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Report on the Demographic Situation in Canada

1994



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Statistics Canada
Demography Division

Report on the Demographic Situation in Canada

1994

Jean Dumas and Alain Bélanger

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Editor-in-Chief

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*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 complement 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.*

Preface

Each year, Statistics Canada reviews the demographic developments which determine the gradual evolution of the size, distribution and composition of the Canadian population. Part I of this report describes the most recent trends in births, deaths, immigration, emigration and interprovincial migration, highlighting the differences which exist among the provinces and territories and between Canada and other industrialized countries.

To belong to the "sandwich generation" is simultaneously to have children still at home and aging parents. It is situation which has always existed, but which is increasingly common. Part II of this report outlines the numbers and characteristics of this growing segment of the Canadian population and indicates some of the changes that can be expected in years to come.

Ivan P. FELLEGI

Chief Statistician of Canada

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Highlights

PART I - DEMOGRAPHIC ACCOUNTS

- ◆ On January 1, 1994, the population of Canada was estimated at 28,973,200¹, an increase of 1.3% compared to a year earlier.
- ◆ The population of Newfoundland was practically unchanged, while that of British Columbia increased by 2.7%, twice the rate of the national average for 1993.
- ◆ Immigration rose, while the rate of natural increase was down. As a result, for the second consecutive year, net international immigration (206,900) contributed more to population growth than natural increase (193,100).
- ◆ The number of births dipped below the 400,000 mark in 1992 (398,642) and preliminary figures for 1993 again showed a small decline (397,100). This brought the birth rate down from 14.0 per 1,000 to 13.8 per 1,000, the lowest ever seen in Canada.
- ◆ The declining birth rate recorded in Canada is a result of population aging since, despite a decrease in the number of births, the number of children per women in 1992 was up very slightly (1.71). The same was true in most of the provinces, with the rate varying from 1.40 in Newfoundland to 2.71 in the Northwest Territories.
- ◆ Population growth and aging have meant that, for the first time in its history, Canada recorded over 200,000 deaths during the year (201,020). There was no increase in the mortality rate, as life expectancy at birth, which in 1992 was 74.9 years for men and 81.2 for women, continues to increase.
- ◆ Although the standardized rate of death from diseases of the circulatory system continues to decline, these diseases nevertheless remain the leading cause of death in Canada. Rates for all neoplasms and cancers were stable for both males and females, but the standardized death rate from cancers of the respiratory system for women has more than tripled since 1971.
- ◆ The number of deaths from H.I.V. reached 1,358 in 1992. The mean annual increase during the preceding five-year period was 21%. Nearly 80% of the victims were males aged between 30 and 50.

¹ The latest estimates at the time of publication of this report show that the total population had reached 29,248,000 on July 1, 1994.

- ♦ Over a third (34.8%) of the 252,000 immigrants admitted to Canada in 1993 were born either in Hong Kong (26,800), India (21,400), the Philippines (20,100) or Mainland China (19,500).
- ♦ Ontario remained the first destination choice of immigrants in 1993. For the first time since 1981, however, British Columbia moved ahead of Quebec as the second ranked destination.
- ♦ Recessionary periods normally cause a decline in the mobility of the population. The number of internal migrants was 306,000 in 1991 and 320,000 in 1992; by contrast, the average for the period 1970-1975 was 410,000, at a time when the Canadian population was smaller.
- ♦ A study of internal migration in Canada reveals that while Ontario serves as the hub of the Canadian migratory system and British Columbia is the final destination of most migrants.
- ♦ The probability of native-born Canadians leaving a region to which they had previously migrated was seven times higher than that of leaving their birth region; the farther Canadians live from their place of birth, the more likely they are to again migrate.

PART II - THE SANDWICH GENERATION: MYTHS AND REALITY

- ♦ The reduction in mortality and the increase in the mean age at motherhood has brought an increase in the number of people who have responsibilities to both their parents and their children, hence the expression sandwich generation.
- ♦ It was estimated in 1990 that over a third of Canadians between 35 and 64, or 3.4 million people, had a child living under their roof and had at least one parent over 65.
- ♦ An important aspect of this situation in the years to come is the increased probability of people having their parents longer, while having fewer brothers and sisters to share the task of caring for them if necessary.
- ♦ According to data from the 1992 General Social Survey, members of the sandwich generation provide relatively little immediate assistance to their parents. While most kept in touch, less than one-quarter provided assistance in the form of transportation, house maintenance, personal care or financial support.
- ♦ The fact that relatively few children provide such assistance does not mean that parents were not receiving the help they needed. Most parents had little need for immediate assistance, and data from the 1986-87

Health and Activity Limitation Survey show that, of person over 65 who needed help with housework or personal care, three out of five received it from family members.

- ◆ By the year 2000, the population that includes the sandwich generation will have grown by 23% and the sandwich generation itself by 30%, but from 2000 to 2010 this sandwich generation will increase less rapidly (4%) than the population of which it is a part (7%).
- ◆ Simulations of a decrease in mortality and an increase in fertility show that changes in the intensity of these phenomena have little effect, at least in the medium term, on the size of the sandwich generation. The strong growth anticipated in the near future will no doubt be essentially due to the advancing age of baby-boomers.

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Part 1

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DEMOGRAPHIC ACCOUNTS

On January 1, 1994, the population of Canada was estimated at 28,973,200.¹ The total increase during 1993 was 379,800, for a rate of 13.2 per 1,000. This annual rate of increase is relatively high compared to both the mean annual increase for recent periods and the rates of increase seen in other industrialized countries (Tables 1A and 1B).

Components: Some Firsts

- a) *Numbers*: Because of population increase and aging, for the first time in its history Canada recorded over 200,000 deaths during the year (201,020). ***The number of births fell below the 400,000 level, which it had remained above in 1990 and 1991.*** We should nevertheless not jump to the conclusion that there was a drop in fertility (see below). All the same, natural increase thus continued the decline that began early in this decade, decreasing by over 6,000 during 1993.

For the second consecutive year, international net immigration contributed more to the growth of the Canadian population than natural increase. The number of international immigrants reached 252,042, some 2,000 above the figure of 250,000 set as a target by the Department of Citizenship and Immigration, while estimated emigration was 45,200 people.

- b) *Rates*: The increase in the population combined with the decrease in the number of births caused a drop in the birth rate. ***The 1993 crude rate of 13.8 births per 1,000 is the lowest since vital statistics records were first set up in 1921.*** Due to the increase in the population and its aging, the crude death rate was up very slightly (6.98 per 1,000). As a result, ***the rate of natural increase also touched a record low for modern times of 6.81 per 1,000.*** Conversely, the international net immigration rate remained at the 1992 level, higher than the rate of natural increase (7.19). Thus, whether we look at numbers or rates, ***over half of the population growth in 1993 was due to immigration.***

The Provinces: Some Stability

The growth of the Canadian population was characterized as usual, by significant differences between regions: the population of Newfoundland on January 1, 1994, was practically unchanged from 1993, while that of

¹ The figures used in the 1993 accounts were, except where indicated, those available on July 31, 1994. This preliminary figure is no doubt an underestimate, since the number of Canadians who have returned to Canada since May 1991 is not included since it was not available when the accounts were drawn up. Returning Canadians may amount to as many as 20,000 a year.

Table 1A. Statement of Population Change, Canada, 1972-1994

Year	Population as of January 1	Total Growth (1)	Births (2)	Deaths (3)	Natural Growth (4) = (2) - (3)	Inter-national Immigrants ¹ (5)	Returning Canadians (6)	Inter-national Emigrants ² (7)	Net			Residual ⁴
									Statistical International Migration ³ (8) = (5) - (7)	Non-permanent residents (9)	Growth by Flow (10) = (6) + (9) + (8)	
(in thousands)												
1972	22,157.8	256.7	347.3	162.4	184.9	122.0	37.1	63.2	58.8	3.0	98.8	-27.1
1973	22,414.5	303.7	343.4	164.0	179.3	184.2	37.8	78.5	105.7	7.9	151.4	-27.0
1974	22,718.2	326.3	345.6	166.8	178.9	218.5	36.0	78.0	140.4	-2.0	174.4	-27.0
1975	23,044.4	326.6	359.3	167.2	192.1	187.9	36.4	70.7	117.2	7.9	161.5	-27.0
1976	23,371.0	289.7	360.0	167.0	193.0	149.4	36.1	64.4	85.1	-3.0	118.1	-21.5
1977	23,660.7	261.0	362.2	167.5	194.7	114.9	32.3	61.4	53.5	-2.0	83.8	-17.5
1978	23,921.7	224.4	358.4	168.2	190.2	86.3	31.8	63.5	22.8	-3.0	51.6	-17.5
1979	24,146.1	275.9	366.1	168.2	197.9	112.1	30.3	54.7	57.3	7.9	95.5	-17.5
1980	24,422.1	322.1	370.7	171.5	199.2	143.1	27.6	45.2	97.9	14.9	140.4	-17.5
1981	24,744.2	317.7	371.3	171.0	200.3	128.6	25.4	50.1	78.6	30.3	134.3	-17.0
1982	25,061.8	268.5	373.1	174.4	198.7	121.1	28.3	59.4	61.7	-3.7	86.4	-16.6
1983	25,330.3	244.4	373.7	174.5	199.2	89.2	26.8	58.6	30.6	4.4	61.8	-16.6
1984	25,574.7	243.6	377.0	175.7	201.3	88.2	26.2	55.2	33.0	-0.3	58.9	-16.6
1985	25,818.3	246.3	375.7	181.3	194.4	84.3	27.3	54.2	30.1	11.0	68.4	-16.6
1986	26,064.5	297.1	372.9	184.2	188.7	99.2	25.4	49.1	50.1	46.5	122.0	-13.6
1987	26,361.7	346.1	369.7	185.0	184.8	152.1	24.2	44.3	107.8	40.9	172.9	-11.5
1988	26,707.8	428.9	376.8	190.0	186.8	161.9	21.5	38.7	123.2	108.9	253.6	-11.5
1989	27,136.7	429.9	392.7	191.0	201.7	192.0	21.1	40.7	151.3	67.4	239.8	-11.6
1990	27,566.6	385.1	405.5	192.0	213.5	214.2	19.4	39.6	174.6	-11.0	183.0	-11.5
1991	27,951.6	320.6	402.5	195.6	207.0	230.8	7.2 ⁵	48.5	182.3	-71.1	118.3 ⁵	-4.7 ⁵
1992 (PR)	28,272.2	321.2	398.6	196.5	202.1	252.8	..	48.5	204.3	-84.3	120.0	..
1993 (PR)	28,593.4	379.8	397.1	201.0	196.1	252.1	..	45.2	207.0	-23.1	183.9	..
1994 (PR)	28,973.2	..	..	..	..	..	..	..	..	..	..	..

See notes at the end of Table 1B.

Table 1B. Main Rates of the Demographic Accounts, Canada, 1972-1994

Year	Population as of January 1 (in thousands)	Total Growth Rate	Birth Rate	Death Rate	Rate of Natural Increase	Net Rate of International Migration ^{1, 2}	Rate of Growth by Flow ⁶
		(per 1,000)					
1972	22,157.8	11.52	15.58	7.29	8.30	2.64	3.22
1973	22,414.5	13.46	15.22	7.27	7.95	4.68	5.51
1974	22,718.2	14.26	15.11	7.29	7.82	6.14	6.44
1975	23,044.4	14.07	15.48	7.20	8.28	5.05	5.79
1976	23,371.0	12.32	15.31	7.10	8.21	3.62	4.11
1977	23,660.7	10.97	15.22	7.04	8.18	2.25	2.79
1978	23,921.7	9.34	14.91	7.00	7.92	0.95	1.42
1979	24,146.1	11.36	15.07	6.93	8.15	2.36	3.21
1980	24,422.1	13.10	15.08	6.98	8.10	3.98	5.00
1981	24,744.2	12.76	14.91	6.87	8.04	3.15	4.71
1982	25,061.8	10.66	14.81	6.92	7.88	2.45	2.77
1983	25,330.3	9.60	14.68	6.86	7.83	1.20	1.77
1984	25,574.7	9.48	14.67	6.84	7.83	1.28	1.65
1985	25,818.3	9.49	14.48	6.99	7.49	1.16	2.00
1986	26,064.5	11.34	14.23	7.03	7.20	1.91	4.14
1987	26,361.7	13.05	13.93	6.97	6.96	4.06	6.08
1988	26,707.8	15.93	14.00	7.06	6.94	4.58	8.99
1989	27,136.7	15.72	14.36	6.98	7.37	5.53	8.34
1990	27,566.6	13.87	14.61	6.92	7.69	6.29	6.18
1991	27,951.6	11.40	14.32	6.96	7.36	6.48	4.04 ⁵
1992 (PR)	28,272.2	11.30	14.02	6.91	7.11	7.19	4.19
1993 (PR)	28,593.4	13.20	13.80	6.98	6.81	7.19	6.38
1994 (PR)	28,973.2	...	...	...	...	...	...

¹ Based on Employment and Immigration Canada data.

² Estimated using Family Allowance and Income Tax files.

³ Emigrants subtracted from immigrants. It is statistical because landed immigrants in one year could have been in the country a year or more earlier, when they were counted in the non-permanent residents category.

⁴ The residual consists of the distribution over five years of the error of closure at the end of the census period, which is equal to the difference between the census count predicted by the components method and the actual count corrected for net undercoverage. This 'error' combines errors on the components, on the net undercoverage of the censuses and differences between concepts used by the Census and administrative files.

⁵ Returning Canadians for five months (January to May): Data not available for 1992 and 1993.

⁶ Takes into account non-permanent residents, returning Canadians and the residual.

(PR) Revised postcensal data, based on 1991, as of July 20, 1994.

Note: All other data are from final intercensal estimates. Births and Deaths are taken from Vital Statistics publications.

Calculations were carried out on unrounded numbers.

Source: Statistics Canada, Demography Division.

**Summary Table, Rates and Principal Demographic Indicators, Canada,
Provinces and Territories, 1986-1992**

	Year	New- foundland	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	
Birth Rate (per 1,000)	1986	14.0	15.0	13.9	13.5	12.6	14.1	
	1987	13.5	15.1	13.5	13.1	12.3	13.9	
	1988	13.0	15.2	13.5	13.1	12.6	13.9	
	1989	13.4	14.8	13.8	13.1	13.3	14.4	
	1990	13.2	15.4	14.1	13.2	14.0	14.6	
	1991	12.4	14.5	13.1	12.7	13.7	14.5	
	1992	11.9	14.2	12.9	12.5	13.4	14.2	
	1993	12.4	14.1	12.8	12.4	13.2	13.9	
Mortality Rate (per 1,000)	1986	6.1	8.7	8.1	7.5	7.0	7.2	
	1987	6.3	8.6	7.9	7.4	7.0	7.0	
	1988	6.2	8.6	8.2	7.4	7.0	7.1	
	1989	6.4	8.3	8.3	7.5	7.0	7.0	
	1990	6.7	8.7	8.1	7.3	6.9	6.9	
	1991	6.6	9.1	7.9	7.3	6.9	7.0	
	1992	6.5	8.5	8.2	7.5	6.8	6.9	
	1993 (P)	6.7	9.4	8.1	7.5	7.1	6.8	
Total Fertility Rate (number of children per woman aged 15-49)	1986	..	1.78	1.58	1.53	1.37	1.60	
	1987	1.53	1.82	1.55	1.51	1.37	1.58	
	1988	1.47	1.85	1.57	1.53	1.43	1.59	
	1989	1.53	1.83	1.62	1.55	1.53	1.63	
	1990	1.52	1.93	1.68	1.58	1.64	1.67	
	1991	1.44	1.85	1.58	1.54	1.65	1.66	
	1992	1.40	1.86	1.59	1.55	1.65	1.68	
Total First Marriage Rate (per 1,000) (males aged 17-49, females aged 15-49)	1986 M	584	704	590	594	426	616	
	F	576	737	628	622	439	653	
	1987 M	592	668	614	589	413	619	
	F	576	686	653	617	436	669	
	1988 M	626	728	637	644	425	635	
	F	628	739	680	675	453	690	
	1989 M	664	798	640	639	424	647	
	F	669	807	685	680	455	697	
	1990 M	644	768	610	624	408	653	
	F	658	766	649	659	459	698	
	1991 M	597	717	568	574	377	606	
	F	611	723	600	600	425	646	
	1992 M	554	689	551	551	333	585	
	F	573	702	582	580	376	628	
	Rate of Natural Increase(per 1,000)	1986	7.9	6.3	5.7	6.0	5.6	7.0
		1987	7.2	6.5	5.6	5.7	5.3	6.9
1988		6.8	6.7	5.3	5.7	5.7	6.8	
1989		7.0	6.5	5.5	5.7	6.3	7.3	
1990		6.4	6.7	6.0	5.9	7.1	7.8	
1991(PR)		5.8	5.3	5.2	5.4	6.8	7.5	
1992(PR)		5.4	5.6	4.7	5.1	6.6	7.3	
1993(PR)		5.7	4.6	4.7	4.9	6.0	7.1	
Total Growth Rate (per 1,000)		1986	-3.0	1.2	4.9	1.8	8.9	18.4
	1987	-2.1	5.8	3.5	4.2	8.7	21.3	
	1988	1.5	6.8	6.4	5.5	11.2	23.8	
	1989	1.2	2.6	7.2	6.6	10.5	21.6	
	1990	2.6	1.4	5.9	8.0	9.9	16.0	
	1991(PR)	1.7	-8.3	5.1	2.3	9.6	13.0	
	1992(PR)	-0.1	9.2	1.9	1.6	9.2	12.9	
	1993(PR)	1.3	7.7	5.5	5.5	8.4	15.7	

See notes at the end of this table

**Summary Table, Rates and Principal Demographic Indicators, Canada,
Provinces and Territories, 1986-1992 - Continued**

	Year	Manitoba	Saskatchewan	Alberta	British Columbia	Yukon	Northwest Territories	Canada
Birth Rate (per 1,000)	1986	15.6	17.0	18.0	13.9	19.3	27.3	14.2
	1987	15.4	16.5	17.2	13.6	18.5	27.4	13.9
	1988	15.4	16.3	17.1	13.7	19.6	27.6	14.0
	1989	15.7	16.3	17.3	13.6	17.5	25.7	14.4
	1990	15.7	15.9	16.8	13.8	19.8	26.8	14.6
	1991	15.6	15.2	16.5	13.5	19.6	26.8	14.3
	1992	14.9	15.0	16.0	13.3	17.5	25.0	14.0
	1993	15.1	15.1	15.7	13.0	16.3	25.0	13.8
Mortality Rate (per 1,000)	1986	8.1	7.8	5.6	7.0	4.5	4.3	7.0
	1987	7.9	7.6	5.5	7.1	4.2	3.6	7.0
	1988	8.2	7.9	5.6	7.2	5.1	3.9	7.1
	1989	8.0	7.8	5.5	7.2	3.5	4.3	7.0
	1990	8.0	8.0	5.5	7.1	4.1	3.8	6.9
	1991	8.1	8.1	5.6	7.1	3.9	3.9	7.0
	1992	8.1	7.8	5.6	7.1	3.9	4.1	6.9
	1993 (P)	8.4	8.4	5.5	7.0	3.8	4.0	7.0
Total Fertility Rate (number of children per woman aged 15-49)	1986	1.83	2.02	1.85	1.61	1.92	2.81	1.59
	1987	1.83	1.98	1.82	1.60	1.88	2.82	1.58
	1988	1.85	1.99	1.84	1.64	1.98	2.90	1.60
	1989	1.92	2.05	1.90	1.65	1.85	2.70	1.66
	1990	1.95	2.07	1.88	1.68	2.16	2.79	1.71
	1991	1.96	2.02	1.89	1.67	2.14	2.86	1.70
	1992	1.93	2.04	1.88	1.68	1.91	2.71	1.71
	Total First Marriage Rate (per 1,000) (males aged 17-49, females aged 15-49)	1986 M	611	582	561	561	473	342	552
F		657	623	612	616	564	393	585
1987 M		614	589	558	597	445	299	554
F		662	632	610	638	476	345	594
1988 M		617	600	590	633	525	302	574
F		669	647	642	684	623	314	620
1989 M		624	625	621	641	497	301	585
F		679	677	665	693	558	326	630
1990 M		637	613	625	638	518	313	582
F		690	665	673	694	591	327	631
1991 M		592	612	590	600	467	286	543
F		646	649	635	652	516	309	588
1992 M		601	609	588	605	532	272	523
F		647	639	631	646	559	294	566
Rate of Natural Increase(per 1,000)	1986	7.4	9.2	12.4	6.9	14.8	23.0	7.2
	1987	7.5	8.9	11.8	6.5	14.3	23.9	7.0
	1988	7.2	8.4	11.4	6.5	14.5	23.7	6.9
	1989	7.7	8.6	11.8	6.5	14.0	21.4	7.4
	1990	7.7	8.0	11.3	6.7	15.7	22.9	7.7
	1991(PR)	7.5	7.2	10.9	6.4	15.7	22.9	7.4
	1992(PR)	6.8	7.2	10.4	6.2	13.6	20.9	7.1
	1993(PR)	6.8	6.7	10.1	6.0	12.5	21.0	6.8
Total Growth Rate (per 1,000)	1986	6.4	2.7	6.0	11.2	31.3	-1.8	11.3
	1987	4.8	-0.4	4.6	18.8	28.1	11.5	13.0
	1988	1.7	-7.9	14.3	23.6	36.0	19.6	15.9
	1989	1.3	-10.4	17.9	27.4	23.6	23.4	15.7
	1990	3.2	-8.3	20.3	26.6	22.9	31.8	13.9
	1991(PR)	1.8	-3.0	14.0	21.3	36.9	26.8	11.4
	1992(PR)	2.1	-1.0	11.3	23.6	55.3	10.6	11.3
	1993(PR)	4.7	3.3	12.2	27.4	5.6	15.5	13.2

See notes at the end of this table

**Summary Table, Rates and Principal Demographic Indicators, Canada,
Provinces and Territories, 1986-1992 - Continued**

	Year	New- foundland	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	
Population Aged 65 + as a Percentage of the Total Population on July 1	1986	8.7	12.6	11.8	11.0	9.8	10.7	
	1987	9.0	12.7	12.0	11.2	10.0	10.9	
	1988	9.1	12.8	12.1	11.5	10.3	11.0	
	1989	9.3	12.9	12.2	11.6	10.5	11.1	
	1990	9.4	13.0	12.3	11.8	10.8	11.3	
	1991 (PR)	9.6	13.1	12.4	11.9	11.0	11.5	
	1992 (PR)	9.7	13.2	12.6	12.1	11.2	11.7	
	1993 (PR)	9.9	13.1	12.7	12.3	11.5	11.9	
Total Age Dependency Ratio (in %) ¹	1986	67.9	68.4	60.9	62.2	52.0	54.9	
	1987	66.3	68.0	60.7	62.0	52.0	54.9	
	1988	64.7	67.6	60.3	61.4	52.1	54.9	
	1989	62.9	67.4	59.6	60.7	52.2	54.6	
	1990	61.2	67.3	59.2	60.1	52.7	54.9	
	1991 (PR)	59.6	67.1	58.9	59.6	53.4	55.5	
	1992 (PR)	58.4	67.0	58.8	59.1	53.9	56.1	
	1993 (PR)	57.2	66.2	58.6	58.6	54.3	56.7	
Life Expectancy at Birth (in years)	1981	M	72.2	72.9	71.0	71.2	71.3	72.5
		F	78.8	80.5	78.6	79.1	78.9	79.2
	1986	M	72.9	72.8	72.5	72.7	72.2	73.8
		F	79.2	...	79.5	80.1	79.7	80.0
	1991	M	73.7	73.2	73.7	74.3	73.8	75.0
		F	79.6	...	80.3	80.9	80.9	80.9
	1992	M (P)	74.2	73.5	73.9	74.4	74.1	75.2
		F (P)	79.7	...	80.5	81.1	81.2	81.2
Infant Mortality Rate (per 1,000)	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	7.1	6.5	7.2	6.5	6.6	
	1989	8.2	6.2	5.8	7.1	6.8	6.8	
	1990	9.2	6.0	6.3	7.2	6.2	6.3	
	1991	7.8	6.9	5.7	6.1	5.9	6.3	
	1992	7.1	1.6	6.0	6.3	5.4	5.9	
	Rate of Pregnancies Terminated (per 1,000 women aged 15-44) ³	1986	2.5	0.4	7.9	2.0	9.6	11.6
1987		3.3	1.2	7.8	2.0	10.1	11.8	
1988		3.3	2.3	8.0	2.7	11.0	12.0	
1989		3.2	0.3	9.3	2.8	11.2	12.7	
1990		3.6	1.7	8.9	3.0	13.8	15.9	
1991		5.7	0.8	10.6	3.3	13.7	16.4	

See notes at the end of this table

**Summary Table, Rates and Principal Demographic Indicators, Canada,
Provinces and Territories, 1986-1992 - Concluded**

	Year	Manitoba	Saskat- chewan	Alberta	British Columbia	Yukon	Northwest Territories	Canada	
Population Aged 65 + as a Percentage of the Total Population on July 1	1986	12.4	12.6	7.9	11.9	3.7	3.0	10.5	
	1987	12.6	12.8	8.3	12.2	3.8	2.9	10.7	
	1988	12.8	13.0	8.5	12.4	3.7	3.0	10.9	
	1989	13.0	13.4	8.6	12.5	3.8	2.8	11.0	
	1990	13.1	13.7	8.8	12.6	3.8	2.7	11.2	
	1991 (PR)	13.3	14.0	8.9	12.6	3.9	2.7	11.4	
	1992 (PR)	13.4	14.2	9.1	12.8	3.9	2.7	11.6	
	1993 (PR)	13.5	14.4	9.3	12.8	4.0	2.8	11.8	
Total Age Dependency Ratio (in %) ¹	1986	63.8	70.5	56.0	57.2	50.0	68.4	56.1	
	1987	64.1	70.8	56.6	57.5	49.5	67.7	56.2	
	1988	64.3	71.1	56.8	57.4	48.1	67.1	56.2	
	1989	64.6	71.8	56.9	57.4	47.9	66.4	56.0	
	1990	65.0	72.9	57.3	57.5	47.9	65.9	56.3	
	1991 (PR)	65.3	73.5	57.7	57.6	47.6	66.7	56.7	
	1992 (PR)	65.7	74.0	58.2	57.8	47.8	67.4	57.1	
	1993 (PR)	65.8	74.3	58.5	57.7	47.1	68.3	57.4	
Life Expectancy at Birth (in years)	1981	M	72.3	72.5	72.2	72.9	72.1
		F	78.9	79.9	79.3	79.8	79.2
	1986	M	73.3	73.8	73.7	74.4	73.3
		F	80.0	80.5	80.3	80.8	80.0
	1991	M	74.6	75.3	75.1	75.2	74.6
		F	80.8	81.5	81.2	81.4	81.0
	1992	M	74.6	75.6	75.4	75.4	74.9
		F	81.0	81.9	81.3	81.7	81.2
Infant Mortality Rate (per 1,000)	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	
	1989	6.6	8.0	7.5	8.2	4.2	16.2	7.1	
	1990	8.0	7.6	8.0	7.5	7.2	12.0	6.8	
	1991	6.5	8.2	6.7	6.5	10.6	11.6	6.4	
	1992	6.8	7.3	7.2	6.2	3.8	16.7	6.1	
	Rate of Pregnancies Terminated (per 1,000 women aged 15-44) ³	1986	10.1	4.5	10.1	15.7	17.6	17.6	10.5
1987		10.3	5.3	8.9	15.6	20.1	17.5	10.6	
1988		11.0	5.6	10.2	14.8	16.0	19.5	11.0	
1989		10.8	5.9	10.5	14.6	18.3	17.8	11.4	
1990		14.0	6.0	10.4	16.2	18.7	22.1	13.6	
1991		13.7	5.9	10.7	16.2	18.7	21.3	13.9	

¹ Ratio between population aged 0-17, 65+ and 18-64.

² Because of an absence of deaths in certain age groups, the mortality table could not be calculated.

³ From 1985 to 1989, for all provinces except Quebec, the rates cover only therapeutic abortions carried out in hospitals and clinics. From 1985 to 1991, the rates for Quebec are calculated using all known abortions (Régie de l'assurance maladie du Québec).

(P) Preliminary.

(PR) Revised postcensal estimates, based on 1991, dated July 20, 1994.

British Columbia increased at twice the rate of the national average (Table A1). Ontario, always the preferred destination of international migrants, as usual took the lion's share of national population growth (44.4%), for a gain of 168,800, followed by British Columbia with 97,300 (25.6%) and Quebec with 60,400 (15.9%).

The decline in the rate of natural increase at the national level is the result of declines in all provinces. Since the crude death rate has remained basically the same in all areas, this decrease reflects the general decline in births. The weakness in the birth rate is one consequence of the aging of the population, insofar as the low birth cohorts arrive at child-bearing age. The decline in employment during the recession of the early 1990s may have further aggravated the situation: uncertain income tends to discourage couples from having children.

Even more than the slight variations in crude birth and death rates, differences in growth between provinces were largely due to the difference in their attraction for international and interprovincial migrants. The two provinces that recorded faster growth than the Canadian population as a whole, British Columbia and Ontario, are also those with the highest rates of international net immigration (10.8 and 10.5 per 1,000, respectively) and the highest rate of interprovincial migration (3.5 and 4.6 per 1,000, respectively). Alberta, which since 1980 has had the highest birth rate and the lowest death rate (and thus the highest rate of natural increase), ranks only third in rate of total increase.

A Look at the World Situation

Europe overall has slower population growth than North America, although it is still subject to significant changes like the sudden and recent change in the tempo of fertility in the Mediterranean area.

In general, an examination of time series shows an aging population, which explains the declining birth rates and rising death rates. At present, judging by the proportion of people 65 and over, the country that has aged the most is Sweden (with 17.7%), while the youngest is Iceland (10.8%), although population dynamics will change these proportions over time. The most recent projections show that in 2005 Italy and Germany will have the highest proportions of people 65 and over (20.0%), while Ireland will have the lowest (12.6%), followed by the Netherlands (14.9%). Canada in 1991 was at 11.5% and in 2005 will probably only reach 13.3%.

Growth rates in the European Community in 1993 were up compared to 1992, back to about 1991 levels (Table 2), but the Community is not uniform in this area. Italy, which had a growth rate of only 0.8 per 1,000 in 1991 and 1.8 in 1992, is now approaching the European average with

Table 2. Main Demographic Indicators for the Industrialized Countries, 1992 and 1993

Country	Population as of January 1				Births			Deaths			Natural Increase			Net Migration	
	1992	1993	1994		1992	1993		1992	1993		1992	1993		1992	1993
	(in thousands)														
Belgium	10,022.0	10,068.3	10,101.0	125.1	120.0	105.7	107.0	19.4	13.0	25.4	19.0	11.1	4.5	11.5	473.9
Denmark	5,162.1	5,180.6	5,196.6	67.8	67.4	60.8	62.9	7.0	4.5	11.5	11.1	11.1	4.5	11.5	473.9
Germany	80,170.0	80,614.1	81,352.6	805.8	795.0	881.2	890.9	-75.5	-95.9	345.0	39.0	35.0	35.0	345.0	473.9
Greece	10,250.0	10,320.0	10,390.0	104.0	102.0	98.0	97.0	6.0	5.0	35.0	39.0	35.0	35.0	35.0	39.0
Spain	39,055.9	39,114.2	39,168.2	381.3	388.7	341.1	339.2	40.2	49.5	18.1	4.5	4.5	49.5	18.1	4.5
France	57,206.2	57,526.6	57,800.1	742.8	710.3	523.0	530.1	219.8	180.2	90.0	90.0	90.0	180.2	90.0	90.0
Ireland	3,532.0	3,556.5	3,571.0	51.6	48.9	30.8	31.0	20.8	17.8	-6.0	-6.0	-6.0	17.8	-6.0	-6.0
Italy	57,788.2	56,932.7	57,153.7	561.3	537.5	547.1	541.2	14.2	-3.6	89.2	194.0	194.0	-3.6	89.2	194.0
Luxembourg	389.8	395.2	400.9	5.1	5.4	4.0	3.9	1.1	1.4	4.3	4.2	4.2	1.4	4.3	4.2
Netherlands	15,128.6	15,238.9	15,341.3	196.7	195.7	129.9	137.8	66.8	57.9	57.9	59.7	59.7	57.9	57.9	59.7
Portugal	9,845.6	9,850.3	9,868.0	115.0	114.0	101.2	106.4	13.9	7.6	-10.0	0.8	0.8	7.6	-10.0	0.8
United Kingdom	57,642.0	57,959.0	58,276.0	781.0	761.8	634.2	658.0	146.8	103.8	59.0	84.2	84.2	103.8	59.0	84.2
EEC members	346,192.4	346,756.4	348,619.4	3,937.5 ²	3,846.7	3,457.0	3,505.4	480.5	341.3	735.4	974.4	974.4	341.3	735.4	974.4
Austria	7,860.8	7,909.6	8,005.9	95.3	95.3	83.2	82.5	12.1	12.8	36.6	32.0	32.0	12.8	36.6	32.0
Finland	5,029.3	5,055.0	5,077.9	66.7	65.0	49.5	51.0	17.2	14.0	8.8	9.1	9.1	14.0	8.8	9.1
Iceland	259.7	262.4	..	4.6	..	1.8	..	2.8	..	-0.3	..	..	..	-0.3	..
Norway	4,273.6	4,299.2	4,324.8	60.1	59.7	44.4	46.1	15.7	13.5	10.0	12.5	12.5	13.5	10.0	12.5
Sweden	8,644.1	8,692.0	8,745.1	122.7	117.8	94.7	97.0	28.0	20.9	19.6	31.9	31.9	20.9	19.6	31.9
Switzerland ¹	6,831.9	6,908.0	6,968.6	86.9	83.7	62.3	62.4	24.6	21.4	51.5	37.6	37.6	21.4	51.5	37.6
Liechtenstein	29.4	29.9	30.5	0.4	..	0.2	..	0.2	..	0.4	..	..	..	0.4	..
EFTA¹	32,928.8	33,156.1	33,152.8	436.7 ²	421.5	336.1	339.0	100.6	82.5	126.9	123.1	123.1	82.5	126.9	123.1
EEA¹	379,121.2	379,912.5	381,772.2	4,374.2 ²	4,268.2 ²	3,793.1	3,844.4 ²	581.1	427.0 ²	862.3	1,097.5 ²	1,097.5 ²	427.0 ²	862.3	1,097.5 ²
Canada	28,272.2	28,593.4	28,973.2	404.3	397.1	199.0	201.0	205.3	196.1	200.2	206.9	206.9	196.1	200.2	206.9
United States	253,668.0	256,899.0	259,681.0	4,084.0	4,039.0	2,177.0	2,268.0	1,907.0	1,771.0	990.0	894.0	894.0	1,771.0	990.0	894.0
Mexico	87,241.4	..	88,767.0	2,646.0	2,360.8	411.1	453.9	2,234.9	1,906.9	..	318.2	318.2	1,906.9	..	318.2
North America	369,181.6	285,492.4	377,421.2	7,134.3	6,796.9	2,787.1	2,922.9	4,347.2	3,874.0	..	..	..	3,874.0	..	..
Australia	17,414.3	17,568.7	17,746.6	264.2	..	123.7	..	140.5	..	44.5	65.7	65.7	..	44.5	65.7
New Zealand	3,449.6	3,485.4	3,524.8	59.3	58.9	27.2	27.2	32.0	31.7	3.8	8.7	8.7	31.7	3.8	8.7
Japan	124,000.0	124,400.0	124,683.6	1,209.0	1,188.3	855.4	878.0	353.5	310.3	225.9	26.6	26.6	310.3	225.9	26.6

See notes at the end of the table.

Table 2. Main Demographic Indicators for the Industrialized Countries, 1992 and 1993 - Continued

Country	Total Growth Rate ⁹ (per 1,000)		Infant Mortality Rate (per 1,000 live births)		Life Expectancy ¹¹		Total Fertility Rate	
	1992	1993	1992	1993	1993		1992	1993
					Males	Females		
Belgium	4.5	3.2	8.2	8.0	73.1	79.8	1.56	1.61
Denmark	3.6	3.1	7.3	6.6	72.6	77.9	1.77	1.75
Germany	3.3	4.7	6.9	5.8	72.9	79.3	1.30	1.30
Greece	4.0	4.2	8.2	8.3	74.6	79.8	1.41	1.38
Spain	1.5	1.4	7.9	7.6	73.3	80.5	1.23	1.24
France	5.4	4.7	7.3	6.4	73.3	81.5	1.73	1.65
Ireland	4.2	3.1	6.6	7.2	72.6	78.2	2.11	2.03
Italy	1.8	3.4	8.3	7.4	73.6	80.3	1.26	1.21
Luxembourg	13.7	14.3	8.5	8.5	71.9	78.4	1.65	1.70
Netherlands	8.2	6.7	6.3	6.2	74.0	80.0	1.59	1.57
Portugal	0.4	0.9	9.3	8.7	70.7	78.1	1.48	1.53
United Kingdom	3.6	3.2	7.0	6.6	73.6	79.1	1.80	1.82
EEC members	3.5	3.7	7.4	6.7	72.9	79.5	1.48	1.44
Austria	6.2	5.6	7.5	6.5	73.2	79.7	1.51	1.51
Finland	5.2	4.5	5.8	4.4	71.7	79.4	1.86	1.82
Iceland	10.0	10.2	5.5	4.8	76.7	80.7	2.22	2.21
Norway	6.0	5.9	6.4	5.8	74.2	80.3	1.88	1.82
Sweden	5.5	6.1	5.4	5.5	75.5	80.8	2.09	2.00
Switzerland ¹	11.1	8.7	6.4	5.6	74.5	81.3	1.58	1.48
Liechtenstein	19.6	19.8	0.0	10.7	..	..	..	..
EFTA¹	3.6	-0.1	..	..	..	..	..	..
EEA¹	2.1	3.9	7.3	6.6	..	..	1.49	1.50
Canada	11.4	14.0	6.4	6.1	..	..	..	..
United States	12.7	10.8	8.5	8.3	..	..	2.08	2.07
Mexico	..	18.0	..	33.7	68.6	74.6	..	3.08
North America	..	..	..	..	..	..	..	..
Australia	8.9	10.1	7.0	7.2	..	..	1.90	..
New Zealand	10.4	11.2	7.3	7.2	72.9	78.7	2.12	2.10
Japan	3.2	2.3	4.5	4.3	76.1	82.2	1.50	..

See notes at the end of the table.

Table 2. Main Demographic Indicators for the Industrialized Countries, 1992 and 1993 - End

Country	Marriage			Divorce				
	1992		1993		1992		1993	
	Marriages (in thousands)	Rate (per 1,000)	Marriages (in thousands)	Rate (per 1,000)	Divorces (in thousands)	Rate (per 1,000)	Divorces (in thousands)	Rate (per 1,000)
Belgium	58.3	5.8	54.2	5.4	22.3	2.2	21.6	2.1
Denmark	32.3	6.2	30.5	5.9	13.0	2.5	12.6	2.4
Germany	452.1	5.6	441.3	5.4	136.3 ⁵	1.7 ⁵	135.0 ¹⁰	1.7 ¹⁰
Greece	50.0	4.9	61.0	5.9	6.5	0.6	7.2	0.7
Spain	215.1	5.5	201.7	5.2	23.1 ¹³	0.6 ¹³	26.8 ¹⁰	0.7 ¹⁰
France	269.9	4.7	253.3	4.4	108.1 ⁵	1.9 ⁵	108.1 ⁵	1.9 ⁵
Ireland	16.1	4.5	16.1 ¹⁰	4.5	..	..	..	..
Italy	306.9	5.4	292.2	5.1	24.0	0.4 ⁵	22.4	0.4 ⁵
Luxemburg	306.9	5.4	292.2	5.1	0.8 ⁵	0.0 ⁵	0.7 ¹⁰	1.8 ¹⁰
Netherlands	93.6	6.2	88.3	5.8	30.1	2.0	30.6	2.0
Portugal	69.9	7.1	68.2	6.9	12.4	1.3	12.3	1.2
United Kingdom	375.4 ¹²	6.5 ¹²	349.7 ⁵	6.1 ⁵	165.7 ¹²	2.9 ¹²	173.5 ⁵	3.0 ⁵
EEC members	1,942.1	5.6	1,838.6²	5.3²	542.3^{2,5}	1.6^{2,5}	550.8¹⁰	1.6¹⁰
Austria	45.7	5.8	45.0	5.6	16.3	2.1	16.4	2.1
Finland	23.0	4.6	23.7 ¹⁰	4.7 ¹⁰	12.8	2.2 ⁵	12.3 ¹⁰	2.4 ¹⁰
Iceland	1.2	4.6	1.2	4.6	0.5 ⁵	2.1 ⁵	0.5 ¹⁰	2.0 ¹⁰
Norway	19.3	4.5	19.3 ¹⁰	4.5 ¹⁰	10.2	2.4	10.2 ¹⁰	2.4 ¹⁰
Sweden	37.1	4.3	33.9	3.9	21.9	2.5	21.7	2.5
Switzerland ¹	45.1	6.6	42.9	6.2	14.5	2.1	15.1	2.2
Liechtenstein	0.2 ⁵	6.7 ⁵	0.2 ¹⁰	6.3 ¹⁰	0.0 ⁵	1.2 ⁵	0.0 ¹⁰	1.3 ¹⁰
EFTA¹	171.6	5.2	..	..	76.2	2.3	76.2	2.3
EEA¹	2,113.7²	5.6²	1,961.9²	5.2²	618.5^{2,5}	1.6^{2,5}	627.0²	1.7²
Canada	168.9	5.9	..	..	..	..	..	..
United States	2,362.0	9.3	2,334.0	9.0	1,215.0	4.8	1,187.0	4.6
Mexico	650.0	..	667.6	7.6	49.1	5.6	51.9	5.9
North America	..	..	..	..	..	..	..	..
Australia	114.8	6.6	113.7	6.4	45.7	2.6	48.3	2.7
New Zealand	22.0	6.3	22.0	6.3	9.1	2.6	9.1	2.6
Japan	754.4	6.1	792.6	6.4	179.2	1.4	179.2	1.4

¹ Switzerland is no longer a member of E.F.T.A. or the E.E.A. since 1992. It is included here to permit comparisons with previous data for major groups. ² Eurostat estimates. ³ Resident population. ⁴ Includes administrative corrections. ⁵ 1991. ⁶ Calculations by author. ⁷ July 1, 1991 to July 1, 1992. ⁸ Legal entries minus legal exits. ⁹ Growth rates are furnished by the countries. If they are not consistent with the populations as of January 1 in the two successive years, it is presumably because the population estimates for the preceding year were corrected after the information was furnished. ¹⁰ 1992. ¹¹ In years and tenths of a year. ¹² 1990. ¹³ 1989.
Note: E.F.T.A.: European Free Trade Association. E.E.A.: European Economic Area. E.E.C.: European Economic Community.
Sources: Europe: Eurostat. Switzerland: Data obtained directly from Geneva. Canada: Statistics Canada. United States: Census Bureau and N.C.H.S. (National Centre for Health Statistics). Mexico: Data obtained from the Instituto Nacional de Estadística, Geografía e Informática. Australia: Data furnished by the Australian Bureau of Statistics. New Zealand: Data furnished by the Department of Statistics. Japan: Statistical Standards Department.

3.4 per 1,000. Natural increase was still negative, but net migration has increased considerably, from 34,900 in 1991 to 89,200 in 1992 and then up to 194,000 in 1993, the highest after Germany. Conversely, France was the exception with slower growth, at 5.5 per 1,000 in 1991 and only 4.7 per 1,000 in 1993. The culprit was natural increase; the surplus of births over deaths, which was 232,000 in 1991, was only 180,000 in 1993, while net migration remained basically constant. Deaths were up slightly, but births dropped from 758,000 to 710,000. ***Spain was the country with the lowest growth rate (1.4 per 1,000)*** along with Portugal, which had only 0.9 per 1,000. ***Spain's growth was in fact down compared to previous years. All components stagnated: fertility (1.24) was the lowest in Europe after Italy (1.21)***. Germany was the country with the highest growth rate, 4.7 per 1,000, equal to that of France. Natural increase remained negative (-96,000) but the deficit was overwhelmingly compensated by a migratory balance of 474,000.

The countries of the European Free Trade Association (EFTA) represent only an eighth of the population of the European Community (EC). Population growth in Austria is still declining slowly. The increasingly weak migratory balance (58,700 in 1991, 36,600 in 1992 and only 32,000 in 1993) was mainly responsible for this decline. Declining natural increase in Sweden was compensated by an increase in net migration (16,600 in 1992 but 32,000 in 1993). Switzerland, which is not a member of the EC and no longer a member of EFTA, is nevertheless a major western European country. Switzerland's growth rate in 1993, even though it was down compared to previous years, remains one of the strongest in Europe (8.7 per 1,000). The reduction in the rate of increase was due to lower net migration than in previous years.

A noteworthy phenomenon, particularly for the countries of northern Europe, is ***the decrease in infant mortality, which fell to 4.4 per 1,000 in Finland, 5.5 per 1,000 in Sweden and 5.6 per 1,000 in Switzerland, all below Canada, which ranked second in the world with 7.1 only a few years ago (1989), right after Sweden. Today, with 6.1 per 1,000, Canada is in sixth place.***²

CENTRAL EUROPE

While we have a good idea of the demographic parameters of countries in western, northern and southern Europe, we know less about those of ***Central Europe***. The lack of information or doubts as to its quality which prevailed throughout the period when these countries were under communist

² Seventh if we accept the Japanese rate of 4.3.

regimes contributed to making them “forgotten” countries. The fact remains, however, that this region, including Albania, ***forms a group of 13 countries totalling some 120 million inhabitants***, whose unstable political boundaries cut through ethnic groups, zones of religious influence, languages and, more broadly, cultures. Through the diversity of their population, they form a transition area between western Europe and the East, as do Turkey.

The available series of indices for the countries are affected by administrative changes, and it is unfortunate that, in addition to their other imperfections, they are not as complete as we might wish. Some trends can nevertheless be seen. In terms of growth, with the exception of Albania, the dominant characteristic is stagnation (see Bulgaria and Roumania, Table 3), with even a decline in natural increase in Hungary (-3 per 1,000). This situation is due to an overall reduction in fertility. The unweighted mean total fertility rate for the 12 Central European countries fell from 2.56 in 1965 to 1.86 in 1990 and, for countries where it is known, it has continued to decline since then. Combined with negative migratory flows, the decline in fertility brought a decrease in the birth rate which cancelled out the very small overall decline in general mortality.

Albania stands out from these trends. Despite a decline, fertility still stood at 3 children per woman in 1990, and the birth rate at about 23 per 1,000. Its young age structure is responsible for a very low death rate (5.4 per 1,000). The result is a rate of natural increase that is quite exceptional for Europe in the modern period, 18 per 1,000.

Another common characteristic of Central European countries is the short life expectancy that results from slow progress in the health-care field. ***In Hungary, Romania and Bulgaria, there has even been a slight decline in male life expectancy.*** For the Czech and Slovak republics taken together, female life expectancy, the highest, was only 75.8 years, while that for males reached 69 in none of these countries except Albania, with 69.3.

Another curious observation has to do with the significant variations in the level of infant mortality, which ranged from 8.9 per 1,000 in Slovenia to 30.6 per 1,000 in Macedonia and even 32.9 per thousand in Albania. Central Europe has long been known for its use of abortion as a birth-control measure, since contraception is relatively uncommon. In only one country, Poland, was the number of abortions per 100 births lower than that of Canada (Table 4). In recent years, the Polish government has acted in two stages (in 1989 and in 1993) to restrict considerably the right to abortion which existed under the Communist regime. With 2.3 reported abortions per 100 births, speculations exist that there are many illegal abortions and/or that an undetermined number of Polish women have abortions in neighbouring countries where the laws are less strict. ***The most surprising country in***

Table 3. Main Demographic Indicators for Eastern European Countries, 1991-1993

Country	Population on January 1			Births			Deaths			Natural Increase		
	1992	1993	1994	1991	1992	1993	1991	1992	1993	1991	1992	1993
	(in thousands)											
Albania	3,353.1	3,363.0	..	77.4	77.4	..	17.7	17.7	..	59.7	59.7	..
Bosnia-Herzegovina	4,570.3	..	..	62.9	..	..	29.8	..	..	33.1	..	..
Croatia	4,808.7	..	..	55.4	..	..	52.2	..	..	3.2	..	..
Macedonia	2,162.6	2,162.5	..	35.0	33.2	..	14.9	16.0	..	20.1	17.2	..
Slovenia	1,998.9	..	..	21.7	20.0	..	19.1	19.3	..	2.6	0.7	..
Montenegro	652.8	652.8	..	9.6	142.2	..	3.9	105.5	..	5.7	36.7	..
Serbia	9,956.5	9,958.5	..	139.6	..	..	93.8	..	..	45.8	..	..
Bulgaria	..	8,956.1	..	96.5	89.1	..	110.4	108.0	..	-13.9	-18.9	..
Hungary	10,337.0	10,310.0	10,278.0	127.2	121.7	116.5	144.8	148.8	148.5	-17.6	-27.1	-32.0
Poland	38,309.2	38,418.0	38,506.0	546.0	513.6	492.9	404.0	393.1	390.9	142.0	120.5	102.0
Romania	..	22,778.3	..	275.3	260.4	..	251.8	263.9	..	23.5	-3.5	..
Czech Republic	15,598.8	10,322.3	..	129.4	121.7	121.0	124.3	120.3	118.3	5.1	1.4	2.7
Slovakia	..	5,307.9	..	78.6	74.6	..	54.6	53.4	..	24.0	21.2	..

See notes at the end of the table.

Table 3. Main Demographic Indicators for Eastern European Countries, 1991-1993 - Continued

Country	Rate of Natural Increase			Birth Rate			Death Rate			Infant Mortality Rate ¹		
	1991	1992	1993	1991	1992	1993	1991	1992	1993	1991	1992	1993
	(per 1,000)											
Albania	..	18.0	..	23.4	..	..	5.6	5.4	..	28.3	32.9	..
Bosnia-Herzegovina	13.8	..	..	..	..	..	..	18.4	..
Croatia	10.8	..	..	..	..	..	..	11.7	..
Macedonia	..	8.0	..	16.3	..	..	..	..	..	..	30.6	..
Slovenia	10.6	10.0	..	..	9.7	..	..	8.9	..
Montenegro	..	3.0	..	14.8	13.6	..	9.2	10.1	..	15.4	16.0	..
Serbia	14.1	..	..	..	..	..	..	..	..
Bulgaria	10.7	10.4	..	12.3	12.6	..	16.8	15.8	..
Hungary	..	-3.0	-3.0	12.3	11.8	11.3	14.0	14.4	14.4	15.6	14.1	13.3
Poland	..	3.0	3.0	14.3	13.4	12.8	10.6	10.2	10.2	15.0	14.3	13.3
Romania	11.9	11.4	..	..	11.6	..	..	23.3	..
Czech Republic	..	1.0	..	12.6	11.8	11.7	12.1	11.7	11.5	11.5	10.9	..
Slovakia	14.9	..	..	10.4	..	..	..	..	..

See notes at the end of the table.

Table 3. Main Demographic Indicators for Eastern European Countries, 1991-1993 - Concluded

Country	Life Expectancy at Birth ²										Total Fertility Rate									
	Males					Females														
	1975	1980	1985	1990	1993	1975	1980	1985	1990	1993	1975	1980	1985	1990	1991	1992	1993			
Albania	..	67.0	68.5	69.3	..	72.0	73.8	75.4	..	5.18	..	3.62	3.26	3.03	3.00	..	..	
Bosnia-Herzegovina	..	..	..	..	..	..	..	..	..	2.64	2.36	1.90	1.80	1.70	..	..	..
Croatia	..	..	..	..	..	..	..	..	..	1.80	1.91	1.92	1.82	1.69	1.50	..	..	
Macedonia	..	..	..	..	..	..	..	..	..	2.95	2.67	2.48	2.32	2.06	2.30	2.18	..
Slovenia	..	..	..	..	..	..	..	..	..	2.13	2.17	2.11	1.78	1.48	..	1.34	..
Montenegro	66.9	67.7	67.1	68.9	71.7	73.2	73.6	74.5	3.08	2.62	2.38	2.15	2.12	1.79	..	..	..
Serbia	..	..	..	..	..	..	..	..	2.48	2.23	2.30	2.28	2.23	2.10	..	..	..
Bulgaria	68.7	..	68.2	68.0	73.9	..	74.4	74.7	2.07	2.18	2.23	2.05	1.95	1.74	1.57	1.47	..			
Hungary	66.8	66.0	65.8	65.1	73.0	73.2	73.6	73.7	1.82	1.98	2.35	1.91	1.83	1.87	1.87	1.78	1.69			
Poland	67.6	66.9	66.5	66.5	74.3	75.4	74.8	75.4	2.52	2.20	2.27	2.28	2.33	2.05	2.06	1.93	1.85			
Romania	67.4	66.5	66.8	66.6	72.0	71.8	72.8	72.7	1.91	2.89	2.60	2.42	2.31	1.83	1.56	1.51	..			
Czech Republic	66.9	66.8	67.3	67.3	73.9	74.2	74.7	75.8	2.18	1.93	2.43	2.07	1.96	1.89	1.86	1.74	..			
Slovakia	..	..	..	..	..	..	..	..	2.78	2.40	2.55	2.32	2.25	2.09	2.05	1.95	..

¹ Per 1,000 live births.

² In years and tenths of a year.

Source: Data furnished by the Institut National d'Études Démographiques (France).

Table 4. Abortions per 100 Births for Certain Eastern European Countries and Canada, 1965-1992

Country	1965	1970	1975	1980	1985	1990	1991	1992
Bulgaria	76.8	86.3	83.2	102.3	93.4	137.5	143.4	..
Hungary	135.5	126.7	49.5	54.4	63.0	71.9	70.7	71.5
Poland	30.9	27.2	21.5	19.3	20.0	10.9	5.6	2.3
Czech Republic	39.7	48.6	28.9	44.8	61.1	85.2	..	89.8
Romania	400.6	68.4	85.7	103.6	84.4	290.0	315.0	265.7
Slovakia	25.0	34.6	26.8	32.8	40.2	60.6	..	66.3
Yugoslavia	53.0	70.0	75.6	93.3	104.1	..	..	..
Canada	..	..	14.9	19.6	18.0	22.5	23.3	..

Source: Data furnished by the Institut National d'Études Démographiques (France).

the whole group is certainly Romania. The ratio of 400 abortions per 100 births in 1965 fell to about 70 or 80 between 1970 and 1985 under the pro-natalist policy of the Ceausescu government.³ Since 1990, the ratio has again started to move upward, reaching 266 per 100 in 1992.

The institution of marriage in all these countries has, up until quite recently, showed better resistance to common-law unions than the majority of European and North American countries. Total marriage rates in the order of 800 to 850 per 1,000 for both men and women were still common until the late 1980s (Table 5). Marriages now appear to be going down, based on those countries for which we have figures, but only Hungary, which probably has the lowest indices, is at about the same level as Canada.

On the whole, divorces are up, but starting from very different levels. The index in Romania in 1970 was very low, no doubt because of the restrictive laws that were part of the government's pro-natalist policy. Poland has the lowest level of all, but no Eastern European country has reached the same level as Canada.

MARRIAGE

The number of marriages declined in 1992 to 164,573 (Table A2). This is a decrease of 7,678 marriages (4.5%) compared to the number recorded

³ Abortion had been outlawed in 1967.

Table 5. Marriage and Divorce in Certain Eastern European Countries, 1965-1992

Country		1965	1970	1975	1980	1985	1990	1991	1992
		Total First-Marriage Rate (per 1,000)							
Albania	M	872	832	940	690	844	..	..	..
	F	839	735	772	787	823	..	..	..
Bulgaria	M	938	963	959	924	849	851	689	..
	F	919	977	1,001	978	906	866	701	..
Hungary	M	984	988	943	767	798	770	701	649
	F	975	966	999	986	858	771	704	598
Poland	M	850	1,002	948	838	790	858	788	736
	F	830	923	940	900	878	904	821	757
Romania	M	909	892	991	908	846	..	..	..
	F	933	841	998	1,030	857	..	..	..
Czechoslovakia	M	965	912	927	978	867	..	..	..
	F	901	902	975	896	916	..	..	..
		Crude Divorce Rate (per 1,000)							
Albania		8.5	12.0	11.8	11.1	10.9	..	..	..
Bulgaria		10.3	14.8	15.4	18.5	20.8	17.0	16.9	..
Hungary		22.7	25.0	27.7	29.4	33.3	30.9	31.0	28.0
Poland		..	14.6	15.4	13.6	16.6	15.0	12.1	11.6
Czech Republic		20.2	26.2	30.0	30.8	35.9	37.9	..	..
Romania		20.4	4.8	20.2	19.6	..	..	..	..
Slovakia		8.0	10.7	17.9	17.6	20.2	22.9	20.4	..

Source: Data furnished by the Institut National d'Études Démographiques (France).

in 1991. This decline is even more remarkable since it follows the exceptional decrease of over 15,000 marriages observed the previous year (1991). *The crude marriage rate*, calculated as the ratio of the number of marriages to the total population, not very meaningful but useful for broad comparisons, *stood at 5.8 per 1,000, the lowest since the creation of the vital statistics registry in 1921*. A similar low of 5.8 per 1,000 was recorded in 1932, but proved to be an anomaly caused by the Great Depression.

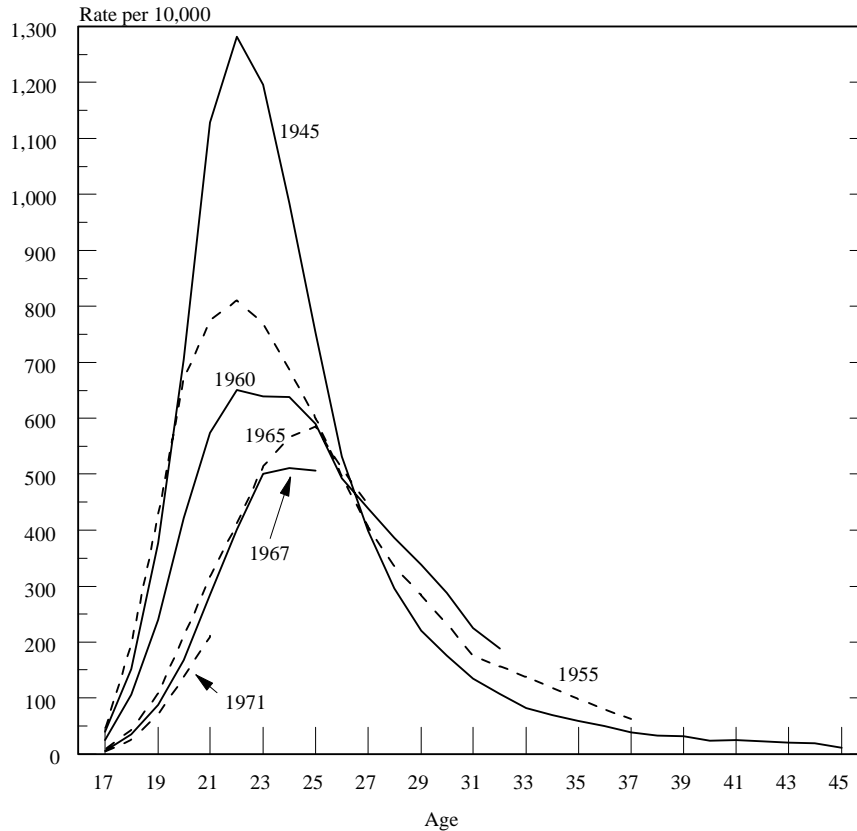
The number of marriages was down in all provinces, except in British Columbia where it remained practically unchanged (Table 6). Compared to the previous year, the decrease was smaller in 1992 everywhere but in Quebec. In that province, the number of marriages had dropped by 9.8% from 1990 to 1991, and the decrease from 1991 to 1992 was 10.7%. In Ontario, however, the decrease of 9.8% observed from 1990 to 1991 went down to 3.9% from 1991 to 1992.

Table 6. Number of Marriages and Annual Change, Canada, Provinces and Territories, 1987-1992

Province	Number of Marriages					
	1987	1988	1989	1990	1991	1992
Nfld	3,481	3,686	3,905	3,791	3,480	3,254
P.E.I.	924	965	1,019	996	876	850
N.S.	6,697	6,894	6,828	6,386	5,845	5,623
N.B.	4,924	5,292	5,254	5,044	4,521	4,313
Que.	32,616	33,519	33,325	32,060	28,922	25,841
Ont.	76,201	78,533	80,377	80,097	72,938	70,079
Man.	7,994	7,908	7,800	7,666	7,032	6,899
Sask.	6,854	6,767	6,637	6,229	5,923	5,664
Alb.	18,640	19,272	19,888	19,806	18,612	17,871
B.C.	23,395	24,461	25,170	25,216	23,691	23,749
Yukon	189	209	214	218	196	221
N.W.T.	237	222	223	228	215	209
Canada	182,152	187,728	190,640	187,737	172,251	164,573
	Difference					
	1987-1988	1988-1989	1989-1990	1990-1991	1991-1992	1987-1992
Nfld	205	219	-114	-311	-226	-227
P.E.I.	41	54	-23	-120	-26	-74
N.S.	197	-66	-442	-541	-222	-1,074
N.B.	368	-38	-210	-523	-208	-611
Que.	903	-194	-1,265	-3,138	-3,081	-6,775
Ont.	2,332	1,844	-280	-7,159	-2,859	-6,122
Man.	-86	-108	-134	-634	-133	-1,095
Sask.	-87	-130	-408	-306	-259	-1,190
Alb.	632	616	-82	-1,194	-741	-769
B.C.	1,066	709	46	-1,525	58	354
Yukon	20	5	4	-22	25	32
N.W.T.	-15	1	5	-13	-6	-28
Canada	5,571	2,906	-2,912	-15,451	-7,697	-17,583
	Annual Change (in percent)					
	1987-1988	1988-1989	1989-1990	1990-1991	1991-1992	1987-1992
Nfld	5.89	5.94	-2.92	-8.20	-6.49	-1.34
P.E.I.	4.44	5.60	-2.26	-12.05	-2.97	-1.66
N.S.	2.94	-0.96	-6.47	-8.47	-3.80	-3.44
N.B.	7.47	-0.72	-4.00	-10.37	-4.60	-2.61
Que.	2.77	-0.58	-3.80	-9.79	-10.65	-4.55
Ont.	3.06	2.35	-0.35	-8.94	-3.92	-1.66
Man.	-1.08	-1.37	-1.72	-8.27	-1.89	-2.90
Sask.	-1.27	-1.92	-6.15	-4.91	-4.37	-3.74
Alb.	3.39	3.20	-0.41	-6.03	-3.98	-0.84
B.C.	4.56	2.90	0.18	-6.05	0.24	0.30
Yukon	10.58	2.39	1.87	-10.09	12.76	3.18
N.W.T.	-6.33	0.45	2.24	-5.70	-2.79	-2.48
Canada	3.06	1.55	-1.52	-8.25	-4.46	-2.01

Source: Statistics Canada, Health Statistics Division and calculations by the author.

Figure 1A. Age-specific First Marriage Rates for Recent Cohorts, Males, Canada

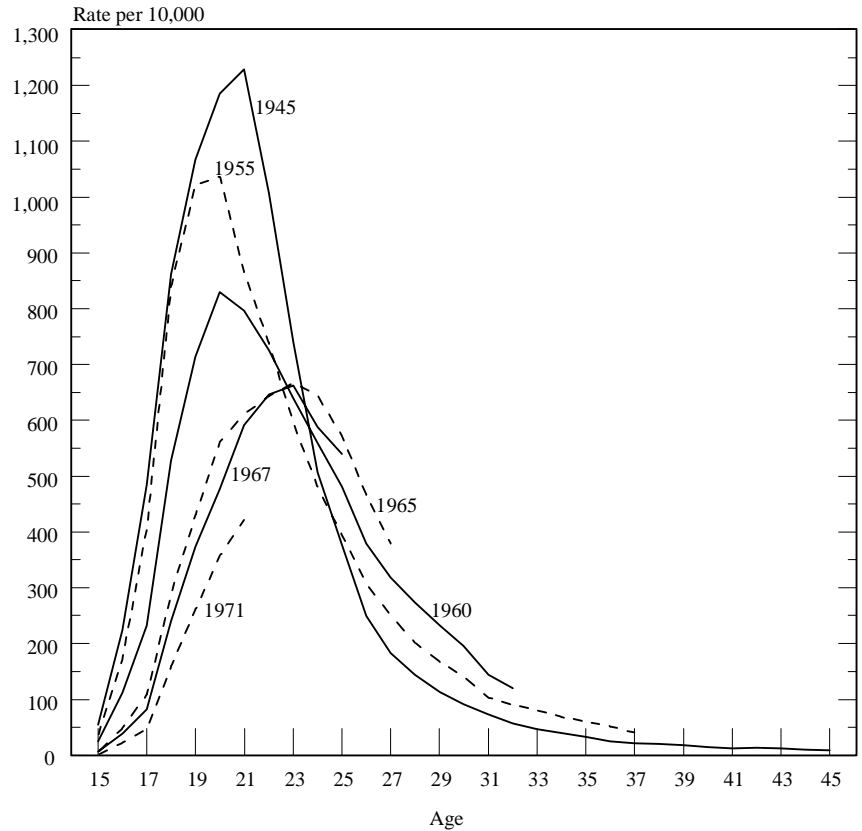


Source: Table A3.1.

The decline in marriages in 1992 had a greater effect on first marriages than on remarriages, as opposed to 1991 when all types of marriages were equally affected (Table 7). In 1991, the number of first marriages by men and women decreased by 8.1%, the number of marriages where at least one spouse had already been married dropped by 8.0%, and marriages involving two previously married spouses by 9.4%. In 1992, the decreases were 4.9% and 5.0% for first marriages by males and females, but only 3.7% for marriages in which at least one spouse was remarrying and 2.1% for marriages involving two previously married spouses.

The reduction in the rate of first marriages is accompanied by a trend towards older ages at marriage for those who remain faithful to the

Figure 1B. Age-specific First Marriage Rates for Recent Cohorts, Females, Canada



Source: Table A3.2.

institution. The continuing reduction in rates⁴ for younger ages and the marginal increase in rates after age 30 result in ever higher average values (27.84 years for men and 25.93 years for women).⁵ The fact that the decline in rates continued in 1992 validates the indicator value of the first-marriage table published in last year's report as a measure of the true level of the propensity of present-day Canadians to marry. This regularity in the decline in rates (Tables 8 and A3) is also a clear indication that the significant decrease in the number of marriages in the past two years can only partially

⁴ Total events.

⁵ Since they are calculated using rates, these figures differ somewhat from those normally published to date by Vital Statistics, which represent the mean age of spouses and are calculated using numbers.

Table 7. Marriages, First Marriages, remarriages, Canada, 1967-1992

Year	Number of Marriages	Number of First Marriages		Number and Proportion of Marriages in which at least one Spouse has been Previously Married		Number and Proportion of Remarriages in which both Spouses had been Previously Married	
		Males	Females	Number	%	Number	%
1967	165,879	151,883	151,488	20,417	12.3	7,970	39.0
1968	171,766	157,309	156,783	21,133	12.3	8,307	39.3
1969	182,183	162,853	162,690	27,494	15.1	11,329	41.2
1970	188,428	167,267	167,421	29,975	15.9	12,193	40.7
1971	191,324	168,944	169,072	31,698	16.6	12,934	40.8
1972	200,470	176,537	177,155	33,582	16.8	13,666	40.7
1973	199,064	173,355	174,135	36,047	18.1	14,591	40.5
1974	198,824	170,678	172,107	39,063	19.6	15,800	40.4
1975	197,585	167,022	168,817	42,300	21.4	17,031	40.3
1976	186,844	155,679	157,412	43,098	23.1	17,499	40.6
1977	187,344	154,906	156,854	44,750	23.9	18,178	40.6
1978	185,523	151,884	154,016	46,254	24.9	18,892	40.8
1979	187,811	152,731	154,982	48,309	25.7	19,600	40.6
1980	191,069	154,138	156,918	50,600	26.5	20,422	40.4
1981	190,082	151,978	154,506	52,340	27.5	21,340	40.8
1982	188,360	149,419	152,825	52,979	28.1	21,438	40.5
1983	184,675	144,960	147,968	53,342	28.9	22,080	41.4
1984	185,597	144,674	147,907	55,436	29.9	23,177	41.8
1985	184,096	144,009	146,718	54,632	29.7	22,833	41.8
1986	175,518	137,665	138,523	52,678	30.0	22,170	42.1
1987	182,151	138,454	139,324	60,106	33.0	26,529	44.1
1988	187,728	142,956	143,943	61,665	32.8	26,892	43.6
1989	190,640	145,733	146,242	62,276	32.7	27,029	43.4
1990	187,738	143,637	145,350	60,393	32.2	26,094	43.2
1991	172,251	131,996	133,576	55,578	32.3	23,644	42.5
1992	164,573	125,505	126,955	53,547	32.5	23,139	43.2

Source: Statistics Canada, Health Statistics Division and calculations by the author.

Table 8. Total First Marriage Rate, Canada, Provinces and Territories, 1987-1992 (per 1,000)¹

Province	1987		1988		1989		1990		1991		1992	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
Newfoundland	592	576	626	628	664	669	644	658	597	611	554	573
Prince Edward Island	668	686	728	739	798	807	768	766	717	723	689	702
Nova Scotia	614	653	637	680	640	685	610	649	568	600	551	582
New Brunswick	589	617	644	675	639	680	624	659	574	600	551	580
Quebec	413	436	425	453	424	455	408	459	377	425	333	376
Ontario	619	669	635	690	647	697	653	698	606	646	585	628
Manitoba	614	662	617	669	624	679	637	690	592	646	601	647
Saskatchewan	589	632	600	647	625	677	613	665	612	649	609	639
Alberta	558	610	590	642	621	665	625	673	590	635	588	631
British Columbia	597	638	633	684	641	693	638	694	600	652	605	646
Yukon	445	476	525	623	497	558	518	591	467	516	532	559
Northwest Territories	299	345	302	314	301	326	313	327	286	309	272	294
CANADA	554	594	574	620	585	630	582	631	543	588	523	566
CANADA LESS QUEBEC	603	648	626	676	640	688	641	687	599	640	587	627

¹ Males aged 17-49 and females aged 15 to 49.

Source: Statistics Canada, Health Statistics Division and calculations by the author.

be attributed to the economic difficulties encountered by young adults; if this were the case, we might predict a recovery in the near future. The reason is more likely the spread of common-law unions, which for the moment impose fewer obligations on individuals.

DIVORCES IN 1991

Detailed figures on divorces in 1991 were still not available when the 1993 report was prepared. The reason for this exceptional delay was a revision of figures published for recent years, which became necessary following the discovery of a large number of unregistered decrees. As Table A6 in the Appendix shows, most errors were in the number of divorces in 1987 and 1988. For these years, the number of divorces was 5,215 higher for 1987 and 3,635 higher for 1988. Since the denominator of total divorces by duration of marriage remained the same, these rates were increased, along with the total rate that is their sum. The changes in the 1985 Act, which had been held responsible for the increase in the 1987 and 1988 rates, thus had a much greater effect than was indicated by the figures available at the time. Now calculated at 4,789 per 10,000 in 1988, the total rate leads us to think that, at the rate observed for that year, one marriage out of two was destined to end in divorce. The rate is somewhat of an underestimate because, on the one hand, it is calculated only for the first 25 years of the fictitious cohort and, on the other, because of its construction, which uses as the population at risk the initial members of the marriage cohort involved, although the actual base gets smaller as marriage duration increases.

Since this peak following the change in legislation, divorces and rates have declined. The number of divorces in 1991 was slightly less than in 1990 and the rate was also down slightly. We appear to be approaching a period of stability in line with mean figures for other western countries.

The decrease observed for Canada affected almost all provinces. The 1.3% increase in the number of divorces in Manitoba can easily be seen as one of those frequent small random fluctuations, but the increase of 6.5% in British Columbia, if it persists, would deserve an explanation.

Divorces by Duration of Marriage

Table 9 shows total divorces by duration of marriage. The information included in this table is not always well mastered, since it can be read vertically, horizontally and diagonally, yielding different information in each case. Each cell of the central part of the table represents total divorces by duration for a given marriage cohort. For example, in 1991 Canada recorded 333 divorces in marriages celebrated less than a year before. Some

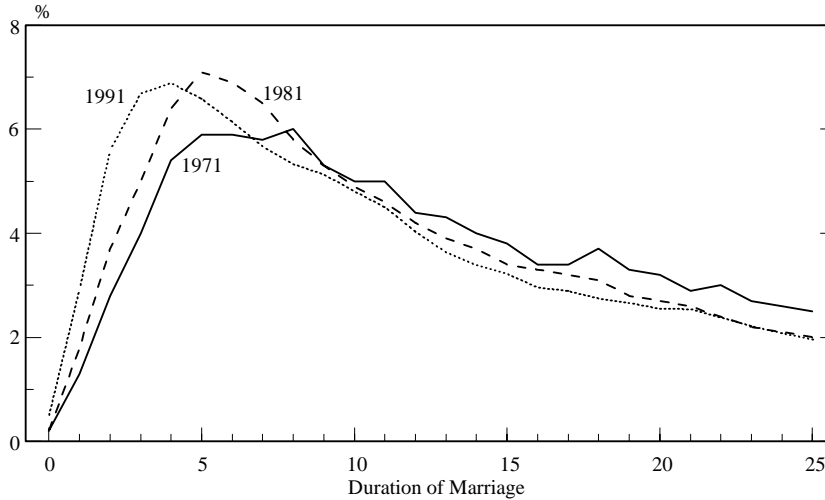
of these marriages were celebrated in 1990 and others in 1991, so the denominator of the ratio is the arithmetic mean number of marriages for these two years, or 179,994 marriages. This gives us a figure of 19 divorces per 10,000 marriages. Similarly, the 2,080 divorces after a period of one year recorded in 1991 apply to the 188,189 marriages of the 1989-1990 cohort, for a figure of 110 divorces per 10,000 marriages. This is known as the cumulated proportion divorced. These values are overestimated by immigration, which in Canada is much greater than emigration so that, all other things being equal, the number of divorces in marriages contracted abroad, and thus excluded from the denominator, is greater than the number of foreign divorces by persons married in Canada. Conversely, they are underestimated by the decrease in marriages in each cohort due to the death of one spouse and to previous divorces.

Reading one diagonal gives us the series of divorce “rates” by duration of marriage for a given year. Their sum is the total duration-specific divorce rate which is shown in the last column of the table, a measure of the net period intensity of annual variations in the number of marriages. This index stood at 1,881 divorces per 10,000 marriages in 1971. Except for a brief interruption prior to the reform of the Divorce Act, the index rose steadily until 1987, when it stood at 4,789. Some 1987 divorces were the result of divorces awaiting the implementation of the new 1985 Act. Since then, the rate has been declining slowly. This decrease in the divorce rate is probably due to the decrease in marriages, as couples increasingly prefer common-law unions, assuming that those who marry are less at risk of separation than those who have chosen a common-law arrangement. Among other factors that might also promote a decrease in the divorce rate we could suggest the increase in age at marriage, assuming that later marriages are less at risk.

The basic upward trend in the frequency of divorce is accompanied by a concentration of divorces at low marriage durations (Figure 2). The distribution by percentage of total divorces allows us to compare the tempo, excluding the effect of variations in the frequency of the phenomenon from year to year, with the surface under each curve being equal to one. The three curves show a slope strongly inclined towards the left. While the outline is identical in all three cases, we can see that the 1971 curve is much less pronounced than the other two: the maximum, reached much later, is not as high and, after peaking at around 6% for durations of 5 to 8 years, values decline only slowly. This is obviously due to some recovery of divorces at longer marriage durations following the adoption of the 1968 Divorce Act.

Reading horizontally in Table 9 we have duration-specific divorce rates for each true marriage cohort. The information is still incomplete for all cohorts, but for the 1964 to 1972 cohorts it is possible by extrapolation

Figure 2. Percentage of Divorces by Duration of Marriage, Canada, 1971-1991



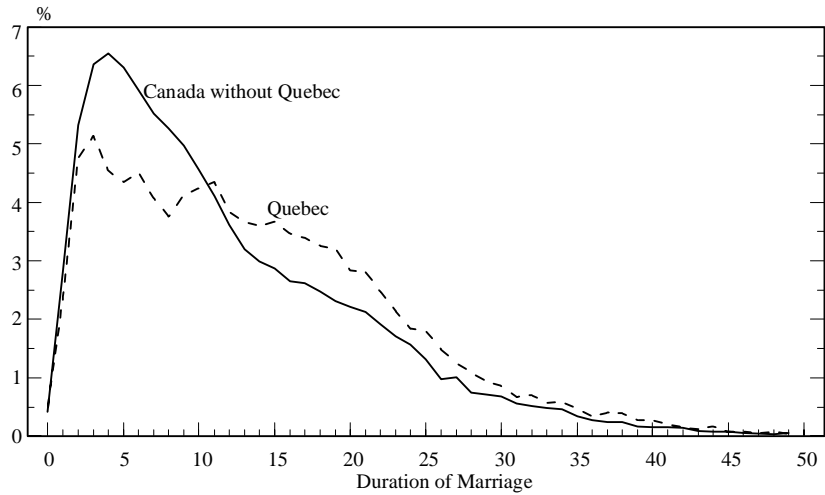
Source: Statistics Canada, Health Statistics Division and calculations by the author.

to get an indication of the number of marriages that ended in divorce. It may thus be estimated that 23% of the marriages of the 1965-1966 cohort ended in divorce before their 20th anniversary, with this percentage going up to 27% for the 1970-1971 cohort and 31% for the 1975-1976 cohort. As well, by reading one column we can rapidly compare changes in the intensity of the divorce rate for a given duration as we go through the successive marriage cohorts.

Provincial Differences

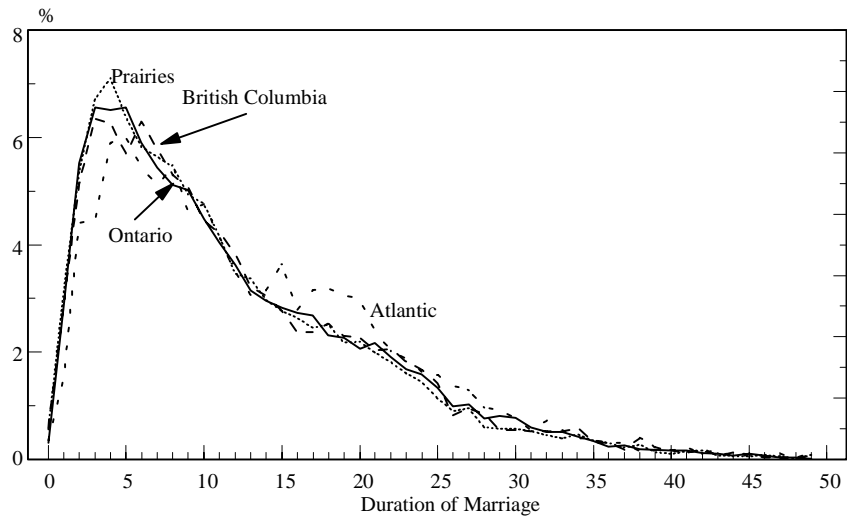
While Quebecers marry less, their marriages last longer than in the other provinces. The median duration of marriages ending in divorce in 1991 was 13 years in Quebec, 2 years more than the Canadian median. Figure 3 shows the distribution of divorces in 1991 by duration of marriage for Quebec and the other Canadian provinces. We can see that, while the proportion of divorces before two years of marriage is basically the same in Quebec as elsewhere in Canada, once we reach three years' duration the curves take a different shape. In the first 12 years of marriage, there are relatively fewer divorces in Quebec than elsewhere in Canada. The level at the modal age in Quebec is much lower and the downward slope of the curve much less pronounced than for divorces among couples in other provinces. This situation is probably due at least in part to the steep decline in the number of marriages in recent years. The decrease in marriages and

Figure 3. Percentage of Divorces by Duration of Marriage, Quebec and the Rest of Canada, 1991



Source: Statistics Canada, Health Statistics Division, unpublished data.

Figure 4. Percentage of Divorces by Duration of Marriages, for the Atlantic Provinces, Ontario, the Prairies and British Columbia, 1991



Source: Statistics Canada, Health Statistics Division, unpublished data.

thus in the associated divorces necessarily brings a corresponding increase in the percentage of divorces after longer durations. Variations between the other Canadian provinces are much less significant, as shown in Figure 4.

NATALITY AND FERTILITY

The Number of Births is Down Slightly ...

The number of births was only 398,642 in Canada in 1992, 3,886 fewer than the previous year (Table A4 in the Appendix). This was a small decrease (1.0%) which nevertheless came on the heels of the previous year's and might be the beginning of a trend. Although slight, it was nevertheless sufficient to affect the country's crude birth rate, which fell from 14.3 per 1,000 in 1991 to 14.0 per 1,000 in 1992 and 13.8 per 1,000 in 1993.

Only one province, British Columbia, recorded a small increase (544) in the number of births. The decline was most pronounced in Quebec (a reduction of 1,164); however, in relative terms, the decrease in the number of births was much greater in Newfoundland (-3.5%) and Manitoba (-4.0%) than elsewhere in Canada since the reduction for the country as a whole was 1.0%. Apart from British Columbia, only Ontario, with 0.6% fewer births, recorded a lower decrease than the national average (to which it contributes). Birth rates in all provinces were down, including that of British Columbia, because the population increased more rapidly than births.

... But Fertility Stays Constant.

This decrease in the birth rate is a consequence of the aging of the female population of child-bearing age. Despite postponement of child-bearing to later ages, the over-30 age groups are much less fertile than the younger ones, and it is the former group whose numbers are up. Despite the decrease in the number of births, the total fertility rate increased very slightly in Canada and in the majority of provinces, to 1.71 children per woman for Canada as a whole and ranging from 1.40 in Newfoundland to 2.71 in the Northwest Territories. Saskatchewan has always had a high fertility rate and, with 2.04 children per woman, is the Canadian province whose rate is closest to the replacement level. The spectacular drop in the Newfoundland rate probably exaggerates the actual decrease in fertility, as often happens in countries and provinces when successive cohorts decide one after another to delay having children.

Since Quebec introduced its program of financial assistance to parents of a third child, a close watch has been kept on fertility trends in this province compared to the others in an attempt to measure the success of this initiative. Since the beginning, analysts have disagreed on this point. In 1987, Quebec's

Table 10. Total Fertility Rate (per 1,000 women) by Birth Order, Quebec and the Rest of Canada, 1987 and 1992

Birth Order	Quebec		Canada without Quebec		Difference	
	1987	1992	1987	1992	1987	1992
1	665	775	693	753	-28	22
2	485	582	586	598	-101	-16
3	160	218	254	252	-94	-34
4	40	55	78	79	-38	-24
5	16	23	40	42	-24	-19
T.F.R.	1,365	1,653	1,652	1,724	-287	-71

Note: T.F.R.: Total Fertility Rate.

Source: Statistics Canada, Health Statistics Division and calculations by author.

total fertility rate was the lowest in its history with 1,365 children per 1,000 women, 286 less than the rate for the rest of Canada. Between 1987 and 1992, the total fertility rate in Quebec rose rapidly, moving into line with that of the rest of Canada. The variance between the two rates is now only 71 children per 1,000 women (Table 10). In 1987, all birth-order indices in all provinces were higher than those for Quebec. Since 1989, fertility of parity 1 in Quebec has moved above that of the rest of Canada, but that of higher orders remains lower. In 1992, for the first time, the total fertility rate for all birth orders moved slightly higher in the rest of Canada than in Quebec. This was due to a decrease in Quebec's parity 1 rate (nearly 3%) while it was basically stable in the rest of Canada. The parity 2 rate increased in the same proportions in Quebec as in the rest of Canada, and the (very low) higher order rate continued to increase a little more rapidly in Quebec than elsewhere in the country (Table 11).

It should be noted that, with the exception of a negligible decline in the rate for parity 5 and over in 1990, Quebec rates for all orders have increased every year since the introduction of the assistance program. The decrease in the parity 1 rate recorded in 1992 might indicate a reversal of these trends and suggest that, in its field of application, the program's incentive to increase fertility might have reached its limits. On the other hand, this decrease may be temporary and linked to the particularly difficult economic situation experienced by young people (see 1993 Report). Women giving birth to a first child were in fact an average of 3.1 years younger than those who had a higher-order child (Table 12), and so were more severely affected by the difficulty of earning an income.

Table 11. Age-specific Fertility and Total Fertility Rates by Birth Order and Age of Mother for Quebec and the Rest of Canada¹, 1981-1992

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	Canada	
1	1981	12.84	24.88	54.74	52.78	53.95	47.70	16.28	16.94	3.43	3.64	0.54	0.48	0.7089	0.7320	0.7258	
	1982	12.88	24.96	52.32	53.12	49.22	48.00	15.66	18.01	3.52	3.94	0.47	0.52	0.6704	0.7231	0.7231	
	1983	12.47	23.31	51.46	51.94	49.77	48.84	16.08	19.40	3.71	4.57	0.46	0.51	0.6697	0.7429	0.7232	
	1984	12.39	22.56	48.69	49.46	49.66	49.14	15.96	20.46	3.91	4.74	0.53	0.54	0.6558	0.7345	0.7136	
	1985	12.48	21.57	46.94	47.02	49.93	49.11	16.81	20.74	3.95	4.71	0.57	0.56	0.6529	0.7185	0.7014	
	1986	12.97	21.08	46.82	45.67	49.60	48.18	17.41	20.48	4.42	5.03	0.49	0.66	0.6586	0.7055	0.6935	
	1987	13.43	20.40	45.37	43.84	50.71	47.49	18.44	20.84	4.45	5.40	0.65	0.72	0.6653	0.6934	0.6864	
	1988	13.90	20.76	48.22	43.94	53.93	49.52	19.22	22.13	4.71	6.05	0.69	0.77	0.7033	0.7158	0.7129	
	1989	14.86	22.16	50.75	45.02	57.70	50.16	21.45	23.51	5.19	6.28	0.64	0.85	0.7529	0.7158	0.7435	
	1990	15.66	22.83	53.08	45.04	60.44	52.55	23.54	25.16	5.64	6.88	0.66	0.89	0.7951	0.7399	0.7435	
	1991	14.93	23.55	52.23	43.66	61.28	50.79	24.26	24.92	6.22	7.00	0.73	0.90	0.7983	0.7541	0.7649	
	1992	15.06	22.79	48.59	42.10	59.84	51.36	24.68	26.09	6.11	7.34	0.78	0.99	0.7753	0.7534	0.7584	
	2	1981	1.62	4.49	23.95	31.24	52.72	47.01	27.62	25.17	6.11	5.82	0.58	0.62	0.5629	0.5718	0.5693
		1982	1.59	4.49	22.56	30.69	49.00	46.16	25.62	26.27	5.76	6.18	0.60	0.64	0.5257	0.5721	0.5594
1983		1.54	4.29	21.88	30.07	47.39	46.29	25.03	27.57	5.29	6.66	0.61	0.76	0.5087	0.5782	0.5593	
1984		1.59	4.18	21.58	29.56	48.53	47.31	26.52	28.77	5.69	7.38	0.61	0.71	0.5226	0.5895	0.5716	
1985		1.63	4.08	20.53	28.43	47.13	47.66	26.02	29.77	5.77	7.72	0.58	0.79	0.5083	0.5922	0.5699	
1986		1.65	3.86	18.73	27.07	45.90	47.41	25.03	30.54	5.71	8.16	0.67	0.81	0.4885	0.5893	0.5626	
1987		1.86	4.02	19.12	25.80	43.87	46.43	25.36	31.19	6.05	8.78	0.68	0.95	0.4847	0.5859	0.5626	
1988		1.78	3.75	19.54	25.30	43.98	44.99	27.13	31.40	6.75	9.26	0.83	1.12	0.5000	0.5791	0.5584	
1989		1.93	4.06	20.62	25.01	45.31	44.70	28.65	32.59	7.05	9.63	0.73	1.10	0.5215	0.5845	0.5681	
1990		2.21	4.14	21.79	24.60	48.96	44.41	31.51	33.84	7.98	10.15	0.91	1.20	0.5668	0.5917	0.5853	
1991		2.10	4.30	22.13	24.06	48.37	43.44	32.15	33.20	7.82	10.42	0.85	1.16	0.5672	0.5829	0.5790	
1992		2.36	4.57	21.94	42.10	49.23	43.72	33.20	34.95	8.70	10.80	0.94	1.41	0.5819	0.5978	0.5938	
3		1981	0.16	0.44	4.41	8.32	17.26	19.66	16.58	15.79	4.57	4.79	0.56	0.69	0.2176	0.2484	0.2399
		1982	0.11	0.49	4.30	8.33	15.66	19.71	14.63	16.17	4.58	5.27	0.58	0.61	0.1993	0.2529	0.2382
	1983	0.14	0.44	3.87	8.05	14.57	19.49	14.02	16.40	4.07	5.44	0.54	0.60	0.1860	0.2521	0.2341	
	1984	0.10	0.44	3.69	7.83	14.06	19.49	13.79	17.25	4.31	5.60	0.57	0.65	0.1826	0.2563	0.2364	
	1985	0.15	0.45	3.63	7.73	13.68	19.41	13.17	17.32	4.26	5.84	0.51	0.70	0.1770	0.2572	0.2356	
	1986	0.18	0.48	3.36	7.42	13.05	19.19	12.20	17.60	4.30	6.05	0.57	0.74	0.1683	0.2574	0.2336	
	1987	0.18	0.42	3.50	7.25	12.17	18.53	11.61	17.58	3.88	6.33	0.57	0.76	0.1595	0.2544	0.2290	
	1988	0.18	0.48	3.55	7.16	12.37	18.20	12.18	17.84	4.07	6.73	0.52	0.84	0.1644	0.2563	0.2320	
	1989	0.22	0.48	4.28	7.19	13.85	17.69	13.86	18.41	4.61	7.08	0.65	0.96	0.1873	0.2591	0.2403	
	1990	0.17	0.50	4.49	7.08	15.03	17.17	15.14	18.33	5.21	7.25	0.58	0.91	0.2032	0.2562	0.2425	
	1991	0.19	0.51	4.61	6.99	15.08	16.77	15.74	18.50	5.46	7.20	0.66	0.89	0.2087	0.2542	0.2428	
	1992	0.24	0.59	4.94	7.03	15.35	16.45	16.56	18.01	5.64	7.35	0.80	0.94	0.2177	0.2518	0.2434	

See notes at the end of the table.

Table 11. Age-specific Fertility and Total Fertility Rates by Birth Order and Age of Mother for Quebec and the Rest of Canada¹, 1981-1992 - 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	Canada	
4	1981	0.01	0.05	0.54	1.58	2.93	5.28	4.47	5.66	2.23	2.63	0.42	0.50	0.0530	0.0785	0.0715	
	1982	0.01	0.03	0.55	1.58	2.85	5.28	4.19	5.87	2.20	2.76	0.42	0.47	0.0512	0.0800	0.0720	
	1983	0.01	0.03	0.58	1.48	2.77	5.17	3.89	5.83	1.93	2.77	0.34	0.47	0.0476	0.0788	0.0703	
	1984	0.02	0.04	0.51	1.47	2.61	5.34	3.64	5.82	1.74	2.73	0.33	0.43	0.0443	0.0792	0.0697	
	1985	0.02	0.04	0.47	1.44	2.44	5.22	3.48	5.96	1.83	2.84	0.28	0.54	0.0426	0.0802	0.0700	
	1986	0.02	0.03	0.48	1.48	2.39	5.16	3.31	5.95	1.70	2.83	0.37	0.49	0.0413	0.0797	0.0694	
	1987	0.02	0.04	0.50	1.50	2.21	5.02	3.19	5.71	1.67	2.86	0.35	0.46	0.0397	0.0780	0.0677	
	1988	0.02	0.05	0.54	1.48	2.40	4.94	3.07	5.78	1.69	2.91	0.43	0.49	0.0407	0.0783	0.0683	
	1989	0.01	0.05	0.58	1.57	2.59	4.87	3.65	6.13	1.67	3.07	0.35	0.56	0.0442	0.0813	0.0716	
	1990	0.00	0.04	0.75	1.65	2.79	4.73	3.95	6.02	2.24	3.11	0.35	0.54	0.0504	0.0805	0.0727	
	1991	0.01	0.05	0.81	1.65	3.22	4.69	4.18	6.03	2.11	3.22	0.35	0.47	0.0534	0.0805	0.0737	
	1992	0.03	0.06	0.91	1.70	3.13	4.60	4.35	5.90	2.20	3.04	0.42	0.53	0.0552	0.0791	0.0731	
	5+	1981	0.00	0.01	0.12	0.35	0.77	1.83	1.53	3.16	1.54	2.60	0.57	0.93	0.0226	0.0443	0.0382
		1982	0.00	0.00	0.12	0.37	0.79	1.89	1.34	3.04	1.36	2.53	0.51	0.91	0.0206	0.0437	0.0373
		1983	0.00	0.00	0.10	0.33	0.69	1.86	1.39	3.05	1.22	2.23	0.49	0.75	0.0195	0.0411	0.0352
		1984	0.00	0.00	0.07	0.33	0.65	1.85	1.33	2.96	1.22	2.33	0.39	0.73	0.0183	0.0410	0.0348
		1985	0.00	0.01	0.08	0.37	0.66	1.85	1.13	2.91	1.03	2.12	0.33	0.67	0.0162	0.0396	0.0332
		1986	0.00	0.00	0.09	0.36	0.67	1.81	1.28	2.83	1.07	2.07	0.36	0.65	0.0174	0.0387	0.0329
		1987	0.00	0.01	0.11	0.34	0.64	1.85	1.17	2.87	0.94	2.19	0.34	0.71	0.0160	0.0398	0.0334
1988		0.00	0.00	0.09	0.38	0.62	1.71	1.31	2.97	1.18	2.11	0.40	0.68	0.0180	0.0393	0.0336	
1989		0.00	0.00	0.13	0.41	0.77	1.76	1.60	2.87	1.30	2.15	0.35	0.63	0.0207	0.0391	0.0342	
1990		0.01	0.01	0.14	0.44	0.76	1.91	1.51	2.92	1.30	2.27	0.39	0.67	0.0206	0.0411	0.0357	
1991		0.00	0.00	0.14	0.43	0.80	1.94	1.62	3.00	1.39	2.27	0.34	0.59	0.0214	0.0412	0.0362	
1992		0.00	0.01	0.20	0.42	0.96	1.99	1.68	2.98	1.33	2.30	0.37	0.68	0.0228	0.0418	0.0370	
All Orders	1981	14.63	29.86	83.75	94.26	127.63	121.49	66.48	66.71	17.86	19.48	2.67	3.22	1.5650	1.6751	1.6446	
	1982	14.60	29.97	79.86	94.09	117.52	121.05	61.44	69.35	17.42	20.69	2.58	3.15	1.4671	1.6915	1.6301	
	1983	14.16	28.07	77.89	91.88	115.18	123.13	60.40	72.26	16.23	21.66	2.43	3.09	1.4315	1.6931	1.6221	
	1984	14.10	27.23	74.54	88.65	115.53	123.13	61.23	75.26	16.86	22.78	2.43	3.06	1.4235	1.7006	1.6261	
	1985	14.28	26.15	71.65	85.00	113.84	123.25	60.62	76.70	16.84	23.22	2.16	3.26	1.3970	1.6878	1.6101	
	1986	14.82	25.46	69.49	82.01	111.60	121.75	59.24	77.40	17.19	24.14	2.47	3.35	1.3740	1.6705	1.5920	
	1987	15.49	24.89	68.60	78.74	109.60	119.32	59.75	78.19	16.99	25.56	2.59	3.60	1.3651	1.6515	1.5758	
	1988	15.87	25.04	71.95	78.26	113.30	119.37	62.90	80.13	18.39	27.05	2.87	3.90	1.4265	1.6687	1.6051	
	1989	17.02	26.76	76.34	79.19	120.21	119.17	69.20	83.33	19.82	28.21	2.72	4.11	1.5266	1.7039	1.6577	
	1990	18.06	27.53	80.26	78.80	127.98	120.77	75.66	86.27	22.38	29.66	2.89	4.21	1.6361	1.7362	1.7101	
	1991	17.23	28.41	79.93	76.79	128.76	117.62	77.95	85.65	23.00	30.11	2.93	4.01	1.6490	1.7130	1.6966	
	1992	17.71	28.01	76.59	75.34	128.50	118.12	80.47	87.93	23.98	30.82	3.32	4.55	1.6528	1.7239	1.7057	

¹ 1981 to 1990 excluding Newfoundland.

Source: Statistics Canada, Health Statistics Division, population estimates and calculations by the author.

Table 12. Mean Age of Mothers by Birth Order of Children, Canada, Provinces and Territories, 1992

Province	Order 1	Order 2	Order 3	Order 4	Order 5 +	Total
Newfoundland	24.69	27.49	29.52	30.90	32.28	26.69
Prince Edward Island	25.25	28.25	29.99	31.02	33.44	27.77
Nova Scotia	25.62	28.36	30.10	31.65	34.03	27.61
New Brunswick	24.92	27.81	29.70	31.30	34.09	26.96
Quebec	26.82	29.08	30.67	31.84	33.38	28.44
Ontario	27.09	29.47	31.00	32.08	33.64	28.86
Manitoba	25.72	27.90	29.24	29.71	31.99	27.53
Saskatchewan	24.59	27.50	28.82	29.60	31.63	27.07
Alberta	26.03	28.52	29.83	30.64	32.57	28.00
British Columbia	26.87	29.26	30.70	31.91	33.45	28.63
Yukon	26.45	28.79	30.07	32.95	35.19	28.40
Northwest Territories	23.59	25.62	26.19	28.67	31.15	26.03
Canada less Quebec	26.52	28.97	30.41	31.34	32.99	28.37
Canada	26.60	29.00	30.47	31.43	33.05	28.38

Source: Statistics Canada, Health Statistics Division and calculations by the author.

Differential Fertility of Foreign-born Canadian Women

The recent increase in immigration levels and the changing ethnic and cultural make-up of the immigrant population warrant a new look at the fertility differential between women born in Canada and immigrants to Canada (see 1986 report). The calculation of age-specific fertility rates by the mother's place of birth calls for estimates of both the number of births by age and mother's country of birth and of the female population by age and country of birth. It is unfortunate for this purpose that all provinces do not collect information on the mother's place of birth. For example, vital statistics prior to 1990 do not show the mother's place of birth for over 98% of the births that occurred in Quebec and Alberta. For this reason, our analysis deals only with Ontario and British Columbia. Appropriately enough, these are two provinces which receive large numbers of immigrants each year (close to 60% of the national total).

A few words of caution are needed before looking at an interpretation of the analysis results. Even for these two provinces, the statistics are not perfect. From 1990 to 1992, the number of registration forms on which the place of birth of the mother was not shown ranged from 13% to 14% for Ontario and 7% to 10% for British Columbia. For these three years, cases where the mother's birthplace was unknown have been divided among age groups using the distribution observed in 1989. Since this was a period

when the annual number of immigrants was very high, the bias introduced by this distribution probably results in an overestimate of the fertility of women born in Canada compared to that of foreign-born women if we accept the hypothesis that those whose country of birth was not reported were mainly immigrants.

Population estimates are not calculated by birth place, and so the denominators of fertility rates for a given year by the mother's place of birth must be estimated on the basis of figures from the latest census. The female population in each age group by place of birth is the result of an interpolation between census years. Annual fluctuations in the number of immigrants are thus not taken into account in the results presented here. Moreover, the fertility rates and total indices shown in Tables 13 and 14 are overestimated compared to the rates and indices published for the total population since the population figures taken from the censuses, unlike the revised population estimates, have not been corrected for net underenumeration. Nevertheless, the comparison of rates and indices for the two subpopulations remains valid, given that the denominator of the rates in both series suffers from the same bias.

Measured as a period rate, the fertility of new Canadians appears somewhat higher than that of native-born Canadians in both Ontario and British Columbia. ***Between 1981 and 1992, total fertility rates for immigrant women exceeded those of native-born Canadians by an average of 8% in British Columbia and 15% in Ontario.*** A comparison of age-specific rates indicates an excess fertility among foreign-born Canadians which becomes more marked as age increases. For those aged 25-29, the fertility of immigrant Canadian women is 6% higher on average than that of native-born Canadians, while their fertility at age 30-34 is over 20% higher than that of women born in Canada.

We also see that the differences between the two subpopulations have shrunk during the period studied, with the fertility of Canadian-born women rising while that of foreign-born Canadians declined. This indication of differential fertility is very fragile, given that the timing of fertility of immigrant women is probably different from that of women born in Canada precisely because they have migrated. It would require an analysis of completed fertility distinguishing subpopulations of immigrant women by immigration period and age at immigration to reach some certainty on this. The fact that the fictitious cohort of immigrant women is continually augmented by new arrivals is no doubt responsible for the higher fertility of those 30-34. Children born to women at these ages may be of first or second order and may have no younger sisters or brothers. The fertility of women 20-24, which is only slightly greater than the fertility of native-born Canadians, may be due to women who arrived young and have adopted the North American fertility model.

Table 13. Fertility Rates by Place of Birth and Age of Mother, Ontario, 1981-1992

Age	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Born in Canada												
15-19	0.0231	0.0233	0.0217	0.0214	0.0208	0.0206	0.0203	0.0203	0.0219	0.0228	0.0232	0.0247
20-24	0.0853	0.0852	0.0839	0.0839	0.0804	0.0766	0.0725	0.0695	0.0712	0.0723	0.0705	0.0672
25-29	0.1167	0.1177	0.1212	0.1238	0.1238	0.1229	0.1240	0.1250	0.1300	0.1336	0.1267	0.1194
30-34	0.0613	0.0628	0.0671	0.0728	0.0764	0.0793	0.0809	0.0827	0.0868	0.0904	0.0909	0.0927
35-44	0.0092	0.0104	0.0112	0.0121	0.0126	0.0138	0.0144	0.0152	0.0162	0.0167	0.0172	0.0177
T.F.R.	1.5229	1.5490	1.5809	1.6300	1.6323	1.6350	1.6324	1.6392	1.7120	1.7623	1.7278	1.6962
Foreign Born												
15-19	0.0232	0.0246	0.0227	0.0207	0.0198	0.0200	0.0181	0.0192	0.0206	0.0214	0.0216	0.0230
20-24	0.1106	0.1072	0.0984	0.0941	0.0890	0.0880	0.0851	0.0862	0.0834	0.0798	0.0736	0.0709
25-29	0.1393	0.1386	0.1356	0.1383	0.1343	0.1398	0.1310	0.1331	0.1289	0.1239	0.1105	0.1164
30-34	0.0845	0.0870	0.0867	0.0897	0.0924	0.0930	0.0899	0.0937	0.0979	0.1017	0.1020	0.1147
35-44	0.0188	0.0191	0.0192	0.0203	0.0203	0.0200	0.0206	0.0212	0.0230	0.0239	0.0248	0.0257
T.F.R.	1.9759	1.9786	1.9096	1.9171	1.8799	1.9035	1.8257	1.8725	1.8840	1.8736	1.7868	1.8820
Ratio ¹												
15-19	100.74	105.79	104.60	96.77	95.22	97.01	88.91	94.59	94.10	93.61	93.13	93.33
20-24	129.78	125.81	117.27	112.19	110.73	114.94	117.44	123.99	117.07	110.50	104.34	105.54
25-29	119.37	117.77	111.90	111.74	108.48	113.70	105.66	106.48	99.13	92.77	87.22	97.54
30-34	137.81	138.55	129.36	123.32	121.02	117.25	111.08	113.19	112.87	112.56	112.28	123.64
35-44	205.12	183.90	172.31	167.98	160.96	144.82	142.61	139.78	141.56	143.23	144.81	145.58
T.F.R.	129.74	127.74	120.79	117.62	115.17	116.42	111.84	114.23	110.05	106.32	103.42	110.95

¹ Born in Canada = 100.

Source: Statistics Canada, Health Statistics Division, Censuses of Canada, population estimates and calculations by the author.

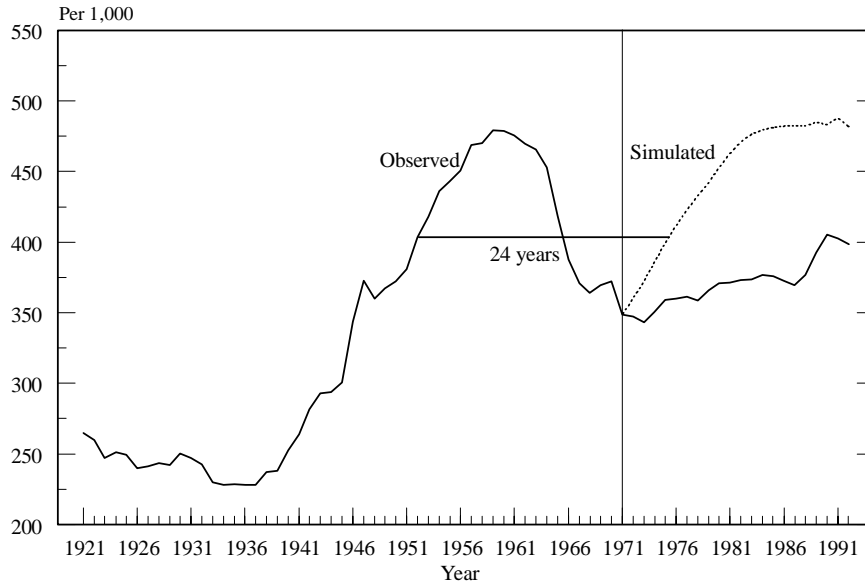
Table 14. Fertility Rates by Place of Birth and Age of Mother, British Columbia, 1981-1992

Age	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
	Born in Canada											
15-19	0.0303	0.0292	0.0270	0.0256	0.0238	0.0235	0.0229	0.0246	0.0262	0.0267	0.0275	0.0284
20-24	0.0968	0.1010	0.1009	0.1003	0.0950	0.0901	0.0844	0.0808	0.0817	0.0837	0.0845	0.0877
25-29	0.1154	0.1201	0.1210	0.1256	0.1246	0.1195	0.1205	0.1212	0.1220	0.1248	0.1211	0.1169
30-34	0.0604	0.0637	0.0685	0.0727	0.0750	0.0768	0.0783	0.0807	0.0819	0.0857	0.0858	0.0870
35-44	0.0091	0.0107	0.0118	0.0131	0.0134	0.0145	0.0146	0.0160	0.0159	0.0170	0.0167	0.0175
T.F.R.	1.6062	1.6769	1.7049	1.7521	1.7266	1.6946	1.6759	1.6968	1.7181	1.7749	1.7622	1.7742
	Foreign Born											
15-19	0.0200	0.0180	0.0174	0.0156	0.0136	0.0141	0.0130	0.0140	0.0149	0.0151	0.0154	0.0158
20-24	0.1159	0.1129	0.1045	0.1052	0.1019	0.0884	0.0866	0.0848	0.0801	0.0769	0.0728	0.0743
25-29	0.1473	0.1425	0.1404	0.1448	0.1403	0.1367	0.1224	0.1256	0.1189	0.1147	0.1053	0.1103
30-34	0.0912	0.0950	0.0954	0.0970	0.0942	0.0919	0.0877	0.0874	0.0880	0.0915	0.0909	0.1018
35-44	0.0175	0.0201	0.0201	0.0206	0.0208	0.0193	0.0202	0.0207	0.0208	0.0226	0.0225	0.0236
T.F.R.	2.0471	2.0431	1.9888	2.0186	1.9572	1.8481	1.7499	1.7659	1.7176	1.7164	1.6473	1.7476
	Ratio ¹											
15-19	65.94	61.56	64.58	61.19	57.13	59.94	56.68	57.00	56.69	56.38	56.08	55.56
20-24	119.76	111.82	103.53	104.84	107.25	98.10	102.56	104.91	98.03	91.79	86.11	84.79
25-29	127.62	118.59	116.04	115.28	112.58	114.33	101.63	103.66	97.45	91.89	86.90	94.37
30-34	151.04	149.02	139.29	133.42	125.47	119.66	111.97	108.35	107.50	106.71	105.98	117.09
35-44	191.27	188.95	169.72	156.64	154.46	133.11	138.44	128.88	130.92	132.81	134.58	135.27
T.F.R.	127.45	121.84	116.65	115.21	113.36	109.06	104.42	104.07	99.97	96.70	93.48	98.50

¹ Born in Canada = 100.

Source: Statistics Canada, Health Statistics Division, Censuses of Canada, population estimates and calculations by the author.

Figure 5. Number of Births Observed since 1971 and Simulated Assuming no Change in Age-specific Fertility Rates from 1971



Source: Statistics Canada, Health Statistics Division and calculations by the author.

The Echo of the Baby Boom at Last?

Once the baby boom was over, many demographers expected to see an “echo” about 25 year later in the form of an increase in births due to the large number of women of child-bearing age, and in fact the number of births in Canada rose from about 350,000 in 1971 to around 375,000 in 1988. The beginning of this period effectively coincided with the arrival of the first baby-boom cohorts at ages when fertility normally peaks. Given their numbers, the increase in the number of births was reasonable. And yet, the mean annual increase in the number of births was relatively small during this period, in fact about half the rate of increase of the female population (0.5% for the former and 1.2% for the latter).

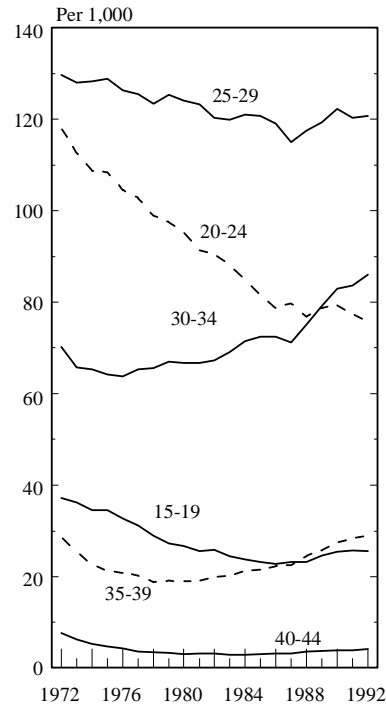
We find the explanation for this small increase in the fact that the overall decrease in fertility that began in the early 1960s continued into the mid-1980s at levels which had not been anticipated. *If we calculate the number of births we should have had between 1971 and 1985 (Figure 5) if the fertility rates observed in 1971⁶ had persisted, we would obtain a mean*

⁶ Incidentally, with 2.14 children per woman, this would yield approximately the replacement level.

annual number of 426,600 births between 1971 and 1985, while the figure 25 years earlier, at the height of the baby boom, was 416,300 (between 1946 and 1960).

From 1988 to 1991, breaking with the trend for previous years, the number of births rose rapidly and exceeded 400,000 a year in 1990 and 1991. Is this a late echo of the baby boom? Analysis of age-specific rates (Figure 6) brings some nuances to this hypothesis. After 1987, we saw a significant increase in the fertility rate at ages 30-34, which rose from 73 per 1,000 to 86 per 1,000 in 1992, and to a lesser extent that of women 35-39, which went from 23 per 1,000 to 29 per 1,000. Women aged 30-34 between 1987 and 1992 were members of the most numerous cohorts of the baby boom, those born between 1953 and 1962 (Figure 7). Members of the 1959 cohort, for example, the largest cohort in the history of Canada, celebrated their 30th birthday in 1989.

Figure 6. Fertility Rate by Age Group, Canada, 1972-1992

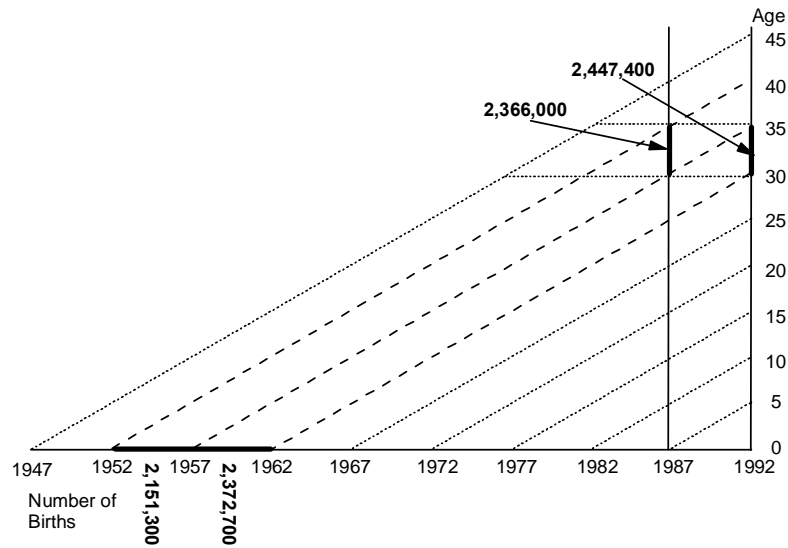


Source: Statistics Canada, Health Statistics Division and calculations by the author.

The circumstance of an increase in fertility at the ages reached by these large cohorts obviously resulted in an increase in the number of births (Figure 8). For example, the number of births to mothers aged 30-34 rose from 85,883 in 1987 to 111,291 in 1992, an increase of over 25,000 births in five years. This increase is the result of the combination of the increase in the fertility rate from 73 per 1,000 to 86 per 1,000 and the increase in the number of women at these ages from 1,179,800 to 1,294,200. In relative terms, this gives a mean annual variation of 5.3% in the number of births, resulting from numbers increasing at an annual rate of 1.9% and fertility rates at 3.4% a year (Table 15).

This delayed, weak echo (since the increase in rates was fairly low-key) was further dampened by the continuing decline in fertility among women aged 20-24. However, since these women are members of the small baby-bust cohorts of the late 1960s (which reached age 20-24 between 1988 and 1992), the decrease in their fertility produced a smaller decrease in the number of births than might have been the case: from 1987 to 1992 the

Figure 7. Lexis Diagram Showing Population Numbers According to the Age Reached in 1987 and 1992 by the Largest Generations of the Baby Boom



Source: Statistics Canada, Health Statistics Division and Demography Division, Estimates Section.

Table 15. Mean Annual Change in the Number of Women, the Fertility Rate and the Number of Births, by Age Group, Canada, 1987-1992

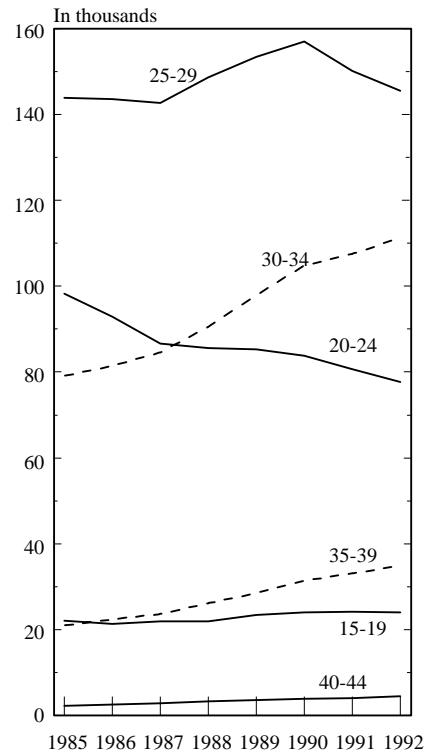
Age Group	1987	1992	Change in %
Population			
20-24	1,164,537	1,027,573	-2.47
25-29	1,247,632	1,205,675	-0.68
30-34	1,179,827	1,294,209	1.87
35-39	1,042,050	1,203,393	2.92
Fertility Rate (per 1,000)			
20-24	76.39	75.61	-0.21
25-29	116.56	120.66	0.69
30-34	72.79	85.99	3.39
35-39	23.09	29.05	4.69
Births			
20-24	88,959	77,691	-2.67
25-29	145,421	145,478	0.01
30-34	85,883	111,291	5.32
35-39	24,066	34,953	7.75

Source: Statistics Canada, Health Statistics Division and calculations by the author.

number of births to women aged 20-24 fell from 88,959 to 77,691, a mean annual variation of -2.7%, while the annual decrease in the number of women in this age group was -2.5%.

In conclusion, the expected echo of the baby boom, in the form of an increase in births as a result of the increase in the female population of child-bearing age some 25 years after the birth of large cohorts, has occurred late and in a somewhat attenuated fashion at a time when women born at the height of the original baby boom are approaching the end of their child-bearing years.

Figure 8. Number of Births by Age of Mother, Canada, 1985-1992



Source: Statistics Canada, Health Statistics Division.

MORTALITY

Comparison of Life Tables Calculated Using Old and New Population Estimates

The 1993 Report presented the demographic accounts for Canada and the provinces prepared using the new population estimates, giving some explanations for the change. It will be recalled that the new estimates differ from the old by the addition of two previously unrecognized components, non-permanent residents and returning Canadians, and by taking into account the net under-enumeration in the censuses. The result for 1991 for the country as a whole, for example, was an increase of 609,123 men and 474,942 women.

The increase in population numbers at all ages inevitably changes the population rates calculated using the old series of estimates. Since the numerator of the rates remains unchanged and the denominator increases,

Table 16. Life Expectancy¹ and Survivors from the Abridged Life Table, Canada, 1971 to 1991

Age	Males		Females	
	Survivors	Life Expectancy	Survivors	Life Expectancy
1971				
0	100,000	69.6	100,000	76.6
1-4	98,003	70.0	98,459	76.8
5-9	97,638	66.3	98,163	73.0
10-14	97,371	61.5	97,984	68.1
15-19	97,121	56.6	97,831	63.2
20-24	96,435	52.0	97,563	58.4
25-29	95,593	47.4	97,300	53.6
30-34	94,925	42.7	96,997	48.7
35-39	94,174	38.1	96,571	43.9
40-44	93,178	33.4	95,939	39.2
45-49	91,567	29.0	94,961	34.6
50-54	89,062	24.7	93,518	30.1
55-59	85,056	20.8	91,305	25.7
60-64	79,140	17.1	88,043	21.6
65-69	70,557	13.9	83,310	17.7
70-74	59,183	11.1	76,320	14.0
75-79	45,453	8.6	66,097	10.8
80-84	30,633	6.6	51,909	8.1
85-89	16,811	5.0	34,360	5.9
90 +	6,969	3.9	17,305	4.5
1976				
0	100,000	70.5	100,000	77.8
1-4	98,559	70.5	98,840	77.7
5-9	98,254	66.7	98,597	73.9
10-14	98,024	61.9	98,442	69.0
15-19	97,814	57.0	98,310	64.1
20-24	97,090	52.4	98,058	59.3
25-29	96,247	47.9	97,806	54.4
30-34	95,569	43.2	97,542	49.5
35-39	94,859	38.5	97,180	44.7
40-44	93,878	33.9	96,614	40.0
45-49	92,372	29.4	95,739	35.3
50-54	89,891	25.1	94,295	30.8
55-59	85,995	21.1	92,255	26.4
60-64	80,146	17.5	89,172	22.3
65-69	71,848	14.2	84,653	18.3
70-74	60,867	11.3	77,971	14.6
75-79	47,206	8.8	68,237	11.4
80-84	32,185	6.7	54,712	8.5
85-89	17,875	5.2	37,334	6.4
90 +	7,354	4.3	19,598	5.0

See notes at the end of the table.

Table 16. Life Expectancy¹ and Survivors from the Abridged Life Table, Canada, 1971 to 1991 - Continued

Age	Males		Females	
	Survivors	Life Expectancy	Survivors	Life Expectancy
1981				
0	100,000	72.1	100,000	79.2
1-4	98,909	71.8	99,156	78.8
5-9	98,676	68.0	98,976	75.0
10-14	98,508	63.1	98,859	70.1
15-19	98,318	58.2	98,747	65.1
20-24	97,703	53.6	98,529	60.3
25-29	96,988	49.0	98,312	55.4
30-34	96,349	44.3	98,056	50.5
35-39	95,721	39.5	97,751	45.7
40-44	94,907	34.9	97,268	40.9
45-49	93,668	30.3	96,499	36.2
50-54	91,545	25.9	95,278	31.6
55-59	88,104	21.8	93,355	27.2
60-64	82,796	18.1	90,468	23.0
65-69	75,080	14.7	86,244	19.0
70-74	64,368	11.7	79,946	15.3
75-79	50,887	9.1	70,843	12.0
80-84	35,454	6.9	58,060	9.0
85-89	20,440	5.2	41,256	6.7
90 +	8,939	4.0	23,269	5.0
1986				
0	100,000	73.3	100,000	80.0
1-4	99,142	72.9	99,322	79.6
5-9	98,953	69.1	99,166	75.7
10-14	98,830	64.2	99,076	70.7
15-19	98,681	59.3	98,985	65.8
20-24	98,182	54.5	98,785	60.9
25-29	97,577	49.9	98,600	56.0
30-34	97,011	45.1	98,393	51.2
35-39	96,384	40.4	98,117	46.3
40-44	95,647	35.7	97,723	41.5
45-49	94,560	31.1	97,052	36.7
50-54	92,786	26.6	95,937	32.1
55-59	89,787	22.4	94,158	27.7
60-64	84,997	18.6	91,514	23.4
65-69	77,790	15.0	87,507	19.4
70-74	67,520	11.9	81,555	15.6
75-79	54,110	9.2	72,815	12.1
80-84	38,286	7.0	60,146	9.2
85-89	22,451	5.2	43,522	6.7
90 +	9,929	3.8	24,951	4.9

See notes at the end of the table.

Table 16. Life Expectancy and Survivors from the Abridged Life Table, Canada, 1971 to 1991 - Concluded

Age	Males		Females	
	Survivors	Life Expectancy	Survivors	Life Expectancy
	1991			
0	100,000	74.6	100,000	81.0
1-4	99,291	74.1	99,424	80.4
5-9	99,143	70.2	99,309	76.5
10-14	99,038	65.3	99,223	71.6
15-19	98,912	60.4	99,142	66.6
20-24	98,468	55.7	98,970	61.7
25-29	97,911	51.0	98,790	56.8
30-34	97,349	46.2	98,583	52.0
35-39	96,711	41.5	98,320	47.1
40-44	95,918	36.8	97,923	42.3
45-49	94,906	32.2	97,339	37.5
50-54	93,315	27.7	96,344	32.9
55-59	90,757	23.4	94,769	28.4
60-64	86,583	19.4	92,313	24.1
65-69	80,017	15.8	88,587	20.0
70-74	70,668	12.5	83,043	16.1
75-79	58,054	9.7	74,862	12.6
80-84	42,394	7.4	62,789	9.5
85-89	25,695	5.5	46,417	7.0
90 +	11,776	4.3	27,558	5.1

¹ In years.

Source: Calculations by the author.

the rates decrease. The 1993 Report gave a brief analysis of the effect of the new estimates on total fertility rates and mentioned that new life tables would be calculated and comments made on differences from the old tables.

A decrease in mortality rates is exactly matched by an increase in the probability of survival and thus an overall increase in life expectancy.

In principle, life expectancies calculated from the new population estimates give a more exact measurement of the situation. The denominator of the rates is now a more accurate estimate of the population at risk, more consistent with the death counts recorded by vital statistics, which have almost always included the deaths on Canadian soil of non-permanent residents or returning Canadians.

The essential figures of the new tables are shown in Table 16, while differences from the old figures are shown in Table 17.

Table 17. Comparison of Former and New Estimates of the Population and of Life Expectancy at Birth, Males, Canada, 1971-1991

Year	Estimates	Total Population	Difference	Life Expectancy	Difference (in years)
1971	Former	10,795,369	269,646	69.40	0.22
	New	11,065,015		69.62	
1976	Former	11,449,524	315,394	70.26	0.24
	New	11,764,918		70.50	
1981	Former	12,067,611	331,388	71.88	0.17
	New	12,398,999		72.05	
1986	Former	12,508,084	504,856	73.06	0.26
	New	13,012,940		73.32	
1991	Former	13,315,081	623,054	74.19	0.42
	New	13,938,135		74.61	

Source: Statistics Canada, Demography Division, Estimates Section and calculations by the author.

Based on the table for males, the order of magnitude of the change is basically constant for the tables from 1971 to 1986⁷, but nearly double for the 1991 table. In Table 18, we see that the new 1991 population estimate increases the population under 50 by over half a million (532,316) while the population over 50 increases by not quite 100,000 (90,738). We might be inclined to attribute the increase in life expectancy at birth to the relatively large increase in the younger component of the population, and we are thus surprised by the distribution of differences in probabilities of survival at various ages. While the increase in these probabilities up to age 35 or even 40 is in line with expectations, past these ages they do not correspond to the values obtained using the old estimates, but instead continue to increase exponentially (Figure 9). This leads us to envisage the possibility that the large increase observed in life expectancy at birth may be due more to slight increases in the population in the older age groups in the new estimates than large increases in the younger age groups.

A number of demographers and statisticians have shown that, using the relationships between the parameters of two life tables, it is possible to measure the contribution of each age group to the increase that we see in the table drawn up using the new estimates compared to that drawn up with the old. The exercise shows that, of the difference of 0.42 years between the two male tables for 1991, only about 35% is due to the increase in males

⁷ In the past, a certain mistrust of population estimates led to the practice of assessing changes in mortality by calculating three-year tables centred on census years, with the assumption that population counts were hard facts. This has become traditional, and tables were therefore recalculated for the years 1971, 1976, 1981, 1986 and 1991.

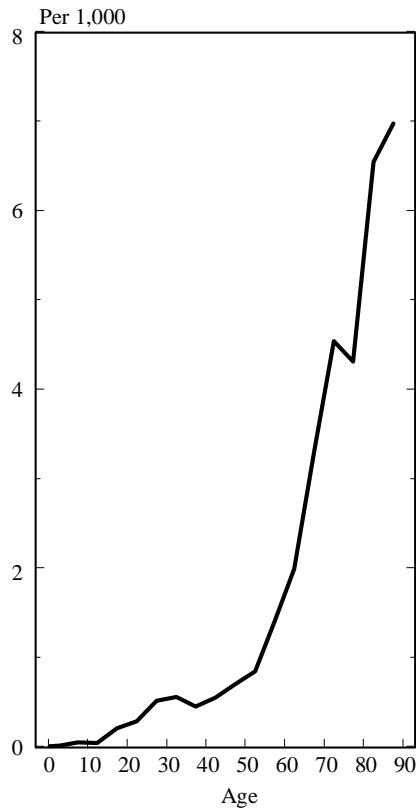
under 50 while 65% is due to the increase in those over 50. The paradox stems from the fact that rates at younger ages are relatively unchanged by a large increase in the denominator of the rate because of the small numerator, but rates at older ages are more affected by a small increase in the denominator because of the larger size of numerators. The fact remains that denominators, that is, the number of people at older ages, are increased by a relatively large amount in the new estimates.

At this point, it is important to determine whether the increase in population is due to the 1991 census itself or to the adjustments that resulted in the estimates. This is a thorny question since the 1986 census on which the old estimates were based was itself affected by under-enumeration. However, the under-enumeration is generally low past age 50. The difference might thus be due to temporary residents and/or weaknesses in the count of deaths and emigrants. The two last reasons are improbable since the under-reporting of deaths is negligible and people over 50 are not very inclined to leave the country. This would leave temporary residents over 50 to explain a difference of 50,000 persons out of 159,000, or 31% (Table 18). The number and proportion appear high, particularly the 2,700 over 90, while the proportion of people “missing” (net under-enumeration) for the group of those over 50, which was 41,000 out of 464,363, or 8.9%, seems reasonable.

In conclusion, it appears that there may have been a slight skewing in the distribution of men in the 1991 estimate, and that this is responsible for part of the difference between the life expectancy at birth calculated from the old and new estimates. ***It is thus entirely possible that life expectancy at birth in the new male table is slightly overestimated.***

The preceding discussion, it must be noted, is not intended to cast doubt on the quality of the census. Perfection by its nature cannot be attained,

Figure 9. Difference in Five-year Probabilities of Survival Between the New and Former Male Life Tables of 1991



Source: Calculations by the author.

Table 18. Difference Between the Numbers in Five-year Age Groups in the Canadian Male Population according to Source

Age Group	1991 Census Data (1)	Estimates Based on the 1986 Census (2)	New Estimates (3)	Difference		
				(1) - (2)	(3) - (1)	(3) - (2)
0	202,061	206,314	206,370	-4,253	4,309	56
1-4	776,011	787,260	793,902	-11,249	17,891	6,642
5-9	980,483	956,125	998,205	24,358	17,722	42,080
10-14	965,178	948,447	980,454	16,731	15,276	32,007
15-19	960,585	942,134	985,072	18,451	24,487	42,938
20-24	987,053	1,015,688	1,067,654	-28,635	80,601	51,966
25-29	1,184,180	1,176,806	1,282,185	7,374	98,005	105,379
30-34	1,238,976	1,209,137	1,312,036	29,839	73,060	102,899
35-39	1,134,816	1,112,807	1,173,504	22,009	38,688	60,697
40-44	1,043,050	1,023,363	1,077,008	19,687	33,958	53,645
45-49	824,934	810,084	844,091	14,850	19,157	34,007
50-54	663,967	652,855	673,195	11,112	9,228	20,340
55-59	608,648	599,601	618,181	9,047	9,533	18,580
60-64	572,388	563,270	578,610	9,118	6,222	15,340
65-69	492,878	483,209	497,864	9,669	4,986	14,655
70-74	359,255	354,355	364,284	4,900	5,029	9,929
75-79	252,713	250,974	255,603	1,739	2,890	4,629
80-84	140,234	139,265	142,234	969	2,000	2,969
85-89	61,292	61,026	62,193	266	901	1,167
90 +	25,070	22,361	25,490	2,709	420	3,129
Total	13,473,772	13,315,081	13,938,135	158,691	464,363	623,054
50 +	3,176,445	3,126,916	3,217,654	49,529	41,209	90,738

Source: Statistics Canada, Demography Division, Estimates Section and calculations by the author.

but within this limit the quality of the census is excellent. The index being calculated, the expectancy of life and its related parameters, unfortunately exaggerates certain minor flaws in the counts for relatively small age groups. At the same time, work continues in the Demography Division to identify the source of the flaws.

Life tables for females do not appear to pose a problem. Differences in life expectancies at birth between the two series of tables are small but constant: 0.15 years in 1971; 0.12 years in 1976; 0.11 years in 1981; 0.21 years in 1986, and 0.23 years in 1991 (Table 19).

This does not mean that the counts of females in the census are completely accurate. But an error of the same size in absolute numbers for equal age groups may go pretty well unnoticed in the value of the rates, given that the female population is much larger than the male at older ages.

Table 19. Comparison of New and Former Estimates of Life Expectancy at Birth, Canada, 1971-1991

Year	Former Estimates	New Estimates	Difference
Males			
1971	69.39	69.62	0.23
1976	70.25	70.50	0.25
1981	71.88	72.05	0.17
1986	73.06	73.32	0.26
1991	74.19	74.61	0.42
Females			
1971	76.45	76.60	0.15
1976	77.69	77.81	0.12
1981	79.06	79.17	0.11
1986	79.81	80.02	0.21
1991	80.72	80.95	0.23

Source: Calculations by the author.

This discussion on the level of mortality also provides an opportunity to note some reservations regarding the comparisons we are often led to make with other countries for which we do not know the quality of data and which do not use strictly identical methods of calculating the table. Note that, independently of the abridged tables, the Health Division of Statistics Canada calculates a complete life table, i.e., by year of age, which gives parameters for ages after 90. For a given reference year, the abridged and complete tables may show slight differences for the most sought-after value, life expectancy at birth, due to their different calculation methods.

The provinces for which we see the greatest differences between the old and new series of life tables are Ontario and British Columbia because they are the ones most affected by changes in population estimates. The larger gains recorded by British Columbia were not enough to move it ahead of Saskatchewan, which still has the highest life expectancy for both men and women. The only noteworthy changes in the provincial rankings were Quebec, which traded its ninth position for the seventh place held by Newfoundland for males, and Ontario which moved up from seventh to replace Manitoba in fourth place for females.

1992 Preliminary Life Table

The final three-year abridged table for 1991, which uses the new population estimates calculated with the 1990-1992 deaths, confirms the results of the preliminary table calculated last year without 1992 deaths; for each sex, life expectancy at birth differs by only a hundredth of a year

from the preliminary table. It shows the gains in life expectancy observed over the past five years continuing at the same rate. Unless there is a major change in the trend in deaths *in 1993, we will see the life expectancy at birth for Canadian women exceed 81 years definitively* (Table A5 in the Appendix). The gap between the life expectancy of men and that of women has decreased by almost a year in the past 15 years, from a maximum of 7.31 years in 1976 to 6.34 in 1991.

Leading Causes of Death

Barring exceptional circumstances, the cause-specific breakdown of deaths does not change significantly from year to year. In 1992, diseases of the circulatory system and tumours and cancers were still the two leading causes of death, in that order. Together they were responsible for two-thirds of the 196,500 deaths observed in 1992 (Table A6 in the Appendix).

To have a more or less accurate picture of the trend in cause-specific mortality, we must counteract the effect of the age structure by standardizing the rates using a reference population. In Table 20, we see that the standardized death rate from diseases of the circulatory system continues to decline while the rate for all tumours and cancers stays at the same level for both males and females. There is a remarkable increase in female deaths from cancers of the respiratory system. Starting from a very low level (8.35 per 100,000 in 1971), the standardized rate more than triples in 21 years. It is generally agreed that this increase in female deaths from cancer of the respiratory system is a result of their increase in smoking.

During the past 20 years, standardized rates of mortality from diseases of the circulatory system have declined at almost the same rate for both sexes (Table 21). The decrease, which was initially more rapid among women, subsequently speeded up for men to the point where, for the period as a whole, the mean annual variations were identical for both sexes. These remarks are valid for the two main sub-categories of diseases of the circulatory system, ischemic heart disease and cerebrovascular disease.

The trends in cancer deaths take on a quite different profile. For women, the slight drop in mortality due to this cause observed during the first five-year period was almost entirely offset by an increase during the three others; while for men, the slight decrease in rates for the last five-year period failed to cancel out the increase observed between 1972 and 1987. The increase in the number of deaths from cancer of the respiratory system was such that this cause alone is now responsible for over a third of all deaths due to cancer for males and about a fifth for females. The standardized rate for this cause of death among women has increased by 5.12% a year over the past two decades. If this continues, as it may well, we could see rates of 40.6 per 100,000 in 2010.

Table 20. Evolution of Mortality from Diseases of the Circulatory System and from Tumors, by Sex, Canada, 1971-1991¹

Year	Diseases of the Circulatory System ²	Ischemic Heart Diseases ³	Cerebro-vascular Diseases ⁴	Tumors and Cancers ⁵	Malignant Tumors of the Respiratory System ⁶
Males					
1971	412.63	281.73	70.65	164.08	46.44
1972	414.59	282.18	71.68	165.62	47.31
1973	408.44	276.86	69.11	167.25	49.12
1974	408.99	277.36	68.51	166.63	51.15
1975	393.87	266.94	65.65	167.02	50.74
1976	389.54	264.38	62.45	167.30	52.54
1977	380.25	258.99	59.54	169.40	54.24
1978	365.20	246.57	57.16	171.17	55.48
1979	351.95	232.12	55.09	173.00	56.74
1980	344.81	227.49	52.27	174.58	58.77
1981	331.40	220.25	50.32	172.48	57.63
1982	323.92	214.16	47.06	175.76	60.75
1983	311.55	205.29	44.32	175.01	61.27
1984	297.40	195.85	43.00	178.49	62.63
1985	289.99	190.84	40.75	178.76	60.90
1986	282.32	183.48	39.39	179.29	61.47
1987	267.76	174.37	38.57	178.26	61.25
1988	260.77	169.29	36.80	182.16	63.23
1989	250.09	159.79	37.19	179.28	62.69
1990	231.04	146.39	35.67	177.32	61.86
1991	225.64	142.06	34.18	177.45	61.04
1992	219.79	137.76	33.25	175.11	59.58
Females					
1971	335.33	188.19	84.60	134.11	8.35
1972	334.44	187.50	84.49	137.52	10.03
1973	327.98	186.06	80.00	136.61	10.61
1974	326.24	185.96	79.25	137.17	11.32
1975	312.33	174.84	77.98	132.39	11.59
1976	303.54	171.16	73.12	131.41	11.84
1977	293.10	166.00	68.64	132.50	13.36
1978	283.55	161.79	67.21	132.68	14.17
1979	271.11	149.03	63.62	135.28	15.47
1980	269.71	148.03	60.68	133.70	16.17
1981	256.43	140.88	58.55	134.21	17.07
1982	252.48	138.78	56.01	134.28	18.45
1983	240.21	131.08	52.87	134.26	18.72
1984	232.06	128.66	49.81	136.37	20.83
1985	225.44	122.61	48.74	139.10	22.41
1986	222.70	121.16	48.34	139.06	22.48
1987	210.86	114.71	45.07	138.82	23.82
1988	206.88	111.07	45.30	139.84	25.17
1989	198.12	105.39	43.94	137.90	25.09
1990	187.16	100.34	40.72	138.13	25.61
1991	184.13	97.69	40.42	138.70	27.44
1992	177.37	92.13	40.09	138.08	27.22

¹ Rate per 100,000, standardized on the age structure of the 1976 Canadian Population.

² Causes 390-459, 9th Revision of the I.C.D.

³ Causes 410-414, 9th Revision of the I.C.D.

⁴ Causes 430-438, 9th Revision of the I.C.D.

⁵ Causes 140-239, 9th Revision of the I.C.D.

⁶ Causes 160-165, 9th Revision of the I.C.D.

Source: Statistics Canada, Health Statistics Division and calculations by the author.

Table 21. Mean Annual Change During the Period in Standardized Rates of Mortality by Cause, Canada, 1972-1992

Period	Disease of the Circulatory System ¹ (1)	Ischemic Heart Disease ² (2)	Cerebro-vascular Diseases ³ (3)	Tumors and Cancers ⁴ (4)	Malignant Tumors of the Respiratory System ⁵ (5)	All Causes	Causes other than (1) & (4)
Males							
1972-1977	-1.71	-1.70	-3.64	0.45	2.77	-1.32	-1.83
1977-1982	-3.16	-3.73	-4.60	0.74	2.29	-1.84	-1.73
1982-1987	-3.74	-4.03	-3.90	0.28	0.16	-1.72	-0.65
1987-1992	-3.87	-4.60	-3.52	-0.36	-0.55	-1.94	-1.06
1972-1992	-3.12	-3.52	-3.91	0.28	1.16	-1.71	-1.32
Females							
1972-1977	-2.60	-2.41	-4.07	-0.74	5.90	-2.12	-2.30
1977-1982	-2.94	-3.52	-3.99	0.27	6.67	-1.66	-1.02
1982-1987	-3.54	-3.74	-4.25	0.67	5.24	-1.31	0.38
1987-1992	-3.40	-4.29	-2.31	-0.11	2.70	-1.53	-0.38
1972-1992	-3.12	-3.49	-3.66	0.02	5.12	-1.65	-0.84

¹ Causes 390-459, 9th Revision of the I.C.D.

² Causes 410-414, 9th Revision of the I.C.D.

³ Causes 430-438, 9th Revision of the I.C.D.

⁴ Causes 140-239, 9th Revision of the I.C.D.

⁵ Causes 160-165, 9th Revision of the I.C.D.

Source: Statistics Canada, Health Statistics Division and calculations by the author.

We may make the changes in mortality even more sensitive by observing changes in the risk of dying from a given cause in a given age interval. Table 22 shows, for instance, that:

- *for a man living at age 40, the risk of dying of a heart attack before age 60 fell between 1971 and 1991 from 59 per 1,000 to 23 per 1,000, a decrease of 61%; and before age 80 from 348 per 1,000 to 193 per 1,000, a decrease of 45%;*
- for women living at age 40, the probability of dying from a heart attack before age 60 dropped by 55% and before age 80 by 49%.

On the other hand, the probability of dying after age 40 from cancer of the respiratory system:

- increased for men before age 60 from 1971 to 1981, and appears to have decreased marginally in 1991, while before ages 70 and 80 the probability also increased between 1971 and 1981 and has since stabilized;
- *for women, the risk increased over the two decades by 140% before age 60, 202% before age 70 and 216% before age 80.*

Table 22. Probability of Dying¹ by Age for Certain Causes of Death, 1971, 1981 and 1991

Year	Age	Malignant Tumors of the Respiratory System ²		Ischemic Heart Diseases ³		Diseases of the Circulatory System ⁴	
		Males	Females	Males	Females	Males	Females
1971	Before Age 60	129	30	585	126	731	234
	Before Age 70	386	65	1,621	534	2,057	859
	Before Age 80	756	114	3,476	1,765	4,544	2,760
1981	Before Age 60	151	56	418	96	540	176
	Before Age 70	458	131	1,224	399	1,608	648
	Before Age 80	939	221	2,819	1,340	3,836	2,143
1991	Before Age 60	139	72	234	57	316	107
	Before Age 70	457	196	748	245	1,035	416
	Before Age 80	966	360	1,929	894	2,770	1,489

¹ Per 10,000 persons alive at age 40.

² Causes 160-165, 9th Revision of the I.C.D.

³ Causes 410-414, 9th Revision of the I.C.D.

⁴ Causes 390-459, 9th Revision of the I.C.D.

Source: Statistics Canada, Health Statistics Division and calculations by the author.

AIDS Victims

The number of deaths attributed to H.I.V. was 1,358 in 1992, an increase of 28% from the previous year (Table 23). *Although numbers are very small in comparison with the leading causes of death, the mean annual increase is nonetheless impressive (21% in the past five years).*

AIDS is still a disease mainly affecting males, as nearly 95% of those dying are men, and strikes men in the prime of life, with over 60% of the deaths (783) being of men 30 to 44 years of age. The number of deaths due to cancer and diseases of the circulatory system in men of the same age, 960 and 840 respectively, might be exceeded by deaths caused by H.I.V. starting next year.

Developments in Mortality Due to H.I.V.

The speed with which H.I.V. infection is spreading is such that few countries have valid statistics, particularly since information is still unclear on the development of the resulting diseases and their consequences. The medical world seems for the moment confident in identifying deaths attributable to H.I.V. For many developed countries where reporting of deaths is satisfactory,⁸ the figures we have may be described as certain.

⁸ Although it is easy to detect weaknesses in some.

Table 23. Deaths due to H.I.V. (Causes 042-044 in the I.C.D.) by Broad Age Groups and Sex, Canada, 1987-1991

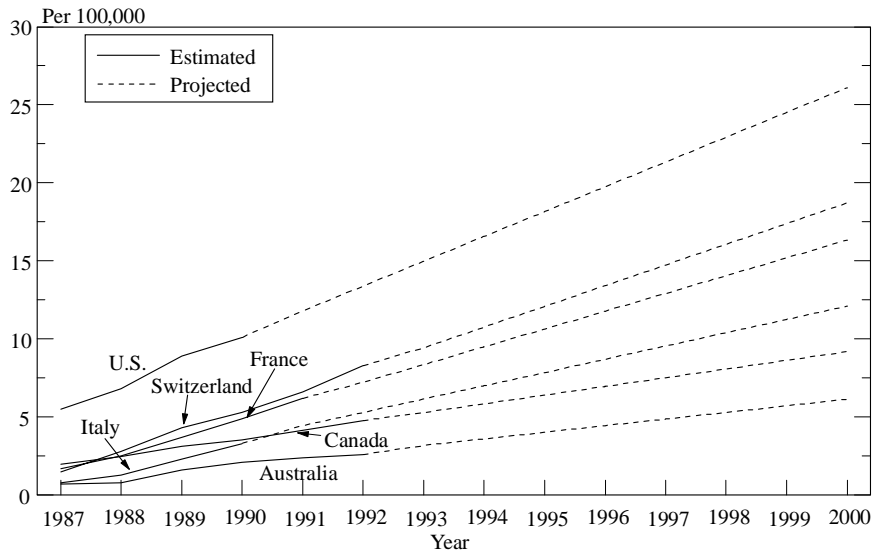
Year	Sex	Age Group					Total
		0-14	15-29	30-44	45-59	60 +	
1987	Males	1	85	293	87	22	488
	Females	5	7	12	8	5	37
1988	Males	2	96	361	126	29	614
	Females	3	10	28	7	9	57
1989	Males	3	124	485	164	21	797
	Females	2	10	20	10	12	54
1990	Males	3	108	576	215	35	937
	Females	1	14	19	7	4	45
1991	Males	3	129	698	233	42	1,105
	Females	4	15	25	14	7	65
1992	Males	4	161	783	305	35	1,288
	Females	4	10	38	11	7	70

Source: Statistics Canada, Health Statistics Division.

For under-developed countries, we must be content with estimates. It cannot be stressed enough that it is nearly impossible to get an accurate idea of the number of persons infected and still less to predict the trend in the number of future deaths. Infected persons might show no signs of disease for years and, as research progresses, it is possible some will eventually not develop the disease before dying at a ripe old age from another disease. While H.I.V. infection wreaks havoc in Third World countries, developed countries have for the moment resisted better, although death rates have risen.

A sample of countries that supplied the World Health Organization (WHO) with age-specific statistics on deaths from H.I.V. shows that rates have evolved in a linear fashion (Figure 10) and in the majority of cases their alignment (often involving only a few points) is almost indistinguishable from the regression line (R^2 ranging from 0.954 to 0.997). In the sample group, the U.S. stands out clearly with high levels from 1987, when the classification came into effect. Canada and Australia show much weaker trends than the four other countries. However, if the growth rate remains unchanged until the turn of the century, Canada's rate per 100,000 will be 9.20, which would result in 2,800 deaths. Based on only four years, the extrapolation for the United States at the same date would yield a rate of 26.11 per 100,000, for over 75,000 deaths. In the European countries, the rates of increase are also very rapid; France would reach 16.34 per

Figure 10. Crude Rates of Mortality from H.I.V. (Causes 042-044 in the I.C.D.) and Extrapolations, Selected Countries, 1987-2000



Source: Data requested from the World Health Organisation and calculations by the author.

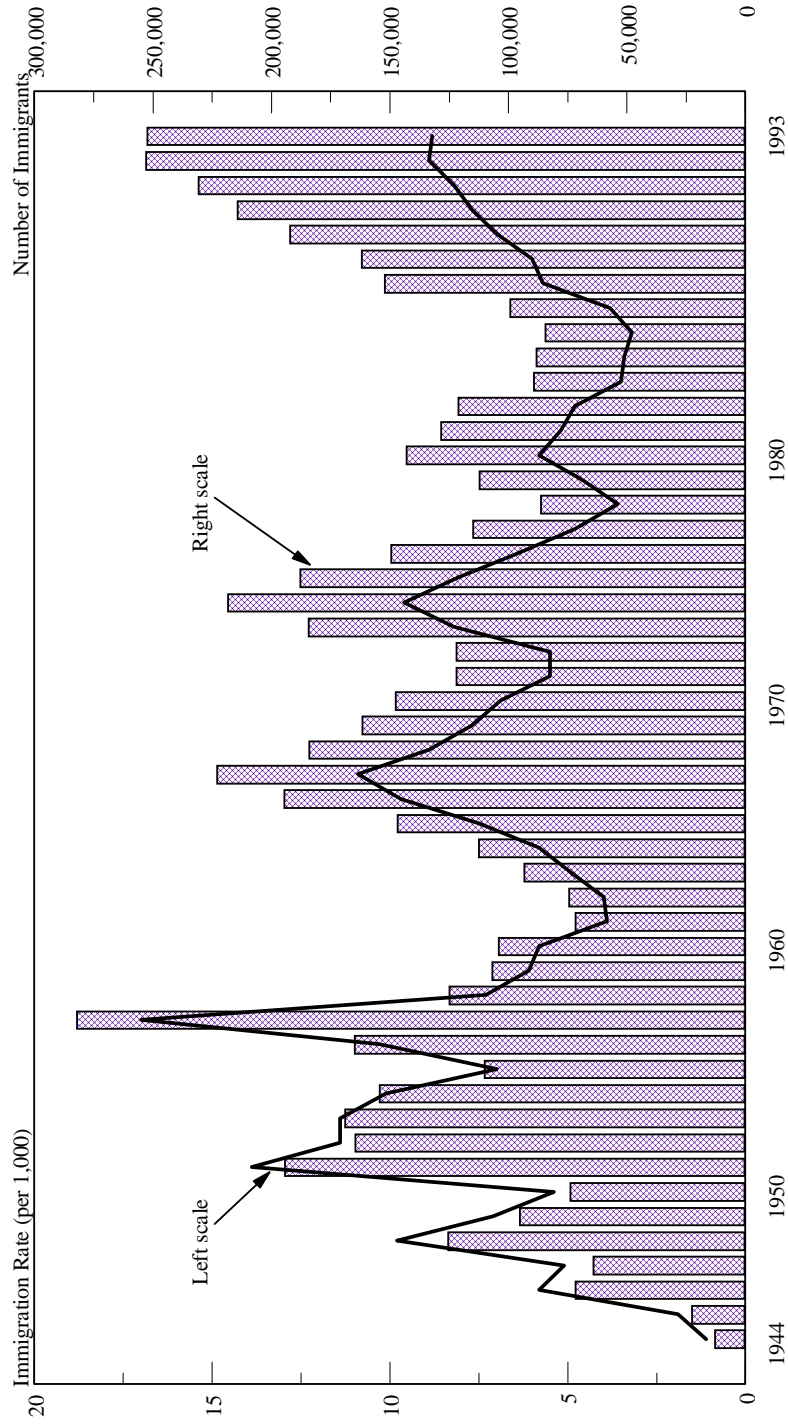
100,000, Switzerland 18.7 and Italy 12.1. Since the deaths are of young people, the life expectancy at birth of several western countries might well be affected.

After standardization on the Canadian population, we may determine the place currently held by Canada and conclude that this country is still one of the least affected.

INTERNATIONAL MIGRATION

Canada admitted 252,137 immigrants in 1993, essentially the same number as in 1992, and thus once again equalled and even slightly exceeded the target of 250,000 immigrants set in the 1991-1995 five-year plan. This contingent of new Canadians pushed the international immigration rate up to 8.8 per 1,000 (Figure 11), a figure much higher than that of other countries which have traditionally attracted immigrants: the U.S. had net immigration of 894,000, Australia 65,700 and New Zealand 8,700, for net immigration rates of 3.5, 3.8 and 2.5 per 1,000 respectively, compared to that of Canada at 7.19 per 1,000.

Figure 11. Number of Immigrants and Immigration Rate, Canada, 1944-1993



Source: Employment and Immigration Canada, *Immigration Statistics*, annual publication.

Table 24. Percentage Distribution of Landed Immigrants by Intended Province of Destination, Canada, 1956-1993

Province	Year											
	1956	1961	1971	1981	1986	1987	1988	1989	1990	1991	1992	1993 ¹
Newfoundland	0.3	0.5	0.7	0.4	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3
Prince Edward Island	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Nova Scotia	1.0	1.3	1.5	1.1	1.1	0.8	0.8	0.8	0.7	0.7	0.9	1.2
New Brunswick	0.5	1.1	0.9	0.8	0.6	0.4	0.4	0.5	0.4	0.3	0.3	0.3
Quebec	19.0	23.6	15.8	16.4	19.6	17.6	15.9	17.8	19.1	22.4	19.1	17.6
Ontario	55.0	50.9	52.8	42.7	50.0	55.8	55.0	54.6	53.0	51.5	54.7	52.5
Manitoba	3.5	3.5	4.3	4.2	3.8	3.2	3.1	3.2	3.1	2.4	2.0	1.9
Saskatchewan	1.3	1.9	1.2	1.9	1.9	1.4	1.4	1.1	1.1	1.1	1.0	0.9
Alberta	6.0	6.7	7.1	15.0	9.7	7.9	8.7	8.4	8.8	7.4	7.0	7.3
British Columbia	10.8	10.2	15.5	17.1	12.7	12.4	14.3	13.2	13.4	13.9	14.5	17.9
Yukon and Northwest Territories	0.1	0.2	0.2	0.2	0.1	0.1	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 Percentage	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 Number	164,857	71,689	121,900	128,618	99,219	152,098	161,929	192,001	214,230	230,781	252,842	252,137

¹ Preliminary data as of March 11, 1994.

Source: Employment and Immigration Canada, *Immigration Statistics*, annual publication.

Table 25. Number of Landed Immigrants and Targets of the Five-year Immigration Plan by Class, Canada, 1991-1993

Class	Planned	Certificates Granted	Difference
1991			
Family	80,000	84,123	4,123
Refugees	46,500	35,355	-11,145
Independents	41,000	43,155	2,155
Assisted Relatives	19,500	21,857	2,357
Business	28,000	17,000	-11,000
Retirees	5,000	4,204	-796
Total	220,000	205,694	-14,306
1992			
Family	100,000	99,960	-40
Refugees	58,000	51,875	-6,125
Independents	41,500	47,505	6,005
Assisted Relatives	19,500	19,880	380
Business	28,000	28,143	143
Retirees	3,000	5,479	2,479
Total	250,000	252,842	2,842
1993			
Family	95,000	111,178	16,178
Refugees	58,000	30,194	-27,806
Independents	47,500	48,368	868
Assisted Relatives	23,500	22,191	-1,309
Business	26,000	32,501	6,501
Retirees	-	7,705	7,705
Total	250,000	252,137	2,137

Sources: Employment and Immigration Canada, *For an Immigration Policy Adapted to the 90s*, Catalogue No. IM199/6/92 and *Immigration Statistics*, annual publication.

Very few changes are observed from one year to another in the distribution of immigrants by anticipated province of destination (Table 24). Ontario remained the intended destination of more than half of all immigrants, while, for the first time since 1981, British Columbia, at 17.9% of the total, moved ahead of Quebec into second place in the intentions of immigrants.

Immigration Levels

The new classification of immigrants proposed by the Policy Group⁹ and summarized in the 1992 Report on the Demographic Situation has not yet been adopted. Immigration is currently governed by the Act to amend the Immigration Act, and to amend other Acts in consequence thereof, which

⁹ Managing Immigration: a framework for the 1990s. Employment and Immigration Canada.

Table 26. Immigrants to Canada by Class, 1981-1993

Year		Family Class	Refugees	Designated Persons	Assisted Relatives	Independent Immigrants	Total
1981	No.	51,017	810	14,169	17,590	45,032	128,618
	%	39.7	0.6	11.0	13.7	35.0	100.0
1982	No.	49,980	1,791	15,134	11,948	42,294	121,147
	%	41.3	1.5	12.5	9.9	34.9	100.0
1983	No.	48,698	4,100	9,867	4,997	21,495	89,157
	%	54.6	4.6	11.1	5.6	24.1	100.0
1984	No.	43,814	5,625	9,717	8,167	20,916	88,239
	%	49.7	6.4	11.0	9.3	23.7	100.0
1985	No.	38,514	6,080	10,680	7,396	21,632	84,302
	%	45.7	7.2	12.7	8.8	25.7	100.0
1986	No.	42,197	6,490	12,657	5,890	31,985	99,219
	%	42.5	6.5	12.8	5.9	32.2	100.0
1987	No.	53,598	7,473	14,092	12,283	64,652	152,098
	%	35.2	4.9	9.3	8.1	42.5	100.0
1988	No.	51,331	8,741	18,095	15,567	68,195	161,929
	%	31.7	5.4	11.2	9.6	42.1	100.0
1989	No.	60,774	10,210	26,794	21,520	72,703	192,001
	%	31.7	5.3	14.0	11.2	37.9	100.0
1990	No.	73,457	11,398	28,291	23,393	77,691	214,230
	%	34.3	5.3	13.2	10.9	36.3	100.0
1991	No.	86,378	18,374	35,027	22,247	68,755	230,781
	%	37.4	8.0	15.2	9.6	29.8	100.0
1992	No.	99,960	28,699	23,176	19,880	81,127	252,842
	%	39.5	11.4	9.2	7.9	32.1	100.0
1993 ¹	No.	111,178	22,035	8,159	22,191	88,574	252,137
	%	44.1	8.7	3.2	8.8	35.1	100.0

¹ Preliminary data as of March 11, 1994.

Source: Employment and Immigration Canada, *Immigration Statistics*, annual publication.

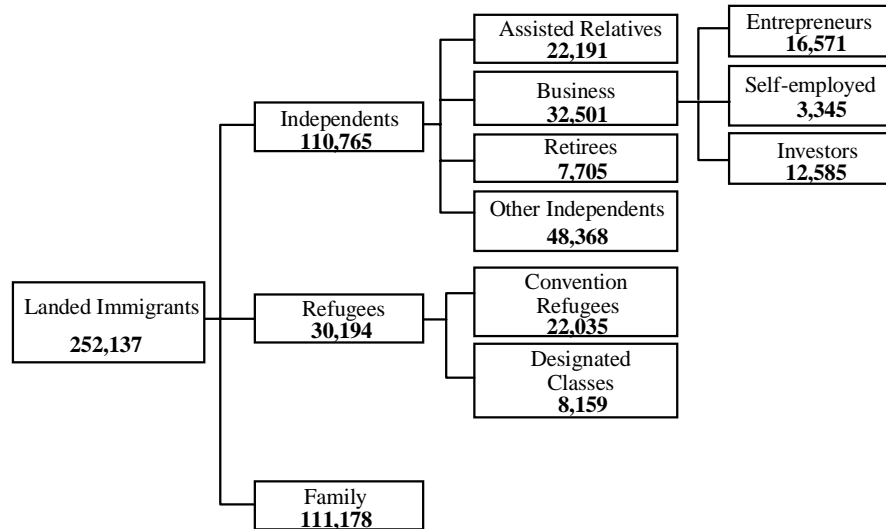
received assent on December 17, 1992. The new government is currently consulting with various Canadian stakeholders on this matter, with a view at developing an immigration strategy for the next decade.

Immigration is under the joint jurisdiction of the federal government and the provinces. Various agreements have been reached with all provinces except Ontario, British Columbia and Manitoba. Consultations with the provinces and other organizations has resulted in an overall admission level and levels for certain target categories of immigrants. These levels are submitted to the two chambers of government at the stipulated date in each calendar year prior to November 1.

For 1994, the level of 250,000 set in previous years was maintained, given that the spring 1993 consultations found no clear reason to change it.

While since 1992 Canada has attained its overall target of 250,000 immigrants a year without difficulty, it is nevertheless interesting to look

Figure 12. Distribution of Immigrants by Class and Category, 1993¹



¹ Preliminary data as of March 11, 1994.

Source: Employment and Immigration Canada, *Immigration Statistics*, annual publication.

at the significant differences between this target and the number of immigrants admitted in the various classes (Table 25). In most cases, the differences are due to the fact that we are comparing two different statistical universes, one concerned with requests for admission while the other involves admissions actually granted. Separating the two are mainly the delay in processing applications and unanticipated political events.

For example, the family class, which has been expanding since 1985 (Table 26), shows the largest positive difference between the forecast for approval of applications and actual admissions for 1993. In this class are 111,178 immigrants (44.1% of the total) admitted to Canada, an increase of 11% over the 1992 figure. The increase seen in recent years is due to changes in regulations governing the eligibility of family members, which was extended between 1988 and 1992. Although since 1992 we have returned to a more restrictive definition, admission statistics continue to rise due to delays in processing applications. *Refugees, on the other hand, were down from 51,875 to 30,194, a decrease of 42%. The proportion of refugees (including persons in designated classes) in the total number of immigrants admitted in 1993 was at its lowest level since 1981.* The business class is still growing, both in numbers and in proportion. In 1993, 32,500 persons were admitted in this class. The retiree class, abolished in 1992, accounted for 7,705 admissions in 1993 (Figure 12); not all pending applications have been processed, and thus several thousand will still be admitted in 1994.

Where Do They Come From?

The location of Canadian immigration offices in various countries throughout the world has an influence on the distribution of immigrants by country of origin, which tends to change only gradually from year to year. Barring unexpected events (political crises or famines and very large-scale disasters) or their resolution, the number of immigrants originating in a country in a given year is generally quite close to that of the previous year.

In a distribution by continent, Asia remains the leading supplier of immigrants. The number of Asians even increased by a little over 5,000 from 1992 to 1993, to 147,172 persons or 58.4% of the total (Table 27). But Asia is too large and diverse to be considered a single entity. People from the Middle East have little in common with those from the Far East. In Canada, there are relatively few of the former, and their numbers even declined in 1993. When we speak of Asia, we are mainly talking about the east, south and southeast. The four countries which supply the main flows of immigrants to Canada were again all in Southeast Asia or Southern Asia. ***In 1993, 87,700 immigrants admitted to Canada, or 34.8% of the total, were born in either Hong Kong (26,772), India (21,399), the Philippines (20,098) or mainland China (19,469).*** Hong Kong was still the leading supplier country in 1993. There were increases of 50% and 46%, respectively in the number of immigrants from India and the Philippines between 1992 and 1993. These two countries now outstrip the People's Republic of China in terms of numbers. There are still large contingents from Sri Lanka (9,400), Taiwan (9,300) and Vietnam (7,800).

The number of immigrants from European countries remains at about 44,000 despite the major increase in the number of immigrants born in one or another of the former Yugoslav republics. This increase to some extent compensates for the drop in the number of immigrants born in Poland. All in all, Canada has admitted very few immigrants from Eastern Europe in recent years, despite what was anticipated by many experts at the time of the dismantling of the USSR and the disappearance of the Iron Curtain.

Also noteworthy are the smaller numbers of Somalis and Salvadoreans, large numbers of whom had been sponsored by the Canadian government at the time they were suffering from famine and political conflict.

Immigration and the Population of Quebec

Variations in mortality and fertility between provinces are now minimal, so internal and international migrations have become the main factor of change in the geographic breakdown of population in Canada, as is the case in many other countries. International immigration is different from other

Table 27. Countries from Which more than 2,000 Immigrants Came to Canada in 1992 and 1993

	1992	1993 ⁴	Difference
Europe	43,338	44,713	1,375
France	3,105	3,324	219
British Isles ¹	5,831	5,767	-64
Poland	11,918	6,879	-5,039
U.S.S.R. ²	3,157	4,049	892
Yugoslavia ³	3,665	9,856	6,191
Other	15,662	14,838	-824
Africa	20,113	17,306	-2,807
Ghana	2,501	2,188	-313
Somalia	5,513	3,621	-1,892
Other	12,099	11,497	-602
Asia	141,816	147,172	5,356
China	22,160	19,469	-2,691
South Korea	3,804	3,698	-106
Hong Kong	27,927	26,772	-1,155
India	14,228	21,399	7,171
Iran	7,047	4,127	-2,920
Iraq	2,159	3,300	1,141
Libanon	6,619	4,769	-1,850
Pakistan	3,731	4,436	705
Philippines	13,737	20,098	6,361
Sri Lanka	12,858	9,379	-3,479
Taiwan	7,021	9,290	2,269
Vietnam	7,841	7,956	115
Other	12,684	12,479	-205
North America and South America	18,676	14,247	-4,429
El Salvador	5,702	2,940	-2,762
United States	5,891	6,387	496
Other	7,083	4,920	-2,163
Other (Under 2,000)	28,899	28,699	-200
Total	252,842	252,137	-705

¹ Includes England, Ireland, Scotland, Wales and the Channel Islands.

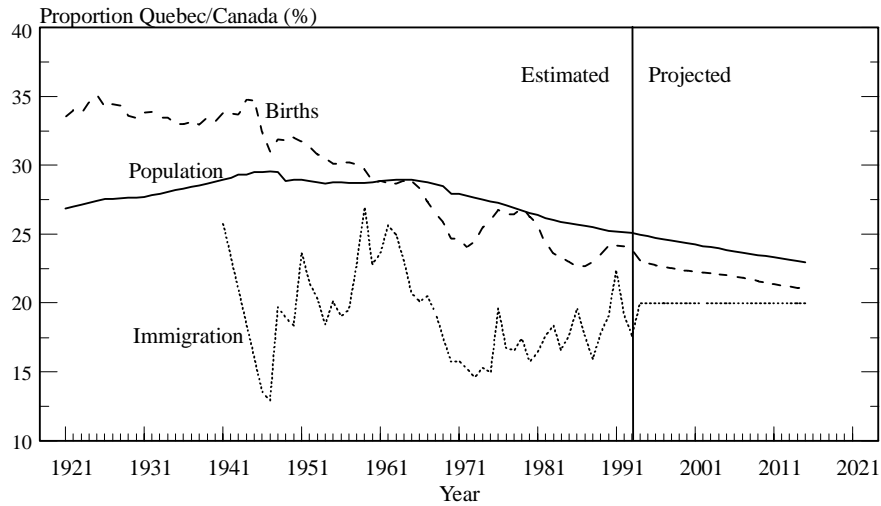
² Includes U.S.S.R., Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Ukraine, Kyrgyzstan, Moldova, Russia, Turkmenistan and Uzbekistan.

³ Includes Yugoslavia, Bosnia-Herzegovina, Slovenia and Croatia.

⁴ Preliminary data as of March 11, 1994.

Source: Employment and Immigration Canada, *Immigration Statistics*, annual publication.

Figure 13. Quebec's Share of Canada's Population, Births and International Immigration



Source: Statistics Canada, Demography Division, Estimates Section and Projections Section.

components of population growth, including internal migration, in that governments can control the level of immigrants accepted, and to a certain extent their socio-economic characteristics,¹⁰ and even in certain cases their destination within the country. For these reasons, it is sometimes seen as a tool for population control. The debate on the role of immigration to compensate for low fertility is still unresolved, and Canada is no exception in this regard.

In 1991 the Canada-Quebec Accord Relating to Immigration and Temporary Admission of Aliens was signed. It is specifically stated that one of the objectives of the accord is to help maintain Quebec's share (25%) of the Canadian population. To achieve this, Quebec agrees to pursue an immigration policy aimed at enabling it to receive a percentage of the total number of immigrant admitted to Canada that would be equal to the percentage Quebec's population forms of the total population of Canada, with the right to exceed this figure by 5% of the Canadian total for demographic reasons. Data on the destinations chosen by immigrants show however that in 1991 Quebec reached a peak with a percentage of 22.4%, which represented about 50,000 persons. In 1992 and 1993, these percentages were lower (19.1% and 17.5%) representing 47,000 and 44,000 persons. For 1994, due to current economic conditions, Quebec is considering limiting the number of admissions to 40,000.¹¹ Nevertheless,

¹⁰ See the Canadian Immigration Act of 1976, Part I, Objective 3(a).

¹¹ Source: "Report on Public Consultations on Immigration Levels".

Table 28. Number of Immigrants Quebec would have to Receive to Maintain Its Current Share of 25% of the Canadian Population

Year	Projected Population		Population Quebec Needs	Annual Immigrants			Cumulative		
	Canada	Quebec		Projected	Extra	Total	Projected Immigrants	Extra Immigrants Needed	Total
	(in thousands)								
1993	28,798.1	7,215.0	7,199.5	50.0	-15.5	34.5	50.0	-15.5	34.5
1994	29,183.3	7,281.8	7,295.8	50.0	29.5	79.5	100.0	14.0	114.0
1995	29,562.5	7,346.1	7,390.6	50.0	30.5	80.5	150.0	44.5	194.5
1996	29,963.7	7,413.7	7,490.9	50.0	32.7	82.7	200.0	77.2	277.2
1997	30,358.4	7,479.4	7,589.6	50.0	33.0	83.0	250.0	110.2	360.2
1998	30,747.0	7,543.6	7,686.8	50.0	32.9	82.9	300.0	143.2	443.2
1999	31,129.3	7,606.3	7,782.3	50.0	32.9	82.9	350.0	176.0	526.0
2000	31,505.9	7,667.6	7,876.5	50.0	32.9	82.9	400.0	208.9	608.9
2001	31,877.3	7,727.0	7,969.3	50.0	33.4	83.4	450.0	242.3	692.3
2002	32,244.3	7,784.9	8,061.1	50.0	33.9	83.9	500.0	276.2	776.2
2003	32,607.2	7,841.4	8,151.8	50.0	34.2	84.2	550.0	310.4	860.4
2004	32,966.7	7,896.7	8,241.7	50.0	34.6	84.6	600.0	345.0	945.0
2005	33,323.4	7,950.9	8,330.9	50.0	35.0	85.0	650.0	380.0	1,030.0
2006	33,677.5	8,004.2	8,419.4	50.0	35.2	85.2	700.0	415.2	1,115.2
2007	34,029.5	8,056.5	8,507.4	50.0	35.7	85.7	750.0	450.9	1,200.9
2008	34,379.7	8,108.0	8,594.9	50.0	36.0	86.0	800.0	486.9	1,286.9
2009	34,728.1	8,158.6	8,682.0	50.0	36.5	86.5	850.0	523.4	1,373.4
2010	35,075.0	8,208.5	8,768.8	50.0	36.8	86.8	900.0	560.3	1,460.3
2011	35,420.3	8,257.5	8,855.1	50.0	37.3	87.3	950.0	597.6	1,547.6
2012	35,764.0	8,305.7	8,941.0	50.0	37.7	87.7	1,000.0	635.3	1,635.3
2013	36,106.0	8,353.2	9,026.5	50.0	38.0	88.0	1,050.0	673.3	1,723.3
2014	36,446.2	8,399.9	9,111.6	50.0	38.4	88.4	1,100.0	711.7	1,811.7
2015	36,784.2	8,445.9	9,196.1	50.0	38.5	88.5	1,150.0	750.2	1,900.2

Source: Statistics Canada, Demography Division, Population Projection Section and calculations by the author.

judging the problems temporary, the province is contemplating raising this figure to 43,000 in 1997. Historically, immigration to Canada has not helped Quebec maintain a constant proportion of the total Canadian population, since the proportion of immigrants choosing this province as their destination has always been lower than Quebec's share of the country's population (Figure 13). Moreover, since the early 1960s, the demographic weight of Quebec has been declining due to its low birth rate.

Since one of the goals of Quebec's immigration policy is to maintain the province's share of the population, we may ask how many immigrants Quebec would have to accept to ensure that its population continues to represent the current 25% of the Canadian total up to the year 2015. Summary calculations are based on the most recent population projections of the Demography Division, which include the following assumptions about the components of population growth:

- 1) a mean increase in life expectancy at birth to 78.5 years for men and 84.0 years for women in 2016;
- 2) maintenance of the total fertility rate at the 1993 level (1.7 children per woman);
- 3) 250,000 international immigrants a year for the country as a whole, 50,000 of them for Quebec, and
- 4) interprovincial migration giving Quebec a mean annual loss of some 14,000 persons.

Based on this scenario, Canada's population would reach 36,784,200 in 2015 and that of Quebec 8,445,900, or 23.0% of the national total. Quebec's share thus would decline by 2 percentage points (Table 28). To prevent this decline and enable Quebec to have the population of 9,196,100 needed to maintain its 25% share through international immigration, 750,200 immigrants would have to be added to the 1,150,000 already forecast for the entire period. This would mean an average flow of nearly 85,000 immigrants a year into Quebec, roughly double the recent targets.

Although somewhat simplified, these results nevertheless respect the order of magnitude of the figures involved, and would suggest that, barring unforeseen changes, Quebec's share of the total population in Canada would continue the gradual decline observed over the past several decades.

Canada and Temporary Migrants

Besides persons who move to Canada with the intention of remaining and request landed immigrant status, a large number of people apply each year for visas of limited duration, mainly for purposes of study or work, and become non-permanent residents.¹² It is important to bear in mind that the number of permits issued in a given year is not equal to the number of persons temporarily living in Canada during that year. Permits are issued for varying lengths of time throughout the year, resulting in a continual movement of people in this category in and out of the country (renewals of temporary visas are included in visa statistics). Individuals may also have more than one visa (student and work authorizations for example). As well, not all persons leave the country on expiry of their visa. Temporary visas are also issued to asylum seekers whose applications are being processed.

Despite these restrictions, statistics on residence permits are nevertheless of interest insofar as they provide information on categories and countries of origin, destination provinces and volumes.

¹² Counted in the census only since 1991.

Work Permits

The 183,621 persons whose work authorization was granted or renewed in 1993 belonged to a great many trades or professions, but some concentrations may be noted:

- a) administrators and managers: 10,904, with over 6,000 in Ontario;
- b) artists or members of related professions: 24,713, including nearly 10,000 in Ontario and close to 6,000 in British Columbia;
- c) persons involved in agriculture, most of them seasonal workers: 12,234, including nearly 10,000 in Ontario;
- d) people in the service category: 20,713, half of them in Ontario, and
- e) teaching personnel: 12,819 distributed among the provinces basically in proportion to their population.

This large number of seasonal workers and the above concentrations are proof that exchanges between countries are fairly significant. The large concentrations in Ontario partially explain the choice of permanent immigrants insofar as temporary stays create host communities, reinforce them and make them familiar to migrants, and thus lead to potential sponsorships.

Table 29. Student Visas Granted in 1993 According to Region of Origin and Province or Territory of destination

Destination	Origine									Total
	Europe	Africa	Asia	Australasia	North and Central America	Carib-bean	South America	Oceania	Not Specified	
Nfld	162	52	255	9	32	6	11	—	—	527
P.E.I.	26	8	17	4	41	2	5	—	1	104
N.S.	255	250	789	27	148	271	37	6	1	1,784
N.B.	137	158	311	11	155	42	9	0	1	824
Que.	3,598	3,476	2,653	73	1,649	472	600	53	12	12,586
Ont.	5,563	4,130	24,792	306	3,716	2,014	1,450	59	134	42,164
Man.	296	163	1,431	22	209	46	53	6	4	2,230
Sask.	253	165	906	22	251	12	35	5	5	1,654
Alb.	990	594	4,289	128	799	96	150	11	28	7,085
B.C.	1,468	394	13,269	234	1,847	69	263	37	10	17,591
Yukon	2	—	10	2	3	—	1	—	1	19
N.W.T.	4	—	16	—	4	3	2	—	—	29
Not specified	364	27	125	2	34	15	52	—	—	619
Canada	13,118	9,417	48,863	840	8,888	3,048	2,668	177	197	87,216

Source: Citizenship and Immigration Canada, unpublished data.

Student Authorizations

In 1993, Canada granted 87,216 temporary residence permits for study purposes.¹³ Regions of origin and destination provinces give us some sort of profile of this category of migrant (Table 29). We see the same pattern in the breakdown by origin and destination as in the landed-immigrant group. The main area of origin is Asia (56%) and the leading destination province is Ontario (48%), followed by British Columbia (20%) and Quebec (14%). ***Comparing continent of origin and destination province shows that, of the total number of authorizations, 28% were granted to Asians for study in Ontario and 15% to Asian students in British Columbia.***

Another series of statistics dealing with foreign students and the institutions they attend (Table 30) is based on visas valid until December 31, 1993. If we exclude the 23,274 authorizations granted for attendance at primary school, which are most likely visas for the children of refugees whose claims are pending, this still leaves 45,000 people, over half of whom are in university programs (23,546).

If, on returning to their country, these students decide to return to settle in Canada, their knowledge of one of the official languages, their level of education and their Canadian experience will enable them to accumulate a certain number of points, which will improve their chances of selection.

ASYLUM SEEKERS

As in the majority of developed countries, one of the most difficult issues related to immigration in Canada has to do with asylum seekers. While refugees normally form a clearly defined category, asylum seekers travel on their own initiative and present themselves as persons in distress on arrival. It is then up to the host country to check their allegations of refugee status. It has long been clear that many are in fact people whose intention is to immigrate for economic reasons but who feel they would be unlikely to be accepted as immigrants in their chosen country, with Canada ranking high among the choices: ***in 1993, the number of asylum seekers reached 22,994***¹⁴. If they are accepted, these asylum seekers are considered refugees. Investigations are often long and costly and, between the time these people submit their applications and the time they are invited to appear for study of their case, a fairly large proportion often disappear. Some of them choose to remain in the country illegally, and this may be the case in Canada, while others leave the country for another where they make a new application. Some of them may also simply give up the attempt and return home. Areas in

¹³ This figure is much lower than the number of foreign students in Canada since these permits are valid for more than one year.

¹⁴ OECD, Continuous reporting System on Migration

Table 30. Number of Foreign Students by University of Attendance, Canada, 1993¹

Province and University	Number
Province of Quebec (6,539) of which:	
McGill University	1,379
Université Laval	1,207
Université de Montréal	672
Université du Québec	523
Concordia University	485
Province of Ontario (8,075) of which:	
University of Toronto	965
Carleton University	775
University of Waterloo	609
Queen's University	535
University of Ottawa	489
York University	425
University of Guelph	410
Province of Alberta (2,025) of which:	
University of Alberta	1,114
Province of British Columbia (3,123) of which:	
University of British Columbia	1,266
Total Foreign Students at the University Level in Canada	23,546

¹ Visas valid to December 31, 1993.

Source: Citizenship and Immigration Canada, unpublished data.

which the host country may act to limit the settlement of illegal immigrants are the reinforcement of border controls and monitoring of the job market, since for economic reasons the great majority of migrants will one day or another become employees. In theory, action is taken against the offending employers, while workers identified as illegals basically risk deportation, although this threat is not always carried out. It has been observed that, in almost all countries, the rejection rate for refugee claimants has been rising steadily in recent years. (See above, 1994 statistics for Canada.)

Stricter application of the law in 1992 was no doubt responsible for the decrease in applications in Austria, France, Greece, Italy, the Netherlands, the U.K. and Switzerland. But it is clear that it is sometimes difficult to apply the law: with these workers, employers may have access to a much cheaper work force than the regular labour force. Governments must also take into account both the national interest and public opinion, which do not necessarily coincide. As well, conflicts like that currently raging in the former Yugoslavia, or the economic hardship in countries in transition

between a socialist economy and a market economy, as is the case in Central Europe and Russia, have sent waves of asylum seekers throughout the world. The most popular destination in recent years has been Germany, where the number of asylum-seekers rose from 193,000 in 1990 to 440,000 in 1992.

Europe's progress towards union, the common economic difficulties of member countries and similarities in the status of their populations have led these countries to cooperate more and more by adopting common immigration policies. In general, after years of hesitation, all countries have opted for stricter controls on the entry of persons from outside the European Community into their territory. Some general guidelines have been borrowed from North American practice, although major differences in economies, populations and geography make Europe very different from North America.

The number of asylum seekers in a given year is not equal to the number of people added to the country's population as refugees, for the reasons mentioned above. Data on such persons do allow us, however, to identify, although retrospectively, regular and temporary migratory flows. For example, applicants to the U.K. in 1992 came mainly from Yugoslavia and Turkey while the previous year they came mainly from Africa. In Sweden, applicants in 1991 came from Iran, Iraq, Somalia, Turkey and Yugoslavia, but in 1992 the country slowed the flow of applicants by imposing entry visas on people from Serbia, Montenegro and Macedonia. In Belgium, 40% of applications in 1991 were from persons from Zaire and 30% from Central Europe, etc...

In Australia the number of asylum seekers rose considerably, from 1,109 in 1989 to 10,919 in 1991, resulting in an accumulation of over 20,000 applications pending. The main source countries were in Central Europe. In the U.S., the number of refugees and asylum seekers combined is set by the President after consulting Congress. The level rose from 67,000 in 1986 to 142,000 in 1992 and then fell back to 132,000 in 1993. The main sources were East Asia and the countries of the former USSR. Canada had about 10,000 asylum seekers, with the source countries being the same as those for refugees in general, many of them coming across the U.S. border.

Migration in Japan

Thanks to SOPEMI,¹⁵ we now have some information on international migration and Japan. While in the period immediately after the war Japan provided large numbers of emigrants, particularly to the U.S. and South

¹⁵ The OECD's Continuous Reporting System on Migration.

America, from 1960 on, i.e., from when its economic recovery began, the Japanese largely ceased to emigrate. From 1951 to 1989, only 260,000 Japanese left their country.

Japan has always been, and remains, closed with respect to immigration. The non-Japanese living in the country are mainly Koreans (in 1991, 693,100 of the 1,218,900 foreign residents), whose presence is due to the annexation of their country by Japan before the First World War. *For a country with a population of over 120 million, there are few requests for refugee status. From 1982 to 1991, 7,764 requests were received and 4,361 were accepted on a temporary basis. During the same period, 197 refugees were admitted,* and between 1978 and 1991, 7,896 Vietnamese refugees received long-term resident visas under a special employment and settlement program.

Currently, large numbers of the descendants of Japanese emigrants who settled in South America, in Brazil in particular, are returning to Japan: 8,450 in 1988 and 148,700 in 1991. Skilled foreign workers have been somewhat more widely accepted in Japan recently because of globalization of the economy (113,599 in 1991)¹⁶, but others have little chance. According to the Japanese official reporter to the SOPEMI, this situation seems strange for a country that is beginning to lack workers due to the aging of its population. The stated policy is to increase the productivity of individuals and make production techniques more efficient. However, pressure from the heavily populated countries close to Japan is increasing and with it the numbers of illegal immigrants.¹⁷ These are mainly Thais, followed by Iranians, Malaysians, Koreans and Filipinos. Following a policy recognized and practised by other countries, Japan encourages its citizens to invest in countries where there is strong pressure to emigrate in order to reduce this pressure through job creation in the source country. Japanese investment in ASEAN¹⁸ countries rose from US\$985 million in 1985 to US\$4,684 million in 1989¹⁹, and the upward trend continues.

INTERNAL MIGRATION

The estimate of internal mobility in 1992 using preliminary data was an overestimate. The recession which prevailed at that time, like those which preceded it, had a deterrent effect that was not clearly portrayed by the preliminary figures. Instead of 348,000 exchanges between provinces, more definitive figures obtained from income tax files estimate such flows

¹⁶ These are workers authorized to live and work in Japan.

¹⁷ The number of illegal workers expelled was over 30,000 in 1991.

¹⁸ Association of Southeast Asian Nations (Brunei, Indonesia, Malaysia, Philippines and Singapore).

¹⁹ SOPEMI 1992.

**Table 31. Annual Number of Interprovincial Migrants from Revenue Canada Tax Files,
January to December 1992**

Number of Migrants : 306,382

Province of Origin	Province of Destination											
	Nfld	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alb.	B.C.	Yukon	N.W.T.
Newfoundland	—	223	1,876	683	284	4,642	185	119	1,266	1,136	69	237
Prince Edward Island	74	—	606	410	101	582	38	33	201	187	6	19
Nova Scotia	1,193	612	—	2,523	1,152	6,634	533	269	1,867	2,720	54	143
New Brunswick	419	405	2,710	—	2,198	4,284	335	132	1,336	1,155	12	80
Quebec	248	148	1,086	2,146	—	22,493	686	362	2,357	5,183	58	164
Ontario	4,292	912	7,073	4,191	16,674	—	5,188	2,643	13,006	25,974	253	607
Manitoba	206	39	638	263	705	5,834	—	2,537	5,048	6,397	75	261
Saskatchewan	111	41	309	106	363	2,389	2,636	—	11,875	6,016	179	297
Alberta	791	201	1,558	873	1,755	9,992	3,360	7,920	—	27,663	499	1,074
British Columbia	448	126	1,820	627	1,946	10,124	2,616	3,059	16,867	—	884	442
Yukon	47	2	32	24	51	144	66	112	494	1,201	—	64
Northwest Territories	160	30	130	65	201	453	208	222	1,296	785	138	—
In	7,989	2,739	17,838	11,911	25,430	67,571	15,851	17,408	55,613	78,417	2,227	3,388
Out	10,720	2,257	17,700	13,066	34,931	80,813	22,003	24,322	55,686	38,959	2,237	3,688
Net Migration	-2,731	482	138	-1,155	-9,501	-13,242	-6,152	-6,914	-73	39,458	-10	-300

Source: Statistics Canada, Demography Division, Estimates Section.

**Table 32. Annual Number of interprovincial Migrants from Revenue Canada Tax Files,
Family Allowance Files (June) and Child Tax Credits
January to December 1993**

Number of Migrants: 319,074

Province of Origin	Province of Destination												
	Nfld	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alb.	B.C.	Yukon	N.W.T.	
Newfoundland	—	153	1,829	712	276	5,426	204	128	1,310	1,412	52	202	
Prince Edward Island	76	—	406	462	65	682	25	9	188	166	-	12	
Nova Scotia	1,292	549	—	2,563	1,099	6,452	516	298	1,809	2,758	30	74	
New Brunswick	335	405	2,510	—	2,000	4,635	299	103	1,091	1,184	15	60	
Quebec	257	119	873	2,119	—	22,518	570	309	2,088	5,471	100	162	
Ontario	4,865	928	7,360	4,806	18,142	—	5,647	2,715	12,593	28,195	234	554	
Manitoba	176	26	502	236	667	6,250	—	2,804	4,781	6,276	56	268	
Saskatchewan	62	10	291	94	420	2,289	2,670	—	10,865	5,974	122	249	
Alberta	875	214	1,356	1,036	1,822	10,147	3,778	9,322	—	29,447	398	1,092	
British Columbia	636	153	1,741	882	2,348	11,945	3,238	3,547	18,326	—	760	413	
Yukon	35	-	-	15	38	141	87	187	495	1,278	—	74	
Northwest Territories	87	33	82	62	114	340	270	321	1,497	707	150	—	
In	8,696	2,590	16,950	12,987	26,991	70,825	17,304	19,743	55,043	82,868	1,917	3,160	
Out	11,704	2,091	17,440	12,637	34,586	86,039	22,042	23,046	59,487	43,989	2,350	3,663	
Net Migration	-3,008	499	-490	350	-7,595	-15,214	-4,738	-3,303	-4,444	38,879	-433	-503	

Source: Statistics Canada, Demography Division, Estimates Section.

at only 306,000 (Table 31). All flows were overestimated. A contribution factor to the overestimation was the loss of comprehensive data from the family allowance program data files, due to changes in the coverage of the program. Alternative data sources, based on income tax files, have proven to be less suitable for purposes of estimation. Among the most significant changes between preliminary and final figures, the most striking were the following : a zero balance for Nova Scotia rather than a balance of -2,000; Quebec lost fewer than 10,000 and not over 15,000, while Ontario lost 13,000 residents instead of 3,000. For the other provinces, the changes were minor. Movements from Ontario to British Columbia had been correctly estimated, as had those toward Alberta. However, Alberta's losses to British Columbia and to Ontario were overestimated. Fewer Quebecers left for Ontario but in the opposite direction, Ontario-Quebec, the estimate was correct. Movements from Nova Scotia to Ontario were also slightly overestimated.

All in all, as other indices would tend to confirm, it is clear that in 1992 the number of internal migrants in Ontario was more severely affected by the economic situation than preliminary figures appeared to show. Preliminary figures for 1993 may still be a little high in terms of overall mobility; for example, the figure of 320,000 movements (Table 32) may be too high.

The size and direction of flows show no break with tradition. *In exchanges between Ontario and British Columbia, Ontario was at a clear disadvantage (16,250)*, while Alberta's losses were very small (2,500), and even preliminary figures demonstrate the attraction of the West Coast province over the country's largest province. They also once again show the difference between the two neighbouring provinces, British Columbia and Alberta. British Columbia clearly had the advantage in these exchanges (over 11,000). Ontario's gains from the Quebec population were again down from 1992 (4,400 instead of 5,800). And it is curious to see such a large negative balance for Alberta (-4,500).

Internal Migration of the Canadian-born

The 1991 report provided an analysis of internal migration among the immigrant population of Canada. It showed that not only was the propensity to migrate higher among new Canadians than among Canadians by birth, particularly for those who had chosen Quebec, but also that the destinations they chose were different from those of native-born Canadians. It is noteworthy that the attraction of Ontario for internal migrants was even greater when these migrants were foreign-born.

Dichotomizing the foreign-born and Canadian-born was only a first step towards understanding internal migration. In the pages that follow, we examine the differing behaviour of native-born Canadians.

In contrast to other demographic phenomena like births and deaths, moves are not accounted for annually along with the characteristics of the persons concerned,²⁰ so we can only calculate total moves between the dates for which information is collected, i.e. census years. Geographic factors must also be taken into consideration, since the geographic units which are significant for migration do not correspond to the political units which provide the framework for data collection. For example, grouping the Atlantic provinces into one region is relevant for analysis, but makes some interprovincial movements disappear from the accounting.

For the purposes of this study, persons who, at the time of the 1991 census, no longer resided in the region where they lived a year earlier were considered interregional migrants; they were both out-migrants from their region of origin (place of residence in 1990) and in-migrants to their destination region (place of residence in 1991). This was the first time since 1961 that the Canadian census collected information on place of residence a year previously. Keeping track of movements over a period of one year instead of five has the advantage of minimizing the number of moves which would otherwise go unnoticed, but the disadvantage of registering behaviour perhaps linked to special and ephemeral circumstances.

Even though there were many moves, the balances for a period were modest (see, in the 1993 Report, the chapter on migration between census metropolitan regions), so that the smaller the period under study the more restricted the number of moves identified, and the overall conclusions we can draw are tenuous. To minimize problems associated with small numbers, the provinces and territories were divided into 6 regions: Atlantic (Newfoundland, Nova Scotia, Prince Edward Island and New Brunswick), Quebec, Ontario, the Prairies (Manitoba and Saskatchewan), Alberta, and British Columbia. For this analysis, the territories were added to British Columbia. These six regions form the geographic framework within which the place of residence of each Canadian counted is compared at three moments of life: birth, census day (1991 residence) and a year earlier (1990 residence). The population studied is thus limited to native-born Canadians five years old or over at the time of the 1991 census, and resident in Canada in 1990.

A Typology of Migrants by Birthplace:

Comparing place of residence in 1990 and 1991 with place of birth, we come up with the following typology:

- 1) *Native-migrant*: Person born in Canada and living in 1990 in his region of birth, who then leaves it. He/She may or may not have moved before,

²⁰ "Estimates" are made annually based on income tax returns.

but was living in the region of his birth at the beginning of the period studied.

- 2) *Non-native migrant*: Born in Canada; differs from the above in that he/she was living outside of his/her region of birth in 1990. This category may be sub-divided into: *onward migrants* and *returning migrants*.
- 3) *Onward migrant*: A person whose region of residence was different in 1990 and 1991, and who was born in yet a third region.
- 4) *Returning migrant*: A person living in a region other than that of his/her birth in 1990, whose region of residence in 1991 was the same as his/her region of birth.

This typology is not new and has been used by many authors.

Probability of Leaving a Region by Place of Birth:

The probabilities²¹ of migrating for those born or not born in a region can be calculated by comparing in each case the number of migrants with the corresponding population of potential migrants. Table 33 shows the probabilities of leaving each region according to whether or not one was born in that region. For Canada as a whole, the probability was 6.0 per 1,000 for people born in a region and 42.1 per 1,000 for people not born in a region. ***Overall then, the probability of leaving a region into which one has previously migrated was seven times higher than that of leaving one's region of birth.*** The low propensity of Quebec residents to leave their province (4.3 per 1,000) is one of the strongest constants in Canadian internal migration. This low propensity to migrate is to a great extent linked to the cultural and linguistic barriers the French-speaking majority of this province must cross to establish themselves elsewhere. This is further underlined by the probabilities of leaving the province if one was born there (2.7 per 1,000 for the Quebec-born and 42.3 per 1,000 for Quebeckers born in another province for a ratio of 16 to 1, the highest of all). It can also be seen that the probability of leaving Quebec for a Canadian born in another province was the same as that of leaving Ontario for residents born elsewhere in Canada (42.5 per 1,000). In fact, Quebec does not differ from the other provinces in its retention of people not born there, the probability of 42.3 per 1,000 being essentially the same as the Canadian average (42.1). The one exceptional province was ***British Columbia. With a probability of 28.7 per 1,000, it was the region that best retained residents who were not born there.*** The other regions (Atlantic, Prairie and Alberta) showed a relatively high propensity to migrate among both those born there and those not.

²¹ Contingent on their survival to census day. As so often in statistics, these are established after the fact and have no predictive value.

Table 33. Probability¹ of Leaving a Region Between 1990 and 1991 for those Born and Not Born in the Region, Canada-born population Aged 5 and Over

Origine	Probability (per 1,000)			Ratio (4) = (3) / (2)
	Total (1)	Born There (2)	Not Born There (3)	
Atlantic	12.7	8.3	68.3	8.2
Quebec	4.3	2.7	42.3	15.9
Ontario	10.2	4.8	42.5	8.8
Prairies	20.6	14.9	70.7	4.7
Alberta	23.0	11.3	45.8	4.0
British Columbia	14.7	6.0	28.7	4.8
Canada	11.4	6.0	42.1	7.1

¹ Conditional on still being alive at the time of the census.

Source: 1991 Census and calculations by the author.

The probability of leaving a region, regardless of place of birth (Table 33) can thus be interpreted as the mean migration probability, weighted by their respective numbers, of two distinct groups: those born in the region, who are much less inclined to migrate, and those born elsewhere in Canada, who are much more likely to migrate again, no doubt because they have already changed place of residence. Thus, if the probability of migrating from Quebec for all birthplaces combined is so close to the figure for the Quebec-born, it is because less than 5% of its population was born elsewhere in Canada (Table 34). For British Columbia, it was about midway between the probabilities for people born and not born there, because almost 2 out of 5 native-born Canadians living in British Columbia were born in another province. The high proportion of British Columbia residents born in another province thus partially explains the relatively high probability of migrating for the total population of this province (14.7 per 1,000), which nonetheless attracts so many Canadians year after year.

Table 34. Population Born and Not Born in a Region by Region, Canadian-born Population Aged 5 and Over, 1990

Region	Born in Region	Not Born in Region	Total	Percent Not Born in Region
Atlantic	1,887,300	150,900	2,038,200	7.40
Quebec	5,430,300	240,000	5,670,300	4.23
Ontario	5,742,900	960,700	6,703,600	14.33
Prairies	1,502,900	171,400	1,674,300	10.24
Alberta	1,237,900	633,000	1,870,900	33.83
British Columbia	1,403,400	876,200	2,279,600	38.44
Canada	17,204,700	3,032,200	20,236,900	14.98

Source: 1991 Census and calculations by the author.

Table 35. Probability of Leaving a Region Between 1990 and 1991 by Region of Birth, Canadian-born Population Aged 5 and Over in 1991 Not Born in their 1990 Region of residence

Residence in 1990	Region of Birth					
	Atlantic	Quebec	Ontario	Prairies	Alberta	British Columbia
Atlantic	...	68.9	63.1	85.8	67.6	89.7
Quebec	34.1	...	37.7	62.4	97.1	110.2
Ontario	45.9	34.6	...	36.5	59.9	61.5
Prairies	76.2	82.8	63.0	...	69.7	81.4
Alberta	56.5	54.7	46.6	34.9	...	65.1
British Columbia	45.6	43.3	36.2	18.9	28.0	...

Source: 1991 Census and calculations by the author.

Examination of internal mobility by place of birth allows us to clarify the relationship between the probability of leaving a region and the distance separating this region from the individual's region of birth. Quebec was no exception here, but was perhaps the region which best exemplified the general rule: *the further one is from one's birthplace, the greater the probability of migrating* (Table 35). Thus, if the probability of leaving Quebec for people born in the Atlantic Region or Ontario, the two adjacent regions, was less than 40.0 per 1,000, it was 62.4 per 1,000, 97.1 per 1,000 and 110.2 per 1,000 for people born in the Prairies, Alberta and British Columbia respectively. The most noteworthy exception to this general rule is the probability of leaving Alberta for the British Columbia-born residing there (65.1 per 1,000). It can also be seen that, regardless of their place of birth, Canadians born in another province and living in British Columbia have a very low probability of migrating (14.7).

Migration Destination by Region of Birth

The choice of destination region differed as well, depending upon whether one was born in the region or not. The distribution of out-migrants born in other regions was, as a general rule, much more even than that of out-migrants leaving their region of birth. For example, for Canada as a whole, 6.2% of all out-migrants leaving their region of birth chose Quebec and 31.5% British Columbia (Table 36). For out-migrants who were not born in their region of origin, the extremes were 11.6% and 20.8% for the same provinces, that is to say a spread of about 9 percentage points instead of more than 25 points as in the distribution of migrants leaving the region of their birth.

It can also be seen that the western provinces (Alberta and British Columbia) have a greater attraction for out-migrants from the eastern and

Table 36. Distribution in Percent of Interregional Migrants According to Destination and Type, Canadian-born Population Aged 5 and Over, 1990-1991

Residence in 1990	Residence in 1991							
	Atlantic	Quebec	Ontario	Prairies	Alberta	British Columbia	Canada	Number
	Born in Region							
Atlantic	-	8.26	55.15	5.22	15.49	15.87	100.00	15,600
Quebec	9.69	-	63.80	2.75	8.97	14.79	100.00	14,400
Ontario	14.26	16.01	-	9.91	24.46	35.36	100.00	27,600
Prairies	1.63	0.82	11.05	-	51.69	34.82	100.00	22,400
Alberta	3.39	1.76	9.42	13.32	-	72.11	100.00	14,000
British Columbia	3.70	2.67	19.75	11.13	62.75	-	100.00	8,400
Canada	6.33	6.21	22.71	6.59	26.65	31.51	100.00	102,500
	Not Born in Region							
Atlantic	-	17.03	49.25	7.10	12.95	13.67	100.00	10,300
Quebec	17.50	-	56.21	4.35	7.75	14.18	100.00	10,200
Ontario	31.73	23.95	-	9.77	15.37	19.19	100.00	40,800
Prairies	9.31	3.90	24.66	-	35.40	26.73	100.00	12,100
Alberta	8.93	4.25	18.27	25.05	-	43.50	100.00	29,000
British Columbia	9.53	6.40	24.92	17.57	41.58	-	100.00	25,100
Canada	16.34	11.64	19.87	13.21	18.14	20.81	100.00	127,500

Source: 1991 Census and calculations by the author.

central provinces (Atlantic, Quebec and Ontario) who were born in the eastern and central provinces than for out-migrants from these provinces who were not born there. For example, 35% of the Ontario-born who were living there in 1990 and made an interregional move between 1990 and 1991 chose British Columbia as their destination, instead of only 19% of out-migrants from this province who were not born there. Conversely, the central and eastern provinces have a stronger attraction for out-migrants from the Prairies and the West not born there than born there, as shown by the percentage of the British Columbia-born choosing the Atlantic Region as their destination (3.7%) and the percentage of non-natives choosing this province (9.5%). The dichotomy here was not Quebec/rest of Canada as it is for so many other demographic phenomena, such as marriages, but East/West. Why should this be so?

Table 37 offers a partial explanation for this observation: return migration. Variations in the percentage of return were small among people leaving a region where they were not born (between 54.75% and 70.9% overall), but more importantly the destinations chosen for return migrants were, in very high proportion, those regions that traditionally lose in migratory movements. For example, averaging all regions of origin, the proportion of returning migrants among out-migrants not born in their region of origin choosing the Atlantic and Quebec regions as their destinations

Table 37. Percent of Out-migrants Not Born in Region of Origin who are Return Migrants, by Origin and Destination, Canadian-born Population Aged 5 and Over, 1990-1991

Residence in 1990	Residence in 1991						
	Atlantic	Quebec	Ontario	Prairies	Alberta	British Columbia	Canada
Atlantic	...	85.58	69.97	49.59	24.96	29.81	59.86
Quebec	87.00	...	75.19	53.62	38.88	41.32	68.70
Ontario	89.42	89.64	...	71.88	42.44	39.31	70.93
Prairies	73.40	75.48	70.06	...	49.18	38.09	54.65
Alberta	79.51	79.50	67.06	81.15	...	44.94	62.61
British Columbia	68.32	76.74	69.43	77.27	53.37	...	64.49
Canada	84.69	86.47	70.41	75.84	47.50	41.44	65.15

Source: 1991 Census and calculations by the author.

was 84.7% and 86.5% respectively, whereas the percentage was only 41.4% for British Columbia. Whatever their region of residence in 1990, more than 65% of migrants not born in their region of origin choosing the Atlantic, Quebec or Ontario regions as destinations were in fact returning to their region of birth, while for Alberta and British Columbia, these return percentages were, with only one exception²⁴ less than 50%. *It might be argued that these disadvantaged provinces have a strong attraction on their out-migrants who left fairly recently and who are still likely to find a support network of family and friends there. People born in other regions of Canada would respond more to economic attractions.* This interpretation implicitly invokes the success or failure of the migration. Moreover, regular migration from these provinces in recent years has generated substantial pools of potential return migrants elsewhere in Canada; these were relatively smaller for the regions that are usually net gainers in migration.

In-migrants, Out-migrants and Net Migration by Type

It can be seen, then, that population exchanges between regions differ according to the type of migrant considered, and that the numbers of in-migrants and out-migrants, without distinction as to type of migration, are the result of dynamics which explain certain reversals of past trends and make it possible to foresee an eventual turnaround of present trends in the relatively long term.

Table 38 shows in-migrants, out-migrants and net migration by type of migrant. This is an unusual way of presenting internal migration in Canada, and to demonstrate it, let us take the Atlantic Region as an example.

²⁴ involving migration between these two provinces.

Table 38. Number of In-migrants, of Out-migrants and Net Migration, by Region and Type of Migrant, Population Aged 5 and Over , 1990-1991

Region	Born in Region of Origin	Not Born in Region of Origin			Total
		Total	Moving in	Returning	
In-migrants					
Atlantic	6,700	21,200	3,300	17,800	27,800
Quebec	6,500	15,300	2,100	13,200	21,700
Ontario	23,600	25,900	7,700	18,200	49,500
Prairies	6,900	17,000	4,200	12,800	23,900
Alberta	27,500	23,500	12,300	11,100	51,000
British Columbia	32,600	27,000	15,800	11,200	59,600
Canada	103,700	129,800	45,500	84,300	233,400
Out-migrants					
Atlantic	15,800	10,600	4,300	6,400	26,500
Quebec	14,600	10,300	3,300	7,100	25,000
Ontario	28,100	41,700	12,300	29,500	69,800
Prairies	22,500	12,300	5,600	6,700	34,800
Alberta	14,200	29,400	11,000	18,400	43,600
British Columbia	8,400	25,400	9,100	16,400	33,800
Canada	103,700	129,800	45,500	84,300	233,400
Net Migration					
Atlantic	-9,200	10,500	-1,000	11,500	1,300
Quebec	-8,200	4,900	-1,200	6,100	-3,300
Ontario	-4,500	-15,800	-4,500	-11,300	-20,300
Prairies	-15,600	4,700	-1,400	6,100	-10,900
Alberta	13,300	-5,900	1,400	-7,200	7,400
British Columbia	24,200	1,500	6,700	-5,200	25,700

Source: 1991 Census and calculations by the author.

Of 27,900 in-migrants into the Atlantic Region (thus out-migrants from one of the other five regions), 6,700 were leaving their region of birth and 21,200 were leaving a region other than the one where they were born, while the great majority of these migrants (17,000, or 84%) were in fact returning to the region of their birth, the Atlantic Region. During the same year, 26,400 people left the Atlantic Region: 15,800 were born there and 10,600 were born elsewhere. Of these 10,650 out-migrants born elsewhere, 60% were returning to their region of birth (6,400) and 40% were choosing another region (4,300). The result of all this for the Atlantic Region was a negative balance of 9,100 persons in its exchange with the other regions of people born in their region of origin, and a positive balance of 10,600 persons in its exchange of people not born in their region of origin, this positive balance being largely due to return movements, with a balance of 11,400 in favour of the Atlantic Region.

Conclusion

This brief analysis of the internal migration of Canadians by place of birth has highlighted certain generally unrecognized elements of the dynamics of the Canadian migratory system. *Insofar as the period 1990-91 was representative of the actual situation, the Atlantic Region, in the past a loser in its migratory exchanges, has such an attraction for people born there but living in other provinces that the flux of returning in-migrants more than compensates for the exodus of natives* (Table 38). Few native-born Quebeckers leave their province of birth, but Quebec was no different from the other provinces in its retention of people born elsewhere (Table 33). Ontario received almost as many migrants born in their region of origin as not (23,600 and 25,900 respectively), but it was the region which includes the greatest number of out-migrants born in another province, for obvious reasons (41,700), and showed the greatest losses in its exchanges of people not born in their region of origin (a negative balance of 15,800). It could be described as the revolving door of the Canadian migratory system, and seems to act as an “interchange” for Canadian internal migrants. The Prairie Region, like the Atlantic, had a positive balance of returning migrants, but not sufficiently high to compensate for the loss of people born there. *Lastly, British Columbia was not only the province which attracted the greatest percentage of people leaving their province of birth (Table 36), but also the province which retained the largest proportion of its residents born in other provinces, regardless of their region of birth (Table 35); it thus serves as terminus for Canadian migratory flows.*

Appendices

Table A1. Demographic Accounts of the Provinces and Territories, 1972-1994
(figures in thousands and rates per 1,000)

Newfoundland

Year	Population as of January 1	Increase		Net International Migration ¹	Returning Canadians	Net Non-permanent residents	Interprovincial Migration			Residual ²
		Total	Natural				In	Out	Net	
1972	537.8	7.3	9.5	0.3	0.3	0.0	11.2	11.4	-0.2	2.5
1973	545.2	4.2	8.5	0.5	0.3	0.0	13.0	15.5	-2.5	2.5
1974	549.4	4.5	7.0	0.5	0.2	0.0	12.4	13.0	-0.6	2.6
1975	553.9	7.3	8.0	0.6	0.2	0.0	12.3	11.4	0.9	2.5
1976	561.2	4.0	7.8	0.3	0.2	0.0	9.7	12.4	-2.7	1.6
1977	565.2	2.7	7.3	0.2	0.2	0.0	8.1	12.2	-4.0	1.0
1978	567.9	2.1	6.4	0.0	0.2	0.0	8.1	11.7	-3.5	1.0
1979	569.9	2.3	7.0	0.2	0.2	0.0	8.9	13.1	-4.2	0.9
1980	572.2	3.5	7.0	0.3	0.2	0.0	9.3	12.4	-3.1	0.8
1981	575.8	-0.6	6.9	0.1	0.2	0.0	8.5	14.8	-6.2	1.6
1982	575.1	4.2	5.8	-0.1	0.2	0.0	10.6	10.3	0.3	1.9
1983	579.4	2.0	5.4	-0.2	0.2	0.0	7.6	8.7	-1.1	2.3
1984	581.4	-0.5	5.0	-0.1	0.2	0.0	5.7	9.3	-3.6	2.0
1985	580.9	-2.0	4.9	-0.1	0.2	0.0	6.0	11.0	-5.0	2.1
1986	578.8	-1.7	4.6	-0.2	0.2	0.1	7.7	12.4	-4.7	1.7
1987	577.1	-1.2	4.1	0.1	0.2	0.0	8.4	12.8	-4.4	1.3
1988	575.9	0.9	3.9	0.2	0.2	0.0	10.0	12.2	-2.2	1.3
1989	576.8	0.7	4.0	0.3	0.1	0.0	10.1	12.7	-2.6	1.2
1990	577.5	1.5	3.7	0.4	0.1	0.0	10.2	11.4	-1.1	1.6
1991	578.9	1.0	3.4	0.3	0.0 ³	0.0	10.5	12.1	-1.6	1.1
1992 (PR)	579.9	-0.1	3.1	0.5	..	0.0	8.9	12.5	-3.6	...
1993 (PR)	579.8	0.8	3.3	0.5	..	-0.1	9.3	12.8	-3.4	...
1994 (PR)	580.6
Year	Population as of January 1	Growth Rate			Birth Rate	Death Rate	Interprovincial Migration Rate		Rate of Net International Immigration	
		Total	Natural	By Flow ⁴			In	Out		
1972	537.8	13.6	17.6	-4.1	23.8	6.2	0.5	21.0	0.5	
1973	545.2	7.7	15.5	-7.8	21.8	6.2	0.6	28.4	0.8	
1974	549.4	8.2	12.6	-4.4	18.6	6.0	0.6	23.6	0.9	
1975	553.9	13.1	14.3	-1.2	20.1	5.8	0.5	20.5	1.1	
1976	561.2	7.0	13.9	-6.8	19.8	5.9	0.4	22.1	0.5	
1977	565.2	4.7	12.8	-8.1	18.4	5.5	0.4	21.5	0.3	
1978	567.9	3.6	11.3	-7.6	16.7	5.5	0.3	20.5	-0.1	
1979	569.9	4.1	12.3	-8.2	17.8	5.5	0.4	23.0	0.4	
1980	572.2	6.1	12.2	-6.0	18.0	5.8	0.4	21.5	0.4	
1981	575.8	-1.1	12.0	-13.1	17.6	5.6	0.4	25.7	0.2	
1982	575.1	7.3	10.0	-2.7	15.9	5.9	0.4	17.9	-0.1	
1983	579.4	3.5	9.4	-5.9	15.4	6.0	0.3	14.9	-0.4	
1984	581.4	-0.9	8.7	-9.5	14.7	6.1	0.2	16.0	-0.2	
1985	580.9	-3.5	8.5	-12.1	14.7	6.1	0.2	18.9	-0.2	
1986	578.8	-3.0	7.9	-10.9	14.0	6.1	0.3	21.4	-0.4	
1987	577.1	-2.1	7.2	-9.3	13.5	6.3	0.3	22.2	0.2	
1988	575.9	1.5	6.8	-5.3	13.0	6.2	0.4	21.1	0.3	
1989	576.8	1.2	7.0	-5.8	13.4	6.4	0.4	22.0	0.5	
1990	577.5	2.6	6.4	-3.9	13.2	6.7	0.4	19.7	0.6	
1991	578.9	1.7	5.8	-4.1 ⁵	12.4	6.6	0.4	20.9	0.6	
1992 (PR)	579.9	-0.1	5.4	-5.5	11.9	6.5	0.3	21.6	0.8	
1993 (PR)	579.8	1.3	5.7	-4.4	12.4	6.7	0.3	22.0	0.8	
1994 (PR)	580.6	..	..	..	..	..	..	..	..

See notes at the end of this table

Table A1. Demographic Accounts of the Provinces and Territories, 1972-1994
(figures in thousands and rates per 1,000)

Prince Edward Island

Year	Population as of January 1	Increase		Net International Migration ¹	Returning Canadians	Net Non-permanent residents	Interprovincial Migration			Residual ²
		Total	Natural				In	Out	Net	
1972	113.2	1.3	1.0	0.1	0.1	0.0	4.2	3.4	0.9	0.7
1973	114.5	0.9	0.9	0.1	0.1	0.0	4.8	4.3	0.5	0.7
1974	115.4	1.8	0.9	0.2	0.1	0.0	5.2	3.8	1.4	0.7
1975	117.2	1.2	0.9	0.1	0.1	0.0	4.6	3.8	0.8	0.7
1976	118.4	1.1	0.8	0.1	0.1	0.0	4.3	4.0	0.3	0.2
1977	119.5	1.8	0.9	0.1	0.1	0.0	3.9	3.3	0.6	-0.1
1978	121.3	1.2	1.0	0.0	0.1	0.0	3.5	3.5	0.0	-0.1
1979	122.5	1.0	0.9	0.2	0.1	0.0	3.4	3.6	-0.2	-0.1
1980	123.5	0.1	0.9	0.1	0.0	0.0	3.0	4.1	-1.1	-0.1
1981	123.6	0.2	0.9	0.0	0.1	0.0	3.5	4.3	-0.8	0.0
1982	123.8	1.0	0.9	0.1	0.1	0.0	3.4	3.4	0.0	0.1
1983	124.8	1.6	0.9	0.0	0.0	0.0	3.3	2.5	0.8	0.1
1984	126.4	1.3	0.8	0.0	0.0	0.0	3.1	2.5	0.5	0.1
1985	127.8	0.9	0.9	0.0	0.0	0.0	2.8	2.8	0.0	0.1
1986	128.7	0.2	0.8	0.1	0.0	0.1	2.5	3.0	-0.5	0.4
1987	128.8	0.7	0.8	0.1	0.0	0.0	3.1	2.8	0.3	0.6
1988	129.6	0.9	0.9	0.1	0.0	0.0	3.5	3.1	0.4	0.6
1989	130.5	0.3	0.8	0.1	0.0	0.0	3.3	3.4	-0.1	0.6
1990	130.8	0.2	0.9	0.1	0.0	0.0	2.8	3.1	-0.3	0.6
1991	131.0	-1.1	0.7	0.0	0.0 ³	0.0	3.1	4.7	-1.6	0.2
1992 (PR)	129.9	1.2	0.7	0.0	..	0.0	3.0	2.5	0.5	..
1993 (PR)	131.1	1.0	0.6	0.1	..	0.0	3.1	2.4	0.7	..
1994 (PR)	132.1
Year	Population as of January 1	Growth Rate			Birth Rate	Death Rate	Interprovincial Migration Rate		Rate of Net International Immigration	
		Total	Natural	By Flow ⁴			In	Out		
1972	113.2	11.3	8.4	2.9	17.7	9.2	0.2	29.8	0.6	
1973	114.5	7.7	7.5	0.2	16.4	8.9	0.2	37.7	1.3	
1974	115.4	15.6	7.3	8.3	16.7	9.4	0.2	32.5	1.6	
1975	117.2	10.2	7.4	2.8	16.4	9.0	0.2	32.2	1.1	
1976	118.4	9.3	7.1	2.2	16.3	9.2	0.2	33.6	1.1	
1977	119.5	14.6	7.7	7.0	16.4	8.7	0.2	27.2	0.8	
1978	121.3	9.8	8.1	1.7	16.3	8.2	0.1	28.4	0.4	
1979	122.5	8.3	7.4	0.9	15.7	8.3	0.1	29.4	1.7	
1980	123.5	0.7	7.5	-6.7	15.8	8.4	0.1	33.3	1.0	
1981	123.6	2.0	7.3	-5.3	15.3	8.0	0.1	34.4	0.3	
1982	123.8	7.7	7.6	0.2	15.5	7.9	0.1	27.1	0.6	
1983	124.8	13.1	6.8	6.2	15.2	8.4	0.1	19.7	0.0	
1984	126.4	10.6	6.6	3.9	15.4	8.7	0.1	20.0	0.1	
1985	127.8	6.9	7.0	-0.1	15.7	8.7	0.1	22.2	0.2	
1986	128.7	1.2	6.3	-5.0	15.0	8.7	0.1	23.2	0.7	
1987	128.8	5.8	6.5	-0.7	15.1	8.6	0.1	21.5	0.9	
1988	129.6	6.8	6.7	0.2	15.2	8.6	0.1	23.5	0.7	
1989	130.5	2.6	6.5	-3.9	14.8	8.3	0.1	26.4	0.7	
1990	130.8	1.4	6.7	-5.2	15.4	8.7	0.1	23.7	1.1	
1991	131.0	-8.3	5.3	-13.6 ⁵	14.5	9.1	0.1	35.8	0.4	
1992 (PR)	129.9	9.2	5.6	3.5	14.2	8.5	0.1	19.2	0.4	
1993 (PR)	131.1	7.7	4.6	3.0	14.1	9.4	0.1	18.2	0.6	
1994 (PR)	132.1	..	..	..	..	..	..	..	..

See notes at the end of this table

Table A1. Demographic Accounts of the Provinces and Territories, 1972-1994
(figures in thousands and rates per 1,000)

Nova Scotia

Year	Population as of January 1	Increase		Net International Migration ¹	Returning Canadians	Net Non-permanent residents	Interprovincial Migration			Residual ²
		Total	Natural				In	Out	Net	
1972	802.4	8.0	6.6	1.3	0.4	0.0	22.7	19.9	2.8	3.2
1973	810.4	7.6	6.4	1.8	0.4	0.1	26.3	24.1	2.1	3.2
1974	818.1	6.6	6.0	1.9	0.3	-0.1	27.2	25.6	1.6	3.2
1975	824.7	9.6	6.3	1.5	0.3	0.1	25.6	21.1	4.5	3.2
1976	834.2	5.8	5.9	1.4	0.3	-0.1	23.0	22.6	0.4	2.1
1977	840.0	4.1	5.4	1.0	0.3	-0.1	19.9	21.2	-1.3	1.3
1978	844.2	4.9	5.7	0.4	0.3	-0.1	19.5	19.6	-0.1	1.3
1979	849.1	3.7	5.6	0.8	0.3	0.1	18.4	20.3	-1.8	1.3
1980	852.8	3.3	5.4	1.2	0.3	0.2	18.5	21.0	-2.5	1.3
1981	856.1	3.5	5.1	0.9	0.3	0.6	19.3	21.7	-2.5	0.9
1982	859.6	7.5	5.4	0.8	0.2	0.2	18.8	17.3	1.6	0.6
1983	867.1	9.4	5.4	0.3	0.2	0.2	18.3	14.5	3.9	0.6
1984	876.5	8.7	5.5	0.6	0.2	0.0	17.3	14.4	3.0	0.6
1985	885.2	4.8	5.1	0.5	0.2	-0.2	16.7	16.9	-0.2	0.6
1986	890.0	4.4	5.1	0.6	0.2	0.0	17.1	17.8	-0.7	0.8
1987	894.4	3.1	5.0	0.7	0.3	0.3	17.6	19.8	-2.2	1.0
1988	897.5	5.8	4.8	0.9	0.2	0.8	19.2	19.1	0.1	1.0
1989	903.2	6.5	5.0	1.0	0.2	0.7	20.4	19.8	0.6	1.0
1990	909.8	5.4	5.5	0.9	0.2	-0.2	18.6	18.7	-0.1	1.0
1991	915.2	4.6	4.8	0.5	0.1 ³	-1.7	21.4	20.1	1.4	0.4
1992 (PR)	919.8	1.7	4.3	1.4	..	-2.0	19.1	21.3	-2.1	...
1993 (PR)	921.5	5.1	4.3	2.1	..	-0.2	19.7	21.4	-1.6	...
1994 (PR)	926.6
Year	Population as of January 1	Growth Rate			Birth Rate	Death Rate	Interprovincial Migration Rate		Rate of Net International Immigration	
		Total	Natural	By Flow ⁴			In	Out		
1972	802.4	9.9	8.2	1.7	16.8	8.6	1.1	24.6	1.6	
1973	810.4	9.4	7.8	1.5	16.3	8.5	1.2	29.7	2.2	
1974	818.1	8.1	7.4	0.7	15.8	8.4	1.2	31.2	2.3	
1975	824.7	11.5	7.6	3.9	15.8	8.2	1.1	25.5	1.8	
1976	834.2	6.9	7.0	-0.1	15.3	8.3	1.0	27.0	1.6	
1977	840.0	4.9	6.4	-1.5	14.7	8.3	0.9	25.2	1.2	
1978	844.2	5.8	6.7	-0.9	14.8	8.1	0.8	23.2	0.5	
1979	849.1	4.4	6.5	-2.2	14.6	8.0	0.8	23.8	1.0	
1980	852.8	3.9	6.3	-2.4	14.5	8.2	0.8	24.6	1.4	
1981	856.1	4.1	6.0	-1.9	14.1	8.1	0.8	25.3	1.0	
1982	859.6	8.7	6.2	2.5	14.3	8.0	0.8	20.0	0.9	
1983	867.1	10.8	6.1	4.6	14.2	8.1	0.7	16.6	0.4	
1984	876.5	9.8	6.2	3.6	14.1	7.8	0.7	16.3	0.7	
1985	885.2	5.4	5.8	-0.4	14.0	8.2	0.7	19.1	0.5	
1986	890.0	4.9	5.7	-0.8	13.9	8.1	0.7	20.0	0.7	
1987	894.4	3.5	5.6	-2.1	13.5	7.9	0.7	22.1	0.8	
1988	897.5	6.4	5.3	1.1	13.5	8.2	0.7	21.2	1.0	
1989	903.2	7.2	5.5	1.7	13.8	8.3	0.8	21.9	1.1	
1990	909.8	5.9	6.0	-0.1	14.1	8.1	0.7	20.5	1.0	
1991	915.2	5.1	5.2	-0.1 ⁵	13.1	7.9	0.8	21.9	0.6	
1992 (PR)	919.8	1.9	4.7	-2.8	12.9	8.2	0.7	23.1	1.5	
1993 (PR)	921.5	5.5	4.7	0.9	12.8	8.1	0.7	23.1	2.2	
1994 (PR)	926.6	..	..	..	..	..	..	..	..

See notes at the end of this table

Table A1. Demographic Accounts of the Provinces and Territories, 1972-1994
(figures in thousands and rates per 1,000)

New Brunswick

Year	Population as of January 1	Increase		Net International Migration ¹	Returning Canadians	Net Non-permanent residents	Interprovincial Migration			Residual ²
		Total	Natural				In	Out	Net	
1972	648.3	6.2	6.8	0.2	0.6	0.0	18.2	17.9	0.2	1.8
1973	654.4	8.5	6.3	0.4	0.7	0.1	22.7	19.9	2.8	1.8
1974	663.0	10.1	6.2	0.9	0.6	0.0	22.9	18.7	4.2	1.8
1975	673.1	14.0	6.6	0.9	0.6	0.1	24.2	16.6	7.6	1.8
1976	687.2	8.1	6.6	0.7	0.6	0.0	18.9	17.3	1.6	1.4
1977	695.3	5.0	6.3	0.1	0.5	0.0	15.5	16.4	-0.9	1.1
1978	700.4	3.0	5.6	-0.4	0.5	0.0	14.3	16.0	-1.6	1.1
1979	703.4	3.2	5.7	0.2	0.5	0.1	14.3	16.5	-2.2	1.1
1980	706.6	1.2	5.3	0.5	0.5	0.2	13.2	17.4	-4.2	1.1
1981	707.9	0.1	5.4	-0.1	0.5	0.4	13.8	18.6	-4.8	1.3
1982	708.0	6.0	5.3	-0.3	0.4	-0.2	14.8	12.7	2.2	1.4
1983	714.0	6.3	5.3	-0.2	0.4	0.0	13.2	10.9	2.3	1.4
1984	720.3	4.6	5.1	-0.3	0.4	-0.1	12.0	11.2	0.8	1.4
1985	724.9	2.0	4.9	-0.4	0.5	0.0	11.5	13.1	-1.6	1.4
1986	726.9	1.3	4.3	-0.3	0.4	0.1	11.4	14.3	-2.9	0.4
1987	728.1	3.0	4.2	-0.2	0.4	0.1	13.2	15.0	-1.8	-0.3
1988	731.2	4.1	4.2	-0.2	0.4	0.6	13.7	14.9	-1.2	-0.3
1989	735.2	4.9	4.2	0.0	0.4	0.1	15.0	15.0	0.0	-0.3
1990	740.1	5.9	4.4	0.0	0.4	-0.1	14.2	13.2	1.0	-0.3
1991	746.1	1.7	4.0	-0.2	0.1 ³	-0.5	14.1	15.9	-1.8	-0.1
1992 (PR)	747.8	1.2	3.8	-0.1	..	-0.8	14.0	15.9	-1.9	..
1993 (PR)	749.0	4.1	3.7	-0.1	..	0.0	15.1	16.0	-0.9	..
1994 (PR)	753.2
Year	Population as of January 1	Growth Rate			Birth Rate	Death Rate	Interprovincial Migration Rate		Rate of Net International Immigration	
		Total	Natural	By Flow ⁴			In	Out		
1972	648.3	9.5	10.5	-1.0	18.1	7.6	0.8	27.6	0.4	
1973	654.4	13.0	9.6	3.3	17.3	7.7	1.0	30.1	0.6	
1974	663.0	15.2	9.3	5.8	17.1	7.8	1.0	28.0	1.3	
1975	673.1	20.7	9.8	10.9	17.3	7.6	1.1	24.4	1.3	
1976	687.2	11.8	9.6	2.2	17.1	7.5	0.8	25.0	1.0	
1977	695.3	7.2	9.1	-1.8	16.5	7.4	0.7	23.4	0.2	
1978	700.4	4.3	8.0	-3.7	15.4	7.4	0.6	22.8	-0.6	
1979	703.4	4.6	8.1	-3.4	15.4	7.3	0.6	23.4	0.3	
1980	706.6	1.8	7.5	-5.8	15.0	7.5	0.6	24.6	0.7	
1981	707.9	0.2	7.6	-7.4	14.8	7.3	0.6	26.3	-0.1	
1982	708.0	8.4	7.4	1.0	14.8	7.3	0.6	17.8	-0.4	
1983	714.0	8.8	7.4	1.4	14.7	7.3	0.5	15.2	-0.3	
1984	720.3	6.3	7.0	-0.7	14.3	7.3	0.5	15.5	-0.4	
1985	724.9	2.8	6.7	-4.0	13.9	7.2	0.5	18.0	-0.5	
1986	726.9	1.8	6.0	-4.2	13.5	7.5	0.4	19.6	-0.4	
1987	728.1	4.2	5.7	-1.6	13.1	7.4	0.5	20.5	-0.3	
1988	731.2	5.5	5.7	-0.2	13.1	7.4	0.5	20.3	-0.2	
1989	735.2	6.6	5.7	1.0	13.1	7.5	0.6	20.4	0.0	
1990	740.1	8.0	5.9	2.1	13.2	7.3	0.5	17.7	-0.1	
1991	746.1	2.3	5.4	-3.1 ⁵	12.7	7.3	0.5	21.3	-0.2	
1992 (PR)	747.8	1.6	5.1	-3.4	12.5	7.5	0.5	21.2	-0.1	
1993 (PR)	749.0	5.5	4.9	0.6	12.4	7.5	0.5	21.3	-0.1	
1994 (PR)	753.2	..	..	..	..	..	..	..	..

See notes at the end of this table

Table A1. Demographic Accounts of the Provinces and Territories, 1972-1994
(figures in thousands and rates per 1,000)

Quebec

Year	Population as of January 1	Increase		Net International Migration ¹	Returning Canadians	Net Non-permanent residents	Interprovincial Migration			Residual ²
		Total	Natural				In	Out	Net	
1972	6,172.2	38.6	41.3	7.6	6.6	0.7	36.2	56.0	-19.9	-2.3
1973	6,210.8	50.7	41.4	13.4	6.7	1.7	39.6	54.4	-14.7	-2.3
1974	6,261.4	59.5	42.9	20.1	6.3	-0.3	39.3	51.2	-11.9	-2.3
1975	6,320.9	64.2	50.2	16.1	6.3	1.7	34.5	46.8	-12.3	-2.3
1976	6,385.1	52.2	53.3	18.4	6.2	-0.5	31.6	52.4	-20.8	4.5
1977	6,437.3	12.0	53.7	9.0	5.5	-0.3	24.4	71.0	-46.5	9.4
1978	6,449.3	17.6	51.8	3.8	5.4	-0.5	24.5	57.9	-33.4	9.4
1979	6,466.9	33.3	55.3	10.5	5.1	1.8	23.6	53.7	-30.0	9.4
1980	6,500.2	43.3	53.9	15.1	4.7	3.3	21.9	46.2	-24.3	9.4
1981	6,543.5	42.6	52.6	13.4	4.2	4.8	23.6	46.1	-22.5	9.8
1982	6,586.1	22.9	47.3	11.8	4.8	-2.8	19.9	48.1	-28.2	10.1
1983	6,609.0	27.6	43.9	7.0	4.3	1.6	22.3	41.4	-19.1	10.1
1984	6,636.6	33.0	43.4	5.8	4.3	0.6	25.2	36.2	-10.9	10.1
1985	6,669.6	40.5	40.6	7.2	4.1	4.6	25.4	31.4	-6.0	10.1
1986	6,710.1	60.0	37.7	12.4	4.0	13.9	26.0	29.0	-3.0	5.0
1987	6,770.1	59.0	36.2	21.1	3.5	7.1	26.0	33.4	-7.4	1.4
1988	6,829.1	77.0	38.8	20.7	3.0	22.9	27.8	34.8	-7.0	1.4
1989	6,906.0	73.0	44.1	28.7	2.9	7.2	29.5	37.8	-8.4	1.4
1990	6,979.0	69.4	49.6	35.5	2.6	-7.4	26.9	36.4	-9.6	1.4
1991	7,048.4	68.3	48.2	45.1	1.0 ³	-13.7	26.9	38.6	-11.7	0.6
1992 (PR)	7,116.7	65.5	47.3	41.7	..	-7.3	27.8	43.3	-15.5	...
1993 (PR)	7,182.2	60.4	43.6	38.4	..	-9.5	29.3	44.2	-14.8	...
1994 (PR)	7,242.6
Year	Population as of January 1	Growth Rate			Birth Rate	Death Rate	Interprovincial Migration Rate		Rate of Net International Immigration	
		Total	Natural	By Flow ⁴			In	Out		
1972	6,172.2	6.2	6.7	-0.4	13.5	6.8	2.2	9.1	1.2	
1973	6,210.8	8.1	6.6	1.5	13.5	6.8	2.4	8.7	2.1	
1974	6,261.4	9.5	6.8	2.6	13.6	6.8	2.4	8.1	3.2	
1975	6,320.9	10.1	7.9	2.2	14.7	6.8	2.0	7.4	2.5	
1976	6,385.1	8.1	8.3	-0.2	15.0	6.7	1.8	8.2	2.9	
1977	6,437.3	1.9	8.3	-6.5	15.1	6.7	1.4	11.0	1.4	
1978	6,449.3	2.7	8.0	-5.3	14.8	6.7	1.4	9.0	0.6	
1979	6,466.9	5.1	8.5	-3.4	15.2	6.7	1.3	8.3	1.6	
1980	6,500.2	6.6	8.3	-1.6	14.9	6.7	1.2	7.1	2.3	
1981	6,543.5	6.5	8.0	-1.5	14.5	6.5	1.3	7.0	2.0	
1982	6,586.1	3.5	7.2	-3.7	13.8	6.6	1.1	7.3	1.8	
1983	6,609.0	4.2	6.6	-2.5	13.3	6.7	1.2	6.3	1.1	
1984	6,636.6	5.0	6.5	-1.6	13.2	6.7	1.3	5.4	0.9	
1985	6,669.6	6.0	6.1	0.0	12.9	6.8	1.3	4.7	1.1	
1986	6,710.1	8.9	5.6	3.3	12.6	7.0	1.3	4.3	1.8	
1987	6,770.1	8.7	5.3	3.4	12.3	7.0	1.3	4.9	3.1	
1988	6,829.1	11.2	5.7	5.6	12.6	7.0	1.4	5.1	3.0	
1989	6,906.0	10.5	6.3	4.2	13.3	7.0	1.4	5.4	4.1	
1990	6,979.0	9.9	7.1	2.8	14.0	6.9	1.3	5.2	5.1	
1991	7,048.4	9.6	6.8	2.8 ⁵	13.7	6.9	1.3	5.4	6.4	
1992 (PR)	7,116.7	9.2	6.6	2.5	13.4	6.8	1.3	6.1	5.8	
1993 (PR)	7,182.2	8.4	6.0	2.3	13.2	7.1	1.4	6.1	5.3	
1994 (PR)	7,242.6	..	..	..	..	..	..	..	..

See notes at the end of this table

Table A1. Demographic Accounts of the Provinces and Territories, 1972-1994
(figures in thousands and rates per 1,000)

Ontario

Year	Population as of January 1	Increase		Net International Migration ¹	Returning Canadians	Net Non-permanent residents	Interprovincial Migration			Residual ²
		Total	Natural				In	Out	Net	
1972	7,925.7	106.8	66.2	33.5	17.7	1.5	97.0	88.8	8.2	20.2
1973	8,032.5	126.1	63.9	65.5	18.1	4.1	104.2	109.4	-5.3	20.2
1974	8,158.7	120.1	63.7	82.6	17.3	-1.2	89.5	111.7	-22.2	20.2
1975	8,278.7	106.1	65.2	64.6	17.5	4.1	80.9	106.0	-25.1	20.2
1976	8,384.8	92.2	62.1	41.3	17.3	-1.7	88.7	99.2	-10.5	16.2
1977	8,477.0	98.2	61.3	27.3	15.4	-1.2	98.6	90.0	8.6	13.4
1978	8,575.2	72.6	59.8	12.3	15.2	-1.7	86.6	86.2	0.4	13.4
1979	8,647.8	76.0	60.2	26.1	14.4	4.0	83.5	98.9	-15.3	13.4
1980	8,723.9	74.0	60.6	41.0	13.0	7.6	74.2	109.1	-34.9	13.3
1981	8,797.9	96.3	59.3	32.2	11.9	17.5	80.6	100.2	-19.7	5.0
1982	8,894.1	120.4	61.2	25.4	13.4	-0.1	89.1	69.5	19.6	-1.0
1983	9,014.5	123.6	62.3	13.5	12.3	1.7	88.2	55.4	32.8	-1.0
1984	9,138.1	131.3	66.6	16.7	11.9	-1.6	89.1	52.4	36.7	-1.0
1985	9,269.4	132.2	65.5	16.6	12.4	3.4	88.4	54.9	33.4	-1.0
1986	9,401.7	174.1	66.0	27.9	11.4	24.7	100.1	57.1	42.9	-1.1
1987	9,575.8	206.4	66.5	65.4	10.8	22.2	104.7	64.4	40.3	-1.2
1988	9,782.2	235.2	67.4	72.2	9.5	70.0	91.4	76.5	14.9	-1.2
1989	10,017.4	218.6	74.4	87.3	9.3	47.6	87.3	88.5	-1.2	-1.2
1990	10,236.0	165.4	80.1	96.8	8.4	-6.0	75.2	90.3	-15.1	-1.2
1991	10,401.4	135.8	78.6	98.0	3.2 ³	-38.9	78.8	84.4	-5.6	-0.5
1992 (PR)	10,537.1	136.7	77.4	117.4	..	-55.0	82.8	85.7	-3.0	..
1993 (PR)	10,673.8	168.8	76.4	112.9	..	-9.4	83.5	89.8	-6.3	..
1994 (PR)	10,842.7
Year	Population as of January 1	Growth Rate			Birth Rate	Death Rate	Interprovincial Migration Rate		Rate of Net International Immigration	
		Total	Natural	By Flow ⁴			In	Out		
1972	7,925.7	13.4	8.3	5.1	15.7	7.4	6.8	11.1	4.2	
1973	8,032.5	15.6	7.9	7.7	15.3	7.4	7.2	13.5	8.1	
1974	8,158.7	14.6	7.7	6.9	15.1	7.4	6.1	13.6	10.1	
1975	8,278.7	12.7	7.8	4.9	15.1	7.3	5.4	12.7	7.8	
1976	8,384.8	10.9	7.4	3.6	14.6	7.2	5.9	11.8	4.9	
1977	8,477.0	11.5	7.2	4.3	14.4	7.2	6.5	10.6	3.2	
1978	8,575.2	8.4	6.9	1.5	14.0	7.1	5.6	10.0	1.4	
1979	8,647.8	8.8	6.9	1.8	14.0	7.1	5.4	11.4	3.0	
1980	8,723.9	8.4	6.9	1.5	14.1	7.2	4.7	12.5	4.7	
1981	8,797.9	10.9	6.7	4.2	13.8	7.1	5.0	11.3	3.6	
1982	8,894.1	13.4	6.8	6.6	13.9	7.1	5.5	7.8	2.8	
1983	9,014.5	13.6	6.9	6.7	14.0	7.1	5.4	6.1	1.5	
1984	9,138.1	14.3	7.2	7.0	14.3	7.0	5.4	5.7	1.8	
1985	9,269.4	14.2	7.0	7.2	14.2	7.1	5.3	5.9	1.8	
1986	9,401.7	18.4	7.0	11.4	14.1	7.2	6.0	6.0	2.9	
1987	9,575.8	21.3	6.9	14.5	13.9	7.0	6.2	6.7	6.8	
1988	9,782.2	23.8	6.8	16.9	13.9	7.1	5.4	7.7	7.3	
1989	10,017.4	21.6	7.3	14.2	14.4	7.0	5.1	8.7	8.6	
1990	10,236.0	16.0	7.8	8.3	14.6	6.9	4.3	8.8	9.4	
1991	10,401.4	13.0	7.5	5.5 ⁵	14.5	7.0	4.5	8.1	9.4	
1992 (PR)	10,537.1	12.9	7.3	5.6	14.2	6.9	4.6	8.1	11.1	
1993 (PR)	10,673.8	15.7	7.1	8.6	13.9	6.8	4.6	8.3	10.5	
1994 (PR)	10,842.7	..	..	..	..	..	..	..	..

See notes at the end of this table

Table A1. Demographic Accounts of the Provinces and Territories, 1972-1994
(figures in thousands and rates per 1,000)

Manitoba

Year	Population as of January 1	Increase		Net International Migration ¹	Returning Canadians	Net Non-permanent residents	Interprovincial Migration			Residual ²
		Total	Natural				In	Out	Net	
1972	1,000.9	3.7	9.2	2.9	1.4	0.1	26.1	33.8	-7.7	2.1
1973	1,004.5	9.8	8.8	3.7	1.4	0.2	33.8	36.0	-2.2	2.1
1974	1,014.3	7.2	8.9	4.5	1.4	-0.1	30.2	35.6	-5.4	2.1
1975	1,021.5	8.6	8.8	4.5	1.4	0.2	28.4	32.5	-4.1	2.1
1976	1,030.1	6.4	8.5	3.2	1.3	-0.1	25.1	28.7	-3.7	2.9
1977	1,036.5	5.3	8.5	2.8	1.2	-0.1	21.6	25.3	-3.8	3.4
1978	1,041.8	-2.5	8.1	1.3	1.2	-0.1	18.7	28.2	-9.6	3.4
1979	1,039.3	-4.9	8.0	3.0	1.1	0.2	18.8	32.6	-13.8	3.4
1980	1,034.5	0.3	7.6	6.1	1.0	0.4	19.0	30.4	-11.3	3.4
1981	1,034.8	7.8	7.4	3.4	1.0	0.7	22.7	26.3	-3.6	1.2
1982	1,042.6	13.7	7.6	3.2	0.8	0.2	20.9	19.4	1.5	-0.4
1983	1,056.2	12.7	8.1	1.8	1.0	0.4	18.5	17.5	1.0	-0.4
1984	1,069.0	11.7	8.4	2.3	0.8	-0.2	17.2	17.2	0.0	-0.4
1985	1,080.7	9.4	8.3	1.6	0.9	-0.1	17.2	19.0	-1.8	-0.4
1986	1,090.1	7.0	8.1	1.9	0.9	0.2	17.4	20.5	-3.0	1.0
1987	1,097.0	5.3	8.2	2.8	0.9	0.1	18.1	22.9	-4.8	2.0
1988	1,102.3	1.8	7.9	3.0	0.8	0.7	16.1	24.7	-8.6	2.0
1989	1,104.1	1.4	8.5	3.7	1.0	0.2	17.1	27.1	-10.0	2.0
1990	1,105.6	3.5	8.5	4.6	0.9	0.2	16.9	25.5	-8.6	2.0
1991	1,109.1	2.0	8.3	3.5	0.4 ³	-1.5	18.0	25.9	-7.9	0.8
1992 (PR)	1,111.1	2.4	7.6	2.9	..	-2.1	18.6	25.1	-6.5	...
1993 (PR)	1,113.5	5.3	7.5	2.8	..	0.1	19.1	24.9	-5.8	...
1994 (PR)	1,118.7
Year	Population as of January 1	Growth Rate			Birth Rate	Death Rate	Interprovincial Migration Rate		Rate of Net International Immigration	
		Total	Natural	By Flow ⁴			In	Out		
1972	1,000.9	3.7	9.1	-5.5	17.4	8.2	1.2	33.8	2.9	
1973	1,004.5	9.7	8.7	1.0	16.8	8.1	1.6	35.6	3.7	
1974	1,014.3	7.0	8.7	-1.7	17.0	8.3	1.4	35.0	4.5	
1975	1,021.5	8.4	8.5	-0.1	16.7	8.2	1.3	31.7	4.4	
1976	1,030.1	6.1	8.2	-2.0	16.2	8.0	1.1	27.8	3.1	
1977	1,036.5	5.1	8.2	-3.1	16.1	7.9	0.9	24.4	2.7	
1978	1,041.8	-2.4	7.8	-10.2	15.8	8.0	0.8	27.1	1.3	
1979	1,039.3	-4.7	7.7	-12.4	15.7	7.9	0.8	31.4	2.9	
1980	1,034.5	0.3	7.3	-7.0	15.5	8.2	0.8	29.4	5.9	
1981	1,034.8	7.5	7.1	0.3	15.5	8.3	1.0	25.3	3.3	
1982	1,042.6	13.0	7.3	5.8	15.4	8.1	0.9	18.5	3.1	
1983	1,056.2	12.0	7.6	4.4	15.6	8.0	0.8	16.5	1.7	
1984	1,069.0	10.9	7.8	3.1	15.5	7.7	0.7	16.0	2.2	
1985	1,080.7	8.7	7.7	1.0	15.8	8.1	0.7	17.5	1.5	
1986	1,090.1	6.4	7.4	-1.0	15.6	8.1	0.7	18.7	1.7	
1987	1,097.0	4.8	7.5	-2.7	15.4	7.9	0.7	20.8	2.5	
1988	1,102.3	1.7	7.2	-5.5	15.4	8.2	0.6	22.4	2.7	
1989	1,104.1	1.3	7.7	-6.4	15.7	8.0	0.6	24.5	3.4	
1990	1,105.6	3.2	7.7	-4.5	15.7	8.0	0.6	23.1	4.1	
1991	1,109.1	1.8	7.5	-5.7 ⁵	15.6	8.1	0.7	23.3	3.1	
1992 (PR)	1,111.1	2.1	6.8	-4.7	14.9	8.1	0.7	22.6	2.6	
1993 (PR)	1,113.5	4.7	6.8	-2.0	15.1	8.4	0.7	22.3	2.5	
1994 (PR)	1,118.7	..	..	..	..	..	..	..	..

See notes at the end of this table

Table A1. Demographic Accounts of the Provinces and Territories, 1972-1994
(figures in thousands and rates per 1,000)

Saskatchewan

Year	Population as of January 1	Increase		Net International Migration ¹	Returning Canadians	Net Non-permanent residents	Interprovincial Migration			Residual ²
		Total	Natural				In	Out	Net	
1972	925.5	-9.6	7.9	0.3	0.8	0.0	19.5	36.8	-17.3	1.3
1973	915.9	-6.1	7.2	0.4	0.7	0.1	26.2	39.4	-13.3	1.3
1974	909.8	2.7	7.3	0.8	0.7	0.0	28.0	32.8	-4.8	1.3
1975	912.5	15.3	7.6	1.6	0.7	0.1	30.0	23.4	6.6	1.3
1976	927.8	13.0	8.2	1.2	0.7	0.0	26.2	22.4	3.8	0.8
1977	940.7	10.6	9.0	1.1	0.6	0.0	22.2	21.8	0.4	0.4
1978	951.3	5.6	8.8	0.4	0.6	0.0	19.3	23.0	-3.7	0.4
1979	956.9	8.1	9.6	1.8	0.5	0.1	21.1	24.6	-3.5	0.4
1980	965.0	8.1	9.4	2.8	0.5	0.2	20.7	25.0	-4.4	0.4
1981	973.1	11.3	9.7	1.4	0.5	0.3	23.2	23.7	-0.5	0.1
1982	984.4	12.9	9.5	1.0	0.5	0.0	21.0	19.3	1.7	-0.1
1983	997.3	14.0	10.2	0.5	0.5	0.1	19.5	17.0	2.5	-0.1
1984	1,011.3	12.9	10.3	1.1	0.5	0.2	17.3	16.6	0.7	-0.1
1985	1,024.2	6.6	10.1	0.5	0.6	0.3	15.8	20.8	-5.0	-0.1
1986	1,030.8	2.8	9.5	1.0	0.5	0.4	15.9	22.9	-7.0	1.5
1987	1,033.6	-0.4	9.2	1.1	0.5	0.4	15.7	24.7	-9.0	2.6
1988	1,033.2	-8.1	8.7	1.3	0.5	0.4	13.6	30.0	-16.3	2.6
1989	1,025.1	-10.6	8.7	1.2	0.5	0.2	15.3	33.9	-18.6	2.6
1990	1,014.5	-8.4	8.0	1.5	0.5	0.1	16.1	32.0	-15.9	2.6
1991	1,006.1	-3.1	7.2	1.6	0.1 ³	-1.0	18.4	28.4	-9.9	1.1
1992 (PR)	1,003.0	-1.0	7.2	1.6	..	-1.2	19.7	28.2	-8.5	..
1993 (PR)	1,002.0	3.3	6.7	1.6	..	0.2	19.8	28.7	-8.9	..
1994 (PR)	1,005.4
Year	Population as of January 1	Growth Rate			Birth Rate	Death Rate	Interprovincial Migration Rate		Rate of Net International Immigration	
		Total	Natural	By Flow ⁴			In	Out		
1972	925.5	-10.4	8.6	-19.0	16.8	8.2	0.9	40.0	0.3	
1973	915.9	-6.7	7.8	-14.5	16.2	8.4	1.2	43.2	0.5	
1974	909.8	3.0	8.0	-5.1	16.6	8.6	1.3	36.0	0.9	
1975	912.5	16.6	8.3	8.3	16.6	8.3	1.3	25.5	1.7	
1976	927.8	13.9	8.7	5.2	17.1	8.4	1.2	24.0	1.2	
1977	940.7	11.2	9.5	1.7	17.5	8.0	1.0	23.1	1.2	
1978	951.3	5.9	9.2	-3.3	17.3	8.1	0.8	24.1	0.4	
1979	956.9	8.4	10.0	-1.6	17.6	7.7	0.9	25.6	1.9	
1980	965.0	8.4	9.7	-1.3	17.6	7.9	0.9	25.8	2.9	
1981	973.1	11.5	9.9	1.6	17.6	7.7	1.0	24.2	1.5	
1982	984.4	13.0	9.6	3.4	17.9	8.3	0.9	19.5	1.1	
1983	997.3	14.0	10.2	3.8	17.8	7.6	0.8	16.9	0.5	
1984	1,011.3	12.7	10.1	2.6	17.7	7.6	0.7	16.3	1.1	
1985	1,024.2	6.4	9.9	-3.4	17.7	7.8	0.6	20.2	0.5	
1986	1,030.8	2.7	9.2	-6.4	17.0	7.8	0.6	22.2	1.0	
1987	1,033.6	-0.4	8.9	-9.3	16.5	7.6	0.6	23.9	1.1	
1988	1,033.2	-7.9	8.4	-16.3	16.3	7.9	0.5	29.1	1.3	
1989	1,025.1	-10.4	8.6	-19.0	16.3	7.8	0.6	33.2	1.1	
1990	1,014.5	-8.3	8.0	-16.3	15.9	8.0	0.6	31.7	1.5	
1991	1,006.1	-3.0	7.2	-10.2 ⁵	15.2	8.1	0.7	28.2	1.6	
1992 (PR)	1,003.0	-1.0	7.2	-8.2	15.0	7.8	0.7	28.1	1.6	
1993 (PR)	1,002.0	3.3	6.7	-3.4	15.1	8.4	0.7	28.6	1.5	
1994 (PR)	1,005.4	..	..	..	..	..	..	..	..

See notes at the end of this table

Table A1. Demographic Accounts of the Provinces and Territories, 1972-1994
(figures in thousands and rates per 1,000)

Alberta

Year	Population as of January 1	Increase		Net International Migration ¹	Returning Canadians	Net Non-permanent residents	Interprovincial Migration			Residual ²
		Total	Natural				In	Out	Net	
1972	1,686.0	30.6	18.6	0.6	4.5	0.3	60.5	54.0	6.5	-0.1
1973	1,716.6	28.8	18.5	2.2	4.6	0.7	70.5	67.8	2.7	-0.1
1974	1,745.5	42.4	18.6	4.6	4.4	-0.1	75.4	60.6	14.8	-0.1
1975	1,787.9	56.4	20.2	7.4	4.5	0.7	76.7	53.2	23.5	-0.1
1976	1,844.2	74.0	21.5	6.6	4.5	-0.2	83.5	49.3	34.2	-7.4
1977	1,918.2	76.2	22.8	4.6	4.1	-0.1	82.8	50.5	32.3	-12.5
1978	1,994.4	73.1	23.5	1.3	4.1	-0.2	82.6	50.6	32.0	-12.5
1979	2,067.5	86.5	24.9	5.2	4.0	0.7	96.1	56.9	39.2	-12.5
1980	2,154.1	103.9	27.0	12.4	3.7	1.2	106.7	59.8	46.9	-12.5
1981	2,257.9	90.0	29.8	11.6	3.6	2.5	107.6	67.3	40.2	-2.3
1982	2,347.9	43.4	32.1	8.8	4.1	-0.4	72.7	68.8	4.0	5.0
1983	2,391.4	7.2	33.0	1.5	4.0	0.0	45.9	72.1	-26.2	5.0
1984	2,398.6	2.2	31.4	2.3	3.9	0.2	39.3	69.9	-30.6	5.0
1985	2,400.8	22.1	30.6	0.5	4.3	1.2	49.9	59.5	-9.6	5.0
1986	2,422.9	14.5	30.2	2.4	3.7	2.5	49.5	69.8	-20.3	3.9
1987	2,437.4	11.2	28.8	4.6	3.8	4.6	45.3	72.9	-27.6	3.0
1988	2,448.6	35.3	28.2	7.5	3.6	4.7	54.8	60.3	-5.5	3.0
1989	2,483.9	44.8	29.5	9.8	3.3	1.9	64.7	61.3	3.4	3.0
1990	2,528.7	52.0	28.9	12.4	3.1	-0.4	67.4	56.3	11.1	3.0
1991	2,580.7	36.5	28.3	8.3	1.2 ³	-6.0	67.0	61.1	5.9	1.3
1992 (PR)	2,617.2	29.7	27.4	9.0	..	-5.7	63.3	64.6	-1.3	..
1993 (PR)	2,646.9	32.5	27.0	10.2	..	-1.4	64.7	66.0	-1.3	..
1994 (PR)	2,679.4
Year	Population as of January 1	Growth Rate			Birth Rate	Death Rate	Interprovincial Migration Rate		Rate of Net International Immigration	
		Total	Natural	By Flow ⁴			In	Out		
1972	1,686.0	18.0	10.9	7.1	17.2	6.3	2.9	31.7	0.4	
1973	1,716.6	16.7	10.7	6.0	16.9	6.2	3.4	39.2	1.3	
1974	1,745.5	24.0	10.5	13.5	16.9	6.4	3.6	34.3	2.6	
1975	1,787.9	31.0	11.1	19.9	17.4	6.3	3.6	29.3	4.1	
1976	1,844.2	39.3	11.4	27.9	17.6	6.2	3.9	26.2	3.5	
1977	1,918.2	39.0	11.7	27.3	17.6	5.9	3.8	25.8	2.3	
1978	1,994.4	36.0	11.5	24.5	17.4	5.9	3.8	24.9	0.6	
1979	2,067.5	41.0	11.8	29.2	17.5	5.7	4.3	27.0	2.5	
1980	2,154.1	47.1	12.3	34.8	18.0	5.8	4.8	27.1	5.6	
1981	2,257.9	39.1	12.9	26.1	18.5	5.6	4.8	29.2	5.0	
1982	2,347.9	18.3	13.5	4.8	19.0	5.5	3.2	29.0	3.7	
1983	2,391.4	3.0	13.8	-10.8	19.0	5.3	2.0	30.1	0.6	
1984	2,398.6	0.9	13.1	-12.1	18.4	5.3	1.7	29.1	1.0	
1985	2,400.8	9.1	12.7	-3.5	18.2	5.5	2.1	24.7	0.2	
1986	2,422.9	6.0	12.4	-6.4	18.0	5.6	2.1	28.7	1.0	
1987	2,437.4	4.6	11.8	-7.2	17.2	5.5	1.9	29.8	1.9	
1988	2,448.6	14.3	11.4	2.9	17.1	5.6	2.2	24.5	3.0	
1989	2,483.9	17.9	11.8	6.1	17.3	5.5	2.6	24.5	3.9	
1990	2,528.7	20.3	11.3	9.0	16.8	5.5	2.7	22.1	4.8	
1991	2,580.7	14.0	10.9	3.1 ⁵	16.5	5.6	2.6	23.5	3.2	
1992 (PR)	2,617.2	11.3	10.4	0.9	16.0	5.6	2.5	24.5	3.4	
1993 (PR)	2,646.9	12.2	10.1	2.1	15.7	5.5	2.5	24.8	3.8	
1994 (PR)	2,679.4	..	..	..	..	..	..	..	..

See notes at the end of this table

Table A1. Demographic Accounts of the Provinces and Territories, 1972-1994
(figures in thousands and rates per 1,000)

British Columbia

Year	Population as of January 1	Increase		Net International Migration ¹	Returning Canadians	Net Non-permanent residents	Interprovincial Migration			Residual ²
		Total	Natural				In	Out	Net	
1972	2,288.0	60.4	16.5	11.9	4.7	0.3	72.3	47.4	24.9	-2.0
1973	2,348.3	72.1	16.3	17.6	4.8	0.8	87.1	56.6	30.5	-2.0
1974	2,420.4	69.5	16.3	24.0	4.7	-0.2	84.2	61.5	22.7	-2.0
1975	2,489.9	41.6	17.1	19.7	4.8	0.8	61.1	64.0	-2.9	-2.0
1976	2,531.5	32.1	17.1	11.8	4.8	-0.3	59.3	60.8	-1.5	-0.3
1977	2,563.6	43.8	18.1	7.1	4.3	-0.2	62.8	47.3	15.5	1.0
1978	2,607.5	45.6	18.2	3.8	4.3	-0.3	65.4	44.7	20.7	1.0
1979	2,653.1	65.5	19.2	9.2	4.1	0.8	76.6	43.4	33.2	1.0
1980	2,718.5	83.4	20.7	18.2	3.8	1.5	80.0	39.8	40.2	1.0
1981	2,801.9	65.3	21.6	15.5	3.4	3.3	70.4	48.8	21.6	0.1
1982	2,867.2	34.8	22.0	10.9	3.9	-0.6	45.9	47.9	-2.0	-0.6
1983	2,901.9	38.3	23.1	6.4	3.7	0.5	43.9	39.9	4.0	-0.6
1984	2,940.3	36.0	23.2	4.5	3.8	0.4	42.0	38.5	3.5	-0.6
1985	2,976.2	28.6	21.8	3.6	3.9	1.8	42.6	45.8	-3.2	-0.6
1986	3,004.8	33.9	20.8	4.3	4.0	4.5	49.5	48.6	0.9	0.6
1987	3,038.7	57.7	20.0	12.0	3.7	5.8	60.9	43.3	17.6	1.5
1988	3,096.4	74.0	20.4	17.5	3.2	8.5	67.5	41.6	25.9	1.5
1989	3,170.4	88.2	20.8	19.3	3.2	9.0	79.4	42.0	37.4	1.5
1990	3,258.6	87.7	22.0	22.5	3.1	2.8	78.4	39.7	38.7	1.5
1991	3,346.3	72.1	21.6	25.0	1.0 ³	-7.2	76.5	44.2	32.3	0.6
1992 (PR)	3,418.4	81.5	21.5	29.7	-	-9.4	85.2	43.9	41.2	-
1993 (PR)	3,499.9	97.3	21.3	38.4	-	-2.9	87.8	45.8	42.0	-
1994 (PR)	3,597.3	-	-	-	-	-	-	-	-	-
Year	Population as of January 1	Growth Rate			Birth Rate	Death Rate	Interprovincial Migration Rate		Rate of Net International Immigration	
		Total	Natural	By Flow ⁴			In	Out		
1972	2,288.0	26.0	7.1	18.9	14.9	7.8	3.6	20.5	5.1	
1973	2,348.3	30.2	6.8	23.4	14.4	7.6	4.3	23.7	7.4	
1974	2,420.4	28.3	6.6	21.7	14.4	7.8	4.1	25.1	9.8	
1975	2,489.9	16.6	6.8	9.8	14.5	7.6	3.0	25.5	7.9	
1976	2,531.5	12.6	6.7	5.9	14.1	7.4	2.8	23.9	4.6	
1977	2,563.6	17.0	7.0	10.0	14.2	7.2	3.0	18.3	2.8	
1978	2,607.5	17.3	6.9	10.4	14.2	7.2	3.1	17.0	1.4	
1979	2,653.1	24.4	7.2	17.2	14.3	7.2	3.5	16.2	3.4	
1980	2,718.5	30.2	7.5	22.7	14.5	7.0	3.7	14.4	6.6	
1981	2,801.9	23.0	7.6	15.4	14.6	7.0	3.2	17.2	5.5	
1982	2,867.2	12.1	7.6	4.4	14.8	7.2	2.1	16.6	3.8	
1983	2,901.9	13.1	7.9	5.2	14.7	6.8	1.9	13.7	2.2	
1984	2,940.3	12.2	7.9	4.3	14.8	7.0	1.8	13.0	1.5	
1985	2,976.2	9.6	7.3	2.3	14.4	7.1	1.9	15.3	1.2	
1986	3,004.8	11.2	6.9	4.3	13.9	7.0	2.1	16.1	1.4	
1987	3,038.7	18.8	6.5	12.3	13.6	7.1	2.6	14.1	3.9	
1988	3,096.4	23.6	6.5	17.1	13.7	7.2	2.8	13.3	5.6	
1989	3,170.4	27.4	6.5	21.0	13.6	7.2	3.3	13.1	6.0	
1990	3,258.6	26.6	6.7	19.9	13.8	7.1	3.2	12.0	6.8	
1991	3,346.3	21.3	6.4	14.9 ⁵	13.5	7.1	3.1	13.1	7.4	
1992 (PR)	3,418.4	23.6	6.2	17.3	13.3	7.1	3.4	12.7	8.6	
1993 (PR)	3,499.9	27.4	6.0	21.4	13.0	7.0	3.5	12.9	10.8	
1994 (PR)	3,597.3	-	-	-	-	-	-	-	-	

See notes at the end of this table

Table A1. Demographic Accounts of the Provinces and Territories, 1972-1994
(figures in thousands and rates per 1,000)

Yukon

Year	Population as of January 1	Increase		Net International Migration ¹	Returning Canadians	Net Non-permanent residents	Interprovincial Migration			Residual ²
		Total	Natural				In	Out	Net	
1972	19.9	1.1	0.3	0.0	0.0	0.0	2.8	2.2	0.6	-0.1
1973	20.9	0.2	0.3	0.0	0.0	0.0	2.3	2.6	-0.3	-0.1
1974	21.1	0.6	0.4	0.0	0.0	0.0	2.8	2.7	0.1	-0.1
1975	21.7	0.7	0.3	0.0	0.1	0.0	2.8	2.5	0.2	-0.1
1976	22.4	0.3	0.3	0.0	0.0	0.0	2.6	2.9	-0.4	-0.3
1977	22.7	0.8	0.3	0.0	0.0	0.0	2.8	2.7	0.1	-0.4
1978	23.5	0.6	0.4	0.0	0.0	0.0	2.7	2.8	-0.2	-0.4
1979	24.1	0.4	0.4	0.0	0.0	0.0	2.4	2.8	-0.4	-0.4
1980	24.5	0.4	0.3	0.0	0.0	0.0	2.3	2.7	-0.4	-0.4
1981	24.9	-0.5	0.4	0.0	0.0	0.0	2.7	4.1	-1.4	-0.3
1982	24.4	-0.5	0.4	0.0	0.1	0.0	1.6	2.8	-1.2	-0.3
1983	23.8	-0.1	0.4	0.0	0.0	0.0	1.6	2.4	-0.8	-0.3
1984	23.8	0.6	0.4	0.0	0.0	0.0	1.6	1.7	-0.1	-0.3
1985	24.4	0.2	0.3	0.0	0.0	0.0	1.6	2.0	-0.4	-0.3
1986	24.6	0.8	0.4	0.0	0.0	0.0	2.2	2.0	0.2	-0.2
1987	25.4	0.7	0.4	0.0	0.0	0.0	2.3	2.2	0.1	-0.2
1988	26.1	1.0	0.4	0.0	0.0	0.0	2.4	2.1	0.3	-0.2
1989	27.1	0.6	0.4	0.1	0.0	0.0	2.3	2.3	0.0	-0.2
1990	27.8	0.6	0.4	0.0	0.0	0.0	2.2	2.2	0.0	-0.2
1991	28.4	1.1	0.5	0.0	0.0 ³	0.0	2.4	1.9	0.5	-0.1
1992 (PR)	29.5	1.7	0.4	0.1	..	-0.1	2.9	1.7	1.2	..
1993 (PR)	31.1	0.2	0.4	0.0	..	0.0	3.2	1.7	1.4	..
1994 (PR)	31.3
Year	Population as of January 1	Growth Rate			Birth Rate	Death Rate	Interprovincial Migration Rate		Rate of Net International Immigration	
		Total	Natural	By Flow ⁴			In	Out		
1972	19.9	53.5	17.1	36.5	22.1	5.0	0.1	109.9	1.6	
1973	20.9	7.7	14.7	-7.0	20.0	5.3	0.1	121.5	-0.9	
1974	21.1	28.4	17.8	10.6	23.1	5.3	0.1	125.3	-0.3	
1975	21.7	30.9	13.4	17.5	18.5	5.1	0.1	113.7	0.0	
1976	22.4	12.7	14.4	-1.7	19.9	5.5	0.1	129.2	-0.7	
1977	22.7	35.2	14.2	21.0	18.8	4.5	0.1	119.1	-1.4	
1978	23.5	25.5	15.0	10.5	18.8	3.7	0.1	119.0	-1.3	
1979	24.1	15.8	15.4	0.5	20.6	5.2	0.1	116.3	-0.3	
1980	24.5	17.1	14.1	3.0	19.3	5.2	0.1	109.9	1.1	
1981	24.9	-21.8	16.0	-37.9	21.8	5.7	0.1	165.7	1.0	
1982	24.4	-21.9	16.9	-38.7	21.8	4.9	0.1	117.4	-1.7	
1983	23.8	-2.4	17.9	-20.4	22.7	4.7	0.1	99.3	0.5	
1984	23.8	25.6	17.1	8.6	21.5	4.5	0.1	70.6	-0.4	
1985	24.4	9.7	13.9	-4.2	18.9	5.0	0.1	82.8	-0.3	
1986	24.6	31.3	14.8	16.5	19.3	4.5	0.1	80.4	-0.2	
1987	25.4	28.1	14.3	13.8	18.5	4.2	0.1	85.7	0.8	
1988	26.1	36.0	14.5	21.6	19.6	5.1	0.1	78.9	1.0	
1989	27.1	23.6	14.0	9.5	17.5	3.5	0.1	85.5	2.1	
1990	27.8	22.9	15.7	7.2	19.8	4.1	0.1	80.1	0.9	
1991	28.4	36.9	15.7	21.2 ⁵	19.6	3.9	0.1	64.9	0.3	
1992 (PR)	29.5	55.3	13.6	41.7	17.5	3.9	0.1	56.2	1.9	
1993 (PR)	31.1	5.6	12.5	-6.9	16.3	3.8	0.1	55.9	1.2	
1994 (PR)	31.3	..	..	..	..	..	..	..	..

See notes at the end of this table

Table A1. Demographic Accounts of the Provinces and Territories, 1972-1994
(figures in thousands and rates per 1,000)
Northwest Territories

Year	Population as of January 1	Increase		Net International Migration, ¹	Returning Canadians	Net Non-permanent residents	Interprovincial Migration			Residual ²
		Total	Natural				In	Out	Net	
1972	38.1	2.2	1.0	0.2	0.0	0.0	4.4	3.5	0.9	-0.1
1973	40.3	0.8	1.0	0.1	0.0	0.0	3.6	4.0	-0.4	-0.1
1974	41.2	1.3	0.8	0.2	0.0	0.0	4.3	4.2	0.2	-0.1
1975	42.4	1.7	1.0	0.2	0.0	0.0	4.3	3.9	0.4	-0.1
1976	44.1	0.6	1.0	0.1	0.0	0.0	4.1	4.9	-0.8	-0.3
1977	44.7	0.4	1.0	0.1	0.0	0.0	4.4	5.4	-1.0	-0.3
1978	45.1	0.5	1.0	0.1	0.0	0.0	3.9	4.8	-1.0	-0.3
1979	45.6	0.7	1.1	0.1	0.0	0.0	3.7	4.6	-0.8	-0.3
1980	46.3	0.6	1.1	0.1	0.0	0.0	3.4	4.3	-0.9	-0.3
1981	46.9	1.8	1.1	0.1	0.0	0.0	4.2	4.1	0.2	-0.4
1982	48.6	2.2	1.1	0.0	0.0	0.0	3.8	3.2	0.6	-0.4
1983	50.8	1.7	1.3	0.0	0.0	0.0	3.4	3.4	0.0	-0.4
1984	52.5	1.7	1.2	0.0	0.0	0.0	3.5	3.5	0.1	-0.4
1985	54.2	1.1	1.2	0.0	0.0	0.0	3.4	4.0	-0.6	-0.4
1986	55.3	-0.1	1.3	0.0	0.0	0.0	3.1	4.9	-1.8	-0.4
1987	55.2	0.6	1.3	0.0	0.0	0.0	3.5	4.7	-1.2	-0.4
1988	55.8	1.1	1.3	0.0	0.0	0.1	3.5	4.3	-0.8	-0.4
1989	56.9	1.3	1.2	0.0	0.0	0.0	3.7	4.1	-0.4	-0.4
1990	58.3	1.9	1.4	0.0	0.0	0.1	3.8	3.8	0.0	-0.4
1991	60.1	1.6	1.4	0.1	0.0 ³	-0.1	3.9	3.9	0.0	-0.2
1992 (PR)	61.8	0.7	1.3	0.1	..	-0.1	3.3	3.9	-0.6	..
1993 (PR)	62.4	1.0	1.3	0.1	..	0.0	3.3	4.2	-1.0	..
1994 (PR)	63.4
Year	Population as of January 1	Growth Rate			Birth Rate	Death Rate	Interprovincial Migration Rate		Rate of Net International Immigration	
		Total	Natural	By Flow ⁴			In	Out		
1972	38.1	55.6	24.7	30.9	31.6	6.9	0.2	89.4	4.1	
1973	40.3	20.5	23.4	-2.9	29.6	6.1	0.2	98.1	3.4	
1974	41.2	31.1	20.0	11.1	24.9	4.9	0.2	100.4	3.9	
1975	42.4	38.2	22.2	16.0	27.2	5.0	0.2	90.6	3.6	
1976	44.1	13.1	21.9	-8.8	26.6	4.8	0.2	110.5	3.2	
1977	44.7	9.8	22.1	-12.3	26.5	4.5	0.2	119.7	2.0	
1978	45.1	10.3	22.0	-11.7	26.5	4.5	0.2	106.4	1.8	
1979	45.6	15.3	23.5	-8.1	27.9	4.5	0.2	99.1	2.4	
1980	46.3	12.2	22.8	-10.7	28.0	5.1	0.1	92.4	1.7	
1981	46.9	37.5	23.2	14.4	27.3	4.1	0.2	84.9	1.5	
1982	48.6	44.0	22.7	21.3	27.4	4.7	0.2	65.2	0.6	
1983	50.8	31.9	24.2	7.7	28.9	4.7	0.1	66.5	0.4	
1984	52.5	32.1	22.6	9.5	27.1	4.4	0.1	65.5	0.6	
1985	54.2	19.5	22.3	-2.9	26.3	3.9	0.1	73.1	-0.2	
1986	55.3	-1.8	23.0	-24.8	27.3	4.3	0.1	88.9	-0.2	
1987	55.2	11.5	23.9	-12.4	27.4	3.6	0.1	84.5	0.1	
1988	55.8	19.6	23.7	-4.1	27.6	3.9	0.1	76.4	0.4	
1989	56.9	23.4	21.4	2.0	25.7	4.3	0.1	71.2	-0.2	
1990	58.3	31.8	22.9	8.9	26.8	3.8	0.1	63.5	-0.4	
1991	60.1	26.8	22.9	3.9 ⁵	26.8	3.9	0.1	63.7	1.1	
1992 (PR)	61.8	10.6	20.9	-10.3	25.0	4.1	0.1	62.8	0.9	
1993 (PR)	62.4	15.5	21.0	-5.5	25.0	4.0	0.1	67.4	1.8	
1994 (PR)	63.4	..	..	..	..	..	..	..	..

1 Immigration: From Employment and Immigration Canada data. Emigration: Estimates based on Family Allowance and Income Tax files. Net: Emigrants subtracted from immigrants.

2 The residual is the distribution over five years of the error of closure at the end of the census period. This error is equal to the difference between the number expected in the census by the components method and the enumeration corrected for net under-enumeration. This 'error' encompasses errors on the components and on the net under-enumeration of the censuses.

3 January to May 1991.

4 Takes into account non-permanent residents, returning Canadians and the residual.

5 Returning Canadians in 1991 includes only those returning between January and May; data are not available for 1992 or 1993.

(PR) Revised postcensal estimates, based on 1991, as of July 20, 1994.

Note: All other data are based on final intercensal estimates. Births and deaths are taken from vital statistics publications.

Source: Statistics Canada, Demography Division.

Table A2. Nuptiality

Year	Nfld	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alb.	B.C.	Yukon	N.W.T.	Canada
	Number of 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	22,312	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	3,905	1,019	6,828	5,254	33,325	80,377	7,800	6,637	19,888	25,170	214	223	190,640
1990	3,791	996	6,386	5,044	32,060	80,097	7,666	6,229	19,806	25,216	218	228	187,737
1991	3,480	876	5,845	4,521	28,922	72,938	7,032	5,923	18,612	23,691	196	215	172,251
1992	3,254	850	5,623	4,313	25,841	70,079	6,899	5,664	17,871	23,749	221	209	164,573

Source: Statistics Canada, Health Statistics Division.

Table A3.1 Age-specific First Marriage Rates (per 1,000) for Males Cohorts, 1943-1975, Canada

Age	Year of Birth																																
	1975	1974	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
	Year of 17th Birthday																																
	1992	1991	1990	1989	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
17	0.3	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.9	1.1	1.6	1.5	2.0	2.4	3.3	3.8	4.4	4.8	4.6	4.2	4.3	4.0	3.8	3.9	3.9	3.9	4.0	3.8	4.0	4.4	4.9
18		2.3	2.4	2.8	2.6	2.7	2.8	3.3	3.6	3.9	4.4	5.9	6.5	8.2	9.2	10.7	12.6	14.6	17.7	18.9	19.9	21.1	18.3	17.9	17.2	16.9	17.8	18.1	18.3	15.9	15.3	17.1	18.0
19			5.9	6.5	7.1	7.4	8.0	8.1	8.9	9.9	10.9	12.9	15.9	18.9	21.6	24.1	27.4	31.1	35.0	39.4	42.6	45.6	46.5	42.2	41.7	39.8	41.0	44.2	44.6	39.2	37.7	38.1	43.1
20				12.5	13.8	15.1	16.4	16.7	16.8	19.2	21.2	23.6	27.8	33.3	38.3	42.2	47.0	50.9	56.0	58.6	67.2	72.9	77.0	79.2	73.3	73.6	73.4	77.4	82.8	73.3	70.6	71.7	73.7
21					21.1	23.1	26.4	28.8	28.4	29.0	31.8	36.2	39.9	45.2	51.8	57.4	63.5	67.6	71.1	75.0	77.6	90.1	93.8	102.9	109.9	109.5	114.0	120.1	127.6	118.1	112.9	114.0	116.8
22						30.5	34.6	37.9	40.1	40.8	41.1	44.9	49.8	53.9	58.4	65.1	68.4	75.2	77.8	78.6	81.0	85.1	95.3	103.3	111.2	119.2	117.3	130.3	140.0	128.6	128.2	130.6	130.6
23							39.6	44.8	50.1	50.2	51.4	52.3	54.5	59.9	63.1	64.0	68.9	72.0	76.3	75.8	77.0	78.8	80.8	89.9	94.8	103.2	111.0	109.2	130.7	121.1	119.6	128.1	131.3
24								48.1	51.1	56.6	56.7	57.2	56.7	58.5	62.7	63.9	64.7	65.5	67.4	69.2	68.7	68.0	68.7	70.0	77.3	82.0	86.9	92.0	92.1	98.3	98.5	106.0	111.0
25									50.7	54.1	58.5	59.7	57.7	56.1	56.3	59.0	59.6	57.3	58.4	60.0	60.0	58.7	57.8	58.6	58.1	63.2	65.1	68.6	71.4	72.9	75.2	80.8	84.8
26										48.6	51.0	54.5	54.6	53.1	48.9	49.3	51.9	49.6	49.5	50.4	49.7	48.4	47.5	46.1	47.0	46.0	48.7	50.0	52.7	54.6	53.2	59.7	62.0
27											44.5	45.4	48.6	47.6	46.0	43.9	42.5	43.8	42.3	40.3	40.5	40.6	39.6	38.4	37.1	37.0	36.4	37.9	38.8	39.6	40.0	40.4	44.9
28												39.0	38.9	41.9	40.5	38.6	36.0	34.3	35.6	34.2	33.6	33.0	32.3	31.4	30.4	30.1	29.9	28.5	29.4	29.2	29.6	29.9	32.0
29													32.9	33.4	34.9	33.8	32.5	30.5	28.6	29.7	28.4	27.8	26.4	26.3	25.3	24.0	22.7	22.7	22.3	22.7	22.1	22.8	24.7
30														28.1	27.1	28.8	27.9	26.4	24.8	23.5	23.3	22.6	22.1	21.0	20.3	19.8	18.8	18.3	17.7	17.2	17.6	17.8	18.0
31															22.7	22.5	23.1	21.9	21.0	19.9	17.5	18.4	17.9	17.4	16.2	15.6	15.1	14.2	13.8	13.8	13.5	13.5	13.8
32																18.9	18.0	18.2	17.9	17.4	15.7	14.5	14.8	14.7	13.0	12.9	12.0	11.6	10.9	10.7	10.7	10.8	10.9
33																	14.7	15.0	14.9	14.3	13.9	12.8	11.6	11.7	11.2	10.9	10.0	9.5	9.1	8.9	8.3	8.8	8.3
34																		12.0	11.8	12.5	11.8	11.6	10.2	9.3	9.5	8.7	8.5	7.8	7.7	7.2	7.0	6.8	6.9
35																			10.0	9.7	9.7	9.5	8.5	7.5	7.6	7.4	6.7	6.4	6.1	6.0	5.9	5.8	
36																				8.1	8.0	7.9	8.0	7.3	7.1	6.4	6.1	5.7	5.5	5.4	5.0	4.4	4.8
37																					6.3	6.4	6.6	6.6	6.1	5.4	5.0	4.6	4.4	4.4	3.9	4.1	4.0
38																						5.3	5.0	5.3	5.1	5.0	4.6	3.9	3.5	3.6	3.3	3.3	3.2
39																							4.4	4.2	4.0	4.2	4.3	3.7	3.7	3.3	3.2	2.8	2.7
40																								3.3	3.2	3.3	3.5	3.4	3.3	3.0	2.4	2.7	2.3
41																									2.6	2.7	2.4	2.9	2.8	2.6	2.5	2.0	2.1
42																										2.3	2.1	2.2	2.4	2.2	2.3	2.0	1.9
43																											1.8	1.7	1.9	2.0	2.1	1.9	1.8
44																												1.7	1.7	1.4	1.9	1.9	1.8
45																													1.3	1.3	1.2	1.6	1.5

Source: Statistics Canada, Health Statistics Division and calculations by the author.

Table A3.2 Age-specific First Marriage Rates (per 1000) for Females Cohorts, 1943-1977, Canada

Age	Year of Birth																																				
	1977	1976	1975	1974	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		
	Year of 15th Birthday																																				
	1992	1991	1990	1989	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	1959	1958		
15	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.4	0.6	0.6	0.5	0.6	0.6	1.1	2.0	2.4	2.4	2.7	3.5	3.4	3.3	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		1.3	1.5	1.6	1.8	2.0	2.2	2.4	3.0	3.6	3.9	4.5	4.9	5.8	6.5	7.6	9.1	11.2	13.7	15.5	17.0	18.2	17.3	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			3.1	3.8	4.7	4.6	4.8	5.5	6.0	7.5	8.3	9.4	10.9	12.5	14.9	16.7	19.2	23.2	26.8	32.3	35.2	38.8	40.8	39.0	40.6	38.6	39.7	40.8	41.0	44.8	48.7	45.4	48.5	53.5	56.8		
18				11.0	13.2	15.2	16.0	16.5	18.0	21.5	24.0	25.3	29.1	33.6	37.8	43.8	48.3	52.9	59.8	66.2	75.2	79.5	84.1	89.2	82.4	82.7	82.0	81.7	84.5	88.0	93.6	87.2	86.2	94.3	101.6		
19					21.2	23.4	26.2	29.1	31.2	32.3	37.3	39.9	43.1	48.0	54.5	61.3	67.6	71.4	76.6	82.4	87.9	97.3	102.3	110.6	114.9	108.7	108.7	108.6	110.3	116.5	123.1	109.4	106.7	112.7	122.0		
20						31.3	35.8	40.7	44.9	45.6	47.7	50.3	56.1	59.2	64.2	72.3	77.3	82.9	85.8	88.7	92.5	92.7	103.7	110.4	117.3	124.5	121.1	121.5	126.1	132.8	141.3	124.7	118.5	124.9	125.7		
21							42.1	47.0	53.7	57.1	59.2	59.6	61.2	66.6	70.9	71.9	77.8	79.7	84.4	85.4	87.1	86.3	86.5	96.9	103.4	111.7	119.8	122.2	126.7	134.6	143.0	132.1	122.9	124.5	127.3		
22								50.9	55.6	63.0	64.6	65.8	64.3	66.6	69.6	70.5	71.0	72.6	75.0	74.9	75.9	73.2	73.9	74.4	81.5	85.4	90.8	95.7	96.2	105.8	115.9	105.1	100.7	103.0	104.4		
23									57.3	61.3	66.3	66.6	66.8	64.6	62.7	66.1	65.6	63.9	64.6	63.7	63.5	62.1	59.5	59.9	58.2	63.3	65.2	67.6	70.6	70.1	83.0	76.3	74.1	78.2	78.0		
24										57.0	58.8	64.6	64.4	62.1	58.5	56.4	57.4	55.9	53.5	52.9	50.5	50.6	48.0	45.9	45.4	44.5	48.3	48.5	48.8	49.7	48.4	53.4	50.6	53.6	55.9		
25											53.9	54.2	57.2	56.5	54.4	50.4	47.2	48.1	45.5	42.5	41.3	40.4	39.4	36.9	35.4	34.9	34.3	35.5	35.2	34.9	35.4	36.2	37.7	38.1	39.2		
26												45.0	46.6	48.4	45.9	43.6	39.0	37.9	38.6	35.9	33.9	32.3	30.7	29.2	28.3	26.8	27.2	26.3	26.4	25.2	24.9	26.3	25.0	27.9	28.2		
27													37.9	38.0	39.4	36.0	35.1	31.8	29.5	29.2	28.0	25.9	25.1	23.8	23.6	21.4	20.9	20.3	19.9	19.5	18.4	19.1	18.3	19.4	21.0		
28													31.4	30.3	31.2	29.4	27.4	25.2	22.0	22.6	21.9	20.1	19.1	18.2	17.5	16.4	15.8	15.2	14.7	14.7	15.0	14.3	15.1	14.7			
29														24.3	23.8	24.7	23.2	22.1	19.7	17.1	17.7	16.7	15.8	15.3	14.5	13.6	12.6	12.1	11.8	10.9	11.4	11.4	11.1	11.4			
30															19.9	19.0	19.5	18.8	16.8	15.3	13.7	14.0	13.6	12.1	11.7	11.1	10.5	9.6	9.2	9.1	9.1	9.2	8.7	9.0			
31																15.5	14.5	15.2	14.0	13.1	11.4	10.3	10.4	10.3	9.5	8.8	8.4	7.6	7.4	6.8	7.1	7.3	7.1	7.1			
32																	12.0	11.7	12.0	11.1	10.1	9.0	7.8	8.1	7.8	7.5	7.0	6.4	6.1	5.8	5.9	5.8	5.7	5.7			
33																		9.9	9.4	9.1	8.8	8.1	7.2	6.5	6.6	6.4	5.8	5.4	5.4	4.9	4.8	4.6	4.6	5.1			
34																			8.1	7.9	7.5	6.9	6.3	5.7	5.4	5.4	5.1	4.5	4.3	4.0	3.9	4.0	4.0	4.1			
35																				8.1	6.4	6.3	6.1	5.7	5.4	5.1	4.2	4.2	3.9	3.6	3.2	3.5	3.2	3.4	3.2		
36																					6.4	6.3	6.1	5.7	5.4	5.1	4.2	4.2	3.9	3.6	3.2	3.5	3.2	3.4	3.2		
37																						4.1	3.7	3.8	3.7	3.5	3.2	2.6	2.5	2.2	2.3	2.1	2.3	2.0			
38																							4.1	3.7	3.8	3.7	3.5	3.2	2.6	2.5	2.2	2.3	2.1	2.3	2.0		
39																								3.3	3.1	2.8	3.1	2.8	2.5	2.3	2.2	2.2	2.0	2.1	1.9		
40																									2.6	2.6	2.6	2.2	2.1	1.9	1.9	1.8	1.6	1.4			
41																										2.6	2.6	2.6	2.2	2.1	1.9	1.9	1.8	1.6	1.4		
42																										2.3	2.2	2.0	2.0	1.7	1.6	1.4	1.3	1.3	1.3		
43																											1.7	1.7	1.6	1.6	1.5	1.3	1.3	1.3	1.1	1.2	
44																												1.6	1.5	1.5	1.4	1.3	1.2	1.2	1.1	1.2	
45																													1.3	1.1	1.1	1.1	1.3	1.2	1.2	1.1	1.2
																													0.9	0.9	1.1	1.0	0.9	0.9	0.9	0.9	
																													0.9	0.9	0.7	0.9	0.9	0.9	0.9	0.9	

Source: Statistics Canada, Health Statistics Division and calculations by author.

Table A4. Divorce

Year	Nfld	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alb.	B.C.	Yukon	N.W.T.	Canada
Number of 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	13,898	22,441	2,282	1,836	7,580	9,464	82	76	62,017
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	205	2,281	1,663	18,579	23,640	2,392	1,815	8,882	10,164	117	67	70,430
1983	711	215	2,340	1,942	17,364	23,073	2,642	2,000	8,758	9,347	88	85	68,565
1984	590	195	2,263	1,427	16,845	21,635	2,611	1,988	8,454	8,988	100	74	65,170
1985	561	213	2,337	1,360	15,814	20,851	2,313	1,927	8,102	8,330	96	72	61,976
1986	687	199	2,609	1,729	19,026	27,549	2,982	2,479	9,556	11,299	94	95	78,304
1987	1,117	275	2,759	1,995	22,098	39,095	3,923	2,968	9,535	12,184	142	109	96,200
1988	906	269	2,494	1,673	20,340	32,524	3,102	2,501	8,744	10,760	82	112	83,507
1989	1,005	248	2,527	1,649	19,829	31,298	2,912	2,460	8,237	10,658	82	93	80,998
1990	1,016	281	2,419	1,699	20,474	28,977	2,798	2,364	8,489	9,773	81	92	78,463
1991	912	269	2,280	1,652	20,274	27,694	2,790	2,240	8,388	10,368	67	86	77,020
Mean Duration of Marriage for Persons Divorced in the Year ¹													
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	12.1	12.8	11.1	11.7	11.8	11.8	10.8	11.1	10.5	11.8	11.8	12.6	11.5
1981	11.8	12.4	11.3	11.8	11.8	11.9	11.0	10.5	10.5	11.7	11.2	9.0	11.5
1982	11.7	12.3	11.0	11.8	11.6	11.9	11.2	10.7	10.5	11.8	11.8	11.1	11.5
1983	11.1	12.6	11.0	11.8	11.4	11.9	10.9	10.4	10.6	11.8	11.5	11.2	11.4
1984	11.9	13.2	11.5	12.3	11.5	11.9	10.9	10.9	10.8	12.4	12.3	10.4	11.6
1985	11.4	12.8	11.4	11.9	11.7	12.0	10.7	10.7	11.0	12.3	11.5	10.3	11.6
1986	11.7	12.5	11.3	11.8	11.5	11.7	11.1	10.7	10.9	12.1	11.8	10.9	11.5
1987	11.3	11.7	11.1	11.7	11.3	11.6	10.5	10.4	10.9	11.8	11.7	11.0	11.4
1988	11.7	12.4	11.0	11.7	11.1	11.5	10.6	10.6	11.0	11.7	11.4	10.4	11.3
1989	11.7	11.5	11.3	11.5	11.0	11.3	10.3	10.8	11.0	11.5	11.5	10.5	11.2
1990	11.3	11.9	11.3	11.1	10.8	11.2	10.5	10.6	11.0	11.5	11.4	10.1	11.1
1991	11.5	13.0	11.0	11.5	11.0	10.9	10.3	10.9	10.8	11.3	11.2	9.0	11.0

¹ Excludes divorces for marriages of a duration greater than 25 years.

Note: Divorces by duration of marriage from 1980 are revised.

Source: Statistics Canada, Health Statistics Division and calculations by author.

Table A5. Births and Fertility

Year	Nfld	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alb.	B.C.	Yukon	N.W.T.	Canada
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	372,913
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
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	7,762	1,937	12,533	9,667	92,373	145,338	17,321	16,651	43,351	43,769	480	1,479	392,661
1990	7,604	2,014	12,870	9,824	98,048	150,923	17,352	16,090	43,004	45,617	556	1,584	405,486
1991	7,166	1,885	12,016	9,497	97,310	151,478	17,282	15,304	42,776	45,612	568	1,634	402,528
1992	6,918	1,850	11,874	9,389	96,146	150,593	16,590	15,004	42,039	46,156	529	1,554	398,642
1993 (P)	7,220	1,850	11,820	9,310	94,870	149,970	16,870	15,150	41,730	46,240	510	1,570	397,110
Age-Specific Fertility Rates (per 1,000)													
1990: 15-19	34.3	34.6	32.6	30.5	18.1	21.4	41.0	44.7	36.9	24.2	57.4	95.9	25.5
20-24	83.5	94.6	83.7	91.0	80.3	68.1	97.3	115.0	93.1	78.4	118.7	177.9	79.3
25-29	108.4	142.0	116.2	116.5	128.0	118.8	131.8	142.7	125.2	114.5	116.7	145.7	122.3
30-34	58.1	85.1	75.5	61.0	75.7	89.4	86.6	83.9	87.1	84.4	97.0	97.2	83.0
35-39	16.5	27.1	23.9	15.4	22.4	31.2	28.4	24.2	30.4	30.8	37.6	32.5	27.5
40-44	2.3	3.2	3.2	1.9	2.9	4.5	3.9	2.6	4.0	4.5	4.3	8.3	3.8
45-49	0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.0	0.2	0.1	0.0	0.9	0.1
1991: 15-19	30.8	33.5	31.0	30.8	17.2	22.0	43.9	46.0	38.4	24.9	42.6	110.9	25.7
20-24	80.2	85.1	79.4	89.8	79.9	65.7	96.4	111.0	92.8	76.6	121.0	173.9	77.5
25-29	100.9	136.5	111.2	110.7	128.7	115.8	132.5	140.0	123.8	112.4	130.0	136.6	120.4
30-34	57.7	80.7	69.3	59.8	77.9	90.5	87.8	80.0	86.5	84.8	89.8	101.2	83.6
35-39	16.2	30.5	22.1	15.2	23.0	32.8	27.8	24.8	31.2	30.7	35.0	43.4	28.3
40-44	2.4	3.5	2.9	1.7	3.0	4.5	4.3	3.1	4.2	4.5	7.9	6.2	3.9
45-49	0.2	0.0	0.3	0.0	0.1	0.2	0.2	0.0	0.3	0.2	1.3	0.0	0.2
1992: 15-19	30.4	31.5	30.9	33.9	17.7	22.2	42.8	44.4	36.1	24.1	35.6	94.4	25.5
20-24	74.9	82.4	79.0	83.7	76.5	64.9	92.5	110.3	91.0	75.8	106.2	163.4	75.6
25-29	99.5	138.8	110.1	111.3	128.3	117.4	128.6	140.1	123.7	112.7	113.9	138.1	120.7
30-34	58.4	90.6	71.1	61.6	80.4	93.0	86.9	84.6	89.1	86.7	79.8	96.8	86.0
35-39	15.0	24.4	23.2	17.0	23.9	33.8	29.5	24.6	30.6	31.6	37.3	40.9	29.0
40-44	2.0	4.0	3.1	2.5	3.3	4.9	4.7	3.7	4.5	4.9	8.4	7.8	4.2
45-49	0.0	0.3	0.1	0.0	0.1	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.1

Table A5. Birth and Fertility - concluded

Year	Nfld ¹	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alb.	B.C.	Yukon	N.W.T.	Canada
Fertility Rates by Birth Order (per 1,000 women)													
1990: 1	..	26.5	26.7	24.9	27.1	26.6	28.2	26.3	26.8	25.6	31.7	34.3	26.7
2	..	22.9	19.9	19.2	20.5	20.9	21.8	23.5	23.4	20.4	25.8	30.9	21.1
3	..	11.3	8.2	7.5	7.5	8.6	11.1	13.8	11.2	8.6	10.1	19.0	8.8
4	..	3.9	2.6	2.0	1.9	2.5	4.0	5.5	3.9	2.6	4.1	9.8	2.6
5 +	..	1.8	1.1	0.8	0.7	1.1	2.9	3.4	2.2	1.2	2.1	9.8	1.3
1991: 1	22.2	24.3	24.4	23.9	26.8	25.9	28.3	25.0	26.4	24.9	31.0	34.4	25.9
2	17.5	22.0	18.8	18.6	20.2	20.5	21.2	22.9	22.9	20.0	23.9	31.1	20.6
3	6.5	10.7	8.0	7.1	7.6	8.6	10.9	12.9	11.0	8.7	10.8	18.9	8.8
4	2.0	3.7	2.3	1.9	2.0	2.5	4.3	5.3	3.8	2.5	3.8	11.0	2.7
5 +	0.9	2.0	1.0	0.7	0.8	1.2	3.0	3.3	2.2	1.2	2.2	9.5	1.3
1992: 1	21.4	23.6	24.3	23.7	25.7	25.8	27.1	24.5	25.9	24.9	26.3	32.4	25.5
2	17.5	21.7	19.4	18.7	20.4	21.2	20.5	23.1	22.6	20.2	21.2	26.0	20.9
3	6.4	11.7	7.6	7.1	7.9	8.6	10.7	12.7	10.5	8.5	12.3	17.8	8.7
4	1.7	4.0	2.1	1.9	2.0	2.5	4.3	5.2	3.8	2.5	2.7	11.8	2.6
5 +	0.6	1.8	1.0	0.7	0.8	1.2	3.2	3.4	2.3	1.1	1.6	11.1	1.3
Total Fertility Rate (Women Aged 15-49) ²													
1978	..	2.04	1.75	1.76	1.63	1.63	1.88	2.17	1.88	1.63	1.80	2.90	1.70
1979	..	1.94	1.70	1.75	1.67	1.61	1.86	2.18	1.85	1.63	1.95	3.02	1.70
1980	..	1.94	1.67	1.69	1.62	1.61	1.82	2.13	1.85	1.63	1.79	3.02	1.67
1981	..	1.87	1.62	1.67	1.57	1.57	1.82	2.11	1.86	1.63	2.06	2.83	1.65
1982	..	1.89	1.64	1.66	1.48	1.59	1.80	2.14	1.89	1.65	1.96	2.81	1.64
1983	..	1.83	1.63	1.65	1.43	1.59	1.83	2.10	1.90	1.65	2.16	3.00	1.62
1984	..	1.84	1.60	1.61	1.43	1.62	1.82	2.08	1.86	1.68	2.07	2.80	1.63
1985	..	1.86	1.60	1.57	1.40	1.60	1.85	2.08	1.86	1.65	1.83	2.66	1.61
1986	..	1.78	1.58	1.53	1.37	1.60	1.83	2.02	1.85	1.61	1.92	2.81	1.60
1987	1.53	1.82	1.55	1.51	1.37	1.58	1.83	1.98	1.82	1.60	1.88	2.82	1.58
1988	1.47	1.85	1.57	1.53	1.43	1.59	1.85	1.99	1.84	1.64	1.98	2.90	1.60
1989	1.53	1.83	1.62	1.55	1.53	1.63	1.92	2.05	1.90	1.65	1.85	2.70	1.66
1990	1.52	1.93	1.68	1.58	1.64	1.67	1.95	2.07	1.88	1.68	2.16	2.79	1.71
1991	1.44	1.85	1.58	1.54	1.65	1.66	1.96	2.02	1.89	1.67	2.14	2.86	1.70
1992	1.40	1.86	1.59	1.55	1.65	1.68	1.93	2.04	1.88	1.68	1.91	2.71	1.71

(P) Preliminary.

¹ Births by birth order are only available for Newfoundland beginning in 1991.

² Children per woman.

Source: Statistics Canada, Health Statistics Division and calculations by author.

Table A6. Life Expectancy at Different Ages, Canada, 1991 and 1992

Age	1991 Table (triennial) ¹		1992 Table (preliminary) ²	
	Males	Females	Males	Females
0	74.61	80.95	74.86	81.19
1	74.14	80.42	74.38	80.64
5	70.25	76.51	70.48	76.73
10	65.32	71.57	65.55	71.79
15	60.40	66.63	60.63	66.85
20	55.66	61.74	55.88	61.96
25	50.96	56.85	51.18	57.07
30	46.24	51.96	46.47	52.19
35	41.53	47.09	41.76	47.31
40	36.85	42.27	37.08	42.49
45	32.21	37.51	32.45	37.73
50	27.72	32.87	27.93	33.08
55	23.42	28.37	23.61	28.57
60	19.42	24.06	19.62	24.26
65	15.80	19.96	15.98	20.16
70	12.54	16.12	12.71	16.32
75	9.71	12.59	9.83	12.76
80	7.35	9.51	7.48	9.69
85	5.53	6.97	5.61	7.11
90	4.28	5.07	4.40	5.21

¹ Calculated with the average of deaths in 1990, 1991 and 1992.

² Calculated with the average of deaths in 1991 and 1992.

Source: Calculations by author.

Table A7. Mortality

Year	Nfld	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alb.	B.C.	Yukon	N.W.T.	Canada
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
1984	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	3,718	1,089	7,516	5,496	48,305	70,907	8,819	7,920	13,854	22,997	95	249	190,965
1990	3,884	1,143	7,388	5,426	48,420	70,818	8,863	8,044	14,068	23,577	115	227	191,973
1991	3,798	1,188	7,255	5,469	49,121	72,917	8,943	8,098	14,451	23,977	114	237	195,568
1992	3,798	1,114	7,544	5,609	48,824	73,206	8,980	7,793	14,679	24,615	117	256	196,535
1993 (P)	3,910	1,240	7,500	5,640	51,300	73,600	9,330	8,450	14,780	24,900	120	250	201,020
Infant Deaths (age less than 1 year)													
1978	128	15	149	127	1,126	1,373	225	236	405	472	5	28	4,289
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	784	1,041	146	186	442	423	11	22	3,385
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
1984	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
1989	64	12	73	69	632	985	115	134	325	360	2	24	2,795
1990	70	12	81	71	612	946	138	123	346	344	4	19	2,766
1991	56	13	69	58	577	952	112	126	285	298	6	19	2,571
1992	49	3	71	59	522	886	113	110	304	286	2	26	2,431

(P) Preliminary.

Source: Statistics Canada, Health Statistics Division.

Table A8. Landed Immigrants in Canada by Country of Birth, 1980-1993

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993 ³
Europe	40,210	44,784	44,356	23,664	20,581	18,530	22,518	36,486	39,187	50,844	50,561	46,651	43,338	44,713
British Isles ¹	16,445	18,912	14,525	4,945	4,657	3,998	4,612	7,650	7,906	7,358	6,897	6,383	5,831	5,767
Portugal	4,222	3,292	2,308	1,373	869	917	1,981	5,904	6,294	7,952	7,740	5,837	2,700	1,455
France	1,461	1,681	1,821	1,237	970	994	1,124	1,486	1,819	2,128	1,996	2,619	3,105	3,324
Greece	1,044	924	884	617	578	579	555	750	595	798	604	618	593	533
Italy	1,873	2,057	1,496	879	892	733	785	1,123	961	1,204	1,066	775	663	673
Poland	1,395	4,093	9,259	5,374	4,640	3,642	5,283	7,132	9,360	16,042	16,536	15,737	11,918	6,879
Other	13,770	13,825	14,063	9,239	7,975	7,667	8,178	12,441	12,252	15,362	15,722	14,682	18,528	26,082
Africa	5,383	5,901	5,196	3,913	3,851	3,912	5,189	9,047	9,604	12,482	13,845	16,530	20,113	17,306
Asia	73,026	50,759	43,863	38,183	42,730	39,438	42,417	69,081	83,283	95,292	113,978	122,228	141,816	147,172
Philippines	6,147	5,978	5,295	4,597	3,858	3,183	4,203	7,420	8,651	11,907	12,590	12,626	13,737	20,098
India	9,531	9,415	8,858	7,810	6,082	4,517	7,481	10,635	11,942	10,738	12,572	14,248	14,228	21,399
Hong Kong (B.C.C.)	3,874	4,039	4,452	4,238	5,013	5,121	4,318	12,618	18,355	15,694	23,134	16,425	27,927	26,772
China	8,965	9,798	6,295	5,321	5,769	5,166	4,178	6,611	7,903	9,001	14,193	20,621	22,160	19,469
Middle East ²	4,665	5,409	5,321	3,964	4,951	5,239	6,947	10,904	12,325	17,697	23,826	25,561	21,816	18,684
Other	39,844	16,120	13,642	12,253	17,057	16,212	15,290	20,893	24,107	30,255	27,663	32,747	41,948	40,750
North America and Central America	9,442	10,183	10,030	10,200	10,223	10,898	12,412	13,691	11,495	11,899	13,042	18,899	18,676	14,247
United States	8,098	8,695	7,841	6,136	5,727	5,614	6,094	6,547	5,571	5,814	5,067	5,270	5,891	6,387
Caribbean, Bermuda	7,515	8,797	8,717	7,258	5,696	6,240	8,948	11,210	9,481	10,967	11,784	13,046	15,142	16,518
Australasia	1,215	1,020	758	394	430	399	449	539	528	634	725	735	918	983
South America	5,381	6,114	6,892	4,825	4,046	4,273	6,546	10,833	7,210	8,595	8,602	10,468	10,240	9,433
Oceania	944	1,024	1,183	720	599	612	740	1,144	1,140	1,186	1,692	2,213	2,479	1,765
Other	1	36	152	-	83	-	-	67	1	102	1	11	120	-
Total	143,117	128,618	121,147	89,157	88,239	84,302	99,219	152,098	161,929	192,001	214,230	230,781	252,842	252,137

¹ Includes England, Ireland, Scotland, Wales and the Channel Islands.

² Includes Turkey, Bahrein, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Saudi Arabia, Syria, Arab Emirates, Yemen Arab Republic and the Democratic Republic of Yemen

³ Preliminary data as of March 11, 1994.

Source: Employment and Immigration Canada, *Immigration Statistics*, annual publication

Table A9. Canadian Population as of July 1st, 1992 and 1993, by Age and Sex
(in thousands)

Age	1992		1993	
	Males	Females	Males	Females
0	206.5	196.7	201.3	191.8
1	207.4	196.3	207.1	197.4
2	207.6	197.5	208.4	197.4
3	199.4	190.3	208.6	198.5
4	193.9	185.7	200.7	191.5
5	195.8	188.5	196.7	188.3
6	202.1	194.1	197.4	190.0
7	202.3	194.0	203.6	195.5
8	200.4	192.3	203.8	195.4
9	199.2	190.8	201.8	193.6
10	199.4	190.8	200.7	192.1
11	200.7	191.8	200.8	192.2
12	200.3	189.8	202.4	193.2
13	196.8	186.5	202.4	191.7
14	195.0	184.7	199.0	188.5
15	196.1	187.2	197.1	186.7
16	199.2	189.6	198.1	189.0
17	200.2	190.6	201.1	191.5
18	194.7	186.5	202.2	193.0
19	198.1	189.5	196.8	189.4
20	203.5	195.7	200.3	192.5
21	213.1	207.7	206.0	199.0
22	216.3	210.5	215.8	211.1
23	214.9	210.2	218.9	213.8
24	216.5	211.9	217.5	213.2
25	223.1	218.4	219.0	214.9
26	237.3	231.1	225.5	221.0
27	256.7	249.4	239.6	233.6
28	266.0	257.4	258.9	251.9
29	270.8	262.7	268.2	259.8
30	269.2	261.5	273.0	265.0
31	272.5	265.2	271.2	263.5
32	268.8	262.6	274.4	267.2
33	263.7	258.3	270.5	264.6
34	262.2	256.6	265.3	260.0
35	256.4	253.4	263.6	258.2
36	247.1	244.5	257.6	254.7
37	245.3	244.5	248.3	246.0
38	237.0	237.8	246.4	245.8
39	227.8	229.0	237.7	239.0
40	223.1	221.6	228.5	230.1
41	220.3	218.3	223.7	222.5
42	217.3	213.9	220.9	219.1
43	213.7	211.6	217.8	214.6
44	213.8	210.1	214.2	212.2
45	214.1	211.0	214.2	210.6
46	186.2	182.9	214.5	211.5

Table A9. Canadian Population as of July 1st 1992 and 1993, by Age and Sex
(in thousands) - Concluded

Age	1992		1993	
	Males	Females	Males	Females
47	173.8	170.6	186.3	183.3
48	168.3	166.1	173.7	170.8
49	163.3	161.1	168.2	166.3
50	152.5	150.5	163.2	161.3
51	146.3	145.2	152.2	150.6
52	137.9	136.5	146.1	145.5
53	133.9	133.1	137.6	136.8
54	129.0	128.1	133.6	133.4
55	124.7	125.0	128.7	128.4
56	125.5	125.9	124.3	125.3
57	123.1	123.8	124.9	126.1
58	120.9	121.2	122.5	124.0
59	122.9	124.6	120.1	121.2
60	123.7	125.4	122.1	124.4
61	121.7	126.0	122.5	125.1
62	118.8	124.1	120.4	125.7
63	112.9	120.2	117.5	123.7
64	111.4	120.7	111.4	119.7
65	107.8	119.1	109.7	120.0
66	105.2	120.4	105.8	118.2
67	101.5	118.4	103.1	119.3
68	97.2	116.3	99.3	117.1
69	92.6	113.1	94.7	114.8
70	90.7	112.8	90.0	111.6
71	85.0	107.7	88.0	111.1
72	79.1	101.8	82.2	105.9
73	66.5	88.3	76.3	100.2
74	61.8	82.9	63.7	86.5
75	58.4	80.3	58.9	80.9
76	55.5	78.1	55.3	78.1
77	53.8	77.2	52.3	75.5
78	48.6	72.3	50.4	74.7
79	43.6	65.9	45.4	69.6
80	38.2	60.1	40.4	63.1
81	33.9	55.6	35.2	57.3
82	29.6	49.8	30.9	52.8
83	25.3	44.7	26.8	46.9
84	21.7	40.1	22.6	41.5
85	18.0	35.3	19.3	37.1
85	15.0	31.0	15.7	32.4
87	12.6	27.1	12.8	28.1
88	10.4	23.1	10.7	24.3
89	8.4	19.5	8.7	20.5
90 +	26.7	73.1	28.1	76.8
Total	14,149.3	14,392.9	14,343.1	14,597.5

1992: Updated postcensal estimates.

1993: Preliminary postcensal estimates.

Source: Statistics Canada, Demography Division, Estimates Section.

PART II

THE SANDWICH GENERATION: MYTHS AND REALITY*

Edited by

Gordon Smith and Jean Dumas

The Editor in Chief of the Current Demographic Analysis expresses his thanks to Dr. Geoff Rowe who provided the projections and their analysis, as well as to Alain Bélanger, Thomas Burch, Benjamin Schlesinger, David Paton, Hugues Basque and Josephine Stanic for their comments and assistance.

* From data presented in a paper by J.A. Norland, entitled: *“The Sandwich Generation in Canada - Basic Demographic Characteristics”*

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WHAT IS THE SANDWICH GENERATION?

The sandwich generation, middle-aged people caught between growing children and aging parents, has attracted the attention of the media in recent years. The phrase conjures up an image of someone squeezed from above and below by overwhelming responsibilities but it may, like any metaphor, mislead as much as illuminate. Even so, the phenomenon the phrase refers to is worth examining in so far as that is possible. At any given time the demographic structure of the population separated into parents and children is the result of the past evolution of fertility and mortality, and it gives rise to relations between the two groups which are both unforeseen and unavoidable. In the present context, these parent-child relations have become very sensitive because the incidence of dependence is under increasing scrutiny in Canada as in other industrialized countries. The following text restricts itself to the demographic dimension of the sandwich generation, while at the same time not implying that that dimension should be separated from the social and political issues underlying the phenomenon, of concern to individuals.

To begin with, the expression "sandwich generation" is incorrect. A generation refers to people born at a given time and therefore possessing characteristics in common, stemming from the historical situation, social and economic, which they have experienced. Thus the "lost generation" in Europe is that of people whose future seemed compromised because they reached maturity during the First World War. In the same way, the "baby-boom generation" is that of people born after the Second World War who have distinct experiences stemming from the unusual size of their cohort.

In fact "sandwich generation" designates more a large group of middle-aged people, constantly being renewed, and in this sense designates more a part of the life cycle than a true generation. It is difficult to know if those who use the term believe that these people's lives are unusual compared to those of the older people who preceded them, or whether they expect that those who follow them will bear much the same burden. Depending on who uses the term, the concept is sometimes restricted only to those experiencing particular difficulties because of their simultaneous obligations toward their children and their parents, and is sometimes extended to everyone experiencing the everyday situation of having children and aging parents.

The terms "bridge generation" or "hinge generation", although hardly more apt, better express the idea of a group of people bridging the aging and the rising generation, without implying anything about the stress linked to the situation. In the following text the terms "bridge generation" and

"sandwich generation" will be used interchangeably without regard to the question of stress.

The Sandwich Generation as Process

In the early years of their life people are dependent on others, then have children in their turn; if they live long enough, they will see the latter bear their grandchildren. This natural process has two consequences that every society deals with in its own way. First, it creates extended periods of dependence or frailty which require support and care. Second, it makes it necessary to pass on the society's resources, possessions and culture from one generation to the next. Children must be socialized and younger adults must be given the tools and possessions that the older generation is relinquishing.

The schema is a general one and not every individual goes through every stage of the process. In societies with high mortality, children may not live to have children of their own. The other side of the coin is that some adults who themselves have aging parents might have no children. *Where the expectation of life is low, some adults who have just begun having children of their own might have already lost their parents.* It has been estimated that, in 18th-century France, half of people aged 40 would have had no living parents or grandparents.¹ In such a case, the younger that people marry and have children, the more likely the grandparents of those children will still be alive.

The size and structure of the sandwich generation are constantly changing. Each depends on the ages at which people have children, separations and divorces, and remarriages. Also affecting them is the age at which children leave the family home and in certain cases return, and the expectation of life at different ages. Finally, sickness and disability theoretically affect the likelihood that both the children and the parents of a middle-aged person will be dependent at the same time.

Certain factors are predictable while others are much less so, thanks to the constant flow of people into and out of the group. The same person, moreover, can enter or leave the sandwich generation more than once. For example, given that it is necessary to have at least one parent aged 65 or older to be a member of the group, a person whose father has just died at the age of 70 and whose mother is 64 suddenly ceases to be a member of the sandwich generation, but will resume membership next year when his or her widowed mother turns 65.

¹ Hervé Le Bras and Kenneth W. Wachter, "Living forebears in stable populations," in K.W. Wachter et al., eds., *Statistical studies of historical social structure*, New York: Academic Press, 1978, p.178.

In the second part of the text the importance of changes in the size and structure of the sandwich generation will be evaluated. Before describing the current situation, we note that the interest of the subject from a demographic point of view arises from the fact that, among other things, the expectation of life is increasing, the expectation of disability-free life is increasing more slowly, fertility is stable at a low level, the age of childbearing is increasing, and children are leaving the parental home later. It is the effect of these processes independently of those stemming from socio-economic change that are addressed here.

Appropriate data for the description and analysis of the sandwich generation are very few. As there is much information concerning individuals, it is unfortunate that it cannot be adapted to reflect family relationships. But the author, lacking ideal data, must make the best of what is available.

A Working Definition

It is unusual for a 20-year-old to have a parent aged 65 or over: that parent would have had to be at least 45 when the person was born.² Nowadays it is also not very common for a 20-year-old to have already had their first child. But when people are between the ages of 25 and 30 the chances are rapidly increasing that they will have had their first child, and even that a few of their parents will have begun turning 65. By the age of 35, there begin to be significant numbers who combine these two characteristics. As the age of 35 is considered by psychologists, epidemiologists, sociologists and other scientists as the beginning of a phase of the life cycle, it has been chosen, despite its arbitrary nature, as the lower boundary of the sandwich generation.

As people grow older, their children reach adulthood and leave home, a process that may be complete by the time they (the children's parents) reach 45, but may well continue longer. The probability increases that their parents will have reached the age of 65; of course, the probability is also growing that their parents may die. These contrary flows cause the proportion of adults falling into the bridge generation at any given age first to rise, then to decline virtually to zero by the age of 65, which thus marks the upper boundary of the sandwich generation.

Thus the sandwich generation in terms of Statistics Canada's General Social Survey data is made up of people aged 35 to 64 who have at least one child at home and at least one parent aged 65 or over, who may or may not live in the same household.

² Keeping in mind, however, that a significant number of the current sandwich generation are the younger children of parents who, in the 1950s, were still having children when relatively old!

Obviously this definition is not perfect. Leaving aside the economic aspects of the matter, it excludes without good reason the 30-34 age group. It also excludes dependent children not living with their parents. It implicitly treats persons 65 and over as dependants. Despite these handicaps it has the merit of including the great majority of those who may be faced with the double burden of meeting the needs of their parents and their children. It can be treated as the large majority of those at risk.

The Sample

The description presented in this text is based on data from Cycle 5 of the General Social Survey. This cycle of one of Statistics Canada's major surveys was carried out in 1990 on the topic "family and friends".

The General Social Survey is a telephone survey carried out by Statistics Canada using a stratified random sample of the Canadian population, exclusive of Yukon and the North West Territories, and also excluding full-time residents in institutions. The sample is selected using Random Digit Dialing, and so has the effect of omitting those without telephones, an omission compensated by the weighting system. Cycle 5 was carried out between January and March 1990. A sample of 18,300 households was drawn, and responses were obtained from 74% of them. In each responding household, an individual respondent was randomly selected from among those aged 15 or over. Survey results are weighted to represent the adult Canadian household population.

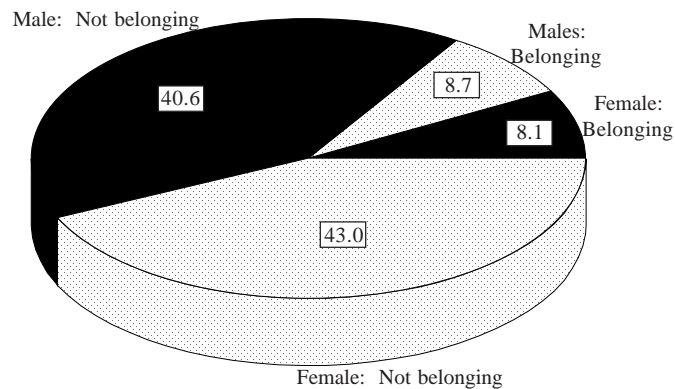
Because they are estimated from a random sample, a quantifiable degree of error is associated with each estimate. No estimate based on fewer than 15 respondents can be considered reliable, hence such population estimates (of less than 25,000) are omitted. Larger estimates also have an error associated with them. For example, in Table A1 in the Appendix, the two estimates of the number of men and women aged 35 to 64 in the Canadian population (1,707,000 and 1,659,000) should not be considered exact. They lie in the interval 1.6 to 1.8 million and are not significantly different from each other.³

Number and Distribution by Age and Sex

Canada's total population was 27.5 million in 1990. The estimate for the adult population (15 or over) derived from the General Social Survey for the same year is 20.5 million. *The bridge generation constitutes only*

³ This is known as the 95% confidence interval. Its interpretation is that, if the value of the variable in the population is as cited, then this random sample, if repeated a large number of times, would yield estimates of which 95% would fall in the interval. For further information see Susan A. McDaniel, *Family and Friends*, ("General Social Survey Analysis Series", Statistics Canada Catalogue 11-612E, No. 9), Ottawa: 1994.

Figure 1. Population Aged 15 +, Belonging and Not to the Sandwich Generation, by Sex (in percent), Canada, 1990



Source: Table A1.

a minority of the adult population, although certainly not a negligible one (16.4%). In the age groups where the bridge generation is by definition found, those aged 35 to 64, its share rises to over a third (37%) (Table A1).

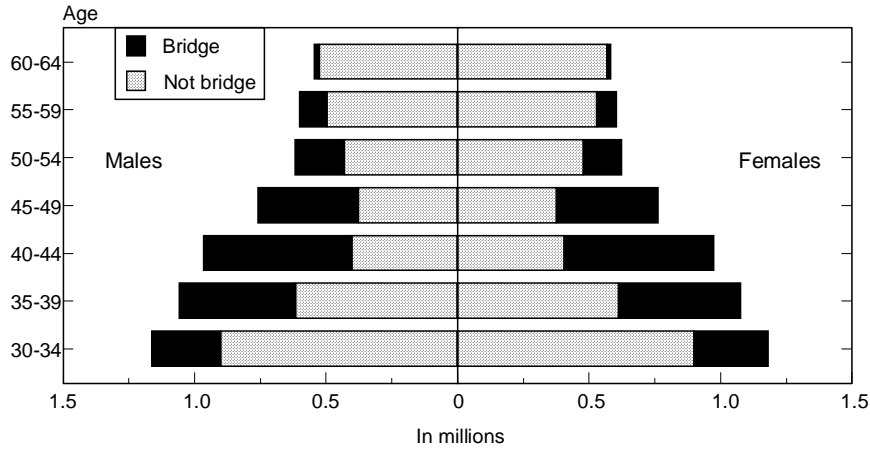
Figure 1 shows a slightly larger adult female population than adult male population (51% vs. 49%). This is due to the greater life expectancy of women (80.5 years at birth in 1990, 6.6 years more than that of men); for the same reason women make up 58% of the population aged 65 or over.⁴ However, this has no effect on the corresponding percentages in the age groups represented in the bridge generation.

If over a third of Canadians aged 35 to 64 are included in the bridge generation, they do not represent a third of each of the 5-year age groups between 35 and 64, as Figure 2 shows. People aged 40 to 44 are overrepresented in the bridge generation (58%), as are the age groups immediately above and below them. It is unusual for someone in the 60-64 age group to have surviving parents and also unusual for them to have children still at home. But it is exceptional to combine the two characteristics and so satisfy the definition of member of the sandwich generation. Those who possess these two characteristics in the 30-34 age group and so could have been taken into consideration make up 23% of their age group.

Among all those aged 35 to 64, whether or not they belong to the sandwich generation, men and women are equally represented in each age

⁴ Life expectancy: Jean Dumas, *Report on the demographic situation in Canada 1993*, ("Current Demographic Analysis" series, Statistics Canada Catalogue 91-209E), Ottawa, 1994, Part I, Table A6; population aged 65+ by sex: *Revised intercensal population and family estimates, July 1, 1971-1991*, (Statistics Canada Catalogue 91-537), Ottawa, 1994, Table 1.2.

Figure 2. Age Pyramid of the Population Belonging and Not to the Sandwich Generation, Canada, 1990



Source: Table A2.

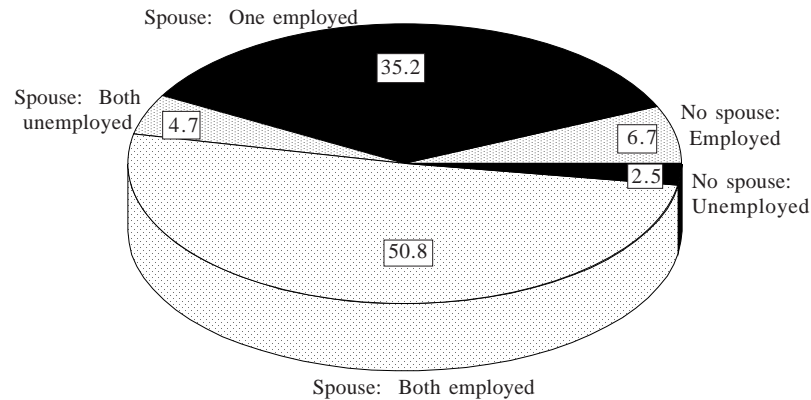
group until 60-64, where women are slightly more numerous (Figure 2). This reflects in part the higher mortality of men compared to women.⁵ The picture is not the same for the members of the sandwich generation. Although men and women are about equally represented at the younger ages, men outnumber women beginning in the 50-54 age group; men make up 58% of the members of the sandwich generation aged 55-59. This anomaly is explained by the fact that women are younger on average than their husbands: fewer women aged 50-64 (and their older husbands) still have children young enough to be living at home than men of the same age, whose wives are younger.

Other Characteristics

Figure 3 shows that almost all (90%) are living with a spouse or partner, and in a large majority of cases at least one of them is employed; for half of them, both spouses are employed. This observation, which reflects the fact that the members of the bridge generation are at the most productive stage of the life-cycle, as well as the presence of a larger number of women than ever before in the labour force, has obvious implications for their ability to support dependants. First, they are as well placed financially as they will probably ever be, but, second, they also have the least time to devote to supportive activities.

⁵ Dumas, *op. cit.*, Part I, Table A6.

Figure 3. The Sandwich Generation, All Ages, by Presence of Spouse and Employment Status¹ (in percent), Canada, 1990



¹ Excluding those with employment status not stated.

Source: Table A3.

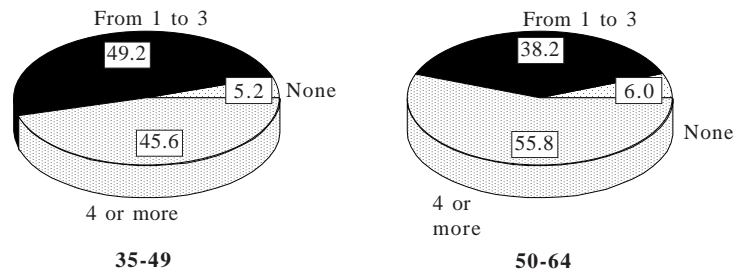
The present members of the bridge generation were born between 1926 and 1955, a period of high fertility relative to what has prevailed since the end of the baby boom. The total fertility rate⁶ in 1926 was 3.4 live births per woman, falling to 2.6 in the middle of the Great Depression and rising again to 3.8 in 1955. Figure 4 illustrates *a consequence of this greater fertility, the large number of surviving brothers and sisters that present members of the bridge generation have. Very few have none, and about half have four or more. By contrast, the 1990 total fertility rates for children of specific birth orders imply that only about one in five children born that year will, when they are adults, have four or more surviving brothers or sisters.*⁷

Respondents aged 50 to 64 report more living brothers and sisters than those aged 35 to 49, despite the fact that fertility rates were not necessarily higher in 1926-40 than in 1941-55, and despite the fact that death should have begun reducing their number. This is due to the fact that, concurrent with the existence of many childless couples, large families were more common in the earlier than the later period; during the baby boom, the total fertility rate was significantly higher than the completed fertility of the cohorts involved.

⁶ An estimate for a given year of the average number of live births per woman at the end of childbearing, based on the assumption that women experience, throughout their reproductive years, the age-specific birth rates prevailing in the year. This rate must be 2.1 in the long run if a population is to maintain its size through natural increase (two children to replace the parents, and a fraction of a child to compensate for mortality before the completion of childbearing in the children's generation).

⁷ Calculation based on data in Dumas, *op. cit.*, Part I, Table 13.

Figure 4. The Sandwich Generation by Broad Age Groups and Number of Siblings (in percent), Canada, 1990



Source: Table A4.

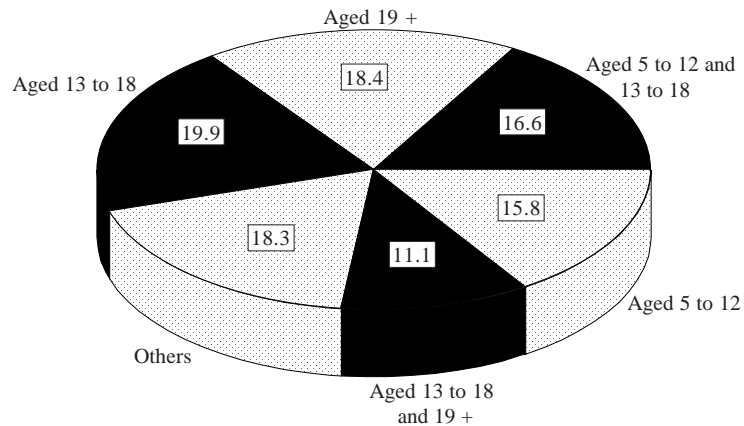
The underlying tendency toward a smaller family size has *a priori* an important effect on the circumstances in which the elderly must organize their lives. ***Formerly, without today's well-developed social services, most elderly people depended on their numerous offspring. In future many will be in a very different situation.*** For the same reason, middle-aged adults themselves will have fewer brothers and sisters with whom to share the burdens which may result from the aging of their parents and from their young children born relatively late.

PARENTS AND CHILDREN OF THE SANDWICH GENERATION

The sandwich generation is characterized by having elderly parents and children at home, and there is a tendency to stress the potential for dependence that this creates. It is not illogical to see a relationship between the age of parents or children and the burden they might represent. For children, the burden in terms of time and energy is certainly heavy up to the age of 5, and financially in late adolescence. As for parents, the large majority commonly retain their independence until a very advanced age, and are even able to assist their adult children. Among people aged 65 to 84, very few have been institutionalized and of those in households fewer than two in five report any kind of disability. Even among people aged 85 or over, only a third are institutionalized and of those in households only half report any kind of disability.⁸ Severe dependence is thus relatively uncommon, and restricted to relatively brief periods. It is, however, possible to use the age groups 4 or under for children and 85 or over for parents as indicators of burden on members of the bridge generation.

⁸ *Health and Activity Limitation Survey 1986-87: Highlights: Disabled persons in Canada*, (Statistics Canada Catalogue 82-602), Ottawa, 1990, Tables 1.1 and 1.2. Someone is defined as having a disability if they have at least some difficulty performing any of 17 specified activities of daily living.

Figure 5. The Sandwich Generation, All Ages, by Age Group of Children (in percent), Canada, 1990



Source: Table A5.

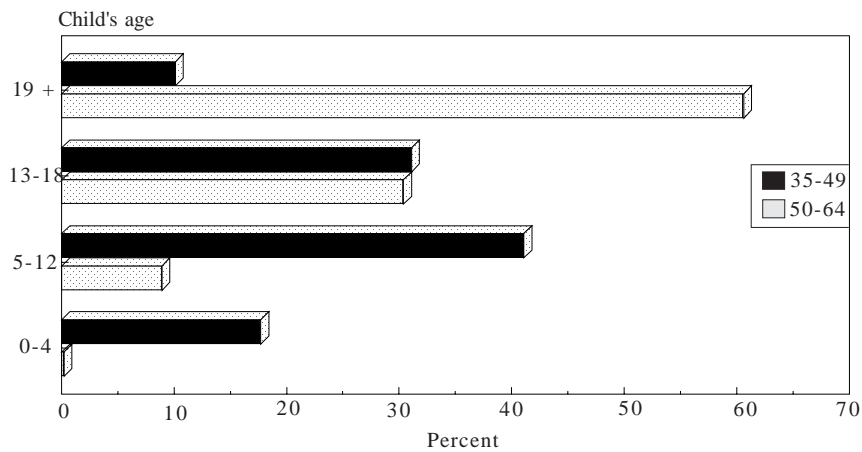
Their Children

The members of the sandwich generation belong to different age groups, their children may be of any age, and they can have one or more of them; taking into account only the question of children, the range of possibilities is quite large. Simplification is therefore necessary to give a view of the whole. Only the presence or absence of a child in each of four broad age groups⁹ (less than 5 years, 5 to 12 years, 13 to 18 years, 19 years or over) has been taken into account. It is thus not possible from these statistics to determine the number of children of each respondent. All that is known is whether there is a child in one or more age groups. Five categories only of members of the sandwich generation in terms of the presence of children, as illustrated in Figure 5, represent at least 8% of members. The other categories have been grouped into the class "Other", which represents less than a fifth of the whole. Those who have children aged under 5, for example, are classified in the category "Other".

In most cases the members of this generation have children who are relatively grown; no category involves people who have only children under 5, and the second largest category is composed of people with solely adult children. Given the age of the members of the bridge generation (at least 35), these results are hardly surprising, any more than the relationship between the age of children and the age of their parents: only a quarter

⁹ There can be more than one child in each age group.

Figure 6. The Sandwich Generation by Age Group of Youngest Child, by Broad Age Group of Generation Member, Canada, 1990



Source: Table A6.

of 35-to-49-year-olds have an adult child at home, compared to four-fifths of those aged 50 to 64. And almost all those who have a child under 5 are aged 35 to 49.

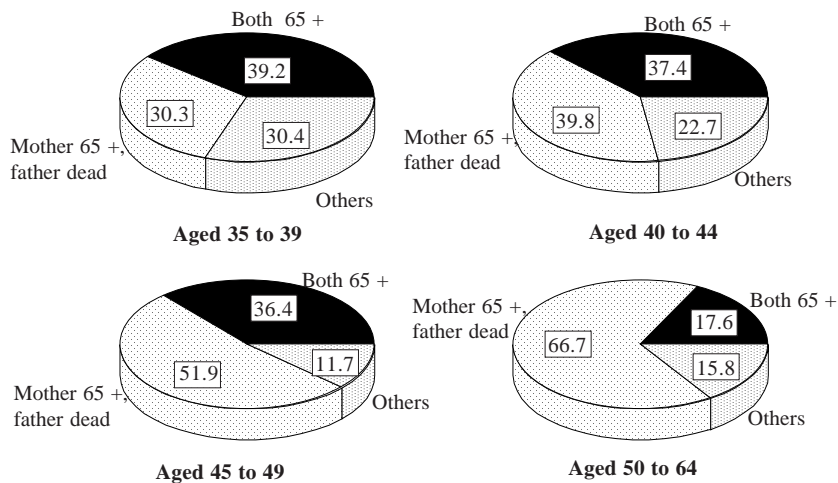
The distribution of members of the sandwich generation according to the age group into which their youngest child falls reveals just how close is the relationship between the age of children and the age of parents (Figure 6). For younger members of the bridge generation (35-49 years old), the distribution peaks for those whose youngest child was aged 5 to 12, but only 41% actually fall into this group. The distribution for older members of the sandwich generation stands out in comparison: 61% of them have no child younger than 19.

Their Parents

By definition members of the bridge generation have at least one parent aged 65 or over. As Figure 7 shows, most either have two parents both aged 65 or over, or a mother aged 65 or over and a father who has died, whatever their own age.¹⁰ Of course, as the bridge generation ages, the proportion whose father has died increases steadily. For those aged 50 and over, the proportion having both parents still alive declines sharply. The relative

¹⁰ For both parents, the category "dead" in fact includes some cases of "unknown".

**Figure 7. Sandwich Generation by Age Group of Member and Age of Parent(s)
(in percent), Canada, 1990**



Source: Table A7.

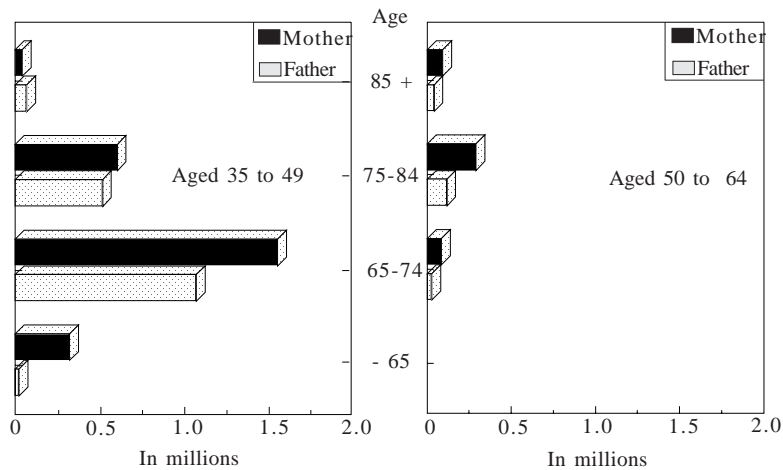
stability of the proportion in the younger age groups (35-39 to 45-49) with both parents alive and aged 65 or over is maintained by an inflow of younger mothers turning 65 which balances fathers who die.

For a more detailed description of the age distribution of parents, the age groups 65 to 74, 75 to 84, and 85 and over are used, representing people who differ, for example, in the risk of disability and institutionalization. When data on the age and sex of parents are broken down between younger and older members of the bridge generation, the results are unsurprising (Figure 8). Younger members of the bridge generation have younger parents; older members not only have older parents, but far fewer surviving fathers. At the same time, even for people aged 50 to 64, it is uncommon to have very old parents, aged 85 or over, since mortality rates after age 80 are high. In terms of young parents, it is far commoner to have a mother than a father under 65; this, once again, is a reflection of the fact that women generally marry men older than themselves.

In fact, there is a certain homogeneity in the age structure of the sandwich generation, its children and its parents; *the common view that membership in this generation brings with it a high risk of having to support a heavy burden of dependence seems thus not to have a demographic foundation.*¹¹ *Two members out of three of this group do*

¹¹ Other factors, however, political and economic, could be involved.

Figure 8. The Sandwich Generation by Age Group of Parents by Broad Age Group of Generation Member, Canada, 1990



Source: Table A8.

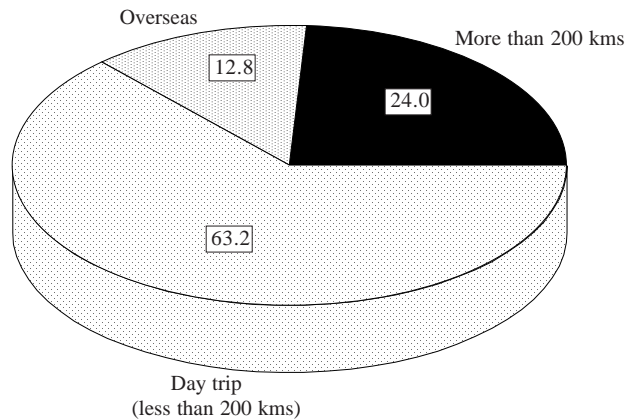
not have children or parents in the age groups most associated with dependence: children under 5 and parents aged 85 or older; and are at the same time themselves still relatively young, 35 to 49.

Contact With Parents and Supportive Activities

Seniors are often stereotyped as people requiring help. Data from the 1987 Health and Activity Limitation Survey cited above qualify that perception: while many do have disabilities, especially among the very old, the majority, even among the very old, are able to live independently. Data from the 1985 General Social Survey provide further information on the health status of the elderly who are not institutionalized. About one out of five people aged 65 or over and living in a private household reported that they had been hospitalized at some time in the previous 12 months. At its highest, among men aged 75 to 79, a quarter reported being hospitalized. About one out of five men and one out of three women aged 65 or over and living in a private household reported more than a slight activity limitation. At its highest, among women aged 80 or over, half reported more than a slight activity limitation.¹² Of course, these data refer to the population living in households: people with major disabilities are

¹² Bertrand Desjardins, *Population ageing and the elderly*, ("Current Demographic Analysis" series, Statistics Canada Catalogue 91-533E), Ottawa, 1993, Tables 43 and 44.

Figure 9. The Sandwich Generation, All Ages, by Distance Between Its and Its Parent's Household (in percent), Canada, 1990



Source: Table A9.

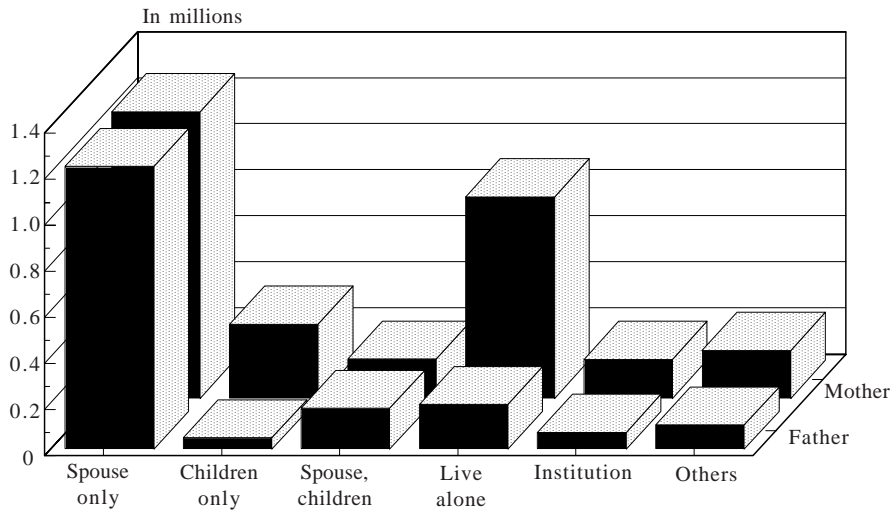
liable to be institutionalized. At the same time, the majority of the elderly population is not institutionalized.

About 3% of the bridge generation have their parents living with them. These people correspond most closely to what is popularly thought of as the sandwich generation. The majority of those who live in a different household do not live very far from their parents (Figure 9). Almost two-thirds live close enough to be able to visit them and return home the same day (less than 200 kms). Only 13% of the members of the sandwich generation, presumably mostly immigrants, have their closest parent living overseas.

It is worth considering the structure of the households in which parents live because it is related to the issue of the sort of help that those parents can expect to receive. In fact, as Figure 10 indicates, the commonest situation is for the parents to be living together without other people in the household. The situation, however, depends on the sex of the parent. Fathers almost all live with their wives; mothers, in contrast, are almost as likely to live by themselves in their own household as with a husband, another reflection of the fact that men generally marry women younger than themselves, as well as of their lower expectation of life. Other situations, including living in a nursing home or other institution, are uncommon.

Most people keep in touch with their parents. They see them at least once a month if they live near them, and either see them or write or telephone at least once a month if they live further away (Figure 11). However, if

Figure 10. Who the Mother and Father of the Sandwich Generation Live With, Canada, 1990

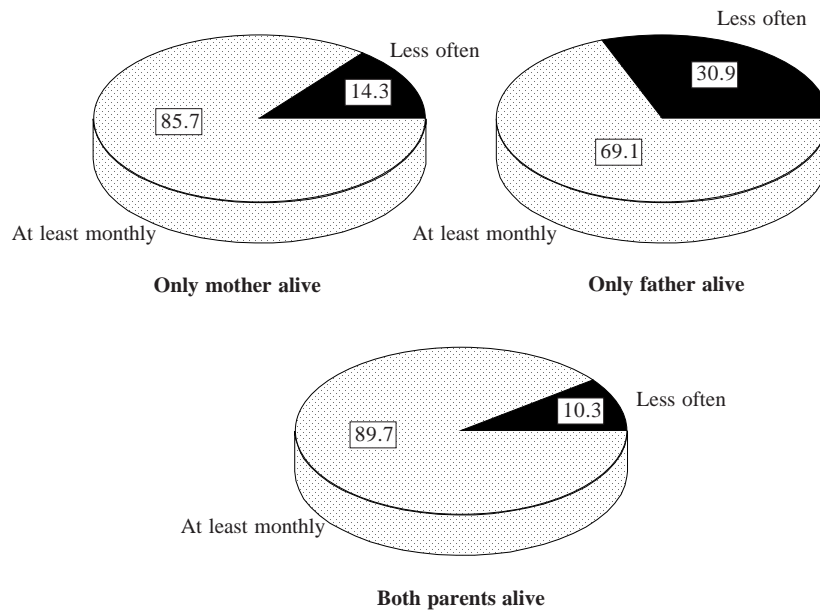


Source: Table A10.

only their father is alive, they are somewhat less likely to keep in touch with him than they are to keep in touch with their mother, if only she is still alive, or with both parents. This propensity to keep in touch with mothers is evident also in the fact that, even if they see them often, people are somewhat more likely to say that they would like to see their mother still more often than they are to say the same about their father.

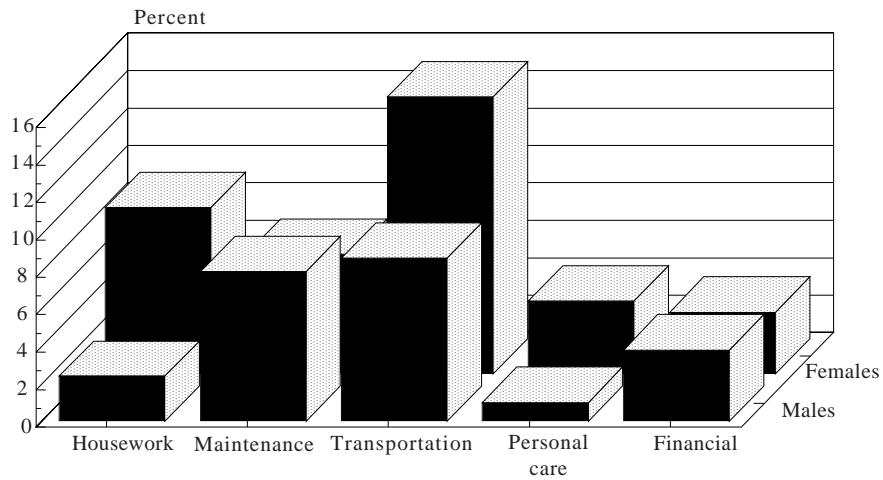
Generalizing from individual cases has suggested that members of the sandwich generation have a great many tasks that they must perform on behalf of their parents. The survey data do not bear out this perception. They suggest that relatively little immediate assistance is provided (Figure 12). The most common service provided is transportation, and that is provided by a minority (14.8% for females and 8.7% for males); personal care, such as help bathing or dressing, is the least likely to be provided. Even when people who provide any of the five specific kinds of assistance are considered, numbers remain small, never as much as a quarter of the sandwich generation. It must be remembered, however, that much of the support between the generations, especially in the area of emotional support, is provided as part of ordinary socializing: taking people out to dinner, giving them presents on their birthday or Mother's or Father's Day, etc.; and is not explicitly considered as support or assistance. The substantial amount of contact between members of the bridge generation and their parents

Figure 11. The Sandwich Generation, All Ages, by Frequency of Contact¹ with Parents (in percent), Canada, 1990



¹ All types of contact.
Source: Table A11.

Figure 12. The Sandwich Generation, All Ages, by Sex of Generation Member and Type of Aid Provided, Canada, 1990



Source: Table A12.

becomes relevant in this context. It should also be noted that members of the bridge generation acknowledge receiving support from their parents, although less frequently than the support they provide their parents.

On the other hand, *the traditional responsibility of women to provide help to family members is borne out by the data*. Even in the spheres that are traditionally male, house maintenance, transportation and financial assistance, women are almost as likely to help as men or, in the case of transportation, more likely. Men, in contrast, continue to avoid the traditionally female spheres, such as housecleaning or personal care.

As one might expect, people who live close to their parents provide more help. The causal direction of these variables is ambiguous. It may be that proximity makes it more convenient to rely on family help than on other forms of assistance. It is equally possible that parents and adult children live close together so that needed help can be provided more conveniently.

Although few people provided any of the five specific kinds of help, this does not necessarily mean that parents were not receiving the help they needed. First, as already mentioned, most parents probably had little need of assistance. The 1986-87 Health and Activity Limitation Survey found that, out of the half of people in households aged 65 or over who reported any disability, a third of them (a sixth of the total) needed help with everyday housework (the commonest need) and 12% needed help with personal care. Of those who needed help in these two areas, three out of five received it from family members, while one in seven failed to be helped by someone.¹³

THE FUTURE OF THE SANDWICH GENERATION

The evolution over the next few decades of such factors as the average age of childbearing, life expectancy, and the propensity of young adult children to leave or remain in the parental home will affect the size and structure of the sandwich generation. The most important factor is the momentum of the baby-boom generation, which will continue to swell the ranks of the age groups of the sandwich generation. In order to measure these changes and compare the relative effect of different factors, it is necessary to project the population under precisely defined conditions, not for the purpose of predicting the future but in order to explore interrelationships among the factors.

Projecting the bridge generation requires more than a population projection. It requires a projection of the links between adults and their parents and children, information not available through standard population-projection techniques. Neither the time nor the resources were available

¹³ *Health and Activity Limitation Survey 1986-87, op. cit.*, Table 3.

to undertake a simulation exercise, but an adequate alternative could be based on the information on family relationships provided by the 1990 General Social Survey. This alternative has the defect of limiting the scope of the projection: since the youngest respondents in the survey were aged 15 in 1990, and since 35 is the youngest age of a member of the bridge generation, the furthest a projection can be made is to the time when those 15-year-olds turn 35, i.e., 2010.

Even with the information available, projecting the bridge generation is a complex task. To find its members in 2010, it is necessary to identify at least one surviving parent in the proper (elderly) age category for each person who will be in the proper (middle-aged) age category in 2010, and at least one child already alive in 1990 or born between 1990 and 2010, who is still alive in 2010 and who has not meanwhile left home, or who has returned home. Cycle 5 of the General Social Survey provides information on people aged 15 to 44 in 1990, who will be 35 to 64 in 2010, including whether they have a parent aged 45 or older (who will be 65 or older in 2010, if they survive) and whether they have already borne a child. To determine the number of 35-to-64-year-olds in 2010 who are and are not members of the sandwich generation, it is therefore only necessary to know a few probabilities about people aged 15 to 44 in 1990:

- 1) the probability of their surviving to 2010;
- 2) the probability of a parent aged 45 or older in 1990 surviving to 2010;
- 3) the probability of their having children between 1990 and 2010;
- 4) the probability of these children, as well as any they already have, surviving to 2010;
- 5) and finally the probability of children leaving home.

Other factors are also involved, although not as directly: immigration and emigration will have an obvious effect, as will the formation and dissolution of marriages and common-law relationships, because they affect where children live, including those from previous unions.

The projection to 2000 and 2010 described here has been simplified in several ways. The most important is its limitation to women. This was done because women are more likely to retain custody of a child on the breakdown of a marital union, so that it is possible to ignore the formation and dissolution of marital unions. (At the same time, it is expected that a projection for men would have results very like those for women.) Further, the projection was carried out without including international migration and without taking into account short-term movements of children into and out of the parental home.

Survival rates for women and their parents are approximated by 10-year and 20-year survivorship ratios from preliminary 1991 life tables, while births were found using 1991 age-specific fertility rates. The probability of children surviving was estimated from the 1991 life tables and the probability of their remaining at home or leaving was estimated from 1981, 1986 and 1991 census data on children in families. These three parameters, mortality rates, fertility rates, and child-separation rates thus constitute the three factors that can be used to test the sensitivity of the projection, i.e., the degree to which changes in the size and structure of the population respond to changes in these factors.

A projection using the above three assumptions produces a 23% increase in the number of women aged 35 to 64 in 2000 compared to 1990 and a further 7% increase between 2000 and 2010. ***In the first decade the number of women in this age group who belong to the bridge generation increases more rapidly than the total age group. The number of women in the bridge generation increases by 30% between 1990 and 2000, while, as just noted, the number of women of their age increases by only 23%.*** However, during the second decade, growth slows sharply and the positions reverse: the sandwich generation grows by only 4% while the age group grows by 7%.

In Table 2, the bridge generation in 2000 and 2010 is decomposed into a part representing what it would be if it had not grown since 1990, a part representing the increment due to population growth in the age groups 35 to 64, and "sandwich growth", representing the increment due to the growth of the bridge generation in excess of population growth. It shows the relatively small share due to changes in family structure of the bridge generation alone.

It is important to gauge how sensitive this projection is to its component factors, changes in mortality, fertility, and children leaving home. This was done by repeating the projection for four different scenarios and comparing them to the above baseline case.

Changes in Mortality

In one scenario, mortality rates were decreased uniformly by 15%. This produced virtually no change in the proportion of women with children at home compared to the base projection (Table 1), but a further slight increase in the proportion of women with at least one parent aged 65 or over, and therefore a slight increase in the sandwich generation. Of course, it was also the only scenario to produce an actual increase in the number of women aged 35 to 64.

Changes in Fertility

In the second scenario, fertility rates were increased uniformly by 15%. This resulted in a small increase in the proportion of women with children

Table 1. Proportion of the Female Population Aged 35-64 with Child at Home and at Least One Parent Aged 65 or Over, Canada, 1990 and Projected to 2000 and 2010 (Different Scenarios)

Year and Scenario	Female Population Aged 35-64			Total (in thousands)
	With Children in Household		No Children in Household	
	With One or More Parent Aged 65 +	No Parent Aged 65 +		
1990	35.7	22.9	41.4	4,639
2000				
Baseline	37.8	18.6	43.5	5,706
Mortality Decreases 15%	38.8	17.6	43.6	5,722
Fertility Increases 15%	38.5	18.9	42.6	5,706
Children Leaving Decreases 15%	38.9	19.5	41.6	5,706
Mortality Decreases 15% and Fertility Increases 15%	39.4	17.9	42.6	5,722
2010				
Baseline	36.6	18.8	44.6	6,112
Mortality Decreases 15%	38.0	17.3	44.7	6,141
Fertility Increases 15%	38.4	19.6	42.0	6,112
Children Leaving Decreases 15%	37.8	19.8	42.3	6,112
Mortality Decreases 15% and Fertility Increases 15%	39.9	18.1	42.1	6,141

Source: Norland, J.A. (1994), unpublished paper.

at home (although not to the 1990 level), and no change in the proportion with an aged parent (Table 1). In a third scenario, the rate of children leaving home was uniformly decreased by 15%, resulting in a change very like that produced by raising fertility rates. In a final scenario, simultaneous changes were made to fertility rates, increasing them by 15%, and mortality rates, decreasing them by 15%. This produced a somewhat larger effect than separate changes to fertility and mortality, and produced the largest proportion of women aged 35 to 64 in the bridge generation of any of the scenarios.

The overall effect of each of these scenarios on the proportion of women aged 35 to 64 in the sandwich generation was never greater than 3.3 percentage points compared to the baseline case, although produced in some cases by increasing numbers of parents and in others by increasing numbers of children at home. Changes of parameters on this scale operating over a mere twenty years have little practical effect: in 1990, the sandwich generation represents 35.7% of women aged 35 to 64; in 2000 it represents between 37.8% and 39.4%, depending on scenario; in 2010, it represents between 36.6% and 39.9%.

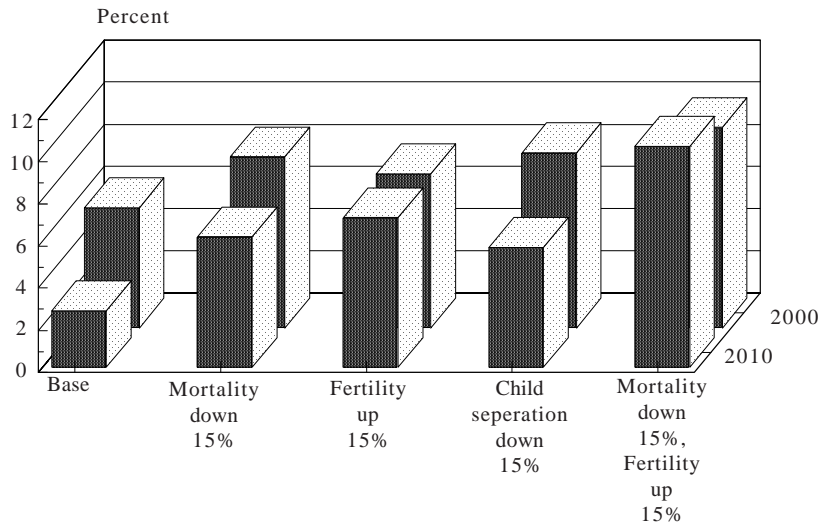
Table 2. Female Members of the Sandwich Generation, Canada, 1990 and Projected to 2000 and 2010 (in thousands)

	2000		2010	
	Number	Percent	Number	Percent
Projected Population	2,159	100.0	2,240	100.0
1990 Population	1,655	76.7	1,655	73.9
Growth	504	23.3	585	26.1
Of which:				
-Due to Demographic Increase	381	17.6	381	17.0
-Due to Changes in Family Structure of the Sandwich Generation	123	5.7	123	5.5

Source: Norland, J.A. (1994), unpublished paper.

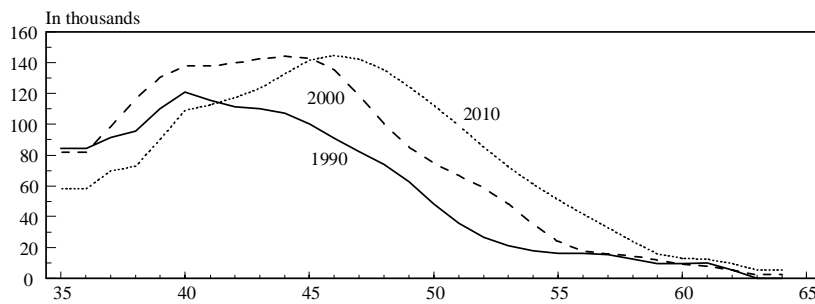
The difference the scenarios make to "sandwich growth", the increment of growth in the bridge generation over and above that due to population growth, is shown in Figure 13. The ranking of components from strongest to weakest in 2000 is children leaving home, mortality, and fertility; in 2010 it is fertility, mortality and children leaving home. *But the basic point remains: the size of the bridge generation depends overwhelmingly on population growth, and change in these demographic factors has by comparison a minor effect.*

Figure 13. Four Scenarios for the Sandwich Generation in 2000 and 2010: Excess Over Population Growth



Source: Table 1.

Figure 14. Sandwich Generation (Female Members Only) by Age in 1990, 200 and 2010



Source: Table A13.

Figure 14 compares the age structure of the female bridge generation in 1990, 2000 and 2010. The effect of the baby-boom generation is obvious. However, its influence is more evident in aging the sandwich generation than in increasing its size. The low fertility of these cohorts means that much of their potential is not realized: if they have few children, the probability of their satisfying the definition of a member of the sandwich generation is necessarily diminished.

CONCLUSION

The phrase "sandwich generation" is a metaphor, and a misleading one. It evokes a picture of people all about the same age, when in reality it refers to no more than the middle-aged, people who can be almost young or almost old. It gives the impression that the experience of these people is somehow unique, when there have always been people who have had to deal simultaneously with aging parents and growing children. It suggests furthermore that a stable group is in question, when in fact its limits are arbitrary and its composition is constantly changing as a function of the changing circumstances of each of its members. Finally, and more particularly, it does not provide a sure indicator of the sources of stress in modern society.

At the same time, like other industrialized countries, Canada is now at a crossroads in demographic and social terms, and the phenomenon of the sandwich generation is an example of the questions this situation raises.

For the first time in human history, the number of elderly persons is approaching that of children in some societies. Social structures, in particular the family, are better adapted to the tasks associated with having dependent children but are less well adapted to those associated with

having dependent parents. The evolution of fertility levels has considerably reduced the number of children that people have, so that there will be fewer to meet their needs when they are no longer capable of doing so themselves. As for adult children, they have already fewer brothers and sisters with whom to share the burden.

At the same time, the system of social security put in place in industrialized countries since the beginning of the century is now being subjected to critical scrutiny. These societies are asking basic questions about the nature of work, the likelihood of sustained economic growth, and the redistribution of wealth, not only between the rich and poor of one country, but between the developed and less developed nations of the world.

None of these questions is peculiar to Canada. All developed societies are experiencing demographic changes, and the debate over fundamental economic and social questions is universal. Answers will be economic, social or political in nature, but the examination of a concrete case like that of the sandwich generation can illuminate the debate.

The size and structure of the sandwich generation are the product of demographic forces, of changes in the rates of fertility, in the mortality of different age groups, in the probabilities of marriage and divorce, and in migration flows. At the same time, the burdens and benefits linked to marriage, to the birth and upbringing of children, as well as to having elderly parents still alive affect at least partially some of the demographic parameters, if only indirectly. ***Over the next few decades, the size of the sandwich generation will increase substantially, but this represents the passage of the baby-boom generation through middle age. The influence of such factors as mortality and fertility is minor in comparison, and would not be much increased even if they were to change significantly.***

It is particularly important to avoid stereotypes. It is easy to associate aging and dependence, but it is an error to do so. Dependence can occur at any age and now becomes common only at very advanced ages. Current data suggest that most people aged 65 or over are independent and in good health. They indicate that these people keep in touch with their adult children and that the help they provide each other is not onerous and meets most of the needs of both generations. At the same time, the data show that women continue, as in the past, to provide more than their share of help, and there are doubtless many instances where this strains their resources of time and energy. That said, although there can be problems of individual stress, there does not now seem to exist a problem at the level of a whole generation.

It is possible that things will change. The proportion of the population finding itself in the sandwich generation will increase, and each member of the generation will have fewer brothers and sisters with whom to share the burden. The demographic aspects of the problem are relatively clear.

The answers will be found in other domains and, by their nature, cannot be simple. It will be the responsibility of future generations to take the necessary decisions when the time comes.

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Appendices

Table A1. Size of the Population Aged 35-64 and of the Sandwich Generation by Reason for Inclusion, Canada, 1990

Sex	Population Aged 35-64			Population Aged 15-34 and 65 +	Total
	With Child in Household		No Child in Household		
	With One or More Parent Aged 65 +	No Parent Aged 65 +			
	(in thousands)				
Male	1,707	1,088	1,756	5,487	10,038
Female	1,659	1,133	1,847	5,848	10,487
Total	3,366	2,221	3,603	11,335	20,526

Source: Norland, J.A. (1994), unpublished paper.

Table A2. Population Aged 30-64 by Age Group and Sex, With and Without Child at Home and at Least One Parent Aged 65 or Over, Canada, 1990

Age	Male			Female			Total
	With Child at Home and at Least One Parent 65 +	No Child at Home or no Parent 65 +	Total	With Child at Home and at Least One Parent 65 +	No Child at Home or no Parent 65 +	Total	
	(in thousands)						
30-34	263	900	1,162	284	900	1,184	2,346
35-39	444	616	1,059	466	613	1,080	2,139
40-44	565	401	966	570	406	976	1,942
45-49	383	376	759	386	378	764	1,523
50-54	188	431	619	147	480	626	1,245
55-59	105	497	602	75	532	607	1,209
60-64	-- ¹	524	546	-- ¹	571	587	1,133
Total	1,970	3,744	5,714	1,943	3,881	5,823	11,537

¹ Fewer than 25,000.

Source: Norland, J.A. (1994), unpublished paper.

Table A3. Sandwich Generation Members With and Without a Spouse by Principal Activity in the Last 12 Months, Canada, 1990

	Population (in thousands)	Percent
Total	3,366	100.0
No Spouse Present		
Work at Job or Business	221	6.6
Kept House	57	1.7
Other	26	0.8
Employment Status Not Stated	22	0.7
Spouse Present		
Both Worked at Job or Business	1,666	49.5
One Worked, Other Looked for Work or Was Student	103	3.1
One Worked, Other Kept House	1,050	31.2
One or Both Retired	80	2.4
Other	74	2.2
Employment Status Not Stated	67	2.0

Source: Norland, J.A. (1994), unpublished paper.

Table A4. Number of Living Brothers and Sisters, by Broad Age Group of Members of the Sandwich Generation, Canada, 1990

Number of Living Siblings	Age Group of the Generation		Total
	35-49	50-64	
	(in thousands)		
None	146	33	179
1	415	80	496
2	546	43	588
3	424	88	513
4	309	71	380
5	286	35	320
6	183	25	208
7	140	33	173
8	94	37	130
9	88	42	131
10+	182	66	248
Total	2,813	553	3,366

Source: Norland, J.A. (1994), unpublished paper.

Table A5. Age Group of Children of Members of the Sandwich Generation by Broad Age Group, Canada, 1990

Age Group of Children	Age Group of Sandwich Generation		Total
	35-49	50-64	
(in thousands)			
0-4 only	168	-- ¹	169
0-4, 5-12	247	-- ¹	247
0-4, 5-12, 13-18	36	-- ¹	36
0-4, 13-18	34	-- ¹	34
5-12 only	514	-- ¹	531
5-12, 13-18	540	-- ¹	559
5-12, 13-18, 19+	64	-- ¹	68
5-12, 19+	38	-- ¹	46
13-18 only	594	77	670
13-18, 19+	280	91	372
19+ only	284	335	619
Total	2,799	552	3,351
All	2,813	553	3,366

¹ Fewer than 25,000.

Source: Norland, J.A. (1994), unpublished paper.

Table A6. Age Group of the Youngest Child of Members of the Sandwich Generation by Broad Age Group, Canada, 1990

Age Group of Child	Age Group of Sandwich Generation		Total
	35-49	50-64	
(in thousands)			
0-4	499	-- ¹	500
5-12	1,156	49	1,204
13-18	874	168	1,042
19+	284	335	619
All	2,813	553	3,366

¹ Fewer than 25,000.

Source: Norland, J.A. (1994), unpublished paper.

Table A7. Age of Parents, by Broad Age Group of Members of the Sandwich Generation, Canada, 1990

Age	Both Parents are 65 +	Only Mother is 65 +		Only Father is 65 +		Total
		Father Not 65 +	Father Dead or Not Stated	Mother Not 65 +	Mother Dead or Not Stated	
(in thousands)						
35-39	357	-- ¹	276	187	83	910
40-44	425	-- ¹	452	139	103	1,135
45-49	280	-- ¹	399	-- ¹	88	769
50-54	80	-- ¹	215	-- ¹	39	335
55-59	-- ¹	-- ¹	124	-- ¹	46	180
60-64	-- ¹	-- ¹	29	-- ¹	-- ¹	37
Total	1,159	-- ¹	1,495	329	360	3,366

¹ Fewer than 25,000.

Source: Norland, J.A. (1994), unpublished paper.

Tableau A8. Age of Parents of Members of the Sandwich Generation by Broad Age Group, Canada, 1990 (in thousands)

Age	Age Group				Dead	Total
	- 65	65-74	75-84	85 +		
Mother						
35-49	323	1,563	607	40	280	2,813
50-64	-- ¹	85	289	91	87	553
Total	323	1,648	897	131	366	3,366
Father						
35-49	-- ¹	1,078	519	67	1,128	2,813
50-64	-- ¹	26	117	41	369	553
Total	-- ¹	1,103	636	109	1,497	3,366

¹ Fewer than 25,000.

Source: Norland, J.A. (1994), unpublished paper.

Table A9. Distance Between the Households of Members of the Sandwich Generation and of their Parents, Canada, 1990

Distance (kilometers)	From Parent's Household	Parents Live Apart or the Other Parent is Dead		Total ²
		From Mother's Household	From Father's Household	
	(in thousands)			
0 to 10	452	492	94	1,038
>10 to 50	209	280	120	610
>50 to 100	101	82	53	236
>100 to 200	105	118	-- ¹	240
>200 to 400	81	123	-- ¹	221
>400 to 1,000	88	108	61	257
>1,000, but in Canada or U.S.	117	146	66	329
Outside Canada and U.S.	154	223	52	430
Total	1,306	1,573	482	3,361

¹ Fewer than 25,000.

² Excludes those whose parents live in the same household as they do, as well as not stated. Where parents have separate households, the distance is to the closest.

Source: Norland, J.A. (1994), unpublished paper.

Table A10. Composition of the Household of the Parents of Members of the Sandwich Generation, Canada, 1990

Composition	Father	Mother
	(in thousands)	
Spouse Only	1,228	1,245
Children Only	50	323
Spouse, Children	178	172
Live Alone	195	877
Institution	74	170
Other	106	210
Total	1,831	2,997

Source: Norland, J.A. (1994), unpublished paper.

Table A11. Frequency of Contact of Members of the Sandwich Generation with their Parents by Distance, Canada, 1990 (in thousands)

	See at Least Monthly	Write or Phone at Least Monthly	No Monthly Contact	Total ³
	Within 50 Kilometers			
Both Parents Alive ²	725	-- ¹	-- ¹	760
Only Mother Alive	671	-- ¹	-- ¹	709
Only Father Alive	131	-- ¹	-- ¹	151
Total	1,527	50	43	1,620
	Over 50 Kilometers			
Both Parents Alive ²	183	438	120	741
Only Mother Alive	125	429	167	721
Only Father Alive	46	58	85	189
Total	354	925	372	1,651

¹ Fewer than 25,000.

² Where parents live apart, the closest parent is taken.

³ Excludes those whose parents live in the same household as they do, as well as not stated.

Source: Norland, J.A. (1994), unpublished paper.

Table A12. Unpaid Assistance Provided to Parents by Type of Assistance, Distance and Sex of Members of the Sandwich Generation, Canada, 1990 (in thousands)

Sex	Type of Assistance					All ²
	Housework	Maintenance	Transportation	Personal Care	Financial	
	50 Kilometers or Less					
Male	33	102	127	-- ¹	25	845
Female	114	77	201	41	-- ¹	774
Total	147	179	328	54	46	1,619
	More than 50 Kilometers					
Male	-- ¹	30	-- ¹	-- ¹	38	815
Female	29	26	38	-- ¹	32	836
Total	36	56	55	-- ¹	70	1,651
	Total					
Male	40	132	144	-- ¹	63	1,660
Female	143	103	239	62	53	1,610
Total	183	235	383	78	116	3,270

¹ Fewer than 25,000.

² Excludes those whose parents live in the same household as they do, as well as not stated.

Note: Where parents live apart, the closest parent is taken.

Source: Norland, J.A. (1994), unpublished paper.

Table A13. Female Population Aged 35-64 in the Sandwich Generation, Canada, 1990 and projected to 2000 and 2010, by Age Group

Age Group	1990	Projection	
		2000	2010
(in thousands)			
35-39	466	510	349
40-44	565	702	595
45-49	410	582	688
50-54	150	284	431
55-59	70	84	166
60-64	25	28	46
Total	1,686	2,190	2,275

Source: Norland, J.A. (1994), unpublished paper.

THE SANDWICH GENERATION

On the Topic

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Glossary¹

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.

¹ For further information consult the following: International Union for the Scientific Study of Population, **Multilingual Demographic Dictionary**, Ordina Editions, Liège, 1980; van de Walle, Étienne. **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 characteristics in a given group of persons.