# LOW INCOME MEASURES AND RATES IN INUIT NUNANGAT

#### Research Note

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## ABSTRACT

This research note measures the scope of poverty among the Inuit in the four regions of the Canadian Arctic where they live. A low income measure (LIM) that takes household composition and consumer prices into account was developed for each region using data from the master file of the 2006 Census of Canada and surveys by Aboriginal Affairs and Northern Development Canada on the Revised Northern Food Basket. For the Inuit Nunanga as a whole, the LIM is \$22,216 and the low income rate (LIR) 44%. However, the values vary from one region to the other: in Nunavik, for example, the LIM is \$22,943 and the LIR 37.5%. These rates are roughly three times higher than those observed in Canada and Quebec.

## **1 INTRODUCTION**

This research note strives to answer the following question: What is the scope of poverty in Inuit Nunangat – which is the territory occupied by Canada's Arctic Inuit and the regions that make it up? It flows from observations that existing poverty indicators cover only part of the Canadian Arctic, use Canada or Quebec as their universe of

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reference and do not factor in specific regional characteristics.<sup>2</sup> The interpretation of these indicators is thus random.

This research note has two main parts. The first part discusses existing methods for constructing and using poverty measurement tools and describes the strengths and weaknesses of the low income measure used as a threshold for classifying households in terms of poverty. The second part presents and discusses the results of our analysis. It calculates poverty rates before and after taxes for Inuit Nunangat as a whole and for each Inuit region. It then adjusts the low income measure to account for household composition and the cost of living and calculates the impacts of these adjustments on poverty rates. The conclusion reviews the usefulness and limitations of this exercise.

#### 2 METHODOLOGY

#### 2.1 Choice of measure

There is no official measure of poverty in Canada, let alone in the Inuit Arctic. No consensus has been reached on how to define poverty or measure it. However, federal and provincial statistics agencies have placed tools for measuring similar realities at our disposal.<sup>3</sup> These tools can be divided into four main families.

The threshold family consists of measures for classifying individuals and households. The thresholds are defined arbitrarily and are sometimes determined on the basis of the goods deemed necessary, within a given social context, to live "decently." Some thresholds concern the incidence of poverty, others its severity and still others its intensity. They include the low income cut-off, low income measure, at-risk-of poverty threshold, market basket measure, etc. Once these thresholds have been defined, the proportion of the population whose income is below them is considered to be "low income" or "poor."

<sup>&</sup>lt;sup>2</sup> Except in the case of Bibi and Duclos (2009), whose work has highlighted the impact of ecological scales on analysis results.

<sup>&</sup>lt;sup>3</sup> For information on the various methods and tools used for measuring poverty in Canada and Québec, see Morasse (2005), Morin (2006) and Fréchet et al. (2011).

- The *income dispersion indicators* consist of measures related to issues of socioeconomic inequality. Examples of indicators that reveal the scope of income distribution inequalities among different populations or within the same population over time are the inter-quintile ratio, Gini coefficient, polarization coefficient and polarization index.
- The *composite index family* consists of aggregates of specific indicators that measure one or more aspects of poverty, rather than of direct measures of material poverty. These indexes – the human development index, the community well-being index, the material and social deprivation index and the multidimensional index of poverty richness, to name but a few – are intended to factor in the material, relational and identity dimensions of poverty.
- Lastly, the social representation indicators consist of measures related to subjective thresholds for defining the poor (subjective estimates of minimum necessary income); individual judgments about one's personal situation (e.g., income satisfaction); and qualitative social representation indicators pertaining to poverty, the poor and the living conditions associated with poverty.

This research note, which aims to measure poverty in Inuit Nunangat, will use only one method, namely, the threshold method. However, it is impossible at the moment to obtain a rigorous estimate of the material poverty line using a budgetary approach for Canada's Arctic population as a whole, particularly because certain data are not available for the Inuit regions (e.g., Survey of Family Expenditures data). Therefore, this note is based solely on the low income measure (LIM), despite the latter's acknowledged shortcomings.<sup>4</sup>

This choice is not without consequences. By focusing primarily on the incidence and scope of poverty in the Canadian Arctic, this research note overlooks, for the time being, the severity, the intensity and evolution of poverty in the heart of Inuit Nunangat. Moreover, the data presented by it provides no basis for observing transitional poverty (e.g., poverty incurred while pursuing an education, after a divorce or in the context of

<sup>&</sup>lt;sup>4</sup> Several of these shortcomings are described in Statistics Canada (2007a), Murphy et al. (2009), and Zhang (2010).

cyclical unemployment) or distinguishing this sort of poverty from persistent or chronic poverty.

#### 2.2 Source of the data

The LIM is usually calculated on the basis of median family income. Information on this income may be derived from the Survey of Labour and Income Dynamics (SLID), the Family Databank, the Aboriginal Peoples Survey and the Survey of Living Conditions in the Arctic (APS-SLiCA), and the Census of Population.

Like most other national surveys, SLID does not always take the First Nations and the Inuit into account in defining its study sample. Therefore, even though some questionnaires are completed by members of the First Nations and the Inuit, the data they gather cannot be extrapolated to all the inhabitants of Inuit Nunangat or broken down by Inuit territory subdivisions. This can be done, however, with the data from the APS and the Census of Canada. Therefore, this research note will use Canadian Census of Population data. The most recent data available for the type of analyses contemplated are those of the 2006 Census.<sup>5</sup>

The 2006 Census data are grouped in Statistics Canada's unscreened Master file, which is available in research data centres administered by the Quebec Inter-University Centre for Social Statistics. The data were first retrieved from the source file and then aggregated and weighted to make Inuit Nunangat households the unit of analysis. Estimates were made using the Statistical Package for Social Sciences (SPSS) software system and taking into account the rules imposed by Canada's *Statistics Act* regarding privacy in the disclosure of survey data. Once generated, the data were exported to an Excel spreadsheet where, if applicable, the absolute frequencies were rounded to the nearest multiple of 5 and each data cell contained a minimum of 10 cases before rounding.

<sup>&</sup>lt;sup>5</sup> The income data from the APS data file were derived from the census, while the 2006 Census of Population data were imported mainly from Canada Revenue Agency tax return files.

#### 2.3 Variable measured

The low income measure (LIM) is generally defined as one half (50%) of median family income. It is a relative measure of poverty and thus indicates not only the situation of a family and its members but also their position in relation to other households in a given universe of reference. In this study, the income distribution universe of reference is not Canada or the province of Quebec, but Inuit Nunangat. This means that the LIM in question here has been calculated for the income of families in Inuit Nunangat and its constituent regions and not for the income of Canadian families as a whole.

The census provides information on Canadians' different sources of income at the level of the individual, census family, economic family, household, etc. In view of the sociodemographic characteristics of Inuit communities (particularly, the high proportion of multi-family households and the persistence of various forms of family solidarity), the LIM has been calculated on the basis of total household income, or the sum of the total incomes of all the individuals in a household.

The Statistics Canada databank used for the purposes of this research note contains information on total household income before and after taxes. As mentioned above, the LIM is based on median family income. Owing to its progressive nature, income tax tends to reduce differences in income distribution up to a certain threshold, with the result that before-tax median income cannot be reconciled with disposable household income. Indeed, median income before taxes better reflects the dispersion of income distribution. On the other hand, total after-tax household income is closer to disposable household income and thus better reflects the distribution of actual household purchasing power.

However, using after-tax income has certain limitations. First of all, the figures for such income in the case of people who have not authorized Statistics Canada to use their tax return information are based on census respondents' subjective estimates of the total income of all the members of their household and the tax levied on it.<sup>6</sup> Furthermore, Morasse (2005) reports that statistics developed from surveys and individual tax records

<sup>&</sup>lt;sup>6</sup> See previous note.

invariably underestimate the number of low income individuals since some people do not file tax returns (e.g., homeless people, underground economy workers, people who do not know how to file a return or who see no advantage to doing so). Due to tax evasion, such statistics may also underestimate the number of high-income earners. Using after-tax income can also give the misleading impression that the situation of less affluent individuals improves after taxes, almost as if some of the less privileged members of society were no longer poor once they had filed their tax returns. The reality is that the low income rate is always lower after taxes than it is before taxes. Lastly, after-tax income must not be confused with a household's net or actual income, in that it does not include the tax refunds and tax credits granted to certain taxpayers.

All in all, despite their shortcomings, the low income measures before and aftertax are two indicators that shed light in their own way on certain aspects of material poverty in Inuit Nunangat. They constitute the most detailed and representative measure currently available of the situation in the Arctic. That being said, the results they generate must be used with caution and their interpretation explained in detail.

#### 2.4 Adjustment of the measure to account for household composition

To ensure that the measure better reflects actual household purchasing power in Inuit Nunangat, their total income before and after taxes was adjusted according to two parameters: household composition and consumer prices. We made this adjustment as it is clear that the same nominal income does not necessarily provide households of different composition in different regions with access to the same standard of living. Household composition and the cost of living influence, as it were, the impact of income on a population's standard of living.

The total income of households was first adjusted to account for their composition. To identify the share of household composition in the impact of reported

income on standard of living, we used a weighting factor specific to the 2006 Census<sup>7</sup> that is provided with Statistics Canada's master data file (HHINC\_Eq) (Table 1). The figure for total household income was then divided by this conversion factor to obtain the adjusted income. The latter was thus standardized such that a higher value would indicate a higher standard of living, regardless of household configuration. This is true, however, only if we refer to people living in the same region.

### 2.5 Adjustment of the measure to account for consumer prices

Major differences can be observed between the prices of consumer products in northern and southern Canada and within northern regions themselves. A dollar does not have the same purchasing power in each region. Therefore, a second household income adjustment factor was calculated.

Once again, however, the adjustment was calculated taking the limitations of available data into account. As noted on several occasions (Duhaime et al. 2009), there are no valid measurements of the difference between the cost of living in Inuit Nunangat and the southern part of the country. Available data are fragmented from a conceptual and geographic standpoint. Proximal data must therefore be relied on. Even though such data cannot reflect cost-of-living differences in a strict sense, they at least make it possible to consider certain gaps that have been documented with explicit and valid methods.

To obtain the consumer price adjustment factor, we used the data disaggregated by region from the price surveys conducted by Aboriginal Affairs and Northern Development Canada (AANDC – known until recently as Indian and Northern Affairs Canada, or INAC). Carried out under the Food Mail Program, which existed for several decades before being abolished in 2010, these surveys gathered information, at different times of the year, on the average price of a northern food basket. The data were collected

<sup>&</sup>lt;sup>7</sup> The MKaster file comes with an equivalence scale that assigns different weights to the members of a household based on their age. The oldest member of the household receives a factor of 1, while the second oldest and all the other members aged 16 and over receive a factor of 0.4. Members under the age of 16 receive a factor of 0.3. The sum of the individual factors provides the conversion factor for the household (Paquet 2009). The advantage of this scale is that it highlights the relationship between a household's specific needs and its nominal income.

in certain isolated northern communities and in the centres in southern Canada where these communities obtained supplies. The goal of these surveys, initially called Northern Food Basket and then Revised Northern Food Basket, was to observe differences in the price of the food required to provide a family of four with a nutritious diet based on recommended nutrient intakes for Canadians. These price surveys were conducted from 2005 to 2010. The information available for 2007, 2008 and 2009 is more complete than that for the other years (AANDC 2010).

Using the information available for those years, we calculated the average price of perishable items, non-perishable items and an entire Revised Northern Food Basket for each region. We then calculated a single price index for each region and for the food basket as a whole, as well as disaggregated indexes for perishables and non-perishables using the corresponding supply centres in cities further south as references (as they always have the lowest prices) and the average price in 2007 as the basis (2007 price = 100).

We thus obtained a second correction factor for total household income that is a bit like a purchasing power parity index. According to this index, an item that costs a dollar in southern centres would cost roughly \$1.66 in Inuit Nunangat – that is, the average of \$1.30 in Nunatsiavut, \$1.67 in Nunavik, \$1.79 in the Inuvialuit region and \$1.88 in Nunavut (Table 2).

The twice-adjusted figure for total household income was obtained by dividing the total income of each household by the product of the consumer price adjustment factor and that of the household composition. Y = R / (f1 \* f2) where: Y = twice-adjusted income, R = initial household income, f1 = household composition adjustment factor, and f2 = consumer price adjustment factor.

#### **3 RESULTS**

#### 3.1 Study population

According to Canadian census data, 48,015 people, including 39,475 Inuit, 1,475 non-Inuit Aboriginals and 7,060 non-Aboriginals, inhabited the Canadian Arctic in 2006. The study population thus comprised 46,540 people, excluding non-Inuit Aboriginals, grouped in 13,190 private households. The population was unevenly distributed among the different regions: 62% in Nunavut, 22% in Nunavik, 10% in Inuvialuit communities and about 5% in Nunatsiavut. In all regions, the vast majority of the population was Inuit, very young and with little schooling. In addition, the ratio of females to males was relatively low (1.017). No less than 18% of the Inuit lived in multi-family households and 28% in dwellings requiring major repairs. One quarter of Inuit children lived with a single parent (Statistics Canada 2008).

What proportion of this population should be characterized as poor? Does the proportion vary depending on whether raw data or adjusted data are used? These questions will be addressed one after the other in the next part of this research note. The calculations and ensuing observations will focus initially on Inuit Nunangat as a whole. The last section will highlight the main regional characteristics.

#### 3.2 Unadjusted income

The data analysis generated the following results. For Inuit Nunangat as a whole, the unadjusted median household income is \$60,490 before taxes and \$53,053 after taxes (Table 3). By calculating one half of this amount, we obtained an after-tax low income measure (LIM) of \$26,527 (Table 4). This low income measure was then used to calculate the number of low income households. These calculations revealed a low income rate (LIR) of 21% for Inuit Nunangat as a whole.

#### 3.3 Income adjusted for household composition

The adjustment made to account for household composition substantially reduced nominal income by reconciling it with the real household purchasing power. This is because the adjustment eliminated the scale effects attributable to household composition. The total household income was modified by the conversion factor applied to it. Following this adjustment, the median income in Inuit Nunangat as a whole was \$30,492 before taxes and \$26,766 after taxes (Table 3). By calculating one half of this amount, the after-tax low income measure (LIM) was \$13,263 (Table 4). This low income measure generated an after-tax low income rate (LIR) of 19% for Inuit Nunangat as a whole. This represents a fairly slight decrease compared with the unadjusted data.

#### 3.4 Additional adjustment to account for consumer prices

When the formula was applied to the letter, the impact of adjusting, in relation to consumer prices, the income already adjusted to factor for household composition in calculating the low income rate was nil. Indeed, when all of the incomes initially adjusted to account for household composition were divided by the same price index in each region, we of course obtained lower twice-adjusted median incomes; however, this did not change the population distribution itself. This double adjustment simply reduced median household income in Inuit Nunangat as a whole: from \$30,491.77 to \$17,620, or by nearly half, before taxes, and from \$26,766.34 to \$15,563.44 after taxes (Table 3). This was also the case of the low income measure, which was reduced by exactly the same proportion (Table 4). Each of the steps in the calculations thus had no net impact on the low income rates, as these rates remained unchanged (Table 4).

#### 3.5 Increase in income adjusted for household composition

The previous calculations did not highlight the impact of consumer prices on poverty rates. This is because nominal data were used. Therefore, the nominal data had to be converted into actual data so that the low income cut-offs would reflect standards of living and offer a basis of comparison. Therefore, instead of applying the price adjustment factors directly to total household income, the factors were applied to the nominal thresholds. The nominal thresholds were converted by multiplying them by the price adjustment factors, making it possible to obtain new and higher low income cutoffs. These cut-offs were expressed in the same unit, so to speak: the 2007 southern dollar (PPP). These higher cut-offs were then used to calculate the low income rates. With this new scale for Inuit Nunangat as a whole, the low income measure calculated after taxes rose to \$22,216 and the low income rate to 44% (Table 4).

These calculations would lower the poverty rate from 21% with no adjustment to 19% after a first adjustment and then raise it to 44% following an upward adjustment (Table 4).

#### 3.6 Regional variations

Even though the results for Inuit Nunangat as a whole tend more to reflect the situation in the most heavily populated regions (Nunavut and Nunavik), concerning their main characteristics they represent the situation in all of Canada's Inuit regions. First, the initial value for before-taxes thresholds decreased substantially when thresholds were adjusted to account for household composition (Table 4, Step 2). The differences were more pronounced in Nunavik and Nunavut compared to the rest of Inuit Nunangat. In those regions, the initial median income was higher, but households are larger and younger. When the final value of the thresholds was adjusted upward according to the price index for each region, the gap was less marked in Nunatsiavut, where price differences with reference localities in southern Canada are least pronounced (Table 4, Step 3.2). Lastly, after the upward adjustment, the poverty rate tripled in Nunavik, doubled among the Inuvialuit and in Nunavut, and climbed by 60% in Nunatsiavut. However, these results must be interpreted bearing in mind that low income households do not always have the same standard of living: the lowest standards of living are found in Nunatsiavut and Nunavik, and the highest among the Inuvialuit.

## **4 CONCLUSION**

All in all, consumer prices have a considerable impact on the incidence of poverty in the North. Indeed, in this study, the after-tax poverty rate in Inuit Nunangat rose from 21% with no adjustment to 44% following an increase in the adjustment (Table 4, Step 3.2). The measures obtained by applying adjustments to the basic census data that account for both household composition and consumer prices, seem to reflect the situation in Canada's Inuit regions more adequately than current measures do. According to the low income rates calculated after taxes, it appears that roughly 5,700 households in Inuit Nunangat live with a low income.

While poverty generally seems to be more frequent in the Inuit regions than among the Canadian and the Quebec population in general,<sup>8</sup> it is not evenly distributed across Inuit Nunangat as a whole. There are considerable regional variations in thresholds and rates alike. In addition, the basic parameters used to determine the calculations differ widely throughout the territory: population size, household size, income distribution and the resulting median income, and differences in consumer prices. Therefore, some caution must be used when interpreting the results of our analysis.

A high nominal income does not necessarily mean a high standard of living. It is still necessary to determine the expenses that have to be covered by this income. If an overcrowded household including more adults than children depends on such income in an environment where consumer prices are very high, these earnings could correspond to a very low standard of living. This is precisely the situation of many households in the main regions of Inuit Nunangat (Nunavut, Nunavik).

On the other hand, if a large number of households in a community include a limited number of individuals and especially few adults, the total income of each household, which is the sum of all the individual incomes in the household, may, on average, not be very high, even if each adult earns a fairly good income. However, the

<sup>&</sup>lt;sup>8</sup> According to Bibi and Duclos (2009), 16% of Québec families lived in low income in 2005 compared with 17% of Canadian families. According to Statistics Canada, the corresponding rates were 14% and 13% respectively. These rates vary according to the unit of analysis used (individual, census family, economic family, household), the reference universes concerned and the statistics agencies that generate the figures.

expenses that have to be covered by the household's total income would be lower than in a larger household. Therefore, on account of the distribution of income, a substantial proportion of the households in the community might fall below the low income cut-off, even though they enjoy a relatively higher standard of living than overcrowded households in other communities. Conversely, this probably explains why households in the Inuvialuit region were over-represented below the pre-adjustment low income cut-off compared with households in other regions, even though the low income cut-off among the Inuvialuit is the second-lowest in Inuit Nunangat. Moreover, since consumer prices are highest in the Inuvialuit region, nearly half of the households fell below the cut-off following the price indexation. Once again, it is important to keep in mind that the low income cut-off among the Inuvialuit corresponds, relatively speaking, to a standard of living that is much higher than that in the other Inuit Nunangat regions.

Therefore, the differences observed cannot be adequately understood without analyzing the differences in thresholds and rates. This analysis was made possible by making these initially relative thresholds and rates comparable. In addition to estimating the income dispersion of households in the Inuit Nunangat's various regions, the associated standard of living had to be considered. In this way, instead of leading to the conclusion, on the basis of relative rates, that poverty is more widespread in the Inuvialuit region (LIR = 45%) than in Nunatsiavut (LIM = 25%), the results highlight the fact that poor households in Nunatsiavut are likely to have a lower standard of living than households in other regions, particularly because the poverty line for that region was set lower, proportionally speaking.

These results call for caution when interpreting thresholds and rates for different geographic and demographic universes. Indeed, a summary comparison of geographic scales that are not comparable can produce misleading interpretations. For example, the poverty rates found in Inuit Nunangat could provide fodder for the alarmist discourse that already exists in regard to Aboriginal populations. However, it is very likely that similar results would be obtained on a comparable scale in other parts of Canada if the same analysis were performed for other communities having the same socioeconomic profile as the communities in Inuit Nunangat's different regions: strong population growth, young

population, high dependency ratio, overcrowded multi-family households, high unemployment rate, high consumer prices, etc.

This research note is one more step in ongoing efforts to gain a more in-depth understanding of the factors of poverty in the Inuit regions. It encourages continued analysis beyond thresholds and rates in order to obtain a better grasp of the social phenomenon at play behind the figures. By using tests of hypotheses to analyze the sociodemographic characteristics (e.g., age and gender) of individuals, the living conditions of families and the structure of households (e.g., single-family and multifamily) in low income situations, the reality of poverty in Inuit Nunangat might be better understood.

#### **5 SUMMARY BIBLIOGRPAHY**

- ABORIGINAL AFFAIRS AND NORTHERN DEVELOPMENT CANADA (previously known as INAC) (2010). Les résultats par région des enquêtes sur les prix. Last retrieved online on June 8, 2012 at: <u>http://www.aadncaandc.gc.ca/fra/1100100035986</u>. [Also published in English as Regional Results of Price Surveys. Available for viewing online at: <u>http://www.aadnc-aandc.gc.ca/eng/1100100035986/1100100035987.</u>]
- BIBI, S. and J.-Y. DUCLOS (2009). "La pauvreté au Québec et au Canada." Cahier de recherche/Working Paper 09-22, Québec City: CIRPEE, 53 pp.
- COLLIN, C. and H. JENSEN (2009). La pauvreté au Canada: un profil statistique. PRB 09-17F, Ottawa: Parliamentary Information and Research Service, Library of Parliament. [Also published in English as Poverty in Canada: A Statistical Profile. PRB 09-17E, Ottawa: Parliamentary Information and Research Service, Library of Parliament.]
- DUHAIME, G. (2009). La pauvreté au Nunavik: État des connaissances. Canada Research Chair on Comparative Aboriginal Conditions, Québec City: Université Laval, 41 pp. [Also published in English as Poverty in

*Nunavik. State of Knowledge.* Canada Research Chair on Comparative Aboriginal Conditions, Québec City: Université Laval.]

- FRÉCHET G. et al. (ed.) (2011). Statistiques sociales, pauvreté et exclusion sociale. Perspectives québécoises, canadiennes et internationales. Montreal: PUM, 285 pp.
- INSTITUT DE LA STATISTIQUE DU QUÉBEC (2012). Taux de faible revenu, MFRseuils avant impôt, particuliers, Québec, 1996-2009, ISQ compilation. Last retrieved online on June 8, 2012 at: http://www.stat.gouv.qc.ca/donstat/societe/famls\_mengs\_niv\_vie/reven us\_depense/revenus/mod1\_hh\_1\_5\_6\_0.htm.
- MORASSE, J. A. (2005). Inventaire des indicateurs de pauvreté et d'exclusion sociale. Québec City: Institut de la statistique du Québec and Ministère de l'Emploi et de la Solidarité sociale, 94 pp.
- MORIN, A. (2006). *Recueil statistique sur la pauvreté et les inégalités socioéconomiques au Québec*. Québec City: Institut de la Statistique du Québec, 134 pp.
- MURPHY, B., X. ZHANG and C. DIONNE (2009). Révision de la mesure de faible revenu (MFR) de Statistique Canada. Research Paper, Income Research Paper Series, Statistics Canada, Ottawa: Income Statistics Division, Catalogue no. 75F0002M No. 004, 34 pp. [Also published in English as Revising Statistics Canada's Low Income Measure (LIM). Research Paper, Income Research Paper Series, Statistics Canada, Ottawa: Income Statistics Division, Catalogue no. 75F0002M No. 75F0002M No. 004, 34 pp. [Also published in English as Revising Statistics Canada's Low Income Measure (LIM). Research Paper, Income Research Paper Series, Statistics Canada, Ottawa: Income Statistics Division, Catalogue no. 75F0002M No. 004.]
- PAQUET, B. (2009). Les seuils de faible revenu de 1992 à 2001 et les mesures de faible revenu de 1991 à 2000. Statistics Canada, Ottawa: Income Statistics Division, Catalogue no. 75F0002MIF– No. 005, 58 pp. [Also published in English as Low Income Cut-offs from 1992-2001 and Low Income Measures from 1991-2000. Statistics Canada, Ottawa: Income Statistics Division, Catalogue no. 75F0002MIE– No. 005]

SARLO, C. (2001). Measuring Poverty in Canada. Vancouver: The Fraser Institute.

- STATISTICS CANADA (2007a). Les seuils de faible revenu de 2006 et les mesures de faible revenu de 2005. Research Paper, Catalogue no. 75F0002MIF– No. 004. [Also published in English as Low Income Cut-offs for 2006 and Low Income Measures for 2005. Research Paper, Catalogue no. 75F0002MIE No. 004.]
- STATISTICS CANADA (2007b). Profils des communautés de 2006. 2006 Census, Statistics Canada, Catalogue no. 92-591-XWF, Ottawa. Last retrieved online on June 8. 2012 at: http://www12.statcan.ca/censusrecensement/2006/dp-pd/prof/92-591/index.cfm?Lang=F. [Also published in English as 2006 Community Profiles, 2006 Census, Statistics Canada, Catalogue no. 92-591-XWE, Ottawa. Available for online http://www12.statcan.ca/censusviewing at: recensement/2006/dp-pd/prof/92-591/index.cfm?Lang=E

STATISTICS CANADA (2008). Peuples autochtones du Canada en 2006: Inuits, Métis et Premières nations, Recensement de 2006. Ottawa, Catalogue no. 97-558-XIF. Last retrieved online on June 8, 2012 at: http://www12.statcan.ca/francais/census06/analysis/aboriginal/tables.c *fm#maps*. [Also published in English as *Aboriginal Peoples in Canada* in 2006: Inuit, Métis and First Nations. Ottawa, Catalogue no. 97-558-XIE. Available for viewing online at: http://www12.statcan.ca/censusrecensement/2006/as-sa/97-558/pdf/97-558-XIE2006001.pdf.]

- STATISTICS CANADA (2010). Le revenu au Canada, 2009 (tableaux 202-0802 et 202-0804). Ottawa: Statistics Canada, 2010, Catalogue no. 75-202-X. [Also published in English as Income in Canada 2009 (tables 202-0802 and 202-0804). Ottawa: Statistics Canada, Catalogue no. 75-202-X.]
- ZHANG, X. (2010). La mesure du faible revenu au Canada: Que nous apprennent les divers seuils et indices?, Ottawa: Income Research Paper Series,

Catalogue no. 75F0002M – No. 003. [Also published in English as *Low Income Measurement in Canada: What Do Different Lines and Indexes Tell Us?* Ottawa: Income Research Paper Series, Catalogue no. 75F0002M – No. 003.]

#### Table 1

## Equivalence scale for calculating the low income measure, Canada 2006

| Family composition                                   | Conversion factor |
|--|-------------------|
| One adult  | 1,0               |
| Two adults/ One adult, one child                     | 1,4               |
| Three adults   | 1,8               |
| Two adults, one child/ One adult, two children       | 1,7               |
| Four adults  | 2,2               |
| Three adults, one child                              | 2,1               |
| Two adults, two children/ One adult, three children  | 2,0               |
| Five adults  | 2,6               |
| Four adults, one child                               | 2,5               |
| Three adults, two children                           | 2,4               |
| Two adults, three children/ One adult, four children | 2,3               |
| Six adults   | 3,0               |
| Five adults, one child                               | 2,9               |
| Four adults, two children                            | 2,8               |
| Three adults, three children                         | 2,7               |
| Two adults, four children/ One adult, five children  | 2,6               |

Average price of the Revised Northern Food Basket and price adjustment factors, southern Canada, Inuit Nunangat and regions, 2007-2009

| (\$)<br>Regions         | Price<br>adjustment | 2007        | 2008        | 2009        | 2007                | 2008                | 2009                | 2007   | 2008   | 2009   |
|-------------------------|---------------------|-------------|-------------|-------------|---------------------|---------------------|---------------------|--------|--------|--------|
|                         | Factors             | Perishables | Perishables | Perishables | Non-<br>perishables | Non-<br>perishables | Non-<br>perishables | Total  | Total  | Total  |
| Reference urban centres | 1,00                | 148,00      | 156,00      | 162,00      | 66,00               | 74,00               | 80,00               | 214,00 | 229,00 | 241,00 |
| Inuit Nunangat          | 1,66                | 241,25      | 259,40      | 249,95      | 114,61              | 120,36              | 122,51              | 355,71 | 379,79 | 372,24 |
| Inuvialuit              | 1,79                | 262,00      | 292,00      |             | 120,25              | 128,25              |                     | 382,25 | 420,25 |        |
| Nunatsiavut             | 1,30                | 194,75      | 208,00      | 218,00      | 83,75               | 87,50               | 98,40               | 278,50 | 295,50 | 315,80 |
| Nunavik                 | 1,66                | 243,00      | 248,00      | 254,56      | 116,50              | 119,50              | 121,11              | 359,00 | 367,50 | 375,56 |
| Nunavut                 | 1,88                | 265,26      | 289,60      | 277,29      | 137,93              | 146,20              | 148,02              | 403,09 | 435,90 | 425,38 |

Source: Data compiled from AANDC, price surveys, 2010.

#### Table 3

Median household income, before and after adjustments, before and after taxes, Inuit Nunangat and regions, 2006

| (\$)<br>Regions | Unadjuste    | d income    | Income ad<br>household co | ,           | Income adjusted for<br>household composition and<br>prices |             |  |
|-----------------|--------------|-------------|---------------------------|-------------|--|-------------|--|
|                 | Before taxes | After taxes | Before taxes              | After taxes | Before taxes   | After taxes |  |
| Inuit Nunangat  | 60 490       | 53 053      | 30 492                    | 26 766      | 17 261   | 15 289      |  |
| Inuvialuit      | 59 354       | 50 000      | 35 833                    | 30 708      | 19 916   | 16 067      |  |
| Nunatsiavut     | 51 145       | 45 298      | 26 629                    | 23 713      | 20 477   | 18 235      |  |
| Nunavik         | 64 752       | 56 345      | 31 311                    | 27 477      | 18 724   | 16 413      |  |
| Nunavut         | 60 278       | 53 178      | 29 429                    | 26 042      | 15 660   | 13 828      |  |
| Quebec          | 46419*       | 40447*      |                           |             |  |             |  |
| Canada          | 53634*       | 46584*      |                           |             |  |             |  |

Source: Data compiled from Statistics Canada, 2006 Canadian Census of Population (master file); Statistics Canada (2007b)\*

#### Table 4

Low income measures and rates for households, before and after adjustments, before and after increase, before and after taxes, Inuit Nunangat and regions, 2006

| (\$, %)        |                   | tep 1-Unadjuste   | 4 :               |                  | Ctore O Turte  |                   | 1 <sup>1</sup>   |                  |  |
|----------------|-------------------|-------------------|-------------------|------------------|--|-------------------|------------------|------------------|--|
| Regions        | 3                 | tep 1-Onadjusto   | ed initial values | 5                | Step 2-Intermediate values adjusted for household<br>composition |                   |                  |                  |  |
|                | Before-tax<br>LIM | Before-tax<br>LIR | After-tax<br>LIM  | After-tax<br>LIR | Before-tax<br>LIM  | Before-tax<br>LIR | After-tax<br>LIM | After-tax<br>LIR |  |
| Inuit Nunangat | 30 245            | 23,5              | 26 527            | 21,1             | 15 246   | 21,8              | 13 263           | 18,8             |  |
| Inuvialuit     | 29 677            | 26,7              | 25 000            | 24,5             | 17 917   | 25,5              | 15 354           | 22,6             |  |
| Nunatsiavut    | 25 572            | 21.4              | 22 649            | 18,4             | 13 314   | 17,3              | 11 857           | 14,7             |  |
| Nunavik        | 32 376            | 17,5              | 28 173            | 15,7             | 15 656   | 14,6              | 13 739           | 11,5             |  |
| Nunavut        | 30 139            | 24,8              | 26 589            | 22,3             | 14 746   | 23,6              | 13 021           | 20,6             |  |

Source: Data compiled from Statistics Canada, 2006 Canadian Census of Population (master file).

#### Table 4 (cont.)

Low income measures and rates for households, before and after adjustments, before and after increase, before and after taxes, Inuit Nunangat and regions, 2006

(\$, %)

| Regions        | Step 3.1-Int      | Step 3.1-Intermediate values adjusted for household<br>composition and prices |                  |                  |                   | Step 3.2-Final values of the LIM adjusted for household<br>composition and increased by the price adjustment<br>factor |                  |                  |  |  |
|----------------|-------------------|---|------------------|------------------|-------------------|--|------------------|------------------|--|--|
|                | Before-tax<br>LIM | Before-tax<br>LIR   | After-tax<br>LIM | After-tax<br>LIR | Before-tax<br>LIM | Before-tax<br>LIR  | After-tax<br>LIM | After-tax<br>LIR |  |  |
| Inuit Nunangat | 8 631             | 21,8  | 7 645            | 18,8             | 25 308            | 45,2   | 22 216           | 44,1             |  |  |
| Inuvialuit     | 9 958             | 25,5  | 8 534            | 22,6             | 32 071            | 46,1   | 27 484           | 45,5             |  |  |
| Nunatsiavut    | 10 239            | 17,3  | 9 118            | 14,7             | 17 309            | 28,6   | 15 414           | 24,7             |  |  |
| Nunavik        | 9 362             | 14,6  | 8 207            | 11,5             | 26 145            | 40,2   | 22 943           | 37,5             |  |  |
| Nunavut        | 7 830             | 23,6  | 6 914            | 20,6             | 27 723            | 48,4   | 24 479           | 47,7             |  |  |