Measurement of Poverty Within Family Groups

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Working Papers provide a succinct discussion of specific issues that arise throughout the analytical process of poverty measurement. The Metcalf Foundation has funded the overall project.

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Measurement of Poverty Within Family Groups

1 Objectives

This paper highlights some issues related to family composition, the economic status of individuals in a family and the definition of a "family unit" for the purpose of assessing poverty.

Poverty measures determine who is poor based on a family's needs in relation to their collective income. As such, it is important to understand how a family is defined, and how family needs are calculated, in order to examine poverty measures.

2 Individuals in a Family

Assessments of poverty status are typically conducted at a family level. That is, if a family's resources are lower than a poverty threshold (i.e., the resources required for an acceptable standard of living), the family, and all members of the family, would be considered poor.

As such, it is worth noting that child poverty is a special case of poverty. Children are not expected to have income and therefore are poor not due to anything they have failed to do. Rather, they are poor because their parent(s)'s resources are inadequate for meeting the family's needs.

This approach of assessing poverty at the family level is based on a recognition that many of the necessities which determine poverty - food, clothing and shelter – are shared in a family. That is, family members should have roughly the same access to food and shelter. Further, one also assumes that expenditures on other necessities such as clothing, health care and transportation, will be roughly comparable within a family.

The assumption of intra-family sharing has come under scrutiny recently by researchers who point out that in many instances, family members do not all have equal control over family spending.[1]

Few would argue that the sharing of resources within a family is equal: families will have many ways of sharing the work for employment, child-care and the maintenance of the home. Also, there are undoubtedly families where the input for financial decisions is not equal and where

[1] Phipps S.A. and P. S. Burton (1995): "Sharing within Families: Implications for the Measurement of Poverty among Individuals in Canada", *Canadian Journal of Economics*, 28(1): 177-204. Woolley F.R., Marshall J.(2004): "Measuring Inequality Within The Household", Review of Income and Wealth;40(4), 415 – 431, p. 429, 430.

some individuals have little say in major purchases. This could be so extreme that control of finances is sometimes part of a pattern of abuse.[2]

In extreme cases, there will be families in which the family income is totally adequate, but where a spouse has such limited access to those resources that they essentially have little, if any, economic autonomy and may lack access to anything but basic necessities.

Thus, when using poverty measures based on economic families, one should bear in mind that there will be circumstances in which individuals in a family may not have equal access to resources and therefore would be considered poor on their own, based on the resources which they control, although they are not part of a poor family.

As data on the standards of living for individuals within a family are unavailable, the assumption of sharing within a family is necessary for the analysis of poverty. This assumption represents a limitation that is similar to other assumptions (e.g., ignoring assets) which one must make in order to produce some statistical information (with its acknowledged assumptions and flaws).

3 Who is in a Family Unit?

For the purposes of studying poverty, researchers wish to identify a family unit that shares financial resources. The combined resources of the family can then be compared to their needs.

Statistics Canada identifies different kinds of families which could be used in research. A “household” is a group of individuals who share a dwelling (they may or may not be related and do not necessarily share finances). An “economic family” is composed of individuals who live together and are related by blood or marriage. A “census family” are a couple (or single parent) and their children.

Some examples may illustrate the distinction between economic and census families. A couple with children is one census family and one economic family. If an uncle lived with them, then they would be two census families, but one economic family.

A couple who have one of their parents living with them would also be one economic family. The addition of the senior would likely increase the family’s income, as he or she generally has at least some income, usually including OAS and CPP/QPP. The income threshold used to determine the family’s poverty status is increased by the addition of one person using an equivalence scale. So a senior who might otherwise be poor may not be poor because of the income of the couple. Or, the couple could be made poor by the presence of the senior if the combined income of the economic family is below the threshold that was increased by the presence of the senior.

The income used to determine poverty includes the income of all the persons in the economic family. To be clear, that amount includes the income of any children with jobs. The poverty

[2] Fawole, O. (2008): “Economic Violence To Women and Girls: Is It Receiving the Necessary Attention?”, *Trauma, Violence & Abuse*, 9(3): 167-177, p. 168.

status of an economic family is based on their income and family composition (this is discussed below).

There are several circumstances in which individuals are difficult to classify into economic families and where problems can affect the poverty rate.

University students are difficult to classify. If the student is living at home, they are unlikely to be ‘poor’ because they are part of their parent’s economic family. If they are living away from home, then they should not be part of their parent’s economic family, although some survey respondents may include the student within the parent’s family.

If the student lives away from home, they would likely be classified as poor as their income is normally below their poverty threshold. This would be the case even if they are supported by their parents and receive financial resources from their parents that exceed the poverty threshold because parental support is not included in income calculations.

Foster children also present a special problem in the determination of poverty status. As they are not related to their foster parents, they will be considered their own ‘family.’ They will typically have little or no income in their own name and therefore will be classified as ‘poor’ although they will often have adequate access to food, clothing and shelter.

4 Family Equivalence Scales

Family equivalence scales are numerical tools which adjusts the income required for a given living standard for the family composition. The equivalence scale answers the following question; what relative income does a family of four need for the same standard of living as a family of one?

The Organization for Economic Cooperation and Development (OECD) lists a number of family equivalence scales. The OECD-modified scale, which is used by the European Union to calculate family needs, gives a value of 1 for the first person in a family, and adds 0.5 for each additional adult, and 0.3 for each additional child. Therefore, a family of four consisting of two adults and two children would need an income 2.1 times higher than an individual to have the same standard of living. A family consisting of a single parent with three children would require only 1.9 times as much money as an individual (OECD, 2008).

Statistics Canada uses the following adult equivalence scale: a value of 1 for the first person in the family, then 0.4 for the second person in the family; then 0.4 for each additional person 16 years and older, and 0.3 for each additional person less than 16 years. As such, a family composed of two adults and two children under 16 would require 2.0 times the resources of a single individual, but these resource needs would increase by 0.2 to 2.2 if the children were both 16 or older.[3]

[3] Statistics Canada (2008) “Low Income Cut-offs for 2007 and Low Income Measures for 2006”, *Income Research Paper Series*, Catalogue no. 75F0002M–004, Statistics Canada, p. 13. http://www.statcan.ca/english/research/75F0002MIE/75F0002MIE2008004.pdf, Accessed 19 Nov 2008.

Square root scales are also used to measure equivalence. These scales calculate the square root of the number of family members to determine their needs. A single individual requires a resource level of 1.0, a family of three requires 1.73 times the income, and a family of four requires 2.0 times an individual's income to maintain the same quality of life. Of note, square root scales assign the same income needs to members regardless of age, whereas the other measures set out lower income requirements for young children.

While the scales vary, they all generate similar income requirement figures. As such, the impact of the different equivalence measures is quite small and unlikely to have a significant impact on poverty rates or the composition of the poor. The predicted income needs according to the scales are outlined in the following table.

Table 1 Adjusted family sizes for three different equivalence scales

Family Composition	OECD	LIM	Square Root
One adult	1.0	1.0	1.00
One adult, one child	1.3	1.4	1.40
Two adults	1.5	1.4	1.41
One adult, two children	1.6	1.7	1.73
Two adults, one child	1.8	1.7	1.73
Three adults	2.0	1.8	1.73
One adult, three children	1.9	2.0	2.00
Two adults, two children	2.1	2.0	2.00
Three adults, one child	2.3	2.1	2.00
Four adults	2.5	2.2	2.00
One adult, four children	2.2	2.3	2.24
Two adults, three children	2.4	2.3	2.24
Three adults, two children	2.6	2.4	2.24
Four adults, one child	2.8	2.5	2.24
One adult, five children	2.5	2.6	2.45
Two adults, four children	2.7	2.6	2.45
Three adults, three children	2.9	2.7	2.45
Four adults, two children	3.1	2.8	2.45

Note: The definition of an adult differs for each equivalence scale: 16 and over low income measure (LIM), 15 and over Organisation for Economic Co-operation and Development (OECD). For the LIM scale, the second oldest person is treated as an adult, regardless of age.
Source: Statistics Canada, 2008

5 Family Groups and Housing

Family groupings imply that economies of scale apply to family needs. That is, as family size increases, the needs of each individual within that family decrease due to family resource sharing. One can question, however, whether or not housing measures are adequately considered within this framework.

The Market Basket Measure (MBM), for example, calculates the necessary housing costs for a family of 4 in Toronto in 2004 as $12,871. For a single person, this value was $6,435, or $536 rent per month.

The purpose of the MBM was to provide a basket of goods that allows for acceptable living standards. When considering the rent amount of $536 per month in Toronto, most accommodations available at that rate are rooms in private residences or motels. These accommodations, while considered acceptable and appropriate for an individual, are not necessarily socially acceptable for housing a family. When living in shared dwellings such as rented rooms or rooming houses, the individual has no control over who else is living in the residence (co-habitants), and there are no expectations of privacy. In addition, the *Tenancy Act* is applied differently.

Currently, the MBM dictates a housing need in Ottawa of $11,393 for the reference family (2 adults, 2 children). At the time of writing, an online search of Ottawa housing options showed 1 room for rent that cost $480 per month within the city of Ottawa.[4] When the search was expanded to include other renters' sites, the rent advertised was weekly.

Opportunities for housing are important to consider in addition to opportunity cost. While a family or individual may be able to make monthly rent payments, in order to rent an apartment or sign a lease, individuals must provide rent for both the first and last months of residence when the lease or rental agreement is signed. In addition, most landlords demand that the prospective tenant signs a lease agreement. There may be additional future costs associated with these agreements if an individual is unable to make a rent or lease payment: there are penalties for failure to pay rent as well as for breaking a lease in Ontario. As such, a family that cannot make a payment due to an emergency would be required to pay an additional financial penalty in addition to the rent owed. For families with marginal incomes, these penalties could result in homelessness.

6 References

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