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# Report on the Demographic Situation in Canada 1990

*Current Demographic Analysis*

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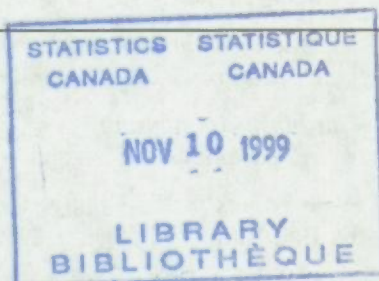


Statistics Canada  
Demography Division

# Report on the Demographic Situation in Canada 1990

*Current Demographic Analysis*

**Jean Dumas**  
Demography Division



Published under the authority of the Minister  
of Industry, Science and Technology

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November 1990

Canada: \$26.00 annually

United States: US\$31.00 annually

Other Countries: US\$36.00 annually

Catalogue 91-209E

ISSN 0715-9293

Ottawa

Version française de cette publication disponible sur demande



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## Supplementary

The reader should be reminded that the publication of successive versions of the **Report on the Demographic Situation in Canada** does not render previous versions obsolete. Rather, since a different substantive focus is taken with each issue, the volumes actually compliment each other. Furthermore, certain of the basic demographic topics are covered in serial format, making the volumes a valuable source of time series data on the Canadian demographic scene.

## Symbols

- .. figures not available.
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## **PREFACE**

Canadian society is realizing more and more that, at the heart of many social and economic problems which we face on a daily basis, questions of a demographic nature are of crucial importance.

During the 1980s three reports were produced on Canada's demographic developments. Given the increasing importance of these issues, the agency has now decided to publish an annual report highlighting the evolution of the important demographic trends that affect Canada in terms of numbers, composition, structure and population dynamics. This report, presented in chronicle form, focuses attention on the levels, trends and interpretation of these principal indicators. It also provides valuable comparisons with other countries at a similar level of development.

Ivan P. Fellegi  
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## ACKNOWLEDGEMENTS

These acknowledgements are directed to all those, too numerous to mention, who have provided invaluable assistance in the preparation of this manuscript. Among them are those whose comments have contributed to the publication: Rejean Lachapelle of the Language Studies Division; Alain Belanger of Demography Division, and, Dr. Maura Ricket of the Federal Centre on AIDS. Particular gratitude is warmly extended to Nicole Montsion, without whose effort the publication would never have come to fruition. Maureen Moore was responsible for editing the English version, under the supervision of Robert Riordan.

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## HIGHLIGHTS

### PART I

The growth rate of the Canadian population rose slightly in 1989. It now stands at 1.3%. This small increase has resulted both from an increase in the number of births, and in the number of immigrants, over the course of 1988 and 1989.

XXX

Population growth was uneven across the country. While the negative growth in 1988 for Saskatchewan is notable, British Columbia posted a net population increase of 22.8 per thousand in the same year. Growth in Ontario was only 16.1 per 1,000.

XXX

The number of marriages increased slightly (3.1%) with respect to 1987, mostly as a result of an increase in the number of first marriages. Consequently, marriage indices are on the rise in all provinces and territories. Marriages, however, are still occurring later in life.

XXX

As expected, both the number of divorces (down by 11,000) and the divorce rate (down by 14%) declined in 1988. A corresponding decline could well occur in 1989.

XXX

At the national level, fertility remained stable. A slight increase was detected in Quebec however, especially at birth orders 1 and 2. Even though the fertility rate declined slightly in the rest of Canada, it must be remembered that cross-sectional measures of fertility tend to underestimate the true reproductive behaviour of cohorts.

XXX

The incidence of triplet births has increased substantially over the recent past. This phenomenon is primarily the result of fertility-promoting treatment among sub-fertile couples.

XXX

A life table calculated from the most recent available data shows that the impressive gains in life expectancy experienced over the last decade are beginning to slow.

XXX

Infant mortality continues to decline slowly. On the other hand, post-neonatal deaths (after 1 month of life) are on the rise. The rationale for this



increase can be found in the apparent postponement of deaths that previously would have occurred soon after birth.

XXX

While AIDS is not yet a major cause of death in Canada, it is realistic to assume some impact on mortality in the near future.

XXX

Immigration over the 1988-1989 period reached nearly its highest level since 1974. As over the preceding few years, the origin of immigrants remained strongly centred around the Asian countries.

XXX

Net internal migration was negative over the last few years in Manitoba and Saskatchewan. Even Ontario experienced a negative balance of 6,500 persons in 1989. Alberta's net migration was nil, while British Columbia benefitted from a net gain of 40,000 persons.

XXX

## PART II

Nearly four centuries of change have shaped Canada and the United States – two countries which look alike and occupy most of the North American continent. But if some demographic characteristics are similar, there exist important differences between the two countries.

XXX

Both countries received the majority of their immigrants from Europe up until World War I. But since World War II, the Asian countries have begun to dominate.

XXX

The U.S. non-white population is growing quickly due to higher rates of natural increase and to a strong influx of immigrants.

XXX

The age structures of the Canadian and American populations are very similar. The white U.S. population is, however, a little older.

XXX

Since World War II, the conditions of immigration have differed between the two countries. In Canada, the immigrant stream appears as a succession of peaks and troughs, whereas in the U.S., it appears as a slow and nearly constant progression in numbers.

Judged by their respective immigration rates, Canada has always been more welcoming than the United States.

XXX

The foreign born carry much more weight in the total population of Canada (16%) than in the United States (6%).

XXX

In the United States, people marry (and remarry) much more than in Canada. In addition, marriages are less concentrated around the mean age in the United States.

XXX

Americans not only marry more, but they divorce more. Break ups in second and third-or-more marriages are much more frequent in the United States (27%) than in Canada (12%) because of a long tradition of divorce.

XXX

According to cross-sectional indices, the fertility of the American population appears slightly higher than that of Canada. A closer look reveals that white Americans have a slightly lower cohort completed fertility rate.

XXX

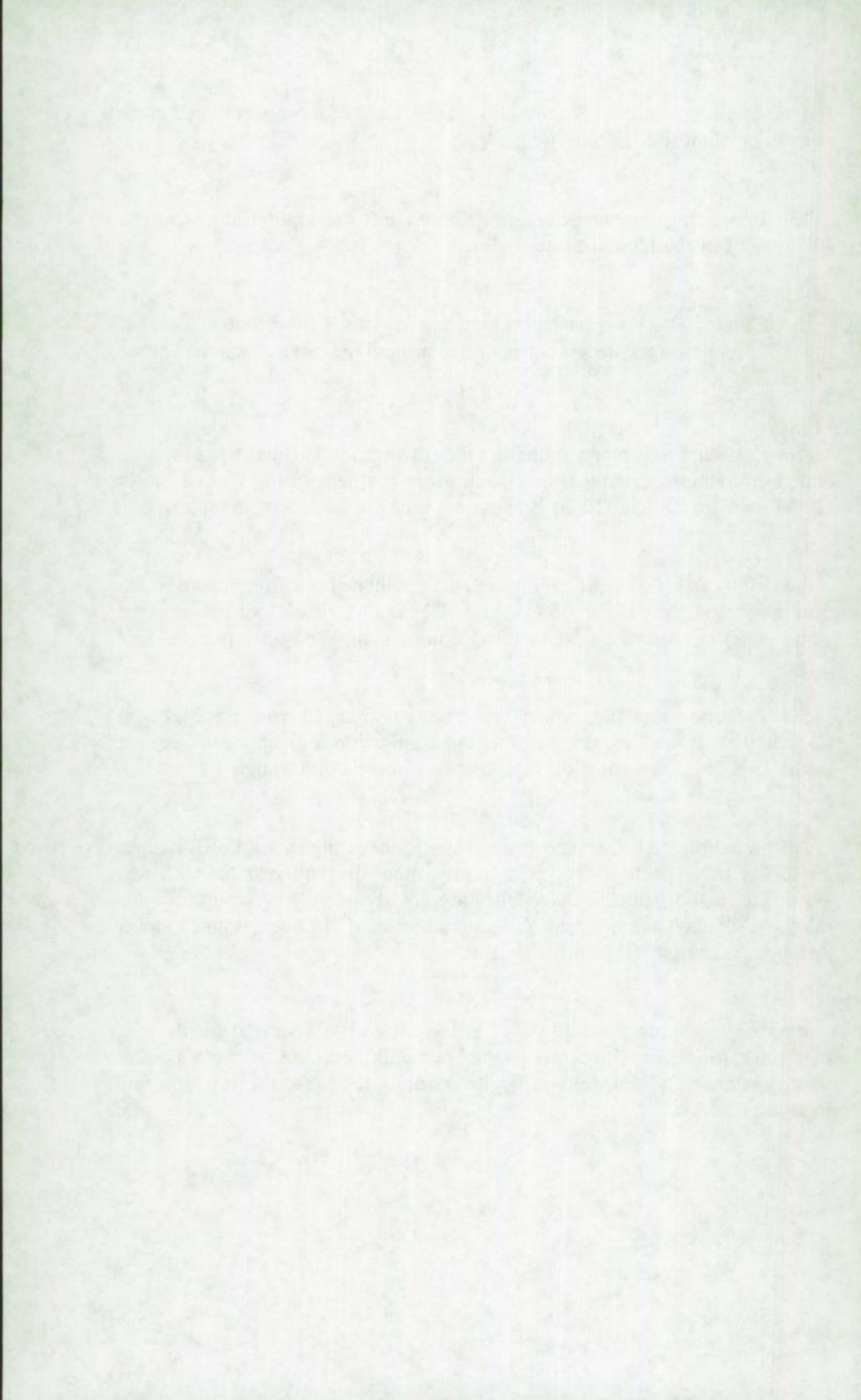
Statistics show that the fertility rate among unmarried women is higher in Canada than in the U.S. On the other hand, abortion is much more frequent in the U.S., and the abortion rate among whites is quite high.

XXX

At the national level, the mortality rate has been higher in the U.S. since 1960. The life expectancy gap is currently about one full year for each sex. While the reasons for this discrepancy are not abundantly clear, infant mortality, which plays a major role in the computation of the index, is much higher in the U.S. than in Canada.

XXX

Internal migration flows in the U.S. have been characterized for decades by strong flows from the centre to the West and the South. Canada's dominant flow has also been westward, with resultant losses for the Maritime and Prairie provinces.





# TABLE OF CONTENTS

	Page
<b>HIGHLIGHTS</b>	v
<b>PART I</b>	
<b>DEMOGRAPHIC ACCOUNTS</b>	1
Population Change in the Provinces	3
<b>NUPTIALITY</b>	3
Marriages	3
First Marriages	3
<b>DIVORCE</b>	9
<b>FERTILITY</b>	16
The Completed Fertility Rate	16
The Total Fertility Rate	16
The Canadian Situation	18
A More General Perspective	21
Fluctuations in the Total Fertility Rate	21
Fertility and Public Policy	21
Multiple Births	24
<b>MORTALITY</b>	26
The Canadian Situation	26
Infant Mortality	26
- The Canadian Evolution	29
- Differential Infant Mortality	32
AIDS	33
<b>INTERNATIONAL IMMIGRATION</b>	35
Countries of Origin	38
Immigrant Destinations	38
Categories of Immigrants	39
<b>INTERNAL MIGRATION</b>	39
<b>APPENDICES</b>	

## TABLE OF CONTENTS - Continued

	Page
<b>PART II</b>	
<b>INTRODUCTION</b>	63
<b>THE RECENT EVOLUTION</b>	63
Racial Composition	63
Age Structure	65
<b>INTERNATIONAL MIGRATION</b>	69
The Major Historical Events	72
Immigration Policy	72
Immigration Waves	73
- In the United States	73
- In Canada	77
Where Do Immigrants Settle?	78
The Foreign-Born Population	78
<b>MARRIAGES</b>	81
First Marriages	81
Marital Timing	83
Remarriage	84
<b>DIVORCE</b>	85
The Global Divorce Rate	86
<b>FERTILITY</b>	88
Birth Order	89
The Fertility of Unmarried Women	89
Abortion	91
<b>MORTALITY</b>	93
Comparative Evolution of the Principal Causes of Death	95
Deaths from Ischemic Heart Disease (ICD 410-414)	95
Deaths from Cerebrovascular Disease (ICD 430-438)	95
Deaths from Cancer	95
Traffic Accidents	98
Infant Mortality	98
Conclusion	98

## TABLE OF CONTENTS – Continued

	Page
<b>INTERNAL MIGRATION</b>	98
Before the Twentieth century	99
After World War II	100
From 1975 to 1980	102
Canadian Migration History	104
Population Concentration in Ontario	104
Conclusion	107
<b>CONCLUSION</b>	107
<b>GLOSSARY</b>	110

## LIST OF TABLES

### PART I

1. Population Movement, Canada, 1960-1990 .....	2
2. Rates and Summary Demographic Indicators, Canada, Provinces and Territories, 1981-1989 .....	4
3. Marriages, First Marriages, and Remarriages Canada, 1967-1988	8
4. Total First Marriage Rate, Canada, Provinces and Territories, 1985, 1987 and 1988 .....	9
5. First Marriage Rates (in thousands) for Male Cohorts, Canada, 1941-1971 .....	10
6. First Marriage Rates (in thousands) for Female Cohorts, Canada, 1943-1973 .....	11
7. Divorce Decrees Granted by Province or Territory, 1980-1988	13
8. Divorce Rates by Duration of Marriage, (in thousands) Canada, Marriage Cohort 1943-1944 to 1986-1987 .....	14
9. Total Fertility Rate and Completed Fertility for Cohorts 1907-1954, Canada .....	17
10. Age-Specific Fertility and Total Fertility Rates by Birth Order and Age of the Mother for Quebec and the Rest of Canada, 1981-1988 .....	22
11. Multiple Births, Canada, 1935-1988 .....	25
12. Life Table for Children Under One Year of Age, Canada, 1987	32



## TABLE OF CONTENTS – Continued

### LIST OF TABLES – Continued

	Page
13. Age at Which the Infant Mortality Rate is Equal to the Mortality Quotient .....	33
14. Infant Mortality Rates (in thousands) by Income Quintile and Sex, Urban Canada, 1971 and 1986 .....	34
15. Deaths Attributed to H.I.V. by Age Groups and Sex, Canada, 1987 and 1988 .....	35
16. The Immigrant Population by Place of Birth, Canada, 1968-1989	36
17. Percentage Distribution of Accepted Immigrants by Province of Intended Destination, 1956-1989 .....	40
18. Net Migration, Provinces and Territories, 1970-1989 .....	41
19. Interprovincial Migratory Movement, Canada, 1989 .....	43
20. Net Migratory Balance of Ontario and British Columbia with the Other Provinces of Canada, 1989 .....	44

### LIST OF APPENDIX TABLES

A1. Demographic Accounts of the Provinces and Territories, 1971-1990 .....	46
A2. Nuptiality .....	53
A3. Fertility .....	54
A4. Divorce .....	56
A5. Mortality .....	57
A6. Canadian Population as of January 1989, by Single Years of Age and Sex .....	59

## PART II

1. Growth of the Canadian Population and the American Population by race, 1900-1988 .....	64
2. Summary Demographic Indicators for Canada and the U.S. by Race, 1900-1988 .....	66
3. Age Structure of the Canadian Population and the American Population by Race, 1987 .....	71

## TABLE OF CONTENTS – Continued

### LIST OF TABLES – Concluded

	Page
4. Immigrants to the United States from Selected Regions and for Selected Periods, 1941-1980.....	75
5. Percentage Distribution of Immigrants by Region/Country of Origin, U.S., 1978-1988 .....	76
6. Immigrants to Canada by Selected Ethnic Origins and for Selected Periods, 1900-1961.....	77
7. Percentage Distribution of Immigrants by Intended Destination, Canada and the U.S., 1976-1988 .....	79
8. Foreign-born Population by Place of Birth, Canada (1981) and the United States (1980).....	80
9. Percentage Distribution of the American and Canadian Populations 18 Years and Over by Marital Status, Showing Age, 1987 .....	82
10. The Proportion of Marriages Between Singles, Canada and the United States, 1970-1987 .....	86
11. Global Divorce Rate (Number of Decrees per 1,000 Married Persons) by Sex, Canada and the United States, 1970-1987 ..	87
12. Divorces per 1,000 Marriages, Canada and the United States, 1940-1987 .....	87
13. Global Fertility Rate by Birth Order, Canada and the U.S. White Population, 1960 and 1986 .....	90
14. Births, Abortions and the Rate of Abortions, Canada and the United States, 1972-1986 .....	92
15. Standardized Death Rates by Causes of Death, Canada and the United States (by Race), 1986.....	96
16. Place of Birth of the East North Central Population, United States, 1850 and 1860.....	100
17. Percentage of the Population Born Out-of-Region for Large Regions of the United States, 1850 and 1860 .....	101
18. Net Migration Between the Regions of the United States, 1975-1980 .....	103
19. Percentage of the Population Born in Canada but Out-of-Province, for Provinces, 1901-1981 .....	105
20. Interprovincial Migratory Balance for the Last Four Decades, Canada .....	106



## TABLE OF CONTENTS – Continued

### LIST OF GRAPHS

	Page
<b>PART I</b>	
1. Total Fertility Rate (1934-1988) and Completed Fertility for Selected Cohorts (1907-1954) .....	19
2. Fertility Rate by Age of Mother, Canada 1951-1988 .....	20
3. Infant Mortality Rates for Selected Countries, 1956-1988....	28
4. Evolution in the Percentage of Infant Deaths Before 1 month, Between 1 and 3 months, Between 3 and 6 months, and Between 6 and 12 months, Canada, 1945-1986 .....	30
5. Infant Mortality Rate and Percentage of Infant Deaths Before 28 Days, Canada, 1945-1988 .....	30
6. Infant Mortality Rate, Canada and Provinces, 1956-1988 ...	31
<b>PART II</b>	
1. Population Growth, Canada and United States, 1900-1988 ..	65
2. Natural Growth Components, United States and Canada, 1940-1986 .....	69
3. Age Pyramids for the Canadian and American White Population, 1985 .....	70
4. Age Pyramids for the White and Coloured Populations United States, 1985 .....	70
5. Immigrants to Canada and the United States, 1900-1988 ....	73
6. The Immigrant Population as a Percentage of the Total Population, Canada and the United States, 1900-1988 .....	74
7. Total First Marriage Rate, Canada and United States, 1972-1986	83
8. Mean Age of Bride and Groom at First Marriage, Canada and United States, 1963-1987 .....	84
9. First Marriage Rate by Age and Sex, Canada and the United States, 1986 .....	85
10. Comparative Total Fertility Rates, Canada and the United States, 1942-1986 .....	89
11. Cumulative Fertility Rate for Cohorts, White American and Canadian Families, 1923-1958.....	90



## **TABLE OF CONTENTS – Concluded**

### **LIST OF GRAPHS – Concluded**

	Page
12. Fertility Rate per 1,000 Unmarried Women, 15 to 54, Canada and the United States, 1951-1985 .....	91
13. Life Expectancy at Birth, Canada and the United States (White Population Only), 1900-1986 .....	93
14. Life Expectancy at Birth by Race, United States, 1900-1986 .	94
15. Evolution of Main Causes of Death, 1970-1986 .....	97

## PART I

## DEMOGRAPHIC ACCOUNTS

Over the course of the last decade, the number of births has averaged about 373,500 per year. It is necessary to note that counts were higher for 1988 and more importantly, for 1989. The total number of births in 1989 registered 392,200, a figure unsurpassed since 1965. After four consecutive years of decline, this increase sparks our interest because the female age structure has changed very little, and even in a way that could be considered as unfavourable to an increase. What can be seen in these thousands of unexpected births is not necessarily an increase in fertility, but rather changes that have occurred in the timing of births. Fertility in Canada as elsewhere in the Western world has come later for a good proportion of the population, following the later formation of unions, both legal marriages and common-law partnerships.

The number of deaths continued to increase in the same period. For a population that is not only growing but is also getting older, this observation is not unexpected. Whether any increases in life expectancy can occur fast enough to reduce the death rate from one year to the next seems doubtful. But the ratio of deaths to births is still quite low (48% for the 1980-89 period), in spite of the low birth rate. This indicates that the population is relatively young in comparison with older countries such as France, where the ratio approaches 68%. It is nevertheless increasing: 29% in 1960, 42% in 1970, 46% in 1980, and 50% in 1989 (Table 1).

The more rapid growth in the number of births over the number of deaths in the past few years has gently augmented natural growth which had dwindled after the baby-boom. But without an important increase in the birth rate, the natural growth rate (which now stands at approximately 7 per 1,000) will decline under the effect of growth in the number of deaths and of population increase, boosted by the arrival of new immigrants.

Immigration is now recovering after the "slump" of the 1982-1985 recession. Canada accepted 162,900 immigrants over the course of 1988, and then 190,900 over the course of 1989. These levels, as it will be discussed later, are not likely to drop in the near future. Since emigration, on the other hand, is on the decline, net migration is rising. It went from 124,700 persons in 1988 to 143,000 in 1989. It is necessary to return to the exceptional year of 1974 to find such a large net migration gain. Never in the recent past has migration played such a large part in population growth. It amounted to 72% of natural growth in 1989, and if it reaches the equivalent level (100%), which is quite possible in the short-term, then the country's growth will be as much driven by migration as by natural growth. Net migration and natural growth together yield a population estimate of 26,440,300 persons for Canada as of January 1, 1990 (Table 1).



Table 1. Population Movement, Canada, 1960-1990 (Figures in thousands and rates in percents)

Year	Population as of January 1 (1)	Annual Increase		Natural Increase		Net Migration <sup>1</sup> (4)	Births (5)	Deaths (6)	Immi- grants <sup>2</sup> (7)	Emi- grants <sup>3</sup> (8)	Residual <sup>4</sup> (9)
		Number (2)	Rate	Number (3)	Rate						
1960	17,710.0	382.0	2.1	338.9	1.9	43.1	478.6	139.7	104.1	75.6	-14.6
1961	18,092.0	350.0	1.9	326.0	1.8	15.3	475.7	141.0	71.7	475.7	-15.9
1962	18,442.0	345.0	1.9	326.0	1.8	19.0	469.7	143.7	74.6	76.7	-21.1
1963	18,787.0	355.0	1.9	318.4	1.7	36.6	465.8	147.4	93.2	83.6	-27.0
1964	19,142.0	359.0	1.9	307.0	1.6	52.0	452.9	145.9	112.6	92.4	-31.8
1965	19,501.0	356.0	1.8	269.7	1.4	86.3	418.6	148.9	146.8	105.3	-44.8
1966	19,857.0	371.0	1.9	237.8	1.2	133.2	387.7	149.9	194.7	91.5	-30.0
1967	20,228.0	353.0	1.7	220.6	1.1	132.4	370.9	150.3	222.9	108.5	-18.0
1968	20,581.0	307.0	1.5	211.1	1.0	95.9	364.3	153.2	184.0	100.0	-11.9
1969	20,888.0	294.0	1.4	215.2	1.0	78.9	369.7	154.5	161.5	90.1	-7.4
1970	21,182.0	283.0	1.3	216.0	1.0	67.0	372.0	156.0	147.7	81.0	-0.3
1971	21,465.0	244.6	1.1	204.9	1.0	101.7	362.2	157.3	121.9	70.1	12.1
1972	21,709.6	232.8	1.1	184.9	0.9	47.9	347.3	162.4	122.0	63.2	10.9
1973	21,942.4	292.9	1.3	180.3	0.8	112.5	344.3	164.0	184.2	78.5	-6.9
1974	22,235.3	333.4	1.5	183.9	0.8	149.5	350.7	166.8	218.5	78.1	-9.1
1975	22,568.7	315.2	1.4	192.9	0.9	122.3	359.3	166.4	187.9	70.7	-5.1
1976	22,883.9	274.5	1.2	192.8	0.8	81.7	360.0	167.2	149.4	64.4	3.3
1977	23,158.4	259.0	1.1	193.9	0.8	65.1	361.4	167.5	114.9	61.4	-11.6
1978	23,417.4	227.1	1.0	190.7	0.8	36.4	358.9	168.2	86.3	63.5	-13.6
1979	23,644.5	267.4	1.1	197.9	0.8	69.5	366.1	168.2	112.1	54.7	-12.1
1980	23,911.9	309.4	1.3	199.2	0.8	110.2	370.7	171.5	143.1	45.2	-12.3
1981	24,221.3	262.1	1.1	200.4	0.8	61.7	371.4	171.0	128.6	43.7	23.2
1982	24,483.4	222.3	0.9	198.7	0.8	23.6	373.1	174.4	121.1	49.4	48.1
1983	24,705.7	190.1	0.8	198.7	0.8	-8.6	373.7	175.0	89.2	50.1	47.7
1984	24,895.8	194.6	0.8	201.3	0.8	-6.7	377.0	175.7	88.2	46.8	48.1
1985	25,090.4	183.6	0.7	194.4	0.8	-10.8	375.7	181.3	84.3	46.9	48.2
1986	25,274.0	218.9	0.9	188.7	0.7	30.2	372.9	184.2	99.2	40.0	20.0
1987(PD)	25,492.9	292.9	1.1	184.7	0.7	109.5	369.7	185.0	152.1	43.9	0.0
1988(PD)	25,785.8	311.5	1.2	186.8	0.7	124.7	376.8	190.0	161.9	37.2	0.0
1989(PD)	26,097.3	343.0	1.3	200.0	0.8	143.0	392.2	192.2	190.9	37.9	0.0
1990(PD)	26,440.3										

Notes: <sup>1</sup> Difference between column 2 and column 3.

<sup>2</sup> Based on Employment and Immigration data.

<sup>3</sup> Estimates based on family allowance and income tax files.

<sup>4</sup> The result of (3) + (7) - (8) - (2).

(PD) Definitive postcensal data.

(PP) Preliminary postcensal data.

(PR) Revised postcensal data.

The calculations are based on unrounded data.

Source: Statistics Canada, Demography Division.

## Population Change in the Provinces

Although the rate of population growth for Canada was 13 per 1,000 in 1989, not all parts of the country shared uniformly in this increase. **Population decline in Saskatchewan was the most striking feature. This amounted to 6,000 persons for the second year in a row.** Net migration has dropped steadily in that province from -0.1 per 1,000 in 1984 to -14.8 in 1989. Natural growth before 1987 had always been sufficient to counteract depopulation, but over the course of the past two years, out-migration has been too high. This is not the first time Saskatchewan has faced population loss, but before 1988 it benefitted from 14 years of growth, however slight (Table 2).

**British Columbia had the highest growth rate by far (26.2 per 1,000) of all the provinces in 1989, a figure in keeping with its tradition.** Only after the recession did growth in B.C. drop, to reach its lowest point at 7 per 1,000. But more than any other province, Alberta felt the negative effects of the recession, so its continuing growth recovery is remarkable. With the return to a positive migration balance in 1989, its growth rate (16.6 per 1,000) was higher than both the national average and the rate for Ontario. In Quebec, net migration increased for the fourth consecutive year. A positive migratory balance of 22,400 persons resulted in an overall growth rate of 9.7 per 1,000, again just over half that of Ontario's, but the highest in the last twenty years. Finally, the Maritime provinces experienced only a small amount of growth, at a rate of about 7 per 1,000.

## NUPTIALITY

### Marriages

The number of marriages increased slightly in 1988 (3.1%) over the previous year. **This increase, however, was mainly in first marriages** rather than in marriages where at least one member of the couple had been married before (Table 3).

### First Marriages

The total first marriage rate is in fact an indicator and not a measure of first-order nuptiality. It resembles the total fertility rate in that it does not correspond to any particular cohort, but it cannot be obtained through addition of the age-specific rates as in the case of cohort analysis<sup>1</sup>. Another cross-sectional measure can be obtained through multiplication of the probabilities of remaining single between two successive birthdays, or more exactly, this difference from one. The formula, in which  $qx$  is the probability of marrying between two successive birthdays is:

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<sup>1</sup> In cohort analysis, the results give the number of events by head.



**Table 2. Rates<sup>1</sup> and Summary Demographic Indicators, Canada, Provinces and Territories, 1981-1989**

	Year	New- foundland	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario
Birth Rate (per 1,000)	1981	17.9	15.5	14.2	15.1	14.8	14.2
	1982	16.2	15.7	14.5	15.0	14.1	14.3
	1983	15.6	15.4	14.4	15.0	13.6	14.4
	1984	15.0	15.6	14.3	14.6	13.5	14.7
	1985	14.9	15.9	14.3	14.3	13.3	14.7
	1986	14.3	15.2	14.1	13.8	12.9	14.7
	1987	13.7	15.4	13.8	13.5	12.7	14.5
	1988	13.2	15.4	13.8	13.5	13.0	14.6
	1989	13.6	14.8	14.1	13.6	13.6	15.3
Total Fertility Rate (number of children per woman)	1981	-	1.9	1.6	1.7	1.6	1.6
	1982	-	1.9	1.7	1.7	1.5	1.7
	1983	-	1.8	1.7	1.7	1.5	1.7
	1984	-	1.9	1.6	1.7	1.5	1.7
	1985	-	1.9	1.6	1.6	1.5	1.7
	1986	-	1.9	1.6	1.6	1.4	1.7
	1987	-	1.9	1.6	1.6	1.4	1.7
	1988	-	1.9	1.6	1.6	1.5	1.7
	1989	-	1.9	1.6	1.6	1.5	1.7
Total First Marriage Rate <sup>2</sup> (per 1,000)	1981 H	675.6	718.8	706.7	689.1	570.5	734.2
	F	648.4	689.6	685.2	667.6	578.0	715.9
	1982 H	682.5	722.5	674.6	652.4	523.4	731.2
	F	646.4	665.8	658.3	645.1	535.0	723.7
	1983 H	661.7	795.4	655.0	672.5	492.1	705.7
	F	624.6	746.2	641.2	664.7	504.7	701.2
	1984 H	607.4	805.4	656.8	659.3	494.7	700.3
	F	657.1	783.6	677.3	673.4	520.6	709.8
	1985 H	554.6	722.5	651.0	658.7	487.8	695.0
	F	532.1	731.2	661.9	668.9	515.4	708.0
	1986 H	614.9	739.8	630.3	638.3	461.9	681.4
	F	600.1	764.6	649.9	653.2	460.4	698.0
	1987 H	622.7	691.4	651.1	631.8	449.2	688.0
	F	596.1	700.8	672.4	646.1	456.7	717.9
	1988 H	657.1	741.4	670.7	687.3	459.7	704.6
	F	634.2	747.0	710.3	710.8	487.7	761.2
	1989 H	657.1	741.4	670.7	687.3	459.7	704.6
	F	634.2	747.0	710.3	710.8	487.7	761.2
	1981	12.2	7.4	6.0	7.7	8.2	6.9
	1982	10.2	7.7	6.3	7.6	7.3	7.0
	1983	9.5	6.9	6.2	7.6	6.8	7.1
	1984	8.8	6.7	6.3	7.2	6.7	7.5
	1985	8.7	7.1	5.9	6.9	6.2	7.3
	1986	8.0	6.4	5.8	6.1	5.8	7.2
	1987	7.3	6.6	5.7	5.9	5.5	7.2
	1988	6.9	6.7	5.4	5.8	5.8	7.1
	1989	7.2	6.7	5.6	6.0	6.3	7.9
Rate of Natural Increase (per 1,000)	1981	12.2	7.4	6.0	7.7	8.2	6.9
	1982	10.2	7.7	6.3	7.6	7.3	7.0
	1983	9.5	6.9	6.2	7.6	6.8	7.1
	1984	8.8	6.7	6.3	7.2	6.7	7.5
	1985	8.7	7.1	5.9	6.9	6.2	7.3
	1986	8.0	6.4	5.8	6.1	5.8	7.2
	1987	7.3	6.6	5.7	5.9	5.5	7.2
	1988	6.9	6.7	5.4	5.8	5.8	7.1
	1989	7.2	6.7	5.6	6.0	6.3	7.9
Total Growth Rate (per 1,000)	1981	-2.1	0.8	2.5	-0.6	5.8	7.4
	1982	6.9	5.7	6.6	7.5	2.3	11.2
	1983	3.5	11.3	8.6	7.5	2.4	11.2
	1984	-1.4	9.6	8.0	5.2	3.4	12.3
	1985	-4.2	4.8	3.8	1.4	3.9	11.4
	1986	-2.1	2.4	4.7	0.4	6.2	14.1
	1987	-1.4	11.8	4.6	2.1	7.6	18.0
	1988	4.1	11.7	4.4	3.8	8.0	16.1
	1989	5.1	8.5	6.1	8.9	9.7	15.2

See notes at the end of this table.



**Table 2. Rates<sup>1</sup> and Summary Demographic Indicators, Canada, Provinces and Territories, 1981-1989 - Continued**

	Year	Mani- toba	Saskat- chewan	Alberta	British Columbia	Yukon	Northwest Territories	Canada
Birth Rate (per 1,000)	1981	15.7	17.8	19.0	15.1	23.2	28.4	15.2
	1982	15.6	18.1	19.5	15.3	22.5	28.6	15.2
	1983	15.9	18.0	19.5	15.2	23.5	30.3	15.1
	1984	15.8	18.0	18.9	15.4	22.4	28.6	15.1
	1985	16.1	18.0	18.7	15.0	19.8	27.8	14.9
	1986	15.9	17.3	18.5	14.5	20.3	29.1	14.7
	1987	15.7	16.8	17.7	14.3	19.6	29.5	14.4
	1988	15.7	16.6	17.6	14.3	20.8	29.8	14.5
	1989	16.4	16.5	17.9	14.4	19.7	21.7	15.0
Total Fertility Rate (number of children per woman)	1981	1.9	2.1	1.9	1.7	2.1	3.0	1.7
	1982	1.8	2.2	1.8	1.7	2.0	3.0	1.7
	1983	1.9	2.1	1.9	1.7	2.2	3.2	1.7
	1984	1.9	2.1	1.9	1.8	2.2	3.0	1.7
	1985	1.9	2.1	1.9	1.7	1.9	2.8	1.7
	1986	1.9	2.1	1.9	1.7	2.0	3.0	1.7
	1987	1.9	2.0	1.9	1.7	2.0	3.1	1.7
	1988	1.9	2.1	1.9	1.8	2.2	3.1	1.7
	1989	1.9	2.1	1.9	1.8	2.2	3.1	1.7
Total First Marriage Rate <sup>2</sup> (per 1,000)	1981 H	745.8	727.3	676.4	734.6	753.3	479.1	679.2
	F	728.3	708.3	716.8	736.8	739.9	500.3	679.2
	1982 H	744.8	727.3	659.1	694.0	723.2	467.6	656.8
	F	728.3	719.5	714.4	708.4	688.4	477.6	663.2
	1983 H	718.3	701.9	621.8	678.1	696.4	488.3	632.4
	F	716.5	699.9	672.4	695.0	800.0	503.0	640.8
	1984 H	715.5	656.4	609.6	667.3	674.8	409.9	626.3
	F	723.4	671.7	663.5	695.0	658.5	468.0	647.7
	1985 H	689.7	634.3	605.3	638.0	588.3	347.5	615.4
	F	700.9	658.8	656.4	665.2	588.3	394.5	638.1
	1986 H	661.7	621.2	604.2	635.7	525.4	384.5	608.1
	F	686.7	653.7	642.8	669.8	603.9	423.6	619.9
	1987 H	659.1	624.1	603.1	662.2	492.6	342.6	605.7
	F	686.3	657.1	640.4	641.4	513.2	376.6	629.1
	1988 H	655.4	631.5	640.5	704.9	573.7	349.2	626.9
	F	699.6	676.5	695.8	756.3	695.5	343.4	672.1
	1989 H	655.4	631.5	640.5	704.9	573.7	349.2	626.9
	F	699.6	676.5	695.8	756.3	695.5	343.4	672.1
	1989 F	699.6	676.5	695.8	756.3	695.5	343.4	672.1
Rate of Natural Increase (per 1,000)	1981	7.2	10.0	13.3	7.9	17.1	24.1	8.2
	1982	7.4	9.7	13.9	7.9	17.5	23.8	8.1
	1983	7.7	10.3	14.1	8.2	18.6	25.4	8.0
	1984	7.9	10.3	13.4	8.2	17.8	23.9	8.1
	1985	7.8	10.1	13.0	7.6	14.5	23.7	7.7
	1986	7.6	9.4	12.8	7.2	15.5	24.5	7.4
	1987	7.6	9.1	12.1	6.8	15.1	25.6	7.2
	1988	7.3	8.6	11.8	6.8	15.3	25.6	7.2
	1989	8.2	8.6	12.1	6.8	15.9	17.9	7.7
Total Growth Rate (per 1,000)	1981	5.8	10.1	38.0	20.5	38.9	34.9	10.8
	1982	11.0	10.7	18.5	10.3	-25.8	40.0	9.0
	1983	9.7	11.5	2.7	11.0	-4.4	26.4	7.7
	1984	9.2	10.2	0.5	10.3	21.6	29.7	7.8
	1985	7.0	3.8	8.5	7.1	-4.3	15.5	7.3
	1986	6.2	2.7	4.8	8.7	29.4	-9.6	8.6
	1987	5.8	0.3	4.7	17.8	28.5	5.8	11.5
	1988	1.8	-6.0	13.4	22.8	32.4	15.4	12.1
	1989	3.3	-6.2	16.6	26.2	11.8	17.1	13.0

See notes at the end of this table.

**Table 2. Rates<sup>1</sup> and Summary Demographic Indicators, Canada, Provinces and Territories, 1981-1989 - Continued**

	Year	New-foundland	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario
Net Migration Rate (per 1,000)	1981	-14.3	-6.6	-3.6	-8.3	-2.4	0.5
	1982	-3.3	-2.0	0.3	-0.1	-5.0	4.2
	1983	-6.0	4.4	2.4	-0.1	-4.4	4.1
	1984	-10.2	2.9	1.7	-2.0	-3.3	4.8
	1985	-12.9	-2.3	-2.1	-5.5	-2.3	4.1
	1986	-10.1	-4.0	-1.1	-5.7	0.4	6.9
	1987	-8.7	5.2	-1.1	-3.8	2.1	10.8
	1988	-2.8	5.0	-1.0	-2.0	2.2	9.0
	1989	-2.1	1.8	0.5	2.9	3.4	7.3
Population aged 65+ as a Percentage of the Total Population on June 1	1981	7.7	12.2	10.9	10.1	8.8	10.1
	1982	7.9	12.4	11.1	10.4	9.1	10.2
	1983	8.1	12.4	11.3	10.5	9.2	10.3
	1984	8.3	12.5	11.4	10.6	9.5	10.4
	1985	8.6	12.6	11.7	10.9	9.7	10.7
	1986	8.8	12.7	11.9	11.1	10.0	10.9
	1987 (PD)	9.0	12.7	12.1	11.4	10.2	11.1
	1988 (PD)	9.2	12.8	12.2	11.6	10.5	11.3
Life Expectancy at Birth	1981 H	71.95	72.83	70.96	71.08	71.08	72.28
	F	78.65	80.49	78.37	79.19	78.71	79.03
	1986 H	72.72	72.57	72.25	72.47	71.98	73.49
	F	79.36	80.35	79.20	80.01	79.39	79.73
	1988 H (P)	73.32	73.28	72.59	72.92	72.47	73.85
	F (P)	79.38	80.98	79.70	80.49	79.99	80.17
Infant Mortality Rate (per 1,000)	1981	9.7	13.2	11.5	10.9	8.5	8.8
	1982	10.8	7.8	8.6	10.5	8.8	8.3
	1983	10.6	8.4	9.4	10.6	7.7	8.0
	1984	9.2	8.2	7.8	7.8	7.3	7.6
	1985	10.8	4.0	7.9	9.6	7.2	7.3
	1986	8.0	6.7	8.4	8.3	7.1	7.2
	1987	7.6	6.6	7.4	7.0	7.1	6.6
	1988	9.3	9.1	6.5	7.2	6.5	6.6
Rate of Pregnancies Terminated <sup>3</sup> (per 1,000 woman 15-44 years of age)	1981	3.5	1.0	8.5	2.7	5.6	14.7
	1982	3.4	0.9	8.4	1.5	6.0	14.9
	1983	3.4	0.5	8.2	1.6	5.8	13.4
	1984	2.7	0.4	8.2	1.6	5.9	13.1
	1985	2.9	0.4	8.0	1.8	6.9	12.5
	1986	2.5	0.4	8.0	2.0	7.5	12.1
	1987	3.3	1.2	8.0	2.1	7.3	12.4
Total Divorce Rate (per 10,000 marriages)	1981	-	-	-	-	-	-
	1982	-	-	-	-	-	-
	1983	-	-	-	-	-	-
	1984	-	-	-	-	-	-
	1985	-	-	-	-	-	-
	1986	-	-	-	-	-	-
	1987	-	-	-	-	-	-
	1988	-	-	-	-	-	-

See notes at the end of this table.

**Table 2. Rates<sup>1</sup> and Summary Demographic Indicators, Canada, Provinces and Territories, 1981-1989 - Concluded**

	Year	Mani- toba	Saskat- chewan	Alberta	British Columbia	Yukon	Northwest Territories	Canada
Net Migration Rate (per 1,000)	1981	-1.4	0.1	24.7	12.7	21.8	10.8	2.5
	1982	3.6	1.0	4.6	2.4	-43.2	16.2	1.0
	1983	1.9	1.2	-11.4	2.8	-23.0	1.0	-0.4
	1984	1.3	-0.1	-12.9	2.1	3.8	5.8	-0.3
	1985	-0.9	-6.3	-4.5	-0.5	-10.3	-8.2	-0.4
	1986	-1.4	-6.7	-7.9	1.6	13.8	-34.2	1.2
	1987	-1.8	-8.8	-7.4	11.0	13.4	-19.8	4.3
	1988	-5.5	-14.6	1.6	16.0	17.1	-10.2	4.9
	1989	-4.9	-14.8	4.5	19.4	-4.1	-0.8	5.3
Population aged 65 + as a Percentage of the Total Population on June 1	1981	11.9	12.0	7.3	10.9	3.0	2.8	9.7
	1982	12.0	12.2	7.3	11.0	3.3	2.7	9.9
	1983	12.1	12.3	7.4	11.2	3.5	2.7	10.0
	1984	12.2	12.4	7.6	11.4	3.5	2.8	10.2
	1985	12.4	12.5	7.9	11.7	3.4	2.7	10.4
	1986	12.5	12.7	8.1	12.1	3.8	2.9	10.6
	1987 (PD)	12.7	12.9	8.4	12.5	3.7	2.9	10.9
	1988 (PD)	12.9	13.1	8.6	12.7	3.6	2.9	11.1
Life Expectancy at Birth	1981 H	72.24	72.43	71.96	72.62	-	-	71.88
	F	78.77	79.61	79.06	79.55	-	-	78.98
	1986 H	73.00	73.66	73.55	74.05	-	-	73.04
	F	79.78	80.47	79.98	80.31	-	-	79.73
	1988 H (P)	73.20	73.95	73.97	74.30	-	-	73.44
	F (P)	80.23	80.91	80.53	80.74	-	-	80.22
Infant Mortality Rate (per 1,000)	1981	11.9	11.8	10.6	10.2	14.9	21.5	9.6
	1982	9.1	10.5	9.8	9.9	21.0	16.2	9.1
	1983	10.4	10.1	8.4	8.8	18.5	20.8	8.5
	1984	8.6	9.4	9.6	8.6	13.5	17.3	8.1
	1985	9.9	11.0	8.0	8.1	10.8	16.7	7.9
	1986	9.2	9.0	9.0	8.5	24.8	18.6	7.9
	1987	8.4	9.1	7.5	8.6	10.5	12.5	7.3
	1988	7.8	8.4	8.3	8.4	5.8	10.3	7.2
Rate of Pregnancies Terminated <sup>2</sup> (per 1,000 woman 15-44 years of age)	1981	6.9	7.7	12.0	19.3	19.2	15.8	11.1
	1982	7.3	7.5	11.2	18.8	18.8	18.6	11.1
	1983	7.0	6.4	10.8	17.2	19.8	17.1	10.2
	1984	9.1	5.4	11.2	16.7	14.7	18.4	10.2
	1985	9.2	5.1	11.0	16.4	14.8	19.7	10.2
	1986	10.2	4.6	10.5	16.5	18.9	19.2	10.2
	1987	10.5	5.4	9.2	16.5	21.3	18.7	10.2
	1988	-	-	-	-	-	-	-
Total Divorce Rate (per 10,000 marriages)	1981	-	-	-	-	-	-	3,529
	1982	-	-	-	-	-	-	3,655
	1983	-	-	-	-	-	-	3,522
	1984	-	-	-	-	-	-	3,306
	1985	-	-	-	-	-	-	3,121
	1986	-	-	-	-	-	-	3,799
	1987	-	-	-	-	-	-	4,314
	1988	-	-	-	-	-	-	3,705

<sup>1</sup> Rates are calculated on the basis of average intercensal estimates between January 1 and December 31, 1987.

<sup>2</sup> Calculated for 15-49 years of age.

<sup>3</sup> This rate cannot be compared with the total fertility rate.

Source: Various Statistics Canada publications.



$$1 - \prod_{x=15}^{49} (1 - n_x)$$

The difference between the two indices may be substantial. For example, the total first marriage rate for Canada in 1985 was 615 per 1,000 men and 638 per 1,000 women (Table 4). The index calculated for the probability of marrying before the age of fifty was 840 per 1,000 men and 860 per 1,000 women<sup>2</sup>. The figures for this index may be questionable however, because the number of marriages in any given year is not independent of the number in previous years (Table 4).

The total first marriage rate has some advantages as an indicator. For intercensal estimates it uses a denominator that is, in principle, less suspect

**Table 3. Marriages, First Marriages, and Remarriages, Canada, 1967-1988**

Year	Number of Marriages	Number of First Marriages		Marriages in which at least one of the spouses had been previously married	
		Males	Females	Number	%
1967	165,879	151,883	151,488	20,417	12.3
1968	171,766	157,309	156,783	21,133	12.3
1969	182,183	162,853	162,690	27,494	15.1
1970	188,428	167,267	167,421	29,975	15.9
1971	<b>191,324</b>	168,944	169,072	31,698	16.6
1972	<b>200,470</b>	176,537	177,155	33,582	16.8
1973	199,064	173,355	174,135	36,047	18.1
1974	198,824	170,678	172,107	39,063	19.6
1975	<b>197,585</b>	167,022	168,817	42,300	21.4
1976	<b>193,343</b>	155,679	157,412	43,098	22.3
1977	187,344	154,906	156,854	44,750	23.9
1978	185,523	151,884	154,016	46,254	24.9
1979	187,811	152,731	154,982	48,309	25.7
1980	191,069	154,138	156,918	50,660	26.5
1981	190,082	151,978	154,506	52,340	27.5
1982	188,360	149,419	152,825	52,773	28.0
1983	184,675	144,960	147,968	54,342	29.4
1984	185,597	144,674	147,907	55,436	29.9
1985	184,096	144,009	146,718	54,632	29.7
1986	175,518	137,665	138,523	52,678	30.0
1987	182,151	138,443	139,312	60,018	32.9
<b>1988</b>	<b>187,728</b>	<b>142,956</b>	<b>143,943</b>	<b>61,665</b>	<b>32.8</b>

Source: Statistics Canada, *Vital Statistics, Marriages and Divorces*, Catalogue 84-205 (Annual).

<sup>2</sup> See table in Adams, O.B. and D.N. Nagnur, *Marriage, Divorce and Mortality: Analysis of Mortality Tables, Canada and Regions*, Statistics Canada, Ottawa, Catalogue 84-536.

**Table 4. Total First Marriage Rate (number per 1,000), Canada, Provinces, and Territories, 1985, 1987 and 1988**

Province	1985		1987		1988	
	Males <sup>1</sup>	Females <sup>2</sup>	Males <sup>1</sup>	Females <sup>2</sup>	Males <sup>1</sup>	Females <sup>2</sup>
Newfoundland	555	532	623	596	657	634
Prince Edward Island	722	731	691	701	741	747
Nova Scotia	651	662	651	672	671	710
New Brunswick	659	669	632	646	687	711
Quebec	488	515	449	457	460	488
Ontario	695	708	688	718	705	761
Manitoba	690	701	659	686	655	700
Saskatchewan	634	659	624	657	632	677
Alberta	605	656	603	640	640	696
British Columbia	638	665	662	692	705	756
Yukon	588	588	493	513	574	695
Northwest Territories	348	394	343	377	349	343
Canada	615	638	606	629	627	672
Canada Excluding Quebec	661	682	661	689	685	735

<sup>1</sup> Ages 17-49 inclusive.

<sup>2</sup> Ages 15-49 inclusive.

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

than the one used for estimates by marital status in the table quotients. And it permits, with little effort, valid geographical comparisons, which are often the aim of research pursuits.

The 1988 first marriage rates were higher than the 1987 rates for almost everywhere in Canada. Examination of the age-specific rates reveals a continuing decline in the rate of first marriage for ages up to 24 for men and up to 21 for women. After these junctures, there appears to be a marked increase in first marriages for ages up to 35. This trend may well represent the beginning of a recovery in nuptiality, but only time will tell. (Tables 5 and 6).

## DIVORCE

The divorce count for 1987 was 90,985 and not 86,985 as published in the 1988 Report on the Demographic Situation in Canada. The earlier figure did not account for some 4,000 decrees granted in Ontario, for which there was no social and demographic information on the divorcing couples. Table 7 has been adjusted to include these decrees. This correction in no way changes the 1988 analysis, which showed a stunning increase in the number of 1987 decrees



Table 5. First Marriage Rates (per 1,000) for Male Cohorts, Canada, 1943-1971

Age	Year of Birth																																
	Year of 17th Birthday																																
	1988	1987	1986	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				
Males																																	
17	0.5	0.6	0.6	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	3.9	4.0	3.8	4.0	4.4	4.4			
18		2.8	2.9	3.4	3.7	4.0	4.5	6.1	6.8	8.6	9.6	11.1	13.0	15.0	18.3	19.7	20.6	21.9	18.9	17.9	17.2	16.9	17.8	18.1	18.3	15.9	15.3	17.1	18.0				
19			8.3	8.6	9.6	10.2	11.3	13.4	16.7	19.9	22.7	25.3	28.7	32.4	36.6	41.3	44.7	48.0	48.7	44.2	41.7	39.8	41.0	44.2	44.6	39.2	37.7	38.1	43.1				
20				17.7	18.1	21.1	22.1	24.8	29.4	35.4	40.7	44.9	49.7	53.4	58.8	62.0	71.3	77.6	81.7	83.6	77.3	73.6	73.4	77.4	82.8	73.3	70.6	71.7	73.7				
21					30.6	31.8	35.3	38.2	42.4	48.3	55.2	61.8	68.1	71.6	75.0	79.4	82.9	96.9	100.2	109.5	116.5	116.5	114.0	120.1	127.6	118.1	112.9	114.0	116.8				
22						44.6	45.7	50.6	53.1	57.8	62.4	70.0	74.3	80.5	82.4	83.2	86.3	92.3	102.6	110.4	118.5	127.1	125.3	130.3	140.0	128.6	132.2	130.6	130.6				
23																																	
24							56.8	58.9	61.5	64.4	67.4	68.6	74.6	77.7	81.3	80.4	81.6	84.7	87.5	96.4	101.0	110.2	118.3	116.1	130.7	121.1	119.6	128.1	131.3				
25							64.0	63.8	65.5	67.0	68.2	69.6	70.4	72.1	73.5	72.6	72.5	73.7	75.2	82.4	87.3	92.5	97.5	97.3	98.3	98.5	106.0	111.0					
26								64.6	62.7	62.0	62.8	63.9	61.2	62.4	63.8	63.2	61.4	62.5	61.9	67.0	68.9	72.7	75.3	78.1	75.2	80.8	84.8						
27								59.2	59.2	53.9	53.8	55.5	52.8	52.7	53.5	52.2	50.9	50.2	48.8	49.8	48.7	51.4	52.6	55.5	58.5	56.2	59.7	62.0					
28											50.7	48.1	45.9	46.4	45.0	42.7	42.5	42.4	41.5	40.4	39.0	38.9	38.2	39.8	40.7	42.4	42.3	42.1	39.9				
29											42.2	39.2	36.8	37.8	36.2	35.2	34.4	33.6	32.9	31.8	31.5	31.3	29.7	30.7	31.1	31.3	31.2	33.5					
30												35.4	32.9	30.6	31.4	29.8	29.1	27.5	27.4	26.4	25.0	23.7	23.6	23.2	24.1	23.3	23.9	25.9					
31													28.5	26.6	25.1	24.4	23.6	23.0	21.8	20.6	19.5	18.9	18.3	18.5	18.6	18.9	18.6	18.9					
32														22.5	21.3	18.6	19.2	18.7	18.0	16.8	16.1	15.7	14.7	14.3	14.6	14.2	14.1	14.5					
33															18.6	16.7	15.3	15.5	15.2	13.4	13.3	12.4	12.0	11.3	11.3	11.2	11.3	11.3					
34																14.7	13.6	12.2	12.1	11.6	11.2	10.3	9.8	9.4	9.3	8.7	9.2	8.7					
35																	10.7	9.7	9.0	8.8	8.0	7.9	7.6	7.3	7.1	7.2	7.1	7.2					
36																		10.1	9.0	7.8	7.6	6.9	6.5	6.3	6.1	6.0	6.0						
37																			7.7	7.4	6.7	6.3	5.9	5.6	5.7	5.2	4.6	5.0					
38																				6.4	5.6	5.1	4.7	4.5	4.6	4.0	4.3	4.2					
39																					5.3	4.8	4.0	3.5	3.7	3.5	3.4	3.4					
40																						4.5	3.5	3.2	3.3	2.9	2.8	2.8					
41																								3.4	3.1	2.5	2.8	2.4	2.1	2.2			
42																									2.9	2.8	2.6	2.1	2.2				
43																										2.3	2.4	2.1	2.0	2.0			
44																											2.2	2.2	2.0	1.9			
45																												2.0	1.9	1.6			

Source: Statistics Canada, unpublished data.



Table 6. First Marriage Rates (per 1,000) for Female Cohorts, Canada, 1943-1973

Age	Year of Birth																															
	Year of 15th Birthday																															
	1973	1972	1971	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	
Females																																
15	0.2	0.2	0.2	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	4.2	5.4	5.0	5.4	5.8	6.2	
16		2.1	2.2	2.5	3.1	3.6	3.9	4.6	5.0	5.9	6.6	7.8	9.2	11.4	13.9	15.8	17.4	18.6	17.6	17.7	16.7	15.7	16.5	16.8	17.6	19.5	21.6	21.6	22.4	25.7	26.7	
17			5.3	5.6	6.2	7.6	8.5	9.6	11.1	12.8	15.3	17.2	19.7	23.7	27.4	33.0	36.1	39.9	41.8	40.1	40.6	38.6	39.7	40.8	41.0	44.8	48.7	45.4	48.5	53.5	56.8	
18				16.9	18.6	22.3	24.7	25.8	29.8	34.6	39.1	45.4	49.8	54.6	61.6	68.1	77.6	82.3	87.0	92.3	85.2	82.7	82.0	81.7	84.5	88.0	93.6	87.2	86.2	94.3	101.6	
19					32.1	33.8	39.3	41.1	44.4	49.8	56.8	64.2	70.5	74.5	79.6	85.3	91.3	101.4	106.5	115.8	119.7	113.2	108.7	108.6	110.3	116.3	123.1	109.4	106.7	112.7	122.0	
20						48.5	50.4	53.6	58.1	61.6	67.1	76.0	81.4	87.4	90.0	92.4	96.2	97.2	108.7	116.2	123.3	130.3	126.8	121.5	126.1	132.8	141.3	124.7	118.5	124.9	125.7	
21							65.2	63.5	65.6	69.7	74.3	75.6	81.8	84.7	89.3	89.5	90.8	90.4	91.1	102.5	109.0	117.5	125.7	128.8	126.7	134.6	143.0	132.1	122.9	124.5	127.3	
22								74.6	68.8	72.1	73.1	74.1	74.3	76.7	80.0	79.0	79.4	76.5	77.5	79.1	86.2	89.9	95.4	100.7	101.3	105.8	115.9	105.1	100.7	103.0	104.4	
23									77.6	69.7	67.6	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	78.2	78.0	
24										69.0	62.9	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	50.6	53.6	55.9		
25											59.8	53.9	49.9	49.8	47.4	44.5	43.3	42.2	40.8	38.4	37.0	36.5	35.7	36.9	36.5	36.3	36.5	38.2	37.7	38.1	39.2	
26												46.5	41.3	39.7	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	25.7	27.9	28.2	
27													38.0	33.5	30.7	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	19.9	21.0	
28														28.7	26.3	22.9	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	
29															22.9	20.5	17.8	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		
30																17.5	15.9	14.3	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	
31																	13.6	11.9	10.7	10.8	10.6	9.7	9.0	8.6	7.8	7.5	6.9	7.4	7.5	7.3		
32																		10.3	9.4	8.1	8.4	8.0	7.6	7.2	6.5	6.2	5.9	6.1	5.9	5.9		
33																			8.4	7.5	6.7	6.8	6.5	5.9	5.5	5.5	5.0	4.9	4.7	4.7	5.2	
34																				5.4	5.9	5.6	5.4	5.2	4.6	4.4	4.1	4.0	4.0	4.1	4.1	
35																					4.4	5.2	4.3	4.2	4.0	3.6	3.3	3.6	3.3	3.4	3.3	
36																						3.5	3.9	3.5	3.3	2.9	3.0	3.1	2.5	2.7	2.7	
37																							2.8	3.2	2.6	2.5	2.2	2.4	2.2	2.3	2.0	
38																								2.2	2.5	2.3	2.3	2.0	2.1	2.0	2.1	2.0
39																									2.0	2.1	1.9	2.0	1.8	1.7	1.4	
40																										1.6	1.7	1.7	1.5	1.3	1.3	
41																											1.1	1.3	1.3	1.1	1.1	
42																												1.1	1.3	1.1	1.2	
43																													0.9	1.3	1.1	
44																														0.9	0.9	
45																															0.8	

Source: Statistics Canada, unpublished data.

but which also concluded that, in 1988, both the number of divorces and the propensity to divorce would realign with the 1983 downward trend. In fact, the number of divorce decrees granted in 1988 was 79,872, a drop of 11,000 from the previous year. Again, 20% of the divorces in 1987 were initiated under the 1968 Divorce Act, whereas in 1988 this figure was only 6%. Likely, there will be practically no more of the 1968 decrees in 1989, and the number of divorces will fall again.

Divorce rates tend to fluctuate from one year to another where populations are sparse, and this explains the erratic patterns in Prince Edward Island and the Territories. Divorce dropped in all other provinces except Quebec, where it rose slightly.

Examination of the 1988 duration-specific divorce rates and the resulting total rate leads to two observations (Table 8). The first is that the total divorce rate (3,705 per 10,000 marriages) dropped significantly, as was expected, to almost the same level as in 1986, and close to the 1983 level (3,522 per 10,000 marriages). This observation reinforces the conclusion of the 1988 report, that the trend toward divorce may have already peaked by the middle of the 1980s and that divorce rates will probably drop before they rise again. That the Palais de Justice in Montreal granted 12,500 divorces in 1988 (among a total of 19,500 for Quebec) but only 8,372 in 1989 confirms this impression. But it is also true that some petitioners may have abandoned divorce suits when the Property Sharing Law (which now provides different rules for partitioning property at the time of divorce) came into force<sup>3</sup>.

The second observation is that, for marriages that ended after long durations, the rates are much lower. Changes in the law disturb statistical distributions and blur behaviour patterns that evolve slowly from generation to generation and from cohort to cohort. Table 8 reveals that the average duration of marriage at the time of divorce, independent of the strength in the propensity to divorce, has dropped. Marriage cohorts in the 1950s reached their highest rate of divorce after a duration of 20 years. Duration then drops steadily: to 15 years for the cohorts at the beginning of the 1960s; to 12 years for cohorts in the middle of the 1960s and to only 6 years for the cohorts in the 1970s. Apart from changing attitudes toward married life, there are at least three explanations for this phenomenon:

- 1) The introduction of the divorce law in 1968, after which followed a veritable flood of divorces, some only legal recognition of long-standing marriage break-downs.

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<sup>3</sup> Verbal communication with the Clerk at the Palais de Justice.



Table 7. Divorce Decrees Granted by Province or Territory, 1980-1988

Province	1980	1981	1982	1983	1984	1985	1986	1987	1988	Changes for 1986-1987 %	Changes for 1987-1988 %
Newfoundland	555	569	625	711	590	561	610	1,002	884	64.3	-11.8
Prince Edward Island	163	187	206	215	195	213	191	246	260	28.8	5.7
Nova Scotia	2,314	2,285	2,281	2,340	2,264	2,337	2,550	2,640	2,478	3.5	-6.1
New Brunswick	1,326	1,334	1,663	1,942	1,427	1,360	1,700	1,952	1,665	14.8	-14.7
Quebec	13,899	19,193	18,579	17,365	16,845	15,814	18,399	19,315	19,825	5.0	2.6
Ontario	22,442	21,680	23,644	23,073	21,636	20,854	28,653	38,223	29,873	19.5	-21.8
Manitoba	2,282	2,399	2,392	2,642	2,611	2,314	2,917	3,771	2,998	29.3	-20.5
Saskatchewan	1,836	1,932	1,815	2,000	1,988	1,927	2,395	2,751	2,463	14.9	-10.5
Alberta	7,580	8,418	8,882	8,758	8,454	8,102	9,386	9,170	8,644	-2.3	-5.7
British Columbia	9,464	9,533	10,165	9,348	8,988	8,330	11,176	11,697	10,591	4.7	-9.5
Yukon	82	75	117	88	100	96	89	113	81	27.0	-28.3
Northwest Territories	76	66	67	85	74	72	94	105	110	11.7	4.8
Canada	62,019	67,671	70,436	68,567	65,172	61,980	78,160	90,985	79,872	11.3	-12.2

Source: Statistics Canada, *Vital Statistics, Vol. II, Marriages and Divorces*, Catalogue No. 84-205.





Year	Number of marriages per calendar year	Marriage cohort	Cohort marriages	Duration of marriage																									Year of observation	T.D.I. <sup>1</sup>	
				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
1966	155,596	1965-66	150,557																												
1967	165,879	1966-67	160,737																												
1968	171,766	1967-68	160,823																												
1969	182,183	1968-69	176,974	3	22	53	83	122	158	182	184	171	165	160	152	147	144	132	111	103	118	123	100								
1970	188,428	1969-70	185,305	3	25	55	92	151	177	192	192	176	174	163	162	157	139	128	112	118	130	106									
1971	191,324	1970-71	189,876	4	28	61	106	161	186	189	191	184	180	172	166	150	130	116	125	133	112										
1972	200,490	1971-72	195,907	4	33	74	117	174	193	196	197	191	187	185	168	144	125	141	141	126											
1973	199,064	1972-73	199,777	5	36	83	129	181	203	212	211	205	204	180	155	135	149	155	135												
1974	198,824	1973-74	198,944	5	44	94	136	184	213	226	228	218	189	168	146	154	163	143													
1975	197,585	1974-75	198,205	6	52	104	147	199	224	243	232	214	185	162	167	177	144														
1976	193,343	1975-76	195,464	8	59	111	161	218	249	246	226	193	167	190	184	156															
1977	187,344	1976-77	190,343	8	63	116	166	232	250	238	209	180	195	201	168																
1978	185,523	1977-78	186,434	7	65	126	175	237	251	220	198	224	224	176																	
1979	187,811	1978-79	186,667	8	60	135	187	228	225	210	246	245	192																		
1980	191,069	1979-80	189,440	8	68	137	178	207	212	261	269	211																			
1981	190,575	1980-81	190,822	9	74	133	154	190	262	285	232																				
1982	188,360	1981-82	189,468	10	69	120	147	252	294	243																					
1983	184,675	1982-83	186,518	9	67	110	202	295	248																						
1984	185,597	1983-84	185,136	9	66	145	246	239																							
1985	184,096	1984-85	184,846	10	70	197	227																								
1986	175,518	1985-86	179,807	10	96	194																									
1987	182,151	1986-87	178,835	18	95																										
1988	187,728	1987-88	184,940	18																											

<sup>1</sup>Total divorce index.

Sources: ??????Statistique Canada, *Statistique de l'état civil, vol. II, mariages et divorces*, n° 84-205 au catalogue.?????



- 2) The trend toward common-law unions before marriage. These unions lengthen the real time spent living together but reduce the duration of the marriage itself.
- 3) The increase in marriages with at least one divorced partner. These marriages are more likely to fail than those between previously unmarried individuals (Table 3).

## FERTILITY

### The Completed Fertility Rate

Fertility refers to the behaviour of the society in matters of procreation. It is at the heart of many issues fundamental to economic vitality, such as the growth and aging of the population, and so remains a subject of great interest.

The birth rate is directly related to fertility. The number of births each year results from the number of women of childbearing age and their propensity to bear children. It is this propensity that is measured to gauge the future evolution of the population.

If, during the course of their lives, one thousand women in a cohort bear 2,000 children, then we can say that the generation has replaced itself. But more precision is necessary in practice because the effects of mortality and the sex of children must be taken into account. It is more accurate to say that a generation is replaced when 1,000 girls alive at birth, after they reach their childbearing years and accounting for any of their deaths, give birth to another 1,000 girls. Since the sex ratio (males per females) at birth is known (1.05), mortality rates are known, and the average age of childbearing can be evaluated in a society such as Canada's, the true replacement threshold can be calculated. Calculations show that the replacement of a generation is only ensured when 1,000 women bring approximately 2,100 children into the world, or 2.1 children per woman. Age-specific rates are calculated by comparing the number of births to mothers of a certain age to the total number of women of that age. The sum of these 35 rates (from 15 to 49) results in the desired value, called completed fertility (Table 9).

### The Total Fertility Rate

The problem with the completed fertility measure is that it lacks pertinence as a measure of current fertility. It is a measure of the behaviour of cohorts who have already completed their fertile life. Only the fertility of women who have reached the age of 50 in any given year can be measured; that is, for 1989, only those women who were born in 1939 or earlier.



**Table 9. Total Fertility Rate and Completed Fertility for Cohorts 1907-1954, Canada**

Year of Birth	Completed Fertility	Year	Total Fertility Rate
1907	2,834	1934	2,787
1908	2,823	1935	2,738
1909	2,725	1936	2,680
1910	2,752	1937	2,629
1911	2,701	1938	2,686
1912	2,712	1939	2,638
1913	2,759	1940	2,751
1914	2,867	1941	2,816
1915	2,906	1942	2,946
1916	2,880	1943	3,023
1917	2,875	1944	2,994
1918	2,925	1945	3,000
1919	2,890	1946	3,355
1920	3,229	1947	3,575
1921	3,266	1948	3,421
1922	3,286	1949	3,444
1923	3,222	1950	3,438
1924	3,260	1951	3,487
1925	3,287	1952	3,631
1926	3,265	1953	3,712
1927	3,244	1954	3,822
1928	3,294	1955	3,823
1929	3,266	1956	3,853
1930	3,394	1957	3,923
1931	3,378	1958	3,881
1932	3,362	1959	3,941
1933	3,258	1960	3,904
1934	3,152	1961	3,852
1935	3,113	1962	3,769
1936	3,056	1963	3,683
1937	2,923	1964	3,515
1938	2,889	1965	3,157
1939	2,810	1966	2,821
1940	2,716	1967	2,601
1941	2,641	1968	2,459
1942	2,517	1969	2,409
1943	2,439	1970	2,336
1944	2,285	1971	2,188
1945	2,110	1972	2,025
1946	2,110	1973	1,939
1947 <sup>1</sup>	2,278	1974	1,887
1948 <sup>1</sup>	2,123	1975	1,871
1949 <sup>1</sup>	2,015	1976	1,820
1950 <sup>1</sup>	1,941	1977	1,801
1951 <sup>1</sup>	1,888	1978	1,751
1952 <sup>1</sup>	1,845	1979	1,757
1953 <sup>1</sup>	1,838	1980	1,738
1954 <sup>1</sup>	1,876	1981	1,699
		1982	1,687
		1983	1,675
		1984	1,684
		1985	1,673
		1986	1,662
		1987	1,647
		1988	1,680

<sup>1</sup> Rates are estimated for the remainder of the fertile period using age and taking into account the falling birth rate.

Source: Statistics Canada, *Vital Statistics, Births and Deaths*, Catalogue No. 84-204 annual. Unpublished Data on Cohort Fertility, Vital Statistics Section, Statistics Canada.

For this reason, an index known as the total fertility rate is often used instead. As its name implies, this is the total rate of procreative behaviour in a given year calculated by adding, as in the case of completed fertility, 35 rates. In this case, the rates are not those for a particular cohort, but those for 35 segments of those cohorts, each of which is at a different age in the year under consideration. Together, they represent the behaviour of a fictitious cohort. It can be seen very quickly that the value of the total fertility rate will never be equal to that of completed fertility except in the unlikely event that all cohorts have the same fertility rate at each age. In this unique case, the sum of the rates of any cohort would be equal to the sum of the 35 rates of the segments of cohorts for a given year. But rarely do successive cohorts resemble one another, either in the number of children they bring into the world, or in the pace at which these children are born. It is therefore difficult to interpret the total fertility rate as a measure of fertility.

To better understand the risk of error, let us assume that the women in the 35 cohorts at 35 different ages decide not to have children in a particular year. The total fertility rate for that year would then be zero, even though the average woman in the cohort may have as many as 2, 3, or 5 children over the course of her fertile life. Alternatively, a specific factor may cause women of all ages to have more children than expected in a particular year. These women would thereby move ahead of the hypothetical schedule each had set to bring the same number of children into the world. The total fertility rate then does not measure the fertility of any one generation. It is always either above or below the completed fertility of the cohorts depending on when fertility expresses itself, whether earlier or later.

The direction of the two rates is not usually contradictory, but fluctuations are more pronounced in the total rate than in completed fertility. Consequently, there are circumstances when the interpretation of the rates may be particularly delicate. When a population is approaching its replacement threshold, the total fertility rate can be lower than that threshold even if the cohorts show no evidence of failure to replace themselves. An example of how the total fertility rate can give an inaccurate portrayal of fertility will later be shown for the American and Canadian populations.

### **The Canadian Situation**

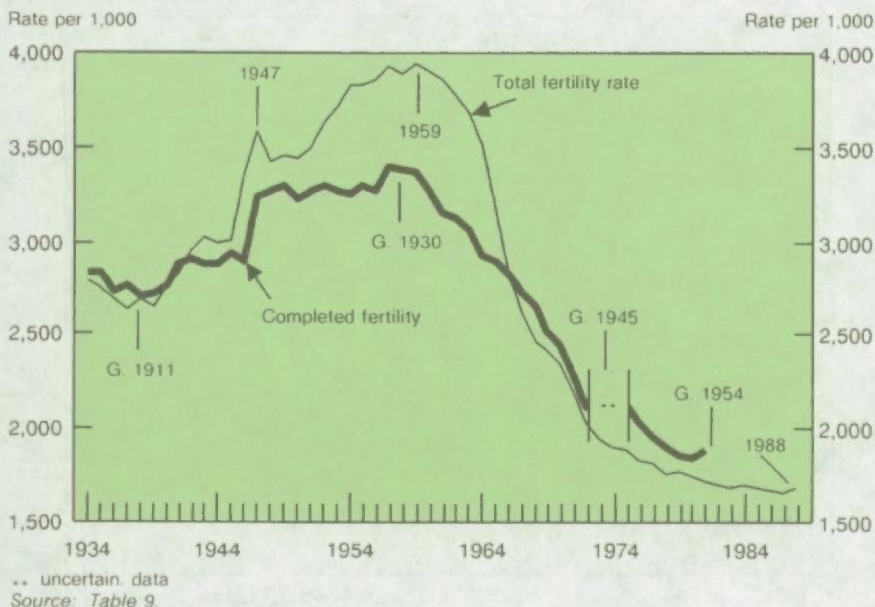
The youngest Canadian cohorts for whom fertility has unquestionably been achieved are those born around 1938. These cohorts have brought an average of 2.7 children per woman into the world (2,700 children per 1,000 women). The replacement threshold in their case would be closer to 2.2 children rather than to 2.1, because infant mortality has been declining. These cohorts have therefore replaced themselves.

We can also estimate, without risk of serious error, the fertility of more recent cohorts. Fertility rates after 40 years of age are now so low that cohorts



Chart 1

**Total Fertility Rate (1934-1988) and Completed Fertility for Selected Cohorts (1907-1954)**



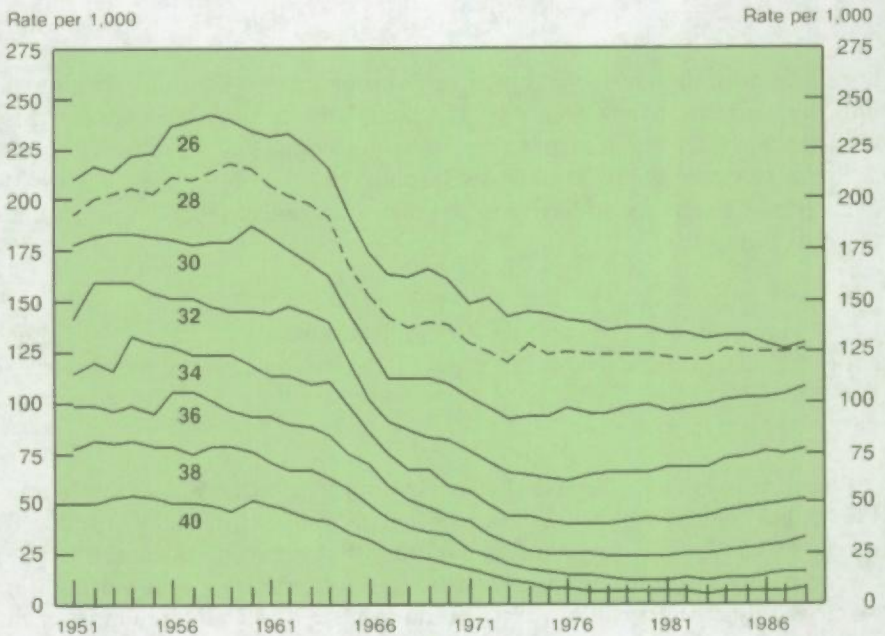
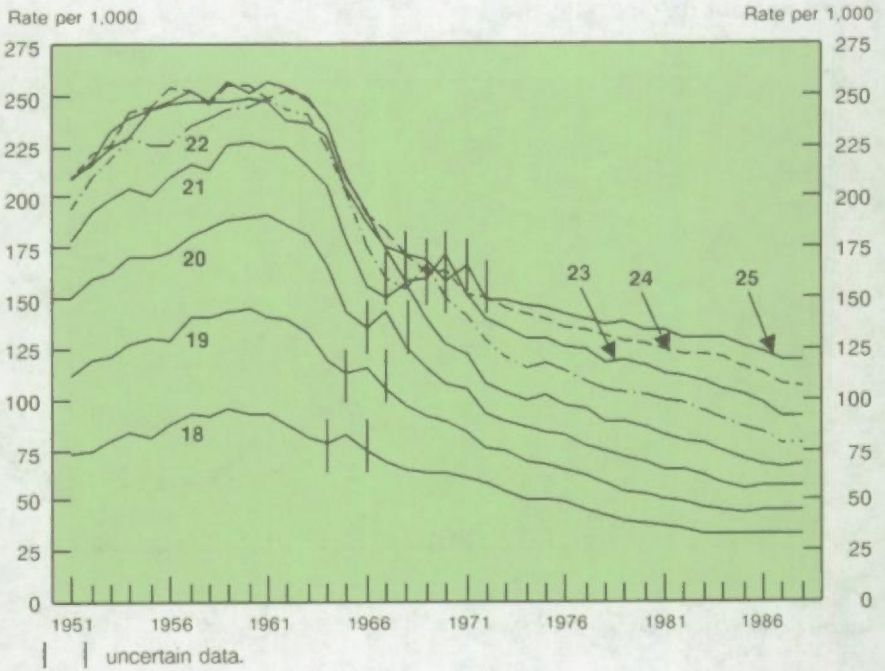
born around 1948 have probably already brought, by 1988, all the children into the world that they ever will. The completed fertility estimate for this group is only 2.1 children per woman. Since completed fertility has been declining since the 1930s, when it was 3.3 children per woman, these late 1940s cohorts may be the last to have ensured their own replacement for some time to come (Graph II).

A look at the fertility behaviour of cohorts who were 32 to 40 years of age in 1988 indicates that they will probably not produce more than 1.9 children per woman, which is below the renewal threshold. This calculation even assumes a rise in their fertility rates in the later childbearing years, as current trends suggest.

Forecasting is more difficult for even younger cohorts. For example, the 1961 cohort, which reached 27 years of age in 1988, has until now produced barely 0.9 children per woman. This implies that between now and the time it reaches age forty in another 13 years (given a relatively long fertile life) women in this cohort will have to bear an average of 1.2 children more each so as to reach the critical figure of 2.1.



Chart 2  
Fertility Rate by Age of Mother, Canada 1951-1988



Source: Calculated in the Demography Division, Statistics Canada.  
Based on data published by the Canadian Centre for Health Information.

## A More General Perspective

Just as no replacement seems a certainty for the cohorts 32 to 40 years of age, the possibility that the 1961 cohort will not replace itself either cannot be eliminated. A study of the evolution in age-specific rates sheds some light on this question. It shows that fertility is now in an historical transition from a time when it came relatively early in life to a time when it appears to be coming later. The average woman in the 1939 cohort had already given birth to half her children (2.7 on average) by the time she was 23.5 years old; her counterpart in the 1956 cohort was age 27 before half of her children (1.8 on average) were born.

## Fluctuations in the Total Fertility Rate

But because it is concise and almost universally applied, the total fertility rate is useful to analyses of fertility. The Canadian rate has been stable at a value of 1.7 since 1980. Analysis of its composition shows, in agreement with the above remarks, that this stability is due to a swing between fertility at young ages, which dropped year after year until 1987, and fertility in the late twenties and early thirties, which has been rising.

During the baby boom, the total fertility rate surpassed completed fertility to reach a figure of almost 4, but no cohorts ever produced more than 3.4 children per woman. The total fertility rate has underestimated real fertility, however, since 1966. At a value of 1.7 children per woman in 1981, it was below that of the most closely affected average cohort, whose value was 1.9. A general rise in age-specific rates could once again boost the total rate and lead too quickly to the conclusion that the cohorts are replacing themselves.

## Fertility and Public Policy

The low fertility rate in Quebec has prompted a revaluation of the family's place in provincial government priorities. A series of clearly pronatalist policies have been implemented over the past few years. Between 1987 and 1990, budgetary measures were enacted to make living conditions more comfortable for families with children. These measures involved income tax breaks, subsidized day care and baby bonuses. For the 1988-89 fiscal year, the Quebec government offered a bonus of \$500 for the birth of first and second children, and a bonus of \$3,000 for third and subsequent children. In effect, this consists of an amount of \$375 paid quarterly over two years. The bonus system was changed for the 1989-90 fiscal year so that for second children, the family receives not only the initial \$500, but an additional \$500 on the child's first birthday. For the third child, families receive the quarterly \$375 over three years rather than just two (for a bonus of \$4,500). In the latest amendment (1990-91) bonuses for the first two children will remain the same, but parents of third and subsequent children will receive quarterly payments of \$375 over four years.



Table 10. Age-Specific Fertility and Total Fertility Rates by Birth Order and Age of the Mother for Quebec and the Rest of Canada, 1981-1988

Birth Order	Year	15-19		20-24		25-29		30-34		35-39		40-44		Total Fertility Rate	
		Quebec	Rest of Canada	Quebec	Rest of Canada	Quebec	Rest of Canada	Quebec	Rest of Canada	Quebec	Rest of Canada	Quebec	Rest of Canada	Quebec	Rest of Canada
1	1981	13.1	25.6	57.4	56.1	55.4	49.2	16.5	17.3	8.5	8.7	0.5	0.5	732.3	761.8
	1982	13.2	25.8	54.8	56.4	50.8	49.9	15.9	18.4	3.6	4.0	0.5	0.5	693.6	775.2
	1983	12.8	24.2	53.8	55.1	51.6	51.0	16.4	19.9	3.8	4.7	0.5	0.5	694.0	776.5
	1984	12.7	22.0	51.0	51.6	51.7	51.4	16.4	21.6	4.0	4.9	0.5	0.6	681.2	760.0
	1985	12.8	22.4	49.4	50.3	52.0	51.3	17.3	21.5	4.0	4.8	0.5	0.6	679.6	754.1
	1986	13.2	21.8	49.6	69.3	51.7	50.5	18.1	21.3	4.5	5.1	0.5	0.7	687.5	743.3
	1987	13.5	20.9	46.5	46.8	51.3	49.7	18.2	21.5	4.2	5.4	0.5	0.7	671.4	725.0
	1988	14.2	20.6	50.5	45.8	56.6	51.4	19.9	22.5	4.8	6.0	0.7	0.8	734.2	734.8
2	1981	1.7	4.6	25.1	33.2	54.1	48.5	28.1	25.7	6.2	5.9	0.6	0.6	578.8	592.8
	1982	1.6	4.6	23.6	32.6	50.5	46.0	26.1	26.9	5.8	6.3	0.6	0.7	541.8	594.9
	1983	1.6	4.5	22.9	31.9	49.2	48.3	25.5	28.2	5.4	6.8	0.6	0.8	525.6	602.3
	1984	1.6	4.0	22.6	30.2	50.5	48.1	27.2	29.0	5.8	7.4	0.6	0.7	541.5	597.4
	1985	1.7	4.2	21.6	30.4	49.1	49.8	26.8	30.8	5.8	7.8	0.5	0.8	527.9	619.5
	1986	1.7	4.0	19.8	29.2	47.8	49.6	26.0	31.8	5.8	8.3	0.7	0.8	508.9	618.8
	1987	2.1	4.2	20.5	27.7	45.3	48.8	25.5	32.2	5.9	8.8	0.7	1.0	500.0	613.3
	1988	1.8	3.7	20.5	26.3	46.2	46.7	28.1	31.9	6.9	9.3	0.8	1.1	521.9	594.6
3	1981	0.2	0.5	4.6	8.9	17.7	20.3	16.9	16.1	4.6	4.9	0.6	0.7	222.8	256.3
	1982	0.1	0.5	4.5	8.9	16.2	20.5	14.9	16.5	4.6	5.4	0.6	0.6	204.5	261.7
	1983	0.1	0.5	4.1	8.6	15.1	20.3	14.3	16.8	4.1	5.5	0.5	0.6	191.3	261.4
	1984	0.1	0.4	3.9	7.8	14.6	19.5	14.1	17.2	4.4	5.6	0.6	0.7	188.4	255.8
	1985	0.2	0.5	3.8	8.3	14.3	20.3	13.6	17.9	4.3	5.9	0.5	0.7	183.1	267.9
	1986	0.2	0.5	3.6	8.0	13.6	20.1	12.7	18.3	4.4	6.1	0.6	0.8	174.7	268.0
	1987	0.2	0.5	4.3	8.0	14.0	19.8	12.6	18.4	4.0	6.5	0.6	0.8	178.9	269.7
	1988	0.2	0.5	3.7	7.5	13.0	18.9	12.6	18.1	4.2	6.7	0.5	0.8	171.2	262.4



Table 10. Age-Specific Fertility and Total Fertility Rates by Birth Order and Age of the Mother for Quebec and the Rest of Canada, 1981-1988 - Concluded

Birth Order	Year	15-19		20-24		25-29		30-34		35-39		40-44		Total Fertility Rate	
		Quebec	Rest of Canada	Quebec	Rest of Canada	Quebec	Rest of Canada	Quebec	Rest of Canada	Quebec	Rest of Canada	Quebec	Rest of Canada	Quebec	Rest of Canada
4	1981	-	0.1	0.6	1.7	3.0	5.5	4.6	5.8	2.3	2.7	0.4	0.5	54.1	80.7
	1982	-	-	0.6	1.7	3.0	5.5	4.3	6.0	2.2	2.8	0.4	0.5	52.3	82.4
	1983	-	-	0.6	1.6	2.9	5.4	4.0	6.0	2.0	2.8	0.3	0.5	48.8	81.4
	1984	-	-	0.5	1.5	2.7	5.4	3.7	5.9	1.8	2.8	0.3	0.5	45.5	80.2
	1985	-	-	0.5	1.5	2.5	5.5	3.6	6.2	1.9	2.9	0.3	0.6	43.9	83.2
	1986	-	-	0.5	1.6	2.5	5.4	3.4	6.2	1.7	2.9	0.4	0.5	42.7	83.0
	1987	-	-	0.8	1.8	3.1	5.6	4.1	6.2	1.9	3.0	0.4	0.5	51.6	85.7
	1988	-	-	0.6	1.5	2.5	5.1	3.2	5.9	1.7	2.9	0.4	0.5	42.3	79.9
5 +	1981	-	-	0.1	0.4	0.8	1.9	1.6	3.2	1.6	2.6	0.6	0.9	23.0	45.3
	1982	-	-	0.1	0.4	0.8	2.9	1.4	3.1	1.4	2.6	0.5	0.9	20.1	44.9
	1983	-	-	0.1	0.4	0.7	1.9	1.4	3.1	1.2	2.3	0.5	0.8	19.9	42.3
	1984	-	-	0.1	0.3	0.7	1.7	1.4	2.8	1.2	2.2	0.4	0.7	18.8	38.0
	1985	-	-	0.1	0.4	0.7	1.9	1.2	3.0	1.0	2.1	0.3	0.7	16.6	40.9
	1986	-	-	0.1	0.4	0.7	1.9	1.3	3.0	1.1	2.1	0.4	0.7	17.9	40.0
	1987	-	0.3	0.2	0.6	1.2	2.3	1.7	3.3	1.3	2.3	0.4	0.7	24.1	47.3
	1988	-	-	0.1	0.4	0.7	1.8	1.4	3.0	1.2	2.1	0.4	0.7	18.6	39.9
All Orders	1981	15.0	31.8	87.8	100.2	131.1	125.3	67.7	68.1	18.1	19.8	2.7	3.3	1611.0	1736.9
	1982	14.9	30.9	83.6	99.9	121.3	125.7	62.5	70.9	17.6	21.0	2.6	3.2	1513.1	1759.0
	1983	14.5	29.2	81.4	97.5	119.5	127.0	61.6	74.1	16.5	22.1	2.5	3.1	1479.5	1763.9
	1984	14.4	26.4	78.1	91.4	120.2	126.1	62.8	76.4	17.1	22.9	2.5	3.1	1475.3	1731.5
	1985	14.7	27.1	75.3	90.9	118.6	128.9	62.5	79.4	17.0	23.5	2.2	3.4	1451.1	1765.6
	1986	15.1	26.3	73.6	88.6	116.3	127.5	61.6	80.6	17.4	24.4	2.5	3.4	1431.8	1754.0
	1987	15.8	25.9	72.3	84.9	114.8	126.1	62.2	81.5	17.3	26.0	2.6	3.6	1426.1	1741.0
	1988	16.3	24.9	75.4	81.4	119.0	123.8	65.3	81.3	18.9	27.0	2.9	3.9	1488.2	1711.5

Source: Statistics Canada, *Vital Statistics, Births and Deaths*, Catalogue No. 84-204 and Final Population Estimates, Demography Division, Statistics Canada.

How these measures will affect fertility remains to be seen. When there is an increase in the birth rate, the contribution of financial incentives in relation to other factors, such as changing attitudes, is not easy to gauge. In the case of Quebec, it is difficult to establish a relationship between the 1988 birth rate and the pronatalist policies of the same year, whereas the policies of the previous year were too modest to have any lasting effect. There has been, however, an increase of almost 10% in first order fertility for all age groups in Quebec that has not occurred in the rest of Canada. As for higher-order births, especially the closely observed third order, levels are very low and continue to drop, both in Quebec and in the rest of Canada (Table 10). The 1988 results show that even though the national rate remains stable at 1.7, it is rather precariously situated. Two rather uncertain movements – a slight increase in Quebec and a slight decrease in the rest of Canada – are confusing. **The provisional count for 1989 is 91,315 births for Quebec. This would mean a very significant increase of 10% over two years.**

### Multiple Births

The probability of multiple pregnancy increases with parity. This fact is well-known and well-documented. But clear proof based on live birth statistics is not easy to provide. This is because multiple pregnancies are more fragile and tend to be miscarried more often than single pregnancies. Moreover, there is no precise parity (for example the fourth or the fifth) at which one can systematically delineate an increase in the risk of multiple births. Table 11 shows that when the periods 1960-69 and 1979-88 are compared from the vantage point of 1935-1944, the rate of twin births decreases, but at a different rhythm from that of high parity births (5+). The decrease in twin births is much weaker. **The trend in triplet deliveries is even more remarkable: their frequency increases rather than decreases.**

Each of these periods is chosen for patterns of fertility behaviour peculiar to each. In the 1935-1944 period, the rate of high-parity births was elevated, and the probability of twin and triplet deliveries increased. In the 1960-1969 period, the rate of high-parity births was much lower, so the number of twin deliveries fell. In the last ten years, the rate of high-parity births has become negligible but, while twin deliveries have become somewhat less frequent, triplet deliveries have increased considerably.

The most recent trends are partly the result of medical intervention. Drugs and other treatment regimens administered to women who have problems conceiving trigger the release of more than one ovum in the course of the menstrual cycle, and increase the probability that more than one embryo will develop. If the fetuses survive, then twins or triplets are born. In vitro fertilization has even stronger effects. Several embryos are voluntarily implanted to counteract high mortality with the hope that at least one fetus will survive.



Table 11. Multiple Births, Canada, 1935-1988

Period	Total Deliveries	Twin Deliveries	Triplet Deliveries	Rate of Twin Deliveries (per 10,000 deliveries)	Rate of Triplet Deliveries (per 10,000 deliveries)	Proportion of Births of Order 5 + (per 1,000 births)
1935-1944	2,498,124	28,121	240	112.57	0.96	255.30
1960-1969	4,115,409	42,849	377	104.12	0.92	170.07
1979-1988	3,624,315	35,012	512	96.60		21.05

Source: Statistics Canada, *Vital Statistics, Births and Deaths*, Catalogue No. 84-204 and calculations done in the Demography Division at Statistics Canada.



The secondary effects of these fertility practices have greatly contributed to a rise in the number of multiple births. Will they one day be demanded by women or couples who want more than one child, but not at the price of several pregnancies?

## MORTALITY

### The Canadian Situation

After some slow improvements, life expectancy showed surprisingly rapid progress between 1976 and 1981. Male life expectancy rose by 1.62 years, while that for females rose by 1.36 years. Gains were significantly smaller, but still remarkable, over the 1981 to 1986 period, at 1.14 years for men and 0.67 years for women. Now more than midway into the 1986-1991 period, we may wonder what progress will be made.

Intercensal life tables<sup>4</sup> cannot claim the precision of life tables established every five years from census data, but when carefully constructed, they provide some good indications. The 1988 table estimated male life expectancy at 73.44 years, and female life expectancy at 80.22 years.

Depending on whether we refer to the 1986 table from the Centre for Health Statistics or to the adjusted table from the 1988 Report on the Demographic Situation in Canada, the two-year gain for men would be between 0.4 years of life and 0.13 years, and the five-year extrapolation would yield gains of between 0.32 years and one year. Gains for women would situate themselves between 0.27 and 0.49 years after two years, and between 0.68 and 1.22 years after five years. Taking into account the denominators used to obtain the rates, it is the smaller gains that seem most probable. In either case, the gains made between 1976 and 1981, however encouraging, appear now to be slowing down.

### Infant Mortality

The death of children at less than one year of age has played an historically important role in demographic evolution. In a closed population these deaths have the same affect on population growth as a fall in fertility with obvious repercussions on population replacement. The net replacement rate will move further away from the gross rate as infant mortality increases, and this mortality is the most important between birth and the mean age at childbearing.

Infant mortality also has a major effect on the most widely used summary measure of general mortality, that of life expectancy at birth. High levels of

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<sup>4</sup> Based on deaths in 1987 and 1988.

infant mortality lower considerably the average number of years of life of the cohort for which they are calculated because of the years not lived by individuals who die prematurely. Until recently, the greatest part of the gain in life expectancy between two dates was due to a reduction in infant mortality. Before 1976 for women, and before 1981 for men, life expectancy was highest at one year of age. Since then, it has been as high at birth as at one year of age<sup>5</sup>.

Another reason demographers monitor infant mortality lies in its direct relationship with the general mortality level; that is, the mortality level that prevails at all other ages. Mastery of the causes of death at different ages of life manifests itself in the causes that kill young children, and such causes are easier to measure.

A reduction in infant mortality generally marks the beginning of the demographic transition in populations, initiating the population growth that is characteristic of the first phase. The Canadian population, like any other, has gone through this transition from a period of high infant mortality to the low levels of the present. Until the end of the 19th century, levels in Canada were similar to what can now be observed in the most underdeveloped countries (in the order of 200 per 1,000), but these have decreased in the twentieth century with improvements in sanitation and living conditions. The infant mortality rate was still 91 per 1,000 in 1930, but during the baby boom in 1950, it had declined to 41 per 1,000. This spectacular decline (Canada followed the same course as other Western countries) raises the question of how low infant mortality will fall in the future. Whereas science hopes to eliminate it completely in the long-term, instinct dictates that death will retain some dominion.

In the 1950s<sup>6</sup>, it was thought that Sweden's low infant mortality rate would be difficult to surpass. But the rate has dropped unceasingly throughout all the advanced nations, even if the pace has slowed. Excluding Japan, where registration of live births<sup>7</sup> has been called into question by the World Health Organization, Sweden still has the lowest infant mortality rate (5.8 per 1,000) as of 1986. Canada has the second lowest rate, at 7.2 (Figures III A and B).

The speed of progress cannot be over-emphasized. Of the eight most advanced countries, Canada had the highest rate of infant mortality in 1956 at 31.9, while Sweden had already reduced its rate to 17.3. Canada was fifth to go beyond the psychological threshold of 10 in 1981, beating Australia

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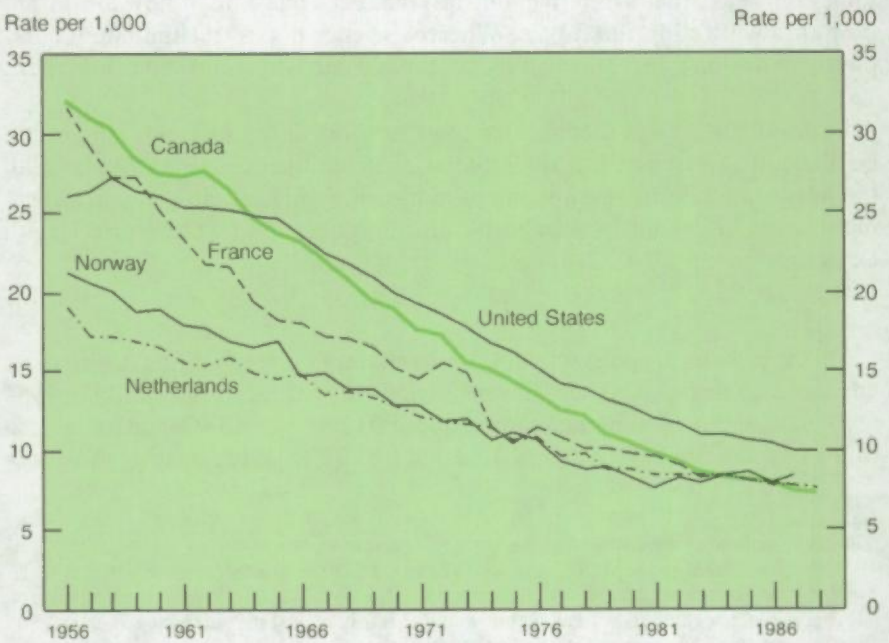
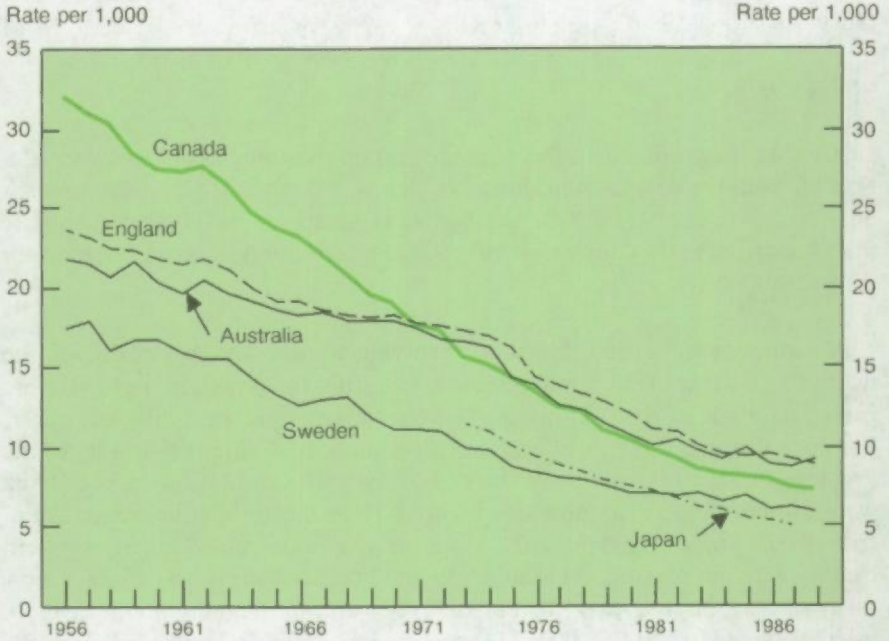
<sup>5</sup> In 1976, male life expectancy was the same at one year as at birth.

<sup>6</sup> J. Bourgeois Pichat wrote in *Population* (1952, no. 3) that the Swedish rates of 13% for males and 9% for females seemed to be the bottom limits, given the current state of medical science.

<sup>7</sup> It is possible that children born alive, but who die shortly after, are counted together with still births, and this obviously reduces infant mortality.



Chart 3  
Infant Mortality Rates for Selected Countries, 1956-1988





(1983), England (1984), and the United States (1987). Comparison with France is difficult because their calculations are done differently from those of other countries.

The reduction of infant deaths below thresholds once considered insurmountable has several origins. Aside from progress in medicine and obstetrics, there are the more diffuse effects of reduced fertility and fewer births. Abortion has also played a role where possibilities of congenital malformation leading to early death seem strong. *Medical intervention to save the lives of infants whose health at birth is very precarious has well-known consequences for changing the age distribution of deaths in the first year of life<sup>8</sup>.*

Figures IV and V show how around 1970 the percentage of neonatal deaths (before one month) in infant mortality increased even as the rate of infant mortality was declining. This meant that victories were being won against post-neonatal (between one and twelve months) and "accidental" deaths (use of the term "exogenous" is now contested). But since around 1970 the proportion of neonatal deaths in infant mortality has declined while that of post-neonatal fatality has increased, especially between one and six months of age. The common explanation now is that medical intervention was able to delay some deaths that would have occurred soon after birth. As a result, the proportion of early neonatal deaths, as well as their rate, dropped. These changes in the distribution of the timing of deaths should not overshadow the fact that overall, infant mortality continues to decline (Figures IV and V).

### The Canadian Evolution

Figures VIa to VIc reveal that infant mortality curves are more uneven in sparsely populated provinces, where they are more sensitive to random causes. This is the case in the Territories, Prince Edward Island, Manitoba, and Saskatchewan. But as in the more populous provinces, where the shape of the curves is regular, *the same general downward trend can be observed. Undeniably, provincial rates are also converging.* Progress in the reduction of deaths in Eastern Canada was mediocre compared with regions west of Quebec at the close of the War. But "catching up" has been spectacular in Newfoundland, but more especially in Quebec, where the rate is now even lower than Ontario's which was by far the lowest at the beginning of the period.

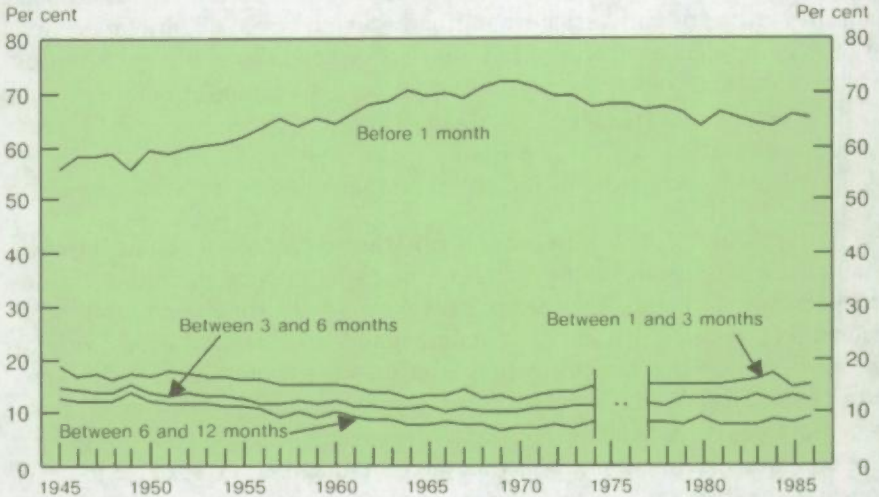
The Canadian infant mortality tables for 1987 give detailed information on the probabilities of death from birth to the first birthday for both sexes. An excess male mortality of 28% and a high concentration of deaths in the first hours of life continue to be evident (Table 12).

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<sup>8</sup> Catherine Lantoiné et R. Pressat: Nouveaux aspects de la mortalité infantile. Population, 39<sup>ième</sup> année, mars-avril 1984, n° 2.

Chart 4

**Evolution in the Percentage of Infant Deaths Before 1 month, Between 1 and 3 months, Between 3 and 6 months, and Between 6 and 12 months, Canada, 1945-1986**



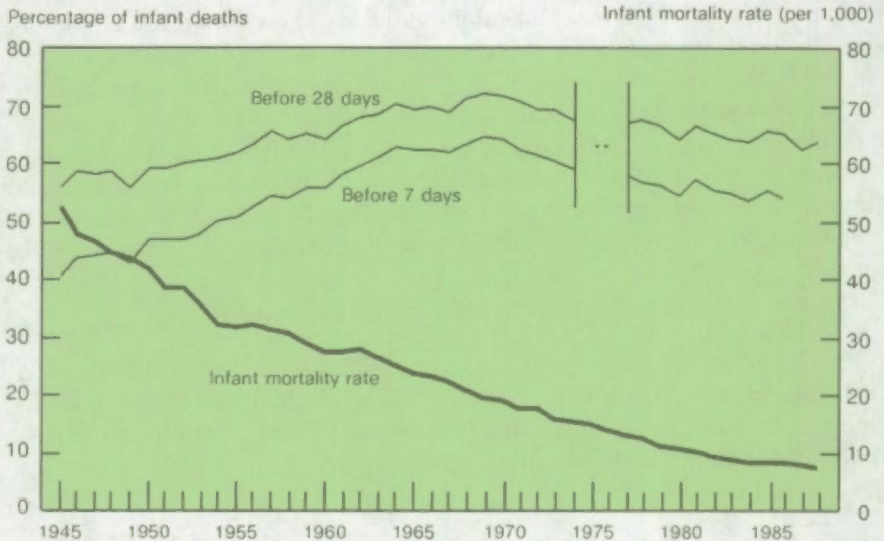
.. data not available

Source: Calculated in the Demography Division, Statistics Canada.

Based on data published by the Canadian Centre for Health Information.

Chart 5

**Infant Mortality Rate and Percentage of Infant Deaths Before 7 Days and Before 28 Days, Canada, 1945-1988**

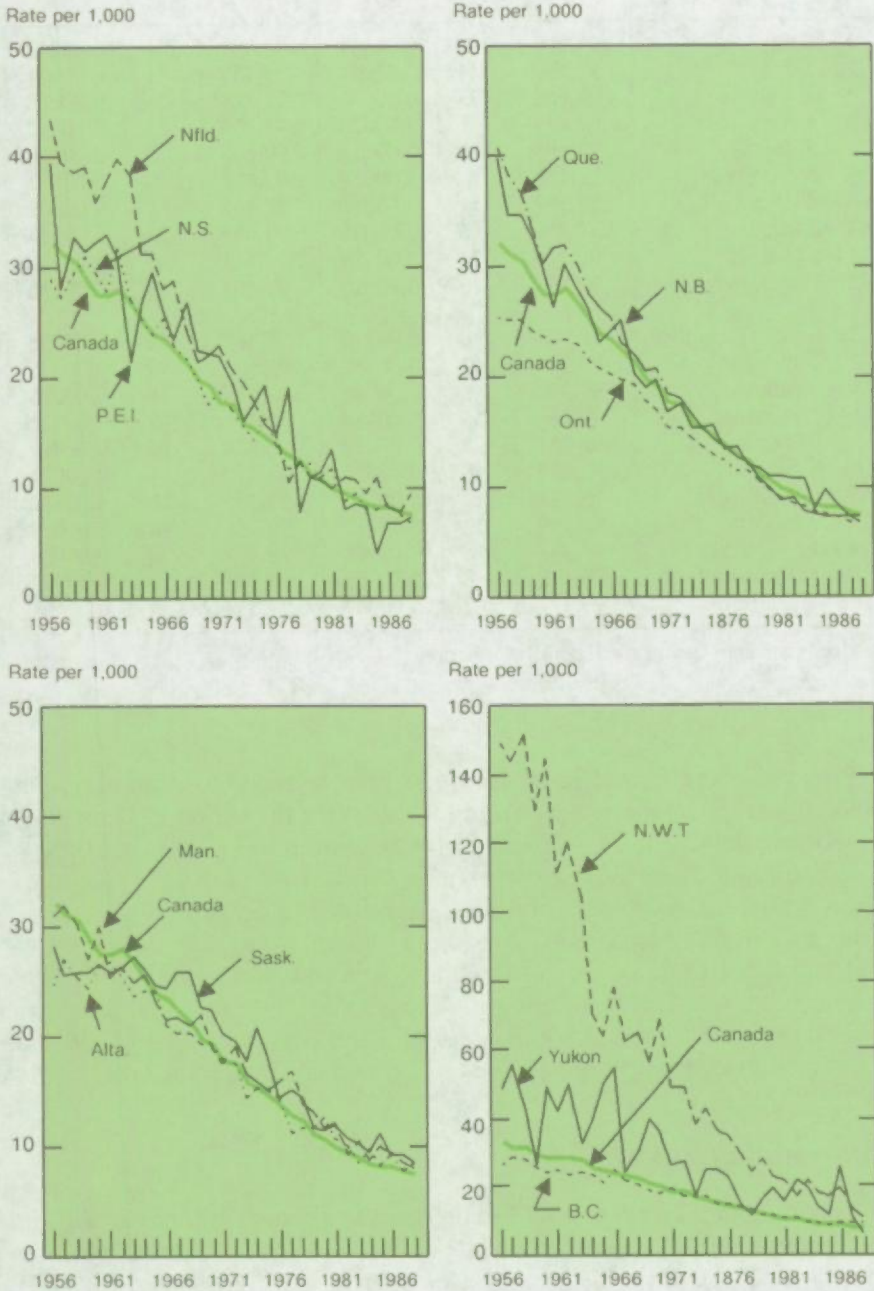


.. data not available

Source: Calculated in the Demography Division, Statistics Canada.

Based on data published by the Canadian Centre for Health Information.

Chart 6  
Infant Mortality Rate, Canada and Provinces, 1956-1988



Sources: Vital Statistics, Births and Deaths, Catalogue no. 84-204, annual.



**Table 12. Life Table for Children Under One Year of Age, Canada, 1987**

Age Interval	Male			Female		
	Lx	Dx	Qx	Lx	Dx	Qx
0 - 1 day	100,000	304	0.00304	100,000	241	0.00241
1 - 2 days	99,696	44	0.00044	99,759	31	0.00031
2 - 3 days	99,652	33	0.00034	99,728	28	0.00028
3 - 4 days	99,619	21	0.00020	99,700	18	0.00017
4 - 5 days	99,598	17	0.00018	99,682	9	0.00010
5 - 6 days	99,581	14	0.00014	99,673	8	0.00007
6 - 7 days	99,567	11	0.00012	99,665	8	0.00008
7 - 14 days	99,556	46	0.00046	99,657	34	0.00034
14 - 21 days	99,510	23	0.00023	99,623	20	0.00020
21 - 28 days	99,487	20	0.00019	99,603	16	0.00016
28 days - 2 months	99,467	70	0.00710	99,587	55	0.00056
2 - 3 months	99,397	67	0.00067	99,532	46	0.00046
3 - 4 months	99,330	46	0.00046	99,486	36	0.00036
4 - 5 months	99,284	33	0.00034	99,450	25	0.00025
5 - 6 months	99,251	22	0.00022	99,425	15	0.00015
6 - 7 months	99,229	18	0.00018	99,410	14	0.00014
7 - 8 months	99,211	12	0.00013	99,396	11	0.00012
8 - 9 months	99,199	12	0.00012	99,385	10	0.00010
9 - 10 months	99,187	8	0.00008	99,375	9	0.00009
10 - 11 months	99,179	8	0.00008	99,366	9	0.00009
11 - 12 months	99,171	7	0.00007	99,357	8	0.00008

Source: Canadian Centre for Health Information.

Progress in the fight against death has been remarkable at all ages, but especially at the infancy stage. From life tables for the period 1931 to 1986, we observe that the age at which the risk of death in the first year of life is equivalent to the mortality quotient (the probability of death in a given year) has not ceased to drop (Table 13). In 1931 a male infant had as much chance of dying before his first birthday as did a 77 year old man in the year, but his chances were equivalent to that of a 55 year old man in 1986. The same pattern holds true for female infants, although their generally lower mortality gives them a higher age at which death probabilities are equivalent, despite a lower infant mortality rate. The decline has been continuous.

### Differential Infant Mortality

Even though infant mortality has declined as a result of improvements in living conditions, there are social class disparities in Canada as elsewhere in the world. These disparities manifest themselves in different levels of mortality. The Canadian Centre for Health Information at Statistics Canada

**Table 13. Age at which the Infant Mortality Rate is Equal to the Mortality Quotient (Probability of Dying During the Year)**

Year	Male	Female
1931	77	75
1941	73	73
1951	70	70
1956	67	69
1961	65	68
1966	63	67
1971	61	66
1976	59	64
1981	56	60
1986	55	59

**Source:** Statistics Canada, *Longevity and Chronological Mortality Tables 1921-1981*, Canada and Provinces, Catalogue 89-506 and the mortality table for 1986, unpublished but available from the Canadian Centre for Health Information.

recently provided interesting information on this subject<sup>9</sup>. The relationship between infant mortality and average income for urban neighbourhoods was analyzed (an ecological approach). Income was divided into five categories, each of which corresponded to an income quintile. The conclusions were clear, but not surprising:

- 1) Infant mortality declined in all classes between 1971 and 1986;
- 2) Mortality levels increase as income decreases; and
- 3) Disparities between relative incomes persist over time (Table 14).

This geographical study is particularly convincing in the case of infant mortality, because a selective migration bias cannot be invoked to explain the results as in the case of general mortality analysis.

## Aids

AIDS (Acquired Immune Deficiency Syndrome) is a mortal illness that strikes terror in the late 20th century, and is caused by the HIV (Human Immunodeficiency Virus). It does not yet have a strong presence in mortality statistics. In fact, the first of HIV deaths were not published by Statistics Canada until 1987 (Statistics for 1989 are not yet available). Between 1987 and 1988, AIDS increased by 26%.

<sup>9</sup> Statistics Canada: "Changes in Mortality by Income in Urban Canada from 1971 to 1986", Health Reports, Volume 1, Number 2, 1990.



**Table 14. Infant Mortality Rates (per 1,000) by Income Quintile and Sex, Urban Canada, 1971 and 1986**

Income Quintile	Men			Women		
	1971	1986	1986-71 Difference	1971	1986	1986-71 Difference
Total	17.2	8.3	-8.9	12.8	6.7	-6.1
Quintile 1	11.4	5.9	-5.5	8.9	5.7	-3.2
Quintile 2	15.0	6.0	-9.0	9.7	5.4	-4.3
Quintile 3	17.3	9.3	-8.0	13.0	6.0	-7.0
Quintile 4	18.6	8.4	-10.2	14.4	7.6	-6.8
Quintile 5	22.7	11.9	-10.8	17.2	9.1	-8.1
Difference Q5-Q1	11.3	6.0	-5.3	8.3	3.5	-4.8
Ratio Q5/Q1 (x 100)	199.1	202.9	3.8	193.6	161.3	-32.3

**Source:** Statistics Canada, Health Reports, Volume 1 No. 2, *Changes in Mortality by Income in Urban Canada from 1971 to 1986*, Russell Wilkins, Owen Adams and Anna Brancker.

According to the Bureau of Epidemiology and Surveillance, Federal Centre for AIDS, Health Protection Branch, National Health and Welfare, since the first case of AIDS was reported in Canada in 1982, there have been over 4,000 cases among Canadians. AIDS is the result of gradual destruction of the immune system after infection by HIV. Death caused by HIV can occur without the development of AIDS, but most people who die with HIV infection die as a result of AIDS. At this time, given our current understanding of the natural history of HIV infection and AIDS, it is probably true that everyone who becomes infected with HIV, who survives long enough, will develop AIDS. However, the incubation period for AIDS can be long. Some studies have determined that within 11 years, only 50% of people with HIV will have developed AIDS.

It is, in part, because of the difficulty of recognizing an HIV infected person that AIDS cases are counted instead. The case definition for AIDS, developed at the Center for Disease Control in Atlanta, Georgia, is the one adopted by the Federal Centre for AIDS at Health and Welfare Canada.

For the moment, it is safer to confine the inquiry to counts of these cases. Rates that could be calculated, even age-specific ones, would not be very revealing because the populations compared are heterogeneous, and the sub-populations at risk within the groups are impossible to measure quantitatively. This disparity is particularly evident when Alberta and British Columbia are compared. With almost identical population numbers, there were 114 deaths in one province in 1988, and only 32 in the other. Statistics at the national level clearly show enormous male excess mortality. **They also show a concentration of deaths in the 30-44 age group.** In 1987, this concentration was 58%, and in 1988, it was 57% (Table 15).



**Table 15. Deaths Attributed to H.I.V. by Age Groups and Sex, Canada, 1987 and 1988**

Year	Sex	Age Groups					Total
		0-14	15-29	30-44	45-59	60 +	
1987	Men	1	85	293	87	22	488
	Women	5	7	12	8	5	37
1988	Men	2	96	361	126	29	614
	Women	3	10	28	7	9	47

Source: Statistics Canada, unpublished information available from the Canadian Centre for Health Information.

However frightening it may seem for the future, AIDS is not yet among the leading causes of death. In 1989, such deaths amounted to only 17% of deaths attributed to suicide, itself a minor cause.

AIDS is still one of the most important causes of death for men in their twenties<sup>10</sup>, second only to accidents. **In light of the number of years of young adult life that are lost, it remains an issue of great public concern.** In a communication, Dr. G. Wells, LCDC, at the "Joint Statistical Meeting", Anaheim, California in 1990, says that **between 1983 and 1988, AIDS became the largest contributor to potential years of life lost for men between 20 and 49 years of age.**

The exact number of Canadians infected by the HIV is unknown. At this time, the number is estimated to be between 20,000 and 30,000. This number, however, does not have a high level of statistical significance. It might be more fruitful to develop a demographic model which takes into account entries into and exits from this illness, as a way to evaluate, all other things being equal, the future evolution of the disease<sup>11</sup>.

## INTERNATIONAL IMMIGRATION

Canada admitted a total of 191,015 immigrants in 1989. The number 160,000 was described as the upper limit on expected entrants in the Annual Report on Future Immigration Levels. The actual count is therefore running about

<sup>10</sup> In 1988, deaths from HIV infection were situated: in fifth place for the 20-24 year age group (19 deaths); in third place for the 25-29 year age group (77 deaths); in second place for the 30-34 year age group (28 deaths); in fourth place for the 35-39 year age group (21 deaths); in fourth place for the 40-44 year age group (112 deaths); in fifth place for the 45-49 year age group (73 deaths); in eighth place for the 50-54 year age group (35 deaths). Information from A. Brancker, Health Information Centre.

<sup>11</sup> Nicolas Brouard, "S.I.D.A.: durée d'incubation, Taux de croissance, taux de reproduction nette" - Population, Nov.-Déc. 1987, n° 6.

Table 16. The Immigrant Population by Place of Birth, Canada, 1968-1989

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978
<b>EUROPE</b>	118,791	87,842	75,006	52,733	51,175	70,080	84,780	68,733	49,470	40,967	30,003
Great Britain	33,814	28,790	23,688	14,230	16,637	23,533	33,088	29,454	19,257	16,634	10,698
Portugal	8,720	7,917	8,594	9,776	9,280	14,417	17,268	17,268	6,194	4,238	3,420
France	5,370	3,612	2,958	2,059	1,880	2,411	2,811	2,831	2,415	2,090	1,322
Greece	7,952	7,106	6,440	4,822	4,008	5,800	5,654	3,954	2,429	1,874	1,324
Italy	20,880	10,685	8,659	5,937	4,847	6,176	5,818	4,919	4,008	3,088	2,647
Poland	1,854	1,563	1,403	1,527	1,664	1,629	1,373	1,191	1,366	1,293	1,153
Other	40,201	28,163	23,264	14,382	12,859	16,114	18,768	17,226	13,801	11,750	9,439
<b>AFRICA</b>	7,002	5,953	4,017	3,463	8,504	9,977	12,792	11,715	8,617	6,595	4,561
<b>ASIA</b>	23,775	24,451	23,682	24,230	25,938	46,777	55,290	52,024	46,482	32,904	25,332
Philippines	2,762	3,138	3,305	4,213	4,113	6,886	9,897	7,688	6,109	6,101	4,368
India	4,675	6,736	7,089	6,301	6,746	11,672	16,016	13,401	8,562	6,772	6,077
Hong Kong (B.C.C.)	3,353	3,353	2,250	2,581	3,396	9,155	7,673	6,438	6,442	3,903	2,825
China	5,401	5,610	3,397	3,694	3,813	6,842	6,581	6,235	6,003	4,037	3,181
Other	7,584	5,614	7,641	7,441	7,870	12,222	15,123	18,262	19,366	12,091	8,881
<b>NORTH AND CENTRAL AMERICA</b>	18,482	20,927	22,670	22,508	21,137	23,861	25,147	19,268	16,494	12,755	9,713
United States	17,076	19,258	20,859	20,723	19,176	21,391	22,454	16,729	14,278	10,723	8,254
<b>CARIBBEAN AND BERMUDA</b>	9,021	13,925	13,371	11,300	8,774	19,809	24,441	18,790	15,066	11,822	8,330
<b>AUSTRALASIA</b>	4,145	3,523	3,462	2,182	1,646	1,893	1,928	1,574	1,367	1,147	944
<b>SOUTH AMERICA</b>	2,368	4,158	4,506	4,598	4,036	10,353	12,204	13,102	10,496	7,774	6,682
<b>OCEANIA</b>	..	..	..	..	..	..	1,882	2,675	1,437	950	724
<b>OTHER</b>	390	752	999	886	796	1,450	1	..	..	..	24
<b>TOTAL</b>	183,974	161,531	147,713	121,900	122,006	184,200	218,465	187,881	149,429	114,914	86,313



Table 16. The Immigrant Population by Place of Birth, Canada, 1968-1989 - Concluded

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
<b>EUROPE</b>	32,633	40,210	44,784	44,356	23,664	20,581	18,530	22,518	36,486	39,187	50,725
Great Britain	11,806	16,445	18,912	14,525	4,945	4,657	3,998	4,612	7,650	7,896	7,045
Portugal	3,742	4,222	3,292	2,308	1,373	869	917	1,981	5,904	3,985	5,084
France	1,547	1,461	1,681	1,821	1,237	970	994	1,124	1,486	1,819	2,126
Greece	1,187	1,044	924	884	617	578	579	555	750	595	792
Italy	2,134	1,873	2,057	1,496	879	892	733	785	1,123	961	1,204
Poland	1,263	1,395	4,093	9,259	5,374	4,640	3,642	5,283	7,132	9,360	16,017
Other	10,954	13,770	13,825	14,063	9,239	7,975	7,667	11,480	12,441	14,571	18,457
<b>AFRICA</b>	4,412	5,383	5,901	5,196	3,913	3,851	3,912	5,189	9,048	9,604	12,434
<b>ASIA</b>	51,740	73,026	50,759	43,863	38,183	42,730	39,438	42,417	69,146	83,284	94,645
Philippines	3,927	6,147	5,978	5,295	4,597	3,858	3,183	4,203	7,420	8,651	11,877
India	5,486	9,531	9,415	8,858	7,810	6,082	4,517	7,481	10,635	11,942	10,705
Hong Kong (B.C.C.)	3,548	3,874	4,039	4,452	4,238	5,013	5,121	4,318	12,618	18,355	15,471
China	5,821	8,965	9,798	6,295	5,321	5,769	5,166	4,178	6,611	7,903	8,882
Other	32,958	44,509	21,529	18,963	16,217	22,008	21,451	22,237	31,862	36,433	47,710
<b>NORTH AND CENTRAL AMERICA</b>	9,128	9,442	10,183	10,030	10,200	10,223	10,898	12,412	13,691	11,495	11,877
United States	7,821	8,098	8,695	7,841	6,136	5,727	5,614	6,094	6,547	5,571	5,801
<b>CARIBBEAN AND BERMUDA</b>	6,535	7,515	8,797	8,717	7,258	5,696	6,240	8,948	11,210	9,481	10,947
<b>AUSTRALASIA</b>	1,068	1,215	1,020	758	394	430	399	449	540	528	633
<b>SOUTH AMERICA</b>	5,810	5,381	6,114	6,892	4,825	4,046	4,273	6,546	10,833	7,210	8,571
<b>OCEANIA</b>	736	944	1,024	1,183	720	599	612	740	1,144	1,140	1,183
<b>OTHER</b>	34	1	36	152	..	83	..	..	..	..	..
<b>TOTAL</b>	112,096	143,117	128,618	121,147	89,157	88,239	84,302	99,219	152,098	161,929	191,015

Source: Employment and Immigration, *Immigration Statistics*, 1968-1989.

20% over the forecasts. The 1990 situation promises to unfold in a similar manner. The established maximum estimate of 175,000 persons will undoubtedly be exceeded. With already 71,477 entries by the beginning of June, the Estimates Service of Employment and Immigration Canada expects this number to reach about 215,000 by 31 December, some 23% higher than the estimates had indicated. This expected surplus is due, in part, to the large number of visa applications pending from Eastern Europe which probably will be granted before the end of the year.

Even if the figure of 215,000 immigrants is reached in 1990, it will not be a record. Almost 219,000 immigrants were admitted in 1974. The immigration rate is expected to reach 8.2 per 1,000 in 1990, and although far below the 54 per 1,000 reached in 1913 when the Prairies were being settled, this level is still rather high from the perspective of the recent past.

### **Countries of Origin**

Immigration is not subjected to inertia as much as other demographic phenomena, but nor does it tend to show sudden fluctuations from one year to the next. This is partly because of the time required to process applicants' files. The source countries of immigrants for the year 1989 bear a close resemblance to 1988 (Table 16). Asia once again provided half of all entrants, although Hong Kong supplied fewer entrants than before. Other countries from where large contingents have arrived include Vietnam (9,440), Taiwan (3,119), Iran (4,270), South Korea (2,989), and Malaysia (2,417).

The repercussions of political change in Eastern Europe on migration into Canada over the medium-term are difficult to evaluate. Polish immigration has already gone from 1,153 entrants in 1978 to 16,017 in 1989. *Now that draconian emigration restrictions have been lifted in most of the Eastern Bloc countries, an increase in the number of Eastern European applicants seems quite probable. As with other applicants, these immigrants will have to meet the requirements of the Department so as to accumulate enough points for their admission.* Those who will be admitted, as in the case of Polish immigrants, will be able to sponsor fellow citizens and bring over relatives by virtue of family reunification (Table 16).

### **Immigrant Destinations**

Even though Ontario has a negative net migration balance (see below), it is the province where the majority of international immigrants want to settle. In 1989, 104,315 of the 191,015 immigrants, or 55%, designated Ontario as their province of choice. Quebec came a far second at 33,978 designations (18%), followed by British Columbia at 25,170 (13%).



Every immigrant that is accepted must become a permanent resident of Canada or lose all rights and privileges. Not all accepted entrants continue to reside in Canada, although the exact number of those who remain is unknown (Table 17).

### Categories of Immigrants

There was no appreciable change in the distribution of immigrants by category in 1989. The "investors" category continues to be popular. While the total number of immigrants increased by 20% in one year, the investor class more than doubled (118%).

## INTERNAL MIGRATION

Internal migration in Canada consists of some well-known movements that historically have shown a displacement toward the West. Movers have nevertheless become increasingly sensitive over the years to the economic opportunities of the moment, whether in commercial, industrial or service locales. It is in this ever changing context that the data must be interpreted. Although not perfectly precise, they are derived from the best possible estimates, based on information gathered from tax and family allowance files (Tables 18 and 19).

The data confirm the following trends for the past few years:

- 1) Net interprovincial movements east of Quebec result in weak net migration balances becoming less and less negative;
- 2) Quebec has posted a migration deficit of about 7,500 people for each of the last three years;
- 3) Migration is much more volatile in Ontario and the West:
  - a) Ontario's appeal to Canadians from other provinces started to drop in 1987 and is continuing to erode. Its net migration went from 40,300 persons to -6,600 in three years;
  - b) There is a renewal of interest in western destinations, especially British Columbia. The positive balance of this province increased from 17,618 in 1987 to 39,459 in 1989, a net gain of 124%. At the same time, Alberta recovered from the disastrous losses of the 1980s (deficits of 27,600 in 1987, and 4,400 in 1988) to post an even balance in 1989. Ontario's most damaging exchanges in 1989 were with British Columbia, to which it lost about 13,000 persons. Exchanges with Alberta were almost evenly balanced. On the other hand, the attraction of popular British Columbia did not extend to the east beyond the Ontario border; (Table 20)

Table 17. Percentage Distribution of Accepted Immigrants by Province of Intended Destination, 1956-1989

Province	Year											
	1956	1961	1971	1981	1982	1983	1984	1985	1986	1987	1988 <sup>1</sup>	1989 <sup>1</sup>
Newfoundland	0.3	0.5	0.7	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.2
Prince Edward Island	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1
Nova Scotia	1.0	1.3	1.5	1.1	1.0	0.9	1.2	1.2	1.1	0.8	0.8	0.8
New Brunswick	0.5	1.1	0.9	0.8	0.6	0.6	0.7	0.7	0.7	0.4	0.4	0.5
Quebec	19.0	23.6	15.8	16.4	17.6	18.4	16.6	17.7	19.6	17.6	15.9	17.8
Ontario	55.0	50.9	52.8	42.7	43.8	44.9	47.1	48.3	50.0	55.8	55.0	54.7
Manitoba	3.5	3.5	4.4	4.2	4.1	4.5	4.4	4.1	3.8	3.2	3.1	3.2
Saskatchewan	1.3	1.9	1.2	1.9	1.8	2.0	2.4	2.3	1.9	1.4	1.4	1.1
Alberta	6.0	6.7	7.1	15.0	14.8	12.0	12.1	10.7	9.8	7.9	8.7	8.4
British Columbia	10.8	10.2	15.5	17.1	15.7	16.2	15.0	14.5	12.7	12.4	14.3	13.2
Yukon and Northwest Territories	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
Unknown	2.4	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total (in numbers)	164,857	71,689	121,900	128,618	121,147	89,157	88,239	84,302	99,219	152,098	161,929	191,015

<sup>1</sup> Provisional data.

Source: Employment and Immigration, *Immigration Statistics*, Catalogue No. WH-5-006 and unpublished data.



Table 18. Net Migration, Provinces and Territories, 1970-1989

Year	Newfound- land	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskat- chewan	Alberta	British Columbia	Yukon and Northwest Territories	Total
1970	-5,950	-29	-3,967	-2,373	-41,156	54,590	-7,707	-28,358	9,898	22,579	2,473	412,559
1971	733	-129	-755	1,798	-25,005	18,580	-7,251	-17,986	2,408	25,034	2,573	405,301
1972	-189	858	2,845	241	-19,891	8,227	-7,735	-17,296	6,538	24,927	1,475	375,185
1973	-2,510	478	2,107	2,841	-14,730	-5,275	-2,200	-13,261	2,698	30,537	-685	433,993
1974	-618	1,386	1,576	4,192	-11,852	-22,163	-5,400	-4,835	14,810	22,655	249	421,336
1975	915	814	4,454	7,572	-12,340	-25,057	-4,134	6,555	23,463	-2,864	622	385,327
1976	-2,732	309	361	1,640	-20,801	-10,508	-3,655	3,819	34,215	-1,490	-1,158	376,971
1977	-4,009	614	-1,277	-886	-46,536	8,596	-3,789	384	32,344	15,507	-948	366,918
1978	-3,540	25	-109	-1,644	-33,424	415	-9,557	-3,701	31,987	20,698	-1,150	348,929
1979	-4,217	-225	-1,840	-2,219	-30,025	-15,317	-13,806	-3,510	39,212	33,241	-1,294	370,862
1980	-3,082	-1,082	-2,494	-4,165	-24,283	-34,919	-11,342	-4,382	46,933	40,165	-1,349	372,167
1981	-6,238	-783	-2,465	-4,766	-22,549	-19,665	-3,621	-520	40,243	21,565	-1,201	380,041
1982	261	-6	1,591	2,183	-28,169	19,614	1,498	1,743	3,961	-2,019	-657	322,634
1983	-1,092	799	3,861	2,296	-19,080	32,825	950	2,501	-26,246	4,029	-843	285,599
1984	-3,585	524	2,963	812	-10,943	36,691	-49	733	-30,591	3,505	-60	273,323
1985	-5,019	-13	-234	-1,559	-6,023	33,414	-1,755	-5,014	-9,568	-3,199	-1,030	281,275
1986	-4,682	-493	-739	-2,897	-3,020	42,916	-3,039	-7,020	-20,293	910	-1,643	302,352
1987	-4,374	301	-2,183	-1,762	-7,410	40,278	-4,751	-9,043	-27,595	17,618	-1,079	318,890
1988	-1,785	586	-1,874	-1,379	-7,632	12,973	-9,284	-16,149	-4,361	29,007	-102	355,249
1989 <sup>1</sup>	-1,004	178	-477	2,051	-7,533		-8,910	-16,641	15		-548	371,914

<sup>1</sup> Provisional data.

Source: Statistics Canada, *Quarterly Demographic Statistics*, Demography Division, Estimates Section.

- c) For the quintessentially "prairie" provinces of Manitoba and Saskatchewan, internal migration over a three-year period shows signs of deterioration as negative migration balances have worsened. This is especially true for Saskatchewan, which lost over 32,000 persons in two years.



Table 19. Interprovincial Migratory Movement, Canada, 1989

Number of moves: 371,914

Origin	Destination											
	New-found-land	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Yukon	Northwest Territories
Newfoundland	0	161	1,995	773	424	5,546	256	134	1,237	669	21	157
Prince Edward Island	152	0	837	590	267	1,173	94	54	200	222	3	30
Nova Scotia	1,547	937	0	3,508	1,607	8,902	565	260	2,011	1,832	72	117
New Brunswick	381	530	2,987	0	2,457	6,312	326	146	1,179	901	10	84
Quebec	261	100	1,296	2,783	0	25,972	857	462	2,962	4,014	48	251
Ontario	6,249	1,353	8,931	6,566	21,246	0	6,160	2,726	17,766	25,674	242	555
Manitoba	235	65	562	489	899	8,328	0	2,902	6,262	7,688	152	255
Saskatchewan	151	86	265	201	373	4,560	3,648	0	14,951	8,834	144	363
Alberta	965	371	1,996	1,393	1,847	16,345	3,997	7,153	0	33,520	582	1,369
British Columbia	315	187	1,873	984	2,137	12,776	2,884	2,803	20,769	0	947	485
Yukon	18	0	27	28	28	225	27	105	571	1,423	0	79
Northwest Territories	95	10	112	49	188	739	113	190	1,645	842	149	0
In	10,369	3,800	20,881	17,364	31,473	90,878	18,927	16,935	69,553	85,619	2,370	3,745
Out	11,373	3,622	21,358	15,313	39,006	97,468	27,837	33,576	69,538	46,160	2,531	4,132
Net Migration	-1,004	178	-477	2,051	-7,533	-6,590	-8,910	-16,641	15	39,459	-161	-387

Source: Statistics Canada, Demography Division, Estimates Section, March 1990.

**Table 20. Net Migratory Balance of Ontario and British Columbia With the Other Provinces of Canada, 1989**

Ontario		British Columbia	
Newfoundland	-703	Newfoundland	354
Prince Edward Island	-180	Prince Edward Island	35
Nova Scotia	-29	Nova Scotia	-41
New Brunswick	-254	New Brunswick	-83
Quebec	4,726	Quebec	1,877
Manitoba	2,168	Ontario	12,898
Saskatchewan	1,834	Manitoba	4,804
Alberta	-1,421	Saskatchewan	6,031
British Columbia	-12,898	Alberta	12,751
Yukon and Northwest Territories	167	Yukon and Northwest Territories	833
Total	-6,590	Total	39,459

Source: Statistics Canada, Demography Division, Estimates Section.



## **APPENDICES**

**Table A1. Demographic Accounts of the Provinces and Territories, 1971-1990**  
(in thousands)

Year	Population <sup>1</sup>	Total Growth <sup>2</sup>	Births <sup>2</sup>	Deaths <sup>2</sup>	Natural Increase	Net Migration <sup>3</sup>
Canada						
1971	21,465.0	244.6	362.2	157.3	204.9	39.7
1972	21,709.6	232.8	347.3	162.4	184.9	47.9
1973	21,942.4	292.9	343.4	164.0	179.3	113.5
1974	22,235.3	333.4	350.7	166.8	183.9	149.5
1975	22,568.7	315.2	359.3	167.4	191.9	123.3
1976	22,883.9	274.5	360.0	167.0	193.0	81.5
1977	23,158.4	259.0	361.4	167.5	193.9	65.1
1978	23,417.4	227.1	358.9	168.2	190.7	36.4
1979	23,644.5	267.4	366.1	168.2	197.9	69.5
1980	23,911.9	309.4	370.7	171.5	199.2	110.2
1981	24,221.3	262.1	371.3	171.0	200.3	61.8
1982	24,483.4	222.3	373.1	174.4	198.7	23.6
1983	24,705.7	190.1	373.7	174.5	199.2	-9.1
1984	24,895.8	194.6	377.0	175.7	201.3	-6.7
1985	25,090.4	183.6	375.7	181.3	194.4	-10.8
1986	25,274.0	218.9	372.9	184.2	188.7	30.2
1987	25,492.9	292.9	369.7	185.0	184.8	108.1
1988	25,785.8	311.5	376.8	190.0	186.8	124.7
1989	26,097.3	343.0	392.2	192.2	200.0	143.0
1990	26,440.3					
Newfoundland						
1971	519.0	8.8	12.8	3.2	9.6	-1.4
1972	527.2	7.2	12.9	3.3	9.5	-2.3
1973	534.4	5.4	11.9	3.4	8.5	-3.1
1974	539.8	6.6	11.5	3.3	8.2	-1.6
1975	546.4	8.4	11.2	3.2	8.0	0.4
1976	554.8	4.2	11.1	3.3	7.8	-3.6
1977	559.0	2.3	11.1	3.1	8.0	-5.7
1978	561.3	2.0	10.5	3.1	7.4	-5.4
1979	563.3	1.3	10.2	3.1	7.0	-5.7
1980	564.6	2.6	10.3	3.3	7.0	-4.4
1981	567.2	-1.2	10.1	3.2	6.9	-8.1
1982	566.0	3.9	9.2	3.4	5.8	-1.9
1983	569.9	2.0	8.9	3.5	5.4	-3.4
1984	571.9	-0.8	8.6	3.5	5.0	-5.8
1985	571.1	-2.4	8.5	3.6	4.9	-7.3
1986	568.7	-1.2	8.1	3.5	4.6	-5.8
1987	567.5	-0.8	7.8	3.6	4.1	-4.9
1988	567.4	2.3	7.5	3.6	3.9	-1.6
1989	569.7	2.9	6.4	3.7	2.7	0.2
1990	572.6					

See notes at the end of this table.



**Table A1. Demographic Accounts of the Provinces and Territories, 1971-1990**  
(in thousands) - Continued

Year	Popula- tion <sup>1</sup>	Total Growth <sup>2</sup>	Births <sup>2</sup>	Deaths <sup>2</sup>	Natural Increase	Net Migration <sup>3</sup>
Prince Edward Island						
1971	111.0	1.2	2.1	1.0	1.1	0.1
1972	112.2	1.4	2.0	1.1	1.0	0.4
1973	113.6	1.0	1.9	1.0	0.9	0.1
1974	114.6	2.0	1.9	1.1	0.9	1.1
1975	116.6	1.4	1.9	1.1	0.9	0.5
1976	118.0	1.0	1.9	1.1	0.8	0.2
1977	119.0	1.5	2.0	1.0	0.9	0.6
1978	120.5	1.1	2.0	1.0	1.0	0.1
1979	121.6	0.9	1.9	1.0	0.9	0.0
1980	122.5	-0.1	2.0	1.0	0.9	-1.0
1981	122.4	0.1	1.9	1.0	0.9	-0.8
1982	122.5	0.7	1.9	1.0	0.9	-0.2
1983	123.2	1.4	1.9	1.1	0.9	0.5
1984	124.6	1.2	2.0	1.1	0.8	0.4
1985	125.8	0.6	2.0	1.1	0.9	-0.3
1986	126.4	0.3	1.9	1.1	0.8	-0.5
1987	126.7	1.5	2.0	1.1	0.8	0.7
1988	128.0	1.5	2.0	1.1	0.9	0.6
1989	129.5	1.1	1.9	1.1	0.8	0.3
1990	130.6					
Nova Scotia						
1971	785.0	7.9	14.3	6.7	7.6	0.3
1972	792.9	8.5	13.5	6.9	6.6	1.9
1973	801.4	8.0	13.3	6.9	6.4	1.6
1974	809.4	7.3	12.9	6.9	6.0	1.3
1975	816.7	9.8	13.1	6.8	6.3	3.5
1976	826.5	5.7	12.8	7.0	5.8	-0.1
1977	832.2	3.6	12.4	7.0	5.4	-1.8
1978	835.8	4.4	12.5	6.9	5.7	-1.3
1979	840.2	3.5	12.4	6.8	5.6	-2.1
1980	843.7	3.2	12.4	7.0	5.4	-2.2
1981	846.9	2.1	12.1	7.0	5.1	-3.0
1982	849.0	5.6	12.3	6.9	5.4	0.2
1983	854.6	7.4	12.4	7.0	5.4	2.0
1984	862.0	6.9	12.4	6.9	5.5	1.4
1985	868.9	3.3	12.5	7.3	5.1	-1.8
1986	872.2	4.1	12.4	7.3	5.1	-1.0
1987	876.3	3.5	12.1	7.1	5.0	-1.5
1988	879.8	3.9	12.2	7.4	4.8	-0.9
1989	883.7	5.4	12.5	7.6	4.9	0.5
1990	889.1					

See notes at the end of this table.

**Table A1. Demographic Accounts of the Provinces and Territories, 1971-1990**  
(in thousands) - Continued

Year	Popula- tion <sup>1</sup>	Total Growth <sup>2</sup>	Births <sup>2</sup>	Deaths <sup>2</sup>	Natural Increase	Net Migration <sup>3</sup>
New Brunswick						
1971	630.0	8.2	12.2	4.9	7.2	1.0
1972	638.2	5.3	11.8	5.0	6.8	-1.5
1973	643.5	7.7	11.4	5.1	6.3	1.4
1974	651.2	9.5	11.4	5.2	6.2	3.3
1975	660.7	13.1	11.8	5.1	6.7	6.4
1976	673.8	7.9	11.8	5.2	6.6	1.3
1977	681.7	5.2	11.5	5.2	6.3	-1.1
1978	686.9	3.3	10.8	5.2	5.6	-2.3
1979	690.2	3.7	10.8	5.2	5.7	-2.0
1980	693.9	1.8	10.6	5.3	5.3	-3.5
1981	695.7	-0.4	10.5	5.1	5.4	-5.8
1982	695.3	5.2	10.5	5.2	5.3	-0.1
1983	700.5	5.3	10.5	5.2	5.3	0.0
1984	705.8	3.7	10.4	5.3	5.1	-1.4
1985	709.5	1.0	10.1	5.2	4.9	-3.9
1986	710.5	0.3	9.8	5.5	4.3	-4.0
1987	710.8	2.3	9.6	5.4	4.2	-1.9
1988	713.1	2.7	9.6	5.5	4.1	-1.4
1989	715.8	6.4	9.8	5.4	4.4	2.0
1990	722.2					
Quebec						
1971	6,017.0	22.7	89.2	40.7	48.5	-25.8
1972	6,039.7	24.7	83.6	42.3	41.3	-16.6
1973	6,064.4	38.7	84.1	42.7	41.4	-2.7
1974	6,103.1	52.5	89.4	42.8	46.6	5.9
1975	6,155.6	55.9	93.6	42.8	50.8	5.1
1976	6,211.5	51.5	96.3	42.6	53.7	-2.2
1977	6,263.0	22.6	95.7	43.5	52.2	-29.6
1978	6,285.6	30.6	94.9	43.6	51.3	-20.7
1979	6,316.2	43.7	98.6	43.3	55.3	-11.6
1980	6,359.9	53.0	97.4	43.5	53.9	-0.9
1981	6,412.9	37.4	95.3	42.7	52.6	-15.2
1982	6,450.3	14.8	90.8	43.5	47.3	-32.5
1983	6,465.1	15.4	88.2	44.3	43.9	-28.5
1984	6,480.5	22.0	87.8	44.4	43.4	-21.4
1985	6,502.5	25.5	86.3	45.7	40.6	-15.1
1986	6,528.0	40.4	84.6	46.9	37.7	2.7
1987	6,568.4	50.4	83.8	47.6	36.2	14.2
1988	6,618.8	52.8	86.6	47.8	38.8	14.0
1989	6,671.6	64.6	91.3	49.1	42.2	22.4
1990	6,736.2					

See notes at the end of this table.



**Table A1. Demographic Accounts of the Provinces and Territories, 1971-1990**  
(in thousands) - Continued

Year	Popula- tion <sup>1</sup>	Total Growth <sup>2</sup>	Births <sup>2</sup>	Deaths <sup>2</sup>	Natural Increase	Net Migration <sup>3</sup>
Ontario						
1971	7,656.0	113.3	130.4	56.6	73.8	39.5
1972	7,769.3	100.8	125.1	58.9	66.2	34.6
1973	7,870.1	126.3	123.8	59.9	63.9	62.4
1974	7,996.4	128.5	124.2	60.6	63.7	64.8
1975	8,124.9	103.9	125.8	60.5	65.3	38.6
1976	8,228.8	85.8	125.5	61.2	61.5	24.3
1977	8,314.6	93.3	122.8	61.4	61.3	32.0
1978	8,407.9	67.5	121.0	61.1	59.8	7.7
1979	8,475.4	64.4	121.7	61.5	60.2	4.2
1980	8,539.8	59.9	123.3	62.7	60.6	-0.7
1981	8,599.7	64.1	122.2	62.8	59.3	4.8
1982	8,663.8	97.4	124.9	63.7	61.2	36.2
1983	8,761.2	98.6	126.8	64.5	62.3	36.3
1984	8,859.8	109.4	131.3	64.7	66.6	42.8
1985	8,969.2	103.0	132.2	66.7	65.5	37.5
1986	9,072.2	129.0	133.9	67.9	66.0	63.0
1987	9,201.2	170.2	134.6	68.1	66.5	103.7
1988	9,371.4	151.3	138.1	70.7	67.4	83.9
1989	9,522.7	144.9	146.8	71.2	75.6	69.3
1990	9,667.6					
Manitoba						
1971	984.0	5.0	18.0	8.0	10.0	-5.0
1972	989.0	3.3	17.4	8.2	9.2	-5.9
1973	992.3	9.8	17.0	8.2	8.8	1.0
1974	1,002.1	7.7	17.3	8.4	8.9	-1.2
1975	1,009.8	8.4	17.1	8.4	8.8	-0.4
1976	1,018.2	6.2	16.7	8.3	8.4	-2.5
1977	1,024.4	5.8	16.7	8.2	8.5	-2.7
1978	1,030.2	-2.4	16.4	8.3	8.1	-10.5
1979	1,027.8	-4.8	16.2	8.2	8.0	-12.8
1980	1,023.0	0.4	16.0	8.4	7.6	-7.2
1981	1,023.4	6.0	16.1	8.6	7.4	-1.4
1982	1,029.4	11.4	16.1	8.5	7.6	3.8
1983	1,040.8	10.1	16.6	8.5	8.1	2.0
1984	1,050.9	9.7	16.7	8.3	8.4	1.3
1985	1,060.6	7.4	17.1	8.8	8.3	-0.9
1986	1,068.0	6.6	17.0	8.9	8.1	-1.5
1987	1,074.6	6.5	17.0	8.7	8.2	-1.7
1988	1,081.1	1.9	17.0	9.1	7.9	-6.0
1989	1,083.0	3.6	17.8	8.9	8.9	-5.3
1990	1,086.6					

See notes at the end of this table.

**Table A1. Demographic Accounts of the Provinces and Territories, 1971-1990**  
(in thousands) - Continued

Year	Popula- tion <sup>1</sup>	Total Growth <sup>2</sup>	Births <sup>2</sup>	Deaths <sup>2</sup>	Natural Increase	Net Migration <sup>3</sup>
Saskatchewan						
1971	927.0	-9.9	16.1	7.4	8.6	-18.5
1972	917.1	-10.5	15.5	7.6	7.9	-18.4
1973	906.6	-6.7	14.8	7.6	7.2	-13.9
1974	899.9	2.4	15.1	7.8	7.3	-4.9
1975	902.3	14.4	15.3	7.7	7.6	6.8
1976	916.7	12.9	16.0	7.7	8.3	4.8
1977	929.6	11.1	16.5	7.6	9.0	2.1
1978	940.7	6.3	16.6	7.7	8.8	-2.5
1979	947.0	8.5	16.9	7.4	9.6	-1.1
1980	955.5	8.6	17.1	7.7	9.4	-0.8
1981	964.1	9.8	17.2	7.5	9.7	0.1
1982	973.9	10.5	17.7	8.2	9.5	1.0
1983	984.4	11.4	17.8	7.6	10.2	1.2
1984	995.8	10.2	18.0	7.7	10.3	-0.1
1985	1,006.0	3.8	18.2	8.0	10.1	-6.3
1986	1,009.8	2.7	17.5	8.1	9.5	-6.8
1987	1,012.5	1.4	17.0	7.8	9.2	-7.8
1988	1,013.9	-6.1	16.8	8.1	8.7	-14.8
1989	1,007.8	-6.2	16.6	7.9	8.7	-14.9
1990	1,001.6					
Alberta						
1971	1,616.0	28.7	30.5	10.5	20.0	8.7
1972	1,644.7	32.3	29.3	10.7	18.6	13.7
1973	1,677.0	32.1	29.3	10.8	18.5	13.6
1974	1,709.1	46.6	29.8	11.3	18.6	28.0
1975	1,755.7	58.7	31.6	11.4	20.2	38.5
1976	1,814.4	70.6	33.1	11.6	21.5	49.3
1977	1,885.0	70.9	34.4	11.6	22.8	48.1
1978	1,955.9	68.5	35.4	11.9	23.5	45.0
1979	2,024.4	81.2	37.0	12.1	24.9	56.3
1980	2,105.6	98.0	39.7	12.7	27.0	71.0
1981	2,203.6	85.3	42.6	12.8	29.8	55.5
1982	2,288.9	42.8	45.0	13.0	32.1	10.7
1983	2,331.7	6.3	45.6	12.6	33.0	-26.7
1984	2,338.0	1.2	44.1	12.7	31.4	-30.2
1985	2,339.2	19.9	43.8	13.2	30.6	-10.7
1986	2,359.1	11.4	43.7	13.6	30.2	-18.8
1987	2,370.5	6.5	42.1	13.3	28.8	-22.3
1988	2,377.0	31.9	42.1	13.9	28.2	3.7
1989	2,408.9	40.0	43.4	14.0	29.4	10.6
1990	2,448.9					

See notes at the end of this table.



**Table A1. Demographic Accounts of the Provinces and Territories, 1971-1990**  
(in thousands) - Continued

Year	Popula- tion <sup>1</sup>	Total Growth <sup>2</sup>	Births <sup>2</sup>	Deaths <sup>2</sup>	Natural Increase	Net Migration <sup>3</sup>
British Columbia						
1971	2,168.0	55.6	34.9	17.8	17.1	38.5
1972	2,223.6	56.6	34.6	18.0	16.5	40.1
1973	2,280.2	69.6	34.4	18.1	16.3	53.3
1974	2,349.8	68.5	35.5	19.2	16.3	52.2
1975	2,418.3	38.8	36.3	19.1	17.2	21.6
1976	2,457.1	28.4	35.8	18.9	16.9	11.4
1977	2,485.5	41.6	36.7	18.6	18.1	24.2
1978	2,527.1	45.0	37.2	19.1	18.2	26.8
1979	2,572.1	64.3	38.4	19.2	19.2	45.1
1980	2,636.4	81.3	40.1	19.4	20.7	60.6
1981	2,717.7	56.4	41.5	19.9	21.6	34.8
1982	2,774.1	28.6	42.7	20.7	22.0	6.6
1983	2,802.7	31.1	42.9	19.8	23.1	8.0
1984	2,833.8	29.2	43.9	20.7	23.2	6.0
1985	2,863.0	20.4	43.1	21.3	21.8	-1.4
1986	2,883.4	25.3	42.0	21.2	20.8	4.5
1987	2,908.7	50.2	41.8	21.8	20.0	32.2
1988	2,958.9	67.5	42.9	22.5	20.4	47.1
1989	3,026.4	79.3	43.8	23.1	20.7	58.6
1990	3,105.7					
Yukon						
1971	18.0	1.2	0.5	0.1	0.4	0.8
1972	19.2	1.0	0.5	0.1	0.3	0.7
1973	20.2	0.3	0.4	0.1	0.3	0.0
1974	20.5	0.6	0.5	0.1	0.4	0.2
1975	21.1	0.7	0.4	0.1	0.3	0.4
1976	21.8	0.1	0.4	0.1	0.3	-0.2
1977	21.9	0.5	0.4	0.1	0.3	0.2
1978	22.4	0.2	0.4	0.1	0.4	-0.2
1979	22.6	0.0	0.5	0.1	0.4	-0.4
1980	22.6	0.1	0.5	0.1	0.3	-0.2
1981	22.7	0.9	0.5	0.1	0.4	0.5
1982	23.6	-0.6	0.5	0.1	0.4	-1.0
1983	23.0	-0.1	0.5	0.1	0.4	-0.5
1984	22.9	0.5	0.5	0.1	0.4	0.1
1985	23.4	0.1	0.5	0.1	0.3	-0.2
1986	23.5	0.7	0.5	0.1	0.4	0.3
1987	24.2	0.5	0.5	0.1	0.4	0.3
1988	24.7	0.8	0.5	0.1	0.4	0.4
1989	25.5	0.3	0.5	0.1	0.4	-0.1
1990	25.8					

See notes at the end of this table.

**Table A1. Demographic Accounts of the Provinces and Territories, 1971-1990**  
(in thousands) - Concluded

Year	Population <sup>1</sup>	Total Growth <sup>2</sup>	Births <sup>2</sup>	Deaths <sup>2</sup>	Natural Increase	Net Migration <sup>3</sup>
	Northwest Territories					
1971	34.0	2.5	1.3	0.2	1.1	1.4
1972	36.5	2.2	1.2	0.3	1.0	1.2
1973	38.7	0.7	1.2	0.2	1.0	-0.3
1974	39.4	1.2	1.0	0.2	0.8	0.4
1975	40.6	1.7	1.2	0.2	1.0	0.7
1976	42.3	0.4	1.2	0.2	1.0	-0.6
1977	42.7	0.4	1.2	0.2	1.0	-0.6
1978	43.1	0.5	1.2	0.2	1.0	-0.5
1979	43.6	0.7	1.3	0.2	1.1	-0.4
1980	44.3	0.7	1.3	0.2	1.1	-0.4
1981	45.0	1.6	1.3	0.2	1.1	0.5
1982	46.6	1.9	1.4	0.2	1.1	0.8
1983	48.5	1.3	1.5	0.2	1.3	0.0
1984	49.8	1.5	1.4	0.2	1.2	0.3
1985	51.3	0.8	1.4	0.2	1.2	-0.4
1986	52.1	-0.5	1.5	0.2	1.3	-1.8
1987	51.6	0.2	1.5	0.2	1.3	-1.1
1988	51.8	0.8	1.6	0.2	1.4	-0.6
1989	52.6	0.9	1.2	0.2	1.0	-0.1
1990	53.5					

<sup>1</sup> As of January 1. Data are taken from definitive intercensal estimates for 1971-1986, and from definitive postcensal estimates for 1987 and 1988. Those for 1989 are revised and those for 1990 are preliminary.

<sup>2</sup> From January 1 to December 31.

<sup>3</sup> Difference between total growth and natural increase.

**Note:** All calculations are based on unrounded data.

**Source:** For births and deaths: Statistics Canada, Centre for Health Information.

For immigration: Employment and Immigration.

For population estimates and emigration data: Statistics Canada, Demography Division, Catalogue No. 91-001, Vol. 2 and Catalogue No. 91-002, Vol. 4, No. 1.



Table A2. NUPTIALITY

	Year	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon	N.W.T.	Can.
Marriages	1978	3,841	939	6,560	5,310	45,936	67,491	8,232	7,139	18,277	21,388	194	216	185,523
	1979	3,737	893	6,920	5,355	46,341	67,980	7,769	7,272	18,999	22,087	181	277	187,811
	1980	3,783	939	6,791	5,321	44,848	68,840	7,869	7,561	20,818	23,830	200	269	191,069
	1981	3,758	849	6,632	5,108	41,005	70,281	8,123	7,329	21,781	24,699	235	282	190,082
	1982	3,764	855	6,486	4,923	38,354	71,595	8,264	7,491	23,312	23,831	225	260	188,360
	1983	3,778	937	6,505	5,260	36,144	70,893	8,261	7,504	21,172	23,692	243	286	184,675
	1984	3,567	1,057	6,798	5,294	37,433	71,922	8,393	7,213	20,052	23,397	212	259	185,597
	1985	3,220	956	6,807	5,312	37,026	72,891	8,296	7,132	19,750	22,292	185	229	184,096
	1986	3,421	970	6,445	4,962	33,083	70,839	7,816	6,820	18,896	21,826	183	257	175,518
	1987	3,481	924	6,697	4,924	32,616	76,201	7,994	6,853	18,640	23,395	189	237	182,151
	1988	3,686	965	6,894	5,292	33,519	78,533	7,908	6,767	19,272	24,461	209	222	187,728
	1989 <sup>1</sup>	3,808	1,019	6,790	5,248	33,332	80,357	7,800	6,637	19,888	25,150	215	213	190,457

<sup>1</sup> Preliminary data.

Source: Statistics Canada, Vital Statistics, *Marriages and Divorces*, Catalogue No. 84-205 (Annual).

Table A3. FERTILITY

	Year	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon	N.W.T.	Can.
Live births	1978	10,480	1,985	12,548	10,790	94,860	120,964	16,397	16,550	35,396	37,231	447	1,204	358,852
	1979	10,170	1,934	12,406	10,848	98,646	121,655	16,242	16,944	37,003	38,432	501	1,283	366,064
	1980	10,332	1,958	12,369	10,636	97,421	123,316	15,989	17,057	39,749	40,104	476	1,302	370,709
	1981	10,130	1,897	12,079	10,503	95,322	122,183	16,073	17,209	42,638	41,474	536	1,302	371,346
	1982	9,173	1,924	12,325	10,489	90,800	124,856	16,123	17,722	45,036	42,747	525	1,362	373,082
	1983	8,929	1,907	12,401	10,518	88,154	126,826	16,602	17,847	45,555	42,919	540	1,491	373,689
	1984	8,560	1,954	12,378	10,360	87,839	131,296	16,651	18,014	44,105	43,911	519	1,444	377,031
	1985	8,500	2,008	12,450	10,121	86,340	132,208	17,097	18,162	43,813	43,127	464	1,437	375,727
	1986	8,100	1,928	12,358	9,788	84,634	133,882	17,009	17,513	43,744	41,967	483	1,507	372,912
	1987	7,769	1,955	12,110	9,588	83,791	134,617	16,953	17,034	42,110	41,814	478	1,523	369,742
Birth rate (per 1,000)	1988	7,487	1,977	12,182	9,617	86,612	138,066	17,030	16,763	42,055	42,930	521	1,555	376,795
	1989 <sup>1</sup>	7,762	1,919	12,510	9,788	91,315	146,819	17,817	16,593	43,402	43,817	497	1,159	393,398
	1978	18.7	16.4	15.0	15.7	15.1	14.3	15.9	17.5	17.8	14.6	19.9	27.6	15.3
	1979	18.0	15.8	14.7	15.7	15.6	14.3	15.8	17.8	18.0	14.8	22.5	29.1	15.4
	1980	18.3	15.9	14.6	15.3	15.3	14.4	15.6	17.8	18.6	15.0	21.3	29.2	15.4
	1981	17.8	15.5	14.3	15.1	14.8	14.2	15.7	17.8	19.1	15.1	23.2	28.5	15.3
	1982	16.2	15.7	14.5	15.1	14.1	14.3	15.6	18.1	19.5	15.3	22.0	28.7	15.2
	1983	15.6	15.4	14.5	15.0	13.6	14.4	15.9	18.0	19.5	15.3	23.6	30.6	15.1
	1984	15.0	15.6	14.3	14.6	13.5	14.7	15.8	18.0	18.9	15.4	22.5	28.8	15.1
	1985	14.9	15.9	14.3	14.3	13.3	14.7	16.1	18.0	18.7	15.0	19.8	27.7	14.9
Fertility rate by age group <sup>2</sup> (per 1,000 women)	1986	14.3	15.2	14.2	13.8	12.9	14.7	15.9	17.3	18.4	14.5	20.5	28.9	14.7
	1987	13.7	15.4	13.8	13.5	12.7	14.5	15.7	16.8	17.7	14.3	19.5	29.3	14.4
	1988	13.2	15.4	13.8	13.5	13.0	14.6	15.7	16.5	17.6	14.4	20.6	29.8	14.5
	1989 <sup>3</sup>	13.6	14.8	14.1	13.6	13.6	15.3	16.4	16.5	17.9	14.4	19.7	21.7	15.0
	1978: 15-19	-	44.2	44.2	42.7	17.4	28.1	42.8	54.3	41.9	30.2	60.9	114.2	29.7
	20-24	-	118.9	109.5	118.3	93.9	96.4	110.3	148.2	123.6	104.4	112.5	154.3	103.1
	25-29	-	136.2	119.6	123.1	134.4	122.4	132.3	144.5	135.7	121.5	120.8	162.0	128.1
	30-34	-	76.6	58.6	54.0	68.9	66.4	70.0	67.8	71.0	65.3	80.9	108.0	67.1
	35-39	-	27.1	17.2	14.3	19.6	18.9	22.3	20.3	19.6	18.3	26.7	49.2	19.5
	40-44	-	4.8	3.5	3.5	3.5	3.3	4.8	4.7	3.9	3.1	4.0	17.0	3.6



Table A3. FERTILITY - Concluded

	Year	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon	N.W.T.	Can.
	1988: 15-19	-	29.5	30.0	23.3	16.4	20.1	38.3	43.9	34.4	23.2	43.0	136.5	23.7
	20-24	-	97.2	87.1	89.4	77.3	75.2	98.7	122.4	100.2	85.8	118.6	178.5	83.4
	25-29	-	138.2	114.9	120.6	119.4	124.5	132.8	144.9	134.3	123.8	135.3	152.4	124.9
	30-34	-	79.4	67.5	63.6	64.8	85.5	81.3	77.9	85.7	83.2	97.6	107.4	78.0
	35-39	-	26.3	21.0	17.6	18.7	28.9	25.7	22.7	27.1	29.1	32.1	38.2	25.1
	40-44	-	2.1	2.6	2.9	2.9	3.9	4.3	2.9	4.2	4.2	4.1	15.5	3.6
Fertility rate by birth order (per 1,000 women ages 15-44) <sup>2</sup>	1978: Order 1	-	26.9	27.0	27.0	25.5	24.5	26.5	29.6	29.2	27.0	32.5	42.4	25.4
	Order 2	-	22.5	20.0	22.2	19.4	19.5	21.4	24.9	22.4	19.0	25.2	26.6	19.5
	Order 3	-	11.2	8.5	9.1	7.2	7.5	9.9	12.1	9.8	7.6	8.6	15.9	7.8
	Order 4+	-	7.7	4.4	4.5	2.8	3.3	6.4	7.9	5.5	3.2	3.9	24.6	3.7
Total fertility rate (women 15-44 years of age) <sup>2</sup>	1988: Order 1	-	24.2	22.9	22.5	23.0	24.0	24.7	24.4	25.5	23.6	30.7	38.1	23.3
	Order 2	-	19.4	18.0	18.1	17.0	19.5	20.3	22.4	22.3	19.5	25.3	29.9	18.8
	Order 3	-	10.4	7.6	7.1	5.6	8.1	10.1	12.7	10.5	8.6	10.3	18.9	7.8
	Order 4+	-	6.1	3.1	2.6	2.0	3.1	6.2	8.0	5.7	3.6	4.5	22.0	3.4
Total fertility rate (women 15-44 years of age) <sup>2</sup>	1978	-	2.1	1.8	1.8	1.7	1.7	1.9	2.2	2.0	1.7	2.0	3.1	1.7
	1979	-	2.0	1.7	1.8	1.7	1.7	1.9	2.3	2.0	1.7	2.1	3.2	1.7
	1980	-	2.0	1.7	1.7	1.7	1.7	1.9	2.2	2.0	1.7	2.0	3.2	1.7
	1981	-	1.9	1.6	1.7	1.6	1.6	1.9	2.1	1.9	1.7	2.1	3.0	1.7
	1982	-	1.9	1.7	1.7	1.5	1.7	1.8	2.2	1.8	1.7	2.0	3.0	1.7
	1983	-	1.8	1.7	1.7	1.5	1.7	1.9	2.1	1.9	1.7	2.2	3.2	1.7
	1984	-	1.9	1.6	1.7	1.5	1.7	1.9	2.1	1.9	1.8	2.2	3.0	1.7
	1985	-	1.9	1.6	1.6	1.5	1.7	1.9	2.1	1.9	1.7	1.9	2.8	1.7
	1986	-	1.9	1.6	1.6	1.4	1.7	1.9	2.1	1.9	1.7	2.0	3.0	1.7
	1987	-	1.9	1.6	1.6	1.4	1.7	1.9	2.0	1.9	1.7	2.0	3.1	1.7
	1988	-	1.9	1.6	1.6	1.5	1.7	1.9	2.1	1.9	1.8	2.2	3.1	1.7

<sup>1</sup> Preliminary data, Vital Statistics, July, 1990.

<sup>2</sup> Calculations done in the Demography Division based on final estimates of the population as of June 1 and from vital statistics.

<sup>3</sup> Preliminary data, Vital Statistics.

Source: Statistics Canada, Vital Statistics, Births and Deaths, Catalogue No. 84-204 (Annual).

Table A4. DIVORCE

	Year	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon	N.W.T.	Can.
Divorces	1978	427	135	1,960	1,153	14,865	20,534	2,187	1,428	6,059	8,265	65	77	57,155
	1979	483	144	2,275	1,223	14,379	21,793	2,152	1,528	6,531	8,826	62	78	59,474
	1980	555	163	2,314	1,326	13,899	22,442	2,282	1,836	7,580	9,464	82	76	62,019
	1981	569	187	2,285	1,334	19,193	21,680	2,399	1,932	8,418	9,533	75	66	67,671
	1982	625	206	2,281	1,663	18,579	23,644	2,392	1,815	8,882	10,165	117	67	70,436
	1983	711	215	2,340	1,942	17,365	23,073	2,642	2,000	8,758	9,348	88	85	68,567
	1984	590	195	2,264	1,427	16,845	21,636	2,611	1,988	8,454	8,988	100	74	65,172
	1985	561	213	2,337	1,360	15,814	20,854	2,314	1,927	8,102	8,330	96	72	61,980
	1986	610	191	2,550	1,700	18,399	28,653	2,917	2,395	9,386	11,176	89	94	78,160
	1987	1,002	246	2,640	1,952	19,315	38,223	3,771	2,751	9,170	11,697	113	105	90,985
Average Duration of Marriage for Divorced Persons	1988	884	260	2,478	1,665	19,825	29,873	2,998	2,463	8,644	10,591	81	110	79,872
	1978	12.5	12.5	12.3	12.6	13.3	12.4	12.0	12.5	10.7	11.8	11.2	11.0	12.4
	1979	12.7	12.0	12.1	12.6	12.9	12.3	11.9	12.4	10.4	11.8	10.8	10.2	12.1
	1980	12.5	13.1	12.0	12.4	12.8	12.3	11.6	12.2	10.3	11.6	11.6	12.0	12.0
	1981	12.4	13.3	12.0	12.8	12.9	12.4	12.0	11.8	10.3	11.6	11.5	9.9	12.1
	1982	12.8	12.8	11.8	12.7	12.7	12.3	12.0	11.9	10.2	11.8	11.4	11.5	12.0
	1983	12.0	13.3	12.0	12.6	12.5	12.5	11.8	11.6	10.3	11.8	11.7	10.7	12.0
	1984	12.6	13.8	12.4	13.5	12.8	12.6	12.1	12.0	10.5	12.5	11.9	10.3	12.4
	1985	12.7	13.6	12.4	13.2	13.1	12.8	11.8	12.2	10.7	12.4	11.3	10.8	12.5
	1986	13.4	14.0	12.4	13.2	13.3	12.7	12.2	12.1	10.5	12.3	10.6	11.6	12.5
	1987	12.7	12.9	12.4	13.2	13.5	12.4	11.9	11.7	10.7	12.1	11.1	10.7	12.4
	1988	13.1	12.8	12.2	13.5	13.3	12.5	11.9	12.2	10.9	12.1	12.2	10.6	12.5

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



Table A5. MORTALITY

	Year	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon	N.W.T.	Can.
Deaths	1978	3,115	994	6,877	5,183	43,552	61,116	8,297	7,749	11,944	19,058	89	205	168,179
	1979	3,136	1,022	6,843	5,172	43,311	61,468	8,217	7,369	12,109	19,204	127	205	168,183
	1980	3,345	1,035	7,004	5,297	43,512	62,746	8,436	7,651	12,710	19,371	128	238	171,473
	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
	1986	3,540	1,121	7,255	5,458	46,892	67,865	8,911	8,061	13,560	21,213	113	235	184,224
	1987	3,629	1,116	7,112	5,408	47,616	68,119	8,710	7,808	13,316	21,814	108	197	184,953
	1988	3,591	1,112	7,412	5,450	47,771	70,679	9,100	8,100	13,894	22,546	136	220	190,011
	1989 <sup>1</sup>	3,679	1,051	7,583	5,442	49,102	71,222	8,889	7,884	13,994	23,075	96	207	192,224
	1978	128	15	149	127	1,126	1,373	225	236	405	472	5	28	4,289
Deaths of infants at less than one year	1979	109	21	148	124	1,040	1,247	211	194	423	434	8	35	3,994
	1980	110	22	135	116	953	1,175	184	193	500	442	9	29	3,868
	1981	98	25	139	114	807	1,073	191	203	452	424	8	28	3,562
	1982	99	15	106	110	800	1,041	146	186	442	423	11	22	3,401
	1983	95	16	116	112	676	1,013	173	180	383	377	10	31	3,182
	1984	79	16	97	81	645	992	144	169	425	378	7	25	3,058
	1985	92	8	98	97	626	961	170	200	352	349	5	24	2,982
	1986	65	13	104	81	604	969	157	157	393	355	12	28	2,938
	1987	59	13	90	67	594	888	142	155	315	359	5	19	2,706
	1988	70	14	79	69	563	910	132	140	347	362	3	16	2,705

See notes at the end of this table.

Table A5. MORTALITY - Concluded

	Year	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon	N.W.T.	Can.
Mortality Rate (per 1,000) <sup>2</sup>	1978	5.5	8.2	8.2	7.5	6.9	7.2	8.0	8.2	6.0	7.5	4.0	4.7	7.2
	1979	5.6	8.4	8.1	7.5	6.8	7.2	8.0	7.7	5.9	7.4	5.7	5.7	7.1
	1980	5.9	8.4	8.3	7.6	6.8	7.3	8.2	8.0	5.9	7.3	5.7	5.3	7.1
	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	6.0	8.0	8.2	7.5	6.7	7.3	8.2	8.4	5.6	7.4	4.9	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	4.9	4.9	7.0
	1984	6.2	8.9	8.0	7.4	6.8	7.3	7.9	7.7	5.4	7.3	4.7	4.7	7.0
	1985	6.2	8.8	8.4	7.4	7.0	7.4	8.2	8.0	5.6	7.4	5.2	4.1	7.2
	1986	6.2	8.9	8.3	7.7	7.2	7.4	8.3	8.0	5.7	7.3	4.8	4.5	7.3
	1987	6.4	8.8	8.1	7.6	7.2	7.4	8.1	7.7	5.6	7.5	4.4	3.8	7.2
Infant Mortality Rate	1988	6.3	8.7	8.4	7.6	7.2	7.5	8.4	8.0	5.8	7.6	5.4	4.2	7.3
	1989 <sup>3</sup>	6.4	8.1	8.6	7.6	7.3	7.4	8.2	7.8	5.8	7.6	3.8	3.9	7.3
	1978	12.2	7.6	11.9	11.8	11.9	11.3	13.7	14.3	11.4	12.7	11.2	23.3	12.0
	1979	10.7	10.9	11.9	11.4	10.5	10.3	13.0	11.4	11.4	11.3	16.0	27.3	10.9
	1980	10.6	11.2	10.9	10.9	9.8	9.5	11.5	11.3	12.6	11.0	18.9	22.3	10.4
	1981	9.7	13.2	11.5	10.9	8.5	8.8	11.9	11.8	10.6	10.2	14.9	21.5	9.6
	1982	10.8	7.8	8.6	10.5	8.8	8.3	9.1	10.5	9.8	9.9	21.0	16.2	9.1
	1983	10.6	8.4	9.4	10.6	7.7	8.0	10.4	10.1	8.4	8.8	18.5	20.8	8.5
	1984	9.2	8.2	7.8	7.8	7.3	7.6	8.6	9.4	9.6	8.6	13.5	17.3	8.1
	1985	10.8	4.0	7.9	9.6	7.2	7.3	9.9	11.0	8.0	8.1	10.8	16.7	8.0
Life Expectancy at Birth	1986	8.0	6.7	8.4	8.3	7.1	7.2	9.2	9.0	9.0	8.5	24.8	18.6	7.9
	1987	7.6	6.6	7.4	7.0	7.1	6.6	8.4	9.1	7.5	8.6	10.5	12.5	7.3
	1988	9.3	9.1	6.5	7.2	6.5	6.6	7.8	8.4	8.3	8.4	5.8	10.3	7.2
	1981 H	72.0	72.8	71.0	71.1	71.1	72.3	72.2	72.4	72.0	72.6	-	-	71.9
	F	78.7	80.5	78.4	79.2	78.7	79.0	78.8	79.6	79.1	79.6	-	-	79.0
	1986 H	72.7	72.6	72.3	72.5	72.0	73.5	73.0	73.7	73.6	74.1	-	-	73.0
	F	79.4	80.4	79.2	80.0	79.4	79.7	79.8	80.5	80.0	80.3	-	-	79.7
	1988 H	73.3	73.3	72.6	72.9	72.5	73.9	73.2	74.0	74.0	74.3	-	-	73.4
	F	79.4	81.0	79.7	80.5	80.0	80.2	80.2	80.9	80.5	80.7	-	-	80.2

<sup>1</sup> Preliminary data, Vital Statistics, 25 July 1990.

<sup>2</sup> Calculations were done in the Demography Division based on final population estimates as of June 1 and on vital statistics.

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



**Table A6. Canadian Population as of January 1989, by Single Years of Age and Sex**

Age	1988		1989	
	Males	Females	Males	Females
0	188,100	179,700	191,500	182,700
1	188,500	180,000	189,200	180,800
2	187,500	178,000	189,300	180,800
3	187,100	177,500	188,400	178,800
4	186,500	177,800	188,100	178,400
5	186,600	177,700	187,500	178,800
6	187,000	178,300	187,600	178,700
7	188,200	179,000	188,000	179,200
8	186,700	177,200	189,200	180,000
9	183,400	174,100	187,800	178,200
10	183,100	174,100	184,400	175,000
11	184,600	175,500	184,100	175,000
12	185,100	175,700	185,600	176,400
13	183,100	174,300	186,000	176,600
14	181,600	172,900	184,100	175,200
15	186,700	176,600	182,500	173,800
16	194,600	184,300	187,600	177,500
17	201,400	191,000	195,500	185,200
18	198,900	188,100	202,200	192,000
19	195,500	186,400	199,800	189,200
20	196,600	189,800	196,500	187,700
21	204,200	198,900	197,700	191,300
22	217,300	213,400	205,400	200,400
23	229,600	226,900	218,400	214,900
24	234,800	233,500	230,800	228,400
25	235,800	236,300	236,000	235,100
26	236,700	237,700	237,100	238,000
27	238,900	239,800	238,000	239,400
28	235,900	237,900	240,300	241,500
29	233,700	236,500	237,300	239,600
30	233,100	236,100	235,100	238,100
31	229,600	232,700	234,500	237,800
32	226,100	229,300	231,000	234,300
33	223,600	227,700	227,400	230,700
34	216,800	221,300	224,700	229,000
35	210,300	213,700	217,700	222,500
36	206,000	208,100	211,200	214,800
37	203,700	205,000	206,800	209,000
38	201,100	202,600	204,400	205,900
39	200,800	202,300	201,700	203,300
40	202,900	203,300	201,300	202,900
41	192,200	192,100	203,300	203,900
42	171,200	170,100	192,500	192,500
43	164,600	163,000	171,300	170,300
44	161,200	160,100	164,600	163,100
45	153,900	153,000	161,200	160,300

See notes at the end of this table.

**Table A6. Canadian Population as of January 1989, by Single Years of Age and Sex - Concluded**

Age	1988		1989	
	Males	Females	Males	Females
46	144,900	144,200	153,800	153,100
47	138,700	138,600	144,800	144,200
48	133,200	132,800	138,500	138,700
49	129,500	128,600	133,000	132,800
50	125,300	124,900	129,200	128,600
51	123,900	124,000	125,000	124,900
52	123,000	123,500	123,500	124,000
53	120,200	120,600	122,500	123,400
54	121,000	121,000	119,600	120,500
55	123,400	123,500	120,300	120,900
56	122,900	123,700	122,600	123,300
57	121,800	124,000	122,000	123,400
58	118,500	121,900	120,800	123,700
59	115,000	120,000	117,300	121,500
60	113,500	120,100	113,700	119,500
61	110,800	119,900	112,100	119,600
62	108,400	120,200	109,300	119,200
63	105,100	118,600	106,700	119,500
64	101,400	116,500	103,300	117,700
65	99,000	115,400	99,500	115,600
66	96,600	114,300	96,900	114,300
67	91,300	109,700	94,300	113,100
68	82,700	100,900	89,000	108,400
69	73,400	91,000	80,400	99,600
70	70,500	88,200	71,000	89,500
71	68,300	86,900	67,900	86,700
72	67,000	86,000	65,500	85,200
73	64,500	84,300	64,100	84,100
74	59,500	79,300	61,500	82,300
75	54,000	73,500	56,500	77,200
76	48,700	68,400	51,100	71,400
77	44,500	64,000	45,700	66,100
78	40,100	58,900	41,500	61,600
79	35,600	54,500	37,100	56,400
80	31,500	50,000	32,700	51,900
81	27,500	45,600	28,800	47,400
82	24,100	41,600	24,900	43,000
83	21,000	37,300	21,600	38,900
84	18,200	33,100	18,600	34,600
85	15,400	28,900	16,000	30,500
86	12,700	25,300	13,400	26,300
87	10,300	22,200	10,900	22,800
88	8,200	18,600	8,700	19,800
89	6,400	15,400	6,800	16,200
90 +	21,200	59,000	21,100	60,700

Source: Statistics Canada, Demography Division, Estimates Section.



## PART II





## INTRODUCTION

Canada and the United States were founded at the same time (Québec City was established in 1608 and New York City<sup>1</sup> was established in 1626) on land already settled by people we now designate as aboriginal groups. The two countries have grown together, drawing increasingly diverse populations to similar geographical settings. History has given distinct institutions, political systems and cultural values to each country. Yet crossings over the 49th parallel have always been voluminous, and national identities have merged into modern standards of behaviour throughout the Western world. In spite of their cultural distinctions, many likenesses have evolved between the two nations. What are the major similarities and differences that characterize the two nations today?

Even if for many reasons the United States now sustains a population ten times the size of Canada's, a succinct comparison of demographic behaviour almost four centuries later is of great interest.

An in-depth analysis is beyond the scope of this publication. The reader will understand that only an inquiry into the most fundamental demographic change and the most striking characteristics can be considered. The larger the population and the more vast the land, the more will diversity prevail over homogeneity. But the use of general demographic measures and statistical indices at the national level does not lend itself to accurate portrayals of any subpopulation. It is nevertheless interesting to see where the differences lie and to note their order of size.

## RECENT EVOLUTION OF THE CANADIAN AND AMERICAN POPULATIONS

### Racial Composition

The American population had grown to about 76 million persons by the turn of the twentieth century (Table 1). Non-white<sup>2</sup> persons accounted for 12.1% of this count, and among them, black persons accounted for the great majority (87%). These proportions had hardly changed by the end of World War II, fifty years later. The population had almost doubled to 151,100,000,

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<sup>1</sup> It was then known as New Amsterdam.

<sup>2</sup> Individuals may be classified by ethnicity, place of birth, language or any other criteria needed for analysis. The demographic behaviour of racial subgroups has never been systematically measured in Canada. The United States, by contrast, has always calculated and published demographic numbers, rates and indices for at least three subpopulations in their society: white persons, black persons, and the more general category of "non-white" persons. The Canadian population is compared with the white American population on the basis of this classification. Wherever possible, a comparison between the Canadian population and the American white population is performed.

**Table 1. Growth of the Canadian Population and the American Population by Race, 1900-1988**

Year	United States							Canada
	Whites	%	Blacks	%	Others	%	Total	
1900	66,809,000	87.9	8,835,400	11.6	351,000	0.5	75,995,000	5,301,000
1910	81,732,000	88.9	9,828,000	10.7	413,000	0.4	91,977,000	6,988,000
1920	94,821,000	89.7	10,463,000	9.9	427,000	0.4	105,711,000	8,556,000
1930	110,287,000	89.8	11,891,000	9.7	597,000	0.5	122,775,000	10,208,000
1940	118,215,000	90.0	12,566,000	9.6	589,000	0.4	131,369,000	11,381,000
1950	134,942,000	89.5	15,042,000	10.0	713,000	0.5	150,697,000	13,712,000
1960	158,455,000	88.8	18,860,000	10.6	1,149,000	0.6	178,464,000	17,870,000
1970	177,749,000	87.5	22,580,000	11.1	2,883,000	1.4	203,212,000	21,297,000
1980	195,571,000	85.9	26,903,000	11.8	5,283,000	2.3	227,757,000	24,043,000
1988	206,187,000	84.5	29,856,000	12.2	7,872,000	3.2	243,915,000	25,909,000

Source: United States: U.S. Department of Commerce, *Historical Statistics of the United States*.  
Canada: Statistics Canada, *Historical Statistics of Canada*.

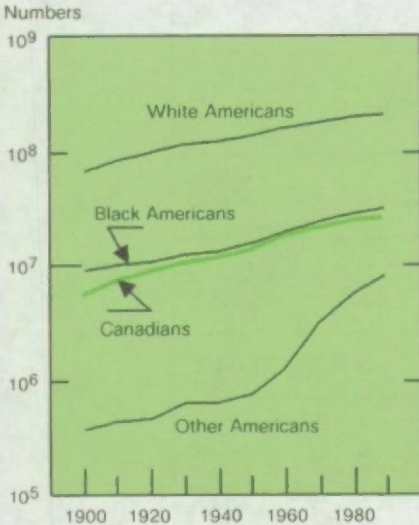
but non-white persons still accounted for 10.5%, and of them, black persons accounted for 89%. Only recently have these population percentages begun to shift. From the United States of 203 million people in 1970, to the United States of 243 million people in 1987, the non-white proportion increased from 12.5% of the population to 15.4%. Only 80% of non-white persons in 1987 were black, while the proportion accounted for by other non-white races had grown. By 1988, 3.2% of the U.S. population was made up of persons not classified as either black or white; this percentage translates to about 7,900,000 persons.

Graph I summarizes and compares the population growth of Canada and the United States since the beginning of the century. The most remarkable feature is the dissimilarity in the pace of average annual growth over the long run between the Canadian population (1.82 per 1,000) and the American white population (1.29 per 1,000). Another distinct feature is the rapid development of populations of "other races" after 1960.

The American population increased by almost 39 million persons, at a slower average annual growth rate of 1.01 per 1,000 between 1970 and 1987 (Table 2). This average has not varied extensively; the largest swing was from 1.28 in 1970 to 0.92 in 1973. Natural increase represents the most important part of this population growth, as shown in Graph 2. The first years of the 1970s were marked by a brief burst in the number of births, which temporarily lifted natural increase. Another increase in the second part of the 1980s represents the "baby-boom echo" reinforced by the postponement of childbearing among certain cohorts. The small increases in net migration for certain years reflect periods when large groups of refugees were accepted into the U.S..



Chart 1  
Population Growth, Canada and  
United States, 1900-1988



Source: *Historical Statistics of the United States and Statistics Canada, Decennial Censuses.*

Disaggregation of the three races, unequally weighted in the total U.S. population, unmasks essential differences in their demographic behaviour. Even if all three have followed the same direction in fertility, mortality, and migration trends, they have done so at their own levels and at their own pace (Table 2). The white population increased at an average rate of 8.2 per 1,000 between 1970 and 1987; the black population increased at an average rate of 16 per 1,000; and the population of other races increased at an average rate of 58.6 per 1,000. The higher rate of black relative to white population growth stemmed mainly from natural increase. Even if natural increase was higher among the other races than among blacks, immigration also boosted their growth rate. The immigration rate among the other races was up to six times the level for whites.

Natural growth of the Canadian population has followed in the path of the U.S. since the war years, but has been, for the most part, stronger (Graph 2). The baby-boom in Canada coincided exactly with the baby-boom in the U.S. (all races) but birth rates were somewhat higher in Canada. The Canadian birth rate declined in the 1960s more sharply than the U.S. rate, such that by 1968, the rates were at par. Since the end of the 1970s, however, the U.S. rate has overshoot the Canadian rate by a small margin. The nuances underlying these shifts will be elaborated in the discussion to follow.

The mortality rate has been higher in the United States than in Canada in recent years. This does not necessarily mean that U.S. mortality, per se, is higher, because age structure plays a part in the construction of this index.

## Age Structure

Viewed globally, the American and Canadian populations present approximately the same level of aging (Graph 3 and Table 3). The Canadian population appears to be slightly younger because the proportion of aged persons is lower. Thus Canada has, for the time being, a lower level of demographic



Table 2. Summary Demographic Indicators for Canada and the U.S. by Race, 1970-1987

Year	United States													
	Total							Whites						
	Population as of January 1 <sup>1</sup>	Total Growth <sup>1</sup>	Natural Increase <sup>1</sup>	Immi- gration <sup>1</sup>	Total Growth Rate (per 1000)	Rate of Natural Increase (per 1000)	Rate of Immi- gration (per 1000)	Population as of January 1 <sup>1</sup>	Total Growth <sup>1</sup>	Natural Increase <sup>1</sup>	Immi- gration <sup>1</sup>	Total Growth Rate (per 1000)	Rate of Natural Increase (per 1000)	Rate of Immi- gration (per 1000)
1970	203,849	2,617	1,812	438	12.8	8.8	2.1	178,692	2,050	1,408	327	11.4	7.8	1.8
1971	206,466	2,451	1,626	387	11.8	7.8	1.9	180,743	1,861	1,228	255	10.2	6.8	1.4
1972	208,917	2,068	1,293	325	9.9	6.2	1.5	182,603	1,515	933	199	8.3	5.1	1.1
1973	210,985	1,947	1,163	331	9.2	5.5	1.6	184,118	1,396	822	195	7.6	4.4	1.1
1974	212,932	1,999	1,225	316	9.3	5.7	1.5	185,515	1,440	878	175	7.7	4.7	0.9
1975	214,931	2,165	1,251	449	10.0	5.8	2.1	186,955	1,459	891	173	7.8	4.7	0.9
1976	217,095	2,084	1,258	353	9.6	5.8	1.6	188,413	1,478	892	184	7.8	4.7	1.0
1977	219,179	2,298	1,426	394	10.4	6.5	1.8	189,891	1,657	1,027	223	8.7	5.4	1.2
1978	221,477	2,388	1,405	508	10.7	6.3	2.3	191,549	1,698	991	295	8.8	5.2	1.5
1979	223,865	2,586	1,580	540	11.5	7.0	2.4	193,247	1,587	1,132	271	8.2	5.8	1.4
1980	226,451	2,582	1,622	845	11.3	7.1	3.7	194,834	1,580	1,160	431	8.1	5.9	2.2
1981	229,033	2,371	1,651	718	10.3	7.2	3.1	196,414	1,554	1,177	374	7.9	6.0	1.9
1982	231,405	2,332	1,705	626	10.0	7.3	2.7	197,967	1,548	1,213	334	7.8	6.1	1.7
1983	233,736	2,224	1,619	605	9.5	6.9	2.6	199,515	1,473	1,138	334	7.4	5.7	1.7
1984	235,961	2,246	1,629	615	9.5	6.9	2.6	200,988	1,476	1,141	334	7.3	5.7	1.7
1985	238,207	2,316	1,667	648	9.7	7.0	2.7	202,464	1,521	1,167	352	7.5	5.7	1.7
1986	240,523	2,219	1,594	625	9.2	6.6	2.6	203,985	1,444	1,097	346	7.1	5.4	1.7
1987	242,742	(ND)	(ND)	(ND)	(ND)	(ND)	(ND)	205,429	(ND)	(ND)	(ND)	(ND)	(ND)	(ND)

See notes at end of this table.

Tableau 2. Summary Demographic Indicators for Canada and the U.S. by Race, 1970-1987 - Continued

Year	United States													
	Blacks							Other Races						
	Population as of January 1 <sup>1</sup>	Total Growth <sup>1</sup>	Natural Increase <sup>1</sup>	Immi- gration <sup>1</sup>	Total Growth Rate (per 1000)	Rate of Natural Increase (per 1000)	Rate of Immi- gration (per 1000)	Population as of January 1 <sup>1</sup>	Total Growth <sup>1</sup>	Natural Increase <sup>1</sup>	Immi- gration <sup>1</sup>	Total Growth Rate (per 1000)	Rate of Natural Increase (per 1000)	Rate of Immi- gration (per 1000)
1970	22,617	424	349	39	18.6	15.3	1.7	2540	142	55	72	54.4	21.0	27.6
1971	23,040	426	340	42	18.3	14.7	1.8	2683	164	58	89	59.3	21.0	32.2
1972	23,467	388	303	35	16.4	12.8	1.5	2846	165	57	91	56.3	19.5	31.1
1973	23,854	373	282	38	15.5	11.8	1.6	3013	178	59	99	57.4	19.0	31.9
1974	24,228	374	284	39	15.3	11.6	1.6	3189	185	63	103	56.4	19.2	31.4
1975	24,602	382	294	38	15.4	11.8	1.5	3374	324	66	238	91.6	18.7	67.3
1976	24,983	384	295	42	15.3	11.7	1.7	3699	221	71	127	58.0	18.6	33.3
1977	25,367	417	324	48	16.3	12.7	1.9	3920	224	76	123	55.6	18.8	30.5
1978	25,784	429	330	61	16.5	12.7	2.3	4144	260	84	152	60.8	19.7	35.6
1979	26,213	467	357	54	17.7	13.5	2.1	4405	532	91	215	113.9	19.5	46.0
1980	26,680	452	356	75	16.8	13.2	2.8	4937	550	106	339	105.5	20.3	65.0
1981	27,132	428	359	69	15.7	13.1	2.5	5487	390	115	275	68.6	20.2	48.4
1982	27,560	424	366	58	15.3	13.2	2.1	5877	360	127	234	59.4	21.0	38.6
1983	27,985	407	353	54	14.4	12.5	1.9	6236	345	128	217	53.8	20.0	33.9
1984	28,391	410	357	54	14.4	12.5	1.9	6582	359	131	227	53.1	19.4	33.6
1985	28,802	422	365	58	14.6	12.6	2.0	6940	373	135	237	52.3	18.9	33.3
1986	29,224	420	363	57	14.3	12.3	1.9	7313	355	134	221	47.4	17.9	29.5
1987	29,644	(ND)	(ND)	(ND)	(ND)	(ND)	(ND)	7669	(ND)	(ND)	(ND)	(ND)	(ND)	(ND)

See notes at the end of this table.



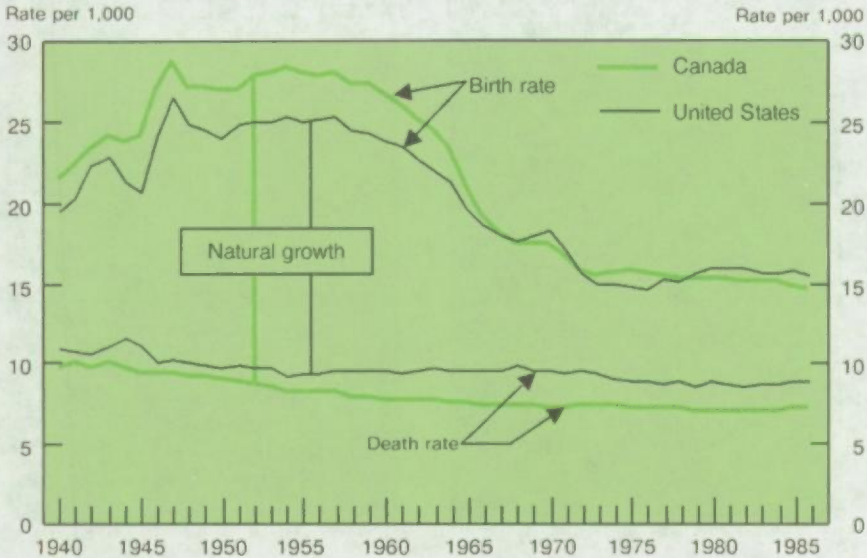
Table 2. Summary Demographic Indicators for Canada and the U.S. by Race, 1970-1987 - Concluded

Year	Canada (Total)						
	Population as of January 1 <sup>1</sup>	Total Growth <sup>1</sup>	Natural Increase <sup>1</sup>	Immi- gration <sup>1</sup>	Total Growth Rate (per 1000)	Rate of Natural Increase (per 1000)	Rate of Immi- gration (per 1000)
1970	21,182	283	216	148	13.3	10.1	6.9
1971	21,465	245	205	122	11.3	9.5	5.7
1972	21,710	233	185	122	10.7	8.5	5.6
1973	21,942	293	180	184	13.3	8.1	8.3
1974	22,235	333	184	219	14.9	8.2	9.8
1975	22,569	315	193	188	13.9	8.5	8.3
1976	22,884	275	193	149	11.9	8.4	6.5
1977	23,158	259	194	115	11.1	8.3	4.9
1978	23,417	227	191	86	9.6	8.1	3.7
1979	23,645	267	198	112	11.2	8.3	4.7
1980	23,912	309	199	143	12.8	8.3	5.9
1981	24,221	262	200	129	10.8	8.2	5.3
1982	24,483	222	199	121	9.0	8.1	4.9
1983	24,706	190	199	89	7.7	8.0	3.6
1984	24,896	195	201	88	7.8	8.0	3.5
1985	25,090	184	194	84	7.3	7.7	3.3
1986	25,274	219	189	99	8.6	7.4	3.9
1987	25,493	293	(ND)	(ND)	(ND)	(ND)	(ND)

<sup>1</sup> In thousands.

**Source:** United States: U.S. Department of Commerce, *United States Population Estimates and Components of Change: 1970 to 1986*, Series P-25, no. 1006.  
Canada: Data from the Population Estimates Section and from the Canadian Centre for Health Information. Calculations done in the Demography Division, Statistics Canada.

Chart 2  
Natural Growth Components, United States and Canada, 1940-1986



Sources: Statistics Canada, Vital Statistics.  
U.S. Monthly Vital Statistics Report, Vol. 38, no 12, April 1990.

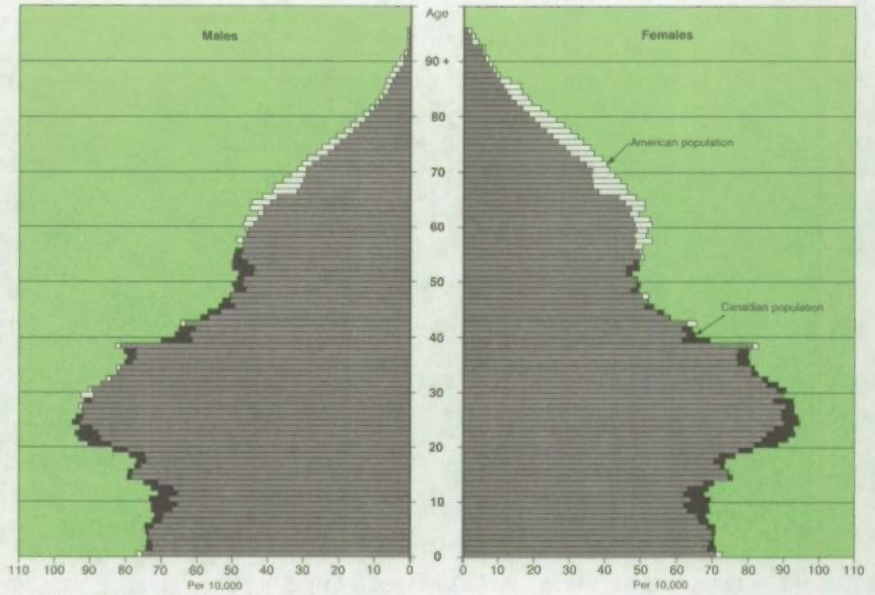
dependence (a dependency ratio of 47.2 compared with 50.9 for the U.S.). But when the American population is compared by race, the origin of this difference becomes clear (Table 3). The white American population has relatively fewer young persons, fewer adults and appreciably more elderly persons. But the non-white population is much younger (Graph 4). Among them, the non-black group has an age structure that bears the mark of newly-immigrated populations: a smaller proportion of elderly persons and a few more adults. These observations reinforce the remarks made earlier on the growth differentials for the three racial subpopulations.

## INTERNATIONAL MIGRATION

Both Canada and the United States were originally countries of settlement. From the time of the first settlers and throughout the eighteenth, nineteenth and twentieth centuries, both have continued to import large groups of immigrants which were added to the naturally expanding population. As in other demographic domains, there are similarities and differences in the quantities, origin and other characteristics of these new American and Canadian

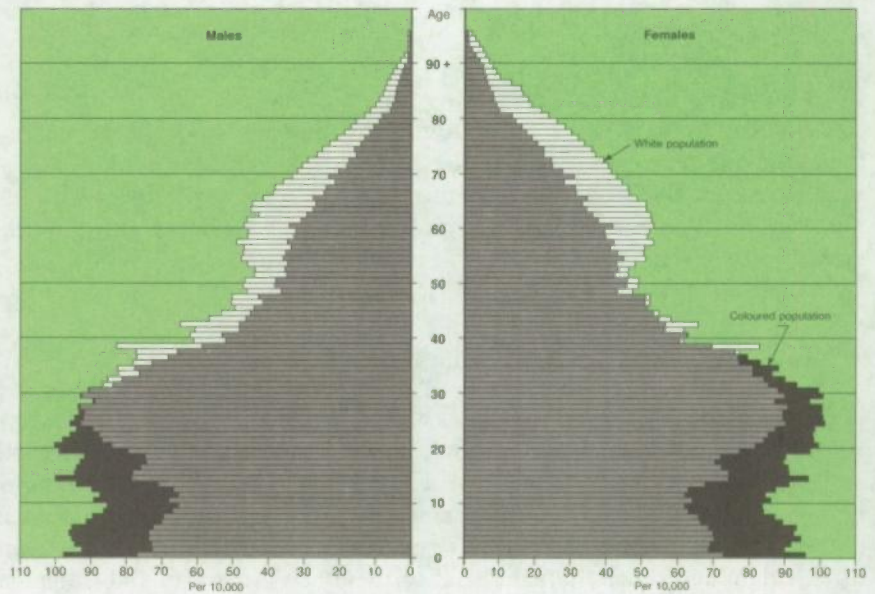


Chart 3  
Age Pyramids for the Canadian and American White Population, 1985



Sources: Statistics Canada, Demography Division, Population Estimates Section  
U.S. Department of Commerce: Estimates of Population of the United States by Age and Race: 1980-1985

Chart 4  
Age Pyramids for the White and Coloured Populations  
United States, 1985



Source: U.S. Department of Commerce: Estimates of Population of the United States, by Age, Sex and Race: 1980-1985

Table 3. Age Structure of the Canadian Population and the American Population by Race, 1987

Age	United States								Canada	
	White Population				Black Population		Other Races		Total	
	Number <sup>1</sup>		%		Number <sup>1</sup>		%		Number <sup>1</sup>	
0-14	42,240	20.5	8,062	27.0	2,095	26.6	52,398	21.5	5,422	21.2
15-64	137,083	66.5	19,346	64.8	5,254	66.8	161,681	66.3	17,403	67.9
65 +	26,864	13.0	2,448	8.2	523	6.6	29,836	12.2	2,793	10.9
Total	206,187	100.0	29,856	100.0	7,872	100.0	243,915	100.0	25,622	100.0
Dependency Ratio	0.504		0.543		0.498		0.509		0.472	

<sup>1</sup> In thousands.

Source: United States: U.S. Department of Commerce *United States Population Estimates by Age, Sex and Race: 1980 to 1987*, Series P-25.

Canada: Statistics Canada, *Quarterly Population Estimates*, Estimates Section, Demography Division.



citizens. The major historical events of the twentieth century (the two World Wars and the Depression of the 1930s) have had repercussions of the same magnitude on both countries.

### **The Major Historical Events**

World War I was the first event to break strong tides of immigration into Canada and the United States. The U.S. received 5,735,000 immigrants between 1911 and 1920, but 72% arrived before 1915. Similarly, 65% of the 1,712,254 immigrants welcomed to Canada during this decade had already arrived by 1914. International immigration to North America never recovered the intensity of these years before World War I.

Immigration flows were also weak during the Depression and World War II. Some 310,000 immigrants entered the United States annually at the close of the 1920s, but only about 23,000 entered at the depth of the Depression in 1933. Canada received about 165,000 immigrants annually before the Depression, but only about 11,000 in 1935. Immigration remained listless throughout World War II. Recorded admissions reached all-time lows of 23,000 annual entries for the United States, and 7,500 annual entries for Canada.

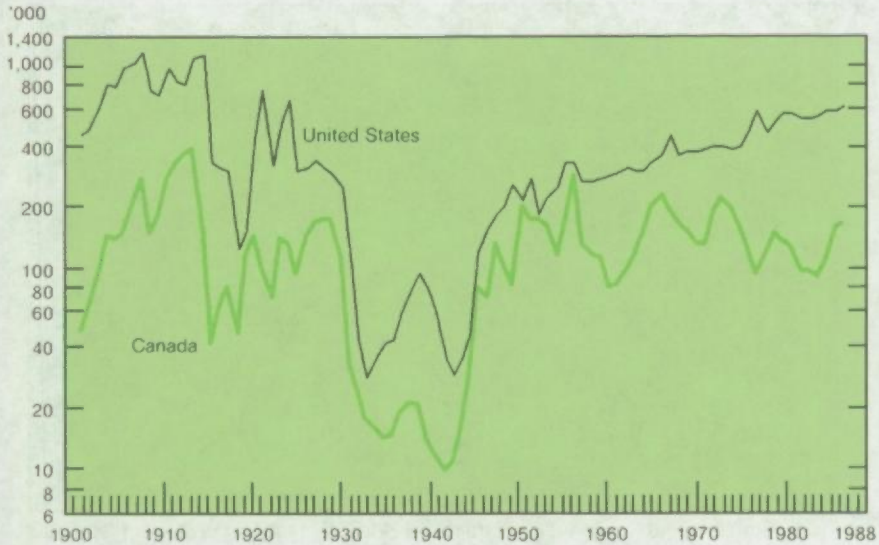
Immigrants entered North America in increasingly larger streams during the calm following the chaotic war years. Flows into the United States went from about 200,000 annually at the close of the war to gradually reach the present level of 650,000. Post-war immigration into Canada was more haphazard. It ebbed and flowed to yield an annual average of 130,000 entrants for the entire period up the present (Graph 5).

### **Immigration Policy**

Immigration has many facets, even in a strictly demographic framework. The relationship between the number of immigrants and the receiving population can be interpreted as the country's ability to absorb newcomers, whether the number of immigrants stems from specific immigration policies or from the more simple laws of supply and demand.

In this perspective, Canada has been considerably more accepting of immigrants than has the United States at least since the beginning of this Century (Graph 6). The maximum ratio of immigrants to population was achieved in the U.S. in 1907 at 14.8 per 1,000. The maximum in Canada was reached in 1913 at 52.5 per 1,000. Even when ratios dropped during the Depression and during World War II, the Canadian ratio remained higher, at 0.6 per 1,000 compared with 0.2 for the U.S.

Chart 5  
Immigrants to Canada and the United States, 1900-1988



Sources: *Statistical Yearbook of the Immigration and Naturalization Service*, U.S. Department of Justice, 1988, and *Immigration Statistics, Employment and Immigration Canada*, 1988.

American immigration flows have increased at a more or less constant rate since 1921; they display a regular curve quite unlike the haphazard shape of the Canadian curve. These patterns, in part, reflect differences in immigration policy. For most of the time since 1921, American laws have been based on the quota system, which pegs the number of admissions to the number of citizens from the same country already on American soil. Canada has at times in the past limited access to certain categories of immigrants, but it has never fixed quotas. Instead, it has applied regulations that express either an “open-door” or a “closed-door” approach, which functions according to the state of the economy. Currently, immigrants are welcome. **If over recent years the U.S. had admitted immigrants at the 1988 Canadian rate, it would have accepted 1.5 million new citizens annually, or twice as many as actually recorded.**

## Immigration Waves

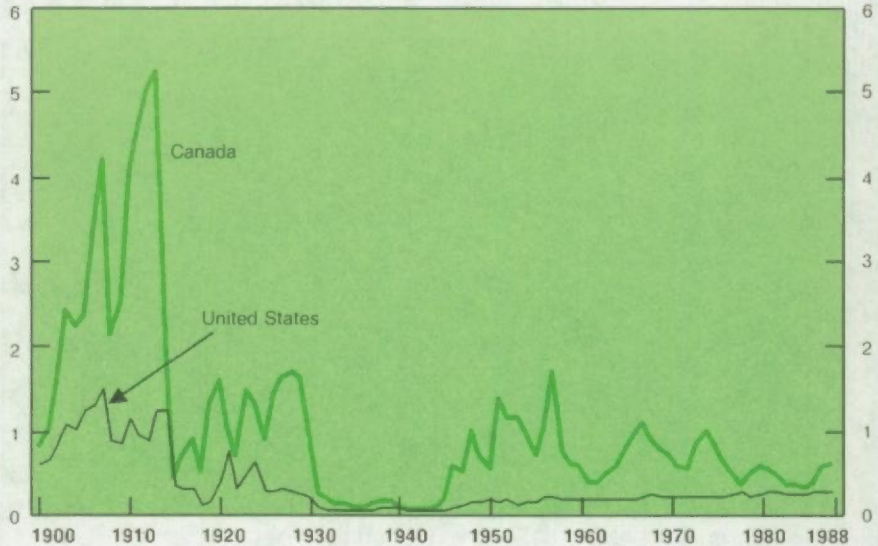
### In the United States

The years of World War I, the Depression and World War II divide the modern history of North American immigration into two distinct periods. The first period represents the hegemony of Europe. At least 75% of immigrants



Chart 6

**The Immigrant Population as a Percentage of the Total Population, Canada and the United States, 1900-1988**



Sources: *Employment and Immigration Canada, Immigration Statistics.*  
*Statistical Year Book of the Immigration and Naturalization Service 1988,*  
*U.S. Department of Justice, August 1989.*

to the United States originated from Europe every year during this period, with proportions as high as 96% between the years 1881 and 1900. Remaining immigrants came primarily from other countries of the American continent, such as Canada and the Caribbean. Almost 3 million immigrants left Canada for the United States between 1861 and the Depression.

Immigration from Europe has itself proceeded in waves (Table 4). The first was the German wave which lasted from 1851 until World War I. Partly because Germany had no colonies, Germans in search of homes abroad immigrated to the United States in numbers that totalled 5.5 million. Another half a million immigrated to the U.S. between World War I and the Depression. These departures made German immigration highly influential, even more so than immigration from the United Kingdom, which was itself substantial, at 3.5 million before World War I, and about 600,000 between World War I and the Depression. Three other countries were prominent contributors to U.S. immigration, although to a lesser extent. Russia contributed an impressive 3.5 million immigrants; Scandinavia contributed 1.5 million (another 350,000 came after the War); and Italy after its unification contributed 1.5 million.



Table 4. Immigrants to the United States from Selected Regions and for Selected Periods, 1981-1980

Region or Country of Last Residence	1841- 1850	1851- 1860	1861- 1870	1871- 1880	1881- 1890	1891- 1900	1901- 1910	1911- 1920	1921- 1930	1931- 1940	1941- 1950	1951- 1960	1961- 1970	1971- 1980
Europe	434,626	951,667	787,468	718,182	1,452,970	505,152	341,498		412,202		226,578	477,765		
Germany						651,893	2,045,877	1,109,524						
Italy														
Norway and														
Sweden					568,362	321,281	440,039							
Russia					213,282	505,290	1,597,306	921,201						
United Kingdom					807,357	271,538	525,950	341,408	339,570			202,824	213,822	1,588,178
Asia			606,896	548,043				247,236					427,642	124,326
China				123,201										
America														
Canada and														
Newfoundland				383,640	393,304			742,185	924,515				470,213	741,126
West Indies													208,536	264,863
Cuba														

Source: *Statistical Yearbook of the Immigration and Naturalization Service 1988*, U.S. Department of Justice, Immigration and Naturalization Service, August 1989.

Table 5. Percentage Distribution of Immigrants by Region/Country of Origin, U.S., 1978-1988

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1978-1988 Average
Europe	12.2	13.2	13.6	11.2	11.6	10.5	11.8	11.1	10.4	10.2	10.1	65,100
United Kingdom	2.4	3.0	2.9	2.5	2.4	2.6	2.6	2.4	2.3	2.2	2.1	14,300
Asia	41.5	41.1	44.5	44.3	52.7	49.6	47.1	46.4	44.6	42.8	41.1	258,200
Philippines	6.2	9.0	8.0	7.3	7.6	7.4	7.9	8.4	8.7	8.3	7.9	45,000
Africa	1.9	2.8	2.6	2.5	2.4	2.7	2.9	3.0	2.9	2.9	2.9	15,400
Oceania	0.7	1.0	0.7	0.7	0.6	0.6	0.7	0.7	0.6	0.7	0.6	4,000
North America	36.7	34.2	31.1	35.3	26.6	30.1	30.7	31.9	34.5	36.0	38.9	190,600
Canada	2.8	3.0	2.6	1.9	1.8	2.0	2.0	2.0	1.8	2.0	1.8	12,226
Mexico	15.4	11.3	10.7	17.0	9.4	10.6	10.6	10.7	11.1	12.0	14.8	69,600
Caribbean	15.2	16.1	13.8	12.3	11.3	13.1	13.7	14.6	16.9	17.1	17.5	84,000
South America	6.9	7.7	7.5	6.0	6.0	6.4	6.9	6.9	7.0	7.4	6.4	39,100
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	573,000

Source: U.S. Department of Justice, 1988 *Statistical Yearbook of the Immigration and Naturalization Service*.



The role of Europe in U.S. immigration began to fade after World War II. About 53% of immigrants who came during the 1950s were from Europe, but only 10% originated from that continent during the 1980s (Table 5). Most immigrants to the U.S. now originate from Asia, especially since 1971, and from the Caribbean, South America, and Central America. For the 1981-88 period, Asia provided 45% of the total immigrant population, while the Caribbean provided 14%, South America 7%, and Central America 5%. Mexico alone supplied 12% of all legal immigrants to the U.S. during this period.

## In Canada

British origins have always been a more important component of Canadian immigration flows than American ones. They represented between 35% and 45% of all persons who immigrated to Canada before 1925. This level then began to decline. Europe, however, remained the principal, if not the only, supplier of new Canadians from 1925 until World War II. It was largely the Germans, Austrians, Ukrainians, Hungarians and other Central Europeans, rather than the Mediterraneans, that came to Canada in those years. But immigration started to diversify immediately after the war. Large waves of Italians, Germans, Hungarians, Dutch and Portuguese arrived successively (Table 6).

European immigrants in Canada have become fewer in both number and proportion since World War II. Europe plays a smaller role in the latter immigration periods of both Canada and the U.S., but it still holds more weight

**Table 6. Immigrants to Canada by Selected Ethnic Origins and for Selected Periods, 1900-1961**

	1900-1906	1906-1915	1916-1925	1926-1935	1946-1955	1956-1961
Total	837,000	2,278,000	916,000	818,000	1,222,000	855,000
British	327,000	926,000	402,000	274,000	368,000	244,000
Hebrew	24,000		31,000	22,000		
Polish	42,000		18,000	35,000		18,000
Russian	16,000	82,000				
Austrian		26,000				
Italian		92,000	21,000		135,000	151,000
German		28,000		65,000	159,000	98,000
Swedish		18,000				
Ukranian		59,000			34,000	
Czechoslovakian				24,000		
Hungarian	28,000			40,000		
Yugoslavian				16,000		21,000
Dutch					115,000	41,000
Portuguse						21,000

Source: *Immigration Statistics 1896-1961*, Employment and Immigration Canada.

in Canada. Asia has become the major supplier of immigrants to Canada, but while South America, the Caribbean and Central America have also emerged as important origins, they have contributed to a lesser extent than in the U.S. (see Part I). The role of Mexico in Canadian immigration is, for the time being, almost non-existent. Large contingents of immigrants came to Canada from the U.S., especially throughout the first half of the twentieth century (more than a third of all entries up until the Depression).

### **Where Do Immigrants Settle?**

Within the economic and political structure of contemporary Canada, which now supports a population of about 26 million inhabitants, there are three major centres of attraction for international immigrants. Ontario is chosen by about 50% of newcomers each year, while British Columbia and Quebec absorb 15% each. The other provinces share the remaining 20% of newcomers. This pattern of settlement has remained practically unchanged for the last thirty years. With the arrival of more Asians, however, British Columbia has become more important in the destination intentions of immigrants (Table 7).

The U.S. shows an identical attraction pattern, but for a country with ten times the population, the centres are proportionately fewer. According to 1988 data, the four states of California, New York, Florida and Texas claim almost two-thirds (64%) of new arrivals. The first two states become home to nearly half of all immigrants (46.9%) and California alone absorbs 30%. The remaining 47 states share 36% of new arrivals.

Data from the last twelve years show two important trends. The first is the fading allure of the American Midwest. This region attracted more than 14% of all immigrants annually before 1976. The proportion had fallen to less than 10% by 1988. The State of Illinois itself was not immune. Its share of immigrants fell from 7.1% in 1976 to 4.4% in 1988. The popularity of the Northeastern region is also fading. In 1976, 36% of new Americans settled in one of this region's nine states, and of this number, New York alone attracted two-thirds. But the region attracted only 28% of newcomers in 1988, and New York welcomed only 17%.

British Columbia in Canada and California in the United States are gateways from the Pacific and Asia. They have come to represent the North American ideal for foreigners who wish to immigrate to the continent.

### **The Foreign-Born Population**

As a natural consequence of the flux in the intensity and origin of immigration waves, Canada and the United States reveal distinct ethnocultural compositions. Immigration to the U.S. began with the forced immigration of the slave days. The geographic proximity of Central America, South America and



Table 7. Percentage Distribution of Immigrants by Intended Destination, Canada and the U.S., 1976-1988

United States	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
North East New York	36.1 22.1	34.2 19.7	30.2 17.0	34.3 20.9	.. ..	.. ..	26.3 15.1	29.8 17.8	31.6 20.0	30.6 18.6	30.7 18.5	31.2 19.2	29.0 17.2
Midwest Illinois	14.4 7.1	12.6 5.5	13.6 5.7	11.5 4.3	.. ..	.. ..	14.2 6.0	12.1 5.0	11.2 5.0	10.9 4.7	10.2 4.4	10.0 4.4	9.7 4.4
South Texas	19.9 6.1	24.8 4.7	24.0 7.9	20.7 6.8	.. ..	.. ..	21.5 8.5	23.9 8.9	23.2 7.9	23.1 7.8	23.5 7.1	24.8 7.1	25.0 6.8
West California	29.6 22.8	28.3 21.9	32.2 24.7	33.4 26.4	.. ..	.. ..	38.0 29.0	34.2 25.8	34.0 26.2	35.3 27.7	35.6 28.4	34.0 27.1	36.3 29.7
Canada	1956	1961	1971	1981	1982	1983	1984	1985	1986	1987	1988		
Ontario	55.0	50.9	52.8	42.7	43.8	44.9	47.1	48.3	50.0	55.8	55.1		
Quebec	19.0	23.6	15.8	16.4	17.6	18.4	16.6	17.7	19.6	17.6	15.9		
British Columbia	10.8	10.2	15.5	17.1	15.7	16.2	15.0	14.5	12.7	12.4	14.9		

Source: United States: U.S. Department of Justice, *Statistical Yearbook of the Immigration and Naturalization Service*, annual.  
Canada: Employment and Immigration Canada, annual statistics.



the Caribbean lent territorial continuity to patterns of immigrant settlement. For this reason, the ethnocultural composition of the U.S. is entirely different from that of Canada's. This topic will not be discussed as such, although present differences can be observed from 1980 Census data on place of birth (Table 8).

**Table 8. Foreign-born Population by Place of Birth, Canada (1981) and the United States (1980)**

Place of Birth	United States	%	Canada	%
France	120,215	0.9	56,175	1.5
Germany	849,384	6.0	198,215	5.1
Italy	831,922	5.9	386,505	10.0
Netherlands	103,136	0.7	138,760	3.6
Poland	418,128	3.0	148,940	3.9
Portugal	177,437	1.3	139,765	3.6
United Kingdom	669,149	4.8	884,915	22.9
Other Europe	1,574,179	10.9	632,725	16.4
Total Europe	4,743,550	33.7	2,586,000	66.9
India	206,087	1.5	109,660	2.8
Japan	221,794	1.6	11,910	0.3
Korea	289,885	2.1	10,165	0.3
Philippines	501,440	3.6	66,460	1.7
Vietnam	231,120	1.6	50,710	1.3
Other Asia	1,089,451	7.7	294,590	7.6
Total Asia	2,539,777	18.0	543,495	14.1
United States	N/A	-	312,015	8.1
Canada	842,859	6.0	N/A	-
Mexico	2,199,221	15.6	11,310	0.3
West Indies	1,258,363	8.9	174,145	4.5
Other North and Central America	364,460	2.6	6,030	0.2
Total North and Central America	4,664,903	33.1	503,500	13.0
Total South America	561,011	4.0	91,105	2.4
Total Africa	199,723	1.4	102,725	2.7
Other Countries	1,370,942	9.7	40,335	1.0
Total	14,079,906	100.0	3,867,160	100.0

Source: United States: *Detailed Population Characteristics*, 1980 Census of Population, Volume 1, March 1984.  
Canada: *Place of Birth, Citizenship, Period of Immigration*, 1981 Census of Canada, Statistics Canada, February 1981.

About 16% of the population of Canada was foreign born in 1981, whereas in the United States, only 6% of the population was foreign born in 1980. This represents a major difference. But since these proportions are relative to size, the American foreign-born population numbered 14 million people, compared with less than 4 million for the Canadian foreign-born population.

Even though the entire U.S. immigrant population is more than 3.5 times larger than the Canadian one, the European-born population is not even twice as large. The Central American-born population, by contrast, is twenty times larger in the U.S. than in Canada, and the South American-born population is six times as large.

Unsuspected differences emerge among other source countries. Relatively more people born in the United Kingdom and Holland are found in Canada, while twice as many people born in France and Italy are found in the U.S. Almost the same number of Portuguese are found in either country. Considerable differences appear among Asian arrivals, probably because they are a more recent immigration source. There were 19 times as many Japanese persons in the U.S. in 1980 as in Canada in 1981, 28 times as many Koreans, 7.5 times as many Philipinos, and 4.5 times as many Vietnamese.

## MARRIAGES

The marital structure of the Canadian and American populations presents some notable differences (Table 9). It is observed that:

1. There are proportionally more singles below the age of 25 in Canada as in the U.S. This suggests an earlier timing of first marriage among Americans.
2. The proportion of singles at the other end of the life span (above the age of 40) is also higher in Canada than in the U.S. This could indicate that generations born before the War married less frequently in Canada notwithstanding the effect of migration.
3. Even though remarriages are more frequent in the U.S. than in Canada (as will be shown later) the proportion of divorced persons still remains higher there.

Unfortunately, marriage statistics from the vital statistics files are not abundant, so only a few points of comparison are possible, and the indices are not the most desirable.

### Total First Marriage Rate

In both Canada and the United States, the total first marriage rate for both sexes has declined since the beginning of the 1970s. This could indicate a delay



**Table 9. Percentage Distribution of the American and Canadian Populations 18 Years and Over by Marital Status, Showing Age, 1987**

Age	Total	Single		Married		Widowed		Divorced	
		Ameri- cans	Canadi- ans	Ameri- cans	Canadi- ans	Ameri- cans	Canadi- ans	Ameri- cans	Canadi- ans
Males 18 +	100.0	25.3	26.5	65.5	67.7	2.5	2.3	6.7	3.5
18-19	100.0	96.8	98.6	3.1	1.4	-	-	-	-
20-24	100.0	77.7	81.7	20.7	18.0	0.1	-	1.5	0.3
25-29	100.0	42.2	41.4	52.3	56.8	-	0.1	5.4	1.8
30-34	100.0	23.1	20.3	68.8	75.8	0.1	0.1	8.0	3.8
35-39	100.0	12.4	12.0	76.6	82.7	0.2	0.2	10.9	5.1
40-44	100.0	6.9	8.4	81.8	85.4	0.5	0.4	10.8	5.9
45-54	100.0	5.9	7.0	84.1	86.1	1.2	1.0	8.8	5.9
55-64	100.0	5.8	7.2	84.1	85.0	2.9	3.2	7.3	4.6
65-74	100.0	4.7	7.0	81.5	82.0	9.0	8.1	4.8	2.9
75 +	100.0	4.3	7.9	68.8	66.8	23.6	23.7	3.3	1.6
Females 18 +	100.0	18.6	19.9	60.5	64.7	12.1	10.8	8.7	4.8
18-19	100.0	89.8	93.4	9.9	6.6	-	-	0.3	-
20-24	100.0	60.8	62.6	36.0	36.6	0.1	0.1	3.2	0.7
25-29	100.0	28.8	26.7	63.3	70.0	0.3	0.2	7.6	3.1
30-34	100.0	14.6	13.8	73.4	80.0	0.8	0.5	11.2	5.7
35-39	100.0	8.4	9.0	76.7	82.5	1.3	0.9	13.6	7.5
40-44	100.0	6.4	6.8	76.7	82.8	2.4	1.8	14.5	8.6
45-54	100.0	4.5	5.7	76.6	81.7	5.8	4.8	13.1	7.8
55-64	100.0	4.2	5.9	70.1	73.4	16.7	15.3	9.0	5.4
65-74	100.0	4.8	7.4	53.0	54.3	36.7	35.2	5.5	3.1
75 +	100.0	6.4	9.8	23.8	23.5	67.0	65.4	2.7	1.2

Source: United States: U.S. Department of Commerce, *Marital Status and Living Arrangements: March 1987*, Current Population Reports, Series P-20, No. 423.  
 Canada: Unpublished data, Estimates Section, Demography Division, Statistics Canada.

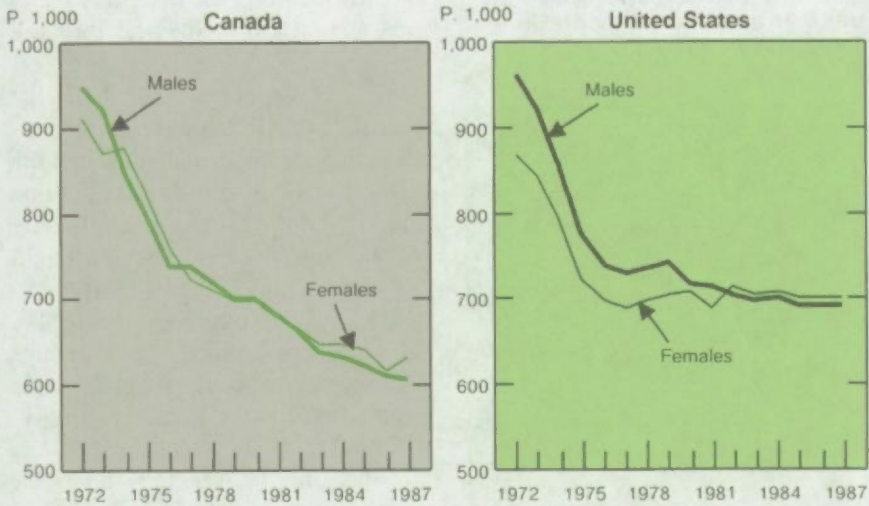
in the timing of first marriage and/or a weaker propensity to marry altogether (Graph 7). The decrease has lasted longer in Canada than in the United States, where the rates seem to have stabilized since 1978. Rates for women decreased by 31% in Canada and by 19% in the U.S. Rates for men decreased by 36% in Canada and by only 28% in the U.S.

The 1986 total first marriage rate is clearly higher, for both men and women, in the U.S.<sup>3</sup> Of the factors that explain this divergence, two work in conjunction. There are higher marriage rates in the Southern states, and to a lesser extent in the Western states, which tend to boost the total American rate. The very low marriage rates in Quebec, on the other hand, work to lower the total Canadian rate.

<sup>3</sup> All races combined.

Chart 7

**Total First Marriage Rate, Canada and United States, 1972-1986**



Sources: Statistics Canada. *Vital Statistics and Demography Division*.  
U.S. *Monthly Vital Statistics Report*, Vol 38 no 12, April 1990.

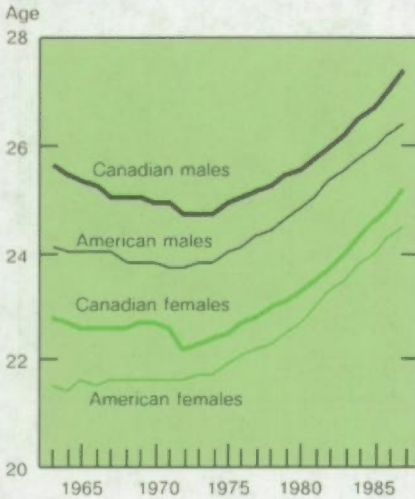
In both countries, the elevation of the total marriage rate of men over women has reversed over the period of observation. The reason probably lies in the changing age structure of the two populations. As children of the baby-boom, and by the habit of marrying men older than themselves, women constituted a larger number of candidates for marriage at the beginning of the period than did men of the same age, who were not yet ready to marry. Since the numerator of the rates (number of marriages) was the same for men and women, and since the denominator for women was larger, the female rates were lower. This made the total rate, which is the sum of rates by age, lower. The progression of the baby-boom generation into the baby-bust era (the end of the observation period) reversed this situation.

### Marital Timing

The average age at first marriage declined in both Canada and the U.S. until about 1973 (Graph 8). It then began to rise at about the same pace. American men and women, according to this measure of central tendency, marry much earlier than do their Canadian counterparts. This point is investigated more closely.



Chart 8  
Mean Age of Bride and Groom at  
First Marriage, Canada and United  
States, 1963-1987



Sources: Statistics Canada, *Vital Statistics*.  
U.S. Monthly Vital Statistics Report,  
Vol 38 no 12, April 1990.

Graph 8 reveals that for both men and women, marriage rates are higher, both at younger ages and at older ages, in the United States than in Canada. Consequently, they are less concentrated in the middle age-range. It is regrettable that the marital behaviour of the subgroups cannot be decomposed, although the 1980 American census offers some information<sup>4</sup>. It shows that only 42.9% of women of Hispanic origin between 20 and 24 years old were still single in 1980, compared with 47.2% of white women in the same group. One could conclude that Hispanic women tend to marry younger. Within the 30-34 and 35-39 age groups, only between 5% and 4%, respectively, of white women were single, compared with 11% and 7% of corresponding Hispanic women. But above age 65, only 5% of Hispanic women were single whereas the proportion among white women reached 6%. It could be concluded

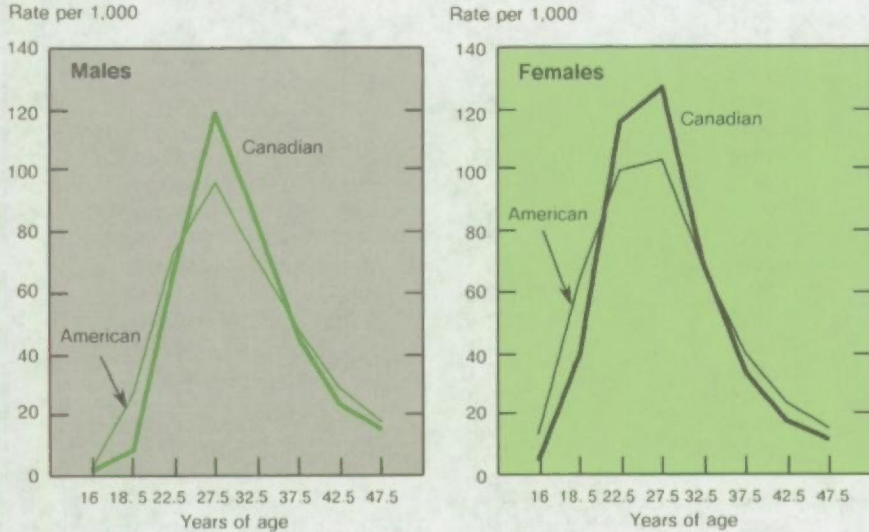
that Hispanic women marry later. The great majority of Hispanic persons are classified in the census as white. Although interesting, this observation does not suffice to explain the rate distribution for the total population, given the wide cultural diversity in a country with almost a quarter of a billion people. A final note is that in either country these figures do not refer to the average age at first marriage, but rather to the average age of the first married. The calculation of the average age of the first married is influenced by the age structure of the population, and would be of little use if both countries did not have similar age structures. Since this is not the case, these differences carry valuable analytical significance.

### Remarriage

Remarriage (in which at least one of the spouses was once married) implies a former state of either widowhood or divorce. Widows have been scarce at the most popular ages of marriage for a long time, so remarriages tend to

<sup>4</sup> The Population of the United States, 1985, Table 4A. Marital Status of the Population by Sex, Race, Spanish Origin, and Age, Single: 1940-1982, p. 157.

Chart 9  
First Marriage Rate by Age and Sex, Canada and  
the United States, 1986



Sources: Statistics Canada, Vital Statistics.  
U.S. Monthly Vital Statistics Report, Vol 38 no 12, April 1990.

be directly related to the level of divorce. The propensity to divorce is higher in the United States than in Canada and, as will be shown later, has been for a long time. Its role in remarriage is therefore also more important. Of 100 marriages in Canada in 1987, 28 involved at least one divorced person. The equivalent figure was 44 for the U.S. A corollary of this finding is the lower proportion of marriages between singles. This proportion went from 84% in 1970 to 67% in 1987 in Canada, and from 69% to 54% in the U.S. (Table 10).

## DIVORCE

The United States has a long tradition of divorce, but in Canada, it was not until the passage of the federal Divorce Law in 1968 that divorce began to take on demographic and social importance. By that time, divorce had already acquired proverbial status in the U.S. It is not easy to describe divorce trends because only a few of the cultural, social and economic characteristics of the couples who separate are collected. We must, therefore, be satisfied with raw measures.



**Table 10. The Proportion of Marriages Between Singles, Canada and the United States, 1970-1987**

Year	Canada	United States
1970	84.1	68.8
1971	83.4	68.2
1972	83.2	67.1
1973	81.9	64.8
1974	80.4	63.1
1975	78.6	60.5
1976	76.9	58.9
1977	76.1	57.8
1978	75.1	57.3
1979	74.3	56.7
1980	73.5	56.5
1981	72.5	54.9
1982	71.9	55.1
1983	71.1	54.8
1984	70.1	55.0
1985	70.3	54.7
1986	70.0	54.4
1987	67.0	54.3

Source: Canada: Vital Statistics, various years.

United States: Monthly Vital Statistics, Vol. 38, No. 12 Supplement, April 3, 1990.

### **The Global Divorce Rate**

The global divorce rate, although imprecise, permits the comparison of divorce levels and their evolution. Apart from the exceptional years 1986 and 1987 (see Part I), divorce in Canada has remained just over half the level in the United States year after year (Table 11). Levels have been stationary with only a slight tendency to drop over the course of recent years. The strong presence of divorce in the U.S. is partly the result of divorce from second or third marriages. Whereas 88% of the divorces in Canada in 1985 involved, for both men and women, a first marriage, the American percentages were only about 73% (divorces from second marriages represented 21% and divorces from higher-order marriages, 6%). For this reason, the median duration of marriage at the time of divorce is much longer in Canada (at 10.9 years in 1985 compared with 6.8 years in the U.S.).

Probably subnational studies have analyzed the life cycles of successive generations to see the points and ages at which marriage and divorce play out their parts. But a few simple indices, difficult to interpret, are the only tools readily available at the national level to approximate differences between the two countries in this analysis.

**Table 11. Global Divorce Rate (Number of Decrees per 1,000 Married Persons) by Sex, Canada and the United States, 1970-1987**

Year	Canada		United States	
	Males	Females	Males	Females
1970			14.2	14.0
1980	10.6	10.5	19.8	19.5
1981	11.4	11.3		
1982	11.7	11.6	19.4	19.0
1983	11.3	11.2	19.3	18.9
1984	10.6	10.5	19.2	18.8
1985	10.0	9.9	19.4	19.2
1986	12.5	12.4	19.0	18.8
1987	13.9	13.7	18.8	18.6

Source: Canada: Vital Statistics, Catalogue No. 84-205, annual.

United States: U.S. Department of Health and Human Services.

Marriages increased by about 51% over twenty years (from 1960 to 1980) in the United States, while divorce increased by 350%. This difference in the pace of increase is not a statistical illusion, but a clear portrayal of how this event, long more familiar in the U.S. than in many other countries, has progressed. The number of divorces per 1,000 American marriages has increased to such a point that there is currently about one divorce for every two marriages (Table 12). Evidently, both events are renewable and work interdependently in both directions: more marriages lead to more divorces, and vice versa.

Canada's divorce history is quite different. Although the trend is less pronounced, a rapid increase in divorce is startlingly clear at the present time. The Canadian divorce level is now almost the same as the American level, at 477 divorces per 1,000 marriages.

**Table 12. Divorces per 1,000 Marriages, Canada and the United States, 1940-1987**

Year	United States	Canada
1940	165	19
1950	231	43
1960	258	54
1970	328	154
1980	497	325
1987	485	477

Source: Canada: Calculations based on Vital Statistics, Catalogue No. 84-205, annual.

United States: U.S. Department of Health and Human Services.



## FERTILITY

About 3,900,000 children were born annually in the United States (2,900,000 white children and 600,000 black children) during the 1980s. The equivalent number in Canada has revolved around 372,000. Birth rates in both countries fluctuated slightly around 15 per 1,000 over this decade. The reproductive behaviour underlying these trends is explored here. The fertility behaviour of whites differs widely from that of other races. For this reason only that of white population will be used for a valid comparison with Canada.

The Canadian baby boom yielded a total fertility rate higher than that for the white American population (Graph 10). The Canadian rate for the 1955-1959 period was 3.9 children per woman, compared with 3.5 for the U.S. But the Canadian rate descended more steeply than the American rate, so that by 1971, both had equalized around the replacement threshold (2.1 births per woman).

The American total fertility rate began to decline faster than the Canadian rate in 1971, and gradually reached the level of 1.88 children per woman in 1977. The Canadian rate dropped again, while the American rate started to ascend in 1978. The last few years show that both rates have almost stabilized, with the American rate at a slightly higher point.

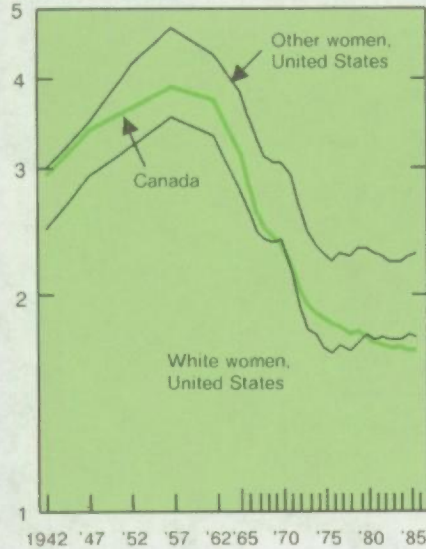
The total fertility rate is more linked to the number of births for a certain period than to a cohort's reproductive behaviour. To what extent does this cross-sectional rate reflect the reproductive behaviour of the two populations? Only a longitudinal view of cohort experience can give any indication. Graph 11 shows the cumulative number of children ever born for equivalent Canadian and American cohorts. *The fertility of Canadian cohorts born before 1933 exceeded that of American cohorts. For cohorts born after 1938, this difference is minor, but Canadian fertility is still slightly higher.*

*There are also differences in the timing of births. Rates at the onset of childbearing are much higher in Canada than in the U.S., but toward the end of the reproductive span, the reverse prevails. This phenomenon was most manifest in the 1960s for cohorts born in the 1930s.*

The present data only permit reasonable extrapolations of reproductive behaviour for cohorts born at the end of the 1950s. The cohort at the mid-point of this quinquennial group would have been 30 years old in 1988. Indications are that this group will probably replace itself in Canada, but the prospect seems less likely in the U.S. (Graph 11). One could conclude that despite a now higher total fertility rate in the U.S., the fertility of the white population is in fact slightly lower. *These observations warn that caution is required in interpreting cross-sectional indices.* There is every reason to think also that cohorts born in following years will not achieve the replacement threshold of 2.1 children per woman in either country.

Chart 10  
Comparative Total Fertility Rates,  
Canada and the United States,  
1942-1986

Average number of children per woman



Some aspects of fertility, such as the spacing of births and the education of parents, cannot be compared because the necessary data are lacking. The total fertility rates, however, evoke some patterns of behaviour that are appreciable for their differences.

### Birth Order

A fall in the fertility rate obviously implies fewer children per woman, but this can happen through diverse routes. One can imagine, for example, a part of the female population as being almost infertile, while the rest of the population continues to have several children. Table 13 was built to investigate this point. It shows that higher order-births have decreased more strongly than lower-order births in both Canada and the United States over the 1960-86 period. But women in Canada and the U.S. have not experienced identical patterns. In Canada, first-order

births have dropped more sharply than in the U.S. This trend suggests that total infertility could be more widespread in Canada. Furthermore, higher-order births are now almost nil in Canada, whereas they still have some frequency in the U.S. Rates for each birth order have declined more sharply in Canada than in the United States.

### The Fertility of Unmarried Women

Fertility outside of marriage is an indicator of non-conformity to traditional social norms. An important fraction of births outside of marriage occur among young women, a large number of whom marry at some time. Fertility outside of marriage has, for this reason, always measured deviation from this social procreation norm, or the transformation of this norm over time.

Graph 12 shows that the unmarried Canadian population has always had higher fertility rates than their white American counterparts. The non-white American races before 1961 must have had very high rates of unmarried fertility, since despite their smaller weight in the total American population, the American rate was higher than the Canadian one.



Chart 11  
Cumulative Fertility Rate for Cohorts, White American  
and Canadian Females, 1923-1958<sup>(1)</sup>

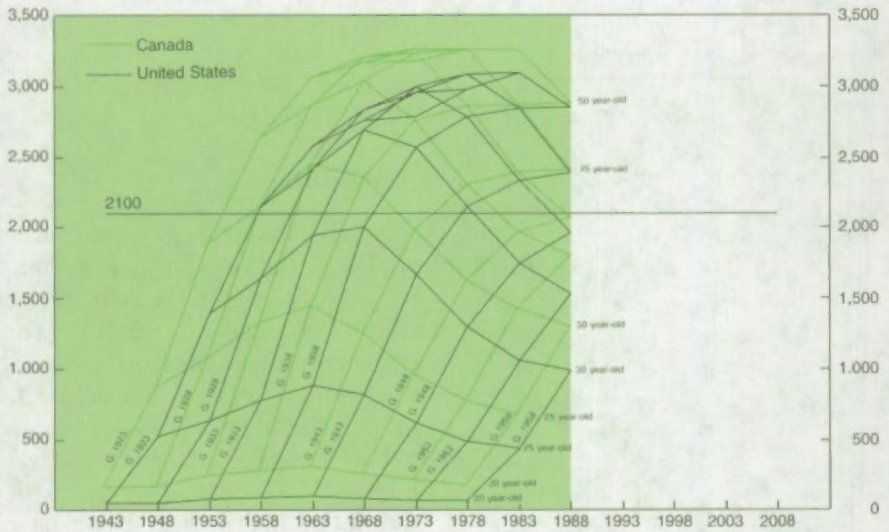


Table 13. Global Fertility Rate<sup>1</sup> by Birth Order, Canada and the U.S. White Population, 1960 and 1986

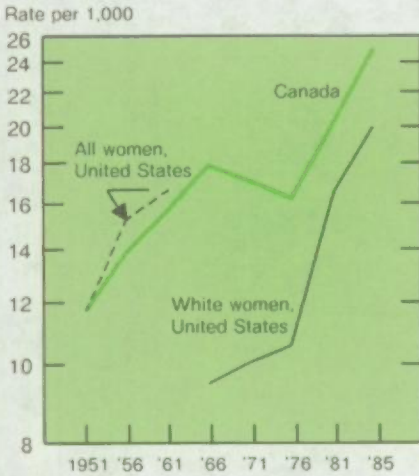
Birth Order	1960		1986		% Change 1960-1986	
	United States	Canada	United States	Canada	United States	Canada
1	30.8	33.9	26.0	26.3	-16	-22
2	29.2	30.3	20.9	21.6	-28	-29
3	22.7	23.3	9.6	8.9	-58	-62
4	14.1	15.3	3.3	2.6	-77	-83
5	7.5	9.4	1.1	0.7	-85	-93
6-7	6.1	9.6	0.6	0.4	-90	-96
8+	2.8	7.5	0.2	0.1	-93	-99

<sup>1</sup> Per 1,000.

Source: United States: National Center for Health Statistics, *Advance Report on Final Natality Statistics*, 1970 et 1986.

Canada: Calculations done in the Demography Division based on published data from the Canadian Centre for Health Information.

Chart 12  
Fertility Rate per 1,000 Unmarried Women, 15 to 54, Canada and the United States, 1951-1985



Source: Vital Statistics, Canada and the United States. Some of the rates have been calculated in the Demography Division, at Statistics Canada.

Fertility outside of marriage became more common in both countries since the beginning of the period of observation, but it has evolved differently (Graph 12). In Canada, increases in this fertility were interrupted between 1966 and 1976, a ten-year break that can be attributed to the popularization of contraceptive use. The increase before 1966 reflects the post-war liberalization of social mores; the contemporary 1976 increase reflects the spread of common-law unions, many of which have stable characteristics conducive to procreation. Fertility outside of marriage among the U.S. white population quickly accelerated in 1976 and then began to increase at the Canadian pace in 1981.

## Abortion

The legal amendment to decriminalize abortion under certain circumstances was passed in Canada in 1968. The Supreme Court of the United States declared the restrictive laws of certain states as unconstitutional in 1973. Finally, the Supreme Court of Canada declared the Canadian law on abortion as unconstitutional in 1988, and at the same time, suppressed the illegal aspect of the abortion act. The text of the 1973 Supreme Court ruling in the U.S. was modified in such a way that it is now unclear. Some States have taken advantage of this ambiguity and have returned to the interdicts of their previous laws. Other states have used their spending authority to almost entirely restrict access to abortion facilities.

Against this legal background, a comparison of abortion trends between Canada and the U.S. can speak for itself. The ratio of registered abortions to the known number of pregnancies (considered as the sum of births and abortions) provides a good measure of this practice. Because of the uncertainty behind the number of spontaneous abortions, the ratio of induced abortions to live births is used. The exclusion of the former will not bias the comparison.

Table 14 brings to light the different behaviour in the two countries. The Canadian population seems to resort to abortion less often than does the American population. In effect, just over 15% of pregnancies are terminated



Table 14. Births, Abortions and the Rate of Abortions, Canada and the United States, 1972-1986

Year	Canada			United States				
	Births	Abortions	Pregnancies Terminated by Abortion (rate per 100)	White Population			Other Populations	
				Births	Abortions	Pregnancies Terminated by Abortion (rate per 100)	Births	Abortions
1972	347,300	45,400	11.6	2,655,600	455,300	14.6	602,900	131,500
1973	343,400	48,700	12.4	2,551,000	548,800	17.7	585,900	195,800
1974	350,700	52,400	13.0	2,575,800	629,300	19.6	584,200	269,300
1975	359,300	53,700	13.0	2,552,000	701,200	21.6	592,200	333,000
1976	360,000	58,700	14.0	2,567,600	784,900	23.4	600,200	394,400
1977	361,400	60,400	14.3	2,691,100	888,800	24.8	635,600	427,900
1978	358,900	65,900	15.5	2,681,100	969,400	26.6	652,200	440,200
1979	366,000	69,000	15.9	2,808,400	1,062,400	27.4	686,000	435,300
1980	370,700	72,700	16.4	2,898,700	1,093,600	27.4	712,500	460,300
1981	371,300	72,900	16.4	2,908,700	1,107,800	27.6	720,600	469,600
1982	373,000	76,300	17.0	2,942,000	1,095,300	27.1	738,500	478,700
1983	373,700	71,500	16.1	2,904,300	1,084,400	27.2	734,700	490,600
1984	377,000	72,200	16.1	2,923,500	1,086,600	27.1	745,600	490,600
1985	375,700	69,900	15.7	2,991,400	1,075,600	26.4	769,200	512,900
1986	372,900	69,600	15.7	2,970,400			786,100	
1987	369,700							
1988	376,800							

Source: United States: National Center for Health Statistics, Advance Report on Final Natality Statistics, and the Ian Buttmacher Institute (for data on abortion).  
Canada: Calculations done in the Demography Division, Statistics Canada, based on data from the Canadian Centre for Health Information.

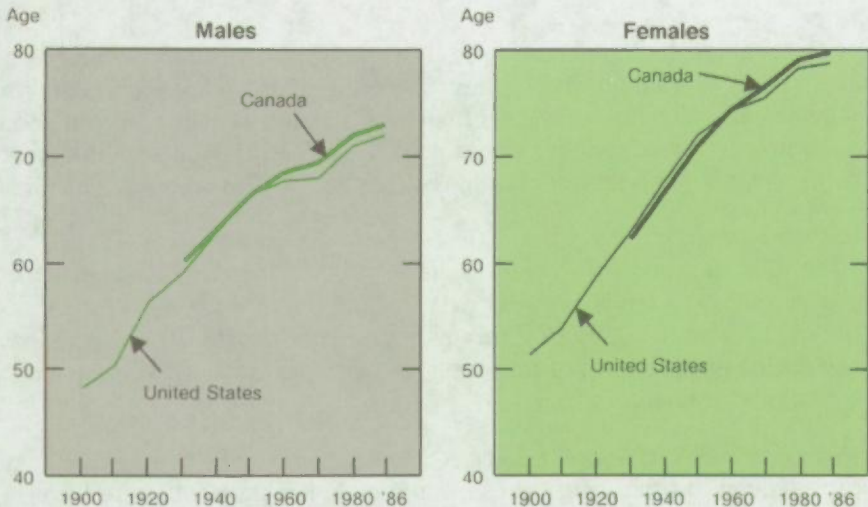
by abortion in Canada, whereas this proportion is in the order of 27% among the American white population, and reaches about 40% among the non-white population. Since the fertility of the Canadian population is nearly the same as the white American population, one has to conclude that either sexual habits are not quite similar or contraception is used less often in the U.S. than in Canada.

## MORTALITY

Life expectancy at birth is the measure that best summarizes a nation's level of mortality. It also allows quick comparisons between countries. Graph 13 summarizes the evolution of life expectancy in Canada and the United States for as far back as reliable data are available.

It can be observed that in recent years life expectancy for males has been higher in Canada than in the United States, even when only the white population is compared. The difference between the two countries is not negligible. Since the end of World War II, it has varied around one full year. Life expectancy was calculated to be 72 years for U.S. males in 1986, and 73.04 years

Chart 13  
Life Expectancy at Birth, Canada and the United States  
(White Population Only), 1900-1986

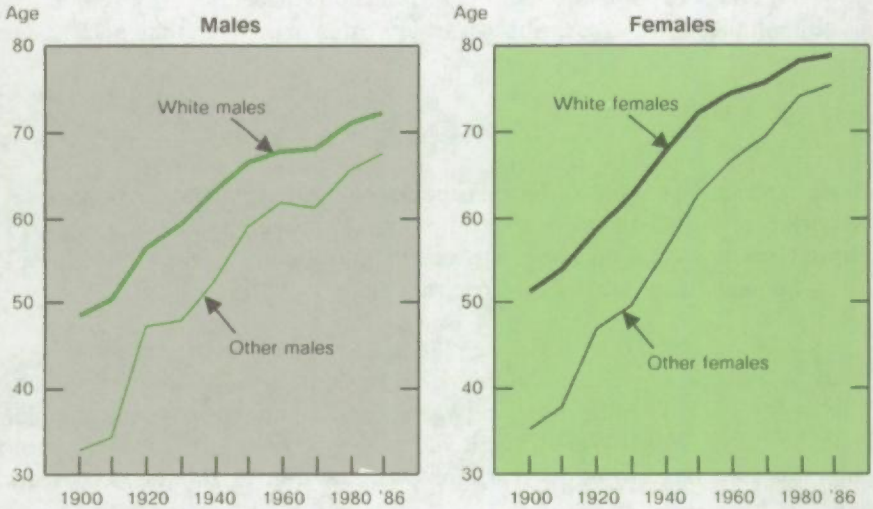


Sources: Vital Statistics of the United States, annual.  
Statistics Canada: Longevity and Historical Life Tables 1921-1981, Cat. 89-506  
and unpublished data.



Chart 14

Life Expectancy at Birth by Race, United States, 1900-1986



Sources: Statistics Canada, Vital Statistics.

U.S. Monthly Vital Statistics Report, Vol 38 no 12, April 1990.

for Canadian males in the same year. The recent history of female life expectancy can be divided into two periods: before 1955 when life expectancy for white American women was higher than for Canadian women; and from 1955 to the present, when the reverse has prevailed. The gap is now in the range of one year (78.8 years for U.S. females and 79.7 years for Canadian females<sup>5</sup>).

The life expectancy of the non-white population is much lower than that for the white population. The difference is 4.8 years for males and 3.7 years for females (Graph 14). Even if this margin is large, progress in closing it has been robust since the turn of the century, when it was 15.7 years for men and 16 years for women.

To explain the differences between Canadian and American life expectancy requires detailed scrutiny of the causes of death, paying attention to the ages at which these causes strike and to the differences between populations. Such an analysis would be too lengthy for this general overview. Instead,

<sup>5</sup> See footnote 6.

comparisons at one point in time of the death rates for five major causes are elaborated for 1986 (Table 15). Although differences may be minor, they are still worthy of note.

Canadians are more fortunate than white Americans because they are less likely to die from ischemic heart diseases and traffic accidents. But white Americans have the advantage when deaths from cardiovascular diseases, cancers and suicides are measured. Death rates for cardiovascular disease are much lower for the non-white population of the U.S. than for the white population. This is also true for deaths due to traffic accidents, especially among females. But the most striking difference appears in suicide. **The death rate among the non-white population, either male or female, is half that of the white American and Canadian populations.**

### **Comparative Evolution of the Principal Causes of Death**

There are no large differences for any of the principal causes of death between the American (all races) and Canadian populations in recent history (the last 15 years). This is not surprising, since medical knowledge spreads very quickly throughout the world, and lifestyles and nutritional habits are almost identical between the two countries. The lack of difference seems surprising, however, in light of the different health insurance systems.

### **Deaths from Ischemic Heart Disease (ICD 410-414)**

Graph 15A demonstrates that if differences in death rates are now small between Canada and the U.S., they have reached this juncture after a markedly different evolution. Fifteen years ago, the ischemic heart disease death rate was higher in the U.S. than in Canada; thus it has declined at a much faster rate.

### **Deaths from Cerebrovascular Disease (ICD 430-438)**

Twenty years ago, deaths by cerebrovascular disease were more frequent in the U.S. than in Canada, and equalization with Canada has happened more quickly than it has for ischemic heart diseases (Graph 15B).

### **Deaths from Cancer**

Death rates from cancer are on the rise in both Canada and the U.S., but the curves are not smooth (Graph 15C). Although differences between the two countries are small, Canadian rates are always higher. As for death from cancer of the respiratory system (Graph 15D), Canadian rates have lagged behind American rates but are progressing a little more rapidly.



Table 15. Standardized Deaths Rates (per 100,000)<sup>1</sup> by Causes by Death, Canada and the United States (by Race), 1986

Causes	Canada		United States			
	Males	Females	White Population		Other Populations	
			Males	Females	Males	Females
Cancers Causes 140-209 of the ICD	182.65	141.15	170.74	136.02	215.13	144.22
Ischemic Heart Disease Causes 410-414 of the ICD	188.44	124.51	191.77	132.34	153.97	129.42
Cerebrovascular Disease Causes 430-438 of the ICD	40.45	46.67	37.32	46.48	58.14	62.57
Traffic Accidents Causes E810-E825 of the ICD	22.95	9.14	29.28	11.45	28.19	9.08
Suicides Causes E950-E959 of the ICD	21.35	5.96	20.34	5.42	11.16	2.67

<sup>1</sup> Rate standardized on the structure of the Canadian population in 1976.

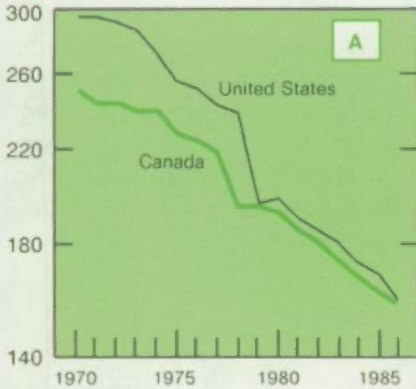
Source: United States: National Center for Health Statistics, *Advance Report on Final Mortality Statistics*, 1987.

Canada: Calculations done in the Demography Division, Statistics Canada, based on data from the Canadian Centre for Health Information.

Chart 15 Evolution of Main Causes of Deaths, 1970-1986

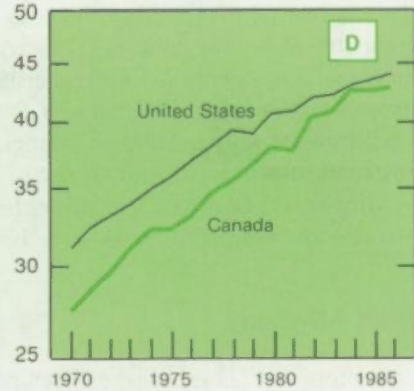
Standardized Death Rate for Ischemic Heart Disease (Causes 410-414 of the ICD)<sup>(1)</sup>

Rate per 100,000

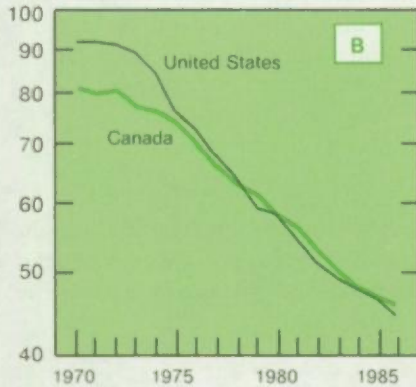


Standardized Death Rate for Cancer of the Respiratory System (Causes 160-165 of the ICD)<sup>(1)</sup>

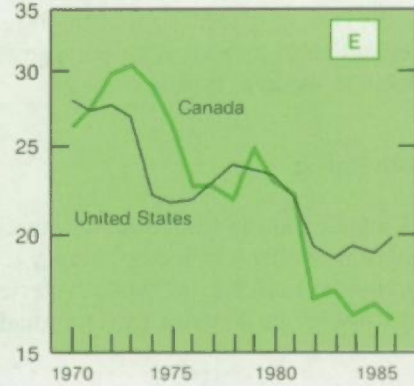
Rate per 100,000



Standardized Death Rate for Cerebrovascular Disease (Causes 430-438 of the ICD)<sup>(1)</sup>



Standardized Death Rate for Motor Vehicle Accidents (Causes E810-E825 of the ICD)<sup>(1)</sup>



Standardized Death Rate for Cancer (Causes 140-208 of the ICD)<sup>(1)</sup>



(1) Rates are standardized according to the structure of the Canadian population of 1976.



## Traffic Accidents

In both Canada and the U.S., deaths by traffic accidents have become less frequent over the past fifteen years (Graph 15E). Progress in the fight against other causes of death often depends on scientific discoveries more or less anticipated after long periods of research, and its effects are lasting. But deaths from traffic accidents are more sensitive to quick changes and fluctuate for unforeseeable reasons that vary by country: a change in the price of gasoline, a slackening of police vigilance, changes in law enforcement, changes in vehicle construction standards and so forth. This is why the Canadian death rates are sometimes above and sometimes below the American ones. For five years, however, the Canadian rates have been appreciably lower.

## Infant Mortality

An important reason for the difference in life expectancy between the Canada and the United States lies in infant mortality rates. Some figures do not require long explanation. In 1985, the Canadian rate was 7.9 per 1,000 compared with 10.1 for the total U.S., 9.3 for the white American population, 15.8 for the population of other races, and 18.2 for the black population. A higher rate for the U.S. may seem strange but it reflects, among other things, less vigilant prenatal care, at least for that segment of the population unable to afford adequate medical insurance<sup>6</sup>.

## Conclusion

Canada and the United States march together to the same beat in the fight against mortality, but life expectancy is still shorter for the non-white American population than for the white American population. This could explain the slight excess in American over Canadian mortality.

## INTERNAL MIGRATION

No more than 54% of American people five years of age and older were living in the same residence as five years previous, according to the 1980 Census. Even if the majority of migrants had moved to residences within the same state, 21% had chosen a new state. These interstate movers accounted for 20 million persons. Mobility on this scale is not new to the United States. The same percentages appear in the 1970 and 1960 censuses. De Tocqueville, as

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<sup>6</sup> David Himmelstein, et. al, "A National Health Program for the U.S.", New England Journal of Medicine, 1989, 320: 102-8.

early as 1830, expressed his astonishment at the impressive mobility of the American people in savory terms<sup>7</sup>.

The mobility status of Canadians, on the whole, bears a strong resemblance with that of Americans as far as its intensity is concerned. The 1986 Census of Canada revealed that only 56% of people five years of age and over were living in the same residences that they occupied in 1981. Of those that had moved, nearly one million had chosen a new province.

### **Before the Twentieth century**

Even if it does not give a total explanation of settlement patterns, migration in both Canada and the United States has displayed an east to west direction as an outcome of history. After the coastal plains were offered to the farmers and the Appalachian forests to the lumbermen, North American industrialization began. The Hudson River (extended westward by the Barge Canal) and the St. Lawrence River were two large natural channels that permitted access to the mining centres of the mid-west that were land-locked in the areas surrounding the Great Lakes. The lake waters facilitated the transportation of iron ore and coal, the two materials upon which the industrial power of the nineteenth century was built<sup>8</sup>. Further west, the Prairies opened up their vast plains to large-scale mechanized farming and to livestock production. No wonder that the small agricultural enterprises of the Canadian Maritimes and the New England states quickly became as outdated as the textile and steel plants, and sawmills, of the Atlantic "Fall Line".

At the same time, industrialization of the agricultural South produced a surplus of labour. Greedy for manpower, the iron, steel, railway and later automobile factories in Gary, Cleveland, Detroit, Toledo, Pittsburgh, Buffalo, Milwaukee, Sault St. Marie and Hamilton (Ontario) attracted workers from the south and eastern United States as well as from Newfoundland, the Maritimes and Eastern Quebec<sup>9</sup>. So the industrial heart of America, with its Canadian extension in Southern Ontario, was built. The prosperity of Southern Ontario cannot be understood outside of the development of the American Midwest, which peaked in the second part of the nineteenth century and in the beginning of the twentieth.

<sup>7</sup> "In the United States a man builds a home for this retirement and sells it before the roof is installed; he plants an orchard then leaves it when the trees begin to bear fruit; he labours in the field and lets others harvest the crop; he learns a profession and abandons it; he establishes himself somewhere only to leave as soon as he can transport elsewhere his ardent desire for change". De la démocratie en Amérique, au chapitre « Pourquoi les Américains sont-ils si remuants au sein de leur prospérité. » Oeuvres complètes, Tome I - Librairie Médicis, Paris, 1951. Free translation from "Why Americans are so Fidgety in the Midst of Their Prosperity", *Democracy in America*.

<sup>8</sup> Iron deposits were discovered in Marquette in 1844, in Gogebic and Vermillion in 1884, in Mesominee in 1887, and in Mesabi in 1892.

<sup>9</sup> In Merigot, Lebat and Froment, in *Notions Essentielles de Géographie Économique*, Vol. II, Sirey, 1966.



**Table 16. Place of Birth of the East North Central Population, United States, 1850 and 1860**

	1850	%	1860	%
Total Population	3,965,269	100.0	5,715,955	100.0
Population Born in the Region	2,582,600	65.1	4,044,329	70.8
Population Born in Other Regions:	1,382,669	34.9	1,671,626	29.2
New England	171,172	4.3	224,230	3.9
Middle Atlantic	725,056	18.3	946,080	16.6
West North Central	12,794	0.3	27,496	0.5
South Atlantic	286,195	7.2	265,569	4.6
West South Central	184,634	4.7	202,798	3.5
Other Regions	2,818	0.1	5,453	0.1

Source: *Historical Statistics of the U.S.* Chapter C, Series C 15-24, p. 91.

Statistical material for this period is not abundant, but there are enough census data to support an analysis and some conclusions. Tables 16 and 17 reveal the development of the American Midwest (shown as the East North Central region). This region contained 22.5% of the U.S. population in 1850, and of this population, 35% had immigrated from other regions of the U.S. By 1860, this region contained 25% of the U.S. population. Concurrent to the building of the East North Central region, the conquest of the west can also be seen in Table 17. High percentages of "newcomers" appear in the yet small populations of the West North Central, West South Central, Mountain and Pacific regions.

## After World War II

Post-war industrial developments in North America continued to displace the population centre of gravity farther away from the Atlantic coast. These developments were characterized by the implementation of new production techniques discovered by science in the war effort. They resulted in the production of new consumer goods. The most striking changes were found in new energy sources, new raw materials and in communications inventions. Technology now yielded a better return from all three. To use stylized images, one could say that the airplane replaced the railway, electric power and especially oil replaced coal, and plastics replaced steel. The telephones, television and computers of today connect, through sound and image, populations once isolated by vast distances.

These changes were fraught with consequence. The agricultural labour force shrunk. Industries that once had to be located close to their raw material sources and to coal deposits could now choose other locales. Milder regions became more attractive, and the demand for coastal fringe sites for oil

Table 17. Percentage of the Population Born Out-of-Region for Large Regions of the United States, 1850 and 1860

Region	1850			1860		
	Population	% of the Country	% Born in Another Region	Population	% of the Country	% Born in Another Region
New England	2,423,178	13.7	2.3	2,663,062	11.4	3.0
Middle Atlantic	4,884,300	27.5	6.5	5,898,979	25.3	5.4
East North Central	3,965,269	22.4	34.9	5,715,955	25.4	29.2
West North Central	695,231	3.9	51.9	1,702,245	7.3	55.6
South Atlantic	2,907,947	16.4	3.3	3,358,465	14.4	3.6
East South Central	2,207,677	12.4	22.8	2,538,909	10.9	19.3
West South Central	503,295	2.8	46.3	984,856	4.2	47.3
Mountain	68,484	0.4	12.7	150,116	0.6	32.9
Pacific	81,278	0.5	87.9	286,166	1.2	65.7
Total	17,736,659	100.0		23,298,753	100.0	

Source: *Historical Statistics of the U.S.: Internal Migration*, Series C 15-24, p. 91.



importing grew. Aeronautical and astronautical industries no longer had to be established in the cold and rainy areas of the Great Lakes, and petrochemical industries moved closer to harbours equipped with crude oil discharging facilities. Location was less important to other industries. Raw materials were negligible for hardware and software information processing, and auto parts were cheaper to transport than completely assembled vehicles. All this industrial change explains historical migration toward the "Sunbelt". Figures for 1975 to 1980 illustrate a still quite active movement<sup>10</sup>.

### From 1975 to 1980

Over the 1975 to 1980 period, 41 million Americans moved from one state to another. Analysis of the flows between all 50 states would be too long to do a valid portrayal any justice, so the analysis must be conducted at the regional level. This simplification is regrettable because the states that make up a region are not necessarily homogeneous with respect to the advantages they offer. Nevertheless, net migration rates that can be calculated reveal a great deal of information (Table 18).

Close to 15 million Americans moved from one region to another over the course of the period. In terms of net migration balances, some regions gained while other regions lost.

The losing regions were:

1) Middle Atlantic	-1,586,700
2) East North Central	-1,182,200
3) New England	-198,000
4) West North Central	-198,100

The gaining regions were:

1) West South Central	793,500
2) Mountain	696,800
3) Pacific	502,100
4) South Atlantic	1,021,500
5) East South Central	171,000

One region, the Middle Atlantic, lost migrants to all the other regions, while another, the West South Central, gained migrants from all the other regions. Among the other gainers, the Mountain region lost population only to the West South Central region, and the Pacific lost only in its exchanges with the Mountain and the West South Central regions. Finally, when regions

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<sup>10</sup> J. Odland, "Sources of Change in the Process of Population Redistribution in the U.S., 1919-1980", Environment Planning, Vol. 20, No. 6, June 1988.

Table 18. Net Migration Between the Regions of the United States, 1975-1980

New England				West North Central				West South Central			
Region	From	To	Balance	Region	From	To	Balance	Region	From	To	Balance
Middle Atlantic	313,334	192,749	120,585	New England	30,495	25,046	5,449	New England	61,826	27,231	34,595
East North Central	84,447	80,985	3,462	Middle Atlantic	75,830	47,498	28,332	Middle Atlantic	199,659	53,338	146,331
West North Central	25,046	30,495	-3,449	East North Central	319,402	254,325	65,077	East North Central	354,973	134,481	220,492
South Atlantic	140,088	291,796	-151,708	South Atlantic	125,279	154,374	-29,095	West North Central	259,652	147,588	112,064
East South Central	15,462	26,969	-11,507	East South Central	49,485	56,310	-6,825	South Atlantic	351,259	135,983	215,276
West South Central	27,231	61,826	-34,595	West South Central	147,588	259,652	-112,064	East South Central	185,552	139,629	45,923
Mountain	25,319	66,178	-40,859	Mountain	141,671	240,015	-98,344	Mountain	208,987	184,797	24,190
Pacific	68,229	146,168	-77,939	Pacific	179,419	230,018	-50,599	Pacific	332,251	258,314	73,937
Total			-198,010	Total			-198,069	Total			793,515
Middle Atlantic				South Atlantic				Mountain			
Region	From	To	Balance	Region	From	To	Balance	Region	From	To	Balance
New England	192,749	313,334	-120,585	New England	291,796	140,088	151,708	New England	66,178	25,319	40,859
East North Central	202,640	278,083	-75,443	Middle Atlantic	1,151,631	379,349	772,282	Middle Atlantic	193,364	48,191	145,173
West North Central	47,498	75,830	-28,332	East North Central	747,387	375,734	371,653	East North Central	334,724	104,879	229,845
South Atlantic	379,349	1,151,631	-772,282	West North Central	154,374	125,279	29,095	West North Central	240,015	141,671	98,344
East South Central	38,695	84,838	-46,143	East South Central	311,927	370,047	-58,120	South Atlantic	162,909	107,439	55,470
West South Central	53,328	199,659	-146,331	West South Central	215,276	351,259	-135,983	East South Central	42,553	32,179	10,374
Mountain	48,191	193,364	-145,173	Mountain	107,439	162,909	-55,470	West South Central	184,797	208,987	-24,190
Pacific	119,273	371,669	-252,396	Pacific	282,074	335,711	-53,637	Pacific	589,278	468,359	120,919
Total			-1,586,685	Total			1,021,528	Total			676,794
East North Central				East South Central				Pacific			
Region	From	To	Balance	Region	From	To	Balance	Region	From	To	Balance
New England	80,985	84,447	-3,462	New England	26,969	15,462	11,507	New England	146,168	68,229	77,939
Middle Atlantic	278,083	202,640	75,443	Middle Atlantic	84,838	38,695	46,143	Middle Atlantic	371,669	119,273	252,396
West North Central	254,325	319,402	-65,077	East North Central	305,084	196,762	108,322	East North Central	462,862	204,114	258,748
South Atlantic	375,734	747,387	-371,653	West North Central	56,310	49,485	6,825	West North Central	230,018	179,419	50,599
East South Central	196,762	305,084	-108,322	South Atlantic	311,927	385,120	-73,193	South Atlantic	335,711	282,074	53,637
West South Central	134,481	354,973	-220,492	West South Central	139,629	185,552	-45,923	East South Central	84,654	3,666	80,988
Mountain	104,879	334,724	-229,845	Mountain	32,179	42,553	-10,374	West South Central	258,314	332,251	-73,937
Pacific	204,114	462,862	-258,748	Pacific	80,988	84,654	-3,666	Mountain	468,359	589,278	-120,919
Total			-1,182,156	Total			170,954	Total			502,129

Source: U.S. Bureau of the Census, Special Reports, 1980.



experienced both gains and losses, New England and the West North Central regions for example, losses were always in favour of the South and the West. In summary, one can clearly discern:

- 1) A basic westward stream;
- 2) A centrifugal movement from the West North Central, East North Central, Middle Atlantic and New England Regions directed toward the South and the West.

### **Canadian Migration History**

Canada has no "Sunbelt", its economic potential differs from that of the U.S. and there are solid economic linkages between the two countries. For these reasons, migration flows in Canada have not been as responsive to the enticements of technical change. Only two movements are prominent in this short migratory history.

- 1) The movement toward population concentration in Southern Ontario which is relatively recent and still in operation;
- 2) The great westward trend.

### **Population Concentration in Ontario**

The industrial history of Canada is much more recent than that of the United States. Canada has ten times fewer people and its industry is of a different scale. Consequently, population movement toward Ontario has never had the sharpness nor the intensity of American Midwestern development in the nineteenth century. Table 19 shows that the percentage of Ontario residents born in other provinces has increased only marginally since the turn of the century.

A simple crosstabulation of place of birth by place of residence is as unsatisfactory as the movements are complex. It provides only makeshift evidence of migration. For instance, the desertion of prairie farmers for Ontario factories at the beginning of the century cannot be detected because many people who moved were themselves foreign born. The analysis is nevertheless conducted for Canada with the same yardstick used to describe the American experience. The results, and some striking features, are observed in Table 19:

- 1) The first feature is the low proportion of persons in Quebec who were born out of province. Never during the twentieth century has Quebec attracted many people from other parts of Canada, largely because of its cultural distinctiveness. Relatively few people who at any time lived in Quebec were born elsewhere in Canada.
- 2) In the Atlantic region, the proportion of persons born out-of-province has increased with time. But even if these increases carry some significance,

Table 19. Percentage of the Population Born in Canada but Out-of-Province, for Provinces, 1901-1981

Province	1901	1911	1921	1931	1941	1951	1961	1971	1981	Population in 1981
Newfoundland	-	-	-	-	-	1.1	2.1	3.2	4.2	567,681
Prince Edward Island	2.4	1.8	2.3	2.9	3.0	5.7	7.7	11.7	14.9	122,506
Nova Scotia	2.4	2.5	3.1	3.1	4.2	8.2	10.1	11.4	13.5	847,442
New Brunswick	3.8	4.1	5.4	5.8	5.5	7.0	9.4	11.3	13.1	696,403
Quebec	1.5	1.6	2.2	2.8	3.3	4.0	4.2	4.3	3.7	6,438,403
Ontario	4.0	3.5	4.0	4.3	5.8	10.9	9.3	10.2	10.4	8,625,107
Manitoba	31.8	20.4	15.8	12.8	12.0	12.5	12.9	13.7	13.7	1,026,241
Saskatchewan	-	29.8	22.5	17.5	14.0	12.9	12.0	11.4	13.1	968,313
Alberta	-	23.6	20.5	17.2	15.5	18.2	19.2	21.0	29.2	2,237,724
British Columbia	22.4	21.6	20.4	20.4	24.1	30.8	27.3	28.9	30.1	2,744,467

Source: Censuses of Canada, 1901-1981.



they are misleading as indicators of the region's attractiveness to other provinces because:

- a) the real numbers are small;
  - b) many of the out-of-province moves are internal to the region.
- 3) Western Canada's proportion of newcomers has decreased gradually with time. This is not surprising for a region which was nearly empty but so full of promise at the beginning of the period. Such a region could not have, for a time, anything but a high concentration of foreign-born persons. The foreign-born share, even though that population was still numerous, decreased gradually as the native-born share increased. This dynamic is especially present in the typically prairie provinces of Manitoba and Saskatchewan. The two most western provinces, Alberta and British Columbia, show increasing proportions of out-of-province residents in spite of this logic. This is proof of their impressive power to attract movers from other parts of Canada.

Another way to take stock of migratory undercurrents is to draw a balance of movements over several decades (Table 20). It seems clear that the Maritimes and the Prairies are perpetual losers, while Ontario and Western Canada (especially B.C.) are the perpetual winners. They absorb the migrants from the other provinces. The sheer number of interprovincial movements is noteworthy.

**Table 20. Interprovincial Migratory Balance for the Last Four Decades, Canada**

Province	1951-1960	1961-1970	1971-1980	1981-1989	Total 1951-1989
Newfoundland	-9,816	-34,557	-20,840	-26,900	-92,113
Prince Edward Island	-7,938	-5,732	2,927	780	-9,963
Nova Scotia	-28,851	-43,521	4,165	2,200	-67,987
New Brunswick	-25,360	-45,277	6,441	-3,233	-67,429
Quebec	-72,877	-142,594	-234,163	-108,867	-558,481
Ontario	148,036	236,081	-96,391	200,369	488,075
Manitoba	-40,587	-64,161	-68,977	-29,880	-203,607
Saskatchewan	-87,938	-123,492	-50,603	-53,815	-315,848
Alberta	32,858	30,022	244,991	-82,746	225,125
British Columbia	93,075	192,713	216,486	107,919	610,193
Yukon and the Northwest Territories	-600	519	-4,036	-5,827	-9,944
Total Interprovincial Movements	2,962,004	3,660,061	3,849,741	2,868,282	13,340,088

Source: Unpublished data from Family Allowance Files, Estimates Section, Demography Division, Statistics Canada.

## Conclusion

Both American and Canadian populations are highly mobile, and in either country a strong westward trend is evident. The disaffection for rural areas is clear in both countries (Southern farmland and the American prairies on the one hand, and the Atlantic provinces and Canadian prairies on the other). Regions of the U.S. where the migratory pull has been linked to traditional industries are losing in their population exchanges. The pull of these industries is still strong in Canada, at least for now, because equipment is more recent, more modern and flexible. Nobody can predict what future migration patterns will be in either Canada or the U.S., especially if economic links for the production of goods and services strengthen. From 1980 to 1988, through exchanges between the two countries, Canada lost 75,000 persons<sup>11</sup>.

## CONCLUSION

The comparison of demographic behaviour between Canada and the United States has yielded some expected insights into important similarities and differences. Among the similarities, demographic behaviour in both countries appeared to be quite sensitive to the major sociopolitical events of this Century. Rates and indices of population growth, marriage and fertility bent equally to the pressures of World War I, the Depression and World War II. Another feature common to these neighbouring countries is the pattern of initial settlement and its advancement throughout the nineteenth and twentieth centuries. Improvement in ways of living has had about the same affect on mortality in both countries.

On the other hand, even if only crude indices are analyzed, important differences emerge as a result of divergent choices made by each society at given junctures of their history, and also because of the large diversity in the American population. The differences are large in matters of divorce, marriage and abortion, as well as in the field of immigration. Divorce rates are much higher in the U.S., and the use of abortion is more frequent than in Canada. Migration flows are relatively weaker but are more even in the U.S.

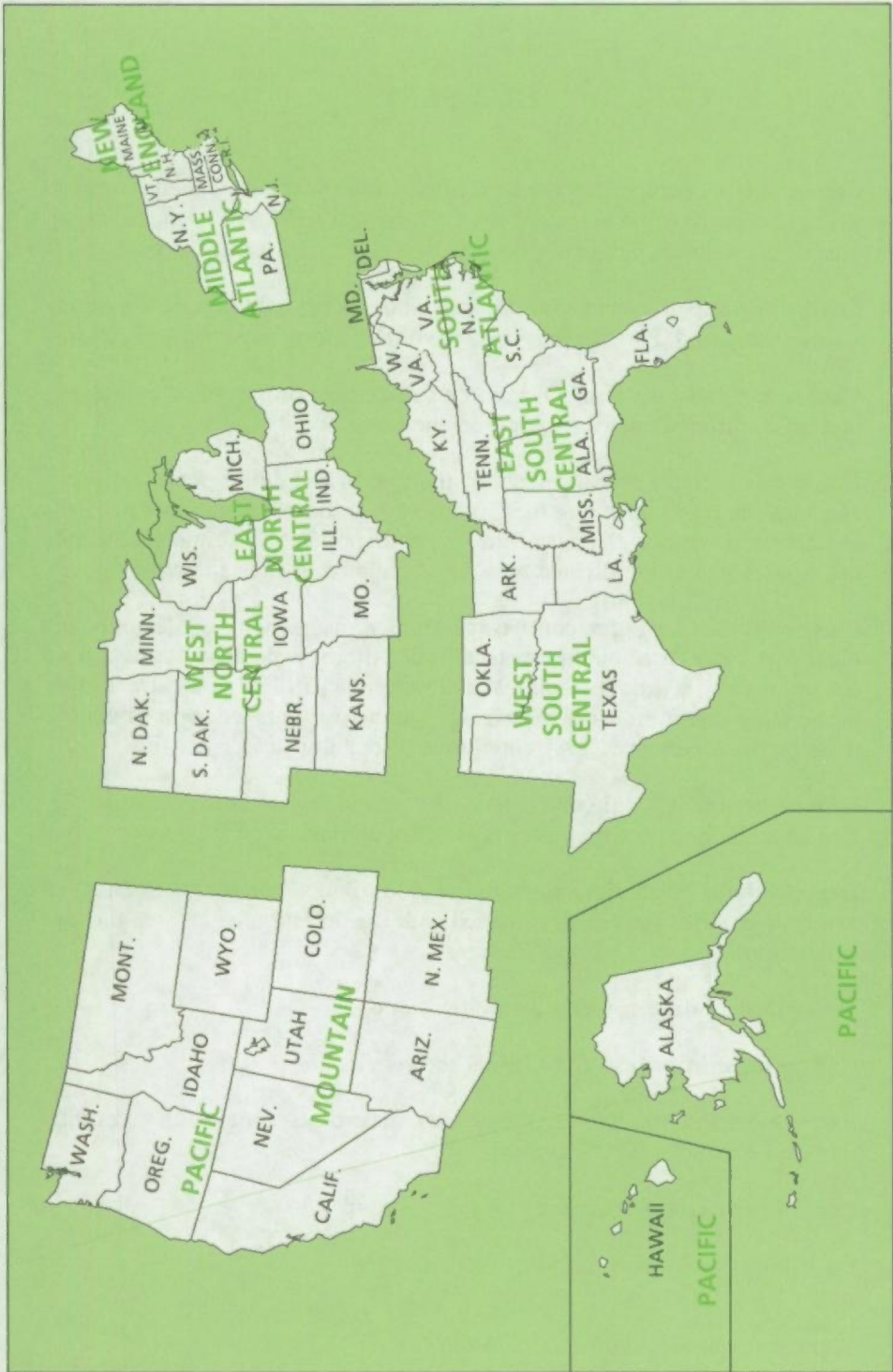
Although the origin of newcomers is somewhat different, both nations share the migration pressure from the Third World. Migration trends on both sides of the border are heavily oriented toward population concentration in areas of technical advancement and fluctuating economics and toward the slow surrender of territories which can hardly sustain their populations. Population projections cannot go beyond the extrapolation of present trends, but show

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<sup>11</sup> Statistics Canada: Migration Between Canada and United States, Catalogue 91-530E, Chapter 2 - Table 1.



increasing disparities in settlement into the future. The U.S. Sunbelt and the provinces and states along the Pacific coast seem to have a brilliant future. These polarizations will probably progress slowly, however, and allowance must be made for changes which are, for now, unforeseeable.





## 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:** A ratio that denotes 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).

**Endogamy:** Marriage within a specific group.

**Endogenous:** Influences from inside the system.

**Excess mortality:** In differential mortality, the excess of one group's mortality rate over another's (see Sex ratio).

**Exogamy:** Marriage outside of a specific group.

**Exogenous:** Influences from outside the system.

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<sup>1</sup> 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.

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

**Fertility, completed:** The cumulative fertility of a cohort when all its members have reached the end of their reproductive period.

**Fertility, cumulative:** Total live births from the beginning of the childbearing period until a later date.

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

**Frequency, cumulative:** Total frequency from the start of the period of exposure to risk of event up to a later date.

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

**Intercensal:** The period between two censuses.

**Life expectancy:** A statistical measure derived from the life table that indicates the average years of life remaining for a person at a 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.

**Migration:** Geographic mobility between one locale and another.

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

**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 attributable to the demographic events that occur during the period. Movement here is not a synonym for migration.

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

**Prevalence:** Number of persons with a certain characteristic in a given group of persons.

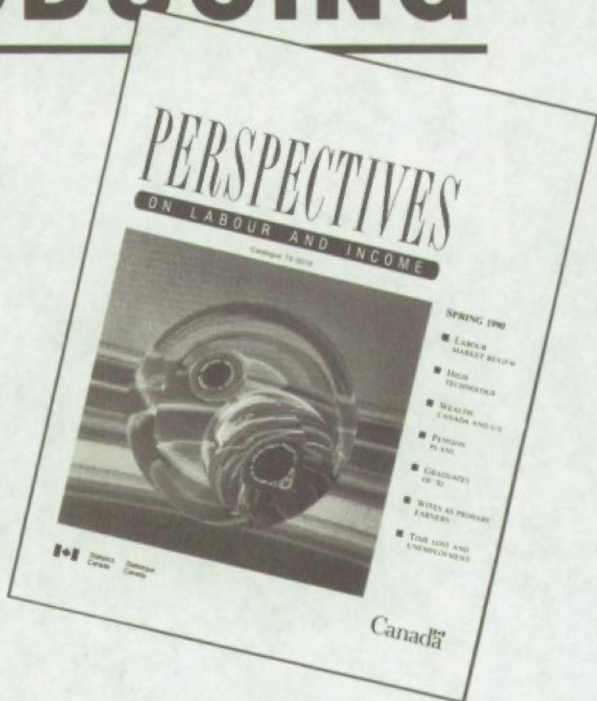
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- *The spectre of A.I.D.S.*
- *Internal migration: Ontario loses, B.C. gains.*

*Canada, United States . . .*

- *Similar populations but not identical*
- *Fewer marriages in Canada • Many fewer divorces • Fewer abortions • Despite appearances, slightly higher fertility • Growth more dependant on immigrants but . . . both peoples are tireless movers.*