

### **Income Statistics** Division

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**Should the Low Income Cutoffs be Updated?** A Summary of Feedback on **Statistics Canada's Discussion Paper** 

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#### Statistics Canada Income Statistics Division

### Should the Low Income Cutoffs be Updated? A Summary of Feedback on Statistics Canada's Discussion Paper

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Note of appreciation
Canada owes the success of its statistical system to a long-standing partnership between Statistics

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#### Abstract

This report summarizes the comments received in response to a discussion paper on low income cutoffs released in January 2000. The authors wish to thank reviewers for taking the time to share their opinions and expertise in writing. The feedback received has already been very helpful and will continue to be so.

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#### 1. Background

In January 2000, Statistics Canada released a discussion paper, *Should the Low Income Cutoffs Be Updated?* 

Low income cutoffs (LICOs) are thresholds used to calculate low income rates. LICOs start with what families spend, on average, on food, shelter and clothing as a proportion of income. A margin of 20 percentage points is added to this figure. Current low income rates represent the income level where a family would generally spend more than 55% of its before-tax income or 64% of its after-tax income on these three essentials. The current LICOs reflect family spending patterns observed in the 1992 Family Expenditure Survey (FAMEX).

The discussion paper explained the LICO methodology in detail and gave an account of the history of low income measurement over the past 30 years. It went on to propose three options for *updating* the cutoffs. The practice of updating LICOs to reflect changes in family spending patterns is an integral part of the program. In the past 30 years, LICOs have been updated four times<sup>1</sup>. However, the environment has changed and, this time, updating is not a straightforward matter.

In particular, we now have annual spending data from the Survey of Household Spending (SHS). SHS has replaced FAMEX, which was conducted every four years or so. Should we take advantage of the annual SHS data? Or should we mirror the program as it was under FAMEX? SHS is less detailed than FAMEX and some of the differences affect the LICOs. Does this matter?

The discussion paper proposed three possible courses of action and raised several ancillary questions. Readers were invited to send their comments to the authors. The purpose of the present document is to summarize the feedback received and to outline plans in response to that feedback.

#### 2. Sources of Feedback

About 80 individuals and agencies received a copy of the discussion paper, or were informed directly of its availability on the Statistics Canada website. A broad cross-section of data users offered their views, including officials from federal departments, provincial and territorial governments, research institutes and advocacy groups. Two of Statistics Canada's advisory committees, as well as one federal/provincial/territorial committee, reviewed the options in conference. The discussion paper was also the subject of some media attention. The authors wish to thank

<sup>1</sup> Apart from this updating, the cutoffs are revised annually for changes in the cost of living using the Consumer Price Index (CPI). The CPI revision assumes no change in the proportion of income that families spend on food, shelter and clothing. Experience has shown that, as incomes rise, this proportion declines.

the following reviewers for taking the time to share their opinions and expertise in writing:

- Richard Dagenais
- Gerry Ewert
- David Greenwood
- Michael Hatfield
- Ted Hildebrandt
- Bill Hyshka
- Sylvie Jean
- Ralph Joyce

- Steve Kerstetter
- Anne Kittredge
- Paul-Henri Lapointe
- Ron McMahon
- Kari Norman
- Susan Peterson
- Laurie Rektor
- David Ross

Opinions on the central issues varied widely. Many reviewers voiced opinions on related issues. The comments were grouped around major themes, and summarized. These comments appear in italics.

This document should be viewed as a companion piece to the discussion paper, which explains the issues in detail. For brevity, the current report presents only a precis of the issues.

#### 3. The three proposed options

#### Issue

The discussion paper presented three options for dealing with the availability of annual expenditure data from the Survey of Household Spending.

Option 1 maintains the status quo. Statistics Canada continues to produce low income information based on 1992 and 1986 spending patterns, updating the LICOs annually with CPI. This option defers a decision on rebasing to some unspecified date in the future.

Option 2 is to rebase the LICOs to reflect spending patterns in 1997, the first year SHS was conducted. The cutoffs would be backcasted, perhaps to 1990. For historical continuity, we would also produce low income rates using the 1992 base, but we would drop the 1986 base. This approach to rebasing is consistent with past rebasing exercises.

Option 3 takes advantage of the fact that we now have annual expenditure data. Cutoffs would be calculated annually, using current spending data. These cutoffs would be used for production of low income rates for that year only – they would not be backcasted into the past or extended into the future. The 1992 base series would also be maintained, for continuity.

The discussion paper recommended Option 3.

#### Feedback

Most reviewers supported Option 3, because if affords an opportunity to use the latest available spending patterns data without loss of continuity.

Points in favor of the series based on current spending patterns include:

- It makes sense conceptually. The use of a base year to produce low income rates for a long period for example, using 1992 or 1997 base LICOs to produce low income rates for 1980 is incorrect. The proper procedure is to use the nearest available base year.
- Had the Family Expenditure Survey been annual, we would have naturally used annual spending data from the start; CPI updating was done only because we did not have annual spending data.

However, a number of concerns about the series based on current spending patterns were voiced:

- Will they be unstable, will sampling variability blur the picture? Only time will tell, so the series should be treated as exploratory for a few years.
- The series will not be of much value for a long time, unless we projected it back in time. In other words, we should develop a historical series that represents our best estimate of what the past would have looked like had we had access to annual data prior to 1997.
- With the Market Basket Measure on the horizon, it would be better to not change the LICO in any way, as this will improve its usefulness as a benchmark for evaluating the performance of the MBM.
- The 1997-base LICOs produce a large change in low income rates.
  We do not fully understand why the change is so large. Until we do, we should not use 1997-base LICOs.
- Using current spending patterns is more controversial than continuing with the 1992 base, therefore we should stay with 1992.

#### Here are some other related comments:

- Statistics Canada should never have instituted the practice of rebasing in the first place because it shifts the yardstick and prevents us from seeing how we are doing relative to the past.
- Because the methodology is difficult to understand intuitively, LICOs should be discontinued altogether.

- LICOs do not provide an appropriate base for inter-provincial comparisons, because they are calculated at the national level and do not properly adjust for provincial variations in the spatial distribution of the population. LICOs assume that all large cities are alike, all rural areas are alike, and so on. In fact, they are not. Yet, inter-provincial comparisons are often done, because Statistics Canada publishes low income rates for provinces.
- Rather than focus on these issues in the discussion paper, we should concentrate on making users aware that the LICO is an arbitrary measure.
- LICOs are not sensitive to age differences in income. It is not appropriate to compare families at different stages of the life cycle.

For the 1998 reference year, Statistics Canada published low income rates based on 1992 spending patterns. Rates based on 1986 spending patterns continue to be available, on the annual CD-ROM, *Income Trends in Canada*.

By the time the 1999 income results are published in the spring of 2001, three years of annual spending data from SHS will be available. At that time, we will have a much better idea of the stability of annual average spending on food, shelter and clothing and of the low income cutoffs and rates based on these data.

#### 4. After-tax rates versus before-tax rates

#### Issue

After-tax and before-tax rates are produced independently. Before-tax rates begin with average spending on food, shelter and clothing as a proportion of before-tax income. After-tax rates begin with these same expenditures, as a proportion of after-tax income. Typically, after-tax low-income rates are lower than before-tax rates.

After-tax low income rates became available in the early 1990s and were extended back to 1980. Historically, most public attention has focused on before-tax information since the after-tax rates were released several months later.

A high-profile user consultation done in the early 1990s concluded that the LICO program should continue, but that after-tax rates should be highlighted. This recommendation could not be implemented immediately, because resources were not available to re-tool the Survey of Consumer Finances (SCF) production system.

With the transition from SCF to the Survey of Labor and Income Dynamics (SLID), all data for a given reference year are available at the same time.

When it was decided that SLID would replace SCF as the source of crosssectional income data, it made sense to wait until that transition before shifting the focus to after-tax low-income rates.

The discussion paper stated our plans along these lines. Although it was emphasized that this was simply a change in analytical focus and did not in any way limit the availability of before-tax low income information, we received a great deal of feedback on this issue.

#### Feedback

Opinions were quite polarized. Some felt that the use of after-tax income did not go far enough: payroll taxes should also be deducted to come even closer to a disposable income concept. Others believed that the shift to after-tax low-income rates should not be made. The following arguments against the shift were advanced:

- People in low income generally do not pay taxes.
- Tax regimes differ widely from province to province; after-tax rates obscure these differences.
- After-tax rates are lower; since after-tax incomes are lower, this is confusing and counter-intuitive. One might conclude that the way of reducing low income is to increase taxes.
- Income tax is only one tax. LICOs do not capture other taxes, such as sales tax and property tax. Moreover, income tax is the only progressive tax, making those with lower incomes look relatively better off. The other taxes are flat or regressive.
- A low income family should not suddenly appear to not be low income because we look at their after-tax income rather than their before-tax income.
- The discussion paper provides only a weak and unconvincing rationale for why this decision is being taken.

Those favoring the shift to after-tax low-income rates offered the following views:

- The after-tax measure is intuitively superior because households make expenditures on food, shelter and clothing with their after-tax dollars; after-tax income is a better measure of income available for consumption.
- The measure treats taxes and transfers consistently, which makes sense. It more accurately reflects families' standards of living.

Regarding the treatment of payroll and other taxes, we heard the following:

- Flat or regressive taxes are included directly or indirectly in the costs of goods and services. The one exception is payroll taxes deducted from wages, salaries and self-employment income. These, as well as income taxes, should be taken into account in calculating LICO thresholds.
- All forms of income redistribution should be taken into account, not just transfers and income taxes, among them: El deductions, CPP/QPP premiums, employer pension plan contributions and RRSP contributions.

#### Response

Four main arguments were made against the shift to after-tax low-income rates

First, *low-income people generally do not pay taxes*. While it is true that the majority of people below the before-tax cutoffs do not pay taxes, it is not clear why this makes the before-tax measure superior. By analogy, most people in low income do not have earnings but no one would suggest that we ignore earnings in calculating low income rates.

Second, provincial tax regimes differ and the after-tax rates mask these differences. LICOs are not sensitive to provincial variations in living standards because two families of the same size, living in the same size of community, are compared to the same cutoff. Analyses of provincial variations in taxation rates or income inadequacy are best done using other measures.

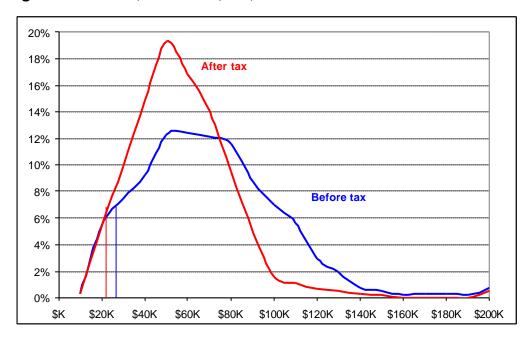
Third, LICOs do not include other taxes, in particular, sales taxes, property taxes and payroll taxes. In fact, the current LICO methodology does take into consideration taxes paid on necessities. Sales taxes are included in expenditures in *both* before-tax and after-tax LICOs. Property taxes are captured directly for home owners and indirectly through the rent of those who do not own homes.

It is true that the current methodology does not capture payroll taxes and that we would more closely approximate a measure of disposable income if they were taken into account. We will examine this issue further, to see what the impact would be. If the impact is noticeable and if it is feasible to exclude payroll taxes, we believe this would be a sensible move.

The final point is the concern that *it is counter-intuitive and confusing to have after-tax rates that are lower than before-tax rates.* This view loses sight of the fact that the LICO is in many respects a relative measure. The tax/transfer system shifts money from the upper and middle part of the income distribution. Some people who are in straitened circumstances

relative to others according to the before-tax income distribution do not appear so based on the after-tax income distribution, because the latter is more compressed. They are, in effect, closer to the average family on an after-tax basis. This is depicted visually in the following chart, which shows income distributions before and after tax for families of four in medium-sized cities.

Chart: Before-tax and after-tax income distribution, families of four living in cities of 30,000 to 100,000, 1992



In summary, none of the arguments appears strong enough to reverse our decision to feature after-tax low income rates. However, there is clearly still a great deal of interest in before-tax cutoffs and rates, and we will continue to publish these. As for payroll taxes, we will undertake further work to see what their impact would be. The results will be made public.

#### 5. The 20 percentage point margin

#### Issue

When LICOs were first developed using 1959 FAMEX data, the average family spent 50% of its pre-tax income on food, shelter and clothing. The original LICO methodology added 20 percentage points to that figure, on the rationale that a family spending more than 70% of its income on these essentials would be in "straitened circumstances".

There was no particular justification for using 20 percentage points as opposed to some other figure.

Since those first LICOs, average family income has increased and the proportion of income spent on food, shelter and clothing has declined. Yet the 20-percentage point margin has remained fixed.

#### **Feedback**

Although the discussion paper did not seek feedback on this issue, several comments were received, essentially proposing to redefine the margin:

- In 1959, a low income family had at most 30% of its before-tax income left over to cover needs other than food, shelter and clothing. The average family had 50% left. Thus low income families had 60% (or less) of what the average family had. If the LICO were based on a share, such as 60% of the average family's discretionary income, a general decline in the proportion of income spent on food, shelter and clothing would not entail an increase in the low income rate.
- Instead of the 20 percentage point margin, Statistics Canada should use 40% of the remaining income to determine the LICOs, as was used in 1959. Thus in 1992, 26 points would be added to the 35% of income spent on food, shelter and clothing rather than 20.
- Instead of 20 percentage points, it would be better to use 1.385 times the average spending on food, shelter and clothing. In 1959, the after-tax LICO would have been set at income levels where 72% of after-tax income was spent on food, shelter and clothing 1.385 times the average of 52%.
- Apart from concern about the 20 percentage point margin per se, the point was made that, if a 20 percentage point margin is used to produce before-tax LICOs, it is not appropriate to use the same margin for after-tax LICOs:
- Since income after tax is lower than income before tax, we should not add 20 percentage points to the after-tax LICO calculations. An alternative would be:

20% x <u>average after-tax income</u> average before-tax income

This would reduce or eliminate the difference between before-tax and after-tax rates.

The 20 percentage point margin is part of the long-established LICO methodology. While the suggested alternatives are intriguing, none of them are any less arbitrary than the current approach.

#### 6. Restructuring of the LICO matrix

#### Issue

Low income cutoffs are produced for seven "family size" categories, ranging from one to seven and over. They are also calculated for five community size categories, ranging from rural areas to cities of 500,000 or more. A matrix of low income cutoffs therefore has 35 cells or values.

Since 1959, average family size has declined and urbanization has increased, causing the distribution of Canadians to become more concentrated in a few of the 35 cells. In fact, 46% of Canadians live in families of size one to five, in cities of 500,000 or more.

Underlying the LICO methodology is the assumption that families of the same size living in the same community size can achieve the same standard of living with the same income. But what happens when the cost of basics varies considerably within a category? In particular, the cost of shelter in Montréal is quite different from Toronto and Vancouver, yet the same cutoffs are applied to the residents of these cities, along with residents of Ottawa-Hull, Edmonton, Calgary, Hamilton, Winnipeg and Quebec City.

The discussion paper proposed future research on restructuring the LICO matrix, possibly adding city-specific LICOs for the census metropolitan areas of Toronto, Montréal and Vancouver. To counterbalance this increase, some of the existing categories would be collapsed.

#### **Feedback**

Several reviewers would like to see further developments along these lines:

- Regional variations in shelter cost are important. City-based LICOs would be more meaningful.
- This is a good move, as long as sample sizes are large enough.
- A reduction in the number of family size categories would be an acceptable trade-off.
- We should analyse shelter costs patterns by community size, in different parts of the country, to see how consistent they are.

Statistics Canada will continue to investigate this issue and the results will be made public.

#### 7. The Market Basket Measure

#### Issue

Human Resources Development Canada collaborated with the provincial and territorial governments to develop the Market Basket Measure. The approach is to cost out a "basket" of necessary goods and services including food, shelter, clothing, transportation and a "multiplier" to cover other essentials. Thresholds will be produced for each province and territory, by size of community.

The income concept to be compared to these thresholds is more restrictive than after-tax income. "MBM disposable income" consists of total income minus income taxes, the employee portion of payroll taxes (EI and CPP/QPP) and expenses such as support payments, work-related child care expenses and employee contributions to pension plans.

#### Feedback

The discussion paper did not specifically ask for feedback on the MBM, but several reviewers offered comments, generally in support of the MBM:

- The MBM makes sense. It is better designed to answer questions on poverty and to evaluate income support programs.
- It satisfies the need for an absolute measure of poverty.
- It is responsive to provincial variations in the cost of goods and services.
- A detailed description of the methodology should be in the public domain. The MBM needs to be methodologically sound and easy to understand.
- The MBM should be in the public domain but there is a risk of confusion among the various measures.
- The MBM should be based on consensus about the content of the basket.
- Some evaluation should be done to show how the series behaves over time (stability, reliability, responsiveness).

Statistics Canada will continue with its plans to collect the necessary data produce the MBM. A report presenting the MBM methodology in detail will be produced.

#### 8. Shelter Definitions in FAMEX and SHS

#### Issue

As far as low income measurement is concerned, the move from the Family Expenditure Survey to the Survey of Household Spending has two effects. First, the LICOs can be updated, or rebased, annually. Second, the two surveys do not collect the same level of detail in shelter costs.

For renters, the level of detail is the same, but the streamlined SHS does not ask homeowners to split their mortgage payment into principal and mortgage. This has reduced response burden, since the separate reporting of principal and interest was one of the most difficult parts of FAMEX. It was also becoming more difficult with time, given the growing variety of methods available for financing the purchase of a home.

The impact of the change in shelter definition is that any base from 1997 onwards would include both principal and interest in the definition of shelter costs. Before that time, only interest was counted; payments towards the principal were treated as savings. If the SHS definition is applied to 1992-base LICOs, the result is a slight increase in low income rates.

#### **Feedback**

Reviewers did not express concern about the change in definition. Some were actually in favour:

- The SHS measure seems superior. Excluding homeowner spending on the principal biases their expenditures downward.
- Homeowners are obliged to pay both principal and interest. If not, they lose the house and must pay rent, which is 100% included.

#### Response

Both principal and interest will be included in any measure based on 1997 or later. There are no plans to revise pre-1997 data to produce a time series based on the SHS definition.

#### 9. Other Concerns and Suggestions

#### **Feedback**

Here is a summary of other comments received:

- The move to SLID is positive since longitudinal data will be available to monitor income mobility.
- The decision to put more emphasis on the severity and persistence of low income is a positive step.
- In reference to Statistics Canada's plan to reweight the data to 1996 Census-based population estimates: these revisions are problematic and time-consuming for data users.
- Statistics Canada should extend the scope of its low income estimates to include Indian reserves and the territories.
- Statistics Canada should consult with people living in poverty before making decisions on measurement issues.
- Statistics Canada should publish a collection of indicators related to poverty, including school drop-out rates, out-of-pocket health care expenses, income inequality, complaints lodged with social assistance review boards.

#### 10. Conclusion

Low income data are of interest to many Canadians, so it is no surprise that opinions diverge on some points. Although we cannot follow the advice in every case, the authors are very grateful to reviewers for their thoughtful insights and for the time taken to share these.

Clearly, there is still some work to do before a final decision can be taken regarding changes to the low income cutoffs. The areas requiring further development are indicated under the "response" rubric in each section of the paper. The results of this research will be presented to the National Statistics Council in the fall of 2000.

A decision will be taken before the end of 2000 and a report will be published at that time.

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