

THE SIZE AND DISTRIBUTION OF THE POVERTY GAP IN CANADA: A MICRO ANALYSIS OF VARIATIONS AMONG DEMOGRAPHIC GROUPS

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Poverty is a much used term by politicians, economists, sociologists, the media and interest groups. Although there is some common consensus that the word poverty means some type of deprivation, there is a lack of comprehensive measures to quantify this term. Although deprivation can relate to a number of areas such as health and education, the focus in policy development has been aimed at economic deprivation or more specifically, income adequacy. Even in this perspective, the availability of comprehensive measures are limited. The United States is the only major industrial nation that has an official poverty line. Several unofficial poverty lines have been developed in Canada, but the poverty measures have not gone beyond head counts of people who fall below these lines. In an environment where the goal is to further progressive social development constrained by inadequate public resources, the emphasis has been on first directing scarce resources to those "most in need". To get a better perception of economic need, this paper provides a micro analysis of the size and distribution of the poverty gap so that meaningful comparisons can be made between demographic groups. The results of this analysis yield some interesting findings. For example, there are virtually no poor elderly couples and although there are a large number of poor single elderly, their income shortfalls are relatively small and are highly concentrated near the poverty line; the poverty rate among families with children is quite low but their incomes on average fall well below the poverty line and are widely dispersed; and single parents fare badly on all measures.

"There are no whole truths; all truths are half truths. It is trying to treat them as whole truths that plays the devil."

ALFRED NORTH WHITEHEAD (1953)

I. INTRODUCTION

The poverty gap represents the aggregate income shortfall of the poor population. In order to estimate the size of the poverty gap, individual household incomes have to be measured against an income threshold commonly referred to as a poverty line. Just as there is little agreement on how to measure poverty, this lack of consensus is reflected in the various approaches that have been taken in the development of both absolute and relative poverty lines. It is therefore of little surprise that most countries are reluctant to accept an official yard stick by which to determine whether one is poor or not. The authors in this paper do not set out to build "a better mouse trap" but rather to examine the characteristics

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of the poverty gap for selected demographic groups in the context of already well established, but unofficial, "poverty lines" that are published on an on-going basis by Canada's central statistical agency.¹

Even though the poverty gap, in aggregate, is sensitive to the level of the poverty lines, the cross-sectional analysis of relative differences among demographic groups make this issue much less critical. This paper will examine variations among selected population sub-groups with respect to three dimensions of income inadequacy: (1) incidence, a head count of these below the poverty line; (2) depth, the degree to which incomes of the poor fall below the poverty line; and (3) inequality, the distribution of incomes below the poverty line. In addition, measures of each of these dimensions are combined into one comprehensive poverty index.

Chart 1 shows the composition of the poverty gap by broad demographic group. This breakdown shows that couples with children make up the largest single share of the poverty gap. This is a bit of a surprise since the poverty rate for this group is relatively low. Single parent families form the next largest group and fare badly on all poverty dimensions. Non-elderly single females and males comprise the next largest segments followed by the elderly and childless couples.

II. DATA, CONCEPTS AND METHODOLOGY

(i) *Data Sources*

The data supporting this study is a household survey of about 45,000 units covering virtually all private households in all regions of the country.² The survey was conducted in April 1983 covering the following sources of annual income for 1982:³

(i) Wages and Salaries

¹The poverty lines used in this paper are the Low-Income Cut-Offs (LICOs) published by Statistics Canada annually in "Income Distributions by Size in Canada," Catalogue Number 13-207. The LICOs are based on 1978 Family Expenditure Survey data and are adjusted annually by the change in the Consumer Price Index. Basically, a household falls below the LICO, (i.e. is regarded as poor), if it spends 20 percent more of its income on food, shelter and clothing than the population on average. The LICOs are adjusted for family size and differences in living costs for area size of residence (i.e. metropolitan to rural).

²The results of the Survey of Consumer Finances are published by Statistics Canada in "Income Distribution by Size in Canada," Catalogue Number 13-207. The survey used in this research was conducted in April 1983 as a supplement to the monthly Labour Force Survey, using two-thirds (44,900 households) of the sample. The sample represents virtually all private households in Canada except for residents of the Yukon and Northwest Territories, households located on Indian reserves and inmates of institutions. Exclusions of these segments have important implications for this study, since it is expected that poverty among these groups is very high. Since the survey is a sample of Canadian households, it is subject to the normal sample variations, response errors and errors due to non-response.

³Annual income measured in the Survey of Consumer Finances has two implications for the comparison of poverty statistics by demographic groups. First, the annual period of accounting misses short spells of poverty of less than one year. Although the annual measure likely provides accurate estimates of poverty for the elderly, poverty would undoubtedly be higher for many non-elderly groups if measured on a sub-annual basis. Second, the Survey of Consumer Finances does not include in-kind income. To the degree that this form of income is not equally distributed among the population, this will alter comparisons of poverty among demographic groups. It should be noted, however, that in-kind income is not reflected in the calculation of the poverty lines used in the study.

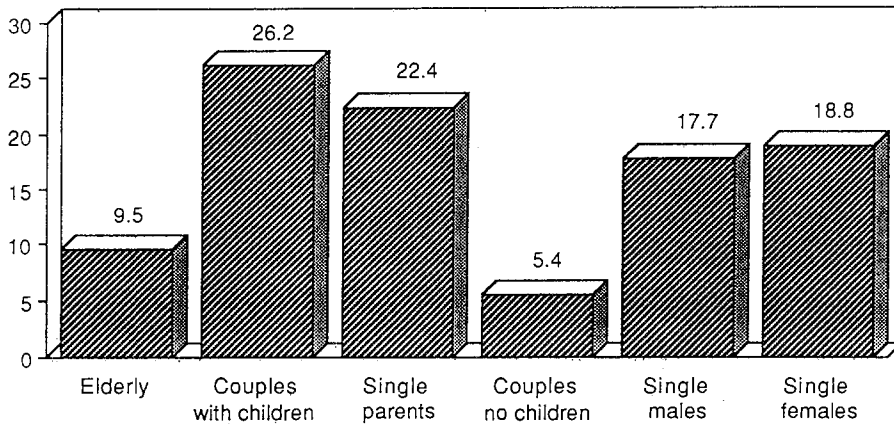


Chart 1. Distribution of the Poverty Gap by Demographic Group Canada, 1985

- (ii) Self-employed Earnings
- (iii) Investment Income
- (iv) Pension Income
- (v) Government Transfers.

Units are defined as “unattached individuals”, who are persons living alone or in a household where he/she is not related to other household members and “economic families” which are groups of individuals who are related by blood, marriage or adoption sharing a common dwelling unit.

The data were subsequently adjusted for under-reporting and projected to 1985.⁴ The corrections for under-reporting of income were based on benchmark data from National Accounts and Taxfile data and attributed to individual households using stochastic processes. The aging to 1985 was based on average growth factors by type of income and changes in demographic structures.

The attribution of income is particularly important to the study since some types of income are far more under-reported than others. This effectively alters the relative income and hence poverty measures among demographic groups. The most under-reported sources of income tend to be welfare payments, investment income and pensions. Among the low-income population, these income sources affect the economic status of the young and the elderly in particular.

(ii) Poverty Lines

The poverty lines used in this study are the Low-Income Cut-Offs (LICO's) published by Statistics Canada. These poverty lines are based on the proportion of income that is spent on the necessities of food, shelter and clothing. These lines are adjusted to reflect differences in family size and area size of residence (see footnote 1).

⁴The procedures for attributing incomes and aging for the Survey of Consumer Finance data base are contained in an unpublished report *Data Aging Model No. 2 Data Base*, Health and Welfare Canada 1985. The effects of adjusting for under-reporting of incomes resulted in nearly 10 percent fewer households falling below the poverty threshold. The groups particularly affected were the young and the elderly.

TABLE 1
LOW INCOME CUT-OFF LINES, CANADA, 1985

Size of Area of Residence	Size of Family						
	1 Person	2 Persons	3 Persons	4 Persons	5 Persons	6 Persons	7 or more Persons
100,000 and over ¹	\$10,136	\$13,371	\$17,881	\$20,616	\$24,006	\$26,209	\$28,859
30,000 to 99,999	9,122	11,961	16,004	18,499	21,425	23,405	25,814
Less than 30,000	8,433	11,099	14,888	17,208	19,961	21,769	24,006
Rural Areas	7,571	9,896	13,251	15,317	17,812	19,445	21,425

Source: Derived from Statistics Canada's Low Income Cut-Offs for 1983, 1978 base inflated by a 4.4 percent inflation factor for 1984 and 4.0 percent for 1985.

¹The public use tape of the 1982 Survey of Consumer Finances collapses the two size of area of residence LICOs (500,000 and over and 100,000 to 499,999) into the one category (100,000 and over) for confidentiality of data reasons. Consequently, NHW's LICO's values for 100,000 and over reflect a proportionate weighting of the two LICO values. For example, NHW's LICO for one person (\$10,136) is derived according to the proportionate distribution of the low-income population in the two size of area of residences.

(iii) Demographic Characteristics

Poverty measures for economic families are analyzed by age groups and family type. The age groups selected are: <25, 25-44, 45-64 and 65+. The family types are: couples with children, single parent families, childless couples, single females and single males.

(iv) Poverty Measures

For the purpose of analysis, poverty estimates for the above outlined demographic characteristics are developed in three basic dimensions; (a) incidence, (b) depth and (c) distribution. These are brought together in a comprehensive measure (d) combining all three elements.

- (a) The incidence of poverty, I , is simply a head count of the poor within a particular demographic group as a proportion of the total number of economic families in that group;

$$(1) \quad I = Q/N$$

where Q is the number of households of a certain demographic group with incomes below the poverty line and N is the total population of that same group.

- (b) The depth of poverty are estimates relating to the shortfall of income in relation to the poverty line. The two measures analyzed in this paper are the average poverty gap and the income-needs ratio which represents the average proportion of a poor demographic group in relation to the poverty line. The average poverty gap, G , is defined as;

$$(2) \quad G = \sum_i (L_i - Y_i)/Q$$

where L_i is the poverty line and Y_i is income.

The income-needs ratio, R , is defined as;

$$(3) \quad R = \frac{\sum_i Y_i}{\sum_i L_i}$$

- (c) The distribution of the poverty gap is examined in terms of the mapping of income-needs ratios and relative standard deviation of the poverty gap.

The relative standard deviation of the poverty gap, D , is defined as;

$$(4) \quad D = \sigma Q / \sum_i L_i$$

where

$$\sigma = \sqrt{\sum_i [(L_i - Y_i) - G]^2 / Q}$$

- (d) The comprehensive poverty index, C , developed for this analysis is a variation of a poverty index defined by Sen. In this index, the relative standard deviation of the poverty gap has been substituted for the Gini coefficient.⁵

The index is defined as;

$$(5) \quad C = I * (P + (1 - P) * D)$$

where $P = 1 - R$ which is the ratio of the poverty gap to the poverty line.

III. RESULTS OF THE ANALYSIS

(i) Incidence of Poverty

As shown in Table 2, there is a wide variation in the incidence of poverty around the average of 16.4 percent. At the lowest extreme, there is virtually no poverty among elderly couples largely due to public income support programs. Nevertheless, the poverty rate for single elderly remains high, particularly among females where 4 out of 10 fall below the poverty line.

The incidence of poverty is very high for the young (<25) but falls dramatically in the next age group. The poverty statistics for the young, which include full-time students and new labour market entrants, support the life-cycle view of low-income among young people. That is to say, the cross-sectional estimates show a decline in poverty that is sufficiently large to draw this conclusion, even though longitudinal data would be required to quantify this observation. The high poverty rate among single parent families, mostly headed by females, reflects the fact that labour force participation is very low for this group and public support payments are inadequate to bring their income over the poverty threshold. The income of more than four out of five young single parents is below the poverty line.

⁵The comprehensive poverty index is a variation of the index developed and formulated by Amartya Sen and presented in *Choice, Welfare and Measurement*, 1982. The Sen Poverty index is composed of the incidence of poverty discounted by the poverty gap ratio and the Gini coefficient of the poverty gap as a measure of inequality in the distribution of income among the poor. In this paper, the relative standard deviation was substituted for the Gini coefficient. As a measure of inequality of the poverty gap, the relative standard deviations used were intuitively more appealing than the Gini's since they effectively interpreted the distributions of the income-needs ratios. Differences between the two measures of inequalities were particularly apparent for the elderly.

TABLE 2
INCIDENCE OF POVERTY BY AGE OF HEAD AND FAMILY TYPE, CANADA, 1985

Family Type	Age of Head				All Ages
	Less than 25	25-44	45-64	65 and over	
Single males (%)	38.1	19.5	30.0	24.6	25.4
Single females (%)	41.0	16.8	34.0	42.2	34.0
Couples—no children (%)	9.4	3.0	7.1	— ¹	4.4
Couples with children (%)	22.9	8.9	6.5	— ¹	8.3
Single parent families (%)	82.7	41.6	25.2	12.6	35.8
All Types	32.6	13.2	14.1	21.0	16.4

Note: Poverty is measured in terms of Statistics Canada's low-income cut-offs lines, adjusted for size of family and size of area of residence, 1978 base.

¹Statistically insignificant at 95 percent confidence level.

(ii) *Depth of Poverty*

The depth of poverty displayed in Table 3 clearly shows that despite the high incidence of poverty, the average poverty gap for elderly singles is far smaller than for other demographic groups. This is mainly attributable to the fact that government transfers effectively provide the elderly with a basic income guarantee. On the other hand, couples with children experience the largest income shortfalls, over \$5,000, even though the poverty rate for this group, at 8.3 percent is about half of the national average.

Unlike the dramatic drop in the incidence of poverty between the two youngest age groups, the average poverty gap does not show a similar picture. The average poverty gap does not decline for three of the five family types and rises substantially in total. Despite these results, however, there are indications that the life-cycle pattern of earnings are supported for the following reasons. First, there are, between these age groups, significant increases in family size through changes in marital status plus the addition of children and second, it is

TABLE 3
AVERAGE POVERTY GAP BY AGE OF HEAD AND FAMILY TYPE, CANADA, 1985

Family Type	Age of Head				All Ages
	Less than 25	25-44	45-64	65 and over	
Single males (\$)	3,922	4,038	4,176	1,588	3,642
Single females (\$)	4,608	3,846	4,070	1,546	2,830
Couples no children (\$)	2,846	3,919	3,688	— ¹	3,432
Couples with children (\$)	5,922	5,558	5,387	— ¹	5,508
Single parent families (\$)	5,309	5,547	5,362	2,189	5,338
All types	4,502	4,961	4,488	1,592	3,973

¹Statistically insignificant at the 95 percent confidence level.

suspected that many of those who escape poverty tend to be close to the poverty threshold thereby implying that the economic status of the low-income population does improve between the two age groups. The impact of changing family size is somewhat clarified in the following table on income-needs ratios which shows a distinct improvement between the (<25) and (25-44) age groups. However, in order to verify the observations about the life-cycle theory one would require longitudinal tracking of households.

In comparing demographic groups, the income-needs ratio, shown in Table 4, has some advantages over the average poverty gap numbers. Since these measures express the average poverty gap as a proportion of the poverty line, they effectively adjust for differences in family size. For the single elderly, the picture of a small income shortfall does not change, therefore clearly indicating that the elderly can be classed as the “wealthiest” of the poor with incomes meeting 85 percent of their needs on average.

TABLE 4
INCOME-NEEDS RATIO BY AGE OF HEAD AND FAMILY TYPE CANADA, 1985

Family Type	Age of Head				All Ages
	Less than 25	25-44	45-64	65 and over	
Single males (%)	60.2	59.0	56.6	84.5	63.1
Single females (%)	52.1	60.7	59.4	84.8	77.7
Couples no children (%)	76.5	68.2	69.9	— ¹	72.3
Couples with children (%)	65.3	71.3	71.0	— ¹	71.0
Single parent families (%)	61.3	66.0	65.6	82.8	65.9
All types	59.9	67.0	64.7	84.7	68.9

¹Statistically insignificant at the 95 percent confidence level.

Couples with children, despite having the largest average poverty gap, have incomes that meet 70 percent of needs. This group best reflects the average for the total population. Non-elderly singles living in poverty have incomes that on average equal less than 60 percent of the poverty line.

The low level of the income-needs ratio for middle-aged singles (aged 25-64) is one of the more unexpected results of the study. This group has not typically been a target group for social policy in Canada.

(iii) *Distribution of the Poverty Gap*

A very useful approach to examining the poverty gap distribution is to map density functions of the poor population by income-needs ratios.

Chart 2 shows significant differences between age groups. Young people tend to be more equally distributed over the entire income-needs ratio range while the elderly are clustered much closer to the poverty line. The latter again is due mainly to the minimum income guarantees provided through government transfers. The wide dispersion of income among the young population is not all

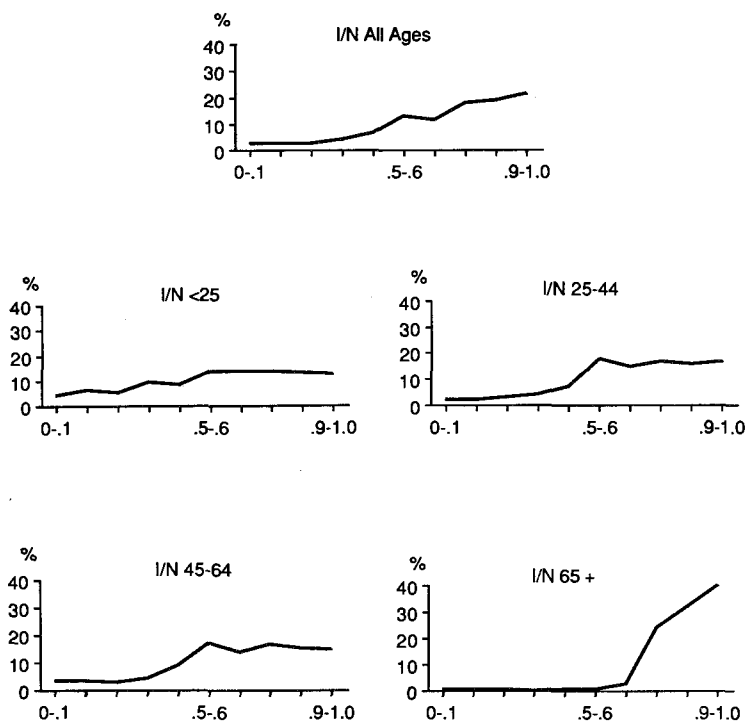


Chart 2. Distribution of the Low Income Population by Income-Needs Ratio and Age Group, Canada, 1985

that surprising considering the wide variations in labour force attachment, changing marital status, and a high variation in the level of welfare benefits in Canada between provinces.

On a family type comparison, the largest proportion of low-income couples with no children have income-needs ratios that exceed 90 percent of the poverty-line. Labour force participation rates for this group tend to be higher than for other low-income groups. The incomes for poor single males tend to be concentrated around 50-60 percent of the poverty line. This concentration tends to be dominated by the young and near elderly as shown in Chart 3.

In Table 5 the relative standard deviations are presented as an overall measure of inequality among the poor within specified demographic groups. This measure, which is simply the standard deviation expressed as a proportion of the poverty lines, can range in value from 0 to 1, with the latter representing perfect inequality. According to this statistic the poverty gap varies more for couples with children than other groups, with the exception of single males in the 25-44 age group where the standard deviation of income represents half the poverty threshold. The results for middle-aged singles are unexpected although the question of inequality can be explained in part by the limited access of this group to government assistance. On the other extreme, the relative standard deviation for the elderly at 0.16 is the lowest and clearly reinforces the high degree of income clustering just below the poverty line.

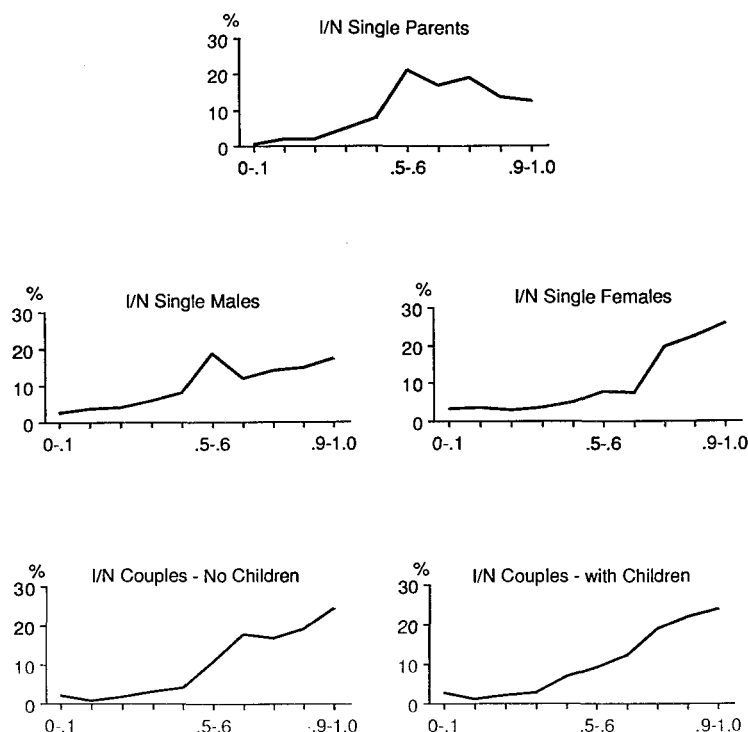


Chart 3. Distribution of the Low Income Population by Income-Needs Ratio and Family Type, Canada, 1985

TABLE 5
RELATIVE STANDARD DEVIATION OF THE POVERTY GAP, CANADA, 1985

Family Type	Age of Head				All Ages
	Less than 25	25-44	45-64	65 and over	
Single males	0.26	0.49	0.27	0.17	0.36
Single females	0.29	0.26	0.27	0.14	0.25
Couples no children	0.23	0.20	0.29	— ¹	0.26
Couples with children	0.38	0.31	0.36	— ¹	0.33
Single parent families	0.19	0.20	0.26	0.20	0.22
All types	0.30	0.31	0.32	0.16	0.32

¹Statistically insignificant at the 95 percent confidence level.

(iv) *Comprehensive Poverty Measures*

So far, this paper has examined three major aspects of poverty; incidence, depth and distribution of the poverty gap. Each of these dimensions has told different stories about poverty for the various demographic groups. Bringing these

dimensions together into a single measure provides some overall perspective as to how the groups compare. The comprehensive poverty indices shown in Table 6 range from 0 to 100 with 0 representing the poverty threshold.

TABLE 6
COMPREHENSIVE POVERTY INDEX, CANADA, 1985

Family Type	<25	25-44	45-64	65+	Total
Single males	21.1	13.6	17.6	7.4	15.1
Single females	25.9	9.2	19.2	11.4	15.7
Couples no children	3.9	1.4	3.6	—	2.0
Couples with children	13.6	4.5	3.5	—	4.4
Single parent families	41.6	19.6	13.0	4.2	17.4
All types	18.9	7.1	7.9	6.1	8.7

The comprehensive measures with few exceptions closely compare, in a relative sense, to the incidence of poverty. For example, the dramatic decline in poverty between the young and middle age groups is clearly evident and poverty among unattached individuals and single parent families is substantially higher than for couples with and without children. The one major exception is the elderly where the comprehensive measure is substantially lower in relation to the incidence. This is because the high poverty rate is discounted by a small average poverty gap and a low relative standard deviation.

(v) *A Summary of Poverty Measures by Selected Demographic Groups*

Since the early 1980s, in many countries, the high level of government deficits and lower expectations for economic growth have resulted in a social policy environment in which the targeting of benefits has become more selective—first directing scarce resources to those most in need.

The analysis of the poverty gap presented in this paper provides important insights into assessing the degree of poverty among various demographic groups. Although the comprehensive poverty index is useful in terms of establishing a ranking among demographic groups, the individual components (i.e. incidence, depth and distribution) may be more useful in evaluating and developing policy strategies. For example, a policy direction that first directs scarce resources to those most in need, would place a greater emphasis on measures pertaining to the average poverty gap and inequality in the distribution of income among the poor as opposed to the actual poverty rate. Based on these criteria, priorities would focus on families with children and non-elderly singles.

Poverty among particular segments of the population tends to be looked upon as the failure of public policy. It is not, however, within the scope of this paper to assess the existing policy framework or discuss policy options. This paper examines priorities for public policy based on poverty measures relating to particular target groups such as the elderly, families with children and youth.

(a) Women

Across all demographic characteristics, one statistic that stands out is the "feminization" of poverty. One in three single women and more than a third of single parent families, mostly female headed, have incomes below the poverty threshold. Based on the comprehensive index, the degree on poverty for females is almost double the national average. Although there appears to be a lack of policies aimed specifically at women, it should be noted that females are over-represented among the poor for almost all traditional policy target groups and as such, policies directed at women should be viewed in a broader context.

(b) The Elderly

Income statistics clearly show that the economic status of the elderly is below the national average. Nevertheless, poverty among this group is much less severe than may be expected. Based on the Low-Income Cut-Offs, there are virtually no elderly couples who are poor. Despite the high poverty rate among single elderly (24.6 percent for males and 42.2 percent for females), the average poverty gap is much smaller compared to other groups and incomes are highly clustered close to the poverty line. Despite these favorable statistics the elderly are very unlikely to escape poverty without additional public assistance. This is predominantly a women's issue since they represent 85 percent of all single elderly poor in Canada. In fact, with aging population in Canada, as in most industrial countries, there is considerable concern about the ability to sustain an adequate elderly benefit system.

(c) Families with Children

Couples with children have a low incidence of poverty, about half the national average. This perspective is supported by the comprehensive poverty index. It is important to point out however that since this group makes up such a large portion of the total population, they account for nearly 20 percent of all poor households and over one quarter of the total poverty gap. As expected, the incidence of poverty as well as the income shortfall increases with family size even though the income-needs ratio falls with the number of children, as shown in Table 7.

In terms of ranking, single parent families, the vast majority of which are female headed, experience the highest degree of poverty among all family types. In particular, poverty among young single parent families by far exceeds that of

TABLE 7
POVERTY AMONG COUPLES WITH CHILDREN CANADA, 1985

Number of Children	Incidence (Percent)	Average Gap (Dollars)	Income-Needs Ratio (Percent)
One	7.4	4,461	72.7
Two	7.3	5,435	70.8
Three or more	11.6	6,579	70.0
Total	8.3	5,508	71.0

any other demographic group, affecting more than four out of five households. As noted earlier, this situation can be largely attributed to the fact that labour force participation among this group is quite low (less than one quarter work), and for the many who depend on welfare, benefit levels are well below poverty thresholds. As is the case with couples, poverty increases with family size (the poverty rate increases from 29.4 percent for one child, to 41.9 percent for two children to 46.5 percent for three and more children).

The underlying causes of poverty among families with children are varied. Unemployment is no doubt a major factor, as is marriage breakdown and lack of education and training. Similarly the social and economic policies to address these problems must be flexible in design to ease entry into the labour force and ensure lasting employment at adequate wages. Such initiatives would include training, affordable child care and economic policies that foster steady and balanced growth. In addition, there has been growing support for governments to provide income supplementation in order to improve work incentives and to assist the working poor. Families with children are currently the focal point of the social policy debate.

(d) Youth

Poverty among youth is very high, based on all dimensions of the measures, both for singles and families with children. Generally, among this group, a lack of labour force experience results in lower wages and a higher risk of unemployment. Youth are particularly sensitive to changing economic conditions. This was clearly evident in the dramatic rise in the poverty rate for young people during the economic recession of the early 1980s. However, even during times of economic prosperity, poverty among youth remains considerably higher than the population on average. Three basic factors can be identified to account for this phenomenon. First, youth unemployment tends to always be much higher than the national average; second, public assistance for single youth is very limited and third, young families tend to have preschool-aged children which restricts labour force participation, particularly in the case of single-parents.

Despite the dismal poverty statistics for young Canadians, some comfort can be found in the expectation that the duration of poverty for many is relatively short. Although, longitudinal data is currently unavailable to quantify this dimension of poverty, the cross-sectional data by age groups indicate that economic status improves considerably between the first two age groups, (15-24 and 25-44). The reasons can largely be attributed to increased work experience and skills, changes in family status in which singles marry to form two-earner families and single-parents who either marry or re-marry resulting in a major change in economic status. Even though there is a growing concern that a number of young people with lower education levels will be destined to long-term poverty, policy initiatives aimed specifically at youth have been slow to develop.

IV. CONCLUSIONS

The poverty measures put forward and empirically tested in this paper serve a useful purpose as relative measures in comparing economic deprivation among

demographic groups. In addition, the measures serve a useful function in monitoring changes in the poverty status within groups and among groups over time, since the poverty rates do not necessarily reflect changes in the size and distribution of the poverty gap. Because of the critical nature of the selection of poverty lines, the absolute magnitudes are of rather limited use, unless the lines are used as a policy administration tool for determining public assistance benefit levels.

One important dimension not included in this paper is the duration of poverty. This component is meaningful since policy strategies dealing with short or longer term issues are generally quite different. This was not an oversight, but rather an area that could not be addressed due to insufficient statistical information. The lack of longitudinal household survey data in Canada precludes adding this dimension to the overall poverty measurement assessment. Nevertheless, it is generally believed that short and long durations of poverty are polarized at the young and elderly ends of the age spectrum, with a very small segment of the non-elderly population destined to long-term deprivation. It can further be added that the duration of poverty tends to be sensitive to changing economic and social conditions.

One of the primary objectives of the empirical estimations of poverty measures is to support the development of effective social policies. In this context, the measures serve to identify priority groups. The actual policy strategies are then based on the underlying causes of poverty for these high poverty groups as well as considerations for broader dimensions of economic and social well-being that go beyond measures of income. Equally important in the policy environment is the effectiveness of empirical measures to monitor and evaluate the effectiveness of programs aimed at reducing poverty.

Although the underlying causes of poverty have not been empirically explored in this paper, it is known that there are a varied number of reasons to explain high degrees of poverty for some groups of Canadians. For the poor who are unable or not expected to work, improved income support is essential. However, poverty is often the result of lack of job opportunities, lack of education, skills or training, lack of access to services such as child care or the lack of work incentives in the current social support system. The policies and strategies needed to address these problems are as wide and varied as the causes and require careful consideration with regard to the integration of tax and transfer programs as well as integration at all levels of government.

In this regard, the measures and analysis of the dimensions of the poverty gap in Canada developed in this paper provide an important new source of information on which to design and assess policies and programs for the poor. Analysis of the poverty gap not only provide more meaningful cross-sectional measures among demographic groups, but is more sensitive than the poverty rate alone, to changing economic and social conditions and social policy initiatives. For example, an increase in income transfer benefits to the poorest groups will narrow the poverty gap but will only be reflected in the poverty rate if incomes are pushed over the poverty line. Furthermore, this research opens the door to associated poverty and policy research in Canada, such as studying the poverty gap on an after-tax income basis and assessing the impact the existing tax-transfer system as well as anti-poverty policy options.

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