

An Update on the Development of Canada's Market Basket Measure

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History of the Market Basket Measure (MBM)

Canada has no official measure of poverty. One of the main reasons for this is the lack of consensus on just what poverty means and on how to measure it. Statistics Canada has been producing Low Income Cut Offs (LICOs) since the late 1960's. They convey the income level at which a family may be in difficult circumstances because it has to spend a greater proportion of its income on necessities than the average family of similar size. Many Canadian groups use these cutoffs as a measure of poverty, even though Statistics Canada has consistently maintained that they measure those who are substantially worse off than the average, which is quite different from poverty.

In 1998 the Canadian Federal, Provincial and Territorial Ministers of Social Services asked a working group to develop an alternative to the LICOs. Part of the motivation for this came from the desire to evaluate the effectiveness of various programs, including the National Child Benefit. Such a measure should be: credible in its approach to poverty measurement, easy to understand, sensitive to geographic cost differences, and reflect changes in costs rather than changes in income. The last point implies that the measure should be absolute rather than relative.

Human Resources Development Canada and the Working Group on Social Development Research and Information have developed a measure of poverty based on the ability to purchase a basket of goods and services that would provide a "credible" standard of living. To purchase the basket, a family must have sufficient income to:

- eat a nutritious diet
- buy clothing for work and social occasions
- house themselves in their community
- satisfy basic transportation needs for work, school, shopping and participation in community activities
- pay for other necessary expenses.

How to Calculate the MBM

The food component is based on the composition and amounts of foods specified in Health Canada's "National Nutritious Food Basket" for a reference family of two adults and two children.

The clothing component is based on the Acceptable Living Level clothing list developed by the Social Planning Council of Winnipeg.

In urban areas, the transportation component of the MBM is set at the annual cost of two monthly bus passes, plus 12 taxi trips per year. In rural areas the transportation component consists of the cost of a used vehicle, amortized over several years, 1,500 litres of gasoline and the cost of maintaining the vehicle (drivers' license, registration, insurance, two vehicle checkups).

The MBM definition of shelter includes what a family must spend on rent, utilities and basic appliances. The general approach is to average the median cost of a two bedroom rental unit and the median cost of a three bedroom unit. The Census of Population provides the basic cost of rent, electricity, heat and water for very detailed geographic areas. In order to ensure a

certain standard of accommodation, only rental units that are not in need of major repairs are used to calculate the basic costs.

The practice of including appliances varies considerably across the country, so an adjustment must be made to allow for the extra expense that some renters will incur in supplying themselves with a refrigerator, stove, washer and dryer. This adjustment is made up of two parts: the cost of the appliance (averaged over its lifetime), multiplied by the percentage of renters who do not have that appliance included as part of their rent.

Combining these three factors produces an amount for rental accommodation that includes electricity, heat, water, refrigerator, stove, washer and dryer.

Of course there are other expenses such as basic telephone service, school supplies, personal care items and modest levels of recreation and entertainment that a family needs to achieve a reasonable standard of living. In theory, these additional items could be specified and priced in various areas of the country. To avoid this detailed and costly task, a “multiplier” approach is used for these other expenses. The actual expenditures on these items by two adult, two children families in the second income decile is expressed as a fraction of expenditures by the same families on food, clothing and transportation. Then the MBM values for food, clothing and transportation are increased by this fraction in each province and size of area of residence.

Equivalence scales provide a means of quantifying the economies of scale that are achieved by several persons living together. The specifications for the components of the Market Basket Measure are based on a family of two adults and two children, so an equivalence scale is used to convert to amounts suitable for families of other sizes. The Market Basket Measure uses the same equivalence scale that is already in use at Statistics Canada in the calculation of the 50% of the median low income measure. This scale counts an unattached individual as 1.0, and adds 0.4 for the second person (regardless of age), 0.4 for additional adults, and 0.3 for additional children. Therefore, the line for a single parent with one child would be 0.7 times the line for the reference family of four, and the line for a single person would be 0.5 time the line for the reference family of four.

Income concept: MBM disposable income

Once the cost of a basket has been established, a family will be above the MBM line if it has enough income to purchase the basket and will be below the line if it does not. Non-discretionary expenditures are subtracted from total income to determine how much money is actually available for purchase of the basket. The following amounts are subtracted from total family income to reach “MBM disposable income”:

- federal, provincial and territorial income taxes
- employee portion of payroll taxes
- union and professional dues
- child care costs incurred to enable both parents (or a lone parent) to work
- child support payments made by non-custodial parents
- out-of-pocket costs of medically prescribed drugs, dental and vision care

Updating the MBM

There are two aspects to updating the MBM: annual price changes and changes in composition of the basket itself. In the case of the food, clothing and transportation components, annual price changes are accounted for automatically because pricing is carried out on a continuous

basis. This leaves the basic cost of rental accommodation, which is available on a five year cycle from the Census. In between census years, the basic cost of shelter is updated using the CPI for provincial rental accommodation.

Society's idea of a reasonable standard of living changes over time. As this happens contents of the basket may become outdated. The contents of the basket will be reviewed on an approximately five year cycle, though this time frame would be modified if the Market Basket Measure exhibited unexpected or unusual trends compared to other low income measures.

Status of the MBM

Statistics Canada has done an initial investigation into the feasibility of producing the MBM. The results have been mixed.

The estimation of the shelter component is mainly based on the "long form" of the Census of Population, covering about 20% of the Canada. With this sample size and geographic detail, the shelter component seems quite feasible, in spite of the complexity involved in combining data from three different surveys.

Pricing of food and many of the transportation items is done regularly as part of the Consumer Price Index program. It was possible to find good correspondences for most of the items in these components, and preliminary estimates of these components have been encouraging. There are still some challenges in geographic coverage.

The specification of the clothing and footwear items was not sufficiently precise to allow a good preliminary estimate of the cost of this component. More work is needed to develop a usable clothing basket.

Data have been collected to allow the estimation of the disposable income concept that is to be compared to the total cost of the basket. Some work remains to be done on the out-of-pocket medical expenses. This information is collected in an expenditure survey, and will be imputed for families in the more detailed income and labour survey.

No firm date has been set for publication of a set of MBM lines and their associated poverty rates.