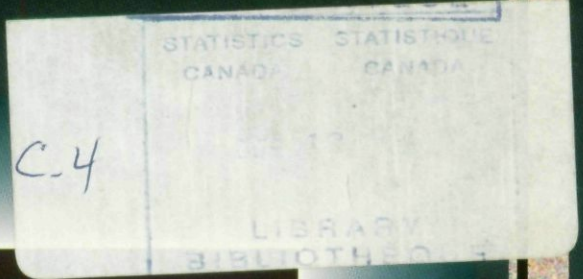


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# Family Income in Canada

F O C U S O N  
C A N A D A



**Focus on Canada**

## **Family Income in Canada**

**By: Abdul Rashid**

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1994  
International Year  
of the Family

## Preface

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**Focus on Canada** is a series of publications portraying the people of Canada. The portrait is drawn through the analysis of the data collected by the 1991 Census of Population and Housing. Each publication examines a specific issue and provides a demographic, social, cultural and economic perspective.

The authors of this series have taken special care to make their analysis informative and easy to read. They make use of descriptive graphs and data tables to more clearly illustrate the information. Often the results are compared to previous censuses, showing how Canada and Canadians have changed over time.

The publications were prepared by analysts at Statistics Canada, and reviewed by peers from within the Agency as well as experts from external organizations. I would like to extend my thanks to all the contributors for their role in producing this useful and interesting publication.

I would like to express my appreciation to the millions of Canadians who completed their questionnaires on June 4, 1991. Statistics Canada is very pleased to be able to now provide this summary of the results. I hope you enjoy reading this study – and the others in this series.

Ivan P. Fellegi  
Chief Statistician of Canada

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## Highlights

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- Adjusted for inflation, real average family income grew by 28.4% in the 1970s but, after going through a decline and recovery cycle, increased by only 7.9% in the 1980s. As a result of declining family size, income available to each family member increased by 46.7% in the 1970s and by 14.5% in the 1980s. The average growth per year was 2.5% in the 1970s, compared with 0.8% per year in 1980s.
- In spite of a 45% increase in the number of families between 1970 and 1990, the number of families with a real total income of less \$20,000 dropped by 6%, while that of families with an income of at least \$100,000 quadrupled.
- Real growth in the average income of husband-wife families amounted to 30.3% in the 1970s and 9.1% in the 1980s. While the average income of male lone-parent families grew by 34.4% in the 1970s, it fell by 1.3% in the 1980s. Respective increases for female lone-parent families were 17.7% and 8.3%.
- Income of wives has been a major source of growth in family incomes. Their contribution toward family income increased from 15% in 1970 to 29% in 1990.
- Family work patterns and family education profiles changed substantially between 1970 and 1990. The proportion of families in which both spouses worked increased from 42.0% to 62.4%, while the proportion in which both had less than secondary school education decreased from 52.2% to 24.2%. The proportion in which both spouses had a university degree increased from 1.8% to 6.4% during the period. Two out of every five dollars of income growth between 1970 and 1990 is estimated to have resulted from changes in work-education profiles of husband-wife families.
- The proportion of lone-parent families increased from 9% in 1971 to 13% in 1991. Male lone-parent families obtained above-average income gains (34.4%) in the 1970s but suffered above-average income losses (5.9%) in the first half of the 1980s which they did not recover in the second half.

- Four out of five lone-parent families were headed by women. In the 1970s, the growth in their average income (17.7%) was significantly below the overall change (46.7%) in family incomes. At \$26,550, average income of female lone-parent families was only a little over half of the overall average family income in 1990. Nearly one-half of lone-parent families headed by women had an income of less than \$20,000 in 1990.
- For the first time, female lone-parent families had a slightly above average increase in their incomes between 1985 and 1990, partly because of increased work activity among the parents and partly because incomes of women grew faster than those of men during this period.
- Three out of five female lone-parent families in 1991 were headed by women under the age of 45. Their average income, at \$20,344 in 1990, was the smallest of all family types. Older female lone-parent families had an average income of \$36,133, of which 45.1% was contributed by children in these families.
- Throughout the period between 1970 and 1990, the 10% of all families at the bottom (the lowest decile) received less than 2% of all income, while the one-tenth at the top received nearly 26%. The 20-year growth in the average income of families in the middle deciles was smaller than it was in both the lower and the higher income deciles.
- The composition of the population in the various deciles changed significantly over the two decades. Female lone-parent families replaced elderly families in the lowest decile, while the elderly families moved up into the second and third deciles. In 1990, both spouses worked in four out of five families in the top two deciles, up from 36% in 1970 to 80% in 1990.
- Government transfer payments played an increasingly important role in augmenting the incomes of families in the lower deciles, as well as in reducing income inequality.
- The 1970s saw families in all provinces and territories gain in income. These gains were above average in the Atlantic and the western provinces. The recession of the early 1980s had a more severe impact on family incomes in the western provinces. As a result of these varying changes, provinces changed ranks by size of average family income. The gap between the regions with the highest and the lowest average family declined by 12 percentage points between 1970 and 1990.

## Introduction

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\* Canadian families experienced large increases in their incomes during the three decades after the Second World War. Growth in family income was significant from year to year. Recently, however, the purchasing power of families has remained constant and indeed has actually declined at times. To place these changes in perspective, this study analyzes changes in family income over the last two decades, using data from the Censuses of Canada taken in 1971, 1981, 1986 and 1991.\*

The analyses in this study relate to money income that families receive in a calendar year. The census income concept includes wages and salaries, income from farm and non-farm self-employment, government transfer payments, investment income, retirement pensions and other money income. It does not include income in kind, non-monetary benefits received by employees, inheritances, windfalls, or capital gains or losses, etc. Although there are significant differences between before- and after-tax incomes, since Census does not collect information on personal taxes, it was not possible to examine this aspect of family incomes.

Chapter 1 presents income distributions by family structure, and examines overall changes in family incomes between 1970 and 1990. Chapter 2 discusses the incomes of husband-wife families, analyzing the impact of changes in family work and education patterns on the incomes of these families. Chapter 3 deals with the incomes of lone-parent families. Chapter 4 presents distributions of families by selected characteristics within income deciles, and discusses changes in income inequality. Chapter 5 describes the changes that have occurred in the relative position of provinces and territories during the last two decades in respect of family incomes. The final section summarizes the main features of family income in Canada during this period.

All income statistics are presented in terms of 1990 dollars by adjusting incomes for earlier years for changes in the Consumer Price Index since 1970.

# Chapter 1

## Family Income by Family Structure

---

Four out of five Canadians live in families. Their economic well-being depends primarily on their family income. During short periods of income stagnation, or even during an occasional drop in family income, families can often ride over their difficulties by dipping into their savings or through short-term borrowing. But a steady rise in standards of living depends, in the long run, on a steady growth of family incomes. (For definitions of family and income, see *Definitions Section*).

This chapter begins by highlighting differences in average family incomes by family structure in 1990. A description of the long-term trends in current and real family incomes follows. The chapter ends with a summary of the changes that have occurred in the income distributions of families during the last two decades.

### Family Income Varies by Family Structure

---

In 1991, there were 7.4 million census families in Canada. Of these, 6.4 million were of husband-wife families and the remaining one million were headed by male and female lone parents. There was a large variation in the incomes of different types of families. Compared with the overall average family income of \$51,342 in 1990, the average income of husband-wife families was \$54,667, that of male lone-parent families was \$40,792 and it was \$26,550 for female lone-parent families.

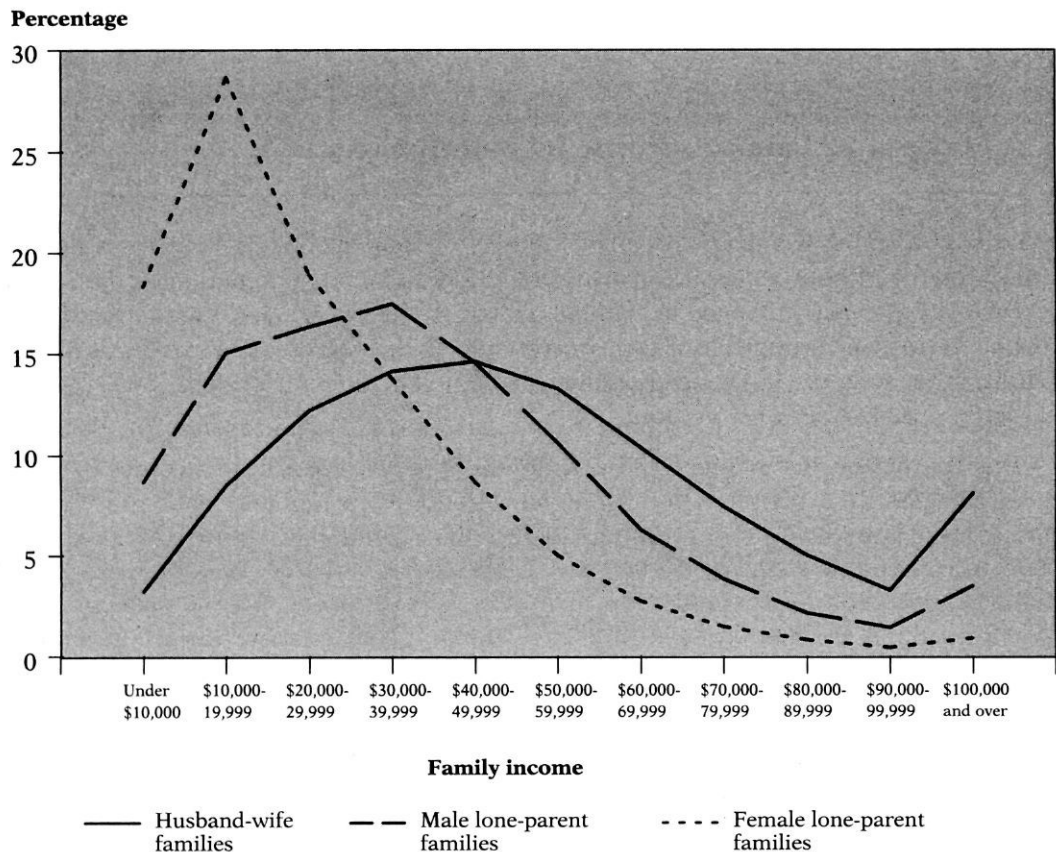
**Chart 1.1** presents distributions of these three groups of families by size of family income in 1990. The differences in their incomes are obvious and quite significant.

Incomes of husband-wife families are more evenly distributed than those of the other two family types. The median income of these families was \$48,091 in 1990.<sup>1</sup> As the Chart shows, a large proportion of husband-wife families was located in the income groups around the median value. Over one-quarter of husband-wife families had an income between \$40,000 and \$60,000, and over one-half reported an income between \$30,000 and \$70,000.

---

<sup>1</sup> Most of the income changes in this study are discussed in terms of the mean (arithmetic average) family income. Since median (the middle value) income is considered more descriptive of skewed distributions, it has been used in this section. In general, median income is smaller than average income.

**Chart 1.1**  
**Percentage Distribution of Families by Family Structure and Family Income Size Groups, Canada, 1990**



Compared with other family types, there were very few (11.7%) husband-wife families in the two lowest income groups. In contrast, as might be expected, a significantly larger proportion (8.0%) of husband-wife families was in the highest income group (\$100,000 and over) in 1990. The incomes of husband-wife families are discussed in greater detail in Chapter 2.

The shape of the income distribution of families headed by male lone-parents was similar to that of husband-wife families, but a significantly larger proportion of them was in the lower income groups. Compared with 24% of husband-wife families, 40% of male lone-parent families had an income of less than \$30,000 in 1990. With a median income of \$35,374, the income distribution of male lone-parent families reaches a peak quickly, and the remaining families beyond this income level are spread thinly across the upper income groups.

Female lone-parent families have a highly skewed income distribution, with large concentrations to the left in the lower income groups. In 1990, their median family income was only \$21,364. Two out of three female lone-parent families had a total income of less than \$30,000. Some of the salient features of the incomes of lone-parent families are discussed in Chapter 3.

## Growth in Real Family Income Slows Down

---

Over the last two decades, average family income in current dollars increased more than fivefold, from \$9,608 in 1970 to \$51,342 in 1990. This, however, did not translate into an equal increase in purchasing power. Rising prices of goods and services eroded the value of dollar so that the growth in real average family income amounted to 38.6% over the two decades. Thus, although actual average family income increased at an annual rate of 8.7% between 1970 and 1990, the real increase was 1.6% per year.<sup>2</sup>

**Chart 1.2** presents average incomes of families in current and constant (1990) dollars for selected years between 1970 and 1990.<sup>3</sup> Family incomes have not changed at a uniform rate throughout the period. The lower curve shows a steady growth of current average family income, with 1973-75 and 1977-81 as periods of faster increases. The upper curve, which adjusts current incomes by changes in the Consumer Price Index, plots incomes in terms of 1990 dollars. Unlike the current income curve, the real income curve shows a much slower rate of growth. Furthermore, it does not show a continuously upward movement.

The first half of the 1970s saw substantial gains in family incomes. Current average family income increased by 70.4% but, after adjustment for inflation, real growth amounted to 19.5%, from \$37,036 in 1970 to \$44,264 in 1975. While the increase in current average family income in the second half of the decade was about the same (63.4%), most of it was consumed by rising prices of goods and services. With a real average family income of \$47,565 in 1980, the increase in the second half of the 1970s was much lower, at 7.5%. Over the decade, average family income (in terms of 1990 dollars) increased by \$10,529 or 28.4%. In other words, census families increased their purchasing power at an average annual rate of 2.5% in the 1970s.

The 1980s presented a new phenomenon to Canadian families in respect of their incomes. Although current average family income continued to rise, real family income fell in 1981 as a consequence of the recession of the early 1980s. For the first time since the Second World War, the purchasing power of families declined in the first half of the decade. The downward trend continued to 1984, after which real average family income began to rise again. However, although current average family income increased by 41.4% between 1980 and 1985, it was lower in real terms by a percentage point in 1985, at \$47,087, than it

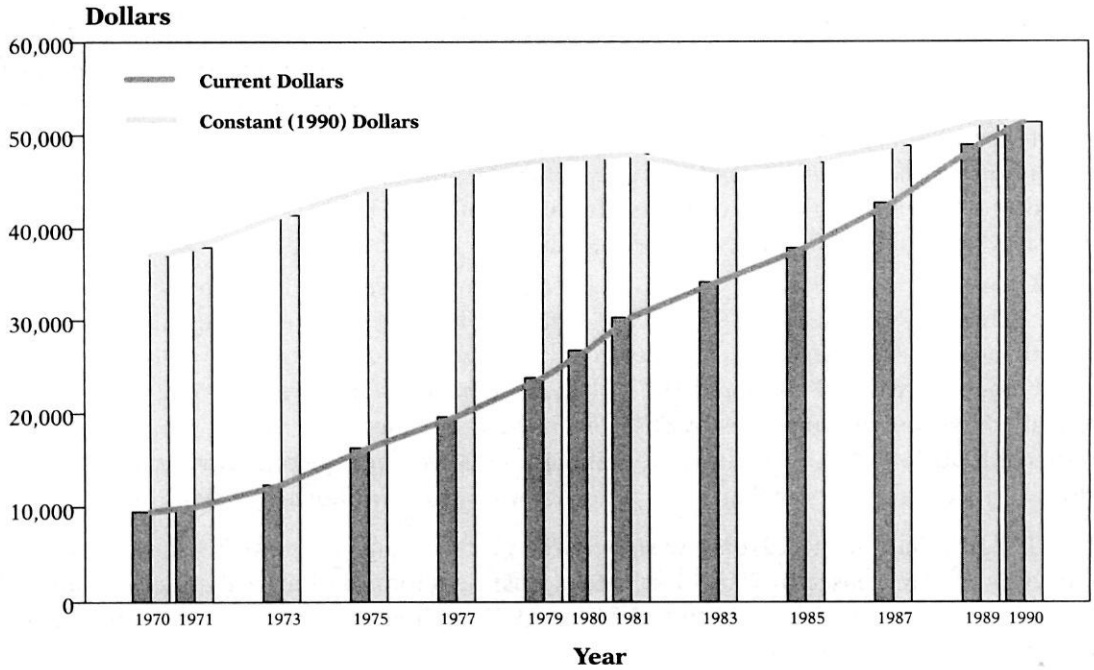
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<sup>2</sup> All annual changes covering more than one year have been calculated at compound rates.

<sup>3</sup> The 1970, 1980, 1985 and 1990 statistics have been derived from census data and the annual Survey of Consumer Finances is the source for data for other years. Although there are differences of coverage between the census and the survey, the overall trend displayed by these statistics is considered reliable.

was in 1980. Current average family income increased by 35.7% in the second half of the 1980s. Real average family income, however, rose by 9.0% to \$51,342 in 1990.<sup>4</sup>

**Chart 1.2**  
**Average Family Income in Current and Constant (1990) Dollars, Canada, Selected Years, 1970-1990**



In contrast to the 1970s increase of 28.4% in real average family income, the net increase in the 1980s amounted to \$3,777, or 7.9%. Thus, compared with 2.5% in the 1970s, the average annual growth rate of family income slowed to less than 0.8% a year during the 1980s. (From this point forward, all income figures in this study are in constant (1990) dollars).

The pattern of changes described above prevailed in varying degrees among all types of families. As shown in **Table 1.1**, the average income of husband-wife families increased by 30.3% from \$38,479 in 1970 to \$50,124 in 1980. The rate of increase in the 1980s was less than one-third of that in the 1970s, and real average family income of husband-wife families in 1990 was \$54,667, which was 9.1% higher than in 1980.

<sup>4</sup> Statistics from the annual Survey of Consumer Finances show that real average family income declined in both 1990 and 1991, and changed little in 1992.

The average income of male lone-parent families increased from \$30,749 in 1970 to \$41,333 in 1980. Compared with other family types, the male lone-parent families experienced the largest gain (34.4%) in family income during the 1970s, but they also suffered the largest decline (5.9%) between 1980 and 1985 as a consequence of the recession of early 1980s. In fact, they were unable to recover these losses during the second half of the decade when incomes were rising. As a result, at \$40,792, real average income of male lone-parent families in 1990 was 1.3% lower than it was in 1980.

**Table 1.1**  
**Average Family Income in Constant (1990) Dollars by Family Structure, Canada, 1970, 1980, 1985 and 1990**

Family structure		1970	1980	1985	1990
<b>All families</b>					
Number		5,054,630	6,325,315	6,733,845	7,355,730
Average income	\$	37,036	47,565	47,087	51,342
Median income	\$	32,815	42,490	41,583	44,891
<b>Husband-wife families</b>					
Number		4,585,215	5,611,495	5,880,545	6,402,090
Average income	\$	38,479	50,124	50,068	54,667
Median income	\$	34,135	44,858	44,427	48,091
Husband's average income	\$	30,134	35,774	34,563	35,856
Wife's average income	\$	5,827	11,063	12,674	15,772
<b>Male lone-parent families</b>					
Number		99,445	124,385	151,485	165,240
Average income	\$	30,749	41,333	38,903	40,792
Median income	\$	26,683	36,322	34,081	35,374
<b>Female lone-parent families</b>					
Number		369,970	589,440	701,810	788,395
Average income	\$	20,838	24,523	23,871	26,550
Median income	\$	16,446	19,263	18,668	21,364

The rate of increase in the average income of female lone-parent families in the 1970s was the lowest of all family types. Real average income of these families increased by 17.7%, from \$20,838 in 1970 to \$24,523 in 1980. They suffered a loss (2.7%) in average family

income during the 1980-85 period, but they showed the largest gain (11.2%) in the second half of the decade. On the whole, average income of female lone-parent families rose to \$26,550 in 1990, an increase of 8.3% over the decade.

## **Income Per Family Member Continues to Increase**

The total income of a family is shared by all family members. Of two families of different size but with identical family incomes, the family with the smaller number of persons, other things being equal, will be better off.

**Table 1.2** shows average family size, average family income and average income per family member for selected years between 1970 and 1990. Average family size in Canada has been decreasing over the years. It declined from 3.72 persons per family in 1970 to 3.26 persons in 1980, and to 3.07 persons in 1990.

**Table 1.2**  
**Average Family Size and Average Family Income in Constant (1990) Dollars, Canada, Selected Years**

Year	Average			Change in average		
	Number of persons	Family income	Income per person*	Number of persons	Family income	Income per person
		Dollars			Percent	
1970	3.72	37,036	9,960	-	-	-
1975	3.45	44,264	12,830	-7.3	19.5	28.8
1980	3.26	47,565	14,611	-5.5	7.5	13.9
1985	3.15	47,087	14,965	-3.4	-1.0	2.4
1990	3.07	51,342	16,734	-2.5	9.0	11.8

\*Except for 1975, average incomes per person have been obtained by dividing the total income of families by the actual number of persons in them and will, therefore, differ slightly when calculated by dividing the average family income by the family size in this table.

The first half of the 1970s saw large increases in family incomes, along with a significant decline in family size. As a result, while the total average family income increased by 19.5%

between 1970 and 1975, the increase in average income per family member was substantially higher at 28.8%. Even though the overall increase in average family income was reduced to 7.5% in the second half of that decade, average per capita income grew by 13.9% because of the drop in family size.

The recession of the early 1980s resulted in a 1% drop in average family income between 1980 and 1985. However, the declining family size provided each family member with 2.4% more income in 1985 compared with 1980. While average family income increased by 9% between 1985 and 1990, income per family member increased by 11.8%.

On a decade-by-decade basis, the 12.4% decline in family size in the 1970s transformed the 28.4% increase in average family income into a 46.7% increase in per capita income between 1970 and 1980. Both the decline in family size (5.8%) and the increase in family income (7.9%) were considerably smaller during the next decade. As a result, income available to each family member increased, on the average, by 14.5% between 1980 and 1990.

## **Changes in Income Distributions**

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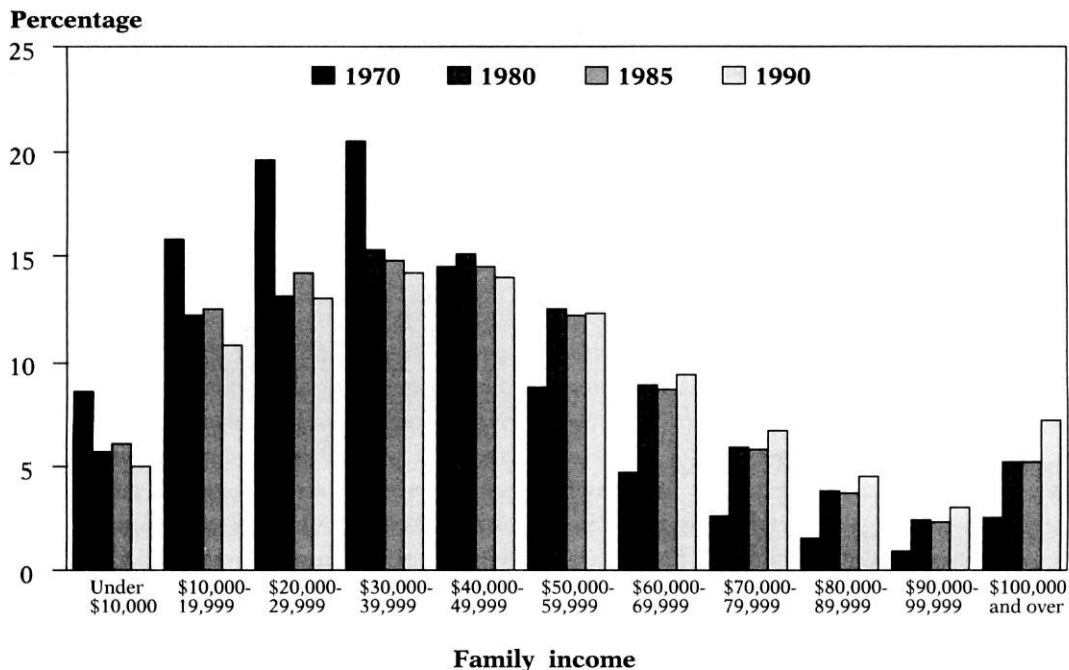
Based on the data collected in the Censuses of Canada, **Chart 1.3** presents income size distributions of families in 1970, 1980, 1985 and 1990. The 1970s saw a major shift in family income distributions. The proportions of families in the four income groups under \$40,000 dropped significantly over the decade: from 64.4% in 1970 to 46.2% in 1980.

Data from both the 1981 Census and the annual Survey of Consumer Finances indicate that family incomes reached a peak in 1980 and then fell with the onset of the recession of the early 1980s. Although that recession bottomed out by the end of 1982, real average family income in 1985 was still 1% below the 1980 level. Furthermore, the recession reversed the historical trend of an upward shift in family income distributions. Instead of the proportions of families in the lower income groups declining and those in the higher groups increasing, the percentage of families with a total income of less than \$30,000 increased from 31.0% in 1980 to 32.8% in 1985. With an increase of 9.0% in average family income between 1985 and 1990, families recouped, in general, the losses suffered in the earlier part of the 1980s. However, the overall change in the income distribution between 1980 and 1990 was much smaller than in the previous decade. In the 1980s, the net movement from the lower to the upper income groups amounted to less than 5% of all families.

In 1970, there were 432,300 families with a family income of less than \$10,000 and 799,100 families with an income between \$10,000 and \$20,000. In 1990, there were, respectively, 367,500 and 793,500 families in these two income groups. Thus, in spite of an increase of 45.5% in the number of all families over the two decades, the number of families in these two income groups declined by 6%. At the other end of the income scale, the number of families with an income of at least \$100,000 more than quadrupled, from 125,000 in 1970 to 528,300 in 1990.

**Chart 1.3**

**Percentage Distribution of Families by Family Income Size Groups in Constant (1990) Dollars, Canada, 1970, 1980, 1985 and 1990**



### Lower Income Groups Dominated by Female Lone-parent Families

While the number of all families increased by 45.5% between 1970 and 1990, that of husband-wife families increased by 39.6% and of male lone-parent families by 66.2%. But the number of female lone-parent families more than doubled during this period. At 113.1%, these families experienced the largest increase. As a consequence of these varying increases, the distribution of families by family structure changed. As a proportion of all families, husband-wife families declined from 90.7% in 1970 to 87.0% in 1990, while the proportion of female lone-parent families increased from 7.3% to 10.7%.

**Table 1.3** provides distributions of families by family structure within each income group in 1970 and 1990. An examination of these distributions makes it obvious that the changes within various income groups did not reflect the overall change in the structural distribution of families. While the changes in the proportions of male lone-parent families are marginal in most income groups and are, on the whole, commensurate with the above-average increase in their number, the changes in husband-wife families and female lone-parent families are substantial, particularly in the lower income groups. In all income

**Table 1.3**

**Distribution of Families by Family Structure Within Family Income Size Groups in Constant (1990) Dollars, Canada, 1970 and 1990**

Family income 1990 dollars	Total	1970			1990		
		Husband- wife families	Lone-parent families		Husband- wife families	Lone-parent families	
			Male	Female		Male	Female
Percentage							
Under \$5,000.....	100.0	64.7	3.7	31.7	59.2	3.7	37.1
\$5,000 - \$9,999.....	100.0	74.4	3.4	22.2	53.9	4.1	42.0
10,000 - 14,999.....	100.0	83.0	2.4	14.6	54.4	4.0	41.6
15,000 - 19,999.....	100.0	85.5	2.4	12.1	77.3	2.6	20.1
20,000 - 24,999.....	100.0	89.0	2.5	8.5	80.5	2.8	16.8
25,000 - 29,999.....	100.0	92.1	2.2	5.7	82.6	2.9	14.5
30,000 - 34,999.....	100.0	93.9	1.9	4.2	85.5	2.9	11.6
35,000 - 39,999.....	100.0	95.1	1.7	3.2	88.1	2.6	9.3
40,000 - 49,999.....	100.0	95.9	1.3	2.7	91.0	2.3	6.6
50,000 - 59,999.....	100.0	96.5	1.2	2.3	93.7	1.9	4.4
60,000 - 69,999.....	100.0	96.5	1.2	2.3	95.4	1.5	3.2
70,000 - 79,999.....	100.0	96.6	1.3	2.2	96.3	1.3	2.4
80,000 - 89,999.....	100.0	96.4	1.3	2.2	96.9	1.1	2.1
90,000 - 99,999.....	100.0	96.7	1.4	1.9	97.1	1.1	1.8
\$100,000 and over.....	100.0	96.7	1.5	1.8	97.5	1.1	1.4
<b>Total.....</b>	<b>100.0</b>	<b>90.7</b>	<b>2.0</b>	<b>7.3</b>	<b>87.0</b>	<b>2.2</b>	<b>10.7</b>
<b>Number of families:</b>							
1970	'000	5,055	4,585	99	370	-	-
1990	'000	7,356	-	-	-	6,402	165
						788	

groups below \$80,000, the proportions of husband-wife families declined and those of lone-parent families increased. The proportion of husband-wife families in the \$5,000-\$9,999 and \$10,000-\$14,999 income groups dropped by 21 and 29 percentage points, respectively, while those of female lone-parent families increased by 20 and 27 points. Though not as large, the changes were also significant in the \$15,000-\$39,999 income groups.

The increased concentration of female lone-parent families in the lower income groups is the result of above-average growth in the incomes of husband-wife families and below-average increases in the incomes of lone-parent families, discussed in the next two chapters.

# Chapter 2

## Husband-wife Families

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Three out of four Canadians lived in 6.4 million husband-wife census families in 1991. Average income of these families increased by 30.3% from \$38,479 in 1970 to \$50,124 in 1980. After a decline and recovery cycle during the first and second halves of the 1980s, their average income grew by 9.1% over the decade, to \$54,667 in 1990.

Changes in income occur as a result of factors that are both external and internal to the families. The overall economic activity has a major impact on the growth of incomes. Incomes grow during periods of economic growth and expansion, while recessions bring about stagnation and decline of incomes. Given the state of the economy, income changes occur when individual factors such as the quantity and quality of labour change. In addition, the size of family income depends on the number of income contributors in the family. Changes in the incomes of husband-wife families between 1970 and 1990 are discussed in this chapter in the light of changes in these factors.

### Wives Enter Work Force Irrespective of Husband's Income

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Historically, a wife generally entered the labour market to supplement her husband's income. The Second World War brought about a far-reaching change in the stereotyped roles of husbands as breadwinners and wives as homemakers. Wives began to join the work force in increasing numbers. This trend continued after the war. There were many reasons for this phenomenon such as changing social attitudes, higher education, and the desire to maintain and enhance living standards.

**Chart 2.1** shows the relationship between husband's income and wife's participation in the work force in 1970, 1980, 1985 and 1990. The overall proportion of wives in the work force<sup>5</sup> increased from 46.9% in 1970 to 61.6% in 1980, and to 74.7% in 1990.<sup>6</sup> Over the period, there were substantial changes in the lowest and highest proportions of working wives within husband's income groups. These proportions ranged from 28.7% to 52.2% in 1970, from 51.5% to 66.0% in 1980, and from 65.2% to 77.3% in 1990. Thus, the spread in the

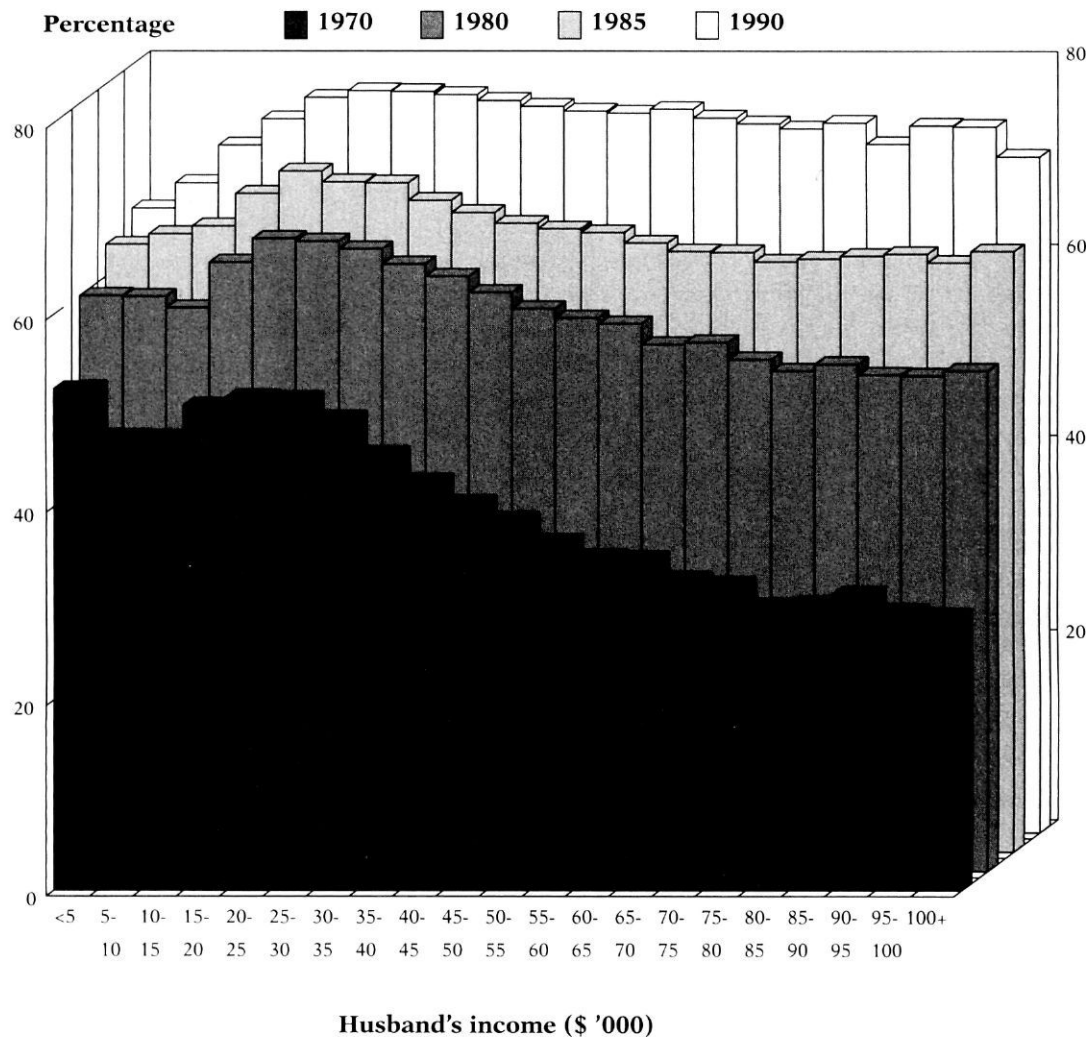
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<sup>5</sup> To highlight the changes that have taken place in the incidence of work among wives since 1970, the data in Chart 2.1 and the comments in this and the next paragraph are restricted to families with husbands under 65 years of age.

<sup>6</sup> These are gross rates indicating labour market activity by wives during the calendar year and will, therefore, be higher than their labour force participation rate at any given time during the year.

range of participation rate of wives in the work force classified by the income of husbands declined from 24 points in 1970 to 15 in 1980, and to 12 points in 1990.

**Chart 2.1**  
**Incidence of Work Among Wives by Husband's Income in Constant (1990) Dollars, Canada, 1970, 1980, 1985 And 1990**



Although the participation of wives in the labour market had begun to increase with the Second World War, there was still a pronounced negative relationship between husbands'

income and incidence of work among wives in 1970. However, by 1980, this traditional relationship had lost most of its strength. In 1990, the impact of husband's income on wife's work status appears to have become almost non-existent. Families with both spouses working have become the norm rather than the exception.

## Wives Boost Family Incomes

Family incomes increased significantly (30.3%) between 1970 and 1980. They began to fall with the recession of the early 1980s, but recovered to the 1980 level by the middle of the decade, then continued to grow. In 1990, the average income of husband-wife families was 9.1% larger than in 1980.

Wives played an important role in the growth of family incomes in both the 1970s and 1980s. The statistics in **Table 2.1** show that the contribution of wives toward family income increased, from 15.1% in 1970 to 22.1% in 1980 and to 28.9% in 1990.<sup>7</sup> In the case of the steadily increasing number of wives working full year, full time, their average contribution increased from 36.9% in 1970 to 39.5% in 1980 and to 39.9% in 1990. Thus, in 1990, two of every five dollars of family income were contributed by wives in these families. The contribution of wives working part year or part time also increased, from 20.8% in 1970 to 23.6% in 1980 and to 27.2% in 1990 and those of non-working wives increased from 3.4% to 14.3% during the period.

**Table 2.1**

**Contribution of Wives to Family Income in Constant (1990) Dollars by Wife's Work Status, Canada, 1970, 1980 and 1990**

Wife's work status	Average income					
	1970		1980		1990	
	\$	%	\$	%	\$	%
<b>Average family income:</b>	38,479	100.0	50,124	100.0	54,667	100.0
Full-year, full-time	47,324	100.0	62,909	100.0	67,403	100.0
Part-year or part-time	40,099	100.0	52,735	100.0	55,732	100.0
Did not work	35,088	100.0	41,686	100.0	41,699	100.0
<b>Average income of wives:</b>	5,827	15.1	11,063	22.1	15,772	28.9
Full-year, full-time	17,482	36.9	24,834	39.5	26,927	39.9
Part-year or part-time	8,327	20.8	12,441	23.6	15,154	27.2
Did not work	1,183	3.4	3,051	7.3	5,968	14.3

<sup>7</sup> The contribution of husbands toward family income decreased from 78.3% in 1970 to 71.4% in 1980 and to 65.6% in 1990. The balance of family income was contributed by children.

The impact of these statistics on the incomes of husband-wife families can be estimated by comparing average family incomes with and without the incomes contributed by wives. Although favourable economic conditions in the 1970s were the main source of growth in family incomes, the increasing participation of wives in the work force during the period provided a further boost to these gains. Average total income of husband-wife families increased by 30.3% between 1970 and 1980. Excluding the incomes of wives from both years would reduce the increase to 19.1%. Contributions of working wives provided a cushion for the falling family incomes in the early 1980s. Between 1980 and 1990, average income of husband-wife families increased by 9.1%. If the incomes of wives were excluded from the both years, average family income would have dropped marginally (-0.4%) instead of actually increasing by 9.1%.<sup>8</sup>

Husband-wife families in which wives reported employment income (with or without any other family member) were the only families to maintain their income levels between 1980 and 1985. During the second half of the decade, they increased their average income by 7.7%, to \$61,950 in 1990. However, families in which wives had no employment income not only suffered a decline of 4.3% between 1980 and 1985, but were unable to recover this loss by the end of the decade. In 1990, their average family income at \$40,568 was 1.4 per cent below the 1980 level.<sup>9</sup>

## Family Work Patterns Change

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As mentioned above, the number of all husband-wife families increased by 39.6% between 1970 and 1990. The number of working husbands increased by only 26.2%, while the number of working wives increased by 111.2%. Thus, the rate of increase in the number of working husbands did not keep pace with the overall growth in the number of families during the two decades. However, the rate of increase in the number of wives in the work force, whether working full year, full time, or part year or part time, was nearly three times the overall growth in the number of families. Compensating for changes in population (that is, if the number of total families had not changed), the incidence of work among husbands declined by 9.7% but increased among wives by 51.2% between 1970 and 1990.

These changes in spousal work patterns had an impact on overall family income. To estimate this impact, families were divided into nine categories by combining the work patterns of husbands and wives, as shown in **Table 2.2**. Compared with 39.6% increase in

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<sup>8</sup> Family incomes declined during the recession of the early 1980s, so that average family income in 1985 was 0.4% lower than in 1980. When the incomes of wives are excluded, the 1980 to 1985 decrease plunges to 4.7%.

<sup>9</sup> For relevant data for 1985 in constant (1990) dollars, see Table 7 in *Selected Income Statistics*, 1991 Census, The Nation, Catalogue No.93-331.

**Table 2.2****Number and Average Income of Husband-wife Families by Spousal Work Patterns, Canada, 1970, 1980 and 1990**

Work patterns of husbands	Work patterns of wives			Total
	Full-year, full-time	Part-year or part-time	Did not work	
Number of families				
1970				
Full-year, full-time	563,690	791,575	1,495,440	2,850,700
Part-year or part-time	171,885	397,570	700,500	1,269,950
Did not work	29,650	45,340	389,570	464,560
Total	765,225	1,234,485	2,585,505	4,585,215
1980				
Full-year, full-time	940,245	1,142,680	1,202,665	3,285,595
Part-year or part-time	266,955	643,545	629,945	1,540,445
Did not work	52,105	80,470	652,890	785,460
Total	1,259,300	1,866,695	2,485,500	5,611,495
1990				
Full-year, full-time	1,571,665	1,262,685	749,925	3,584,275
Part-year or part-time	371,675	792,460	452,470	1,616,600
Did not work	93,125	131,130	976,955	1,201,210
Total	2,036,465	2,186,270	2,179,350	6,402,085
Average family income in constant (1990) dollars				
1970				
Full-year, full-time	50,314	43,931	41,629	43,985
Part-year or part-time	40,785	34,653	30,577	33,235
Did not work	28,378	20,945	18,096	19,030
Total	47,324	40,099	35,088	38,479
1980				
Full-year, full-time	66,985	57,812	51,216	58,023
Part-year or part-time	52,969	46,320	39,471	44,671
Did not work	40,277	31,941	26,267	27,778
Total	62,909	52,735	41,686	50,124
1990				
Full-year, full-time	71,571	61,784	54,907	64,637
Part-year or part-time	55,107	49,285	40,886	48,273
Did not work	46,127	36,411	31,938	33,527
Total	67,403	55,732	41,699	54,667

the number of all husband-wife families during the last two decades, the changes that occurred in the various husband-wife work combinations ranged from a decline of 49.9% in families where the husband worked full year, full time, and the wife did not work to an increase of 214.1% in families where the husband did not work but the wife worked full year, full time.

The three categories of families in which the husband did not work show very large increases in percentage terms. Compared with less than half a million in 1970, the number of these families increased to nearly a million and a quarter in 1990. While a part of this increase can be attributed to the general aging of the Canadian population, there have also been changes in the work activity of husbands under 65 years of age.<sup>10</sup> The incidence of work among all husbands dropped from 89.9% in 1970 to 86.0% in 1980 and to 81.2% in 1990. As a result of this decline, the number of families with non-working husbands would have nearly doubled over the 20 years even without the increase in the number of husband-wife families.

The two categories of husband-wife families that have shrunk over the 20 years consist of families in which the husband worked but the wife did not. The proportion of these families decreased from 47.9% in 1970 to 32.6% in 1980, and to 18.8% in 1990. Compared with the 39.6% overall increase in the number of all husband-wife families, the number of families with non-working wives declined by 15.7% over the two decades.

The remaining four categories of husband-wife families are of special interest from the point of view of family income. These are dual-earner families in which both spouses were in the labour market. In 1970, such families accounted for 42.0% of all husband-wife families. By 1990, their proportion had increased to 62.4%.

## **Impact of Changes in Spousal Work Patterns on Family Income**

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Based on the statistics in Table 2.2, the impact of changes in family work patterns since 1970 on family incomes in 1980 and 1990 is estimated in **Table 2.3**.

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<sup>10</sup> Eight percent of husbands under the age of 65 did not work in 1990, compared with less than 4% in 1970.

**Table 2.3**

**Average Income of Husband-wife Families in Constant (1990) Dollars, Actual and Standardized by 1970 Family Work Patterns, Canada, 1980 and 1990**

Standardized* by work activity in 1970						
	Husband: $\Sigma(P_{wi})(Y_{wi})$		Wife: $\Sigma(P_{wj})(Y_{wj})$		Both: $\Sigma(P_{wij})(Y_{wij})$	
	1980	1990	1980	1990	1980	1990
Dollars						
Actual	50,124	54,667	50,124	54,667	50,124	54,667
Standardized	51,260	56,952	48,202	49,767	49,757	53,330
Difference: \$	-1,136	-2,285	1,922	4,900	367	1,337
%	-2.2	-4.0	4.0	9.8	0.7	2.5

\* $P_{wi}$  = proportion of husbands in each of the three work pattern categories (FYFT, PY/PT, None) in 1970.

$P_{wj}$  = proportion of wives in each of the three work pattern categories (FYFT, PY/PT, None) in 1970.

$P_{wij}$  = proportion of families in each of the nine husband-wife work combinations in 1970.

$Y_{wi}$  = average family income in each of the three work pattern categories of husbands in 1980 and 1990.

$Y_{wj}$  = average family income in each of the three work pattern categories of wives in 1980 and 1990.

$Y_{wij}$  = average family income in each of the nine husband-wife work combinations in 1980 and 1990.

FYFT = worked 49 to 52 weeks, mostly full time

PY/PT = worked 49 to 52 weeks, mostly part time or worked less than 49 weeks

Average incomes of husband-wife families in 1970, 1980 and 1990 were, respectively, \$38,479, \$50,124 and \$54,667. Thus, family income increased by 30.3% or \$11,645 between 1970 and 1980, and by 9.1% or \$4,543 between 1980 and 1990. Other things being equal, had the work patterns of husbands not changed over the period under review, average family income would have been \$51,260 in 1980 and \$56,952 in 1990. Reduced work activity of husbands resulted in a reduction of 2.2% or \$1,136 in average family income in 1980, and 4.0% or \$2,285 in 1990. This is not surprising given the declining proportions of working husbands. In contrast, the increased work activity of wives resulted in an increase in average family income of 4.0% or \$1,922 in 1980, and of 9.8% or \$4,900 in 1990. Again, these results are not surprising, given the increasing proportions of working wives.

When the joint impact of changes in the work patterns of husbands and wives is taken into account, the overall change has been an increase in family incomes. The negative impact of the decline in the proportion of working husbands was more than offset by the positive impact of the increase in working wives. As a net result of these changes in family work patterns, average income of husband-wife families was higher by 0.7% or \$367 in 1980, and by 2.5% or \$1,337 in 1990.

## Family Education Profile Changes

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Major shifts occurred in the educational attainment of Canadians between 1970 and 1990. The impact of these shifts on the education profile of husband-wife families can be seen in **Table 2.4**, which shows the joint distribution of husbands and wives by education. As stated earlier, the overall number of families increased by 39.6% between 1970 and 1990. However, the number of families in which both spouses had less than secondary school education decreased by 35%, while the number of families where either the husband or the wife or both had a university degree more than tripled.

Unlike family work patterns which showed the work activity of husbands and wives changing in the opposite directions, both spouses raised their level of education equally significantly during the period. In 1970, 65.7% of all husbands and 64.3% of all wives had less than secondary school education. A decade later, these proportions dropped to 43.6% and 47.8%, respectively. By 1990, the proportions had fallen to an identical level: 35.1% of both husbands and wives had less than secondary school education. Compared with more than half (52.2%) of all husband-wife families in 1970, both spouses had less than secondary school education in less than a quarter (24.2%) of the families in 1990. At the other end of the spectrum, 7.6% of husbands and only 2.8% of wives had a university degree in 1970; by 1990, their proportions had increased to 14.5% and 10.4%, respectively. Over the two decades, the proportion of husband-wife families in which both spouses had a university degree increased from 1.8% to 6.4%.

## Impact of Changes in Spousal Education Profile on Family Income

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The positive relationship between education and income is clearly demonstrated by the statistics in **Table 2.4**. For example, the average income of families in which both the husband and the wife had a university degree was \$89,981 in 1990, compared with \$39,396 for families in which both spouses had less than secondary school education.

The effect of the changes in family education profile on family incomes is most interesting. Average family income increased by 30.3% between 1970 and 1980, and by 9.1% between 1980 and 1990. However, the statistics in **Table 2.4** show that the rates of increase in family income were lower in almost all of the 16 categories of families by spousal education levels. Compared with the overall gain of 30.3%, the increases in average family income amounted to less than 10% in three groups and to less than 20% in another 11 groups between 1970 and 1980. Again, between 1980 and 1990, 15 of the 16 groups had smaller increases than the overall increase of 9.1%. In fact, two family groups actually recorded declines in their average incomes during this period.

**Table 2.4**

**Number and Average Income of Husband-wife Families by Spousal Educational Patterns, Canada, 1970, 1980 and 1990**

Education patterns of husbands	Education patterns of wives				Total
	University degree	Above secondary	Secondary school	Below secondary	
Number of families					
1970					
University degree	83,575	63,905	146,680	56,255	350,415
Above secondary	14,265	44,415	114,535	90,020	263,235
Secondary school	16,370	48,420	487,175	407,395	959,360
Below secondary	12,125	66,005	541,120	2,392,965	3,012,215
Total	126,335	222,745	1,289,510	2,946,635	4,585,225
1980					
University degree	224,340	289,795	69,705	59,825	643,665
Above secondary	91,195	854,100	359,695	668,465	1,973,455
Secondary school	13,305	155,835	206,565	174,320	550,025
Below secondary	22,685	403,275	240,985	1,777,395	2,444,340
Total	351,525	1,703,005	876,950	2,680,005	5,611,485
1990					
University degree	411,705	369,220	93,805	55,190	929,920
Above secondary	190,385	1,293,115	452,115	505,655	2,441,270
Secondary school	33,210	249,050	363,595	137,020	782,875
Below secondary	32,405	416,335	246,835	1,552,445	2,248,020
Total	667,705	2,327,720	1,156,350	2,250,310	6,402,085
Average family income in constant (1990) dollars					
1970					
University degree	71,354	66,175	67,527	60,127	67,005
Above secondary	56,885	47,456	47,842	42,276	46,363
Secondary school	58,486	48,819	43,983	39,597	42,612
Below secondary	50,251	41,373	38,288	31,682	33,156
Total	66,028	51,320	44,614	33,643	38,479
1980					
University degree	80,181	76,081	74,111	69,301	76,666
Above secondary	65,109	54,401	51,711	47,854	52,188
Secondary school	67,886	53,576	48,712	46,006	49,696
Below secondary	65,593	49,172	45,312	39,024	41,564
Total	74,864	56,776	51,027	42,356	50,124
1990					
University degree	89,981	80,305	77,204	70,361	83,686
Above secondary	68,853	56,465	55,933	47,870	55,552
Secondary school	70,000	55,227	51,744	46,558	52,719
Below secondary	64,569	48,528	47,878	39,396	42,381
Total	81,730	58,694	54,622	42,496	54,667

These results, with an average being higher than the components, stem directly from the changes in the distributions of families by educational attainment of spouses during the 1970s and 1980s. Higher proportions of families with higher levels of education and, consequently, higher incomes in 1980 and 1990 raised the floor and pushed the overall average increase in family incomes above the increases experienced by the individual groups.

Based on the statistics in **Table 2.4**, the impact of changes in family education profile since 1970 on family incomes in 1980 and 1990 is estimated in **Table 2.5**.

**Table 2.5**  
**Average Income of Husband-wife Families in Constant (1990) Dollars, Actual and Standardized by 1970 Family Education Patterns, Canada, 1980 and 1990**

	Standardized* by work activity in 1970					
	Husband: $\Sigma(\text{Pei})(\text{Yei})$		Wife: $\Sigma(\text{Pej})(\text{Yej})$		Both: $\Sigma(\text{Peij})(\text{Yeij})$	
	1980	1990	1980	1990	1980	1990
Dollars						
Actual	50,124	54,667	50,124	54,667	50,124	54,667
Standardized	46,559	48,457	46,391	47,774	45,370	46,738
Difference: \$	3,565	6,210	3,733	6,893	4,754	7,929
%	7.7	12.8	8.0	14.4	10.5	17.0

\*Pei = proportion of husbands in each of the four education categories (DEG, >SS, SS and <SS) in 1970.

Pej = proportion of wives in each of the four education categories (DEG, >SS, SS and <SS) in 1970.

Peij = proportion of families in each of the 16 husband-wife education combinations in 1970.

Yei = average family income in each of the four education categories of husbands in 1980 and 1990.

Yej = average family income in each of the four education categories of wives in 1980 and 1990.

Yeij = average family income in each of the 16 husband-wife education combinations in 1980 and 1990.

DEG = university degree, >SS = no degree but some post-secondary.

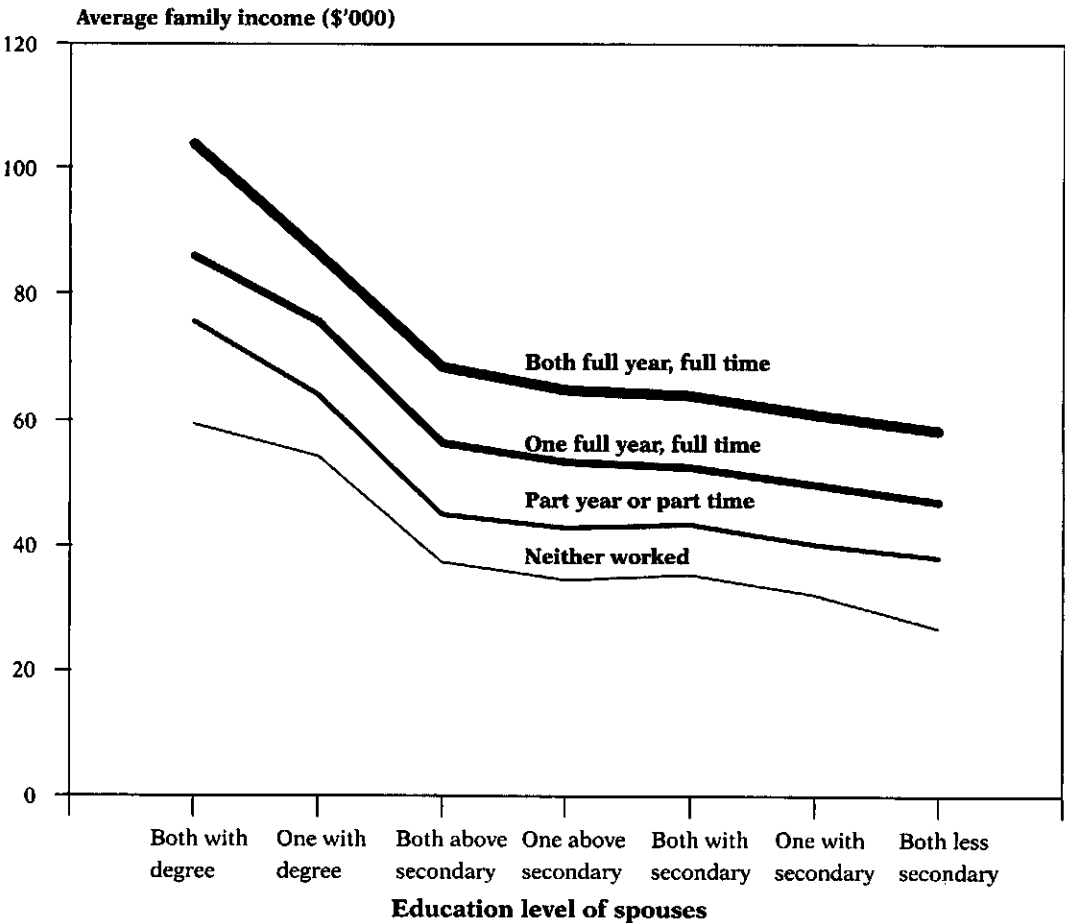
SS = secondary school certificate, <SS = less than secondary school

Since the changes in the educational attainment of husbands and wives were similar over the two decades, the impact of these changes on family income is also similar. It is estimated that, other things being equal, average family income would have been lower by \$3,565 in 1980 and by \$6,210 in 1990 if husbands had not increased their level of education since 1970. Similarly, family income would have been lower by \$3,733 in 1980 and by \$6,893 in 1990 if the level of education of wives had not improved. Thus, without these changes in spousal education profiles, the actual increases of 30.3% between 1970 and 1980 and 9.1% between 1980 and 1990 in real average income of husband-wife families would have been much smaller. As a result of higher educational attainment of spouses, the average income of husband-wife families was larger by 10.5% or \$4,754 in 1980, and by 17.0% or \$7,929 in 1990.

# Changes in Work and Education Lead to Changes in Income Levels

The joint impact of work and education on family incomes can be seen in **Chart 2.2**. In 1990, average family income in 1990 ranged from a low of \$26,596 for families in which both spouses had less than secondary school education and neither spouse worked to a high of \$103,914 for families in which both spouses had a university degree and both worked full year full time. In the case of families in which neither spouse had a university degree, family income was strongly influenced by the work status of the spouses. On the whole, family income is likely to be well above average (\$54,667) if at least one of the spouses has a university degree and both work, with at least one working full year full time.

**Chart 2.2**  
**Average Income of Husband-wife Families by Spousal Work and Education Levels, Canada, 1990**



It is clear that these changes in work and education profiles have led to changes in family incomes over the last two decades. Not only has the amount of work undertaken by the families increased, the quality of family labour (as measured by educational achievement) also improved over the years.

To estimate the effect of these changes on the incomes of husband-wife families since 1970, these families were divided into 144 categories by spousal work-education patterns. The results are summarized in **Table 2.6**.

**Table 2.6**  
**Average Income of Husband-wife Families in Constant (1990) Dollars, Actual and Standardized by 1970 Family Work and Education Patterns, Canada, 1980 and 1990**

Standardized* by work activity in 1970						
Husband: $\Sigma(P_{wei})(Y_{wei})$		Wife: $\Sigma(P_{wej})(Y_{wej})$		Both: $\Sigma(P_{weij})(Y_{weij})$		
	1980	1990	1980	1990	1980	1990
Dollars						
Actual	50,124	54,667	50,124	54,667	50,124	54,667
Standardized	48,500	51,965	45,499	45,546	46,528	48,224
Difference:	\$ 1,624	2,702	4,625	9,121	3,596	6,443
	% 3.3	5.2	10.2	20.0	7.7	13.4

\*Pwei = proportion of husbands in each of the 12 work-education combinations in 1970.

\*Pwej = proportion of wives in each of the 12 work-education combinations in 1970.

Pweij = proportion of families in each of 144 husband-wife work-education combinations in 1970.

Ywei = average family income in each of the 12 work-education combinations of husbands in 1980 and 1990.

Ywej = average family income in each of the 12 work-education combinations of wives in 1980 and 1990.

Yweij = average family income in each of the 144 husband-wife work-education combinations in 1980 and 1990.

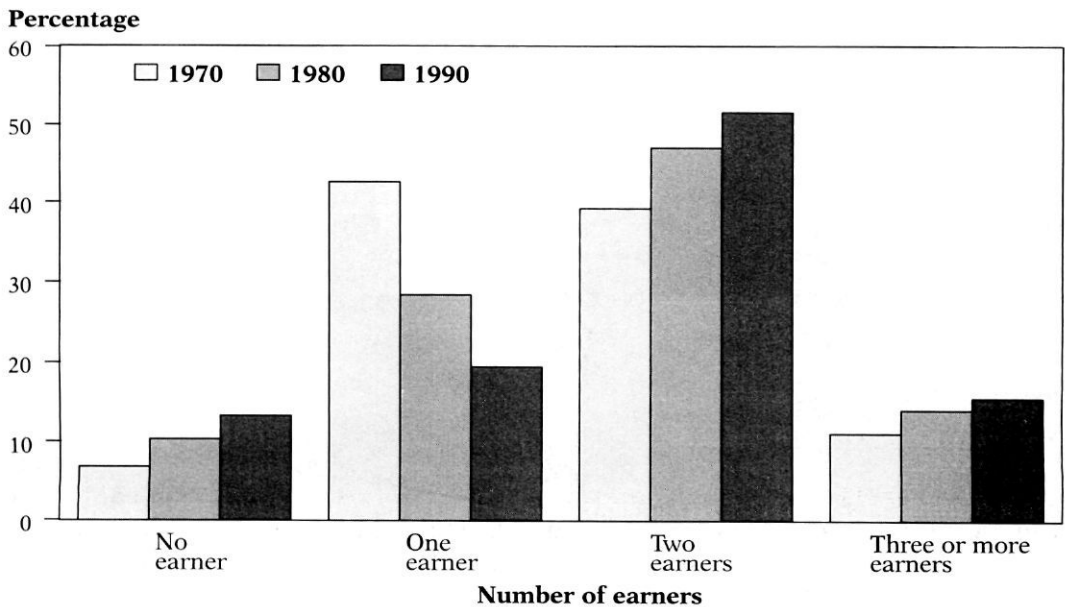
Real average family income increased by 30.3% or \$11,645 between 1970 and 1980, and by another 9.1% or \$4,543 between 1980 and 1990. Other things being equal, these increases would have been reduced substantially without the underlying changes in the work-education profiles of spouses. Since there were both negative (lower work activity) and positive (higher educational attainment) components in the changes in husbands' profiles, their net impact is much smaller than that of the changes in the profile of wives. When the joint effect of changes in the spousal work and education patterns is taken into account, it is estimated that \$6,443 or about 40% of the \$16,188 growth in average income of husband-wife families over the two decades was generated by improvements in spousal work-education patterns. In other words, changes in these work-education patterns produced two of every five dollars of increase in the average income of husband-wife families between 1970 and 1990.

## Number and Combination of Earners

As shown in **Chart 2.3**, the increasing participation of wives in the labour force over the two decades resulted in major changes in the distribution of husband-wife families by number of earners.

The proportion of families without an earner nearly doubled during the period, from 6.9% in 1970 to 13.4% in 1990. This can be attributed both to the aging of population and to the growing trend toward early retirement. The income of these families has increased at a rate that is well above average: 53.2% between 1970 and 1980, and 24.1% between 1980 and 1990. These higher-than-average increases were due primarily to increased pensions, both private and public.

**Chart 2.3**  
**Distribution of Husband-wife Families by Number of Earners, Canada, 1970, 1980 and 1990**



Family income increases as the number of earners in the family increases. In 1970, families with only one earner accounted for 42.6% of all husband-wife families. That proportion dropped to 28.4% by 1980, and to 19.5% by 1990. In contrast, the proportion of husband-wife families with two or more earners increased from 50.5% in 1970 to 61.1% in 1980 and to 67.2% in 1990. The increasing proportion of families with two or more earners has resulted in faster overall growth in average family income.

Family income depends on both the number and the combination of earners in a family. **Table 2.7** presents data on this aspect of family income from the last three decennial censuses.

In 1990, families in which both spouses and at least one child were earners accounted for 12.2% of all husband-wife families. This group had the highest average income at \$78,372, which was 43.4% above the national average. In another 47.8% of families, both husband and wife reported income from employment. Their average total family income, at \$59,069, was 8.1% above the overall average income of husband-wife families. In another 15% of husband-wife families, the husband was the sole earner. This group's average family income of \$44,894 was 17.9% below the overall average. Families in which the husband had no employment income accounted for only 5.8% of all husband-wife families and had below-average family income. Finally, 13.4% of all husband-wife families reported no income from employment in 1990. Their average family income was \$27,665, about half of the average income of all husband-wife families.

**Table 2.7**  
**Selected Statistics on Husband-wife Families by Combination of Earners, Canada, 1970, 1980 and 1990**

		Husband earner				Husband not earner			No
	Total	HWC	HW	HC	H	WC	W	C	earner
1970									
Number	4,585,215	344,425	1,446,425	501,535	1,859,425	13,115	54,120	52,060	314,115
Average income:	Constant (1990) dollars								
Family	38,479	56,959	41,973	50,556	33,841	36,072	21,190	31,392	14,560
Husband	30,134	33,853	29,095	36,748	33,164	7,344	7,006	9,879	10,644
Wife	5,826	12,466	12,863	692	643	13,213	14,139	2,510	3,831
1980									
Number	5,611,500	623,385	2,323,150	428,410	1,408,180	32,940	121,905	88,455	585,080
Average income:	Constant (1990) dollars								
Family	50,124	75,107	54,192	63,769	42,087	48,922	30,192	41,035	22,301
Husband	35,774	43,706	36,523	45,697	40,488	13,319	11,306	14,597	15,302
Wife	11,063	17,631	17,648	1,433	1,545	18,226	18,807	4,397	6,868
1990									
Number	6,402,090	899,435	3,063,005	257,165	957,970	58,330	200,740	110,685	854,760
Average income:	Constant (1990) dollars								
Family	54,667	78,372	59,069	64,925	44,894	52,681	35,031	46,185	27,665
Husband	35,856	44,335	37,992	45,705	41,572	15,634	14,575	17,516	18,660
Wife	15,772	21,443	21,030	2,786	3,225	19,650	20,332	6,278	8,825

H=husband, W=wife and C=child(ren)

These differences in average family incomes by combination of earners become highly significant when examined in the light of changes in the distribution of husband-wife families by combination of earners. In 1970, 7.5% of families reported husbands, wives and children with employment income, and 31.5% reported both husbands and wives with employment income. These proportions changed, respectively, to 11.1% and 41.4% in 1980 and to 14.0% and 47.8% in 1990. Thus, the proportion of families where both spouses were earners, irrespective of the earning status of children, increased by 23 percentage points over the two decades. In contrast, the proportion of families in which the wife was not an earner but the husband was dropped from 51.5% in 1970 to 19.0% in 1990 and the proportion of families without working husbands increased slightly.

Given the rate of increase in family income for each of the eight categories of husband-wife families by combinations of earners in **Table 2.7**, had there been no changes in the distribution of families by combination of earners, the overall increase in their average income between 1970 and 1990 would have amounted to 37.2% instead of the actual increase of 42.1%. This difference should be viewed in the light of changes in the proportions of various groups of families and in their average family incomes between 1970 and 1990.

Although the overall number of husband-wife families increased by 39.6% and their average income increased by 42.1% during the period, there were significant differences in the changes which took place within various family groups. First, the number of families in which both spouses were earners increased substantially (121.3%) in this period. Although their average income was well above the overall average, the rate of growth in their income was a little below average. Secondly, the smallest income growth took place in the two groups of families in which the husband had employment income but the wife did not. However, these were the only two groups whose numbers declined over the two decades. Thirdly, the rate of increase in the number of families was largest in respect of families in which someone other than the husband was an earner (210%) and in which there was no earner (172%). While the average income of these families was below the overall average family income both in 1970 and 1990, their incomes grew at a faster rate than the overall growth rate. The net result of these developments was a contribution of about 12% to the overall growth of average income of husband-wife families between 1970 and 1990.

# Chapter 3

## Lone-parent Families

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The incomes of lone-parent families are generally lower than those of husband-wife families. In recent decades, the number of lone-parent families has been increasing at a faster rate than the growth of the population. In 1991, nearly one million families in Canada were headed by lone parents. This translates into 13% of all families compared with a little over 9% in 1971.

### Lone-parent Families Have Smaller Incomes

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In 1971, 21.2% of all lone-parents were men. By 1991, this proportion had dropped to 17.3%. The average income of male lone-parent families increased by 34.4% between 1970 and 1980, from \$30,749 to \$41,333. It was the largest increase of all family types. However, these families also suffered the largest income decline (5.9%) between 1980 and 1985. Although their incomes grew by 4.9% in the second half of the 1980s, their 1990 average family income, at \$40,792, was still 1.3% below the 1980 level.

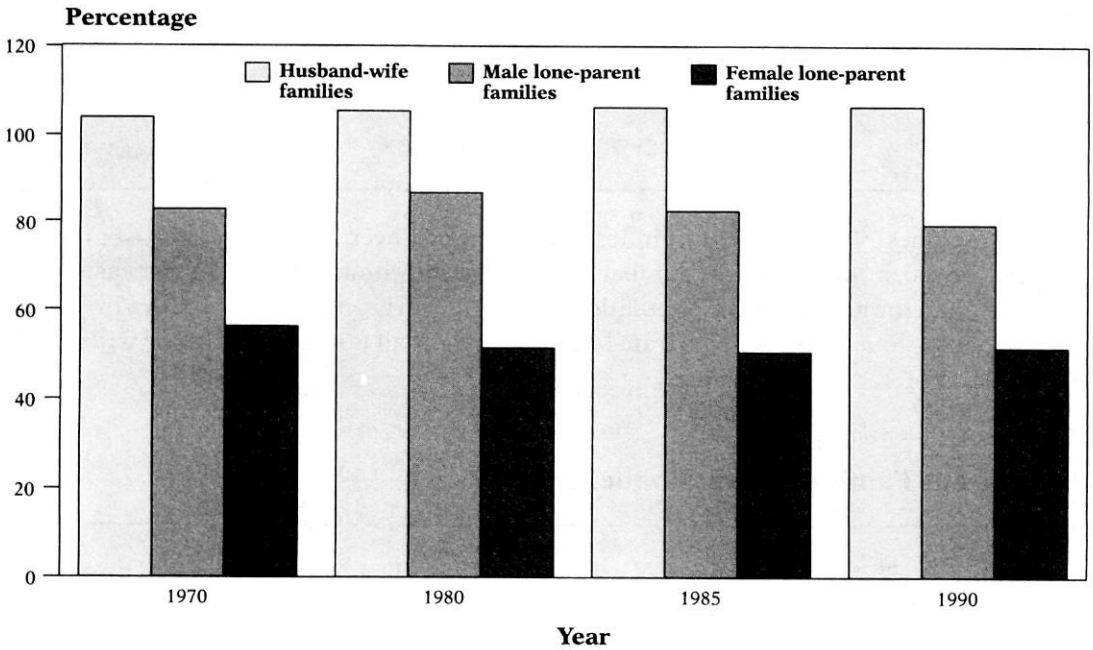
Four out five lone-parent families are headed by women. The average income of female lone-parent families was \$20,838 in 1970. It increased by 17.7% to \$24,523 in 1980, and then declined by 2.7% to \$23,871 in 1985. In the second half of the decade, the average income of female lone-parent families increased by 11.2% to \$26,550 in 1990. Thus, compared with an increase in family income of 17.7% in the 1970s, female lone-parent families gained 8.3% in the 1980s.

The variations in the income growth rates experienced by different family types resulted in changes in the position of lone-parent families in relation to other families.

**Chart 3.1** shows the changes in the relative position of families by structure that occurred between 1970 and 1990 in terms of the ratio of their average incomes to the overall average income.

**Chart 3.1**

**Average Income of Families by Structure as a Percentage of Overall Average Family Income, Canada, 1970, 1980, 1985 and 1990**



As a percentage of overall average income, the average income of husband-wife families increased from 103.9% in 1970 to 106.5% in 1990. Thus, their relative position has improved over the years. In contrast, the position of lone-parent families has worsened. From 83% of the overall average income in 1970, the average income of male lone-parent families improved by nearly four percentage points to 86.9% in 1980. In 1985, however, it fell to 82.6%, and in 1990 slipped further to 79.5%. Thus, male lone-parent families lost by 3.5 percentage points between 1970 and 1990 in their relative position. The average income of female lone-parent families in 1970 amounted to 56.3% of the overall average family income. The ratio fell to 51.6% in 1980 and to 50.7% in 1985 because of below-average growth in their incomes between 1970 and 1980 and above-average decline between 1980 and 1985. In 1990, the position of female lone-parent families improved to 51.7%, but was still 4.6 percentage points below their 1970 position.

## Family Versus Per Person Income

The characteristics of lone-parent families differ significantly from those of husband-wife families. **Table 3.1** presents selected income and other statistics by family structure.

On the average, the size of female lone-parent families (2.57) was about 16% smaller than the national average (3.07). As a result, while the average income of female lone-parent families was only a little over one-half (51.7%) of the national average in 1990, income per family member was over three-fifths (61.8%). Again, compared with the overall average of 1.68 earners per family, there were 1.09 earners in female lone-parent families. Consequently, the average income of female lone-parent families on a per earner basis was nearly four-fifths (79.3%) of the national average.

**Table 3.1**  
**Selected Statistics on Family Income by Family Structure, Canada, 1990**

	Family type				Ratio to Total		
	Husband-wife	Male lone parent	Female lone parent	Total	Husband-wife	Male lone parent	Female lone parent
					%		
<b>Average number of:</b>							
Persons	3.14	2.5	2.57	3.07	102.3	81.4	83.7
Earners	1.76	1.35	1.09	1.68	104.8	80.4	64.9
<b>Average family income*:</b>							
				\$			
Per family	54,667	40,792	26,550	51,342	106.5	79.5	51.7
Per person	17,387	16,295	10,336	16,734	103.9	97.4	61.8
Per earner	31,101	30,142	24,259	30,605	101.6	98.5	79.3

\*The averages have been obtained by dividing the total income of families by the actual number of persons and of earners and will, therefore, differ slightly when calculated by dividing the average family income by the average numbers in this table.

The average size of male lone-parent families (2.50) was similar to that of female lone-parent families. But, because of their higher average income, the changes in the position of male lone-parent families on the basis of per capita income become much more pronounced than is the case with female lone-parent families. While the average income of male lone-parent families was 79.5% of the national average in 1990, income per family member amounted to 97.4%. Again, the discrepancy between the overall average number of earners and that in male lone-parent families (1.35) was much smaller than was the case with female lone-parent families. Consequently, the average family income per earner was very close (98.5%) to the national average.

## Male Lone-parent Families Have Higher Incomes

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The average incomes of both male and female lone-parent families in 1990 were lower than the average income of husband-wife families. There was also a significant difference between the incomes of male and female lone-parent families. The average income of male lone-parent families (\$40,792) was 53.6% larger than that of female lone-parent families (\$26,550). To analyze this difference, it is relevant to examine the differences in some of the characteristics of male and female parents, since most of the income of lone-parent families is contributed by a single person — the parent.

Firstly, female lone parents contributed, on average, 73% toward the income of their families in 1990, while male lone parents contributed 80.6%.<sup>11</sup> The average earnings of male earners were higher than those of females by 73.9%, while the average total income of males was higher than that of females by 71.8%.<sup>12</sup> Thus, the difference between the average incomes of male and female lone-parent families in 1990 was commensurate with the overall differences in the earnings and incomes of individuals by sex.

Secondly, as shown in **Table 3.2**, there are differences in the age distributions of male and female lone parents. Since there is a close positive relationship between age and income, this difference generates a difference in the overall average incomes of the two groups. On the one hand, the proportion of male lone parents in the two lowest age groups, with the lowest average family incomes, was less than half of that of female lone parents in these age groups. On the other hand, the proportions of male lone parents in all of the remaining age groups (35 years and over) were significantly higher than those of female lone parents. The differences were particularly striking in two age groups. Male lone parents made up 12.9% of the 25-34 years age group, while female lone parents made up 24.3%. Their average family incomes were \$27,345 and \$16,337, respectively. In the 45 to 54 age group, there were 26.8% of male lone parents, compared with 17.2% of female lone parents. Their respective average family incomes were \$48,159 and \$34,841. The fact that there were relatively more male lone parents than female lone parents in the age groups associated with higher income contributed toward the overall difference in their family incomes.

Lastly, there were significant differences in the work activities of male and female lone parents. As the second part of **Table 3.2** shows, less than one-third (31%) of female lone parents worked full year, full time in 1990, but nearly one-half (49.5%) of all male lone parents did so. The average family income of full-year, full-time working male lone parents was \$49,243 in 1990, compared with \$36,420 for females. Again, compared with nearly two-fifths (39%) of female lone parents, less than one-quarter (22.7%) of male lone parents did not work in 1990. The impact of these differences is clear from the composition of incomes of the two groups of lone-parent families. In the case of female lone-parent

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<sup>11</sup> The children of male lone parents contributed \$7,912, toward family income in 1990, compared with \$7,171 by children of female lone parents. Although the contribution of the children of male lone parents was higher by 10.3%, it amounted to 19.4% of the total income of male lone-parent families, compared with 27.0% for female lone-parent families.

<sup>12</sup> See Table 3, 1991 Census of Canada, The Nation, *Selected Income Statistics*. Catalogue No. 93-331.

families, about 45 cents of every dollar of family income came from the earnings of the parent, compared with 65 cents for male lone-parent families.

Thus, a part of the overall difference in the average incomes of male and female lone-parent families stems from the differences in the distributions of the parents by age and work activities.

**Table 3.2**  
**Distribution and Average Family Income of Lone-parents by Sex, Age and Work Activity, Canada, 1990.**

Age and work activity of parent	Distribution		Average family income	
	Male	Female	Male	Female
	%		\$	
Age				
15 to 24 years	1.2	6.4	15,993	9,937
25 to 34 years	12.9	24.3	27,345	16,337
35 to 44 years	31.1	29.9	37,001	25,836
45 to 54 years	26.8	17.2	48,159	34,841
55 to 64 years	14.1	10.5	47,802	36,243
65 years and over	13.8	11.6	42,646	37,909
Work activity				
Full-year, full-time	49.5	31.0	49,243	36,420
Part-year or part-time	27.8	30.0	35,174	23,111
Did not work	22.7	39.0	29,267	21,359
Total	100.0	100.0	40,792	26,550
Parent's income	—	—	32,880	19,378
Parent's earnings	—	—	26,307	11,891

## Female Lone-parents Not a Homogeneous Group

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There is a very high concentration of female lone-parent families in the lower income groups. In 1990, nearly one-half of these families had a total income of less than \$20,000. However, female lone-parent families do not constitute an entirely homogeneous group. An examination of their incomes by the age of the parent reveals that female lone-parent families can be classified into two distinct subgroups: those with the parent under 45 years of age and those with the parent aged 45 years and over.

### Income Distributions of Female Lone-parent Families

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**Table 3.3** presents income distributions of female lone-parent families by age of the parent. Three out of five female lone-parent families were headed by women under the age of 45 years. The meagreness of income of these families is clear from the data in the table. The total income of one out four of these families was less than \$10,000 in 1990. In fact, one out of every ten families in this group had a total income of less than \$5,000 in 1990,<sup>13</sup> while only one out of ten had an income of \$40,000 or more.

In contrast, the income distribution of families headed by female lone-parents aged 45 years or over shows that they were more evenly distributed across the various income groups. Only 8.7% of these families had a total income less than \$10,000, while nearly 23% had an income of at least \$50,000 in 1990.

These differences in the income distributions of the two groups stem from the difference in their respective family compositions. Average income of younger female lone parents (\$19,081) in 1990 was only 3.8% smaller than that of the older female lone parents (\$19,836). But the average total income of younger families (\$20,344) was 56.3% lower than that of the older families (\$36,133). While the income of younger female lone-parents was the only source of their family income, children in the older group of female lone-parent families contributed significantly toward family income. Compared with \$1,263 in the younger female lone-parent families, children in the older families contributed, on average, \$16,297 to their family incomes in 1990.

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<sup>13</sup> Compared with other family types, there is a greater probability that the family status of female lone-parent families on the census day differs from their status in the preceding year. It is possible that the total income of a lone-parent family might have been larger in 1990 if it became a lone-parent family in 1991. See *Definitions Section*.

**Table 3.3****Distribution of Female Lone-parent Families by Age of Parent and Family Income Size Groups, Canada, 1990**

Income group	Total	Age of parent	
		Under 45	45 and over
		Percentage	
Under \$2,000	3.7	4.6	2.2
\$2,000-\$4,999	5.6	8.2	1.6
\$5,000-\$7,999	4.1	5.5	2.0
\$8,000-\$9,999	5.0	6.4	2.9
\$10,000-\$11,999	6.7	8.7	3.8
\$12,000-\$14,999	9.6	12.1	5.6
\$15,000-\$16,999	5.5	6.4	4.0
\$17,000-\$19,999	6.9	7.5	6.0
\$20,000-\$21,999	4.3	4.5	4.0
\$22,000-\$24,999	5.8	6.0	5.6
\$25,000-\$29,999	8.8	8.6	9.3
\$30,000-\$34,999	7.6	6.8	8.9
\$35,000-\$39,999	6.2	4.8	8.3
\$40,000-\$44,999	5.0	3.4	7.5
\$45,000-\$49,999	3.6	2.1	5.9
\$50,000-\$54,999	3.0	1.6	5.0
\$55,000-\$64,999	3.7	1.5	7.1
\$65,000-\$79,999	2.7	0.8	5.5
\$80,000 and over	2.3	0.6	5.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Number of families</b>	<b>788,400</b>	<b>478,510</b>	<b>309,890</b>
<b>Average income of:</b>			
Family	\$ 26,550	20,344	36,133
Parent	\$ 19,378	19,081	19,836
Children	\$ 7,172	1,263	16,297

## Faster Growth of Incomes of Female Lone-parent Families

The 1991 Census data show that, for the first time during the period 1985 to 1990, female lone-parent families experienced a faster growth in their incomes (11.2%) than husband-wife families (9.2%) or all families (9.0%). A partial explanation for this might lie in the change for the better in the work patterns of female lone-parent families.

Table 3.4 presents data on the work activity of husbands and lone parents in 1985 and 1990. Keeping with the trends in the recent past, the overall work activity of husbands was lower in 1990 than in 1985. The proportion of working husbands declined by one and a half percentage points during the period.

**Table 3.4**  
**Work Patterns of Husbands and Lone-parents and Average Family Incomes,**  
**Canada, 1985 and 1990**

Work patterns	Distribution						Average family income in 1990		
	Husbands		Lone parents				Husband- wife families	Male lone- parent families	Female lone- parent families
			Males		Females				
	1985	1990	1985	1990	1985	1990			
	%						\$		
Worked full time	77.4	77.1	70.5	72.2	42.1	47.7	60,364	45,322	32,131
1-13 weeks	2.5	2.0	3.3	2.5	3.1	3.0	36,005	24,223	16,580
14-26 weeks	4.8	5.2	5.5	5.9	3.9	4.7	40,177	29,848	20,254
27-39 weeks	4.7	4.7	4.5	5.0	3.0	3.4	45,768	34,002	24,302
40-48 weeks	9.0	9.2	9.1	9.4	4.9	5.7	58,496	45,991	31,456
49-52 weeks	56.5	56.0	48.2	49.5	27.1	31.0	64,637	49,243	36,420
Worked part time	5.3	4.2	6.4	5.1	14.4	13.3	44,524	27,986	21,737
Did not work	17.3	18.8	23.1	22.7	43.5	39.0	33,527	29,267	21,359
Total	100.0	100.0	100.0	100.0	100.0	100.0	54,667	40,792	26,550

In contrast, work activity among female lone parents increased during the period. Although the total number of female lone parents increased by 12.3% between 1985 and 1990, the number of those who worked increased by 21.2%. While the proportion of full-time working husbands remained about the same, that of female lone parents increased from 42% to nearly 48% during the period. More significantly, unlike the small drop in the incidence of full-year, full-time, work among husbands, the proportion of full-year, full-time working female lone parents increased by nearly four percentage points.

Other things being equal, these differential rates of change in work patterns would produce different rates of income changes. When the 1990 average family income of female lone-parent families is recalculated on the basis of the 1985 work patterns of parents, it shows a positive contribution of 2.5% toward their 1990 average family income. A similar standardization by the 1985 work patterns of husbands shows a small negative impact on their 1990 family incomes.<sup>14</sup>

The inference about the impact of changes in work patterns is supported by an examination of the composition of family income. The share of employment income in total income has been dropping over the past two decades. In 1985, employment income accounted for 81.1% of the total income of all families, and for 82.0% in the case of husband-wife families. These proportions fell to 80.4% and 81.2% in 1990. In contrast, in the case of female lone-parent families, employment income increased from 65.4% of their total income in 1985 to 67.2% in 1990.

In addition to these changes in work activity, an examination of the pattern of changes in individual rather than family incomes is also illuminating. Between 1985 and 1990, there was an increase of 6% in the real average total income of all income recipients. While the average income of men increased by 4.3%, that of women rose by 11.9%. The increase in the average income of female lone-parent families (11.2%) is similar to the increase in the average income of all females (11.9%). This is not surprising since female lone parents contributed at least 73% (94% in the case of younger parents) of the total income of their families.

Thus, the most probable explanation for the above-average increase in the incomes of female lone-parent families between 1985 and 1990 appears to be their increased participation in the work force, coupled with the generally faster growth of incomes of women than of men.

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<sup>14</sup> This was, however, compensated by the positive effects of changes in the work patterns of wives. Compared with 59.3% in 1985, 66% of wives worked in 1990.

# Chapter

## 4

### **Income Inequality**

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The total income pie is not divided equally among families. Some family groups take a disproportionately large share of the pie. This chapter examines this important aspect of family incomes in two ways. The shares of different family groups in the total income of families are examined, along with the changes in the composition of these groups by selected family characteristics between 1970 and 1990. This is followed by an investigation of the degree of, and changes in, income inequality among different types of families.

Income inequality is a complex issue. Neither the space nor the available census data permit a detailed exploration of the topic in this study. During the examination of income shares of various groups of families, the impact of differences in family size on these shares will be discussed in terms of average family income and per capita income. While the relevance of further adjustments to family size to take into account the combination of adults and children (generally known as the "equivalence scale") is recognized, such adjustments have not been undertaken for this study. The role of government transfer payments in reducing income inequality will be highlighted. However, an equally important aspect, on which census does not collect data, is the impact of taxes on income distribution. Since this study is based almost entirely on census data, the analyses cover only family incomes before taxes.

### **Income Deciles**

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Changes in family income are generally discussed in terms of changes in both average incomes and the proportions of families in various income groups. It would be considered an improvement in the overall position of families if, after adjustments for changes in the prices of goods and services, average family income increased and the proportions of families in the lower income groups decreased. The previous chapters followed this procedure, but it is less suited to a simple description of changes in income inequality. This is because there are generally simultaneous changes in both the proportions of families in different income groups and their income shares. Another way to examine income inequality is to arrange families in order of their income size from the lowest to the highest, divide them into equal parts, and examine the share of each part in the total income pie.

For the analysis in this section, families were divided into ten equal parts. Each group is designated an income decile.<sup>15</sup> **Table 4.1** shows the upper income limits or cut-off points for various deciles in 1970, 1980 and 1990. For example, in 1970, 10% of all families had a total income of less than \$10,717. These families were at the bottom of the income ladder, and formed the lowest decile. The total income of the next 10% of all families was between \$10,717 and \$17,298, and this group formed the second decile. In 1990, the upper limits for the bottom and the second deciles increased to \$15,714 and \$23,155.

**Table 4.1**

**Upper Limits of Family Income Deciles and Distribution of Aggregate Income of Families by Deciles, Canada, 1970, 1980 and 1990**

Decile	1970	1980	1990
<b>Upper limits</b>			
	Constant (1990) dollars		
Lowest decile	10,716	14,634	15,714 )
Second decile	17,298	21,747	23,155
Third decile	23,177	29,322	30,814
Fourth decile	28,140	36,080	37,872
Fifth decile	32,792	42,446	44,870
Sixth decile	37,781	49,017	52,092
Seventh decile	43,331	56,593	60,501
Eighth decile	50,874	66,436	71,546
Ninth decile	63,859	83,045	90,214
<b>Share in aggregate income</b>			
	%		
Lowest decile	1.46	1.48	1.64
Second decile	3.78	3.80	3.78
Third decile	5.48	5.38	5.27
Fourth decile	6.97	6.90	6.69
Fifth decile	8.20	8.25	8.05
Sixth decile	9.53	9.61	9.44
Seventh decile	10.96	11.09	10.95
Eighth decile	12.60	12.86	12.80
Ninth decile	15.25	15.50	15.53
Highest decile	25.77	25.13	25.85
<b>Total</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

<sup>15</sup> It is common to find discussion on this subject in terms of income quintiles. By definition, the first two deciles form the lowest quintile. The division of families into deciles was adopted for this study for two reasons. First, the large sample size, on which census income estimates are based, allows this more detailed division without compromising the reliability of changes within the deciles. Secondly, an analysis by quintiles is likely to hide some important changes which have occurred in the last two decades.

## *Little Change in Income Shares*

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If all families had received an identical total income, each decile would have received one-tenth of the aggregate income. But, as the second part of Table 4.1 shows, there is a large variation in the decile shares. The lower the decile, the smaller is its share of the aggregate income.

The lack of any major changes in the income shares of various deciles over the two decades is evident from the relevant statistics. However, although the changes in most deciles amounted to less than one-fifth of a percentage point over the period, the trend in changes is noteworthy. Families forming the bottom tenth on the income scale received only 1.46% of aggregate income in 1970. The income share of these families has been creeping upwards over the years, more or less imperceptibly, to reach 1.64% in 1990. The share of the second decile, after a slight increase in 1980, fell back in 1990 to the 1970 level of 3.78%.

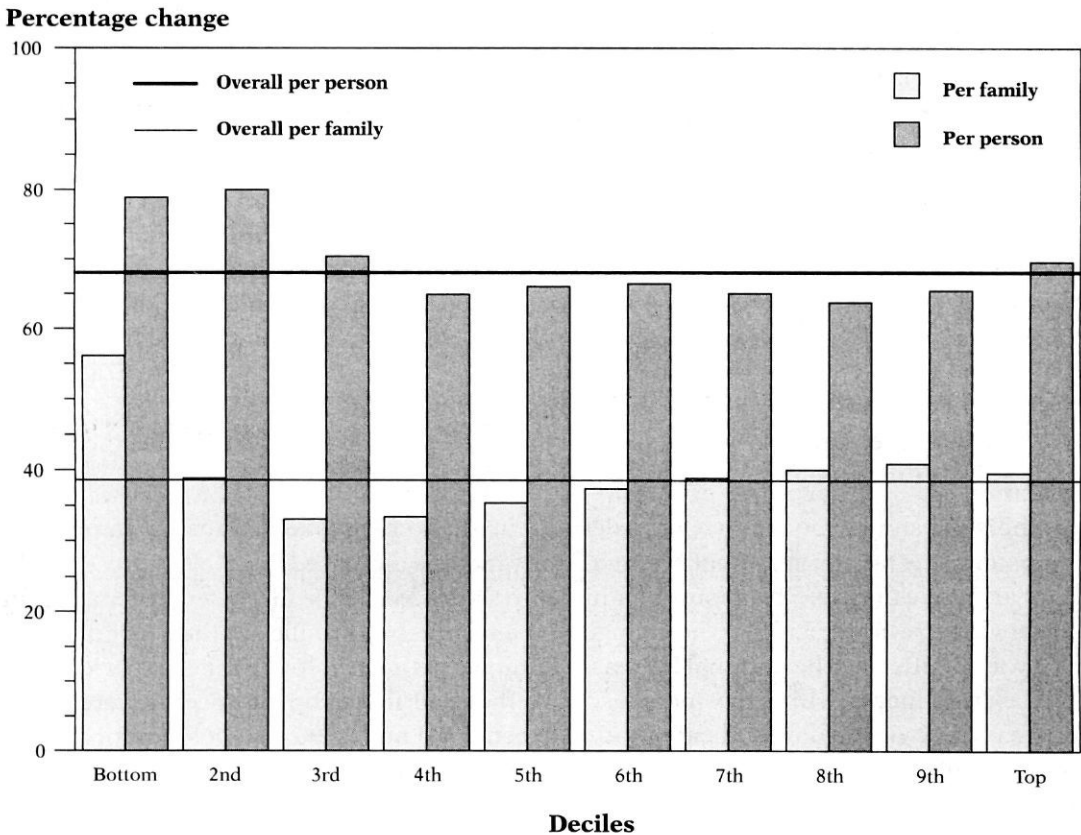
On the whole, middle income families — those forming the third to seventh deciles — lost, while families in the upper deciles gained. The largest losers were families in the third and fourth deciles. The third decile's share of aggregate income declined from 5.48% in 1970 to 5.38% in 1980 and to 5.27% in 1990, while the fourth decile's share declined from 6.97% in 1970 to 6.90% in 1980 and to 6.69% in 1990. The largest gainers were families in the eighth and ninth deciles, with the ninth decile gaining the most in income share — from 15.25% in 1970 to 15.53% in 1990.

While the changes in the percentage shares of various deciles may appear small, their impact is not minimal. Between 1970 and 1990, the total change in the decile shares was three-quarters of a percentage point. However, in terms of aggregate income distribution, it amounted to a total transfer of over a quarter of a billion dollars from six deciles to three deciles (the share of the second decile did not change). For example, the share of the families in the fourth decile declined by .28 percentage points between 1970 and 1990. Translated into dollars, it amounts to a loss of about 4% or about \$1,450 in the total income of each family in this decile. Because of a similar increase in the share of the ninth decile, income of each family in that decile was higher, on average, by about 2% in 1990.

**Chart 4.1** shows changes over two decades in the average total income per family and per person in the ten deciles. Real average family income increased by 38.6% between 1970 and 1990. While the average income of families in the lowest decile increased by 56%, a gain well above the overall increase, the change in the incomes of families in the second lowest decile was identical to the national increase. Families in the next four deciles experienced a below-average increase in family incomes, while the gains in the top four deciles were above average. These decile data indicate that, between 1970 and 1990, the position of middle income families worsened relative to families in both the upper and the lower income deciles.

Furthermore, as was pointed out in Chapter I, average family size declined from 3.72 in 1970 to 3.07 in 1990, which actually made families better off from an income point of view. While average family income increased by 38.6% between 1970 and 1990, average income per family member increased by 68.0%. But the decline in family size has not been uniform across the various deciles. Census data indicate that the declines in average family size were below average in the lowest, seventh, eighth and ninth deciles. The smallest decline occurred in the lowest decile, from 3.13 persons per family in 1970 to 2.73 in 1990, while the largest decline took place in the third decile from 3.60 to 2.81. As a consequence of this variation, the average income per family member changed at a different rate than the average income per family across the deciles. This is reflected in the second of set bars in **Chart 4.1**.

**Chart 4.1**  
**Changes in Per Family and Per Person Average Income in Constant (1990) Dollars**  
**by Deciles, Canada, 1970-1990**



Families in the lowest decile had the largest increase in their average income, but their per capita increase, though well above average, was not as large because the decline in the average family size in this decile was below average. The second decile gained the most in income per person. Unlike 1970, this decile had a large concentration of elderly families in 1990, accompanied by a large decline in family size. In terms of family income, families in the third to sixth deciles had below average increases. On a per person basis, families in the first and second deciles were better off by 78.9% and 80.0%, respectively, and those in the fourth to ninth deciles had below-average increases.

The above analysis shows the difficult nature of a discussion on income shares in isolation of other factors. It would be misleading to examine and draw conclusions about the income shares of various deciles without, at the same time, examining changes in the composition of these deciles during the period under review.

### ***Family Characteristics Change***

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Over time, important changes generally take place in the demographic structure of a society which may have an impact on income distributions. In addition, changes in economic conditions and economic behaviour often lead to significant variation in income gains made by various segments of the society. Furthermore, deliberate government policies and programmes also bring about changes in the relative income position of certain groups, especially those with small incomes. As a consequence, the composition of deciles changes over time. In Canada, all three factors have contributed to bringing about changes in the composition of various deciles.

Firstly, an important change occurred in the distribution of families by family structure. Families headed by female lone parents accounted for 7.3% of all families in 1970. Their proportion increased to 9.3% in 1980 and to 10.7% in 1990. While the number of all families increased by 45.5% over the two decades, the number of female lone-parent families increased by 113.1%. Although female lone-parent families still account for only a little over one-tenth of all families, they generally have low incomes. A disproportionately large increase in their number changes the overall income distribution.

Secondly, the increasing participation of wives in the labour market has led to the now common phenomenon of dual-earner families. Such families increased, as a proportion of all families, from 38.1% in 1970 to 55.5% in 1990,<sup>16</sup> leading to major changes in the structural and income distributions of families.

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<sup>16</sup> These are proportions of families with both spouses working out of all families. As Table 2.2 shows, the proportions are higher when calculated within husband-wife families.

Finally, the social security network in Canada has been expanding over the years. In 1970, the major source of income of 8.7% of all families consisted of government transfer payments. By 1990, these transfer payments were the main source of income of 15.5% of all families.

### ***Composition of Deciles Changes***

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The changes in family characteristics discussed above were some of the factors responsible for important changes in the composition of various deciles. **Table 4.2** presents the distribution of families by selected characteristics within each income decile for 1970, 1980 and 1990.

The lowest decile is of special interest because of the meagreness of income of families in it. Although this decile accounts for 10% of all families, it received less than 2% of all income. However, major changes have occurred in the composition of the decile between 1970 and 1990.

Firstly, female lone-parent families made up less than one-quarter of the lowest decile in 1970. In 1980, these families accounted for over one-third and, by 1990, nearly two-fifths of this decile. In fact, the number of female lone-parent families in the lowest decile nearly doubled over the 1970s.

Secondly, older families dominated the lowest decile in 1970. By 1980, they were replaced by younger families as the most common constituent of the decile. The proportion of elderly families in the decile was reduced by half, from 26.5% in 1970 to 13.1% in 1980. In 1990, there were only 10.9% older families in the decile. Conversely, the proportion of younger families (aged 25 to 34 years) in the lowest decile increased substantially during the period, from 18.0% in 1970 to 28.3% in 1990. This change in the distribution of families in the lowest decile stems from two factors. On the one hand, it reflects the disproportionately large growth of lone-parent families headed by younger women. On the other hand, the increase in government transfer payments such as Old Age Security and Guaranteed Income Supplements, both federal and provincial, was large enough to push most of the older families out of the lowest decile.

Thirdly, the data show that the proportion of families where both spouses worked in the lowest decile increased from 13.8% in 1970 to 20.7% in 1990. This reflects the very large overall growth in dual-earner families during the period. Had there been no such growth, their proportion in the lowest decile would have changed very little.

The move of elderly families out of the lowest income decile resulted in changes in the next three deciles. The composition of the second decile changed substantially between 1970 and 1980. The proportion of elderly families in this decile increased from 28.3% in 1970 to 41.7% in 1980, while that of families with non-working husbands increased from 26.6% to 42.5%. These proportions did not change much between 1980 and 1990. In fact, the proportion of elderly families in the second decile declined slightly during the 1980s. This was a reflection of the changes taking place in the third decile in which the proportion of the elderly increased from 15.4% in 1970 to 20.1% in 1980 and to 24.3% in 1990. Again, the proportion of families in which the husbands did not work increased in the third decile from 11.5% in 1970 to 19.6% in 1980 and to 27.4% in 1990. Similar, though less pronounced, changes took place in the composition of the fourth decile.

For the remaining deciles, changes in the work patterns of spouses resulted in major shifts within husband-wife families. As discussed in Chapter II, the number of families with both husband and wife working has been continuously and substantially rising since 1970. This had a twofold impact on the composition of income deciles. First, because such families have become more numerous, they make up a larger proportion of almost every income decile. Secondly, because of their generally larger incomes, the proportions of these families have naturally increased in the upper income groups. In 1970, husband-wife families with both spouses working made up 58.3% of the ninth decile and 49.5% of the highest decile. By 1990, both husbands and wives worked in four out of five families in these two deciles.

Again, the proportion of families in which only the husbands worked decreased greatly over the period under review. In 1970, in 43.4% of all families, only the husband worked. The proportion declined by 14 percentage points to 29.0% in 1980, and by another 14 points to 15.2% in 1990. This, of course, translated into declining proportions of such families in all deciles. However, considering the overall decrease in this family type, the declines were smaller in the lower deciles than in the upper deciles. Thus, for example, in 1970, 44.7% of the families in the highest decile had only the husbands working but there were only 12.9% such families in 1990.

### ***Role of Government Transfer Payments Grows***

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The overall share of government transfer payments in aggregate income of families nearly doubled from 5.4% in 1970 to 9.8% in 1990. These payments include Old Age Security pension, Guaranteed Income Supplement, benefits from Canada and Quebec Pensions Plans, family allowances, Federal child tax credits, benefits from Unemployment Insurance and other payments received from federal, provincial or municipal programmes. The provincial and municipal programmes include social assistance to the needy, disabled and the elderly, and provincial income supplements to the seniors.

**Table 4.2**  
**Distribution of Families by Selected Characteristics Within Income Deciles, Canada 1970, 1980 and 1990**

Characteristic	Total			Lowest decile			Second decile			Third decile			Fourth decile			Fifth decile		
	1970	1980	1990	1970	1980	1990	1970	1980	1990	1970	1980	1990	1970	1980	1990	1970	1980	1990
	Percent																	
<b>Family Structure</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Husband-wife																		
Both worked	38.1	47.3	55.5	13.8	15.2	20.7	18.2	18.1	23.3	25.4	30.8	37.0	30.3	39.6	47.8	36.1	47.1	56.3
Husband only worked	43.4	29.0	15.2	27.2	20.9	10.8	38.4	23.1	12.6	50.6	34.4	18.1	54.9	38.6	20.4	53.1	37.5	20.0
Husband did not work	9.2	12.4	16.3	31.7	24.1	25.4	26.6	42.5	43.2	11.5	19.6	27.4	6.0	10.9	18.2	4.1	7.3	13.3
Male lone-parent	2.0	2.0	2.2	3.3	3.0	3.8	2.5	2.0	2.7	2.4	2.4	2.8	2.4	2.4	2.8	2.0	2.2	2.5
Female lone-parent	7.3	9.3	10.7	23.9	36.8	39.3	14.3	14.4	18.3	10.1	12.9	14.7	6.5	8.5	10.7	4.7	5.9	7.8
<b>Age of Husband/Parent</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
15 to 24 years	6.4	5.8	3.1	9.8	12.7	10.5	7.9	6.8	4.6	9.3	8.5	4.4	8.8	8.3	3.7	7.6	7.0	2.9
25 to 34 years	23.1	25.7	22.4	18.0	27.3	28.3	18.1	17.2	18.4	22.9	25.2	22.8	26.8	28.9	26.0	27.7	31.1	27.4
35 to 44 years	23.1	22.3	26.8	15.4	18.2	22.6	16.6	12.4	16.2	20.0	18.0	21.0	22.2	20.1	24.8	24.7	22.6	26.9
45 to 54 years	20.7	18.8	18.9	14.0	13.5	12.9	14.4	9.7	9.4	16.6	13.3	12.6	17.4	15.1	14.5	18.4	16.3	16.0
55 to 64 years	15.0	14.9	14.4	16.4	15.0	14.8	14.6	12.2	12.0	15.8	14.9	15.0	14.7	15.5	14.6	13.9	14.1	14.1
65 years and over	11.7	12.5	14.4	26.5	13.1	10.9	28.3	41.7	39.5	15.4	20.1	24.3	10.1	12.1	16.4	7.8	8.9	12.7
<b>Major Source of Income</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
No income	0.3	0.3	0.4	2.9	2.9	3.8	-	-	-	-	-	-	-	-	-	-	-	-
Wages and salaries	79.3	75.8	72.4	29.2	31.3	28.9	51.0	39.8	38.2	76.8	69.0	61.0	87.1	82.6	74.7	91.0	87.8	82.2
Self-employment	8.0	6.4	4.9	15.4	8.1	4.7	12.5	6.7	4.5	9.9	7.6	5.1	7.1	6.1	4.8	5.4	5.4	4.3
Government transfers	8.7	12.0	15.5	47.4	51.6	56.5	29.5	47.1	51.7	6.8	14.0	25.1	1.9	4.2	11.4	0.8	1.7	5.4
Investment	2.0	3.3	3.1	2.9	3.5	2.9	3.2	3.1	2.2	3.0	4.9	3.4	1.8	3.9	3.6	1.4	2.9	3.3
Miscellaneous	1.7	2.1	3.6	2.2	2.5	3.0	3.8	3.3	3.3	3.6	4.5	5.3	2.1	3.2	5.5	1.3	2.2	4.9
<b>Composition of Income</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Wages and salaries	80.6	77.6	74.2	41.6	43.4	36.1	49.5	38.6	36.0	71.7	63.9	55.1	81.5	76.0	66.7	85.4	81.3	74.0
Self-employment	7.9	6.7	6.2	-10.9	-13.4	-4.9	10.6	5.7	3.6	8.5	6.6	4.4	6.4	5.4	4.3	5.3	4.8	4.1
Government transfers	5.4	7.1	9.8	60.1	64.0	62.3	29.6	43.6	49.4	12.3	18.1	26.9	7.0	10.2	17.4	5.1	7.2	12.3
Investment	4.1	6.4	5.8	5.5	2.0	2.0	5.3	6.5	5.1	4.0	6.3	6.0	2.9	4.9	5.2	2.6	4.2	4.6
Miscellaneous	2.1	2.2	4.0	3.8	4.0	4.5	5.0	5.6	5.8	3.5	5.1	7.7	2.3	3.4	6.3	1.7	2.5	5.1

**Table 4.2**  
**Distribution of Families by Selected Characteristics Within Income Deciles, Canada 1970, 1980 and 1990 (concluded)**

Characteristic	Sixth decile			Seventh decile			Eighth decile			Ninth decile			Highest decile		
	1970	1980	1990	1970	1980	1990	1970	1980	1990	1970	1980	1990	1970	1980	1990
	Percent														
<b>Family Structure</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Husband-wife															
Both worked	43.9	54.8	64.1	49.2	61.3	70.6	56.2	67.4	75.9	58.3	70.9	79.9	49.5	68.1	79.3
Husband only worked	47.5	33.4	18.1	43.9	29.3	15.4	37.8	24.7	12.9	36.2	22.4	11.0	44.7	25.4	12.9
Husband did not work	3.1	5.4	10.1	2.5	4.3	8.0	2.1	3.6	6.7	2.0	3.1	5.7	2.4	3.4	5.2
Male lone-parent	1.7	1.9	2.2	1.5	1.6	1.9	1.3	1.4	1.4	1.2	1.4	1.2	1.3	1.4	1.1
Female lone-parent	3.8	4.5	5.5	2.9	3.5	4.1	2.6	2.8	3.1	2.3	2.2	2.2	2.1	1.7	1.5
<b>Age of Husband/Parent</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
15 to 24 years	6.8	5.9	2.0	5.9	4.4	1.4	4.5	2.8	0.7	2.3	1.3	0.3	0.6	0.4	0.1
25 to 34 years	27.8	31.7	27.1	27.8	30.4	25.7	26.2	28.3	22.5	22.8	23.0	17.0	13.1	13.2	9.1
35 to 44 years	25.8	23.9	29.4	26.5	26.0	31.3	27.1	27.2	33.2	27.0	28.2	33.3	25.8	26.8	29.6
45 to 54 years	19.8	17.5	18.1	21.1	19.4	20.2	23.7	22.2	22.9	27.6	27.0	28.1	34.8	33.8	34.4
55 to 64 years	13.4	14.0	13.7	13.2	13.9	13.3	13.5	14.2	13.5	15.1	15.5	14.6	19.6	19.3	18.4
65 years and over	6.4	7.0	9.7	5.5	5.8	8.2	5.0	5.2	7.2	5.2	4.9	6.7	7.0	6.5	8.4
<b>Major Source of Income</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
No income	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wages and salaries	93.0	90.7	86.8	93.7	91.8	89.2	94.0	92.4	90.6	93.3	91.8	90.7	84.0	80.8	81.9
Self-employment	4.6	4.7	3.8	4.3	4.4	3.6	4.2	4.3	3.5	4.7	4.9	4.1	11.4	12.1	10.9
Government transfers	0.4	0.8	2.4	0.2	0.4	1.2	0.1	0.2	0.6	0.1	0.1	0.3	0.1	-	0.1
Investment	1.1	2.3	2.9	1.0	2.2	2.6	1.0	2.0	2.6	1.2	2.3	2.7	3.1	6.3	5.1
Miscellaneous	0.9	1.5	4.1	0.7	1.3	3.3	0.7	1.0	2.7	0.7	0.8	2.2	1.4	0.8	1.9
<b>Composition of Income</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Wages and salaries	87.5	84.3	79.0	88.5	85.9	82.1	88.9	86.8	83.9	87.9	86.0	84.3	73.1	71.4	72.2
Self-employment	4.6	4.3	3.8	4.6	4.1	3.6	4.6	4.1	3.7	5.4	4.8	4.4	15.5	13.5	12.9
Government transfers	4.0	5.4	8.8	3.2	4.3	6.7	2.7	3.4	5.1	2.2	2.6	3.8	1.5	1.6	2.2
Investment	2.4	3.9	4.2	2.5	4.0	4.0	2.5	4.2	4.1	3.0	5.0	4.6	7.3	11.8	9.6
Miscellaneous	1.4	2.0	4.2	1.3	1.8	3.6	1.3	1.6	3.2	1.5	1.5	2.9	2.6	1.7	3.1

The structural changes in the composition of various income deciles are also reflected in the distribution of families by major source of family income in **Table 4.2**. Employment income consisting of wages and salaries and self-employment income, though the predominant source of family income, declined as a major source of family income from 87.3% of families in 1970 to 82.2% in 1980 and to 77.3% in 1990. In contrast, government transfer payments became the major source of income of 15.5% families in 1990, compared with 12.0% in 1980 and 8.7% in 1970. Thus, the increases in families in which husbands did not work, in female lone-parent families and in elderly families are reflected in the third, fourth and fifth deciles, where government transfer payments became a major source of income for much larger proportions of families over the two decades.

The growing importance of government transfer payments is also apparent from the composition of the total income within each decile, shown in the last block of statistics in **Table 4.2**. The impact of increasing transfer payments on the income composition of families is particularly significant in the second, third and fourth deciles. Compared with 29.6% in 1970, government transfer payments accounted for nearly one-half of the total income of families in the second decile in 1990. Between 1970 and 1990, the share of government transfer payments in the aggregate income of the third and fourth decile families increased, respectively, by 15 and 10 percentage points.

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## Income Inequality

Income generating factors such as education, work experience, asset holdings, etc, are not distributed uniformly across the population. Therefore, an equal distribution of income cannot be expected. While this fact is recognized, the degree of inequality in income distribution is of concern to many researchers, policy makers and interest groups.

An overall picture of family income can be obtained through a graph showing percentage distribution of families by income size groups. (See, for example, Chart 1.1). Similarly, a simple visual picture of income inequality can be viewed through a diagram known as the Lorenz curve. The horizontal axis in a chart, containing a Lorenz curve, represents the cumulative percentage of families arranged in order of size of income, while the vertical axis represents the cumulative share of these families in the aggregate income. If all families received an identical amount of income, the Lorenz curve will coincide with the diagonal. The further the curve is removed from the diagonal, the more unequal is the income distribution.

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### *Income Inequality Varies by Family Structure*

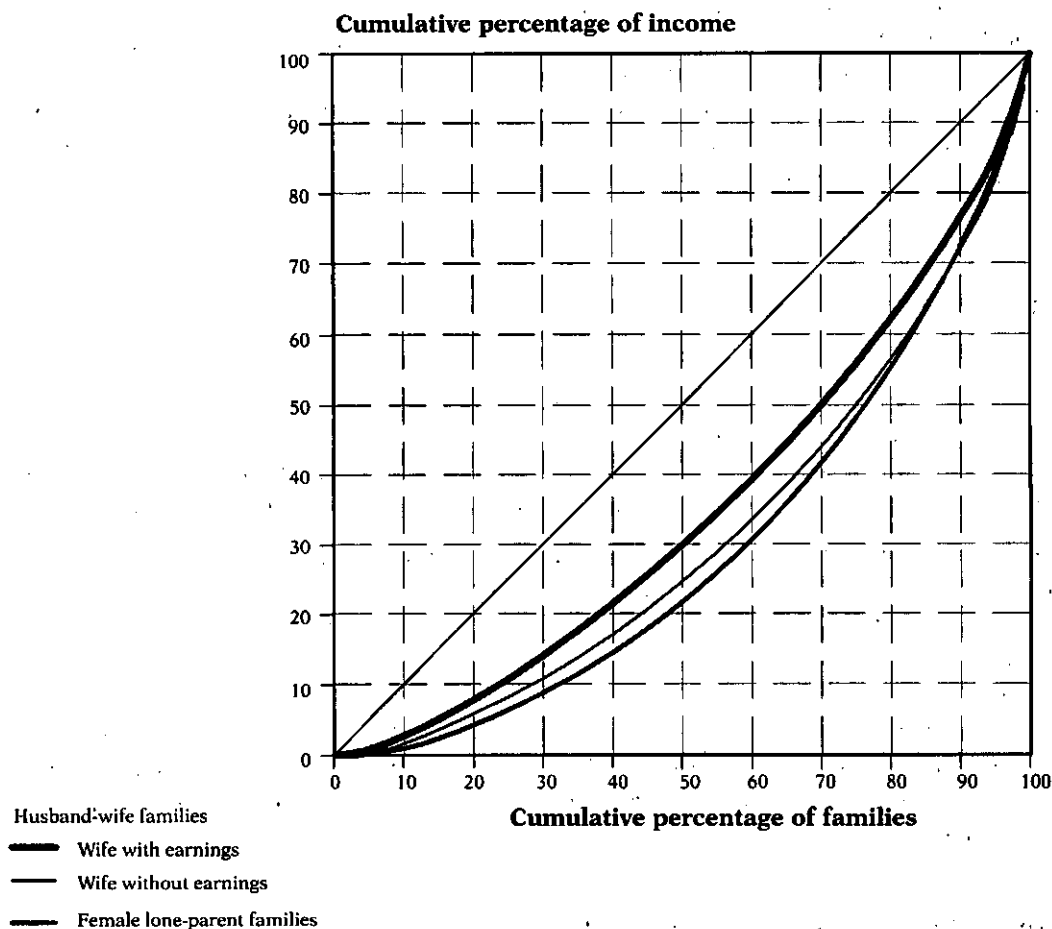
**Chart 4.2** presents three Lorenz curves depicting the income distributions of families of different type in 1990. The curve representing the husband-wife families with wives reporting employment income lies closest to the diagonal and, hence, there is least income

inequality among these families. This is not unexpected. Although there is a significant proportion of these families with very high incomes, very few families have very low incomes when both spouses are working.<sup>17</sup> The Lorenz curve for husband-wife families in which wives had no employment income displays a greater degree of inequality of income distribution.

With their Lorenz curve lying farthest from the diagonal, female lone-parent families show the most inequality of income distribution.<sup>18</sup> Again, this is expected since these families consist of two groups. The first consists of families headed by young parents with

**Chart 4.2**

**Distribution of Aggregate Family Income by Family Structure, Canada, 1990**



<sup>17</sup> These families can be equated to dual-earner families. The probability of a husband also working when the wife is working is much higher (95% in 1990) than the wife working alone.

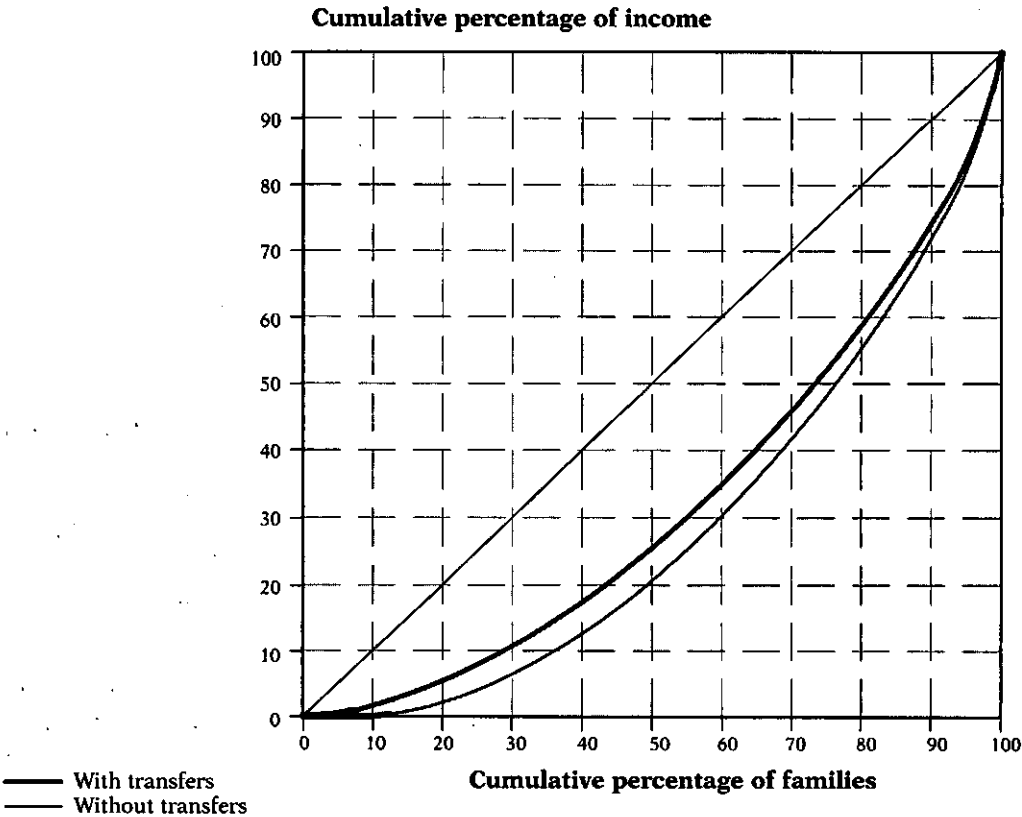
<sup>18</sup> No Lorenz curve for the income distribution of male lone-parent families is included in the chart since it was found to be almost identical to that for husband-wife families with wives without employment income. Also, see Table 4.3 for Gini coefficients for the income distributions of families by family structure.

small children. Their total family income consists primarily of their own relatively low incomes. The second group is headed by older lone parents with grown up children. The incomes of these children enlarge their family incomes substantially.

**Government Transfer Payments Reduce Income Inequality**

Without government transfer payments, the inequality of income distribution would be higher. **Chart 4.3** shows two Lorenz curves: one represents the distribution of actual income of all families in 1990 and the other shows the distribution of income excluding government transfer payments. The impact of government transfer payments is quite clear from the position of the two curves. The curve excluding government transfer payments from total income lies below the total income curve. The small share of the lower income families in the aggregate income becomes even smaller, while that of families in the upper deciles increases.

**Chart 4.3**  
**Distribution of Aggregate Family Income With and Without Government Transfer Payments, Canada, 1990**



## *Changes in Income Inequality*

While the Lorenz curve is a very convenient tool to compare income inequality between a limited number of groups, a quantitative measure, like the average income, is needed to allow an easy estimate of changes in inequality over time. The most widely known and used measure for this purpose is the Gini coefficient.<sup>19</sup> The value of this statistic lies between zero and one, denoting, respectively, total equality (all families receive equal income) and total inequality (one family receives all income).

**Table 4.3** provides Gini coefficients for selected categories of families in 1970, 1980 and 1990. The overall coefficient for all families was .3518 in 1970, declined only marginally to .3511 in 1980, and increased again to .3573 in 1990. A few Gini coefficients were derived for 1985 income distributions of different families. It was found that inequality of income increased between 1980 and 1985, with little change in the coefficients between 1985 and 1990. Thus, most of the increase in inequality of family incomes between 1980 and 1990 resulted from the recession of the early 1980s.

When the Gini coefficient for families of different characteristics are examined, a general pattern of declines in income inequality between 1970 and 1980 and increases between 1980 and 1990 emerges. Furthermore, the degree of income inequality and changes in it over the period under review are larger within various groups of families than the overall change.

By family structure, income inequality among dual earner husband-wife families increased from the 1970 level in both 1980 and 1990. In the case of families in which the wives had no earned income, inequality declined somewhat in 1980, but then moved back to the 1970 level. However, the overall inequality among all husband-wife families changed little between 1970 and 1990 in spite of a significant increase in income inequality among dual-earner families. This is the effect of the increasing weight of these families whose income distribution displays the lowest Gini coefficient (.2979) in 1990.

Inequality of income distribution declined for male lone-parent families between 1970 and 1980, but there was very little change between 1980 and 1990. The Gini coefficient for male lone-parent families in 1990 (.3746) was almost identical to that of husband-wife families in which wives were not earners (.3754). The largest decline in income inequality occurred in the case of female lone-parent families. There was a small drop in the Gini coefficient for their income distribution, from .4399 in 1970 to .4345 in 1980, but this was followed by a sharp decline to .4052 in 1990. This large decline in the 1980s can be attributed to the recent growth in the incomes of these families, discussed in the previous chapter.

In 1970, the degree of income inequality was very high among families headed by female lone parents under the age of 45. The Gini coefficient for their income distribution was largest at .4375. It was still highest in 1990, but had dropped to .3934. In the case of families headed by female lone parents aged 45 years or over, there was a sharp decline in

<sup>19</sup> The Gini coefficient is associated with the Lorenz curve. It expresses the area between the diagonal and the Lorenz curve as a proportion of the area under the diagonal.

**Table 4.3**  
**Gini Coefficients for the Income Distribution of Families by Selected**  
**Characteristics, Canada, 1970, 1980 and 1990**

Characteristic	Gini coefficient		
	1970	1980	1990
<b>All families</b>	<b>0.3518</b>	<b>0.3511</b>	<b>0.3573</b>
<b>Family structure</b>			
Husband-wife families	0.3383	0.3323	0.3379
Wife with employment income	0.2702	0.2838	0.2979
Wife without employment income	0.3760	0.3705	0.3754
Male lone-parent families	0.3888	0.3756	0.3746
Female lone-parent families	0.4399	0.4345	0.4052
Under 45 years	0.4375	0.4317	0.3934
45 years and over	0.4046	0.3850	0.3576
<b>Age of husband/parent</b>			
15 to 24 years	0.3093	0.3349	0.3761
25 to 34 years	0.2911	0.3032	0.3155
35 to 44 years	0.3227	0.3243	0.3251
45 to 54 years	0.3427	0.3375	0.3375
55 to 64 years	0.3822	0.3644	0.3792
65 years and over	0.4265	0.3760	0.3732
<b>Province/Territory</b>			
Newfoundland	0.3806	0.3530	0.3559
Prince Edward Island	0.3744	0.3455	0.3299
Nova Scotia	0.3533	0.3395	0.3441
New Brunswick	0.3498	0.3432	0.3457
Quebec	0.3509	0.3502	0.3511
Ontario	0.3316	0.3418	0.3550
Manitoba	0.3642	0.3511	0.3499
Saskatchewan	0.4059	0.3708	0.3581
Alberta	0.3668	0.3541	0.3550
British Columbia	0.3362	0.3456	0.3525
Yukon	0.3195	0.3179	0.3175
Northwest Territories	0.4207	0.3792	0.3841
<b>Government transfer payments</b>			
With transfer payments	0.3518	0.3511	0.3573
Without transfer payments	0.3882	0.4012	0.4245

income inequality. The Gini coefficient for their income distribution decreased from .4046 in 1970 to .3576 in 1990.

By age of husband/parent, young families (15 to 24 years of age) experienced the largest increases in the degree of income inequality in both decades. The Gini coefficient for their income distribution increased by nearly seven percentage points, from .3093 in 1970 to .3349 in 1980 and to .3761 in 1990. The families in the next age group (25 to 34 years) also experienced significant increases in income inequality in both decades, but the Gini coefficient for them has remained the lowest of all age groups throughout the period.

The Gini coefficient for elderly families was highest at .4265 in 1970. It declined by five percentage points to .3760 in 1980 but the decline between 1980 and 1990 was very small. The degree of income inequality in 1990 among elderly families (.3732) was about the same as among young families (.3761). In this respect, it may be pointed out that families in the older group are not as homogenous as the label "65 years and over" might suggest. While the main sources of income of a large number of families in this group are government old age pensions and other transfer payments, the group also includes many families that may be active in the labour market or that may be enjoying large retirement benefits and investment income. Therefore, the larger size of the Gini coefficient for the income distribution of elderly families, compared with other age groups, is not surprising.

**Table 4.3** also shows Gini coefficients for the income distribution of families in the provinces and territories in 1970, 1980 and 1990. Throughout the period, the two Territories show extreme positions: the Yukon had the least family income inequality (.3175) in 1990, and the Northwest Territories had the most (.3841).

The four provinces in the Atlantic region experienced varying degrees of decline in income inequality between 1970 and 1990, although almost all of the decline occurred between 1970 and 1980. While Quebec's position remained virtually unchanged, family income distribution in Ontario has become more unequal, with the Gini coefficient rising from .3316 in 1970 to .3418 in 1980 and to .3550 in 1990. The only other province experiencing an increase in income inequality was British Columbia, where the Gini coefficient rose from .3362 in 1970 to .3456 in 1980 and to .3525 in 1990.

The role of government transfer payments was discussed earlier. The last two rows of **Table 4.3** show the Gini coefficients for the income distribution of families with and without government transfer payments. Compared with a negligible decline in the Gini coefficient for actual family income distribution between 1970 and 1980, and then a small increase between 1980 and 1990, the inequality of income distribution would have been significantly larger in each of the three years without government transfer payments. Even more important, the inequality would have increased significantly over the two decades. It was argued earlier that major changes in the composition of various deciles were the main reason for lack of change in the incomes shares of various deciles. In spite of those changes, however, the Gini coefficient (and, therefore, inequality of income) would have increased by nearly four percentage points between 1970 and 1990 without government transfer payments.

# Chapter 5

## Regional Incomes

There is a large variation in family incomes among the various regions of the country. During the last two decades, family incomes have grown in all provinces and territories, but the changes have not been uniform. **Table 5.1** shows average family income in constant (1990) dollars in the provinces and territories in 1970, 1980, 1985 and 1990.

**Table 5.1**  
**Average Family Income in Constant (1990) Dollars, Canada, Provinces and Territories, 1970, 1980, 1985 and 1990**

Province/ Territory	Average family income			
	1970	1980	1985	1990
	\$			
<b>Canada</b>	<b>37,036</b>	<b>47,565</b>	<b>47,087</b>	<b>51,342</b>
Newfoundland	25,733	37,292	35,950	40,942
Prince Edward Island	26,905	36,750	37,905	43,295
Nova Scotia	30,265	38,894	41,002	44,001
New Brunswick	28,806	37,620	38,000	42,148
Quebec	35,720	44,644	43,048	46,593
Ontario	41,106	49,796	51,898	57,227
Manitoba	33,409	43,489	44,173	46,091
Saskatchewan	28,274	45,236	43,153	44,174
Alberta	36,618	54,043	50,713	52,346
British Columbia	38,655	51,806	46,873	52,403
Yukon	43,205	56,611	50,114	56,034
Northwest Territories	32,584	46,460	49,757	55,795

## **All Provinces Gain in the 1970s**

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The overall increase in average family income between 1970 and 1980 was 28.4%. The gains in all provinces and territories other than Quebec and Ontario were larger than the national average increase.

Average family incomes increased by 45% in Newfoundland and 37% in Prince Edward Island, the two provinces with the lowest family incomes. Although, as in 1970, family incomes in the Atlantic provinces remained lower in 1980 than in all other regions, the substantial gains in the two provinces with the lowest incomes reduced the differences in family incomes among the Atlantic provinces from \$4,500 in 1970 to \$2,100 in 1980. Furthermore, these provinces moved closer to the national average family income.

Average incomes of families in both Quebec and Ontario increased at a lower rate than the national average. Quebec families gained 25% over the decade. Average family income in the province had started below the national average in 1970. As a result of the lower than average increase during the decade, it moved somewhat further away from the national average in 1980. In Ontario, the 21% increase in family income over the decade was significantly lower than the national rate of 28.4%. Consequently, Ontario was the only province in which family income was pulled down toward the national average.

In Western Canada, Saskatchewan and Alberta families experienced very substantial income increases of 60% and 48%, respectively, in the 1970s. The large increase in Saskatchewan was partly due to the major losses suffered by the farm sector in that province in 1970, which made the average family income abnormally low in that year. In 1970, average family income in Saskatchewan was about three-quarters of the national average; in 1980, it was less than 5% below the national average. In Alberta, the average family income leaped from below the national average in 1970 to well above it in 1980.

With an increase of 34% in average family income in British Columbia and 31% in the Yukon, families in these areas continued to enjoy well above average incomes. Finally, the average family income in the Northwest Territories was 12% below the national average in 1970, but an increase of 43% moved it very close to the national average by the end of decade.

## **Varying Impact of Recession on Family Incomes in the 1980s**

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There was a large variation in the impact of the recession of the early 1980s on family incomes in various parts of the country. Average family incomes declined in half of the provinces and territories and increased in the other half. Both the gains in the 1970s and the losses in the early 1980s were generally well above average in the Western provinces. Families in Ontario experienced the lowest average increase in the 1970s but a well above-average increase between 1980 and 1985. The average income of families in Quebec

increased in the 1970s at a lower than average rate, but declined at an above average rate between 1980 and 1985.

Average family incomes increased in all provinces and territories during the second half of the 1980s, but with a large provincial variation in growth rates. The gains ranged from 2.4% in Saskatchewan to 14.2% in Prince Edward Island.

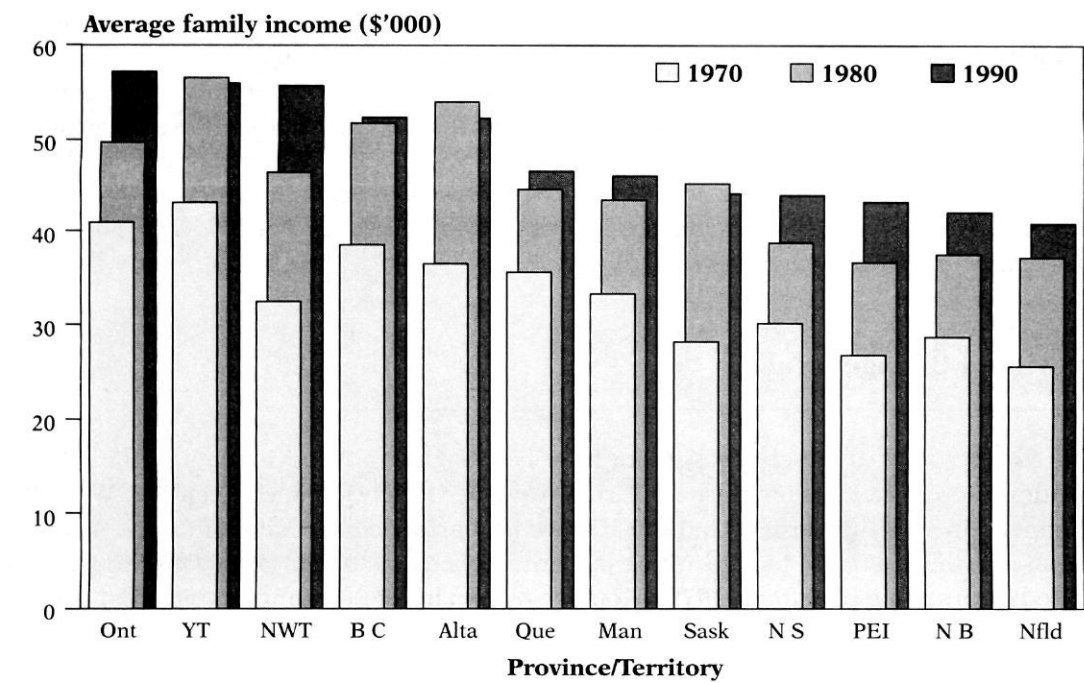
Thus, the 1980s differed significantly from the 1970s in respect of changes in family incomes. The overall gain in average family income was only 7.9% between 1980 and 1990, compared with 28.4% in the previous decade. In addition, the variation in provincial changes was much larger. In fact, Saskatchewan, Alberta and the Yukon suffered a decline in real average family income between 1980 and 1990, while family income in British Columbia increased by only a little over 1%. In contrast, average family incomes in Ontario and the Northwest Territories increased, respectively, by 14.9% and 20.1%. The gains in all the Atlantic provinces were above average.

## Provinces Change Rank

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As a result of these changes, there have been significant movements in the relative position of provinces and territories in terms of average family income since 1970. While the Yukon retained its first position in 1980, it moved down to second position in 1990. As **Chart 5.1** shows, the Yukon, in fact, lost in real terms between 1980 and 1990. Ontario families moved from second position in 1970 to fourth position in 1980, but then gained first place in 1990. This is primarily due to the significant increases experienced by Ontario families during the second half of the 1980s. The Northwest Territories advanced from seventh position in 1970 to fifth in 1980 and to third in 1990. Saskatchewan moved from tenth position to sixth in 1980, then slipped down to eighth position in 1990, while the other areas west of Ontario moved down a position. The four Atlantic provinces continued to occupy the bottom rungs of the income ladder throughout the period.

**Chart 5.1**  
**Average Family Income in Constant (1990) Dollars Canada, Provinces and Territories, 1970, 1980 and 1990**



**Regional Income Gap Narrows**

As the statistics in **Table 5.1** show, the gap in family incomes between the lowest and the highest provincial averages has consistently declined over the period reviewed.

In 1970, the ratio between the lowest and the highest provincial average family incomes (Newfoundland and the Yukon) was 59.6%. The lowest (Prince Edward Island) to the highest (the Yukon) family income ratio moved up to 64.9% in 1980. In both 1985 and 1990, average family income was lowest in Newfoundland and highest in Ontario. The ratio between them increased to 69.3% in 1985 and to 71.5% in 1990. Thus, the income gap between the lowest and the highest provincial average family incomes narrowed by nearly 12 percentage points over the two decades.

## Conclusion

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Average family income increased at an average annual rate of 2.5% between 1970 and 1980. The first half of the 1980s saw family incomes decline for the first time after the Second World War, but they recovered during the second half. Over the decade, however, the growth per year averaged less than 0.8%.

While the incomes of husband-wife families were boosted by the growth of dual-earner families during the last two decades, the incomes of lone-parent families, especially those headed by women, have remained significantly below the national average. Lone-parent families headed by women under 45 years of age were especially prone to having low incomes. However, between 1985 and 1990, there were indications of increased work activity among female lone parents. This, coupled with the generally faster growth of incomes of women, has led to some improvement in the incomes of female lone-parent families over the period.

Income inequality was lowest among dual-earner families and highest among female lone-parent families. It was also very high among younger and older families surrounding the middle age groups (25 to 54 years). Regionally, income inequality in 1990 was lowest among families in the Yukon, and it was highest among families in the Northwest Territories.

Overall income inequality decreased slightly between 1970 and 1980 but, as a result of the recession of early 1980s, it increased in that decade and was at a slightly higher level in 1990 than in 1970. Although the movement in income inequality across all families has been small, there have been significant changes within various groups of families. The largest decline in income inequality occurred in the case of elderly families, followed by female lone-parent families. The largest increase took place among very young families (under 25 years of age), followed by dual-earner families.

The growth of family incomes showed large regional variations. In both decades, the gains were well above average in the Atlantic provinces and below average in Quebec. Ontario families experienced below average growth in family income in the first decade, but well above average in the second. In the Western provinces, income gains were generally well above average in the 1970s and below average in the 1980s.

In 1970, the Yukon, Ontario and British Columbia occupied the top three positions in terms of average family income. Over the two decades, Ontario moved to the first place, Yukon to the second and the Northwest Territories replaced British Columbia in the third position in 1990. The Atlantic provinces remained at the bottom of the income ladder. However, measured in terms of the ratio between the lowest and the highest provincial average family incomes, the regional gap narrowed by nearly 12 percentage points from 59.7% in 1970 to 71.5% in 1990.

## Definitions

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- **Census Family**

A census family consists of a now-married couple (with or without never-married sons and/or daughters of either or both spouses), a couple living common-law (again with or without never-married sons and/or daughters of either or both partners), or a lone parent of any marital status, with at least one never-married son or daughter living in the same dwelling.

- **Family Income**

The total income of a census family is the sum of the total incomes of all members of that family received during the calendar year preceding the census or survey. The census income concept includes wages and salaries, income from farm and non-farm self-employment, government transfer payments, investment income, retirement pensions and other money income. It does not include income in kind, such as non-monetary benefits received by employees, agricultural products produced and consumed by the self-employed on farms, social and other assistance in kind, inheritances, windfalls, or capital gains or losses, etc.

- **Earnings/Earner**

Income from wages and salaries and from farm and non-farm self-employment is referred to as employment income or earnings and the recipients of such income are called earners.

- **Constant Dollars**

An increase in current income generally does not amount to an equivalent increase in purchasing power because of changes in the prices of goods and services. To render historical income data in constant dollars, income estimates for years prior to 1990 were converted into 1990 dollars by an adjustment for changes in the Consumer Price Index.

- **Work Activity**

Work activity of spouses and lone parents is described in this study in terms of weeks worked during the reference year and whether the work was full time or part time. Persons who reported 30 hours or more per week of work and who worked 49 to 52 weeks in the reference year are designated as full-year, full-time workers (FYFT). All persons who worked less than 30 hours (irrespective of the number of weeks worked) or who worked less than 49 weeks were classified as part-year/part-time workers (PY/PT).



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## Definitions (concluded)

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- **Educational Level**

Spouses in husband-wife families have been classified in four groups: those with a university degree (DEG), those with no university degree but with some post-secondary education or training (>SS), those with a secondary school certificate (SS), and all others (<SS).

- **Reference Period**

The statistics on families (number, size structure, etc.) relate to families as constituted at the time of the census, while those on income and work activity cover the calendar year preceding the census. No recall or adjustment has been made to account for persons who were family members for part of the reference year but then left because of marriage, divorce, death or other reasons. Some families existing at the time of census were not families during the whole of the reference year.

- **Data**

The data used in this study are from the Census of Canada taken in 1971, 1981, 1986 and 1991. For a brief description of different aspects of income – collection, processing, quality, etc. – readers may consult the report on *Income* in the 1991 Census Technical Reports series, Catalogue No. 92-340.

For detailed definitions, see Statistics Canada, *1991 Census Dictionary* (Catalogue No. 92-301E).

# Family Income in Canada

Statistics Canada

Changes in family incomes and purchasing power between 1970 and 1990 are traced, highlighting the impact of the recession of the early 1980s. The study analyzes the consequences of changing work and education profiles of the spouses on the incomes of husband-wife families. The incomes of lone parent families are examined in terms of their work and age patterns. Changes in the characteristics of families at different levels of income and in income inequality between 1970 and 1990 are discussed. Finally, changes in the regional disparities are examined.

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