



Understand Economics

2nd Edition

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Chapter 8

Income Distribution

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Chapter Objectives

In this chapter you will:

- learn about the distribution of income among Canadian households, how this distribution is measured, and the factors underlying the distribution
- consider the causes of poverty and the way poverty is measured
- analyze the effectiveness of government intervention to change the distribution of income

Canadian Distribution of Income

- Canada's distribution of income can be shown using the a Lorenz curve.
- This curve is a graph showing the cumulative distribution of income for households categorized into five groups based on their income levels.

Income Distribution in Selected Years

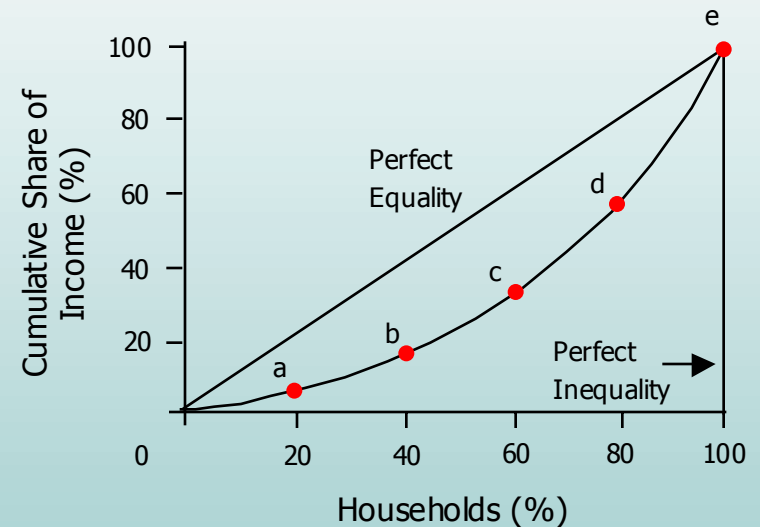
Figure 8.1, Page 196

	Percentage of Total Pre-Tax Income Received by Each Fifth of Households						Average Income (1998)
	1951	1961	1971	1981	1991	1998	
Lowest 20%	4.4	4.2	3.6	4.5	4.7	4.3	10 688
Second 20%	11.2	11.9	10.6	10.9	10.4	9.9	24 579
Third 20%	18.3	18.3	17.6	17.6	16.7	16.0	39 780
Fourth 20%	23.3	24.5	24.9	25.2	24.7	24.3	60 593
Highest 20%	42.8	41.1	43.3	41.8	43.5	45.5	113 374
Average of total							49 797

The Lorenz Curve

Figure 8.2, Page 197

Distribution of Household Income		Cumulative Distribution of Household Income		
Share of Income in 1998 (%)		Cumulative Share of Income in 1998 (%)		
Lowest	4.3	Lowest 20%	4.3	(a)
Second	9.9	Lowest 40%	14.2 = 4.3 + 9.9	(b)
Third	16.0	Lowest 60%	30.2 = 14.2 + 16.0	(c)
Fourth	24.3	Lowest 80%	54.5 = 30.2 + 24.3	(d)
Highest	45.5	100%	100.0 = 54.5 + 45.5	(e)

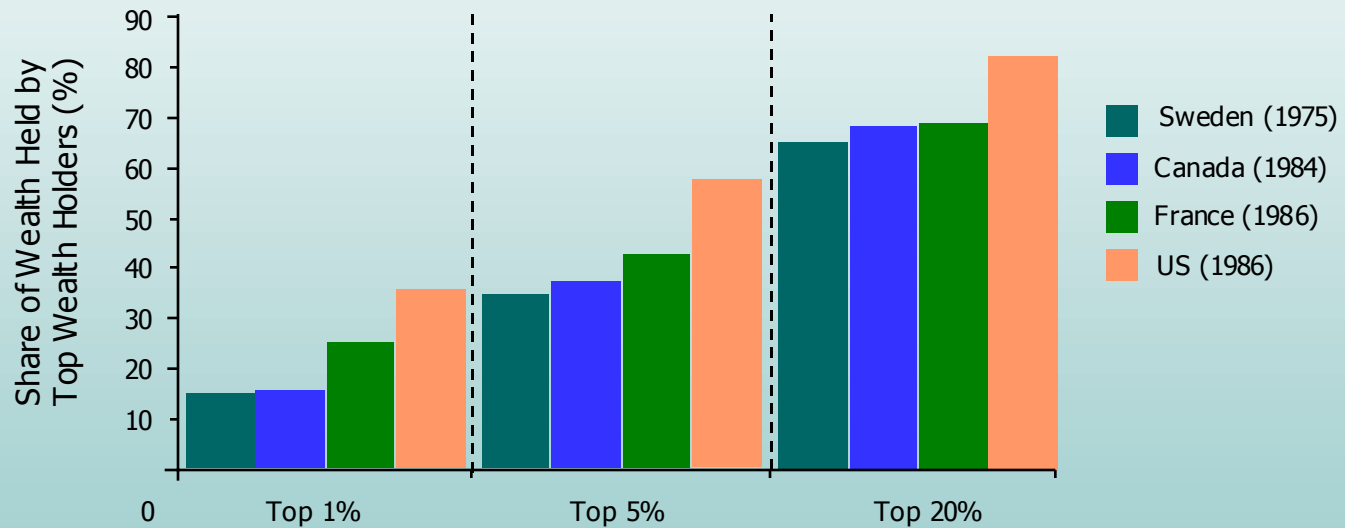


Reasons for Income Inequality

- There are three main reasons for income inequality (in addition to wage determinants)
 - risk-taking
 - ability
 - Wealth
- Wealth is more unequally distributed than income.

Distribution of Wealth in Selected Countries

Figure 8.3, Page 199



The Poverty Line (a)

- The poverty line is the income level below which a household is classified as poor
- In Canada, a household is considered to be poor if it spends more than 64% of its after-tax income on food, clothing, and shelter.

The Poverty Line (b)

- In dollar terms, the poverty line depends on the number of household members and the size of the community they live in.

The Poverty Line for Various Households

Figure 8.4, Page 200

Size of Household Unit	Urban Areas (categorized by size)				Rural Areas
	500 000 and over	100 000 to 499 999	30 000 to 99 999	Less than 30 000	
1 person	14 510	12 223	12 034	10 995	9 514
2 persons	17 705	14 913	14 682	13 418	11 608
3 persons	22 392	18 863	18 571	16 970	14 681
4 persons	27 890	23 439	23 129	21 136	18 285
5 persons	31 172	26 258	25 851	23 623	20 438
6 persons	34 454	29 022	28 573	26 110	22 590
7 or more persons	37 735	31 787	31 294	28 596	24 744

The Incidence of Poverty (a)

- Poverty rates are higher among unattached individuals than among families, except for single-parent families with a female head.
- Unattached females and unattached young people (24 and under) have particularly high poverty rates

The Incidence of Poverty (b)

Figure 8.5, Page 201

Percentage of Households Below the Poverty Line in 1998	
Families	9.1
Unattached Individuals	30.3
Gender and Household Type	
Married couples with children	7.3
Single-parent families (female head)	42.0
Single-parent families (male head)	17.5
Elderly unattached males	17.4
Nonelderly unattached males	30.3
Elderly unattached females	22.1
Nonelderly unattached females	38.8
Age of Household Head	
Less than 18	29.2
18 – 24	36.6
25 – 54	20.4
55 – 64	22.6
65 +	15.7
Education of Household Head	
Less than high school	30.2
Graduated from high school	22.4
Some post-secondary	28.5
Post-secondary certificate or diploma	18.0
University degree	11.0

The Canadian Welfare Society

- A welfare society is one in which the government plays a major role in attempting to ensure the economic well-being of its citizens
- transfer payments and personal income taxes are the most important elements of Canada's welfare society

Transfer Payments and Income Equity

- Transfer payments are now usually based on the principle of means testing rather than universality.
- Transfer payments are greatest as a percent of income for the poorest fifth of households, but the second-poorest fifth of households receives the largest share of these payments.

Transfer Payments and Income Equity

Figure 8.6, Page 204

	Average Transfer Payments Received	Transfer Payments as a Percent of Total Income	Shared Received of Total Transfer Payments
Lowest 20%	6 696	62.6	21.4
Second 20%	8 367	34.0	26.7
Third 20%	6 801	17.1	21.7
Fourth 20%	5 176	8.5	16.5
Highest 20%	4 258	3.8	13.6
Average of Total	6 260	12.6	

Principles of Taxation

- There are two main principles of taxation
 - benefits received (e.g. gasoline taxes for roadwork)
 - ability to pay (e.g. personal income tax)

Taxes and Income

- Taxes are related to income in three possible ways
 - progressive taxes (which increase as a proportion of income as income rises)
 - proportional taxes (which stay constant as a proportion of income as income rises)
 - regressive taxes (which decrease as a proportion of income as income rises)

Taxes and Income Equity

- Personal income taxes are progressive, with the proportion of income paid in tax rising significantly with a household's income level.

Personal Income Taxes and Income Equity (1998)

Figure 8.7, Page 206

	Average Personal Income Taxes Paid	Personal Income Taxes as a Percent of Total Income	Shared Paid of Total Personal Income Taxes
Lowest 20%	671	6.3	1.4
Second 20%	2 619	10.7	5.3
Third 20%	6 406	16.1	13.0
Fourth 20%	11 815	19.5	24.0
Highest 20%	27 768	24.5	56.3
Average of Total	9 854	19.8	

The Doomsday Prophet

- Thomas Malthus formulated a theory of population based on two principles
 - food increases in an algebraic progression (1,2,3...)
 - population increases in a geometric progression (1,2,4...)
- He predicted that over time population growth would outstrip growth in the food supply with disastrous effects

The Malthusian Time Chart

Page 210

A Malthusian Time Chart

Year	1	25	50	75	100	125	150	175	200	225
Food	1	2	3	4	5	6	7	8	9	10
Population	1	2	4	8	16	32	64	128	256	512



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Chapter 8 **The End**

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