

Monetary Poverty in Inuit Nunangat

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ABSTRACT. This article measures for the first time the scope of poverty in Inuit Nunangat, the four regions of the Canadian Arctic where Inuit people live. On the basis of a monetary definition of poverty, we propose and apply a method adapted to key characteristics of the Inuit condition. For each region, we developed a low income measure (LIM) that takes household composition and consumer prices into account, 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 Inuit Nunangat as a whole, the low income measure was \$22 216 and the low income rate (LIR) was 44%. Values vary among regions: in Nunavik, for example, the low income rate is 37.5%. However, throughout Inuit Nunangat, poverty rates are significantly higher than those observed in Canada. We recommend further statistical exploration to better identify not only the factors correlated with households living in poverty, but also a qualitative approach to produce an Inuit emic perspective. Both tools are necessary for informed policy to fight against poverty.

Key words: poverty; income; measurement; methodology; Inuit Nunangat; Inuvialuit; Nunavut; Nunavik; Nunatsiavut; Canada

R SUM . Cet article mesure, pour la premi re fois, l' tendue de la pauvret  dans l'Inuit Nunangat, les quatre r gions de l'Arctique canadien habitees par les Inuits. En nous fondant sur une d finition mon taire de la pauvret , nous proposons une m thode qui tient compte de caract ristiques de la condition inuite : pour chacune des r gions, nous avons d velopp  une mesure du faible revenu (MFR) qui refl te la composition des m nages par l'utilisation des donn es du fichier-ma tre du Recensement du Canada de 2006, et les prix   la consommation par l'utilisation des donn es du Panier de provision nordique r vis  calcul  par le minist re des Affaires autochtones et du D veloppement du Nord du Canada. Pour l'ensemble de l'Inuit Nunangat, la mesure du faible revenu (MFR) obtenue se situait   22 216 \$, et le taux de faible revenu (TFR)  tait de 44 %. Les r sultats varient selon les r gions : au Nunavik, par exemple, le taux de faible revenu est de 37,5 %. N anmoins, les taux de pauvret  dans l'Inuit Nunangat sont significativement plus  lev s que ceux observ s au Canada. Nous recommandons que des  tudes subs quentes approfondissent la question, d'abord des  tudes statistiques avanc es pour identifier les caract ristiques associ es   la pauvret  mon taire, ensuite des  tudes qualitatives pour d passer la d finition mon taire de la pauvret  et parvenir   une d finition  mique, c'est- -dire, une d finition qui rendrait compte de la perception inuite de la pauvret . Ces deux types d' tudes constitueraient des apports n cessaires pour mieux orienter les politiques de lutte   la pauvret .

Mots cl s : pauvret ; revenu; mesures; m thodologie; Inuit Nunangat; Inuvialuit; Nunavut; Nunavik; Nunatsiavut; Canada

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THE SCOPE OF A SOCIAL PROBLEM

The Unknown

In 2010, three million Canadians, or 9% of the country's population, were living in a low income situation. Of these, more than a million were children, 40% of whom were Aboriginal children (MacDonald and Wilson, 2013). In part because the question of poverty has been moving up on the ladder of public priorities with the approval of the UN's Millennium Development Goals, six Canadian provinces (Manitoba, Ontario, Qu bec, New Brunswick, Nova Scotia,

and Newfoundland and Labrador) have adopted measures that are intended to reduce poverty (Ballet, 2001; Chatelet and Soulet, 2001; Roy and Soulet, 2001; Gagnon et al., 2008; Crocker and Johnson, 2010; Mendell, 2010; Sala-i-Martin and Pinkovskiy, 2010; Lef vre et al., 2011; ONPES, 2012; UN, 2012). But no reliable estimates existed of the extent of the problem in Inuit Nunangat, the Canadian Arctic inhabited by Inuit people; in fact, studies on poverty in Inuit Nunangat are rare. In the social sciences, the most ambitious studies undertaken by international networks of researchers over the last 10 years did not address the question of poverty in the circumpolar regions (Einarsson et al.,

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2004; Golubchikova et al., 2005; Duhaime and Caron, 2006; Nuttall, 2006; Rasmussen, 2011). Evaluation studies that focus on public health in the Arctic are the most advanced, particularly in integrating factors that are considered determinants of people's health. What that kind of work shows is that disparities in health are clearly associated with social, economic, cultural, and political inequalities, which have been exacerbated by industrial development and modernization (Lavoie et al., 2007a, b; Young et al., 2012). But to our knowledge, very few studies have examined specific communities in Inuit Nunangat, and those few limit themselves to identifying the groups most affected by poverty: women, children, and single-parent families (Vanier and Grey, 1998; Chabot, 2004). There are no studies that focus on temporal variations of poverty in Inuit Nunangat or evaluate the appropriateness or effectiveness of efforts to combat poverty there.

Nevertheless, public authorities of the territorial government of Nunavut and the regional administrations of Inuvialuit, Nunavik, and Nunatsiavut all want to develop policies aimed at combating poverty. They feel a compulsion to act given the seriousness of the indicators that they do possess (for example, the unemployment and the social assistance rates) and given the day-to-day manifestations of poverty with which they are familiar. In Nunavut, public consultations in all the communities led to the organization of a Poverty Summit in 2011 and to the adoption of an action plan; in the Northwest Territories, an anti-poverty steering committee was established; and in Nunavik, a strategy to combat poverty is currently under discussion (NAPS, 2011; Northwest Territories, 2012; Duhaime, 2013). Even though the public authorities in the North are determined to act, they continue to navigate more or less in the dark. They still cannot rely on the country's central statistical agencies to describe the scope of poverty, and even less, to track the changes in their particular regions. And they themselves do not possess the basic information that is needed to identify the critical factors involved, plan the manner in which they should intervene, and assess the relevance and effectiveness of particular actions.

The Challenges

The challenges are thus daunting, when taking into account the characteristics of the regions and the population, as well as the limitations of the available data. The geography in itself is challenging. Inuit Nunangat encompasses the four Arctic regions inhabited by Inuit and covered by land claims: the Inuvialuit Settlement Region in the Northwest Territories, the Territory of Nunavut, Nunavik in northern Quebec, and Nunatsiavut in northern Labrador. Covering about one-third of Canada's land mass, this vast area in 2006 was inhabited by 48 000 people, including 39 500 Inuit, 1500 non-Inuit Aboriginals, and 7000 non-Aboriginals. The population is unevenly distributed among the regions: 62% in Nunavut, 22% in Nunavik, 10% in Inuvialuit communities, and about 5% in Nunatsiavut.

However, poverty-related factors are present in all regions, sometimes with high occurrence. As compared to the national averages, this population is very young and has relative little schooling; one-fifth of Inuit live in multi-family households mainly for lack of available social housing; one-third of the dwellings need major repairs; one-quarter of Inuit children live with a single parent; and unemployment is high, as are prices for almost all commodities (Statistics Canada, 2008).

What proportion of this population should be characterized as poor? How many poor people are living in Inuit Nunangat? Nobody actually knows simply because that problem is statistically invisible. In this paper, we aim to create a benchmark study that will help to identify the magnitude of the challenge facing public authorities, shed some light on a poorly known side of the living conditions of contemporary Inuit, and propose directions for future investigations. We propose a measurement tool that would allow for valid comparisons between the Arctic and the rest of the country. While avoiding endless debates on the poverty definition per se, we explain the essential aspects of a tool that could be used to follow up in the future, in the perspective of a long-run effort to alleviate poverty.

MODERNIZATION AND POVERTY

Processes

Inuit societies of the Canadian Arctic share a common history of suddenly entering modernity. The shift from nomadism to a sedentary way of life in the late 1950s not only transformed the Inuit mode of land use; it also caused an upheaval in their social organization, making the market their main vehicle of access to goods and services, money their primary means of exchange, and government the main hub of most industries (e.g., Chabot, 2003, 2004; Duhaime and Robichaud, 2010; Kuhnlein et al., 2014). In contemporary Inuit society, paid employment has established itself as the principal condition of access to money, market, and commodities. Earning a living now means performing a specialized activity that entails learning new skills, an official certification of these skills (e.g., a diploma), proficiency in a dominant (non-Aboriginal) language; and wages proportionate with the skills and labour power involved in performing this activity. Transfer payments, based on the Welfare State policies still surviving today, come to the rescue whenever such employment fails to occur.

Thus, the wage payment system and transfer payments appear to have supplanted customary activities as a basis of livelihood, food, clothing, shelter, and mode of transportation. Though they remain very much alive, hunting, fishing, trapping, crafts, and the traditional institutions of sharing have undergone major changes in role and status. The pursuit of such activities has become more and more dependent on the market economy: snowmobiles have replaced dog sleds, and hunting and fishing now require firearms,

ammunition, and other equipment that is purchased on the market in exchange for cold cash.

Consequences

The penetration of money and the market has thoroughly transformed the configuration of social arrangements and relationships. The ascendance of these socioeconomic regulatory institutions—and more generally, the commodification of life in Inuit Nunangat—have somewhat marginalized previous institutions and systems of subsistence and self-sufficiency. These changes have made the Inuit people dependent on imported goods and services and on the just as equally imported means of gaining access to them. Perhaps more importantly, the passage to a monetary regime as one major foundation to make ends meet has had profound impacts upon the social fabric.

It is far from clear that commodities are within everyone's reach. To begin with, employment income is redistributed unequally between workers according to wage scales established on the basis of hierarchical criteria of skill, seniority, and effort. Secondly, social transfer mechanisms have weakened over time, following various cuts in social program budgets. These features and trends are true in the North as they are in the rest Canada (e.g., Ulysse, 2006; Tremblay, 2009). Under these circumstances, there is a significant risk of losing the capacity to meet one's needs and aspirations. That risk would be especially great for those experiencing the condition of monetary poverty, as it applies in its modern meaning, and its consequences.

Several studies have identified areas where these changes have interfered with the mechanisms of social differentiation, particularly in regard to gender relations, intergenerational relations, and division of labour (e.g., Vallee, 1967; Simard, 1982, 2003; Mark, 1983; Dorais, 1989, 1997; Vincent, 1992; Mitchell, 1996). In the process appeared the modern form of monetary poverty, the history of which is still to be documented. By comparing archival information with the available reliable statistics on household incomes, Duhaime et al. (2001) identified the 1960s to 1970s as a turning point during which money, market, and access to commodities imposed their growing importance upon previous economic and social values, structures, and dynamics. These two sets of social arrangements are being kept alive and are somewhat interrelating (sometimes in harmony, sometimes in competition) to produce the final shape of contemporary Inuit societies. But after decades of these social changes, we still know little about the experience of modern monetary poverty in Inuit lands.

MEASUREMENT METHOD

Definition and Sources

For many years now, researchers and policy makers have gone along with the reflex of describing poor populations

on the basis of “objective” criteria—that is, counting them, examining their attributes, and analyzing changes in their conditions. This research has leveraged recent technical and methodological innovations to improve indicators (simple or composite, absolute or relative) and measurement and monitoring techniques. These efforts have brought about a deeper understanding of the phenomenon internationally and in Canada. Depending on the research objectives, the definition of the object of study and the methods adopted, they have delivered profiles (varying from one study to the next) of the level, intensity, and seriousness of the phenomenon and produced a picture of its transformation across time and space. However, such measures were not available for Inuit Nunangat and its sub-regions.

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 created tools for measuring proximal realities (Morasse, 2005; Morin, 2006; Fréchet et al., 2012). This study is based on a monetary approach to poverty. It takes due note of the serious criticisms that have been leveled at this approach and of the relevance of alternative theories, including the capability approach and the participatory diagnosis method (e.g., Nusbaum, 1999; Statistics Canada, 2007). That being said, we hold that individuals are poor whenever their income does not allow them to meet their vital needs and enjoy access to the goods and services corresponding to the norm in their community (Langlois, 2003; Bertin, 2008). Therefore, we strive to answer the following question: in Inuit Nunangat, what is the level of monetary poverty—the deprivation of material necessities in everyday life? It flows from observations that existing poverty indicators cover only part of the Canadian Arctic, use Canada as their universe of reference, and do not always factor in specific regional characteristics.

In this study, we use the threshold method: this paper is based on the low income measure, despite the acknowledged shortcomings of that measure (Statistics Canada, 2007; Murphy et al., 2009; Zhang, 2010). We used data from the 2006 Canadian Census and the 2006 Aboriginal People Survey. These two sources, the most recent ones available for the type of analyses contemplated here, were accessed through the Statistics Canada Regional Data Center administered by the Québec Inter-University Centre for Social Statistics. The 2006 Census data were grouped in Statistics Canada's unscreened master file. 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.

Methods

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

TABLE 1. Equivalence scale for calculating the low income measure (LIM). Source: Paquet (2009).

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

in relation to other households in a given universe of reference. In this study, the income distribution universe of reference is 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. In view of the socio-demographic 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. Moreover it has been calculated after tax, since after-tax household income 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. Furthermore, statistics developed from surveys and individual tax records invariably underestimate the number of low-income individuals since some people do not file tax returns (Morasse, 2005), and such statistics may also underestimate the number of high-income earners. Finally, after-tax income must not be confused with a household's disposable income, since it does not include the tax refunds and tax credits granted to certain taxpayers.

These choices are not without consequences. By focusing primarily on the incidence and scope of poverty in Inuit Nunangat, the approach overlooks, for the time being, the severity, intensity, and evolution of poverty in the heart of Inuit Nunangat. Moreover, the data presented provide no basis for observing transitional poverty (e.g., poverty incurred while pursuing an education, after a divorce, or in the context of cyclical unemployment) or for distinguishing that sort of poverty from persistent or chronic poverty. Despite shortcomings, the low income measure after tax can shed light on specific aspects of monetary poverty in

Inuit Nunangat. It constitutes the most detailed and representative measure currently available for the situation. That being said, the results it generates must be used with caution and their interpretation explained in detail.

Adjustments

To ensure that the measure better reflects actual household purchasing power in Inuit Nunangat, we adjusted total income after taxes according to two parameters. First, it was adjusted to account for household 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 that is provided with Statistics Canada's master data file (Table 1; Paquet, 2009). The figure for total household income was then divided by this conversion factor to obtain the adjusted income. The latter was thus standardized so that a higher value would indicate a higher standard of living, regardless of household configuration. This holds true, however, only if we refer to people living in the same region.

Second, the total income was adjusted to account for differences in consumer prices in northern and southern Canada and within northern regions themselves. As noted on several occasions (e.g., Duhaime and Caron, 2013), there are no valid measurements of the price differences between Inuit Nunangat and southern Canada. The available data are fragmented from a conceptual and geographic standpoint. Proximal data must therefore be relied on in order to consider the gaps that have been documented using explicit and valid methods. Consequently we used the data disaggregated by region from the price surveys conducted by Aboriginal Affairs and Northern Development Canada (AANDC) 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, the average price of perishable items, non-perishable items, and an entire Revised Northern Food Basket were calculated 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 farther south as references (as they always have the lowest prices) and the average price in 2007 as the basis (2007 price = 100). The second correction factor was thus obtained. According to this index, an item that costs one dollar in southern centres would cost roughly \$1.66 in Inuit Nunangat, with regional variations (Table 2).

POVERTY LINE AND RATE

For Inuit Nunangat as a whole, the unadjusted median household income is \$53 053 after taxes (Table 3A). By calculating one half of this amount, we obtained an after-tax LIM of \$26 527 (Table 4A). This low income measure was then used to calculate the number of low income

TABLE 2. Average price (\$) of the Revised Northern Food Basket and price adjustment factors for southern Canada, Inuit Nunangat, and the four Inuit regions, 2007–09. Data compiled from AANDC (2010).

Region	Price adjustment factor	Perishables			Non perishables			Total		
		2007	2008	2009	2007	2008	2009	2007	2008	2009
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

TABLE 3. Median household income (\$), before and after adjustments and after taxes, for Inuit Nunangat and its regions, 2006. Data compiled from Statistics Canada (2007).

Region	A	B	C
	Initial values unadjusted	Adjusted for household composition	Adjusted for household composition and prices
Inuit Nunangat	53 053	26 766	15 289
Inuvialuit	50 000	30 708	16 067
Nunatsiavut	45 298	23 713	18 235
Nunavik	56 345	27 477	16 413
Nunavut	53 178	26 042	13 828

households. These calculations revealed a low income rate (LIR) of 21% for Inuit Nunangat as a whole (Table 4A). The adjustments for household composition and consumer prices were applied to these calculations.

The adjustment made to account for household composition substantially reduced nominal income by reconciling it with the 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 \$26 766 after taxes (Table 3B), which produced a LIM of \$13 263 (Table 4B). In turn, this low income measure generated a LIR of 19% for Inuit Nunangat as a whole (Table 4B). This represents a fairly slight decrease compared with the unadjusted data.

When the income already adjusted for household composition in calculating the low income rate was then adjusted for consumer prices, the impact 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 calculation did not change the population distribution itself. This double adjustment simply reduced median household income in Inuit Nunangat as a whole from \$26 766 (Table 3B) to \$15 289 after taxes (Table 3C). This was also the case for the low income measure, which was reduced by exactly the same proportion (Table 4B and 4C). Each of the steps in the calculations thus had no net impact on the low income rates, as those rates remained unchanged (Table 4B and 4C). The previous calculations did not highlight the impact of consumer prices on poverty rates 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. Instead of applying the price adjustment factors directly to total household income, we applied them 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 cut-offs. These cut-offs were expressed in the same unit, so to speak: the 2007 “southern Canada dollar.” These higher cut-offs were then used to calculate the low income rates.

For Inuit Nunangat on average, the after-taxes low income measure rose to \$22 216 and the low income rate to 44% (Table 4D). When this rate is applied to the demographic figures, it appears that roughly 5700 out of 13 190 households in Inuit Nunangat live with a low income. The results vary from one region to the next (Table 4D). They must be interpreted bearing in mind regional characteristics, such as the weight of each region’s population as compared to the total population of Inuit Nunangat, the age structure, the size of the households, and the standard of living as represented by the median income. For instance, the average results are closer to the most heavily populated regions, Nunavut and Nunavik; and contrasting results for Inuvialuit and Nunatsiavut cannot be properly understood without considering huge differences in their respective standards of living.

DISCUSSION

Limitations of the Measurement

The exercise of measuring may seem trivial, but it is not. It is a precondition for valid comparisons, given the

TABLE 4. Low income measures (LIM, \$) and rates (LIR, %) before and after adjustments, before and after increase, and after taxes, for households of Inuit Nunangat and its four regions in 2006. Data compiled from Statistics Canada (2007).

Region	A Initial values unadjusted		B Intermediate adjusted for household composition		C Intermediate adjusted for household composition and prices		D Final values adjusted for household composition and increased by the price factor	
	LIM	LIR	LIM	LIR	LIM	LIR	LIM	LIR
Inuit Nunangat	26 527	21.1	13 263	18.8	7645	18.8	22 216	44.1
Inuvialuit	25 000	24.5	15 354	22.6	8534	22.6	27 484	45.5
Nunatsiavut	22 649	18.4	11 857	14.7	9118	14.7	15 414	24.7
Nunavik	28 173	15.7	13 739	11.5	8207	11.5	22 943	37.5
Nunavut	26 589	22.3	13 021	20.6	6914	20.6	24 479	47.7

demographic and economic differences between Inuit Nunangat and Canada as a whole. The same sorts of constraints explain why major efforts have been deployed internationally to produce specific measurements for specific situations (e.g., Lanjouw and Ravallion, 1995; Bahri, 2004; Batana, 2008; Streak et al., 2009; Chen and Ravallion, 2010; Bisiaux, 2011). Indeed, the low income threshold based on half-median revenue would reveal nothing if applied to the poorest countries in the world; conversely, the method of the “\$1.25 a day” that is used for those countries would reveal nothing if applied in the wealthier ones. The same limitation was at the origin of the Survey of Living Conditions in the Arctic, when the usual questionnaire on material living conditions proved to be inefficient when applied in Arctic areas (e.g., Edouard, 2008; Kruse et al., 2008; Morin et al., 2010; West, 2011). Comparing metropolitan Canada with Inuit Nunangat using the same tools for both would yield misleading results.

So far, the few poverty measurements covering some parts of Inuit Nunangat did not adequately account for the demographic and economic conditions of the area and its regions. As a result, both the validity of the measures themselves and the validity of the comparisons based on them have been very questionable. Among Inuit households, the demographic structure is very different: as opposed to the Canadian averages, the Inuit population is much younger, and the number of persons per family—especially children—is much bigger. Another key difference is price structure: consumer prices for almost all commodities are higher and may be more than double the prices for the same items in Canadian metropolitan areas, as noted above. The measurement method we propose here tries to overcome these limitations, and to build in these factors more adequately than has been done to date. The results obtained by applying adjustments to the basic census data that account for both household composition and consumer prices should better reflect the situation in Canada’s Inuit regions.

Words of Caution

Nevertheless, any interpretation would have to follow some precautions, and particularly at the regional level. The impact of consumer prices on the incidence of poverty in

the North is considerable. The after-tax poverty rate of Inuit Nunangat rises from an unadjusted 21% (Table 4A) to 44% following an upward adjustment (Table 4D). But 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 that includes more adults than children depends on such income in an environment where consumer prices are very high, these earnings could correspond to a 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 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 have a relatively higher standard of living than overcrowded households in other communities. Conversely, this distribution probably explains why households in the Inuvialuit region were overrepresented 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 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 four regions of Inuit Nunangat, we had to consider the associated standard of living. In this way, instead of leading to the conclusion, on the basis of relative rates, that poverty

is more widespread in the Inuvialuit region than in Nunatsiavut, the results highlight the fact that poor households in Nunatsiavut are likely to have a lower standard of living than households in other regions, because the poverty line for that region was set lower, proportionally speaking.

CONCLUSION

Differences and Similarities

Despite their limitations, these results provide a stronger basis for comparison between Inuit Nunangat and Canada as a whole. There are significant differences between these results and comparable national figures. Our results reveal that the poverty rate in Inuit Nunangat is almost five times that in Canada as a whole.

These results give a portrait far from the few calculations published for Inuit regions by official agencies. Present results suggest that the poverty rate in Nunatsiavut is four to five times the rate suggested by Statistics Canada results (24.7%, as opposed to 5.4%) published for the same year (<http://www.arcticstat.org/TableViewer.aspx?S=1&ID=13910>; see also Sarlo, 2001; Collin and Jensen, 2009). For Nunavik, our results suggest that poverty is almost twice as common as was estimated by the Institut de la statistique du Québec: 37.5%, as opposed to 20.5% (ISQ, 2014; <http://www.nunivaat.org/TableViewer.aspx?S=2&ID=12899>). Interestingly enough, the ISQ result is closer to our results because it took household composition into account (see also Bibi and Duclos, 2009).

Finally, on the basis of previously cited data (MacDonald and Wilson, 2013) and Inuit Nunangat population structure, we conclude that the proportion of Inuit children living in poverty is two to three times that of Canadian children in that situation (44% vs. 18%).

Furthermore, coherent similarities were found between these results and several other indicators associated with poverty in the epidemiology and sociology literature: a high prevalence of food insecurity, high prices for commodities, insufficient income to support hunting and fishing, and a high rate of dependence on social assistance, to name but a few (Chan et al., 2006; Duhaime et al., 2008; Rosol et al., 2011; Campbell et al., 2013; Duhaime and Caron, 2013; Kuhnlein et al., 2014).

The Range

Neither differences nor convergences should surprise researchers; and they cannot be used to define the validity of the results. Validity can be based solely on the theoretical foundations of the chosen methods and the rigor of data processing, and these must be fully described.

We believe this study provides a more realistic view of the magnitude of monetary poverty in Inuit Nunangat than the weak, previously existing clues. And it reveals that

today, the phenomenon has taken on proportions that are quite far from the Canadian national average.

One could hypothesize that, all in all, the sedentary mode of life and the predominance of the central institutions of contemporary capitalism (e.g., money, market economy, and wage labour) have radically reformatted the social organization of Inuit communities. These phenomena have transformed the Inuit mode of land use, reconfigured the structure of social groups and domestic units, and above all, triggered the loss of control over the material appropriation of their livelihoods. The former endogenous processes of creating and distributing goods and wealth in Inuit Nunangat have been replaced by new exogenous processes. The relationship to nature that enabled the Inuit to derive the goods, commodities, and amenities necessary to sustain their life and society, was supplanted by both the logic of capitalism and the guiding principles and the central institutions of the market economy. Inuit Nunangat has become vulnerable to the vicissitudes of markets changes, through the universalization of the wage economy, parallel marginalization of customary activities, and the integration of those activities into the market regime. Monetary poverty could be seen as an effect of the modernization process, the long march of the market economy. In the midst of the process, accelerated in the mid 20th century by the Canadian government decision to create permanent villages and infrastructures, Inuit people, land, and institutions became highly influenced by federal policies, and they still are. When government activities are central to directly and indirectly supporting the overall production, circulation, and consumption of commodities, then Arctic communities, households, and individuals may be hard-hit by austerity policies. In such a context, price differences resulting from remoteness (among other factors) further worsen the already precarious conditions of many inhabitants of Inuit Nunangat. All these factors, market changes, and public policies are far beyond their control. If the exogenous effects of the market on consumer prices and access to wage-earning employment are not corrected by government action, the gap is likely to widen between those who are able to capitalize on the new rules of the contemporary Inuit Nunangat economy and those who bear the brunt of these changes.

The Remaining Unknown

These speculations have to be submitted to experimentation. Our results give a sense of the scope of the problem, but they do not explain how to fight monetary poverty in the specific context of Inuit Nunangat. First, we still know nothing about trends in monetary poverty in that vast area: do these results represent a bare minimum, an average situation, or the worst score in recent history? We now have an idea about the scope of poverty in 2006, but so far nobody knows whether the situation is improving or worsening. Second, we know little about the relevance and efficiency

of the tools designed to fight poverty within the Inuit context. Should a government multiply the budget by a factor of four to fight poverty on the basis of such results? Again nobody can tell, basically because we know even less about the daily experience and the cultural perception of poverty among contemporary Inuit. While shedding some light on the size of the phenomenon, we cannot say a lot about its very nature.

We reach there the fundamental limitations coming from methodological choices made at the outset. Criticisms may be leveled at this article for the overly narrow definition of its object of study, or the limitations inherent in choosing a one-dimensional measurement. But it does have the merit of presenting a rigorous and comparable measure of low income across all Inuit Nunangat; thus, it contributes to the removal of a hurdle in the pursuit of a better understanding of poverty in the Inuit regions. But that way of taking stock is only a point of departure. The limited description given by this measure highlights the need to pursue analysis beyond rates and thresholds. By using hypothesis testing to analyze the socio-demographic characteristics of individuals (e.g., age and gender), the living conditions of families, and the structure of low-income households (e.g., single-parent head of household, multi-family households), and by resituating these observations within the broader context of a neo-liberal regime obsessed with slimming down social programs, the reality of poverty in Inuit Nunangat could come into clearer view. The need and will to fight poverty call for a fundamental understanding beyond economic measurement and statistical correlation, without which policies, strategies, or programs may very much miss the point. To better grasp the social phenomenon beyond statistics would require a historical gaze, which could reveal the characteristics of poverty that appeared in the daily life and language of people along with the modernization process. Maybe more importantly, it would require an exploration and understanding of the emic Inuit perspective.

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