	.660	.692
1925	56	.909	.898	.760	.678	.644	.661	.667	.673	.683	.669
1926	55	.916	.896	.757	.685	.634	.641	.647	.658	.648	.647
1927	54	.916	.904	.765	.690	.644	.633	.643	.649	.638	.637
1928	53	.919	.905	.768	.690	.636	.638	.633	.650	.684	.636
1929	52	.920	.910	.771	.682	.631	.626	.631	.643	.641	.651
1930	51	.923	.911	.765	.668	.612	.612	.628	.638	.626	.628
1931	50	.926	.914	.759	.667	.614	.609	.614	.622	.601	.622
1932	49	.931	.915	.765	.665	.598	.593	.596	.618	.627	.59
1933	48	.932	.913	.763	.665	.594	.578	.574	.583	.613	.55
1934	47	.934	.915	.758	.647	.578	.577	.578	.598	.613	.594
1935	46	.929	.912	.747	.630	.552	.569	.553	.573	.574	.57
1936	45	.934	.907	.732	.615	.544	.546	.537	.552	.541	.51
1937	44	.930	.911	.719	.600	.532	.512	.495	.545	.575	.58
1938	43	.933	.904	.693	.571	.501	.495	.506	.528	.497	.534
1939	42	.928	.901	.679	.543	.500	.497	.503	.536	.538	.44
1940	41	.930	.898	.650	.512	.462	.482	.481	.521	.428	.47
1941	40	.927	.884	.619	.484	.431	.463	.475	.484	.509	.509
1942	39	.922	.878	.576	.453	.412	.442	.433	.451	.458	.55
1943	38	.918	.871	.545	.427	.389	.417	.424	.509	.493	.50
1944	37	.912	.859	.513	.385	.372	.405	.426	.475	.486	.510
1945	36	.907	.851	.488	.363	.361	.414	.410	.455	.388	.51:
1946	35	.899	.838	.445	.331	.324	.425	.429	.419	.462	.43
1947	34	.892	.820	.424	.312	.288	.347	.373	.406	.341	.42
1948	33	.881	.808	.394	.283	.257	.294	.518	.353	.400	.58
1949	32	.870	.788	.379	.265	.279	.345	.322	.379	.636	.429
1950	31	.856	.764	.358	.259	.269	.358	.386	.377	.652	.26:
1951	30	.834	.735	.327	.231	.250	.305	.289	.429	.417	.800
1952	29	.802	.697	.312	.226	.234	.347	.333	.414	.250	.66
1952	Projected	.897	.835	.461	.273	.249	.297	.329	.357	.498	.33

Source: Fertility data from the 1981 Census.

Table 6. Distribution of Number of Children Born per 1,000 Married Women for Selected Cohorts, 1981

Cohort					Numbe	r of Children	Born					Number of Children per
Conort	0	1	2	3	4	5	6	7	8	9	10	1000 Women
1924	92	96	202	195	142	93	61	38	27	16	38	3,551
1925	91	93	196	200	150	92	60	89	26	18	35	3,571
1926	84	95	199	196	156	97	61	38	26	17	31	3,543
1927	84	88	194	196	156	103	64	40	27	17	31	3,589
1928	81	87	193	198	160	101	66	40	23	18	33	3,614
1929	80	83	192	205	162	104	64	39	25	16	30	3,594
1930	77	82	198	214	167	102	60	37	24	15	24	3,529
1931	74	80	204	214	165	103	62	37	24	14	23	3,514
1932	69	79	200	218	174	106	62	35	21	15	21	3,515
1933	68	81	202	217	175	108	63	36	19	13	18	3,473
1934	66	79	207	229	177	102	59	33	19	12	17	3,438
1935	71	82	214	234	179	95	56	30	17	10	12	3,313
1936	66	86	227	239	174	94	52	27	15	9	11	3,236
1937	70	83	238	244	171	95	50	22	11	6	10	3,156
1938	67	90	259	250	167	84	41	20	11	5	6	3,030
1939	72	92	268	260	154	78	38	18	10	6	4	2,951
1940	70	94	293	265	149	66	32	14	9	4	4	2,833
1941	73	107	312	262	140	57	26	12	6	3	2	2,701
1942	78	112	343	255	124	49	22	9	4	2	2	2,567
1943	82	119	364	250	113	42	17	6	3	2	2	2,468
1944	88	129	381	247	97	34	13	5	2	1	3	2,351
1945	93	135	395	240	88	29	12	5	2	1	1 -	2,279
1946	101	146	418	224	75	21	9	4	1	1	-	2,161
1947	108	161	421	213	69	18	6	2	1	_	-	2,073
1948	119	169	432	201	59	14	3	2	1	-	_	1,993
1949	130	185	426	191	50	13	4	1			-	1,913
1949	144	202	420	173	44	10	4	1	-	-	-	1,831
1951	166	221	412	154	35	8	3	1	_	_	_	1,710
1951	198	243	395	135	30	6	2	1	_	_	-3	1,589

<sup>&</sup>lt;sup>1</sup> The figures may differ considerably from those that appear in another publication on the subject of fertility, "Fertility in Canada from Baby-boom to Baby-bust", because they relate to married women born in Canada, and the information does not come from the same source: Census in this case and Vital Statistics in the other.

Source: 1981 Census of Canada - unpublished data.

### Conclusion

The overall fertility rate today is appreciably below the replacement threshold of 2.1 children per woman. Examination of the most fertile subgroups portion of recent cohorts of ever-married Canadian-born women shows that more recent cohorts will not replace themselves. It should be noted, nonetheless, that the reproductive level of the cohorts concerned is somewhat higher than what one might expect if one's assessment is based on only the annual total fertility rate. Possibly this too will decline with time; but it is noteworthy that women of recent cohorts devote to childbearing only a small fraction of the time during which they are fecund. Some unforeseen (but possible) changes in aspirations regarding maternity could modify the quantity and tempo of child-bearing in the future.

Appendix B

#### Weaknesses in the Data

In 1971, persons in common-law relationships were not in the universe of the census data base; in 1981, they were considered married. Thus, in 1981, an unmarried woman living in a common-law relationship who had borne a child – to be counted as married according to the questionnaire instructions – was asked to report the starting date of her current union as if it were her date of marriage. Few women complied with these requests, and where no date was given, none was imputed during processing. This problem, however, accounts for only a small part of the differences (as we shall see later) between 1971 and 1981 cohort sizes (Table B1).

Aside from the aforementioned problem of common-law unions, in the 1981 Census no marriage date was imputed for married respondents who failed to report the date of their first marriage, whereas in 1971, Statistics Canada did assign a marriage date to such respondents. Nor was age at marriage calculated in the same manner in the two censuses<sup>13</sup>. These differences have a significant impact on the distribution of women by age at marriage, although for the measures used in this study, the effect was minimal. Lastly, to prevent any distortion by immigrants' fertility patterns, the analysis was confined to women born in Canada.

Given the foregoing constraints, and those of a different nature to be described below, we nevertheless selected groups of women on the basis of age and age at marriage to form very specific birth-marriage cohorts to be examined over a ten-year interval. For the following reasons, their numbers in 1971 and 1981 may not be the same:

- 1) some 1971 respondents died or migrated by 1981;
- 2) some respondents born in Canada were present in 1981, but out of the country in 1971 (1971 figure < 1981 figure);
- 3) age at marriage was calculated in a different manner in the two censuses;
- 4) the inflation of the sample (1/3 in 1971, 1/5 in 1981) may have produced different numbers for the same group of persons.

A further consideration is that all censuses differ due to undercoverage, and such undercoverage varies by age, with more young people escaping enumeration than older people. Consequently, the completeness of the coverage of the same birth-marriage cohorts at a ten-year interval will be different on each occasion (1971 figure < 1981 figure).

<sup>13</sup> In both cases, age at marriage was not supplied by the respondent, but was obtained by subtracting the date of birth from the date of marriage. However, in 1971 only the years were subtracted, whereas in 1981 the months were also taken into account. For full details, see Norland, Joseph, "A Statement on Comparability of Census Data on Age at First Marriage 1961, 1971, 1981", Demography Division, unpublished internal document, 1983.

Table B1. Number of Ever-married Women, Married at Age 21, Canada, 1971 and 1981

Age in 1971	Number	Age in 1981	Number	Difference
22	14,525	32	19,970	5,445
23	19,455	33	20,345	890
24	20,905	34	20,180	- 725
25	16,455	35	17,070	615
26	15,870	36	15,835	- 35
27	14,605	37	14,730	125
28	14,145	38	13,810	- 335
29	12,560	39	12,680	120
30	11,825	40	12,150	325
31	10,950	41	10,780	-170
32	10,540	42	11,145	605
33	10,270	43	11,135	865
34	10,390	44	10,170	- 220
35	10,580	45	10,800	220
36	10,505	46	10,770	265
37	10,260	47	10,180	- 80
38	10,890	48	11,065	175
39	10,655	49	10,660	5
40	10,390	50	10,335	- 55
41	10,345	51	10,860	515
42	10,080	52	9,750	- 330
43	9,760	53	9,680	- 80
44	10,195	54	9,485	-710
45	10,445	55	9,845	- 600
46	10,580	56	10,585	5
47	9,460	57	8,945	-515
48	8,610	58	7,935	- 675
49	8,930	59	8,410	- 520
50	9,240	60	9,205	-35
51	8,700	61	8,610	- 90
52	7,760	62	8,565	805
53	7,570	63	6,395	-1,175
54	6,865	64	6,095	- 770
55	5,830	65	5,515	-315
56	6,280	66	5,585	-695
57	5,705	67	5,325	-380
58	5,130	68	4,350	-780

Source: 1981 Census of Canada.

Finally, persons living in senior citizens' residences were not enumerated in 1981, whereas they had been ten years earlier. Women who were living in such residences in 1971 simply appear to have vanished in 1981 (1971 figure > 1981 figure).

In any case, since the comparisons relate to the number of children born per 1,000 women, it will be assumed that women who were either absent or supernumerary in the second census exhibited the same behaviour as those present in both.

Table B2. Percentage of Childless Women After Five and Ten Years of Marriage in Two Sets of Two Like Birth-Marriage Cohorts, Canada (figures used for graph No. 1)

Vac	r of Birth			Age a	at Ma	rriage			R <sup>2</sup>
rea	r of Birth	19	20	21	22	23	24	25	(Semilogarith- mic Fit)
		Aft	er Fiv	e Yea	ars of	Marr	iage		
1046	Observed Value	14.5	23.3	33.3	47.7	61.0	71.4		.972
1946	Fitted Value	16.4	22.6	31.1	42.8	59.0	81.2		
1056	Observed Value	20.5	30.0	41.2	50.4	65.6	77.2		.982
1956	Fitted Value	22.4	29.1	37.8	49.3	63.9	83.1		
		Aft	er Te	n Yea	rs of	Marr	iage		
1041	Observed Value	4.8	5.8	7.5	10.0	13.4	17.0	24.2	.995
1941	Fitted Value	4.5	5.9	7.8	10.2	13.4	17.5	23.0	
1051	Observed Value	8,2	11.2	13.9	18.3	20.0	26.8	27.5	.970
1951	Fitted Value	8.9	11.0	13.5	16.7	20.4	25.0	30.7	

Source: Statistics Canada, 1981 Census, unpublished data.

#### THE FERTILITY OF SINGLE WOMEN

#### The Problem and the Data

The term "illegitimate fertility", now considered anachronistic, has been superseded by the more neutral term "out-of-wedlock fertility". Out-of-wedlock fertility remains, nevertheless, a useful indicator of social mores, and, as such, continues to be of interest to social scientists and policy-makers alike. Since out-of-wedlock fertility relates primarily to single women, it is their fertility that will be studied here.

The time series of fertility rates for single women, published by Vital Statistics, is subject to a number of limitations. These limitations require some discussion before an analysis of the series can be attempted.

- 1) It should be pointed out that Vital Statistics cannot provide a continuous picture of the fertility of single women over the past ten years. Because of incomplete registration in at least two provinces (Alberta and Quebec), there were a substantial number of births in 1974, 1975 and 1976 for which the mother's marital status is unknown. Thus, only a short time series, beginning with 1977, is available.
- 2) Aside from the above unusual years, in any year there are invariably a number of birth registrations on which this information is not recorded. These births cannot be allocated to any other marital status classes without implicitly making unjustifiable assumptions. For this reason, and because of their small numbers since 1977, it is preferable to ignore them, even if the result is a slight understatement of the number of births to single mothers.
- 3) While inaccurate birth registrations have an impact on the numerator in the rate calculation, the denominator, which consists of the population at risk, is no less flawed. A significant source of error is the greater census undercoverage of single women than of the rest of the female population, particularly at the ages of highest fertility. For example, the 1981 Census undercoverage rate for single women aged 15 and over stood at 3.8%, as against 1.65% for females of all marital statuses and ages. This results in an exaggerated rate, since the denominator is too small.
- 4) A much more serious bias is introduced into the rates by the difference between the Census and Vital Statistics definitions in classifying the population by marital status. Birth registration data from Vital Statistics identify the mother's legal marital status, whereas the Census classifies women who are not widowed or divorced on the basis of whether they are living with a partner, irrespective of the legal or common-law status of the arrangement. Hence, women who are legally single but living

Births to widows and divorced women, which are infrequent and therefore less important as a social phenomenon, are disregarded here, but are reported in Vital Statistics.

with a partner are classified in the Census as "married". It therefore follows that the younger the age group, the greater the probability of the single female population being understated. This discrepancy between the numerator and denominator tends to exaggerate the fertility of single women still further<sup>3</sup>.

For these reasons, published data and rates must be interpreted with caution.

# Most Single Mothers are Young, But the Number of Older Ones is Growing

Births to single women are on the rise in Canada, but not at the same rate in all age groups (Table 1). Up to 1980, teenagers (age 15 to 19) accounted for the largest share (41%). In 1981, however, this group contributed only 38%, the same percentage as that of the young adult group (20-24). This pattern persisted into 1984, with downward movement for the 15-19 age group, and upward movement for the 20-24 age group. For the 1977-1984 period as a whole, births to single women 25 years of age and over climbed from 17% to 30%. It would seem, then, that the number of adult single mothers is increasing. Should the conclusion be drawn that the fertility of single women has risen?

The changes between 1977 and 1984 in the age structure of the population are not unrelated to the phenomenon just described. Because of previous fluctuations in the number of births for one thing, but chiefly because of increasing age at first marriage, there has been a change in both the number of single women in each age group, and in the relative proportion of each age group in the total population (Table 2).

Between 1977 and 1984, the number of young single women (15-19) fell by 99,400, but increases of 202,200 and 95,900 were recorded for the 20-24 and 25-29 age groups, respectively. As a result, the proportionate share of adolescents in the under 30 group declined to 50% from 61%, while that of young adults (20-29) increased from 39% to 50%. These changes can have an impact on the number of births, but they do not suffice as an explanation for the changes in fertility rates, which have shown a much stronger progression in the adult age groups than in the adolescent age group. Whereas since 1977 the fertility rate for adolescents has increased by less than one per thousand, that for young adults has increased by nine per thousand, and that for adults over 25, much more (Table 1).

<sup>&</sup>lt;sup>2</sup> In 1981, if they did not report themselves as such, the Edit and Imputation Unit assigned them to the "married" class.

<sup>&</sup>lt;sup>3</sup> For a more detailed discussion, see Dumas, Jean and Louise Boyer, "Mise au point sur la fécondité des célibataires", Cahiers québécois de démographie, vol. 13, no. 2.

Table 1. Births and Fertility Rates of Unmarried Women by Age of Mother, Canada, 1977-1984

	< 15	15-19	20-24	25-29	30-34	35-39	40+	Total
Year				Num	ber			
1977	296	16,800	11,645	4,008	1,365	367	69	34,634
1978	308	16,806	12,610	4,336	1,536	426	83	36,749
1979	297	16,671	14,059	5,259	1,812	442	77	38,633
1980	260	17,188	15,770	6,035	2,119	478	84	41,955
1981	262	17,217	17,699	7,124	2,557	613	96	45,585
1982	262	17,880	20,038	8,425	3,027	801	93	50,608
1983	215	16,516	21,531	9,933	3,639	936	120	52,929
1984	244	16,065	22,822	11,167	4,207	1,108	147	55,794
				Ra	te			
1977	1.3	15.8	22.9	23.4	16.8	7.8	1.7	17.9 <sup>1</sup>
1978	1.3	15.6	23.7	23.9	17.5	8.5	2.0	18.2
1979	1.3	15.5	25.5	27.3	19.3	8.4	1.8	18.9
1980	1.3	16.0	27.5	29.2	21.2	8.6	2.1	20.0
1981	1.4	16.3	29.6	32.6	24.0	10.4	2.3	21.1
1982	1.4	17.2	31.8	36.4	27.2	12.4	2.2	22.7
1983	1.2	16.4	32.0	40.6	31.3	13.6	2.7	24.1
1984	1.3	16.5	31.7	43.1	34.5	15.1	3.2	25.3
Increase								
1977-1984	0.0	0.7	8.8	19.7	17.7	7.3	1.5	7.4
Increase in %	0.0	4.4	38.4	84.2	105.4	93.6	88.2	41.3

Standardized Population of Canada in 1976.
Source: Statistics Canada, Catalogue 84-204.

Little of this change in fertility (Table 2) can be explained by structural changes within the groups. The proportion of adolescents aged 18-19 years, which constitutes the most fertile subgroup of adolescents, increased from 36% to 41% between 1977 and 1984. This can explain the slight increase in the rate for the group as a whole. The internal structure of the 20-29 age groups did not play any role, however, since the age composition remained almost stable over the period in question. (Table 2).

This shift towards a larger contribution of older age groups in total out-of-wedlock fertility appears to be significant, but gives rise to the suspicion that statistics (probably a discordance between the numerator and the denominator of the calculated rate) are the cause. Even though the number of older single mothers is increasing, the increase is probably not as large as the change in rates would lead us to believe. The next section clarifies this issue.

Table 2. Age Distribution of Single Women 15-30 Years Old, Canada, 1977 and 1984

				Ye	ear				
Age		1977	7	1984					
Age	Number	070	Mean Age	% of 15-30	Number	070	Mean Age	% o	
15	227,900	21.4			184,400	19.1			
16	233,100	21.9			186,400	19.3			
17	222,700	20.9			191,000	19.8			
18	202,900	19.1			199,300	20.6			
19	178,300	16.7			204,300	21.2			
15-19	1,064,800	100.0	17.4	61	965,400	100.0	17.6	50	
20	150,800	29.7			191,800	27.0			
21	122,000	24.0			168,900	23.8			
22	98,900	19.5			138,800	19.5			
23	76,500	15.0			116,800	16.4			
24	60,600	11.9			94,500	13.3			
20-24	508,600	100.0	22.1	29	710,800	100.0	22.2	37	
25	48,500	28.4			75,700	28.4			
26	39,000	22.8			61,900	23.2			
27	31,900	18.7			51,000	19.1			
28	27,400	16.1			41,500	15.6			
29	24,100	14.1			36,700	13.8			
25-29	170,900	100.0	27.2	10	266,800	100.0	27.1	14	
15-29	1,744,300			100	1,943,000			100	

Source: Statistics Canada, Catalogue 91-210 annual.

Table 3. Adjusted and Unadjusted (for Common-law Unions), and Estimated Age-specific Fertility Rates of Single Women (per 1,000), Canada, 1981

	Age								
Rate	15-19	20-24	25-29	30-34	35-39				
Unadjusted Rate	16.3	29.6	32.6	24.0	10.4				
Adjusted Rate	15.8	24.8	23.7	16.3	6.8				
Estimated Fertility Rate for Single Women	13.0	16.3	11.7	11.5	6.6				

Source: Jean Dumas and Louise Boyer "Mise au point sur la fécondité des célibataires" in Les Cahiers québécois de démographie, Vol. 13, No. 2, October, 1984.

## The Impact of Common-law Unions on Fertility Rates

A fact gleaned from the 1981 Census<sup>4</sup> about persons living in common-law unions provides a means of adjusting fertility rates in an approximate fashion so that they probably give a more accurate picture of social reality. By adjusting the denominator for the number of single women living common-law, one obtains appreciably lower estimated fertility rates for women who are neither married, nor living in a common-law union. It is these women who are the focus of our attention (Table 3).

The age groups in which the unadjusted rates of fertility have risen most (ages 20-34) are also those in which non-marital cohabitation is frequent. Once the number of women living common-law has been subtracted, the rates for non-cohabiting single adolescents in these groups are much lower (Table 3). Nevertheless, analysis of a long time-series reveals a virtually indisputable increase in the fertility of single adolescents.

## **Regional Variations**

Of particular interest are the regional variations in the fertility rates of single women (Table 4). The rates for the Yukon and Northwest Territories are substantially above the national average, but there are also marked differences among the provinces. Regardless of the year, Saskatchewan's rate is roughly two and a half times higher than Ontario's. Note that the rates have been standardized to eliminate distortions caused by differences in age structure between provinces and between years. The factors underlying interprovincial variations in "out-of-wedlock" fertility are difficult to pin-down. They can range from sexual freedom to level of education, religious conviction and access to contraception and abortion facilities. One important factor is ethnic composition. For example, the fertility rates for single women are generally highest in the Prairie Provinces, and it is in these populations that the highest percentage of Indians and Métis are found (Table 5).

It is not simply that Native women have a higher overall fertility rate than non-Native women. The out-of-wedlock fertility rate may have also been artificially inflated as the unintentional result of legislation which affected the status of Indian women. Until 1986 (when the legislation was changed), status Indian women lost their status when they married a non-Indian man. As a result, Indian women were probably less willing to marry, preferring instead to enter into a common-law union, with the result that more births are credited to single women in Vital Statistics.

<sup>4</sup> Norland, Joseph, Selected Characteristics of Cohabiting Persons in Canada 1981. Statistics Canada 1985, unpublished paper.

Table 4. Standardized Fertility Rates<sup>1</sup> of Single Women (per 1,000), Canada, Provinces and Territories, 1977-1982, 1984

Province	1977	1978	1979	1980	1981	1982	1984
Prince Edward Island	21.0	21.0	21.7	21.7	25.2	24.4	26.9
Nova Scotia	23.5	24.5	24.2	24.4	25.5	26.4	25.9
New Brunswick	25.6	24.6	24.8	27.1	27.4	29.4	27.6
Quebec	15.5	15.9	17.9	18.8	20.3	21.8	24.1
Ontario	14.3	14.3	14.2	14.8	15.1	16.6	17.4
Manitoba	28.9	28.9	28.7	29.5	31.2	31.6	32.5
Saskatchewan	37.0	37.5	37.6	39.4	41.4	42.4	42.5
Alberta	21.2	22.0	22.4	24.7	27.7	32.1	29.0
British Columbia	20.5	20.2	21.5	23.1	24.5	24.8	25.0
Yukon	55.8	52.8	57.0	55.1	67.2	68.5	78.0
Northwest Territories	94.9	92.7	94.8	112.0	116.4	122.3	178.2
Canada	17.9	18.2	18.9	20.0	21.1	22.7	23.2

<sup>&</sup>lt;sup>1</sup> Age structure of 1976 Canadian population used as standard. Source: Statistics Canada, Vital Statistics.

Table 5. Distribution of the Native Female Population Aged 20 to 34 and Percentage in Relation to the Total Female Population of the Same Age, Canada, Provinces and Territories, 1981

Province	Total Number of Natives Females	Native Females Aged 20 to 34	Total Females Aged 20 to 34	% of Native Females in Total Female Population Aged 20 to 34
	(1)	(2)	(3)	(2) + (3)
Canada	248,815	66,635	3,279,303	2.0
Newfoundland	2,085	580	73,299	0.8
Prince Edward Island	315	125	14,938	0.8
Nova Scotia	4,060	1,170	109,217	1.1
New Brunswick	2,795	790	90,627	0.9
Quebec	26,050	7,730	890,859	0.9
Ontario	56,255	15,950	1,137,287	1.4
Manitoba	33,625	8,270	129,781	6.4
Saskatchewan	30,310	7,075	116,827	6.1
Alberta	36,610	9,680	335,063	2.9
British Columbia	41,710	11,780	370,955	3.2
Yukon	2,065	560	3,933	14.2
Northwest Territories	12,940	2,950	6,517	45.3

Source: 1981 Census of Canada. Microfiche SDN 81BB5

#### THE STRENGTHENING OF MAJORITY POSITIONS

## Recent Developments in the Language Situation

Réjean Lachapelle1

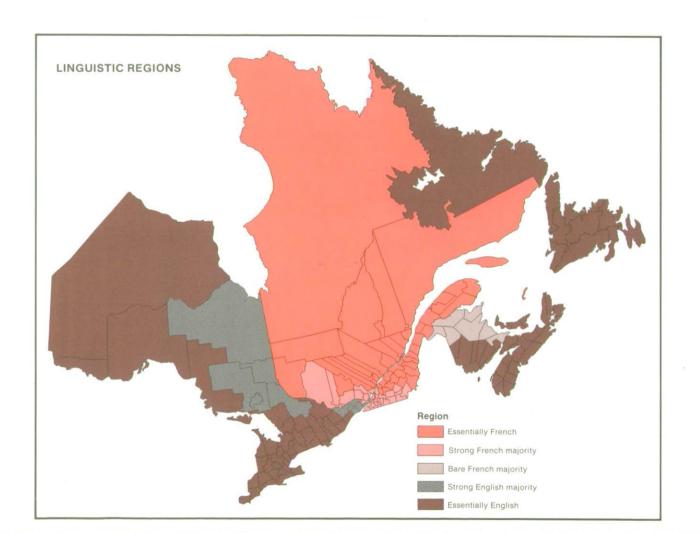
In 1981, the population of Canada was 68% Anglophone and 25% Francophone. Those who spoke a language at home other than French or English accounted for the remaining 7% of the population. Geographically, this distribution is far from uniform: the two official language communities are heavily concentrated. As a result, Anglophones and Francophones, through their daily experiences, form different images of the country's linguistic reality.

Recent changes in linguistic composition among regions stem from differences between the Anglophone or Francophone groups in mortality, fertility, migration and linguistic mobility. Some of the effects of these phenomena on linguistic composition can be determined from census information.

Until quite recently, analysis of demographic changes in language groups had to be based on census for mother tongue (the first language learned, or spoken, and still understood) which was collected in every decennial census from 1921. From an analytical point of view, however, this was a makeshift approach: as pointed out by the Royal Commission on Bilingualism and Biculturalism, mother tongue data may be as much as a generation out of date. Accordingly, in the two most recent decennial censuses, 1971 and 1981, the respondent was asked to identify the language most often spoken at home.

Statistics are never perfect, and the data on mother tongue and home language are no exception. While most Canadians can answer the questions relating to these variables without difficulty, some have trouble because they use, or have used, more than one language at home. In both 1971 and 1981, Statistics Canada assigned one (and only one) language to these people. Because their numbers were small, this imputation had little effect on the distributions of the individual language variables; but the effects on individual cells in the joint distributions may be much more serious. Moreover, the mother tongue question was asked of the entire population, while home language data are based on a sample (one-third of the population in 1971 and one-fifth in 1981). (In addition), the statistics on home language do not apply to the total population in 1981 since inmates of institutions were excluded. This omission has virtually no effect on the percentage distributions, but it causes an understatement of about 1% in the population figures.

<sup>1</sup> Social and Economic Studies Division, Statistics Canada.



## **Heavy Regional Concentration**

Most Francophones live in Quebec, where they are in the majority, whereas Anglophones reside primarily in the other provinces. Within each of these two large geographic areas, however, the distribution of Francophone and Anglophone communities is far from uniform. How can this diversity be taken into account without drastically expanding the regional reference framework and complicating the description and analysis? Based on a geographic breakdown proposed by Joy<sup>2</sup> – and updated by Lachapelle and Henripin<sup>3</sup>, the country is divided into five major linguistic regions, two in Quebec and three in the rest of the country.

In Quebec, there is a vast expanse to the north and east of the Montreal area that is mostly Francophone (MFR). 2,600,000 people lived there in 1981 (Table 1) – about 11% of the national population and 40% of the population of Quebec. French was spoken at home by 96% of this group, while some 70,000 people, or 3% of the population, spoke English.

The second regional grouping encompasses the entire southwestern part of the province (the Eastern Townships, Montreal and the Ottawa Valley). Its population is more heterogeneous, although Francophones hold a large majority (RFM+). Nearly 4,000,000 people lived there; 73% of them were French speakers and 20% English speakers. This region accounted for 16% of the national population and 60% of the population of Quebec. More than 90% of Quebec's Anglophones reside there.

The third region is a small one located to the east of Quebec, consisting of the northern and eastern parts of New Brunswick (RFM-). From a language standpoint, it is heterogeneous, with Francophones (home language French) accounting for 56% of the population and Anglophones (home language English) 43%. This region contains roughly 400,000 people, just over half of New Brunswick's population.

The fourth grouping is made up of two areas in Ontario, one in the eastern part of the province and the other in the northeast, where the majority of the population is anglophone (RAM+). There are slightly over 1 million people living in this region, or 13% of Ontario's population. Seventy-two percent of them reported that their home language was English while 24% reported French. This grouping, which embraces the National Capital, has a linguistic composition much like that of Canada as a whole.

<sup>&</sup>lt;sup>2</sup> Joy, Richard J., 1967, Languages in Conflict, the Canadian Experience, Ottawa. Published by the author.

<sup>&</sup>lt;sup>3</sup> Lachapelle, Réjean and Jacques Henripin, La situation démolinguistique au Canada: évolution passé et prospective, Montréal, l'Institut de recherches politiques, 1980.

Table 1. Population1 by Language Used in the Home, Canada and Major Regions, 1981

Region	Total	English	French	Other
		Populat	ion	
Canada	24,083,500 (24,343,190) <sup>2</sup>	16,425,905	5,923,010	1,734,585
Quebec	6,369,065 (6,438,395) <sup>2</sup>	809,145	5,256,830	303,090
Mostly Francophone (MFR)	2,582,665 (2,611,515) <sup>2</sup>	69,345	2,484,070	29,250
Large Francophone majority (RFM+)	3,786,400 (3,826,880) <sup>2</sup>	739,800	2,272,760	273,840
Canada excluding Quebec	17,714,435 (17,904,795) <sup>2</sup>	15,616,760	666,180	1,431,495
Small Francophone majority (RFM <sup>-</sup> )	372,570 (376,575) <sup>2</sup>	161,850	208,750	1,970
Large Anglophone majority (RAM+)	1,076,160 (1,087,075) <sup>2</sup>	770,880	255,150	50,130
Mostly Anglophone (MAR)	16,265,705 (16,441,145) <sup>2</sup>	14,684,030	202,280	1,379,395
		Compositio	on (%)	
Canada	100.0	68.2	24.6	7.2
Quebec	100.0	12.7	82.5	4.8
MRF	100.0	2.7	96.2	1.1
RFM+	100.0	19.5	73.2	7.2
Canada excluding Quebec	100.0	88.2	3.8	8.1
RFM-	100.0	43.4	56.0	0.5
RAM+	100.0	71.6	23.7	4.7
MAR	100.0	90.3	1.2	8.5
	Re	gional distrib	oution (%)	
Canada	100.0	100.0	100.0	100.0
Quebec	26.4	4.9	88.8	17.5
MFR	10.7	0.4	41.9	1.7
RFM+	15.7	4.5	46.8	15.8
Canada excluding Quebec	73.6	95.1	11.2	82.5
RFM-	1.5	1.0	3.5	0.1
RAM+	4.5	4.7	4.3	2.9
MAR	67.5	89.4	3.4	79.5

<sup>&</sup>lt;sup>1</sup> Excluding inmates of institutions. Because of rounding, the data do not always add up to the totals.

2 Including inmates of institutions.

Sources: Tables C2 and C4.

The rest of Canada (the fifth grouping) forms an immense English-speaking territory (MAR). Just over two-thirds of the country's population lives in this region (16,500,000). Nine out of ten people speak English at home; French speakers (200,000) make up little more than 1% of the population. There is not much variation in the linguistic composition of this grouping. In all the provinces and subprovincial areas that comprise it, at most 4% of the population is Francophone (less than 2% everywhere west of Ottawa except in Manitoba) (Table C5). The proportion of Anglophones exceeds 95% in Newfoundland, Prince Edward Island, Nova Scotia, the Yukon and southern New Brunswick, and falls somewhere between 90% and 95% in Saskatchewan, Alberta and British Columbia. In Manitoba, those who speak English at home account for 86% of the population; and in all parts of Ontario except the east and northeast, those who speak English at home account for 88%. The concentration of Anglophones is much lower in the Northwest Territories (64%) because of the high percentage of people (35%) who speak a third language at home, in most cases the Native language Inuktitut.

To sum up, close to 90% of Canada's population who speak English at home live in the mostly Anglophone region, which contains, all languages combined, more than two-thirds of the country's population.

The geographic concentration of French speakers is less pronounced. While 42% of them reside in the mostly Francophone region, 50% are located in regions with only a Francophone majority. A small proportion (3%) live in the primarily Anglophone region.

Contact between the two official language communities takes place mostly in heterogeneous regions, which contain slightly over 20% of Canada's population. These heterogeneous regions form a sort of zone of transition between two linguistically homogeneous areas. According to Joy, they constitute a bilingual belt around the heartland of French Canada.

# Two Majority Perceptions

Very few Canadians (slightly over 1 million) live in areas where the percentage distribution of the language communities is similar to the national profile. As a result, Canada's linguistic composition is probably perceived in very different ways by the average Anglophone or Francophone. It may be assumed that their perceptions of linguistic reality are formed chiefly through their daily contact with members of the various language communities in their immediate surroundings.

How can the impressions that the members of each community have of the country's linguistic reality be quantified? Let us suppose that it is possible to identify a set of regions within which contact between residents occurs randomly, regardless of language characteristics. In each of these regions, perceptions are identical with reality. Let us also suppose that contact between

inhabitants of two regions is minimal. Each community's impression of linguistic reality could then be represented by a specific weighting of the linguistic composition in each region, where the weighting coefficients are derived from the percentage distribution of the reference community's members. This is equivalent, for example, to selecting a Francophone at random somewhere in the country and then choosing another person at random in the region where the Francophone lives. The probability that the second person selected speaks one or another of the different languages at home is an approximate measure of the linguistic composition perceived by Francophones. This composition can also be interpreted as a set of potential contact indices<sup>4</sup>.

Using the five geographic regions defined above, we estimated the images that the various language communities had of Canada's linguistic reality in 1981 (Table 2). For the average English speaker, the country was made up of slightly less than 7% Francophones, 8% Allophones and 85% Anglophones. His image of Canada is essentially the same as the linguistic composition found in the mostly Anglophone region. Conversely, for the average French speaker, Canada consists of 18% Anglophones, 78% Francophones and 4% Allophones. The contrast would be even sharper if the calculations had been based on a finer geographic breakdown<sup>5</sup>. But even then, the values calculated in this fashion constitute only a crude approximation of the perceptions that the members of different communities have of the linguistic reality of the country.

By virtue of its heavy geographic concentration, each official language community tends to perceive itself as the majority. These perceptions of majority have become more pronounced since 1971 (Table 2). The day-to-day contacts among Francophones are chiefly with members of their own community even though they are a minority in the country. These discrepancies between perception and reality have become more pronounced even as the percentage of the national population that is Francophone has been falling (from 25.7% in 1971 to 24.6% in 1981).

# **Shrinking Minorities**

The decline in the percentage of Francophones in the population between 1971 and 1981 protracts a trend that began some 30 years ago. The relative size of the French group<sup>6</sup> dropped from 29.0% in 1951 to 26.9% in 1971 and 25.7% in 1981, while the English group expanded from 59.1% to 61.3% between 1951 and 1981. The third group's share rose from 11.8% in 1951 to 13.5%

5 Lachapelle, Réjean, 1984, "Linguistic Composition: Perception and Reality", Statistics Canada, Social and Economic Studies Division, working paper.

<sup>6</sup> Persons whose mother tongue is French.

<sup>&</sup>lt;sup>4</sup> Lieberson, Stanley and Donna K. Carter, 1982, "Temporal Changes and Urban Differences in Residential Segregation: A Reconsideration", *American Journal of Sociology*, Vol 88, No. 2, pp 296-310.

Table 2. Perception by Language Community of Home-language Composition, Canada, 1971 and 1981 (%)

	Total		English		French		Other	
Community	1971	1981	1971	1981	1971	1981	1971	1981
Anglophone	100.0	100.0	83.9	85.4	7.7	6.5	8.4	8.1
Francophone	100.0	100.0	20.0	18.0	75.9	77.6	4.1	4.4
Allophone	100.0	100.0	77.2	77.0	14.5	14.9	8.3	8.1
All communities	100.0	100.0	67.0	68.2	25.7	24.6	7.3	7.2

Source: Tables 1 and C4. Calculations by the author.

in 1961 as a result of a decade of heavy immigration, but has shown no significant change since 1961. While 13% of Canadians reported a third language as their mother tongue in 1981, these languages are spoken at home by only 7% of the population, owing to the high level of linguistic mobility affecting them<sup>7</sup>.

The general overall pattern of decline of the Francophone community and expansion of the Anglophone is not typical of all regions. Whether we classify the population by home language or by mother tongue, the pattern of change that has developed over the last few years is very clear (Table 3). In every major linguistic region in the country, the majority group is growing larger, while the minority group is shrinking. For the English group in Quebec, whose proportion has been falling slowly for a century, the downward trend accelerated between 1971 and 1981, particularly in the heterogeneous regions with a Francophone majority (RFM+). In fact, the decline in the English speaking population in this region was absolute as well as relative - from 811,000 in 1971 to under 750,000 in 1981. In the mostly Francophone region (MFR), the percentage of Anglophones, already very low in 1971 (3.2%), continued to shrink. Even their population count decreased from 76,000 in 1971 to about 70,000 in 1981.

In the rest of Canada the pattern of change is in the opposite direction. The relative size of the French speaking population has been falling steadily since the early 1940s. The decline continued between 1971 (4.3%) and 1981 (3.8%), in both the mostly Anglophone area (MAR) and the region with a large Anglophone majority (RAM+). In the former, the number of Francophones edged down from almost 215,000 in 1971 to about 205,000 in 1981, and in the latter, from 270,000 to less than 260,000. The one exception to the

<sup>&</sup>lt;sup>7</sup> Devereaux, M.S. and Luc Albert, 1985, "Language in Canada", 1981 Census of Canada, Statistics Canada, Catalogue 99-935.

general trend was in the region with a small Francophone majority comprising northern and eastern New Brunswick (RFM-). The linguistic composition of this region, which contains less than 2% of the national population, changed very little between 1971 and 1981.

The downward trend (both relatively and often absolutely) in the size of the minority language group in each region means that the geographic concentration of the official language communities is becoming more pronounced. This further implies that opportunities for contact between Anglophones and Francophones are diminishing. In each region the proportion of population that is accounted for by the majority language group is increasing. How can this tendency be explained?

Table 3. Mother-Tongue and Home-language Composition of Population (%)1, Canada and Major Linguistic Regions, 1971 and 1981

Desire est		Mo	ther tong	gue	Hon	ne langua	age
Region and yea	Г	English	French	Other	English	French	Other
Canada	1971 1981	60.2 61.3	26.9 25.7	13.0 13.0	67.0 68.2	25.7 24.6	7.3 7.2
Quebec	1971 1981	13.1 11.0	80.7 82.4	6.2 6.6	14.7 12.7	80.8 82.5	4.5 4.8
Mostly Francophone (MFR)	1971 1981	3.1 2.5	95.6 96.1	1.2	3.2 2.7	95.9 96.2	0.9
Large Francophone Majority (RFM+)	1971 1981	19.8 16.7	70.8 73.1	9.5	22.5 19.5	70.7 73.2	6.9
Canada excluding							
Quebec	1971 1981	78.4 79.4	6.0 5.3	15.6 15.4	87.2 88.2	4.3 3.8	8.4 8.1
Small Francophone Majority							
(RFM-)	1971 1981	40.8 40.7	58.0 58.3	1.2 1.0	43.7 43.4	55.4 56.0	0.9
Large Anglophone Majority		(Sant 1975)		200,000			7 3070043
(RAM+)	1971 1981	60.8 62.8	30.8 28.4	8.4 8.7	68.8 71.6	26.6 23.7	4.6 4.7
Mostly Anglophone (MAR)	1971	80.6	2.9	16.5	89.6	1.5	8.9
*	1981	81.4	2.5	16.1	90.3	1.2	8.5

<sup>&</sup>lt;sup>1</sup> Due to rounding, the percentages do not always total 100. **Source:** Tables C2 to C4.

Changes in linguistic composition are governed by four phenomena: mortality, fertility, linguistic mobility and migration, each of which has some effect on linguistic composition. Because of low mortality levels, the differences between the groups now have a negligible impact on linguistic composition. The effects of the other three phenomena, however, are appreciable. In the following, we endeavour to measure the effects that these factors have had on the changes in linguistic composition.

## The Fertility Effect: A Paradox

The high fertility rates that characterized French Canadian women are almost legendary. Yet, they did not always bear more children than other Canadian women! In about 1870, their fertility rate was close to the national average rate<sup>9</sup>. In the ensuing decades, however, the fertility rate for non-francophone women declined while that for the French Canadian women did not. Accordingly, by 1931, the fertility rate of French Canadian women was 70% higher than that of other Canadian women<sup>10</sup>. After 1931, the gap began to narrow and finally disappeared in the mid-1960s. A lower fertility rate is now observable throughout the country as a whole, irrespective of language group affiliation<sup>11</sup>.

The 1981 Census format permits the estimation of differences in fertility between the different language groups in each of the regions under consideration. All "non-single" women (which includes women living common-law) were asked how many children they had ever borne. By assuming the fertility of single women to be zero, an "underestimate" of the average number of children per woman (i.e. regardless of marital status) can be obtained. The error in this estimate is probably quite small for women 35 years of age and over, since most of those who had children when they were single later got married or are living common-law. Furthermore, as the "underestimate" affects all language groups, it seems reasonable to conclude that the assumption has little impact on differential fertility.

Two age groups of women were chosen – those who were in the 45-54 age bracket and those aged 35-44 (Table 4). For all practical purposes, the figures for the latter group represent completed fertility, since women today have very few children after the age of 35. Canadian women in this age group averaged 2 4 children per woman. Using this as a reference level and assigning it a value of 100, we find that Francophones had fewer children than Anglophones (their

<sup>8</sup> Lachapelle and Henripin, op. cit., Chapter 3.

<sup>9</sup> Henripin, Jacques, Trends and Factors of Fertility in Canada, 1961 Census Monograph Programme, Ottawa, Queen's Printer, 1968.

Lieberson, Stanley, 1970, Language and Ethnic Relations in Canada, New York, John Wiley.
 Romaniuc, A, 1984, Fertility in Canada: From Baby-boom to Baby-bust, Ottawa, Minister of Supply and Services, Catalogue 91-524E (Occasional).

index was 94, compared with 100 for Anglophones). This reversal of the secular trend is recent since the fertility rate of the Francophone women who were 45-54 years of age in 1981 is still higher than the rate for non-Francophone women.

As to the recently observed differences at the national level, the fertility rate of Francophones tends always to be higher than that of Anglophones in most of the broad linguistic regions, although the differences do have a tendency to become less pronounced among younger women. At first glance there appears to be something paradoxical about this. It results from what may be termed an effect of aggregation. The signs of difference in fertility change (from plus to minus and vice versa) when one passes from the regional level of analysis to the national level. This is attributable to the fact that the fertility rate among recent Francophone cohorts in Quebec has been lower than that of Anglophones living outside this province.

For Canada as a whole, recent fertility levels are slightly higher for English speakers, depressing the percentage for French speakers. Yet fertility has the opposite effect on the linguistic composition in Quebec as well as in the rest of the country. Moreover, the influence of fertility is long-lasting. Because of the high fertility of French Canadians in the past, not only is the average

Table 4. Index of the Average Number of Children per Woman<sup>1</sup> in Selected Age Groups, by Language Used in the Home, Canada and Major Linguistic Regions, 1981

		35	-44		45-54					
Region	Total	English	French	Other	Total	English	French	Other		
Canada <sup>2</sup>	100	101	94	106	100	98	106	94		
Quebec	92	84	92	104	100	84	104	85		
MFR	99	107	98	181	116	114	116	159		
RFM+	88	85	87	98	90	81	93	80		
Canada excluding Quebec	103	102	113	107	100	99	130	96		
RFM-	119	118	121	132	138	118	154	206		
RAM+	101	98	110	107	104	98	121	93		
MAR	103	102	109	107	99	99	123	96		

<sup>&</sup>lt;sup>1</sup> Excluding inmates of institutions.

Source: Statistics Canada, 1981 Census of Canada, special tabulations.

<sup>&</sup>lt;sup>2</sup> For all languages combined, the average number of children per woman was 2.4 in the 35-44 group and 3.1 in the 45-54 group.

age of the Francophone population lower than the average age of the Anglophone population, but it also has a larger proportion of adults. This age structure helped the growth of Francophones in all the regions, as well as at the national level. It has been at work during the past decade, offsetting the adverse effect of recent fertility levels. However, these differences will gradually fade over the next 15 years.

Women aged 35 to 44 who speak a language at home other than English or French have a greater number of children than other Canadians. Their higher fertility, therefore, tends to push up the proportion of the "other language" group in the population. The other factors, however, tend to work in the other direction – particularly, the linguistic mobility factor.

## Linguistic Mobility Favours English in All Regions

Some Canadians speak a language at home other than their mother tongue. These transfers from one language to another are the outcome of a process known as linguistic mobility, a process that particularly affects the French and the third language group minorities. Assessments of the strength of this phenomenon and of its impact on linguistic composition are usually based on census data. However, the multi-purpose design of the Census questionnaire does not allow a level of detail that is adequate for an analysis of the successive steps of the linguistic mobility process. The definition used in the Census for mother tongue (first language learned and still understood) leads to underestimating the strength of linguistic mobility among minorities, since those who no longer understand their original language are not included in that category. The information on home language (i.e. language most often spoken at home) was also clouded by a reducing process as only one language was selected. Therefore, it is important to not confuse linguistic mobility with linguistic assimilation.

We are interested only in the effects of linguistic mobility on linguistic composition. It has been shown that the index of linguistic continuity is well-suited for this purpose<sup>12</sup>. This index is the ratio of the number of people speaking a particular language at home to the number reporting the same language as their mother tongue. Where it exceeds 100 (assuming it is expressed as a percentage), it means that the language in question is making a net gain through language transfers. Conversely, a reading of under 100 indicates that the language is losing as a result of linguistic mobility.

In all regions, even in the mostly Francophone ones (Table 5) the net transfer is to English. The exact opposite is true for the third languages, which sustain large losses in all regions. As for the French language, it is just holding its own in the two Quebec regions; elsewhere in Canada, the lower its percentage of

<sup>12</sup> Lachapelle, Réjean, 1984, "Analysis of Linguistic Mobility: Indexes, Observations and Models", Statistics Canada, Social and Economic Studies Division, working paper.

the region's population, the greater the rate of transfer to English. In the mostly Anglophone areas, half the French-mother-tongue population speaks English at home. Among French Canadian women between the ages of 35 and 44, (who reflect the phenomenon's recent trends), over 60% have transferred to English as their home language (Table 5). The linguistic mobility rate of the French Canadian women in this age group exceeds the rate of linguistic mobility of women in the third group, probably because the majority of the latter were born in other countries.

It would seem reasonable to suppose that a child's mother tongue would be the mother's home language. On the basis of this assumption, it is possible to construct a linguistic reproduction index, which measures the joint effect of differential fertility and linguistic mobility on linguistic composition. It is the ratio (multiplied by 100) of a particular mother tongue's proportion in the children's birth cohort to the corresponding proportion in the mother's cohort. In most of the regions the higher fertility of Francophones attenuates the impact of language transfers (Table 6).

Table 5. Continuity Index<sup>1</sup> (%) for the Total Population<sup>2</sup> and Women Aged 35 to 44, by Mother Tongue, Canada and Major Linguistic Regions, 1981

Region	Tota	al populati (%)	on	Women aged 35 to 44 (%)				
atogion.	English	French	Other	English	French	Other		
Canada	111	96	55	117	94	53		
Quebec	116	100	71	122	100	74		
MFR	106	100	82	107	100	81		
RFM+	118	100	70	124	99	74		
Canada excluding								
Quebec	111	72	52	116	61	51		
RMF-	107	96	55	110	94	70		
RAM+	114	84	52	121	78	50		
MAR	111	50	52	116	38	51		

<sup>&</sup>lt;sup>1</sup> This index is the ratio of the number of persons speaking a particular language at home to the number reporting the same language as their mother tongue.

Source: Statistics Canada, 1981 Census of Canada, special tabulations.

<sup>&</sup>lt;sup>2</sup> Excluding inmates of institutions.

Table 6. Linguistic Reproduction Index for Women Aged<sup>1</sup> 35 to 44, by Mother Tongue, Canada and Major Linguistic Regions, 1981

Region	Total	English	French	Other
Canada	100	118	88	57
Quebec	100	115	100	83
MFR	100	117	99	148
RFM+	100	119	99	82
Canada excluding Quebec	100	115	67	53
RFM-	100	109	94	77
RAM+	100	117	84	53
MAR	100	115	41	53

<sup>1</sup> Excluding inmates of institutions.

Source: Statistics Canada, 1981 Census of Canada, special tabulations.

## Internal Migration Consistently Benefits the Francophone Group

During each of the last three five-year periods, the propensity of Anglophones to move from Quebec to elsewhere in Canada was invariably ten times greater than that of Francophones. Conversely, the tendency to move to Quebec from other parts of Canada was much stronger for Francophones than for Anglophones<sup>13</sup>. However, these propensities do not measure the actual effect of migration on linguistic composition.

One of the questions the 1981 Census asked was the place of residence five years before (in 1976). Given these data, it is easy to compute the migration balance for each region and to compile it by language group (Table 7). Among the five major regions only the mostly Anglophone area posted a net gain. This finding applies to all language groups except the French group, which showed a slight migration gain in the region with a larger Francophone majority in Quebec.

To measure the impact of internal migration on linguistic composition, account must be taken of the populations of the various language groups in each region. To this end, we calculated linguistic net in-migration by taking the internal linguistic migration balances and dividing them by the corresponding number of persons of the mother tongue concerned who were residents of Canada in 1981 and lived in the region in 1976 (Table 7).

<sup>13</sup> Baillargeon, Mireille, 1983, "Évolution et caractéristiques linguistiques des échanges migratoires interprovinciaux et internationaux du Québec depuis 1971", Québec, Conseil de la langue française (draft edition). Lachapelle et Henripin, op. cit.

The net in-migration ratio for the French group was invariably higher than that for the English group. The pattern of change in the 1966-71 and 1971-76 periods was similar<sup>14</sup>. The explanation for this is that Francophones are concentrated in regions with negative migration balances. They leave these regions less than Anglophones, which raises their proportion of the population. Furthermore, although in the mostly Anglophone region the migration balance for the English group is far larger than for the French group (131,000 English to 25,000 French), proportionally the migration balance favours the French group. This tends to push the proportion of Francophones upward, but is insufficient to offset the adverse effect of linguistic mobility.

Table 7. Internal Migration Balance and Net In-Migration Ratio by Mother Tongue, Canada and Major Linguistic Regions, 1976-1981<sup>1</sup>

Region	Total	English	French	Other			
	Interna	l migration ba	alance (in the	ousands)			
Quebec	-141.7	-106.3	-18.1	-17.3			
MFR	-37.3	-13.4	-22.0	-1.9			
RFM	-104.4	-92.9	+3.9	-15.4			
Canada excluding Quebec	+ 141.7	+ 106.3	+ 18.1	+17.3			
RFM	-4.7	-4.0	-0.6	-0.1			
RAM	-29.0	-20.8	-6.6	-1.6			
MAR	+175.4	+131.1	+25.3	+19.0			
	Net In-Migration Ratio <sup>2</sup> (%)						
Quebec	-2.4	-14.3	-0.4	-4.6			
MFR	-1.6	-18.2	-1.0	-6.5			
RFM+	-2.9	-13.9	+0.2	-4.4			
Canada excluding Quebec	+0.9	+0.9	+ 2.1	+0.7			
RFM-	-1.4	-2.8	-0.3	-3.9			
RAM+	-2.9	-3.3	-2.3	-1.8			
MAR	+1.2	+1.1	+7.1	+0.8			

<sup>&</sup>lt;sup>1</sup>Excluding population under five years of age in 1981 and inmates of institutions.

Source: Statistics Canada, 1981 Census of Canada, special tabulations.

<sup>&</sup>lt;sup>2</sup>The ratio of the internal migration balance to the corresponding number of persons who were residents of Canada in 1981 and lived in the region in question in 1976.

<sup>&</sup>lt;sup>14</sup> Lachapelle and Henripin, op. cit, p. 201.

It may seem surprising that internal migrations could cause a rise in the relative importance of Francophones. The ways in which internal migration affect linguistic composition may best be illustrated as follows. Let us consider a territory consisting of two small regions. In the first reside 1,000 persons, 800 of whom speak language A, and 200 language B; in the second region, which is more populous, only 150 people speak A, but 2,850 speak B. Let us now suppose that no deaths or births occur over a five-year period, the only source of population growth or decline being confined to internal migration. In the fifth year a census count reveals that there was a net movement of 30 persons from the first region to the second, 5 of language A and 25 of language B. There are still 4,000 persons living in the territory and the number speaking language A (950), and language B (3,050) is unchanged. However, the weight of language A has advanced in both of the two constituent regions. In the first region, it has gone from 80% (800/1,000) to 82% (795/970) and in the second, from 5.0% (150/3,000) to 5.1% (155/3,030). This is analogous to the situation observed in Canada.

Conventionally, one does not consider the effects of migration on the linguistic composition of regions, but on the regional distribution of the population. If regions composed of a high proportion of Francophones lose importance in the country as a result of internal migratory movements, one may conclude that migration is unfavourable to Francophones. This reasoning is perhaps not false, but what can be affirmed is that it doesn't apply to the influence of internal migration on the linguistic make up.

# The Third Group Gains Through Immigration

The impact of international migration cannot be measured with available data. While there are estimates of the total number of emigrants, there is no information on their linguistic composition. Accordingly, we decided to confine this discussion to immigration, with only a few observations about emigration in the conclusion.

In 1981, over 550,000 people reported that they had been living abroad five years before (Table 8). This figure includes not only those people who had immigrated in the five-year period since 1976 and who were still resident in Canada in 1981, but it includes also Canadians who were residing in other countries in 1976 but had returned by 1981. About 80% of those 550,000 people had taken up residence in the mostly Anglophone region of the country. This is a far larger proportion than the proportion of the Canadian population living in this region (67.5% in 1981). The opposite is true in the other regions (Tables 1 and 8). Most of the immigrants settled in the same regions that experienced growth through internal population exchanges.

The language characteristics of immigrants influence their choice of geographical destination. Quebec is much more attractive to immigrants who

report French as their mother tongue (76%) than those who report English (6%). This situation is reversed in the rest of Canada. Thus, there is a very sharp division in the geographic allocation of immigrants by mother tongue, which has remained almost unchanged during the past three five-year periods<sup>15</sup>.

Table 8. Population<sup>1</sup> Reporting Having Resided in Another Country in 1976, by Mother Tongue, Canada and Major Linguistic Regions, 1981

Region	Total <sup>2</sup>	English	French	Other				
		Number (in	thousands)					
Canada	56.2	251.2	39.5	265.5				
Quebec	84.7	15.4	30.1	39.2				
MFR	12.4	1.1	7.3	4.0				
RFM+	72.3	14.3	22.8	35.2				
Canada excluding Quebec	471.5	235.7	9.4	226.3				
RFM -	3.1	1.4	1.5	0.3				
RAM+	20.9	11.0	1.6	8.3				
MAR	447.4	223.3	6.3	217.8				
	Composition (%)							
Canada	100.0	45.2	7.1	47.7				
Quebec	100.0	18.2	35.5	46.3				
MFR	100.0	8.9	58.8	32.4				
RFM+	100.0	19.8	31.5	48.7				
Canada excluding Quebec	100.0	50.0	2.0	48.0				
RFM-	100.0	43.9	46.9	9.2				
RAM+	100.0	52.7	7.8	39.5				
MAR	100.0	49.9	1.4	48.7				
		Regional distr	ribution (%)					
Canada	100.0	100.0	100.0	100.0				
Quebec	15.2	6.1	76.1	14.8				
REF	2.2	0.4	18.4	1.5				
RMF+	13.0	5.7	57.7	13.3				
Canada excluding Quebec	84.8	93.9	23.9	85.2				
RMF-	0.6	0.5	3.7	0.1				
RMA+	3.8	4.4	4.1	3.1				
MAR	80.4	88.9	16.0	82.0				

<sup>&</sup>lt;sup>1</sup> Excluding population under five years of age in 1981 and inmates of institutions.

<sup>&</sup>lt;sup>2</sup> Because of rounding, the sum of the data does not always equal the total. **Source:** Statistics Canada, 1981 Census of Canada, special tabulations.

<sup>15</sup> Lachappelle and Henripin, op. cit., p. 238 and 55.

Nearly half of all immigrants belong to the third group (home language other than French or English), which exceeds by far the percentage of that group in the national population (13%). The picture is much the same in all regions (Tables 3 and 8). In other words, immigration favours the third group and pushes its proportion upward in all areas. Conversely, the effect of immigration on the French share of total population is negative in all regions while the effect of immigration on the English share varies from region to region. The English group benefits from immigration where it is a minority, and loses where it constitutes the majority. These results relate solely to immigration. If the impact of both phenomena (immigration and emigration) could be taken into account, both the English and the French groups in most regions would probably be adversely affected.

### Synopsis

In the course of the last decade, the majority positions of the two official language communities strengthened. In all regions where Anglophones constitute the majority, including the country as a whole, their proportion of the population increased. The same was true of Francophones in regions where they were in the majority. As a result, there was a decline in the relative sizes and even in the population counts of official language minorities. This trend also intensified the regional concentration of Anglophones and Francophones.

Most of the members of the two official language communities do not reside in the same regions. They therefore seldom encounter each other in their day-to-day lives. They have regular contact chiefly with members of their own community. Consequently, the country's linguistic reality has only an abstract meaning for English and French speakers alike. Very few Canadians live in areas where the linguistic composition is similar to that of the country as a whole. Because of their heavy regional concentration, both Anglophones and Francophones tend to perceive themselves as members of a majority group.

Appendix C

Table C1. Distribution of Census Divisions in Linguistic Regions, New Brunswick, Ontario and Quebec

1971	1981
NEW BR	UNSWICK
North and East (Region With Sn	nall Francophone Majority (RFM-))
Gloucester Kent Madawaska Northumberland Restigouche Victoria Westmorland	Same
South (Mostly Anglo	phone Region (MAR))
All Other Census Divisions	Same
ONT	ARIO
East (Region With Large Ar	nglophone Majority (RAM+))
Glengarry Ottawa-Carleton Prescott Russel Stormont	Same
Northeast (Region With Large	Anglophone Majority (RAM+))
Cochrane Nipissing Sudbury Timiskaming	Same plus Sudbury Regional
Rest of the Province (Mostly	y Anglophone Region (MAR))
All Other Census Divisions	All Other Census Divisions

Table C1. Distribution of Census Divisions in Linguistic Regions, New Brunswick, Ontario and Quebec - Concluded

1971	1981
Q	UEBEC
Ottawa Valley (Region With L	arge Francophone Majority (RFM+))
Gatineau Hull Papineau Pontiac	Same
Central Montreal: (Region With	Large Francophone Majority (RFM+))
Ile-de-Montréal Ile-Jesus	Same
Outskirts of Montreal (Region Wi	th large Francophone Majority (RFM+))
Argenteuil Beauharnois Chambly Châteauguay Deux-Montagnes Huntingdon Iberville Laprairie L'Assomption Napierville Rouville Saint-Jean Soulanges Terrebonne Vaudreuil Verchères	Same
Eastern (Region With Larg	e Francophone Majority (RFM+))
Brome Compton Missisquoi Richmond Shefford Sherbrooke Stanstead	Same
Rest of the Province (Mo	stly Francophone Region (MFR))
All Other Census Divisions	Same

Table C2. Population by Mother Tongue, Canada and Regions<sup>1</sup>, 1971 and 1981

Decien		197	1			198	1	
Region	Total	English	French	Other	Total	English	French	Other
Canada	21,568,310	12,973,805	5,793,650	2,800,855	24,343,190	14,918,465	6,249,100	3,175,625
Quebec Ottawa Valley	6,027,760 217,040	789,185 40,830	4,867,250 172,050	371,325 4,160	6,438,395 243,700	706,110 42,195	5,307,010 195,190	425,275 6,315
Montreal	3,080,915	625,870	2,121,395	333,650	3,243,270	553,615	2,311,680	377,97
Centre	2,187,145	494,945	1,382,320	309,880	2,028,455	421,795	1,271,765	334,89
Outskirts	893,770	130,925	739,075	23,770	1,214,815	131,820	1,039,915	43,080
Eastern Townships	311,770	46,980	261,285	3,505	339,910	44,185	291,215	4,51
Rest of Quebec	2,418,035	75,505	2,312,520	30,010	2,611,515	66,115	2,508,925	36,47
Canada Excluding								
Quebec	15,540,555	12,184,630	926,405	2,429,520	17,904,780	14,212,345	942,085	2,750,35
Newfoundland	522,100	514,515	3,640	3,945	567,685	560,465	2,655	4,56
Prince Edward								
Island	111,645	103,105	7,365	1,175	122,505	115,045	6,080	1,38
Nova Scotia	788,960	733,555	39,335	16,070	847,440	793,165	36,030	18,24
New Brunswick	634,555	410,400	215,725	8,430	696,405	453,315	234,030	9,06
North and East	345,940	141,130	200,620	4,190	376 575	153,295	219,365	3,91
South	288,615	269,270	15,105	4,240	319,835	300,020	14,665	5,15
Ontario	7,703,110	5,971,570	482,045	1,249,495	8,625,105	6,678,765	475,605	1,470,73
East	595,835	389,705	162,980	43,150	681,805	449,370	171,410	61,02
Northeast	419,270	227,425	149,850	41,995	405,270	233,640	137,540	34,09
Rest of Ontario	6,688,005	5,354,440	169,215	1,164,350	7,538,030	5,995,755	166,655	1,375,62
Manitoba	988,245	662,720	60,545	264,980	1,026,245	735,920	52,560	237,76
Saskatchewan	926,240	685,915	31,605	208,720	968,310	770,815	25,540	171,95
Alberta	1,627,875	1,263,935	46,500	317,440	2,237,725	1,810,545	62,145	365,03
British Columbia	2,184,620	1,807,255	38,030	339,335	2,744,470	2,249,310	45,620	449,54
Yukon	18,390	15,350	450	2,590	23,150	20,240	585	2,32
Northwest Territories	34,815	16,310	1,165	17,340	45,740	24,760	1,235	19,74

<sup>1</sup> The regions are defined in Table C1.
Source: Statistics Canada, 1971 and 1981 Censuses of Canada, special tabluations.

Table C3. Composition (%) of the Population by Mother Tongue, Canada and Regions<sup>1</sup>, 1971 and 1981

	19	71			198	31	
Total <sup>2</sup>	English	French	Other	Total <sup>2</sup>	English	French	Other
100.0	60.2	26.9	13.0	100.0	61.3	25.7	13.0
100.0 100.0 100.0 100.0 100.0 100.0 100.0	13.1 18.8 20.3 22.6 14.6 15.1 3.1	80.7 79.3 68.9 63.2 82.7 83.8 95.6	6.2 1.9 10.8 14.2 2.7 1.1	100.0 100.0 100.0 100.0 100.0 100.0 100.0	11.0 17.3 17.1 20.8 10.9 13.0 2.5	82.4 80.1 71.3 62.7 85.6 85.7 96.1	6.6 2.6 11.7 16.5 3.5 1.3
100.0	78.4	6.0	15.6	100.0	79.4	5.3	15.4
100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0	98.5 92.4 93.0 64.7 40.8 93.3 77.5 65.4 54.2 80.1 67.1 74.1 77.6 82.7 83.5	0.7 6.6 5.0 34.0 58.0 5.2 6.3 27.4 35.7 2.5 6.1 3.4 2.9 1.7 2.4	0.8 1.1 2.0 1.3 1.2 1.5 16.2 7.2 10.0 17.4 26.8 22.5 19.5 15.5	100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0	98.7 93.9 93.6 65.1 40.7 93.8 77.4 65.9 57.7 79.5 71.7 79.6 80.9 82.0 87.4	5.0 4.3 33.6 58.3 4.6 5.5 25.1 33.9 2.2 5.1 2.6 2.8 1.7 2.5	0.8 1.1 2.2 1.3 1.0 1.6 17.1 9.0 8.4 18.2 23.2 17.8 16.3 16.4 10.0 43.2
	100.0 100.0	Total²         English           100.0         60.2           100.0         13.1           100.0         18.8           100.0         20.3           100.0         14.6           100.0         15.1           100.0         3.1           100.0         78.4           100.0         98.5           100.0         92.4           100.0         93.0           100.0         40.8           100.0         93.3           100.0         93.3           100.0         54.2           100.0         80.1           100.0         74.1           100.0         77.6           100.0         82.7           100.0         83.5	100.0         60.2         26.9           100.0         13.1         80.7           100.0         18.8         79.3           100.0         20.3         68.9           100.0         22.6         63.2           100.0         14.6         82.7           100.0         15.1         83.8           100.0         3.1         95.6           100.0         98.5         0.7           100.0         93.0         5.0           100.0         93.0         5.0           100.0         40.8         58.0           100.0         93.3         5.2           100.0         77.5         6.3           100.0         54.2         35.7           100.0         80.1         2.5           100.0         74.1         3.4           100.0         77.6         2.9           100.0         82.7         1.7           100.0         83.5         2.4	Total <sup>2</sup> English         French         Other           100.0         60.2         26.9         13.0           100.0         13.1         80.7         6.2           100.0         18.8         79.3         1.9           100.0         20.3         68.9         10.8           100.0         22.6         63.2         14.2           100.0         14.6         82.7         2.7           100.0         15.1         83.8         1.1           100.0         78.4         6.0         15.6           100.0         98.5         0.7         0.8           100.0         92.4         6.6         1.1           100.0         93.0         5.0         2.0           100.0         64.7         34.0         1.3           100.0         40.8         58.0         1.2           100.0         93.3         5.2         1.5           100.0         93.3         5.2         1.5           100.0         77.5         6.3         16.2           100.0         54.2         35.7         10.0           100.0         54.2         35.7         10.0	Total <sup>2</sup> English         French         Other         Total <sup>2</sup> 100.0         60.2         26.9         13.0         100.0           100.0         13.1         80.7         6.2         100.0           100.0         18.8         79.3         1.9         100.0           100.0         20.3         68.9         10.8         100.0           100.0         22.6         63.2         14.2         100.0           100.0         14.6         82.7         2.7         100.0           100.0         15.1         83.8         1.1         100.0           100.0         3.1         95.6         1.2         100.0           100.0         78.4         6.0         15.6         100.0           100.0         98.5         0.7         0.8         100.0           100.0         92.4         6.6         1.1         100.0           100.0         93.0         5.0         2.0         100.0           100.0         93.3         5.2         1.5         100.0           100.0         40.8         58.0         1.2         100.0           100.0         93.3         5.2	Total <sup>2</sup> English         French         Other         Total <sup>2</sup> English           100.0         60.2         26.9         13.0         100.0         61.3           100.0         13.1         80.7         6.2         100.0         11.0           100.0         18.8         79.3         1.9         100.0         17.3           100.0         20.3         68.9         10.8         100.0         17.1           100.0         22.6         63.2         14.2         100.0         20.8           100.0         14.6         82.7         2.7         100.0         10.9           100.0         15.1         83.8         1.1         100.0         13.0           100.0         3.1         95.6         1.2         100.0         2.5           100.0         78.4         6.0         15.6         100.0         79.4           100.0         98.5         0.7         0.8         100.0         98.7           100.0         93.0         5.0         2.0         100.0         93.6           100.0         93.0         5.0         2.0         100.0         93.6           100.0         93.3	Total <sup>2</sup> English         French         Other         Total <sup>2</sup> English         French           100.0         60.2         26.9         13.0         100.0         61.3         25.7           100.0         13.1         80.7         6.2         100.0         11.0         82.4           100.0         18.8         79.3         1.9         100.0         17.1         71.3         80.1           100.0         20.3         68.9         10.8         100.0         17.1         71.3         100.0         17.1         71.3         100.0         20.8         62.7         100.0         20.8         62.7         100.0         20.8         62.7         100.0         10.9         85.6         100.0         10.9         85.6         100.0         10.9         85.6         100.0         13.0         85.7         100.0         13.0         85.7         100.0         13.0         85.7         100.0         13.0         85.7         100.0         13.0         85.7         100.0         2.5         96.1         100.0         98.7         0.5         100.0         98.7         0.5         100.0         98.7         0.5         100.0         100.0         93.9

<sup>&</sup>lt;sup>1</sup> The regions are defined in Table C1.
<sup>2</sup> Because of rounding, the data do not always total 100.
Source: Table C2.

Table C4. Population by Language Used in the Home, Canada and Regions<sup>1</sup>, 1971 and 1981

Danier		197	1			198	12	
Region	Total	English	French	Other	Total	English	French	Other
Canada	21,568,315	14,446,240	5,546,025	1,576,050	24,083,500	16,425,905	5,923,010	1,734,585
Quebec Ottawa Valley Montreal Centre Outskirts Eastern townships Rest of Quebec	6,027,760 217,040 3,080,930 2,187,155 893,775 311,775 2,418,015	887,875 45,595 716,890 572,680 144,210 48,985 76,405	4,870,100 168,960 2,120,785 1,383,785 737,000 261,050 2,319,305	269,785 2,485 243,255 230,690 12,565 1,740 22,305	6,369,065 242,165 3,208,965 2,002,605 1,206,360 335,270 2,582,665	809,145 46,505 648,365 501,665 146,700 44,930 69,345	5,256,830 191,665 2,293,370 1,258,365 1,035,005 287,725 2,484,070	303,090 3,995 267,230 242,575 24,655 2,615 29,250
Canada Excluding Quebec	15,540,550	13,558,370	675,920	1,306,260	17,714,435	15,616,760	666,185	1,431,490
Newfoundland Prince Edward Island Nova Scotia New Brunswick North and East South Ontario East Northeast Rest of Ontario Manitoba Saskatchewan Alberta British Columbia	522,105 111,645 788,965 634,565 345,945 288,620 7,703,100 595,830 419,265 6,688,005 988,245 926,235 1,627,870 2,184,620	517,210 106,795 753,730 430,725 151,185 279,540 6,558,065 428,355 270,075 5,859,635 816,555 832,515 1,477,960 2,027,120	2,295 4,405 27,220 199,085 191,750 7,335 352,460 142,870 127,130 82,460 39,600 15,930 22,695 11,505	2,600 445 8,015 4,755 3,010 1,745 792,575 24,605 22,060 745,910 132,090 77,790 127,215 145,995	563,740 121,230 839,810 689,375 372,570 316,805 8,534,265 674,555 401,605 7,458,105 1,013,705 956,435 2,213,660 2,713,610	559,520 117,080 806,950 468,545 161,850 306,695 7,337,255 497,855 273,025 6,566,375 872,075 887,385 2,029,505 2,487,330	1,810 3,730 24,450 216,585 208,750 7,835 332,945 143,210 111,940 77,795 31,045 10,085 29,555 15,120	2,410 420 8,410 4,245 1,970 2,275 864,065 33,490 16,640 813,935 110,585 58,965 154,600 211,160
Yukon Northwest Territories	18,390 34,810	17,465 20,230	135 590	790 13,990	23,070 45,535	22,170 28,945	230 630	15,960

The regions are defined in Table C1.
 Excluding inmates of institutions.
 Source: Statistics Canada, 1971 and 1981 Censuses of Canada, special tabulations

Table C5. Composition (%) of the Population by Language Used in the Home, Canada and Regions<sup>1</sup>, 1971 and 1981

Desire		197	71		1981				
Region	Total <sup>3</sup>	English	French	Other	Total <sup>3</sup>	English	French	Other	
Canada	100.0	67.0	25.7	7.3	100.0	68.2	24.6	7.2	
Quebec Ottawa Valley Montreal Centre Outskirts Eastern townships Rest of Quebec	100.0 100.0 100.0 100.0 100.0 100.0 100.0	14.7 21.0 23.3 26.2 16.1 15.7 3.2	80.8 77.8 68.8 63.3 82.5 83.7 95.9	4.5 1.1 7.9 10.5 1.4 0.6 0.9	100.0 100.0 100.0 100.0 100.0 100.0 100.0	12.7 19.2 20.2 25.1 12.2 13.4 2.7	82.5 79.1 71.5 62.8 85.8 85.8 96.2	4.8 1.6 8.3 12.1 2.0 0.8 1.1	
Canada Excluding Quebec	100.0	87.2	4.3	8.4	100.0	88.2	3.8	8.1	
Newfoundland Prince Edward Island Nova Scotia New Brunswick North and East South Ontario East Northeast Rest of Ontario Manitoba Saskatchewan Alberta British Columbia Yukon Northwest Territories	100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0	99.1 95.7 95.5 67.9 43.7 96.9 85.1 71.9 64.4 87.6 82.6 89.9 90.8 92.8 95.0 58.1	0.4 3.9 3.5 31.4 55.4 2.5 4.6 24.0 30.3 1.2 4.0 1.7 1.4 0.5 0.7	0.5 0.4 1.0 0.7 0.9 0.6 10.3 4.1 5.3 11.2 13.4 8.4 7.8 6.7 4.3 40.2	100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0	99.3 96.6 96.1 68.0 43.4 96.8 86.0 73.8 68.0 86.0 92.8 91.7 96.1 63.6	0.3 3.1 2.9 31.4 56.0 2.5 3.9 21.2 27.9 1.0 3.1 1.1 1.3 0.6 1.0	0.4 0.3 1.0 0.6 0.5 0.7 10.1 5.0 4.1 10.9 10.9 6.2 7.0 7.8 2.9 35.0	

<sup>1</sup> The regions are defined in Table C4.
2 Excluding inmates of institutions.
3 Because of rounding, the data do not always total 100.
Source: Table C4.

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# Glossary<sup>1</sup>

Census year: A neologism patterned after "fiscal year". In Canada, it refers to the 12-month period between June 1 of one year to May 31 of the following year. It can equally designate the year during which a census is held.

**Cohort:** A group of individuals or couples who experience the same event during a specified period. For example, there are birth cohorts and marriage cohorts.

**Cohort, fictitious:** An artificial cohort created from portions of actual cohorts present at different successive ages in the same year.

**Crude rate:** Relates certain events to the size of the entire population. For example, the crude birth rate for Canada is the ratio of the number of births in Canada in a year to the size of the Canadian population at mid-year. Crude death rates and crude divorce rates are calculated in the same way.

Current index: An index constructed from measurements of demographic phenomena and based on the events reflecting those phenomena during a given period, usually a year. For example, life expectancy in 1981 is a current index in the sense that it indicates the average number of years a person would live if he or she experienced 1981 conditions throughout his or her life.

**Dependency ratio:** Ratio denoting the dependency on the working population of some or all of the non-working population.

**Depopulation:** The decline in the population of an area through an excess of deaths over births (not to be confused with the depletion of an area through *emigration*).

Endogenous: Influences from inside the system.

Exogenous: Influences from outside the system.

**Fertility:** Relates the number of live births to the number of women, couples or, very rarely, men.

**Frequency:** Frequency of occurrence within a cohort of the events characterizing a paticular phenomenon.

Infant mortality: Mortality of children less than a year old.

**Life expectancy:** A statistical measure derived from the life table indicating the average years of life remaining for a person at the specified age, if the current age-specific mortality rates prevail for the remainder of that person's life.

Life table: A detailed description of the mortality of a population giving the probability of dying and various other statistics at each age.

**Natural increase:** A change in population size over a given period as a result of the difference between the number of births and deaths.

For further information consult the following: International Union for the Scientific Study of Population, Multilingual Demographic Dictionary, Ordina Editions, Liège 1980; Pressat, Roland. The Dictionary of Demography, ed. Christopher Wilson. Oxford, England: New York, NY, USA.

**Neonatal mortality:** Mortality in the first month after birth (part of infant mortality.

**Net migration:** Difference between immigration and emigration for a given area and period of time.

**Nulliparous:** Pertaining to a woman or a marriage of zero parity (has not produced a child).

**Parity:** A term used in reference to a woman or a marriage to denote the number of births or deliveries by the woman or in the marriage. A two-parity woman is a woman who has given birth to a second-order child.

**Population growth:** A change, either positive or negative, in population size over a given period.

**Population movement:** Gradual change in population status over a given period attribuable to the demographic events occurring during the period. Movement here is not a synomyn for migration.

**Post-neonatal mortality:** Mortality between the ages of one month and one year.

**Probability of survival:** Probability at exact age x of surviving to not less than exact age x + a; denoted  $_ap_x$ . It is the complement of the probability of death  $(1 - _aq_x)$ .

Quinquennial: Pertaining to a five-year period.

**Rate:** Ratio of the events occurring in a population in a given period to the average population during that period.

**Sex ratio:** Ratio of males to females in a given population. It is usually expressed as the number of males per 100 females.

**Standardization:** Procedure by which rates are corrected for the effect of the population structures under consideration in order to facilitate a comparison with other populations.

**Structure:** Composition of a population based on demographic characteristics such as age, sex, marital status, and so on.

**Timing:** Distribution over time of the events characterizing a particular phenomenon within a cohort. Its purpose is to indicate the rate at which the events occur. Mean or median age and mean or median duration are often used to measure the "timing" of events.

**Total (fertility, divorce, nuptiality) rate:** The sum of age-specific rates during a given period. It is one of the most commonly used current indices. It represents the behaviour of a fictitious cohort.

