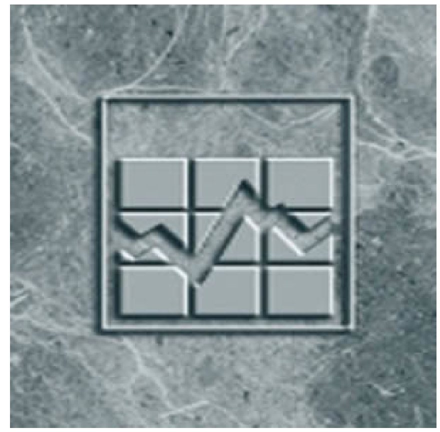
Catalogue no. 75F0002M
ISSN 1707-2840
ISBN 978-0-660-33315-1

Income Research Paper Series

Defining disposable income in the Market Basket Measure



by Samir Djidel, Burton Gustajtis, Andrew Heisz,
Keith Lam and Sarah McDermott

Release date: December 20, 2019

Statistics Canada Statistique Canada

Canada

How to obtain more information

For information about this product or the wide range of services and data available from Statistics Canada, visit our website, www.statcan.gc.ca.

You can also contact us by

Email at STATCAN.infostats-infostats.STATCAN@canada.ca

Telephone, from Monday to Friday, 8:30 a.m. to 4:30 p.m., at the following numbers:

- Statistical Information Service 1-800-263-1136
- National telecommunications device for the hearing impaired 1-800-363-7629
- Fax line 1-514-283-9350

Depository Services Program

- Inquiries line 1-800-635-7943
- Fax line 1-800-565-7757

Standards of service to the public

Statistics Canada is committed to serving its clients in a prompt, reliable and courteous manner. To this end, Statistics Canada has developed standards of service that its employees observe. To obtain a copy of these service standards, please contact Statistics Canada toll-free at 1-800-263-1136. The service standards are also published on www.statcan.gc.ca under "Contact us" > "Standards of service to the public."

Note of appreciation

Canada owes the success of its statistical system to a long-standing partnership between Statistics Canada, the citizens of Canada, its businesses, governments and other institutions. Accurate and timely statistical information could not be produced without their continued co-operation and goodwill.

An HTML version is also available.

Cette publication est aussi disponible en français.

Defining disposable income in the Market Basket Measure

The Market Basket Measure (MBM) of low income compares the disposable income of families to the cost of the MBM basket. This discussion paper describes considerations for updating the disposable income component of the MBM and for improving the methodology used for its determination.

This discussion paper also provides an opportunity for feedback and comments to the proposed changes to the MBM.

Introduction

This document is the third in a series of four discussion papers that are being prepared to provide an update on the comprehensive review of the Market Basket Measure (MBM). The MBM establishes poverty thresholds based on the cost of a basket of food, clothing, shelter, transportation and other items for a family of four that reflects a modest, basic standard of living. This is the last document before the publication of the final report of the comprehensive review which will be released in the winter of 2020.

This paper discusses the concept of disposable income used in the MBM. Disposable income is a measure of the means available to a Canadian family to meet its basic needs and achieve a modest standard of living. The disposable income of families surveyed in the *Canadian Income Survey* (CIS) is compared to the cost of the MBM basket for the size of the family and the region, and families with disposable incomes below that cost are deemed to be living in poverty. The definition of the MBM basket was the subject of the previous publication entitled *Towards an update of the Market Basket Measure* (Djidel et al., 2019).

On August 21, 2018, the Government of Canada released *Opportunity for All – Canada's First Poverty Reduction Strategy* (Employment and Social Development Canada, 2018), which contained long-term commitments to guide current and future government actions and investments to reduce poverty, including:

- Establishing the MBM as Canada's Official Poverty Line (Statistics Canada, 2016)
- Introducing poverty reduction targets using a baseline of 2015
    - Reduce the rate of poverty by 20% by 2020, and
    - Reduce the rate of poverty by 50% by 2030 (aligned with United Nations Sustainable Development Goals)
- Creating a National Advisory Council on Poverty
- A Data and Measurement Plan, which includes ongoing funding to develop and improve data to measure poverty and to inform policy decisions.

The Poverty Reduction Act received Royal Assent in June 2019 and legislates commitments made in the Strategy including entrenching the MBM as Canada's Official Poverty Line.

The *Poverty Reduction Act* mandates Statistics Canada to review the MBM on a regular basis "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." In 2018, Statistics Canada launched a comprehensive review of the MBM, which will be completed in 2020.

To date, the comprehensive review has consisted of several related activities. From September 2018 through April 2019, Statistics Canada with the participation of Employment and Social Development Canada (ESDC) conducted broad consultations with Canadians, poverty experts, other stakeholders and officials from provincial, territorial and federal governments, which was summarised in *An update on the Market Basket Measure comprehensive review* (Heisz, 2019).

Next, in the spring of 2019, Statistics Canada and ESDC prepared a work plan to test various methodological changes to the MBM arising from the comments received during the consultations. This work went through the summer and fall of 2019. The process has been collaborative, with Statistics Canada responsible for launching and conducting the comprehensive review as well as for the statistical methodology of the MBM and ESDC responsible for setting the scope of the comprehensive review and for the policy direction of the MBM.

This discussion paper provides an update on the work that Statistics Canada has undertaken to update the MBM applied in the provinces, focusing specifically on the elements of the methodology associated with the determination of disposable income.

As indicated in *An update on the Market Basket Measure comprehensive review*, Statistics Canada is also working with the Northwest Territories, Yukon and Nunavut to develop territory-specific MBM thresholds for these regions.

Proposals for changes to the MBM disposable income

In the MBM methodology, disposable income is defined as total income (including government transfers) after deducting not only income tax, but also several non-discretionary expenses including Canada Pension Plan and Quebec Pension Plan contributions, Employment Insurance and Registered Pension Plan contributions, union dues, child care expenses, spousal support payments paid, public health insurance premiums, and direct medical expenses including private insurance premiums. In the 2008-base MBM methodology, disposable income was also adjusted for homeowners without mortgages to reflect the lower shelter costs faced by families with this type of housing tenure. This adjustment was called the Mortgage Free Advantage (MFA).

The main changes proposed for the 2018-base MBM are summarized as follows:

- Expansion of the concept of the MFA to other types of tenure

  During the 2010 review, costs for homeowners without mortgages were introduced into the MBM basket (Hatfield, Pyper and Gustajtis (2010)). A subsequent review in 2012, resulted in a revised basket methodology and the introduction of the MFA to the MBM definition of disposable income (Statistics Canada, 2015). It is proposed that this concept be extended to other tenure types, such as homeowners with mortgages and families living in subsidised dwellings. This would serve to place families in these tenure types on more equal footing with families in rental units, when determining their poverty status.

- Update of medical expenses

  The amounts used to account for out-of-pocket medical expenses, when no tax information is available, would be updated to use more recent survey data.

- Treatment of capital gains taxes

  It is proposed that capital gains taxes be removed from the other types of taxes to prevent families from appearing to be in poverty due to paying a large capital gains tax.

In addition, while no changes are proposed to the child care expenses methodology for the 2018-base MBM, this discussion paper will explain the current methodology, as it can have an important impact on the disposable income for families with young children.

Changes to the calculation of disposable income as part of the current comprehensive review

Tenure Type Adjustment

The shelter component value of the MBM basket is based on the costs associated with renting a dwelling (Djidel et al., 2019). However, there are several different types of tenures such as homeowners with a mortgage, homeowners without a mortgage (i.e., who own their homes outright), and families living in subsidized dwellings, each of which may be associated with different shelter costs.

To recognize the lower shelter costs faced by homeowners without a mortgage, the 2008-base MBM made an adjustment to disposable income, which was called the Mortgage Free Advantage (MFA). The MFA added the difference between the cost of the shelter component of the MBM basket (based on renters) and the typical shelter costs for mortgage free homeowners to the disposable income of mortgage free owners, placing homeowners without a mortgage on a more equal footing with renters in regards to their shelter costs.

The 2008-base MBM methodology only made adjustments for mortgage free homeowners, while homeowners with a mortgage and families in subsidized dwellings were treated as having shelter costs equivalent to renters. For the 2018-base MBM, it is proposed that the MFA concept be extended to homeowners with a mortgage and subsidized renters; thereby, putting all families' shelter costs on an equal footing when determining poverty estimates, regardless of their tenure type. This new concept would be referred to as the Tenure Type Adjustment (TTA).

The estimation of the TTA for each MBM region and tenure type would be obtained by subtracting the typical shelter costs of a specific tenure type from the shelter costs for renters derived during the construction of the MBM shelter basket. The following three sections describe in more detail how shelter costs would be estimated for each of the three tenure types (see text box – *Statistical Fine Print: TTA*).

Estimating shelter costs for homeowners without a mortgage

For homeowners without a mortgage, the shelter costs considered for the MBM consist of property taxes, utility costs, condominium fees, appliance costs and basic home insurance costs. These are estimated for a three-bedroom unit for a family in the second income decile for each MBM region. For mortgage free homeowners, the resulting TTA is conceptually similar to the former MFA methodology used in the 2008-base MBM.

Estimating shelter costs for homeowners with a mortgage

For the purpose of the MBM, shelter costs for homeowners with a mortgage would consist of property taxes, utility costs, condominium fees, basic home insurance costs, appliance costs and mortgage interest payments. The key difference, relative to homeowners without a mortgage, is the interest cost component (which is zero for homeowners without a mortgage).

Analysis of the data have shown that younger homeowners tend to have higher average mortgage balances than older homeowners due to the fact that they are in an earlier phase of the repayment of their loan. Conversely, older homeowners tend to be closer to the end of their mortgage, and tend to have lower mortgage balances. This translates into lower shelter costs for older homeowners, due to having lower interest charges. The TTA for older homeowners thus tends to be larger than it would be for younger homeowners though still less than for mortgage free homeowners.

Estimating shelter costs for subsidized tenants

According to the 2016 Census, approximately 4% of Canadian families live in a subsidised dwelling. For subsidized tenants, shelter costs would be estimated using an approach similar to that used for market rental units. As with the other tenure types, the estimate of shelter costs for the reference family would be based on the cost of a 3-bedroom dwelling unit occupied by families in the second income decile for each MBM region. For subsidised renters, shelter costs consist of the rent paid plus utility costs, appliance costs and relevant insurance costs.

Statistical Fine Print: TTA

For the TTA, it is proposed that shelter costs be based on the results of a regression using data from the 2016 Census. Specifically, the regression model will predict the median shelter cost for a 3-bedroom unit occupied by families in the second decile of income for each of the MBM regions. Separate regression models would also be used for each of the tenure types: (1) mortgage free homeowners, (2) homeowners with a mortgage and (3) families in subsidised dwellings. For homeowners with a mortgage, data from the 2016 Survey of Financial Security (SFS) would also be used, as described in the following paragraph.

Shelter costs in the MBM come mainly from the census, but the census does not have an estimate for the mortgage interest cost. Therefore, this would need to be estimated in another way. In order to estimate mortgage interest payments, the following steps are proposed:

1. SFS data would be used to estimate the average household mortgage balance, while accounting for the age of the head of the household, the type of dwelling and the region. Families included in this estimation would be restricted to those in the lower half of the income distribution.
2. These estimates would then be merged on to the census data, based on the same characteristics used to determine the average mortgage balance.
3. Finally, the amount of interest paid per household would be calculated by multiplying the estimated mortgage balance (given the age of the head of the household, the type of dwelling, and the region) by CMHC's 2016 estimate of the 5-year conventional mortgage lending rate.

The costs of annual home insurance and purchasing of appliances (amortized over a period of 14 years) would also be added to the annual shelter cost estimates derived from the regressions. For each MBM region, the TTA is estimated as the difference between the MBM basket shelter cost (based on market rent) and the shelter cost for the respective tenure type.

Update of medical expenses

Medical expenses are one of the non-discretionary expenses that are deducted from after-tax income to derive disposable income for the MBM.

These medical expenses include out-of-pocket expenses for prescription medicines and eye wear, for medical services and health care equipment, and for dental services. They also include health care and dental plan insurance premiums.

Under the current MBM methodology, medical expense amounts are determined for each adult using the appropriate line from the individual's tax form. For adults who do not report a medical expense on their tax form, a value is imputed using data from the Survey of Household Spending (SHS). For the 2008-base an older SHS value is used, while for the 2018-base it is proposed that a new value be derived from the 2017 SHS and adjusted using a price inflator for other years (see text box – *Statistical Fine Print: Medical expenses*).

Statistical Fine Print: Medical expenses

In the 2018-base MBM it is proposed that medical expenses be accounted for in the following way:

- Medical expenses from the tax form would be used for adults whose records are linked to tax data and for whom the medical amount claimed is greater than zero.
- If an adult is not linked to tax data or if their medical claim for tax purposes is zero[1], they would be assigned a predetermined amount corresponding to a provincial average of medical expenses among persons in the second income decile not claiming an amount on their tax return.

Treatment of taxes caused by a capital gain or loss

A capital gain or capital loss occurs when an individual disposes of or transfers a capital property (e.g., land, buildings, stocks, bonds, mutual funds, etc.). Since these financial settlements are not always foreseeable and for many people constitute an occasional lump sum transaction, the standard is not to include them when calculating income (UNECE, 2011). The current MBM does not include the values of capital gains or losses in disposable income. However, due to the complexity in estimating the taxes on a capital gain (or the reduction in taxes on a capital loss), the taxes on capital gains had not been previously removed from the taxes that are deducted from before-tax income in deriving disposable income.

For the 2018-base MBM, it is proposed that the taxes on these capital gains be estimated and that disposable income be adjusted accordingly. Specifically, it is proposed that capital gains taxes be removed from other taxes to prevent families from appearing to be in poverty due to paying a large capital gains tax. Since the tax implications of capital gains/ losses are not directly known from available tax information, they would have to be estimated.

1. In order to be able to claim an amount for tax purposes, medical expenses must exceed the lesser of 3% of net income or a minimum threshold amount.

Child care expenses

Child care expenses are amounts paid by a parent to a child care provider to care for their child, so that the parent can pursue employment, business or education. This aligns with how the Canada Revenue Agency defines child care expenses in the income tax system. In the MBM, child care expenses are taken into account by subtracting from an individual's income the actual child care expenses incurred by each respondent to the CIS in order to derive the family's disposable income.

More precisely, under the MBM methodology, there are two data sources for determining child care expense amounts incurred by the CIS respondent: (1) the CIS and (2) the respondent's tax record (line 214) if a link to tax data was possible. Current tax rules regarding child expenses require that the expenses be reported by the lowest earning parent and are also subject to a maximum claimable limit. Therefore, since there is a maximum reportable amount in the tax data, the final amount of child care expenses deducted from disposable income is the higher of the amount reported in CIS and the amount reported in the tax data[2].

As reported in *An update on the Market Basket Measure comprehensive review* (Heisz, 2019), child care expenses is an area that has been flagged for the forward looking research agenda to study further before the next comprehensive review.

2. Ensuring there is no duplication of reported amounts between the two sources of data.

Discussion papers reporting on the comprehensive review

This study represents the third of four discussion papers to be released as part of the comprehensive review. Other papers in the series include:

July 2019: An update on the Market Basket Measure comprehensive review

From September 2018 through April 2019, Statistics Canada conducted a broad consultation on the Market Basket Measure. The consultation objectives were to gather input on the development of an update to the Market Basket Measure. This discussion paper describes the consultations that took place, gives highlights of what Statistics Canada heard, and describes next steps.

December 2019: Towards an update of the Market Basket

The Market Basket Measure basket is comprised of five major components: food, clothing, transportation, shelter and other necessities. This discussion paper describes considerations for updating these five components and the changes to the methodology for calculating these five components.

February 2020: The second comprehensive review of the Market Basket Measure of low income

This report describes the proposed changes to be made to the MBM as part of the 2018-base, as well as identifying research to be conducted in preparation for the 2023 review. The paper will describe the 2018-base thresholds and compare these to the 2008-base thresholds. Release of this report will be followed by a review period during which Statistics Canada and ESDC will work with experts, stakeholders, and federal, provincial and territorial officials to validate the results.

Conclusion

This discussion paper described the work being done by Statistics Canada and ESDC towards updating the MBM methodology associated with the determination of disposable income. It describes the proposed changes to the methodology to define a family's disposable income. This paper is the third in a series of four papers that are intended to provide updates on the progress of the comprehensive review. The next paper, which will provide detailed information on the development of the proposed 2018-base MBM and disposable income, is scheduled for publication in February 2020. Following the release of this paper, there will be a review period during which Statistics Canada and ESDC will work with experts, stakeholders, and federal, provincial and territorial officials to validate the results. Users are welcome to ask questions or share their feedback. Persons interested in contacting us are encouraged to do so by sending an email to: statcan.market.basket.measure-mesure.du.panier.de.consommation.statcan@canada.ca

References

Djidel, Samir, Burton Gustajtis, Andrew Heisz, Keith Lam and Sarah McDermott (2019), Towards an update of the Market Basket. Catalogue no. 75F0002M2019013.

Employment and Social Development Canada (2018), *Opportunity for All – Canada's First Poverty Reduction Strategy*, Cat. No.: SSD-212-08-18E.

Hatfield, Michael, Wendy Pyper and Burton Gustajtis (2010), "First Comprehensive Review of the Market Basket Measure of Low Income", Applied Research Branch paper, Human Resources and Skills Development Canada.

Heisz, Andrew (2019), An update on the Market Basket Measure comprehensive review. Catalogue no.75F0002M2019009.

Statistics Canada (2015), Low Income Lines, 2013-2014: Update. Catalogue no. 75F0002M2015002

Statistics Canada (2016), Low Income Lines: What they are and how they are created. Catalogue no. 75F0002M2016002.

UNECE (2011), Canberra Group Handbook on Household Income Statistics, Second Edition 2011.