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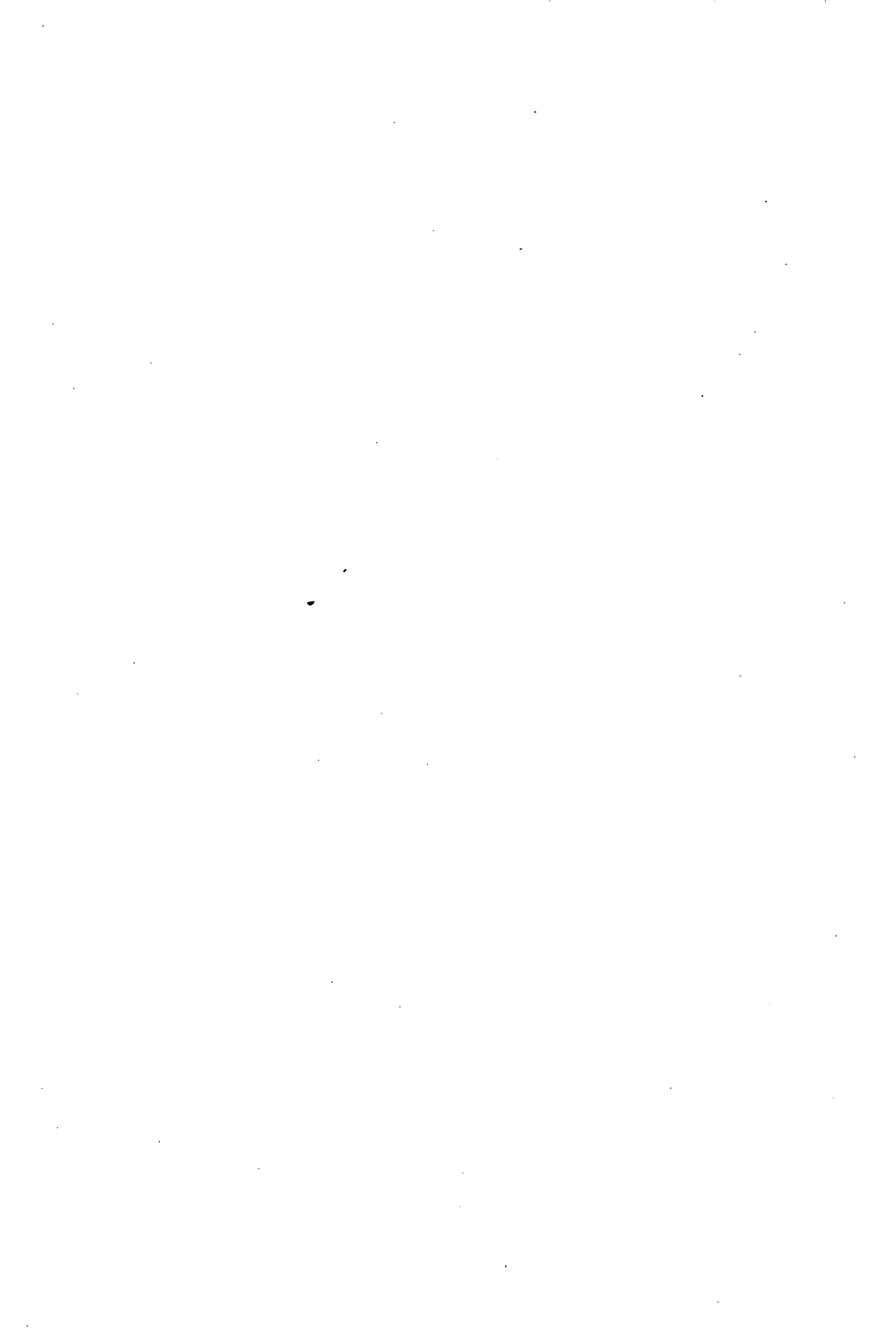


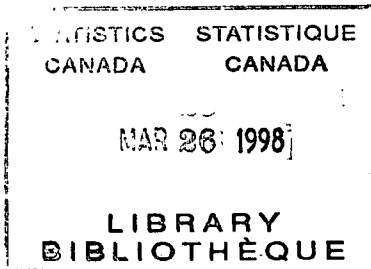
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**EMPLOYMENT  
INCOME**

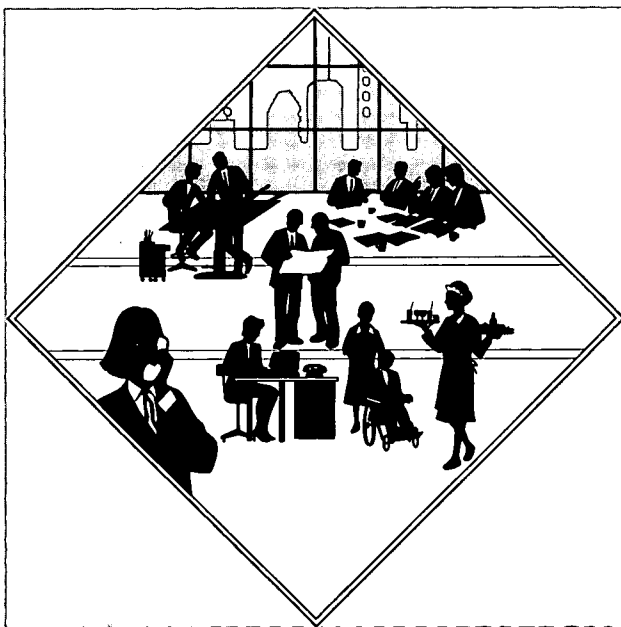
Canada





1986 Census of Canada

## EMPLOYMENT INCOME



by Morley Gunderson

Published under the authority of the Minister of Regional Industrial Expansion.

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## PREFACE

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**T**he 1986 Census of Canada provided, as did all the previous censuses, a rich source of information on individual, family and household characteristics of Canadians. The census data allow individual researchers as well as academic, business, cultural, social and governmental organizations to undertake in-depth enquiries and analyses on those social issues which interest and concern them.

This study is part of the 1986 Focus on Canada Series. The series is a modest effort by Statistics Canada to provide overviews of a wide variety of subjects on which the 1986 Census collected information. The studies have been written by experts, both inside and outside Statistics Canada, in non-technical language supported by simple tables and attractive charts. The topics include demographic characteristics (population, families, farmers, youth, seniors, the disabled), socio-cultural characteristics (ethnicity, language, education), and economic characteristics (women in the labour force, affordability of housing, occupational trends, employment income, family income).

The present study on "Employment Income" was authored by Professor Morley Gunderson of the University of Toronto.

I would like to express my appreciation to the authors, to the reviewers and to the staff of the Bureau involved in managing and producing this series.

We hope that the studies in the Focus on Canada Series will not only provide Canadians with very useful information on various facets of Canadian society, but will also be an inducement for them to undertake further research on the topics.

Ivan P. Fellegi  
Chief Statistician of Canada



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## HIGHLIGHTS

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- Employment income accounted for 79% of total income in 1985.
- Average employment income in 1985, for all workers, was \$18,910 and it was \$26,781 for full-year, full-time workers.
- Average employment income of men was \$23,411 and that of women was \$13,027. Thus, for all workers, average employment income of women in 1985 was 55.6% of that of men, but it was 65.5% for full-year, full-time workers.
- Employment income rises with age, peaking between the ages of 40 to 44 and declines slightly thereafter. The female age-earnings profile in 1985 was below the male profile for all ages.
- Females tend to work disproportionately in low-wage jobs like clerical, services and sales. Almost 60% of them were in clerical, service and sales occupations.
- Higher education, especially a university degree, is associated with higher income for both sexes. Nevertheless, women with a university degree still earned, in 1985, only slightly more than a male high school graduate.
- Married men had the highest average employment income (\$28,199) but the average employment income of married women (\$13,748) was only slightly above the overall female average.
- There was considerable regional disparity in employment income, with the Atlantic provinces having the lowest income, followed by Saskatchewan, Manitoba and Quebec. The Northwest Territories had the highest, followed by Ontario, Alberta, British Columbia and the Yukon.
- The regional differences in employment income are reduced when comparisons are made for full-year, full-time workers, highlighting that some of the disparity reflects the difficulty of finding full-time, full-year jobs.
- After adjustment for inflation, average employment income increased substantially between 1970 and 1980 but declined between 1980 and 1985. In real terms, average employment income increased slightly for females (3%) but declined for males (4%), between 1980 and 1985. The ratio of female to male employment income has increased steadily since 1970.



## INTRODUCTION

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**E**mployment income is an important component of our economic well-being, affecting our ability to consume and save. It is also an important source of status, influencing the perceived worth of a job.

Because of its importance, employment income is the basis of many controversial subjects. These include the issue of sex discrimination (males and females have considerable differences in their employment income), the issue of regional earnings disparities (there is a wide variation in employment income across Canadian provinces and territories), and the determinants of low earnings.

It should be emphasized, however, that the earnings of an individual are only one component of his or her economic welfare. The economic welfare of an individual may also be affected by such factors as assets, investment income and government transfer payments, as well as the number of other earners in the family and the extent to which different individuals have access to family income. Individuals with very low employment income need not be part of low income families.

This study uses 1986 Census data to describe the employment income picture in Canada in 1985, and a brief comparison with the position in 1970 and 1980. The census is comprehensive not only in terms of its coverage, but also in terms of the detailed information it obtains on such factors as the individual's personal characteristics and characteristics of the job and general environment in which the person works.

Separate figures are usually tabulated or discussed for men and women. It is well known that, on average, women earn considerably less than men in Canada and elsewhere. What is less well known, and difficult to document with precision, is the relative importance of the different factors (including discrimination) that contribute to that earnings gap.

Although a thorough analysis of the determinants of the male-female earnings gap is beyond the scope of this study, some light can be shed on the issue by examining how the male-female earnings differential varies by such factors as age, hours worked, education, occupation, and marital status. Other variables that could influence the male-female earnings gap, but for which census data are unavailable, include general labour market experience, company specific seniority, and absenteeism.

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This study shows how employment income varies by such factors as the characteristics of the workers (age, sex, marital status and education), their job (hours and weeks worked, occupation) and their province or territory of residence. The analysis is basically descriptive, explaining the gross relationship that prevails between employment income and each of these factors. It does not indicate the net or partial relationship that prevails after controlling for the effect of all other factors that influence employment income. It is, however, doubtful that such analysis would alter the broad pattern described in this study.

DISTRIBUTION OF POPULATION BY SIZE OF EMPLOYMENT INCOME





## DISTRIBUTION OF POPULATION BY SIZE OF EMPLOYMENT INCOME

### Employment Income as a Component of Total Income

Employment income is derived from three sources: wages and salaries, net income from non-farm self-employment such as business or professional practices, and net income from a farm operation. The latter two categories both refer to self-employment.

Wages and salaries refer to gross wages and salaries including military pay and allowances, tips, commissions, bonuses, and piece-rate payments before any deductions for such items as income tax, pensions, or insurance premiums. They do not include the monetary value of fringe benefits. Net income from non-farm self-employment refers to gross receipts minus expenses of operations from unincorporated business or professional practice, while net income from farm operation refers to gross receipts minus expenses of operating the farm.

The data on employment income and weeks and hours worked refer to the 1985 calendar year. The data on all other variables refer to the day or week of the census and relate to individuals who were 15 years or over on June 3, 1986.<sup>1</sup>

The importance of employment income is illustrated in Table 1. It is by far the largest component of total income, accounting for almost 79% of total income in 1985. Within employment income, wages and salaries are the largest component, accounting for almost 93% of employment income (73% of all income).

The data used throughout this report refer to individuals with employment income who worked one or more weeks in 1985, whether full time or part time. Full-time work refers to a self-enumerated concept whereby the respondents simply indicated

**Table 1. Percentage Distribution of Total Income of Population 15 Years and Over by Income Sources, Canada, 1985**

Income Source	Distribution
	%
<b>Employment income</b>	<b>78.7</b>
Wages and salaries	72.9
Non-farm self-employment	4.8
Farm self-employment	0.9
<b>Other income</b>	<b>21.3</b>
Government transfer payments	11.1
Investment income	6.6
Retirement pensions	2.8
Miscellaneous	0.9
<b>Total income</b>	<b>100.0</b>

Source:  
1986 Census of Canada, unpublished data.

<sup>1</sup> For detailed definitions, see Employment Income: Individuals, Catalogue No. 93-115.

that they worked full time. Full-year work refers to 49 to 52 weeks per year. Less than 49 weeks per year is classified as part year. Full-year, full-time work involves 49 to 52 weeks per year and is considered by the respondent to be full-time work. This highlights that there can be substantial variation in the hours worked even within the different categories of work activity.

Table 2 shows the distribution of population 15 years and over, who worked in 1985, by employment income size groups. The top panel refers to all workers, whether full time or part time, full year or part year. The bottom panel refers to those who worked full year (49 to 52 weeks) and full time.

**Table 2. Percentage Distribution of Population 15 Years and Over Who Worked in 1985 by Employment Income Groups, Age and Work Activity, Canada, 1985**

Employment income	15-24 years	25-44 years	45-64 years	65 years and over	All ages	Cumulative All ages
	(1)	(2)	(3)	(4)	(5)	(6)
%						
<b>All workers</b>						
Under \$2,000	24.2	5.7	5.5	17.4	9.9	9.9
\$ 2,000 — \$ 4,999	24.7	7.4	7.0	15.8	11.2	21.1
5,000 — 9,999	20.7	11.7	11.8	19.3	13.8	34.9
10,000 — 14,999	13.7	12.4	11.7	13.8	12.5	47.4
15,000 — 19,999	8.7	13.8	12.2	9.4	12.2	59.6
20,000 — 24,999	4.3	12.9	12.0	7.2	10.7	70.3
25,000 — 29,999	2.1	10.8	10.1	4.6	8.6	78.9
30,000 — 39,999	1.2	15.0	14.7	5.6	11.7	90.6
40,000 and over	0.3	10.3	14.9	6.9	9.2	99.8
<b>Total<sup>1</sup></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>
Average employment income	\$ 7,675	21,363	23,870	15,027	18,910	18,910
Median employment income	\$ 5,206	19,532	20,479	9,183	15,852	15,852
<b>Full-year, full-time workers<sup>2</sup></b>						
Under \$2,000	2.6	1.5	2.0	10.0	1.9	1.9
\$ 2,000 — \$ 4,999	3.1	1.3	1.8	7.5	1.7	3.6
5,000 — 9,999	15.1	4.3	5.2	13.0	5.8	9.4
10,000 — 14,999	29.2	9.3	9.3	15.1	11.4	20.8
15,000 — 19,999	24.9	15.3	13.2	13.0	15.6	36.4
20,000 — 24,999	13.3	16.5	14.7	11.2	15.6	52.0
25,000 — 29,999	6.8	14.9	13.0	7.8	13.5	65.5
30,000 — 39,999	4.1	21.7	20.0	9.9	19.3	84.8
40,000 and over	0.9	15.0	20.9	12.5	15.3	100.1
<b>Total<sup>1</sup></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>
Average employment income	\$ 15,619	27,266	29,765	22,562	26,781	26,781
Median employment income	\$ 14,999	25,428	26,154	16,470	24,349	24,349

<sup>1</sup> May not add to 100.0 because of rounding.

<sup>2</sup> Worked 49-52 weeks, full time, in 1985.

Source:

1986 Census of Canada, unpublished data.



## All Workers

As the last column in Table 2 indicates, 9.9% of the working population earned less than \$2,000 during 1985. An additional 11.2% earned between \$2,000-\$4,999 (Column 5) so that, in total, 21.1% earned less than \$5,000. Over one-third (34.9%) of the population earned less than \$10,000, and almost half of the population (47.4%) earned less than \$15,000 in 1985.

The separate columns reflect how the various age groups fall into different income categories. (More detailed information on the relationship between age and income is given later.) Young persons aged 15 to 24 years are quite likely to fall into the low income categories; almost 70% earned less than \$10,000 in 1985. Conversely, persons in the age group 45 to 64 years are more likely to be in the higher income categories; nearly 30% earned at least \$30,000 in 1985.

## Full-year, Full-time Workers

The low employment income of many workers in the top panel reflects the fact that they worked part time or only part of the year. This is apparent from a comparison of the top and bottom panels in Table 2. As the bottom panel indicates, the employment income picture is dramatically different for those who worked full year, full time.

Table 2 shows that 9.4% of full-year, full-time workers earned less than \$10,000 in 1985. Although not shown in the table, the proportion earning less than \$10,000 is even smaller (7.3%) based only on paid workers — that is, excluding the self-employed, many of whom may have suffered losses.

Slightly over half (52.0%) of those who worked full year, full time earned less than \$25,000. The full-year, full-time work force is fairly evenly distributed over the income categories between \$15,000 and \$40,000 per year. Almost half of this work force (48.4%) earned between \$20,000 and \$40,000 in 1985 and 15.3% earned \$40,000 or more.

The separate average income figures for the different age categories exhibit a pattern for full-year, full-time workers similar to that for all workers except that full-year, full-time workers obviously have higher income, reflecting their greater hours worked. As well, the difference between younger and older workers is not as great, reflecting the much lower average income of the 15 to 24-year age group who worked full year, part time or part year. For example, the average income of 45 to 64-year olds who worked full year, full time, was only twice that of 15 to 24-year olds, but the average employment income

of all workers 45 to 64 years old was three times that of all workers who were 15 to 24 years old.

The importance of part-time or part-year work for younger workers is highlighted by a comparison of the top and bottom panels of Column (1). A large portion of all younger workers are in the low income categories (almost 70% earned less than \$10,000). In contrast, only slightly more than 20% of full-year, full-time workers earned less than \$10,000. Just over half of the younger workers who worked full year, full time earned between \$10,000 and \$20,000, and slightly over two-thirds earned between \$10,000 and \$25,000 in 1985. Few are in the higher income groups since they have not had sufficient time to receive promotions, move to higher paying jobs or acquire the wage increases that come with seniority and experience.

In contrast, older workers (65 years and over) who work full year and full time are more evenly distributed throughout the different income groups, with around 10% in each group. Clearly, the nature of work changes substantially for those who do not retire. Many of them likely engage in self-employment for low income (over 30% earned less than \$10,000 in 1985). Many also do part-time or part-year work, as evidenced by the substantial portion of all workers (top panel) in the low income categories.

## Female and Male Workers

Table 3 repeats Columns (5) and (6) of Table 2 separately by sex. Clearly, women are distributed disproportionately in the lower employment income categories. For example, 13.2% of women had employment income of less than \$2,000 in 1985 and a further 14.8% had between \$2,000 and \$4,999. The corresponding figures for men were only about one-half of those proportions. As a result, on a cumulative basis (Columns (3) and (4)), almost half (46.2%) of all women, compared with only about a quarter (26.4%) of all men, had employment income of less than \$10,000 in 1985. Conversely, only 5.5% of women had between \$30,000 and \$39,999 in employment income and 2.2% had over \$40,000. The corresponding proportions for men were, respectively, 16.6% and 14.6%.

For full-year, full-time workers a similar pattern also prevails, with women disproportionately occupying the lower categories of employment income. However, the proportions occupying the low income categories obviously are smaller for both men and women, reflecting the higher employment income of full-year, full-time workers.

**Table 3. Percentage Distribution of Population 15 Years and Over Who Worked in 1985 by Employment Income Groups, Sex and Work Activity, Canada, 1985**

Employment income	Distribution		Cumulative distribution	
	Females	Males	Females	Males
	(1)	(2)	(3)	(4)
	%			
<b>All workers</b>				
Under \$2,000	13.2	7.4	13.2	7.4
\$ 2,000 — \$ 4,999	14.8	8.5	28.0	15.9
5,000 — 9,999	18.2	10.5	46.2	26.4
10,000 — 14,999	15.6	10.2	61.8	36.6
15,000 — 19,999	14.7	10.4	76.5	47.0
20,000 — 24,999	10.0	11.2	86.5	58.2
25,000 — 29,999	5.9	10.8	92.4	69.0
30,000 — 39,999	5.5	16.6	97.9	85.6
40,000 and over	2.2	14.6	100.1	100.2
<b>Total<sup>1</sup></b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Average employment income	\$ 13,207	23,411	13,207	23,411
Median employment income	\$ 11,233	21,699	11,233	21,699
<b>Full-year, full-time workers<sup>2</sup></b>				
Under \$2,000	1.9	1.8	1.9	1.8
\$ 2,000 — \$ 4,999	2.1	1.5	4.0	3.3
5,000 — 9,999	9.1	3.9	13.1	7.2
10,000 — 14,999	17.9	7.8	31.0	15.0
15,000 — 19,999	24.1	11.0	55.1	26.0
20,000 — 24,999	18.4	14.0	73.5	40.0
25,000 — 29,999	11.3	14.7	84.8	54.7
30,000 — 39,999	10.9	23.9	95.7	78.6
40,000 and over	4.3	21.4	100.0	100.0
<b>Total<sup>1</sup></b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Average employment income	\$ 19,995	30,504	19,995	30,504
Median employment income	\$ 18,944	28,395	18,944	28,395

<sup>1</sup> May not add to 100.0 because of rounding.

<sup>2</sup> Worked 49-52 weeks, full time, in 1985.

**Source:**

1986 Census of Canada, unpublished data.

## EARNINGS PROFILES BY SEX

## Age

The relationship between employment income and age, highlighted briefly in Table 2, is illustrated with more detailed age categories in Table 4. For both sexes, for full-year, full-time workers and for all workers, employment income rises sharply with age, peaks usually in the 40-44-year age group, and thereafter declines steadily until 65 years of age when it drops substantially. The female peak is reached slightly earlier, for full-year, full-time workers, in the 35-39-year age group.

As illustrated in Chart 1, the basic difference between the female and male age-earnings profiles are: (1) the female profile is always below the male profile; (2) the female profile is flatter or less peaked; and (3) the peak of the female profile is earlier, at least for full-year, full-time workers.

These differences in the female and male earnings profiles lead to the pattern of the ratio of female to male earnings as exhibited in Columns (3) and (6) of Table 4. Female earnings are a much higher proportion of male earnings in the younger age groups, before differences in such factors as experience, seniority and family responsibilities have their effect. As well, female earnings are a much higher percentage of male earnings for full-year, full-time workers than for all workers. This emphasizes that differences in hours of work are an important source of the earnings gap between females and males. (The relationship between work activity and the female to male earnings gap is examined in more detail in the next section.)

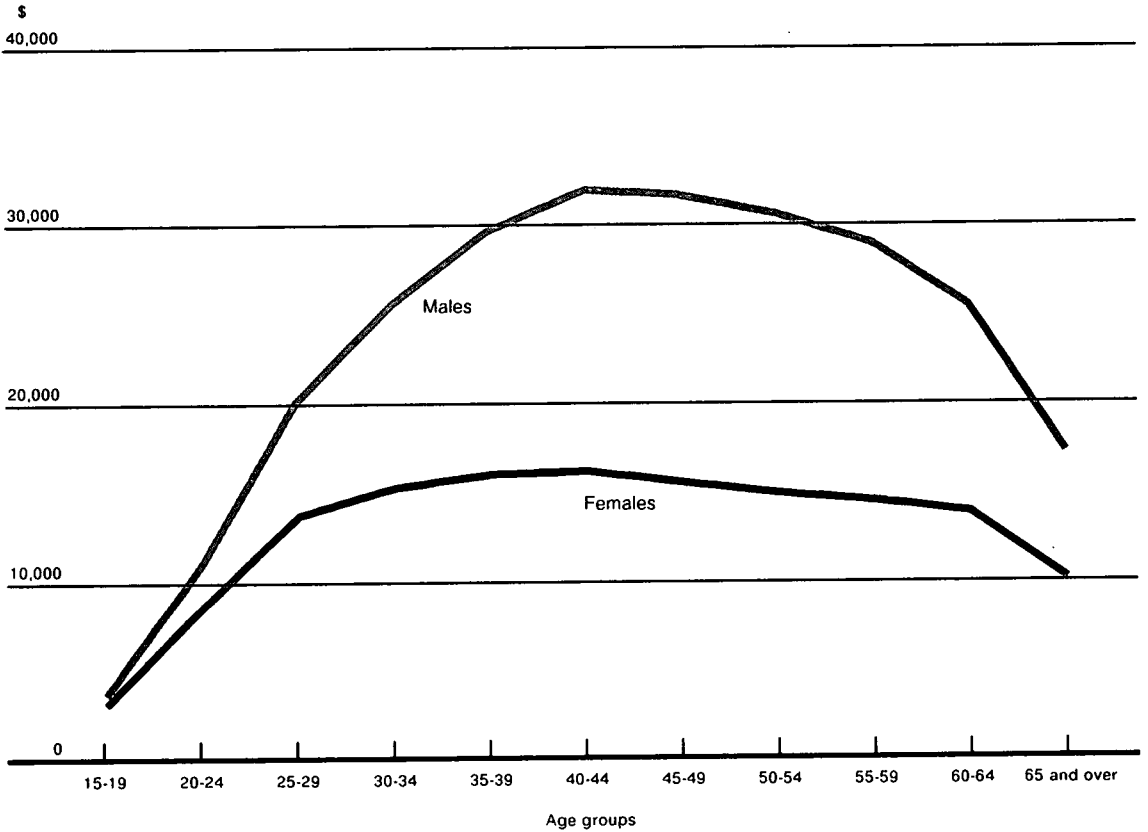
**Table 4. Average Employment Income of Population 15 Years and Over by Sex, Age Groups and Work Activity, Canada, 1985**

Age groups	Full-year, full-time workers			All workers		
	Females	Males	Female/ male ratio <sup>1</sup>	Females	Males	Female/ male ratio <sup>1</sup>
	(1)	(2)	(3)	(4)	(5)	(6)
	\$		%	\$		%
15-19 years	9,935	11,760	84.5	2,886	3,475	83.1
20-24 years	14,285	17,473	81.8	8,577	10,947	78.4
25-29 years	19,122	24,819	77.0	13,762	20,067	68.6
30-34 years	21,461	29,669	72.3	15,185	25,612	59.3
35-39 years	22,392	33,430	67.0	15,974	29,657	53.9
40-44 years	22,047	35,478	62.1	16,072	31,868	50.4
45-49 years	21,157	35,287	60.0	15,573	31,636	49.2
50-54 years	20,669	34,410	60.1	14,946	30,576	48.9
55-59 years	20,140	33,130	60.8	14,376	28,873	49.8
60-64 years	19,726	30,723	64.2	13,812	25,470	54.2
65 years and over	16,214	24,534	66.1	10,021	17,231	58.2
<b>All ages</b>	<b>19,995</b>	<b>30,504</b>	<b>65.5</b>	<b>13,027</b>	<b>23,411</b>	<b>55.6</b>

<sup>1</sup> Average employment income of females as a percentage of average employment income of males.

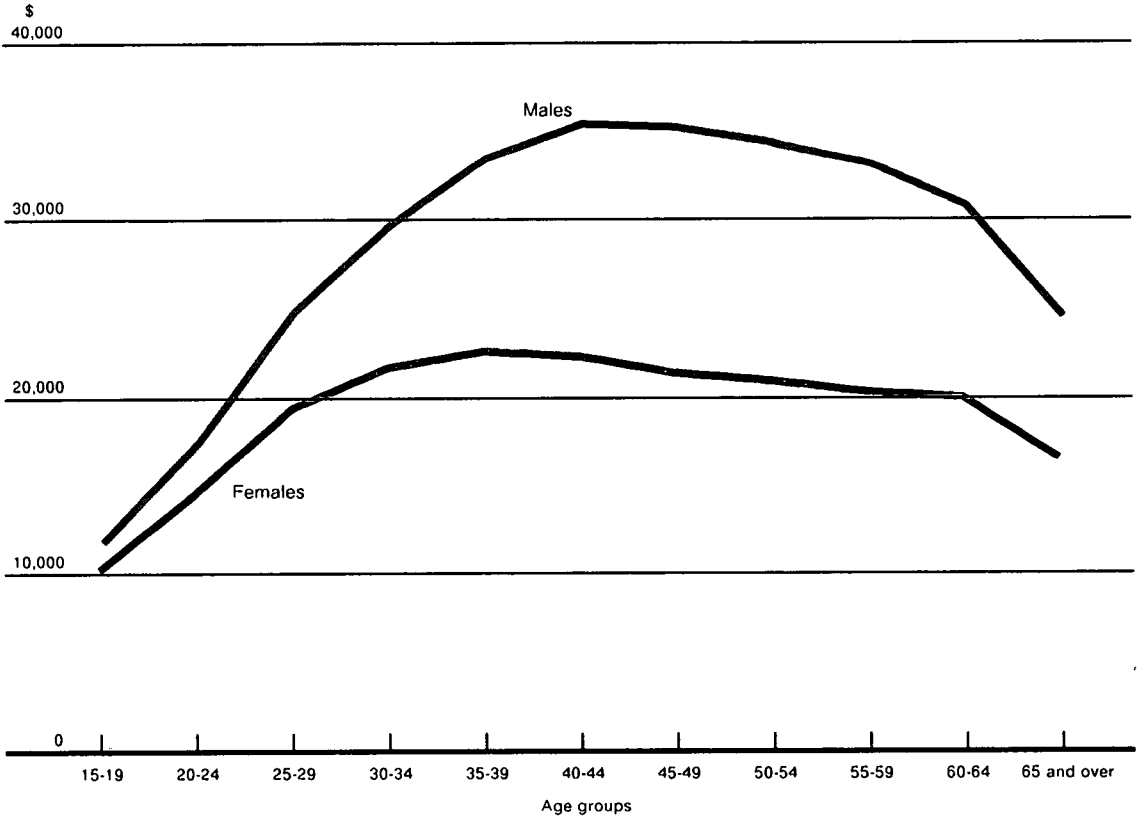
Source:  
1986 Census of Canada, unpublished data.

**Chart 1. Average Employment Income of All Workers by Sex and Age Groups, Canada, 1985**



**Source:**  
1986 Census of Canada, unpublished data.

**Chart 2. Average Employment Income of Full-year, Full-time Workers by Sex and Age Groups, Canada, 1985**



Source:  
1986 Census of Canada, unpublished data.

## Work Activity

Table 5 illustrates how male and female employment income each varies by weeks worked and whether that work was full time or part time. For both sexes, annual employment income obviously increases as the number of weeks worked per year increases, and when that work is full time as opposed to part time.

As the last entry of the last column (Column (3)) indicates, on average, female employment income

for all workers was 55.6% of male employment income in 1985. Alternatively stated, average employment income was \$13,027 for females and \$23,411 for males, implying an overall ratio of female to male employment income of 0.556 (i.e.  $\$13,027/\$23,411$ ). When comparing those who worked full year (49-52 weeks) and full time, however, females on average had an employment income that was 65.5% (i.e.  $(\$19,995/\$30,504) \times 100.0$ ) that of males. Clearly,

**Table 5. Average Employment Income of Population 15 Years and Over by Sex and Work Activity, Canada, 1985**

Weeks worked	Part time	Full time	All workers
	(1)	(2)	(3)
	\$		
<b>Both sexes</b>			
1-13 weeks	2,390	4,171	3,353
14-26 weeks	5,056	9,022	7,561
27-39 weeks	7,107	14,015	11,875
40-48 weeks	9,284	21,996	18,980
49-52 weeks	10,358	26,781	24,866
<b>Total</b>	<b>7,014</b>	<b>22,086</b>	<b>18,910</b>
<b>Females</b>			
1-13 weeks	2,153	3,243	2,666
14-26 weeks	4,440	6,828	5,719
27-39 weeks	6,226	10,792	8,861
40-48 weeks	8,573	15,901	13,182
49-52 weeks	9,950	19,995	17,859
<b>Total</b>	<b>6,731</b>	<b>16,028</b>	<b>13,027</b>
<b>Males</b>			
1-13 weeks	2,747	4,941	4,102
14-26 weeks	6,064	10,592	9,346
27-39 weeks	8,729	16,136	14,599
40-48 weeks	10,947	25,568	23,687
49-52 weeks	11,433	30,504	29,488
<b>Total</b>	<b>7,573</b>	<b>25,671</b>	<b>23,411</b>
<b>Female/male ratio<sup>1</sup></b>		<b>%</b>	
1-13 weeks	78.4	65.6	65.0
14-26 weeks	73.2	64.5	61.2
27-39 weeks	71.3	66.9	60.7
40-48 weeks	78.3	62.2	55.6
49-52 weeks	87.0	65.5	60.7
<b>Total</b>	<b>88.9</b>	<b>62.4</b>	<b>55.6</b>

<sup>1</sup> Average employment income of females as a percentage of average employment income of males.

Source:  
1986 Census of Canada, unpublished data.

differences in work activity account for a substantial portion of the overall earnings differential; nevertheless, a very large gap remains even when comparing males and females who have similar work activities (i.e. both worked full year and full time).

The extent to which differences in work-time practices reflect preferences or discrimination is beyond the scope of this analysis. It could reflect discrimination to the extent that females are disproportionately given only part-time work or part-year jobs. It could reflect choice if women choose such work, perhaps because it is compatible with household activities that they choose. Or it could reflect a severely "constrained choice" if women must limit their hours of work in the labour market given their disproportionate burden of household responsibilities, even when both men and women work in the labour market. Whatever the reason, women tend to disproportionately work part time and part year

relative to men and this does reduce the employment income of women relative to men.

Interestingly, the ratio of female to male earnings is substantially higher when only part-time workers are compared. Specifically, on average, females who work part time earned 88.8% of what part-time males earned.

## Occupation

Women do not earn as much as men, on average, partly because women tend to work in lower paying occupations than men. This is illustrated in Table 6, based on the 22 major occupation groups.

Although not shown in the table, 33.6% of the female work force is in the clerical and related occupations, 16.3% in services, and 9.5% in sales. Thus, a total of almost 60% of the female work force

**Table 6. Average Employment Income of Population 15 Years and Over by Sex and Major Occupation, Canada, 1985**

Occupation	Average employment income			Female/ male ratio <sup>1</sup>	Percentage of females in each occupation
	Females	Males	Both sexes		
	(1)	(2)	(3)	(4)	(5)
		\$		%	
Managerial, administrative and related occupations	21,328	37,939	32,664	56.2	31.8
Occupations in natural sciences, engineering and mathematics	19,878	30,756	28,828	64.6	17.7
Occupations in social sciences and related fields	15,792	34,938	23,757	45.2	58.4
Occupations in religion	12,526	16,975	16,045	73.8	20.9
Teaching and related occupations	20,137	33,009	24,973	61.0	62.4
Occupations in medicine and health	18,051	46,679	24,050	38.6	79.0
Artistic, literary, recreational and related occupations	12,060	18,945	15,984	63.7	43.0
Clerical and related occupations	12,746	18,147	13,885	70.2	78.9
Sales occupations	9,594	21,840	16,284	43.9	45.4
Service occupations	7,362	16,028	11,270	45.9	54.9
Farming, horticultural and animal husbandry occupations	6,233	11,858	10,653	52.6	21.4
Fishing, trapping and related occupations	5,900	13,644	12,874	43.2	9.9
Forestry and logging occupations	5,865	16,443	15,679	35.7	7.2
Mining and quarrying including oil and gas field occupations	17,893	27,844	27,602	64.3	2.4
Processing occupations	9,873	21,228	18,331	46.5	25.5
Machining and related occupations	13,320	22,577	22,916	59.0	7.1
Product fabricating, assembling and repairing occupations	11,136	21,688	19,107	51.3	24.5
Construction trades occupations	12,642	19,775	19,594	63.9	2.5
Transport equipment operating occupations	11,087	22,113	21,248	50.1	7.8
Material handling and related occupations	10,683	17,937	16,244	59.6	23.3
Other crafts and equipment operating occupations	12,036	26,026	22,799	46.2	23.1
Occupations not elsewhere classified	9,829	14,631	13,748	67.2	18.4
Total, all occupations	13,027	23,411	18,910	55.6	43.3

<sup>1</sup> Average employment income of females as a percentage of average employment income of males.

Source:  
1986 Census of Canada, unpublished data.

were in those three occupations. These are all low paying occupations, as is evident by the fact that they all had employment income below the average of \$18,910 in 1985. In addition, they are female-dominated occupations since they all show a higher proportion of females than the average proportion of 43.3% of the work force that is female.

The broad occupation categories used in Table 6 do not show the extent to which females occupy low paying positions within those broad occupations. For example, within the high paying occupations of medicine and health (which is 79.0% female), females occupy the lower paid job of nursing, while males predominate in the much higher paid position of doctors. Within the reasonably well paid teaching occupations, which are female dominated, women tend to occupy the lower paid elementary school jobs, and men the higher paid secondary school jobs and principal positions. Within the highest paid managerial and administrative group, men tend to hold the higher paid managerial positions and women tend to hold lower paid positions. Like the differences in their hours of work spent in the labour market, the reasons for the differences in the occupational distribution between men and women are extremely difficult to determine.

Some of the differences in the occupational distribution between men and women may reflect discriminatory pressures since employers tend to hire mainly women for what they consider to be "women's jobs", or since they do not promote them to the senior positions within occupational groups. Other differences may reflect the streaming that exists in educational institutions if female students are encouraged by guidance counsellors or parents to take nursing as opposed to medicine, or clerical as opposed to mechanical or managerial training. To some extent, differences in the occupational distribution between males and females may also reflect choices, perhaps constrained by differences in household responsibilities typically done by each sex. Whatever the reasons, there are dramatic differences in the extent to which males and females dominate certain occupations.

These differences in the occupational distribution by sex have given rise to several policy initiatives. Equal employment opportunity legislation is designed to prevent discrimination against women being hired or promoted to the higher paying jobs. Educational institutions have tried to remove the sex role stereotyping that may exist in books or guidance programs. Equal pay for work of equal value is designed to ensure that persons in predominantly female jobs are paid the same as persons in predominantly male jobs of equal value, where value is determined usually by job evaluation procedures. All these initiatives are

designed to deal with the fact that women tend to dominate the lower paying occupations.

## Education

For both males and females, higher education is generally associated with higher employment income (Table 7). This is especially true for persons with a university degree. Specifically, persons with a university degree on average earned \$31,735 in 1985 compared with persons with a trades certificate or some university who earned \$18,924. The pattern is fairly similar for both men and women, with each sex receiving higher earnings as they increase their education. Nevertheless, females with a university degree still earn only slightly more than a male high school graduate.

As illustrated in the bottom panel of Table 7, the pattern of higher employment income associated with higher education prevails for full-year, full-time workers. Of course, the employment income levels are higher for all education levels, reflecting the longer hours worked by full-year, full-time workers at all education levels.

Column (4) illustrates that female employment income as a percentage of male employment income tends to increase slightly with education. Conversely, the earnings gap between men and women tends to decrease at higher levels of education. The one exception is the university level for all workers, where female employment income as a percentage of male employment income (55.3%) was slightly less than the average (55.6%) in 1985.

## Marital Status

The possible effect that different family responsibilities might have on the earnings of males and females was alluded to in the discussion of differences between males and females in their hours of work and occupational distribution. The effect of different family responsibilities may also be ascertained by examining the relationship between employment income and marital status (Table 8).

Married men had the highest average employment income (\$28,199) in 1985. The average employment income of married women (\$13,748) was only slightly above the overall female average. Hence, the ratio of female to male employment income (Column (4)) is lowest (48.9%) for persons who are married. Conversely, female earnings as a percentage of male earnings are highest for persons who have never been married (87.4% for all workers). To a large extent this reflects the earnings position of young persons. Nevertheless, although it is not shown in the table, the relationship also prevails for older men and women who have never been married. As illustrated in the bottom panel of Table 8,



**Table 7. Average Employment Income of Population 15 Years and Over by Sex, Education and Work Activity, Canada, 1985**

Education	Females	Males	Both sexes	Female/male ratio <sup>1</sup>
	(1)	(2)	(3)	(4)
	\$			%
<b>All workers</b>				
Less than Grade 9	9,803	18,819	15,807	52.1
Grades 9-13, no certificate	9,846	18,279	14,694	53.9
Grades 9-13, with certificate	12,020	21,045	16,488	57.1
Trades certificate and some university	13,431	23,396	18,924	57.4
University degree	21,362	38,620	31,735	55.3
All education levels	13,027	23,411	18,910	55.6
<b>Full-year, full-time workers</b>				
Less than Grade 9	14,123	23,116	20,672	61.1
Grades 9-13, no certificate	16,469	25,644	22,498	64.2
Grades 9-13, with certificate	17,904	27,349	23,245	65.5
Trades certificate and some university	20,143	30,042	26,419	67.0
University degree	30,318	44,858	40,293	67.6
All education levels	19,995	30,504	26,781	65.5

<sup>1</sup> Average employment income of females as a percentage of average employment income of males.

Source:

1986 Census of Canada, unpublished data.

**Table 8. Average Employment Income of Population 15 Years and Over by Sex, Marital Status and Work Activity, Canada, 1985**

Marital status	Females	Males	Both sexes	Female/male ratio <sup>1</sup>
	(1)	(2)	(3)	(4)
	\$			%
<b>All workers</b>				
Divorced	17,294	24,631	20,462	70.2
Separated	15,257	25,572	20,227	59.7
Widowed	13,297	22,642	15,563	58.7
Currently married	13,748	28,199	22,168	48.8
Never married	10,359	11,855	11,217	87.4
<b>Total</b>	<b>13,027</b>	<b>23,411</b>	<b>18,910</b>	<b>55.6</b>
<b>Full-year, full-time workers</b>				
Divorced	22,152	30,380	25,739	72.9
Separated	20,772	31,373	26,344	66.2
Widowed	18,986	28,786	21,737	66.0
Currently married	20,045	32,356	28,551	62.0
Never married	19,220	21,353	20,416	90.0
<b>Total</b>	<b>19,995</b>	<b>30,504</b>	<b>26,781</b>	<b>65.5</b>

<sup>1</sup> Average employment income of females as a percentage of average employment income of males.

Source:

1986 Census of Canada, unpublished data.

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the pattern with respect to marital status is similar for full-year, full-time workers, as it also is for all workers.

For whatever reasons, the earnings of married men and married women differ substantially. In part, this probably reflects the fact that even when both husband and wife work in the labour market, women

bear a disproportionate burden of household tasks, especially those associated with child care. This in turn may limit their hours of work or their selection of jobs to those that are near the household. For women who work full time in the labour market, it may even limit their productivity since they literally hold two full-time jobs — one in the labour market and one in their household.

## EMPLOYMENT INCOME: PROVINCES AND TERRITORIES

The distribution of income across the different provinces and territories of Canada is fairly uneven. As illustrated in Table 9 (Column (2)), the average employment income of all workers in 1985 ranged from a low of \$13,131 in Prince Edward Island to a high of \$20,392 in the Northwest Territories. That is, the average employment income in the highest income region was slightly over 50% more than in the lowest income region. Much of the employment income differences amongst the provinces and territories likely reflect compensation for differences in the cost of living, especially for the Yukon and the Northwest Territories. In descending order from high to low in terms of employment income for all workers, the provincial rankings in 1985 were: Ontario, Alberta, British Columbia, Quebec, Manitoba, Saskatchewan, Nova Scotia, New Brunswick, Newfoundland and Prince Edward Island.

When comparisons are made for full-year, full-time workers, the income differences are reduced. Average employment income in 1985 ranged from \$22,025 in Prince Edward Island to \$31,216 in the Northwest Territories, a difference of slightly over 40% between the highest and lowest income regions. The provincial ranking also changed: in terms of full-year, full-time employment income, British Columbia had the highest employment income, followed by Alberta, with Ontario dropping to the third place. It is also noteworthy that Newfoundland, which was in ninth position in terms of average employment income for all workers, moved up to the sixth position when comparison was restricted to full-year, full-time workers.

The income differences are more starkly illustrated when the average employment income in each province and territory is expressed as a percentage

**Table 9. Average Employment Income of Population 15 Years and Over by Work Activity, Canada, Provinces and Territories, 1985**

Province	Full-year, full-time workers	All workers	As % of Canadian average	
			Full-year, full-time workers	All workers
	(1)	(2)	(3)	(4)
	\$		%	
Newfoundland	24,468	13,954	91.4	73.8
Prince Edward Island	22,025	13,131	82.2	69.4
Nova Scotia	24,700	16,577	92.2	87.7
New Brunswick	23,977	15,198	89.5	80.4
Quebec	25,342	18,636	94.6	98.6
Ontario	27,713	19,864	103.5	105.0
Manitoba	24,418	17,267	91.2	91.3
Saskatchewan	24,104	16,830	90.0	89.0
Alberta	28,308	19,701	105.7	104.2
British Columbia	28,462	19,411	106.3	102.6
Yukon	29,457	18,996	110.0	100.5
Northwest Territories	31,216	20,392	116.6	107.8
<b>Canada</b>	<b>26,781</b>	<b>18,910</b>	<b>100.0</b>	<b>100.0</b>

Source:  
1986 Census of Canada, unpublished data.

of the Canadian average. For all workers, employment income in Newfoundland and Prince Edward Island was about 70% of the national average in 1985. In Ontario, Alberta, British Columbia and the Territories, it was slightly above the national average.

When full-year, full-time workers are compared, employment income in the Atlantic provinces is approximately 90% of the national average (except for Prince Edward Island, where it was 82%). The figures for Ontario, Alberta and British Columbia remain slightly above the national average, while those in the Yukon and the Northwest Territories were, respectively, 10% and 17% above the national average. This shows that the regional differences in employment income across Canada reflect both differences in employment income for those who work full year, full time, as well as differences in the availability of full-year, full-time work. This is most apparent in the case of Newfoundland. In that province, those who can find full-year, full-time work, earn 91.4% of what the average Canadian earns — neither an inconsequential difference nor a large disparity. However, few people can find full-year, full-time work in Newfoundland. Hence, on average, all workers (including those who work part time or part year) earn only 73.8% of the Canadian average — a

substantial difference. This clearly reflects the effect of low annual employment income associated with the seasonal work, especially fishing, in Newfoundland.

The importance of the various dimensions of work activity is illustrated in more detail in Table 10, which shows Newfoundland in relation to Canada. When all workers are compared, workers in Newfoundland earn 73.8% of the national average. Although not shown in the table, this reflects the fact that the Newfoundland work force is disproportionately composed of persons who work part time and part year. The difference in employment income between workers in Newfoundland and the rest of Canada who worked the same number of weeks in 1985 and worked either full time or part time is not that great. For example, persons who worked full time for 14 to 26 weeks in 1985 in Newfoundland earned 89% (i.e. \$7,990/\$9,022) of the Canadian average; persons who worked full time for 27 to 39 weeks in Newfoundland earned 99% (i.e. \$13,853/\$14,015) of the Canadian average. All part-time workers in Newfoundland, except for those who worked full year (49-52 weeks), earned more than the Canadian national average.

**Table 10. Average Employment Income of Population 15 Years and Over by Weeks Worked and Work Activity, Canada and Newfoundland, 1985**

Weeks worked	Part time	Full time	All workers
			\$
<b>Newfoundland</b>			
1 — 13 weeks	2,425	3,384	3,085
14 — 26 weeks	5,478	7,990	7,328
27 — 39 weeks	7,714	13,853	12,384
40 — 48 weeks	9,606	19,289	17,009
49 — 52 weeks	9,897	24,468	23,185
<b>Total</b>	<b>5,736</b>	<b>15,998</b>	<b>13,954</b>
<b>Canada</b>			
1 — 13 weeks	2,390	4,171	3,353
14 — 26 weeks	5,056	9,022	7,561
27 — 39 weeks	7,107	14,015	11,875
40 — 48 weeks	9,284	21,996	18,980
49 — 52 weeks	10,358	26,781	24,866
<b>Total</b>	<b>7,014</b>	<b>22,086</b>	<b>18,910</b>
			%
<b>Newfoundland as % of Canada</b>			
1 — 13 weeks	101.5	81.1	92.0
14 — 26 weeks	108.3	88.6	96.9
27 — 39 weeks	108.5	98.8	104.3
40 — 48 weeks	103.5	87.7	89.6
49 — 52 weeks	95.5	91.4	93.2
<b>Total</b>	<b>81.8</b>	<b>72.4</b>	<b>73.8</b>

Source:  
1986 Census of Canada, unpublished data.

## CHANGES IN EMPLOYMENT INCOME: 1970-1985

The changes in employment income that have occurred in Canada between 1970 and 1985 are highlighted in Table 11. To facilitate comparisons, the figures are in "real" terms; that is, the 1970 and 1980 figures are adjusted for the inflation during the period, as measured by changes in the Consumer Price Index, and are expressed in constant (1985) dollars.

For both sexes combined, real employment income actually increased substantially between 1970 and 1980, but then fell slightly between 1980 and 1985. This was true for both full-year, full-time workers and for all workers.<sup>2</sup> Much of the decline in real employment income since 1980 reflects the slow growth in

earnings that occurred especially during the recession of the early 1980s. Earnings did not increase as fast as inflation so that in real terms the work force was no better off, and often worse off, in 1985 as opposed to 1980.

Women experienced a slight increase in real earnings between 1980 and 1985 (3%) but men experienced a decline over that period (almost 4%). As a result, average employment income of women as a percentage of average employment income of men increased slightly over that period, for full-year, full-time workers as well as for all workers. This has continued the trend in the increase in the ratio of female to male earnings since 1970.

**Table 11. Average Employment Income of Population 15 Years and Over in Constant (1985) Dollars by Sex and Work Activity, Canada, 1970, 1980 and 1985**

Sex	Year	Full-year, full-time workers	All workers
			\$
Females	1970	15,299	9,923
	1980	19,571	12,683
	1985	19,995	13,027
Males	1970	25,529	20,393
	1980	30,682	24,310
	1985	30,504	23,411
Both sexes	1970	22,673	16,549
	1980	27,049	19,311
	1985	26,781	18,910
			%
Female/male ratio <sup>1</sup>	1970	59.9	48.7
	1980	63.8	52.2
	1985	65.5	55.6

<sup>1</sup> Average employment income of females as a percentage of average employment income of males.

**Source:**

1986 Census of Canada, unpublished data.

<sup>2</sup> It is important to recognize, however, that this does not necessarily imply that the real income of a given individual worker on average fell between 1980 and 1985. Different individuals may be involved over those two time periods. In other words, the composition of the population may have changed slightly. For example, in 1985, the population may have contained disproportionately more younger, inexperienced workers or females who have lower average earnings and this may have "lowered" the overall average.



## CONCLUSION

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In 1985, employment income constituted 78.7% of all income, with wages and salaries being the largest component of total income (93% of employment income and 73% of all income). Average employment income was \$18,910 for all workers and \$26,781 for full-year, full-time workers. Women earned 55.6% of that of men, and 65.5% of that of men when comparisons are made on a full-year, full-time basis.

Considerable regional disparity is present in employment income. Average employment income in 1985 ranged from \$13,131 in Prince Edward Island and \$13,954 in Newfoundland to \$19,864 in Ontario and \$20,392 in the Northwest Territories. The disparities are somewhat reduced when comparisons are made only for full-year, full-time workers, highlighting that much of the disparity reflects the difficulty of finding full-year, full-time jobs in Canada's poorer regions.

Employment income rises with age, peaking between the ages of 40 and 44 years and declining slightly thereafter. At all ages, women tend to earn less than men, their earnings rise less rapidly with age as do men's earnings, and women reach their peak earnings earlier, at least for women who work full year, full time.

Higher education, especially the acquisition of a university degree, is generally associated with higher employment income. As a percentage of male employment income, female employment income tends to rise slightly with higher levels of education.

Being married is associated with substantially higher income for males but not for females so that the male-female earnings gap is largest for married persons. Conversely, the gap is smallest for those who have never been married. This likely reflects the differential effect of family responsibilities on women relative to men.

In real terms, employment income increased substantially between 1970 and 1980, but declined between 1980 and 1985. It increased slightly for females (3%) but declined for males (almost 4%) since 1980. This in turn has led to a slight increase in female employment income as a percentage of male employment income.





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