UNIVERSITÉ LAVAL

CALCULATION OF THE BASIC LOCAL LIVING WAGE FOR ONE ADULT

STARS technical manual
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"Canadian institutions should use Living Wage Canada's standards. (Please note that Living Wage Canada's standards are based on a family of four. To calculate the basic living wage for one adult, an institution should use 50 percent of the living wage for a family of four.) If a figure is not available for the institution's community or province, use 120 percent of the appropriate Low Income Cut-Off (LICO) for a family of four as the basic living wage for one adult (expressed as an hourly wage)."

Living Wage Canada's standards
The measure does not exist for the province of Quebec.

Low Income Cut-Off (LICO), after-tax

Why use after-tax LICO? The average proportion of income that families spend on food, shelter and clothing, which figures prominently in the low income cut-offs, is undoubtedly a useful gauge of economic well-being no matter which income concept is used. The choice of after-tax income, total income or market income depends on whether one wants to take into account the added spending power that a family gets from receiving government transfers or its reduced spending power after paying taxes.

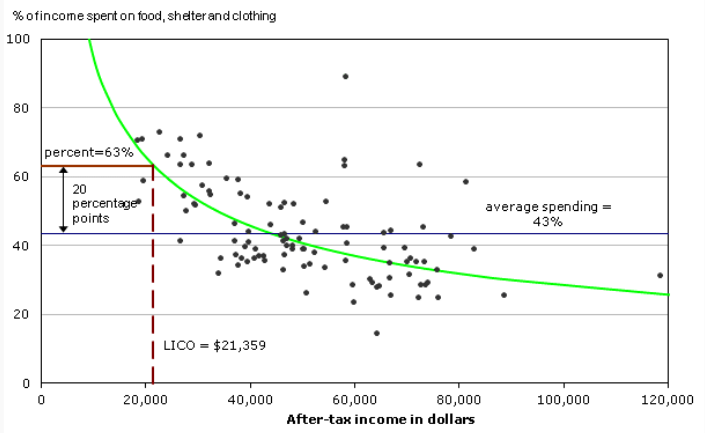
Statistics Canada produces two sets of low income cut-offs and their corresponding rates—those based on total income (i.e., income including government transfers, before the deduction of income taxes) and those based on after-tax income. Derivation of before-tax versus after-tax low income cut-offs are each done independently. There is no simple relationship, such as the average amount of taxes payable, to distinguish the two types of cut-offs.

Although both sets of low income cut-offs and rates continue to be available, Statistics Canada prefers the use of the after-tax measure.

The choice to highlight after-tax rates was made for two main reasons. First, income taxes and transfers are essentially two methods of income redistribution. The before-tax rates only partly reflect the entire redistributive impact of Canada's tax/transfer system because they include the effect of transfers but not the effect of income taxes. Second, since the purchase of necessities is made with after-tax dollars, it is logical to use people's after-tax income to draw conclusions about their overall economic well-being.

Ref.: http://www.statcan.gc.ca/pub/75f0002m/2011002/lico-sfr-eng.htm

Figure 1
Calculation of an after-tax LICO



Source: Survey of Family Expenditures (Famex), 1992.

▼ Description for figure 1

Figure 1 shows the calculation of a LICO using the example of a family of four living in a community with a population between 30,000 and 99,999. The 63% line represents the average proportion of after-tax income that all families (regardless of size) spent on food, shelter and clothing in 1992 (i.e. 43%) plus the 20 percentage point margin. The dots on the chart show the actual observed proportion of income spent by four-person families in that community size on necessities, according to the 1992 Family Expenditure Survey. A regression line is fitted to this distribution and the intersection of that curve and the 63% line gives the LICO—in this case, $21,359.

http://www.statcan.gc.ca/pub/75f0002m/2015002/lico-sfr-eng.htm

Rebasing and indexing the LICOs

Over time, Canadian families have spent a smaller percentage of their income on the necessities of food, shelter and clothing. This relationship between families' income and spending is associated with a specific point in time, i.e. the year of the expenditure survey used to derive the cut-offs. That particular year is referred to as the base year for the set of cut-offs. In order to account for changing spending patterns, Statistics Canada has in the past recalculated new LICOs after each subsequent Family Expenditure Survey. This process is referred to as rebasing and includes recalculating new LICOs using the method described in "How are low income cut-offs calculated?" and the new spending data. In addition to the 1992 base, LICOs have also been based on the 1986, 1978, 1969 and 1959 Family Expenditure Surveys; although cut-offs based on 1992 are the most commonly used and are available for the income reference years from 1976 onwards.

After having calculated LICOs in the base year, cut-offs for other years are obtained by applying the corresponding Consumer Price Index (CPI) inflation rate to the cut-offs from the base year – the process of indexing the LICOs. The CPI are provided at the end of this document. For example, continuing with the 1992 after-tax LICO for a family of four living in a community with a population between 30,000 and 99,999; to calculate the corresponding LICO for 2014, the Consumer Price Index is used as follows: $LICO_{2014} = LICO_{1992} \times CPI_{2014} / CPI_{1992} = 21,359 \times 125.2 / 84.0 = 31,835$

Thus for 2014, the 1992 based after-tax LICO for a family of four living in a community with a population between 30,000 and 99,999 is $31,835, expressed in current dollars.

Because the LICOs only depend on the annual Consumer Price Index, they can be produced as soon as the CPI is available, that is January following the reference year.
Note that using the CPI to update the cut-offs takes inflation into account, but does not reflect any changes that might occur over time in the average spending on necessities.

LICO for 2016

$LICO_{2014} = LICO_{1992} \times CPI_{2014} / CPI_{1992} = \$21,359 \times 125.2 / 84.0 = \$31,835$

$LICO_{2016} = LICO_{1992} \times CPI_{2016} / CPI_{1992} = \$21,359 \times 128.4 / 84.0 = \$32,649$

CPI 2016: http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/econ46a-eng.htm

Basic local living wage for one adult

= $32,649 x 120% x 50% = $19,589
= $19,589 / 52 week / 35 hour per week = **$10.76 / hour**

Additional information

Minimum wage in Quebec in 2016 was $10.75 per hour
http://www.cnt.gouv.qc.ca/en/wages-pay-and-work/wages/index.html