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Bill C-87, Updating the MBM, and the Role of Statistics Canada

Introduction

Bill C-87 adopts Statistics Canada's Market Basket Measure (MBM) as Canada's official poverty line. It goes on, in Section 7(2) to state, "The Official Poverty Line is to be reviewed, on a regular basis as determined by Statistics Canada, to ensure that it reflects the up-to-date cost of a basket of goods and services representing a modest, basic standard of living in Canada."

Unfortunately, the legislation is completely silent on the frequency with which the MBM should be updated, and on the methods to be used. This absence of prescription puts Canada's national statistical agency, Statistics Canada, in an impossible position. The first reason is that there are no purely empirical or statistical bases for selecting an updating frequency. There is an unwritten assumption that updating will occur every five years. But if, for some reason, Statistics Canada chooses not to update the MBM until after 2030, then it will be far easier for the federal government of the day to have achieved the legislated 50% poverty reduction target.

Second, and similarly, there are no purely empirical or statistical bases for selecting an updating methodology, beyond changes in price levels for the specific goods and services comprising the MBM. It would be, under the proposed legislation, entirely within Statistics Canada's authority to update the official poverty line in a way that was close to stagnant, or alternatively in a way that its dollar levels increased quite rapidly over time. Indeed, the very wording of the objective of the MBM, "modest, basic standard of living in Canada" is ambiguous. If interviewed, most Canadians would likely say that a "*basic* standard of living in Canada" required less income than a "*modest* standard of living in Canada".

It would not be very difficult in the updating process to document a method for either case (basic or modest) that would look reasonable. But any such method would inevitably involve

major non-statistical judgements. In turn, these implicit and probably technical-looking judgements would greatly affect the likelihood of the government of the day achieving the 50% poverty reduction target.

In the sections that follow, this note provides ample illustration of the many non-statistical, hence arbitrary, judgements that are required for a wide range of plausible updating approaches for the existing MBM.

Statistics Canada should not be put in such an untenable position. Instead, Bill C-87 should at least provide explicit guidelines as to the methods and frequency for updating the MBM.

(The frequency, e.g. every five years, can be directly included in C-87. The updating guidelines, given their likely technical detail, can be a matter of regulation that would be explicitly enabled in the Bill itself.)

Statistics Canada recently (November 19-20, 2018) held a consultation on the processes they are considering using for the first round of updating for the MBM, to be published in 2020 for a base year of 2018. Two of the Council on Aging of Ottawa's (COA's) Income Security Panel attended (Stapleton and Wolfson). This note is based on their experiences.

Previously, the COA Income Security Panel has offered several substantial documents outlining thoughts and suggestion related to the Poverty Reduction Strategy (links to come). Among the key points were:
- welcoming the idea of an official poverty line,
- emphasizing the importance of there being an accompanying "dashboard" of related indicators, because no single statistic or metric can capture all the major aspects of living in poverty,
- highlighting the importance of some sort of ongoing council or advisory body with a mandate that includes reporting on the results of the poverty and dashboard metrics and advising on the underlying statistical methods and types of data needed, and
- showing the serious limitations of both of the current leading measures, the MBM and LIM, and therefore indicating how a new hybrid measure (a "LIMified MBM") could embody the best of both while eschewing their major flaws.

We are very pleased that all but the last point have been essentially accepted and are reflected in Bill C-87. However, by selecting the MBM rather than the proposed hybrid measure or the LIM, Bill C-87 has opened the issue of updating outlined above.

In this note, we first discuss a number of sometimes detailed points that arose during Statistics Canada's MBM consultation. We then suggest a series of changes to the MBM that would substantially spare Statistics Canada from its current untenable role.

General Points Regarding MBM Updating

Don't Forget Dashboard – At several points during the consultation, e.g. discussion of student loan interest and special costs faced by those with disabilities, it was suggested that the MBM needed to take account of these needs for more income for the affected individuals in order for them to avoid poverty. This approach is misguided. It represents an attempt to have the MBM do too many things at once – a kind of "specification creep". Instead, it would be better for these kinds of concerns to be reflected in an appropriate set of dashboard indicators, such as access to post-secondary education by children from poor families, and unmet health care needs. Indeed, at least a draft set of the dashboard "metrics" mentioned in Bill C-87 should be tabled as soon as possible to enable public discussion.

Consider Responsiveness to Policy – It is reasonable to anticipate several possible future poverty reduction initiatives such as increased support for childcare, reduced prices for public transit, and initiatives to reduce shelter costs. However, depending on sometimes obscure details in the construction of the MBM, it is possible that such initiatives would not register as a reduction in the prevalence of official poverty. Similarly, it should be expected that an increase in the unemployment rate would be accompanied by an increase in the poverty rate – this is the case with the current MBM. But it is not clear that an increase in interest rates would also be reflected in more poverty. Such a lack of responsiveness needs to be avoided if the MBM is to play its role adequately as Canada's official poverty line.

Coherence – The basic principles underlying different groups of goods and services in the MBM are incoherent. There was general agreement in the consultation with the idea that the food group should be based on what families "ought" to be able to purchase, based on Health Canada's nutritious food basket. On the other hand, childcare costs are based on what families currently spend, regardless of its quality. It would be preferable, if childcare costs are to be explicitly considered in the MBM, for them to be based on the costs of care of adequate quality.

Accept "Sawtooth" Pattern – Assuming the MBM is to be updated regularly every 5 years, and adjusted during the intervening years only for price changes, the graph of annual rates of poverty incidence (the "headcount" ratio of the number of individuals below the official poverty line divided by the total population) will show a sawtooth pattern. This is fine. In effect, during the intervening years, the poverty rate will be showing trends in absolute poverty, while examining the peak to peak changes every 5 years will show trends in a form of relative poverty.

Show Sensitivity – There is a major gap in the poverty rates for seniors depending on whether the MBM or LIM is used, 4.9 versus 14.2 percent for those age 65+. This is primarily the result of a large number of seniors living with incomes between the two lines – just above the MBM but still below the LIM. In turn, these figures reflect the fact that the income guarantees provided by OAS and GIS are above the MBM but not above the LIM. In order to convey this

reality, it would be straightforward when publishing data on the incidence of official poverty to show not just one curve, but a set, e.g. based on 0.8, 0.9, 1.0, 1.1, and 1.2 times the MBM.

Avoid Spurious Precision – The long list of commodities, especially in the clothing group, lend an air of precision or accuracy to the construction of the MBM. However, this list of items is highly arbitrary. If ten focus groups were convened and asked independently to come up with such a list, there would almost certainly be wide variations. (This was the case decades ago when the Montreal Diet Dispensary basket cost about half that determined by the Metro Toronto Planning Council, even though both baskets were presumably developed by similarly sympathetic groups of thoughtful individuals.)

In contrast, there are dramatic simplifications in other parts of the specification of the MBM, such as the use of the square root of family size to determine the MBM for families other than two-parent + two-children. The fact that some portions of the MBM specification are excessively detailed while others are so highly simplified and clearly arbitrary represents an unfortunate lack of balance. This dramatic imbalance in the levels of apparent precision in the structure of various parts of the MBM, for those with the inclination to delve into its methods, seriously compromises its "face validity."[2] When this family size equivalence scale was applied to shelter costs in Statistics Canada's online consultation, it generated completely unrealistic shelter costs for single individuals.

Simplification of the construction of the MBM would be most useful not only for transparency but also for updating (see below) if such spurious precision were avoided.

Indivisibilities – As family size changes, costs for the collections of items in the food and clothing commodity groups can in principle be scaled up and down accordingly – more or fewer items of clothing, larger or smaller amounts of various foodstuffs, as family size changes. Such is not the case for cars and shelter. It is not possible for a single individual to consume half a car, or rent a 1.25-bedroom apartment at half the cost of the average of 2- and 3-bedroom apartments, though this is assumed implicitly in the current MBM – since the square root family size equivalence scale sets the MBM level for a single person at one-half that for a four-person family.

This issue is not easily addressed. Inevitably, the equivalence scale will be arbitrary – there is simply no way to infer such a scale from data, even with the most sophisticated econometrics applied to the most detailed expenditure data (ref Martin Browning study for LICO review, 1991). There will always be some assumptions needed, though these may be very subtle and arcane.

There was considerable discussion at the consultation about these issues relating to scaling the MBM for different family sizes and compositions, e.g. whether or not the children were of pre-

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[2] "Face validity" refers simply to whether a specification or result looks reasonable "on the face of it" when examined thoughtfully.

school age, and whether boys and girls should share the same bedroom in the shelter cost component (general consensus – not).

One approach would be to use different equivalence scales for shelter costs than for other goods and services. While this is plausible, and would increase the face validity of the MBM greatly, it would also involve a more substantial change in its basic structure. Bill C-87 should be explicit that some substantial revisions to the current MBM will be needed.

Updating the MBM

As noted earlier, it is unreasonable to expect Statistics Canada to shoulder the entire responsibility for updating Canada's official poverty line without any guidance from the federal government in Bill C-87. There are too many areas where judgments are required for which there is no conceivable statistical or empirical basis. Yet, these judgements could substantially affect whether or not a future federal government would be able to attain the 50% poverty reduction target in 2030.

The federal government, when specifying its official poverty line, must specify not only its level "today", but also how its level will change over time. While it is widely accepted that the poverty line should take full account of price changes, the concept of "modest, basic standard of living" is quite ambiguous with regard to changes over time. For example, over the past decade or two, the composition of a "*basic* standard of living" commodity basket would continue to include food and shelter, but need not add in internet connectivity, while a "*modest* standard of living" would include this major innovation. Similarly, with urban growth, low income housing in city centres has been disappearing as a result of "gentrification". Consequently, poor families are increasingly being forced to live further from the urban core, and further from employment opportunities. A "basic standard" need not adjust for resulting increased transportation costs, while a "modest standard" would likely do so.

Regardless of this fundamental lack of clarity for the meaning and definition of C-87's "modest, basic standard of living", the need to specify at least some guidelines for updating the MBM would be more easily addressed if the MBM were substantially simplified.

Simplification Option 1 – As described in our earlier COA brief Toward a Poverty Line, one option would be to focus only on the food and shelter components of the MBM, and embed the clothing and transportation components (along with a number of other goods and services) into the "other expenses" component of the "market basket". The main reason for having suggested this change for the clothing component was its excessive detail, substantial arbitrariness, and the sense that there could never be any reasonable guideline for updating that would substantially absolve Statistics Canada of the need to make non-statistical judgements.

In the case of transportation, the major problem raised during the recent Statistics Canada consultation was the very different treatment of rural and non-rural geographic areas, where a car was included only for rural residents. The current MBM makes a sharp division that results in unrealistic differences. As discussed, many poor families live in urban areas, but so far from the city core that public transit is spotty at best. But the MBM does not include the costs of a car for these families. On the face of it, this looks unreasonable, and is certainly the result of an arbitrary non-statistical and non-empirical judgement.

In contrast, the shelter component of the MBM has a quite straightforward definition: the average rent on 2- and 3-bedroom apartments. There are of course a number of further details, such as the need to include utilities and tenants' insurance, and the challenge of how to deal with those who own and occupy their home. But the general principles are reasonably clear so that Statistics Canada would not be undertaking undue non-statistical judgements for the updating of the shelter component of the MBM.

In the case of food, Bill C-87 through using the MBM as the official poverty line effectively passes responsibility to Health Canada to determine the contents of a nutritious food basket. The underlying principle, that the MBM should be based on what it costs to eat a proper diet, is sound. But there remains quite extensive scope for judgement in specifying the contents of this food basket. For example, the current food basket, while in accord with past versions of Canada's food guide, appears high by current standards in red meat, salt, sugar, and some processed foods.

There is also, at present, no plan for Health Canada to update this food basket on a regular quinquennial basis. On the other hand, there is no reason to expect that human nutritional needs are going to change that dramatically in coming years. With Canada's wide ethnic diversity and continued globalization, it is likely that the variety of foods available will continue to increase. But these changes are unlikely to cause changes in food components from either a basic or a modest standard of living perspective. On the other hand, food prices are often volatile and there may be important trends. Still, price changes are already a well understood and automatic part of the MBM updating, both every 5 years when there is a formal update, and for the years in between.

The main area where important differences between "basic" and "modest" food expenditures could well arise by 2030 concerns prepared meals. For example, more food shopping could move online and include delivery, and the composition of the food basket could shift toward complete prepackaged prepared meals. Either of these trends, if widely accepted as necessary parts of a "modest" but not a "basic" nutritious food basket, would significantly affect the updating of the MBM. There is no statistical or empirical basis for Statistics Canada to make this choice. Rather, it should be the responsibility of the government at the political level.

Simplification Option 2 – Alternatively, it may be plausible to retain explicit transportation and clothing commodities in the MBM, provided they are substantially revised, so that Statistics

Canada could undertake regular updating subject to clear guidelines set out as part of the regulations to Bill C-87.

In the case of transportation, there was general agreement in the consultation that a car could be necessary in urban areas when public transit was poor. This view, however, raised the question of where exactly within each geographic region the price quotes for shelter were being taken, since the accessibility of public transit would be much higher closer to the urban core, hence transportation costs would be lower, but rents would be higher. There is clearly a trade-off between rental costs and transportation costs. One option would be for there to be a guideline for this portion of the MBM transportation and shelter specification to state explicitly which parts of each geographic region would be used to price both shelter and transportation – e.g. those parts of a city which had the highest proportion of second income quintile residents of that geographic region.

Note again that this kind of guideline specification is a judgement call; there is no statistical or empirical basis for choosing the second quintile, say, rather than the second decile – both look plausible and suitably technocratic. But depending on this essentially arbitrary choice, the resulting MBMs could in fact be quite different. Therefore, it should not be the role of Statistics Canada to set this specification. It should be spelled out as part of the regulations for Bill C-87.

For clothing, it is most likely that prices are highly correlated over time. The main differences between geographic areas will be in the markups at local retailers, the effects of local climate on the kinds of clothing needed, and possibly a trend growth in the use of on-line purchasing. In this context, it may be possible to create a parsimonious list of "sentinel" types of clothing. For example, there is likely no need to include both a winter coat and mittens and a toque, since the local retailer's markups are likely similar and their prices over time will be highly correlated; just a winter coat should be sufficient – provided it is accompanied by a multiplier to cover other clothing items like the mittens and toque.

On the other hand, some adjustments in the set of these sentinel clothing items by geographic area would enhance "face validity" in relation to climate. At present, Winnipeg and Victoria have identical clothing baskets.

The objective, from Statistics Canada's perspective, should be to make the selection of clothing items as automatic as possible. For example, a five-year average of the Survey of Household Spending (SHS) could be used to determine which kinds of clothing items were purchased most often (a) in the Fall when children started school, (b) during Winter, and (c) in the Spring / Summer period – disaggregated across geographic areas by an indicator of climate such as heating and cooling degree-days from Environment Canada. Then, for each of the three seasons, the top ten to fifteen clothing items, in terms of expenditure, would be determined for each of three climate groups – warmest, coldest, and in between – based on the degree-days data. In other words, there would be three sets of clothing items, depending on climate, and after combining the lists within each climate area over the seasons, somewhere between 30

and 45 items – ideally a list short enough to fit onto a single page, hence about a third or less the length of the current list of clothing items.

Most importantly, this kind of clothing item list would be defined at a general level by a kind of algorithm. The algorithm would be part of the guidelines pursuant to (an amended) Bill C-87. This would absolve Statistics Canada of the need to make arbitrary non-statistical judgments (e.g. whether to use two or three seasons or geographic climate areas or just one), and place its role more closely in line with that of a statistical office.

Note that this approach for clothing may have important implications for the collection of prices by Statistics Canada. It places much more weight than at present on differences in price *levels* across geographic regions compared to geographic patterns of price *changes*, and it requires even more geographic detail / disaggregation in price monitoring. It will likely also increase the importance of monitoring prices for on-line purchases.

Other Topics – In addition to changing the four main expenditure components of the MBM (option 2 above) or collapsing two into the "other expenditures" part of the basket (option 1 above), and providing more details on the methods for constructing these market baskets, in order to render the updating process more automatic, there are a number of further topics to be addressed.

At present, the MBM not only specifies a highly detailed basket of goods and services, it also makes a range of adjustments to the concept of income used to determine whether a family is below the line or not. There is general agreement that income after-taxes should be used. But the current MBM methods make inconsistent further adjustments to the income concept regarding the treatments of various kinds of saving and dis-saving, and treats childcare and medical expenses as deductions from income rather than as needed expenditures. There are also unclear treatments of money transfers among family members who do not all live in the same household, and various kinds of insurance.

In the case of owner-occupied housing, many poor families live in their own homes. In principle it is legitimate that the imputed net value of this major asset of home equity should be taken into account. At present, the MBM makes an adjustment for owner-occupiers without a mortgage, but nothing for those with as little as a dollar of outstanding mortgage debt – clearly a completely arbitrary and inequitable specification. Further, significant proportions of poor families live in "rent geared to income" units. To be consistent, some adjustment to income would also appear warranted to account for the implicit rental subsidy.

Concluding Comments

Based on the discussion above, it is clear that Bill C-87 needs to specify at least some guidelines for the updating of Canada's official poverty line. Otherwise, Statistics Canada will be placed in an untenable position.

Our preferred option would be for the MBM to focus only on shelter and food costs, explicitly combined with a simple and transparent multiplier to take account, albeit implicitly, of other "basic, modest" components of a market basket such as clothing and transportation. There could also be some elaboration of the family size equivalence scale to account for the very different impacts of changes in family size on shelter costs as compared to other components of the market basket. Updating would then be "guided" as specified in regulation by at least a series of principles or even algorithms. Such a specification would spare Statistics Canada from any major responsibilities for making non-statistical judgements that could substantially affect the apparent attainment of the 50% poverty reduction target for 2030.

Another much weaker option would retain transportation and possibly clothing components of the market basket. But to achieve the same protection for Statistics Canada would require C-87 and its regulations to specify much more extensive and detailed updating guidelines.

In any case, the legislation (not the regulations) should specify updating as occurring every 5 years.

For more information:

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