COURTESY TRANSLATION

POVERTY, INEQUALITY AND SOCIAL EXCLUSION IN QUÉBEC:

2018 Progress Report

Centre d'étude sur la pauvreté et l'exclusion

Statistical compilation, analysis and writing:
Guy Fréchet, Aline Lechaume and Frédéric Savard

Centre d'étude sur la pauvreté et l'exclusion
Direction de la recherche
Ministère du Travail, de l'Emploi et de la Solidarité sociale
425, rue Jacques-Parizeau, 4e étage
Québec (Québec) G1R 4Z1
Telephone: 418 646-0425, ext. 34603
Fax: 418 644-1299
Email: cepe@mtess.gouv.qc.ca

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ACRONYMS AND INITIALISMS

BDSO	Banque de données des Statistiques officielles sur le Québec
CANSIM	Statistics Canada socioeconomic database
CCB	Canada child benefit
CCHS	Canadian Community Health Survey
CCTB	Canada Child Tax Benefit
CEPE	Centre d'étude sur la pauvreté et l'exclusion
CIQSS	Centre interuniversitaire québécois de statistiques sociales
CIS	Canadian Income Survey
CMA	Census metropolitan area
CPI	Consumer price index
CSEW	Canadian Survey of Economic Well-Being
ESDC	Employment and Social Development Canada (formerly HRSDC)
EU-SILC	European Union - Survey on Income and Living Conditions
GPD	Gross domestic product
GST	Goods and services tax
HRSDC	(see ESDC)
INSEE	Institut national de la statistique et des études économiques
ISQ	Institut de la statistique du Québec
LFS	Labour Force Survey
LICO	Low income cut-off
LIM	Low income measure
LRFA	Last-resort financial assistance
MBM	Market basket measure
MFQ	Ministère des Finances du Québec
MTESS	Ministère du Travail, de l'Emploi et de la Solidarité sociale
NCBS	National child benefit supplement
NOS	National Occupancy Standard
OECD	Organisation for Economic Co-operation and Development
PIAAC	Programme for the International Assessment of Adult Competencies
PST	Provincial sales tax
PWA	Parental wage assistance
QST	Québec sales tax
SFS	Survey of Financial Security
SHE	Survey of Household Expenses (formerly Survey of Family Expenses, SFE)
SLID	Survey of Labour and Income Dynamics
STC	Solidarity tax credit
UCCB	Universal child care benefit
WITB	Working income tax benefit

MESSAGE FROM THE CEPE CHAIR

At a time when we are celebrating the 15th anniversary of the Act to combat poverty and social exclusion, which was passed unanimously, and the publication of the third action plan related to it, the mandate and role of CEPE remains more pertinent and important than ever.

CEPE is an independent monitoring body in the area of poverty and social exclusion and produces progress reports and research notes every year.

In a context in which the question of combatting poverty is the focus of numerous public discussions about strategies, targets, activities and results, CEPE is working to define indicators of poverty, inequalities and social exclusion that will make it possible to measure our progress. In its 2009 Advisory Opinion, it adopted the Market Basket Measure (MBM) as a reference measure to report on coverage of basic needs but not as a measure of escape from poverty. Our use of MBM must be understood as such among the other measure of low income and not as a poverty threshold.

This 2018 edition of the Progress Report on poverty in Québec is an opportunity to see how far we have come.

The Progress Report shows that the family policies developed in Québec and the combat against poverty have undeniably made it possible to reduce the rate of families with children who are living under the MBM threshold. However, the data also show that many unattached individuals have not fared as well. The 2016 MBM data remain unchanged for that group, compared with 2002, 23.2 % in 2002 and 23.0 % in 2016. While 2016 may not signal a trend, it is obvious that to meet the objectives in the law passed in 2002, taking action to assist unattached individuals is an urgent reality.

By adding a monitoring of social exclusion indicators to this persistent situation, it becomes possible to observe the extent to which poverty remains a major risk factor for social exclusion, just as exclusion is an obstacle to escaping poverty.

By putting together indicators and measures in this way, CEPE can arrive at a larger, more global understanding of the issues faced by those who live in poverty. In addition to the question of income, it must be remembered that living alone in poverty is usually marked by a greater social disaffiliation and vulnerability. By reducing the number of families and children living in poverty, Québec has no doubt chosen a promising way forward toward its future. Nevertheless, in the case of unattached individuals, it is clear that the philosophies, policies and measures put into place have not yet borne fruit. The challenge remains for us to catch up with comparable countries that have fewer people living in poverty. To meet that challenge, acknowledging the complexity of the situations in which poor people find themselves, as well as the challenge to support and accompany or society's most deprived on their path to inclusion and well-being.

Céline Bellot
Chair of the CEPE steering committee

HIGHLIGHTS

The market basket measure (MBM) has been recommended by the CEPE as the reference measure for monitoring poverty situations in terms of basic needs coverage, as well as the low income measure (LIM) for situations where the MBM may not be available (CEPE, 2009).

Overall, Québec's low income rate based on the MBM decreased between 2002 and 2007, followed by an overall increase since that time, followed by another decrease. The rate decreased from 10.8 %, in 2002, to 8.6 %, in 2007, before increasing again to 11.8 % in 2012, and finally dropped to 8.6 % in 2016, the historical floor for the whole period :

- The same downward-upward trend is seen for the low income measure in children (under 18 years of age) in low income households, persons aged 18-64, persons in lone-parent families and female lone-parent families.
- The low income rate for persons aged 65 and over remained more or less stable.
- The low income rate for unattached individuals is 4.25 times higher than the rate for members of economic families with two persons or more in 2016.

Interregional, interprovincial and international comparisons indicate the following:

- According to the LIM, between 2002 and 2014, the low income rate fell in some of Québec's administrative regions (e.g., Abitibi-Témiscamingue, Gaspésie–Îles-de-la-Madeleine), remained relatively stable in others (e.g. Laval, Nord-du-Québec). The Chaudière-Appalaches and Capitale-Nationale regions saw the best rates in 2014, whereas Nord-du-Québec and Montréal saw the worst.
- A comparison using the MBM shows where Quebeckers stand relative to residents of the other provinces. Québec is in a first group, which includes six provinces (Alberta, Québec, Saskatchewan, Manitoba, Newfoundland and Labrador and Prince Edward Island). This group is significantly different from a second group, which includes four provinces whose low income rates were higher in 2016 (Ontario, New Brunswick, British Columbia and Nova Scotia).
- An examination of low income rates in certain census metropolitan areas (CMAs) between 2002 and 2016 shows that Montréal compares favourably to other large cities, outperforming Toronto and Vancouver.
- Québec did not reach its objective of being in 2014 among the industrialized nations with lowest number of poor people. According to section 4 of the *Act to combat poverty and social exclusion*, "The national strategy is intended to progressively make Québec, by March 5, 2013, one of the industrialized nations having the least number of persons living in poverty, according to recognized methods for making international comparisons." With respect to this objective, Québec is significantly outpaced by a group of six countries (Norway, Netherlands, Denmark, Finland, France and Switzerland) and is found in a second group (Austria, Sweden, Belgium, Québec, Luxemburg, Ireland, Germany and the United Kingdom) which is significantly ahead of a third group (Italy, Portugal, Greece and Spain).

For the purposes of measuring Québec's performance between 2004 and 2017 (2004 being the year preceding the implementation, in January 2005, of the economic measures of the first action plan to combat poverty), some typical cases were observed that make it possible to measure Québec's efforts in comparison to other groups and to itself. Those cases involved unattached individuals, unattached individuals with severe employment constraints, lone-parent families with one child aged 3, childless couples with one income, and two-parent families with one income and two children to see if their lot had improved or gotten worse. We noted differences between the two periods, depending on the absence or presence of children, which no doubt reflect the

recent advances made through Québec's family and anti-poverty policies, which has adopted stronger measures to combat poverty in families with children. As a result, unattached individuals and childless couples are in a less favourable situation, although some progress is beginning to be seen.

In terms of inequality, the Gini coefficient and interdecile ratios provide the same overall picture. Compared with other societies, for example the other Canadian provinces and some European countries, Québec has maintained a lower level of inequalities, although it is still outpaced in this respect by the Scandinavian countries.

Finally, for most of the exclusion indicators, we note differences that depend on whether a person has a low income. Undeniably, poverty is a major risk factor for social exclusion, just as, conversely, exclusion is a major roadblock to escaping poverty. In the current state of things, because the historical data is too recent, it is difficult to make a judgment on the basic trends of a large number of indicators. However, in spite of the apparent improvement in some indicators, social exclusion associated with poverty remains a preoccupation.

INTRODUCTION

One of CEPE's mandates is to publish an annual report on the poverty situation in Québec. The current report[1], after recalling the thresholds of various measures and the observed rates for each of them, presents comparisons made possible by those measures. Whether interregional, interprovincial or international, those comparisons can be used to situate each region with respect to the others, to Québec as a whole, to Québec with regard to the other provinces, to Canada as a whole and finally to Québec considered as a distinct entity on the international stage, with respect to other countries or comparable nation states. The tables presented in the previous edition (CEPE, 2017) have been updated, sometimes with minor adaptations or changes, which are always noted (section 1).

From the standpoint of the experience of poverty, it is, however, by comparing changes in various living situations as revealed by the implicit thresholds that Québec's progress relative to itself can be measured (section 2).

Among the measures of inequality, Gini coefficients and interdecile ratios are presented. Complementary indicators of the gap (extent), the intensity and severity of poverty also make it possible to characterize the situation of persons, by completing the picture given by those rates. The indicator of the severity of poverty makes it possible to incorporate inequalities among the poor themselves as a measure of poverty aversion. Surplus family income, taken from the sustainable development series of indicators makes it possible to characterize inequality changes. Finally, patrimony inequality changes round out this section (section 3).

A new section, on exclusion social, has been added to this report. It is an update of data first published in the *CEPE Advisory Opinion on Exclusion* (LECHAUME and SAVARD, 2015). In the future, the annual CEPE progress report will include all the social exclusion indicators recommended in that Advisory Opinion (section 4).

The years marking the beginning and end of the selected time series may vary depending on the nature of the indicators and the availability of data. For most of the indicators, the longest available series are presented, so as to properly characterize recent years and ensure a certain continuity from one type of situation to another.

Some of the selected indicators, particularly the low income measures, have their own particularities. Thus, for the MBM, the series now begin only in 2002 (since the previous data can no longer be used) because of calculation changes related to shelter. For the LIM, the series published by the Institut de la statistique du Québec begin in 1997, but only the series since 2002 are used here, so as to harmonize them with the MBMs. At the international level, the available data often begin in 2001. For implicit thresholds, the situations in 2004 and 2017 are compared, that is, just before the financial initiatives of the first government action plan to combat poverty and social exclusion (2004-2010), which were implemented in January 2005 (child assistance, work premium and social housing) [GOUVERNEMENT DU QUÉBEC, MINISTÈRE DE L'EMPLOI, DE LA

1. CEPE's 2009 Advisory Opinion gives definitions for existing poverty and inequality measures. Among the low income measures, the low income cut-off (LICO) thresholds, the low income measure (LIM) and the market basket measure (MBM) are analyzed in detail. The choices of measures used according to various criteria are justified for different situations, in particular the choices made for interregional, interprovincial and international comparisons (CEPE, 2009).

SOLIDARITÉ SOCIALE ET DE LA FAMILLE, 2004]. To measure inequality, it is important to use relatively long time series, which is why we start in 1990 (Gini coefficient for the provinces and interdecile ratios). With the 2016 data, the observation period is more than a quarter of a century. In the case of international Gini coefficients, the series begin in 1995.

Where possible, low income data, in particular LIM data, and inequality measures in Québec, Canada and internationally represent income adjusted for household size (LIM) or family size (MBM, inequality), also referred to as "adult-equivalent income." Adult-equivalent family income is a per capita measure of family income that accounts for the economies of scale that are introduced as families get bigger. The factor takes into account changes in family size over time, thereby eliminating potential biases (CEPE, 2014, Appendix 2).

The appendices at the end of the report contain:

- Some methodological notes that contain in particular several definitions, precisions on the sources of data and on the statistical units used. The appendix is completed by two charts on the makeup of economic families and census families, taken from the 2016 census, as well as an overview of the variables related to those families (Appendix 1);
- A note on the use of a regionally adjusted LIM based on the ratio of the region's MBM to the MBM for Canada, based on a recent Statistics Canada research document (Appendix 2);
- A list of the CEPE steering committee's members, that is all those who participated in the preparation of this progress report (Appendix 3).

Economic context

After years of sluggish economic growth, this progress report on poverty and social exclusion continues in the same vein. After reaching one of the lowest rates of growth in 2016 (1.8 %) since the sharp decline of the real GDP in 2009 in the OECD countries (-3.4 %), the macroeconomic situation at the international level has barely improved following years of modest growth in the advanced economies (1.9 % in 2014, 2.0 % in 2015 and 1.8 % in 2016).

Canada did not escape the tidal wave after its GDP dropped 2.9 % in 2009. With an increase of 1.4 % in the GDP, 2016 is a continuation of the preceding periods even though economic growth showed increases of 2.6 % and 0.9 % in 2014 and 2015 respectively. The economic sluggishness made the job market plummet during those years although job creation showed a modest annual increase of 0.7 % from 2014 to 2016.

The situation in Québec followed the global trend. On average, employment increased at a rate of 0.6 % a year from 2014 to 2016. After the downward trend experienced since the turn of the 21st century, Québec's MBM began rising in 2008, reached 11.8 % in 2012, fell back somewhat in 2014 to 9.4 %, rising again to 10.9 % in 2015 and finally went down to 8.6 % in 2016. An analysis of the recent MBM trend shows that it has known some variations over the last few years, with a downward trend on the whole period.

Although the number of last-resort financial assistance beneficiaries is not, strictly speaking, an indicator of poverty[2], it informs us on people's financial independence. After constant declines since 1997, the number of households receiving last-resort financial assistance increased in 2009

2. The number depends in part on parameters specific to social assistance plans that are set by governments.

(+1.5 %) and in 2010 (+0.6 %)[3]. As of 2011, however, the number of distinct households receiving last-resort financial assistance began to decline again. Since 2011, that number decreased by 1.4 % on average each year.

Although the economic situation has improved since the financial crisis, the upturn has occurred in the presence of persistent uncertainty in all the advanced economies. The United States, which had great difficulty in getting out of the economic slump that has persisted since the beginning of the recession, now seems on the right path, with stronger growth and falling unemployment. The OECD (2017) anticipates modest gains in the overall worldwide economy in a context of political uncertainties remaining high, eroded confidence in governments and the continued presence of inequalities. However, the OECD believes the Canadian economy should see higher growth in 2017 and 2018 because of an expansionist budget policy, which should benefit to the Québec economy.

3. Yearly averages of the number of distinct households.

KEY POVERTY AND INEQUALITY DATA

1. LOW INCOME

The best-known measures of low income are the market basket measure (MBM)[4], the low income measure (LIM)[5] and low income cut-off (LICO)[6]. While their methodology differs, all of these measures entail the establishment of a baseline threshold and systematic computations based thereon. They are also all founded on objective and subjective elements in the selection of criterion or criteria for establishing the threshold.

Of the above three measures, CEPE concluded that the MBM offers the most advantages in terms of methodology and recommended using it as the baseline measure for monitoring situations of poverty from the perspective of meeting basic needs. It also deemed that, within a range of possible low income thresholds, the MBM does not constitute a threshold for exiting poverty, something that remains very difficult to evaluate using current measures (CEPE, 2009).

The CEPE recommended using LICOs and the LIM only in very specific circumstances. LICOs can be useful for examining long time series in one province at a time. However, owing to the biases of the measure, LICOs should not be used for interprovincial comparisons, because of various measurement biases and given that they do not account for differences in costs of living differentiated by province. It was thus decided to stop presenting them after the 2012 progress report. Although the LIM is not, strictly speaking, a measure of inequality, it nevertheless reveals inequalities because it is based on income medians. The LIM is the most commonly used low income measure for interregional and international comparisons.

1.1 Main thresholds

The MBM thresholds are shown according to the size of the family unit and the size of the community type (Table 1).

4. A low income household is considered to be one whose income is below the cost of a market basket determined on the basis of the household's community or a community of the same size. The basket includes selected goods and services: food, clothing, footwear, shelter, transportation and others (personal care, household needs, furnishings, telephone service, reading, leisure and entertainment). The measure is based on disposable income, that is, after-tax income less some non-discretionary expenses (social contributions, childcare, support payments) (Hatfield et al., 2010).

5. A family unit is considered to be a low income unit where income, adjusted to the size and composition of the family is less than 50 % of the median adjusted income (STATISTICS CANADA, 2015b).

6. A family unit is considered to be a low income unit where at least 64.6 % of its income is devoted to clothing, food and shelter, which is 20 percentage points more than the average Canadian family. These thresholds were calculated based on the Survey of Family Expenditures (SFE) of 1992, then indexed annually to the consumer price index (CPI) of Canada. The thresholds vary depending on the size of unit and the size of the community type (STATISTICS CANADA, 2015b).

Table 1 Low income thresholds, based on the market basket measure (MBM), for selected family and community types, 2016, Québec

	Rural regions	Less than 30 000	From 30 000 to 99 999	From 100 000 to 499 999	Québec CMA	Montréal CMA
1 person	17 312	17 357	16 485	16 974	17 270	17 714
2 persons	24 483	24 547	23 313	24 004	24 423	25 051
3 persons	29 985	30 063	28 553	29 399	29 913	30 682
4 persons	34 624	34 714	32 970	33 947	34 540	35 428
5 persons	38 711	38 811	36 862	37 954	38 617	39 610
6 persons	42 406	42 516	40 380	41 576	42 303	43 390
7 persons or more	45 803	45 922	43 615	44 908	45 692	46 867

CMA: census metropolitan area.
Source: STATISTICS CANADA, CANSIM 206-0093; CEPE compilation, April 2018.

Each low income measure is determined according a different method. One must not confuse the thresholds of the LIM, based on income and those of the MBM, based on the cost of a basket that can be purchased with the disposable income. The income corresponding to the reference thresholds for 2015 (LIM) or 2016 (MBM), converted to estimated 2018 dollars, is shown in Table 2. In the case of the MBM, the after-tax income needed to purchase a basket of goods varies considerably depending on the family unit's non-discretionary expenses. On average, we estimate that income must be increased by 7 % with respect to the basket cost so that a family unit has the means to purchase that basket (FRÉCHET et al., 2010a). The amounts corresponding to the low income thresholds are indicated below.

Thus, the Montréal MBM threshold for unattached individuals, indexed to $18 336 in 2018 and grossed up to a corresponding estimated median after-tax income of $19 618, can be compared with the LIM-50, indexed to $20 504. It may happen that the MBM and LIM thresholds are virtually the same some years and farther apart in others. However, these measures are constructed very differently and this relative position could change at any time.

Table 2 **Low income thresholds based on various low income measures, selected family and community types, current dollars and 2018 dollars (estimated), Québec**

	Current $	2018 Estimated $	Corresponding average after-tax income (estimated) (2018 $)
Maket basket measure (MBM) (Montréal CMA, 2016)			
Unattached persons	17 714	18 335	19 618
Lone-parent families (1 child)	25 051	25 929	27 744
Childless couples	25 051	25 929	27 744
Two-parent families (2 children)	35 428	36 669	39 236
Low income measure (LIM), after tax (2015)			
Unattached individuals	19 669	20 504	20 504
Lone-parent families (1 child)	27 815	28 998	28 998
Childless couples	27 815	28 998	28 998
Two-parent families (2 children)	39 337	41 009	41 009

CMA: census metropolitan area.
The value of the consumer price index (CPI) in 2018 was estimated by the MINISTÈRE DES FINANCES DU QUÉBEC[7].
Source: STATISTICS CANADA, CANSIM 206-0093; CEPE compilation, April 2018.

1.2 Low income rate

In keeping with the CEPE's main recommendation that the MBM be used as the baseline measure to monitor situations of poverty from the perspective of meeting basic needs, and with another recommendation to use the LIM for international comparisons, they are the only two measures discussed in this report.

Statistics Canada has revised the 2006 to 2011 MBM data so as to be able to compare them with the 2012 to 2016 data. Thus, the data can be considered to have been harmonized with that published from 2006 to 2016. Here, they are, nevertheless presented since 2002 (when the MBM series began), that is for all the years from 2002 to 2016, which, consequently, has a rupture between 2005 and 2006. Because of the harmonization, they also differ from those shown in our progress reports prior to 2016.

Furthermore, although the revision of the data for 2006 to 2011 was intended to make the estimations in the *Survey of Labour and Income Dynamics* (SLID) as comparable as possible to the data shown in the *Canadian Income Survey* (CIS), the observed trends may still contain a rupture for certain characteristics, because of the methodological change[8].

7. "Total CPI growth should gradually pick up pace in Québec, climbing from 0.7 % in 2016 to 1.6 % in 2017 and 1.9 % in 2018." MFQ, *The Québec Economic Plan, March 2017*, p. C-25.

8. "An important difference between the two surveys is in their design; SLID was a longitudinal survey in which the same respondents were interviewed each year for a six year period, while CIS is a cross-sectional survey where respondents are only interviewed once. SLID estimates can differ from those of CIS as a result of coverage and response differences. Coverage issues include an undercoverage of recent immigrants in SLID, as new immigrants to Canada were only added to SLID when a fresh panel was

In the case of the LIM, the Québec series have not been harmonized and, since their publication by the Institut de la statistique (ISQ), are based on a certain number of compilations, the data for 2012 and 2015 must be considered as being affected by a series rupture, which is apparent between 2011 and 2012. These series ruptures are noted in the footnotes to tables for each occurrence.

1.2.1 Market basket measure (MBM)

The market basket measure (MBM) developed by Employment and Social Development Canada (ESDC) and published by Statistics Canada, is based on a specific basket of goods and services[9].

The cost of the goods and services contained in the market basket is calculated for a reference family of four. It is subsequently calculated for all other family sizes, using the square-root-of-family-size equivalence scale (FRÉCHET et al., 2010b). The cost of the goods and services is calculated for a number of communities and community sizes. The MBM thus accounts for differences in costs of living across 49 communities and community sizes in Canada.

In 2011, Employment and Social Development Canada devised a new methodology for calculating shelter costs that captures the advantage homeowners without mortgages have compared to renters. The series has thus been rebased since 2002, that is, the year in which mortgage-related data were available, and the MBM "2011 base" is now used as the reference. The publication rules based on the coefficient of variation have been taken into account[10].

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introduced. Response differences include the effects of sample attrition over the length of the SLID panel. Sample attrition refers to the fact that, in a longitudinal survey, fewer and fewer members of the original sample are interviewed each year due to refusal to continue participating, or inability to find respondents following a move. As a cross-sectional survey, neither of these issues are present in CIS." (Statistics Canada, 2015c, p. 5).

9. The market basket includes the following categories of items:
   1. food
   2. clothing and footwear
   3. shelter
   4. transportation (public transit in urban areas, vehicle in rural areas)
   5. other goods and services (e.g. furniture, telephone, household products, recreation)

   The disposable income available to purchase the above goods and services is calculated by deducting the following expenditures from total family income:
   - childcare
   - non-insured health-related expenses such as dental and vision care
   - personal income taxes and contributions to the Canada Pension Plan (CPP), the Québec Pension Plan (QPP) and the Employment Insurance (EI) account
   - support payments and child assistance payments
   - union dues and contributions pension plans

10. The coefficient of variation (CV) is the estimated standard error, expressed as an estimation percentage. According to Statistics Canada's publication rules, values whose CV is ≤ 16.6 % are published without restriction; values whose CV is > 16.6 % and ≤ 33.3 % must be interpreted with **caution** and are marked with an asterisk (*); values whose CV is > 33.3 % are not published. Sample size may be small in some subcategories of persons, which implies a higher coefficient of variation. In all comments where it is noted

Among the main facts, we see (Tables 3 and 4) a decrease in the low income rate based on the MBM from 2002 to 2007, followed by several variations. The rate fell from 10.8 % in 2002 to 8.6 % in 2007 and then went up, reaching 11.8 % in 2012, and finally dropped to 8.6 % in 2016, the historical floor for the whole period :

- A similar decrease followed by an increase is observed for the low income rate for children (persons under age 18) in low income households, the rate for persons aged 18 to 64, the rate for members of lone-parent families and the rate for lone-parent families headed by a woman.
- The low income rate for persons aged 65 and over in low income households remains more or less stable. However, the data for seniors must be used with caution.
- The situation for seniors living alone, men and women, is unusual. There is a sudden increase in 2009. Among the women in this group, for example the rate increases from 5.7 % in 2008 to values varying between 10.8 % and 15.1 % from 2009 to 2012, then falls to 3.9 % in 2016. The data for seniors living alone must be used with caution.
- The low income rate for unattached individuals (23.0 %) is 4.25 times higher than the rate for persons who are members of economic families with at least two persons (5.4 %) in 2016.
- The low income rate for persons in lone-parent families shows several fluctuations, that is, a decrease until 2007, followed by an increase and a decrease. The rate decreases from 32.4 % in 2002 to 19.7 % in 2007, and then increases to around 30 % in 2011, 2012 and 2014, then falls again, finally reaching 20.1 % in 2016. However, these data must be used with caution.

Table 3 Number of persons in low income families based on the market basket measure (MBM 2011 base), Québec, 2002-2016

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
All persons	791 000	747 000	673 000	775 000	757 000	651 000	747 000	779 000	761 000	833 000	939 000	860 000	760 000	890 000	706 000
Persons under age 18	179 000	150 000	127 000	141 000	149 000	105 000	138 000	145 000	122 000	156 000	176 000	172 000	131 000	170 000	124 000
Persons ages 18 to 64	580 000	579 000	532 000	606 000	582 000	520 000	577 000	571 000	568 000	608 000	695 000	650 000	575 000	669 000	530 000
Persons age 65 and over	32 000*	17 000*	14 000*	28 000*	26 000*	27 000*	31 000*	63 000*	71 000	69 000	68 000	39 000*	54 000*	51 000	52 000*
Males	361 000	362 000	343 000	374 000	371 000	310 000	358 000	389 000	392 000	412 000	464 000	440 000	355 000	439 000	372 000
Males under age 18	99 000	82 000	74 000	71 000	73 000*	55 000*	73 000*	81 000*	68 000*	88 000*	79 000	94 000	64 000	84 000*	64 000*
Males ages 18 to 64	249 000	276 000	263 000	295 000	286 000	245 000	272 000	289 000	298 000	299 000	357 000	332 000	265 000	335 000	279 000
Males age 65 and over	F	F	F	F	F	F	F	F	26 000*	25 000*	28 000*	F	26 000*	21 000*	29 000*
Females	430 000	385 000	330 000	402 000	387 000	341 000	389 000	390 000	368 000	421 000	475 000	420 000	405 000	451 000	333 000
Females under age 18	80 000	68 000	52 000	70 000*	76 000*	50 000*	65 000*	64 000*	54 000*	69 000*	97 000	78 000*	67 000*	86 000*	60 000*
Females ages 18 to 64	331 000	304 000	269 000	311 000	296 000	275 000	305 000	282 000	270 000	309 000	338 000	317 000	309 000	335 000	251 000
Females age 65 and over	19 000*	F	F	21 000*	F	F	19 000*	44 000*	45 000*	44 000*	41 000	24 000*	28 000*	30 000*	23 000*
Unattached individuals	273 000	276 000	288 000	332 000	314 000	303 000	310 000	373 000	348 000	358 000	371 000	348 000	343 000	398 000	345 000
Unattached individuals, men	122 000	144 000	161 000	176 000	172 000	155 000	148 000	195 000	185 000	185 000	203 000	192 000	176 000	199 000	203 000
Unattached individuals, women	151 000	132 000	127 000	157 000	142 000	148 000	162 000	179 000	163 000	173 000	168 000	156 000	168 000	199 000	141 000
Unattached individuals, seniors	17 000*	F	F	17 000*	F	F	23 000*	52 000*	48 000*	47 000*	49 000	28 000*	33 000*	38 000*	29 000*
Unattached individuals, male seniors	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
Unattached individuals, female seniors	F	F	F	15 000*	F	F	F	37 000*	33 000*	39 000*	32 000*	19 000*	F	24 000*	F
Unattached individuals, under age 65	256 000	268 000	280 000	315 000	294 000	287 000	287 000	321 000	300 000	311 000	321 000	320 000	311 000	361 000	315 000
Unattached individuals, males under age 65	117 000	142 000	158 000	174 000	163 000	151 000	139 000	180 000	170 000	177 000	186 000	183 000	161 000	185 000	186 000
Unattached individuals, males under age 65	139 000	125 000	123 000	142 000	131 000	136 000	148 000	142 000	129 000	134 000	136 000	137 000	149 000	175 000	130 000
Persons in economic families, two persons or more	518 000	471 000	385 000	443 000	443 000	349 000	437 000	406 000	413 000	475 000	568 000	512 000	417 000	492 000	361 000
Childless couples	95 000*	96 000	82 000*	87 000	84 000	81 000*	87 000	80 000*	78 000*	73 000*	102 000	86 000*	79 000*	67 000*	52 000*
Persons in two-parent families with children	163 000*	142 000*	118 000*	140 000*	173 000*	95 000*	167 000*	136 000*	139 000*	152 000*	237 000	263 000	134 000*	232 000*	157 000*
Persons in lone-parent families	166 000	147 000	115 000	117 000*	109 000*	90 000*	97 000*	118 000*	95 000*	122 000	107 000*	72 000*	98 000*	98 000*	82 000*
Persons in male lone-parent families	17 000*	12 000*	13 000*	11 000*	F	F	F	F	F	F	F	F	F	F	F
Persons in female lone-parent families	149 000	135 000*	102 000	105 000*	101 000*	75 000*	84 000*	107 000*	84 000*	110 000*	99 000*	60 000*	88 000*	91 000*	80 000*

*: Use with caution, coefficient of variation > 16.6 % and ≤ 33.3 %.

F: Data not published.

Caution: There is a series rupture between 2005 and 2006. (*See STATISTICS CANADA [2015a].*)

Source: STATISTICS CANADA, CANSIM 206-0041 and 206-0042 tables; CEPE compilation, April 2018.

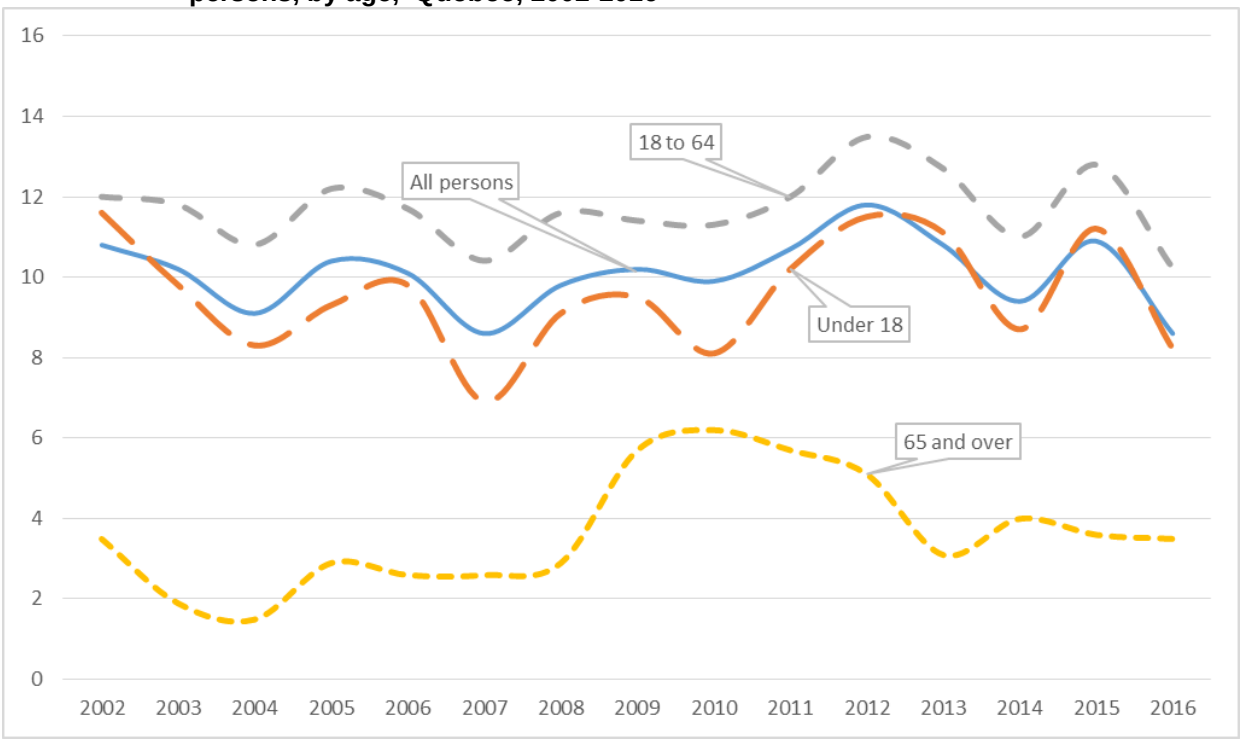
that the data must be interpreted with **caution**, the data are given for information purposes, but it is suggested that they should not be used as a basis for decision making.

Table 4 Low income rates based on the MBM (2011 base), all persons and persons in family units, Québec, 2002-2016

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
All persons	10.8	10.2	9.1	10.4	10.1	8.6	9.8	10.2	9.9	10.7	11.8	10.8	9.4	10.9	8.6
Persons under age 18	11.6	9.8	8.3	9.3	9.8	6.9	9.1	9.5	8.1	10.2	11.5	11.1	8.7	11.2	8.2
Persons ages 18 to 64	12.0	11.8	10.8	12.2	11.7	10.4	11.6	11.4	11.3	12.0	13.5	12.7	11.0	12.8	10.2
Persons age 65 and over	3.5*	1.9*	1.5*	2.9*	2.6*	2.6*	2.9*	5.7*	6.2	5.7	5.1	3.1*	4.0*	3.6	3.5*
Males	10.0	10.0	9.3	10.1	10.0	8.4	9.6	10.3	10.4	10.6	11.9	11.1	8.8	10.9	9.1
Males under age 18	12.6	10.5	9.4	9.1	9.4*	7.1*	9.5*	10.4*	8.9*	10.9*	10.1	11.4	8.3	11.2*	8.2*
Males ages 18 to 64	10.2	11.2	10.6	11.9	11.5	9.8	10.9	11.5	11.9	11.8	14.0	13.0	10.1	12.7	10.6
Males age 65 and over	3.4*	F	F	1.7*	F	F	F	3.9*	5.0*	4.5*	4.8*	2.5*	4.2*	3.2*	4.3*
Females	11.7	10.4	8.9	10.7	10.2	8.9	10.1	10.1	9.5	10.8	11.7	10.5	10.0	11.0	8.1
Females under age 18	10.7	9.1	7.2	9.6*	10.1*	6.6*	8.6*	8.6*	7.3*	9.5*	13.1	10.7*	9.2*	11.3*	8.1*
Females ages 18 to 64	13.7	12.5	11.0	12.6	12.0	11.1	12.2	11.3	10.7	12.3	13.1	12.5	12.0	13.0	9.7
Females age 65 and over	3.7*	2.5*	1.6*	3.8*	2.6*	2.8*	3.2*	7.2*	7.1*	6.6*	5.4*	3.5*	3.8*	3.9*	2.9*
Unattached individuals	23.2	22.8	23.2	26.1	25.1	23.9	24.2	28.6	26.3	26.6	27.1	25.3	23.4	26.8	23.0
Unattached individuals, men	21.8	24.3	25.9	28.0	28.4	25.4	23	28.7	28.1	26.5	29.9	28.5	23.7	26.9	26.7
Unattached individuals, women	24.4	21.4	20.5	24.2	22.1	22.5	25.4	28.5	24.5	26.7	24.2	22.2	23.1	26.7	19.2
Unattached individuals, seniors	5.5*	2.7*	2.5*	5.3*	6.1*	4.6*	6.6*	14.8*	12.9*	12.5*	11.7	6.6*	7.7*	8.5	6.6*
Unattached individuals, male seniors	F	F	F	F	F	F	F	15.3*	12.9*	6.8*	13.5*	F	F	9.1*	12.2*
Unattached individuals, female seniors	5.4*	F	2.1*	6.3*	F	F	5.7*	14.6*	12.9*	15.1*	10.8*	6.5*	6.4*	8.2*	3.9*
Unattached individuals, under age 65	29.3	29.6	30.2	33.0	31.8	31.1	30.9	33.6	31.5	32.0	32.9	33.6	29.7	34.5	29.8
Unattached individuals, males under age 65	24.5	27.9	29.6	32.0	31.7	29.5	25.7	30.9	31.1	30.4	33.3	33.7	26.7	31.4	30.1
Unattached individuals, females under age 65	35.0	31.8	31.0	34.4	31.8	33.0	38.3	37.8	32.0	34.3	32.3	33.5	33.8	38.6	29.5
Persons in economic families, two persons or more	8.5	7.7	6.3	7.2	7.1	5.5	6.9	6.3	6.4	7.3	8.5	7.6	6.3	7.4	5.4
Childless couples	8.9*	8.8	7.4*	7.5	7.1	7.1	7.6	7.1*	7.1*	6.4*	8.6	7.2*	6.9*	5.6*	4.3*
Persons in two-parent families with children	6.1*	5.3*	4.4*	5.3*	6.3*	3.5*	6.0*	4.9	4.9*	5.4*	8.6	10.0	4.8*	8.3*	5.7*
Persons in lone-parent families	32.4	29.5	23.6	22.8	23.8*	19.7*	20.0*	25.9	25.2*	30.4	29.7	14.4*	29.5	23.8*	20.1*
Persons in male lone-parent families	14.8*	F	F	F	F	F	F	F	F	F	F	F	F	F	F
Persons in female lone-parent families	37.3	34.2	27.5	26.9	28.6*	21.5*	22.7*	28.6	26.6*	35.0	35.6	16.8*	35.0	28.0*	23.1*

*: Use with caution, coefficient of variation > 16.6 % and ≤ 33.3 %.
F: Data not published.
Caution: There is a series rupture between 2005 and 2006. (*See STATISTICS CANADA [2015a].*)
Source: STATISTICS CANADA, CANSIM 206-0041 and 206-0042 tables; CEPE compilation, April 2018.

Figure 1 − Low income rates based on the market basket measure (MBM, 2011 base), all persons, by age, Québec, 2002-2016



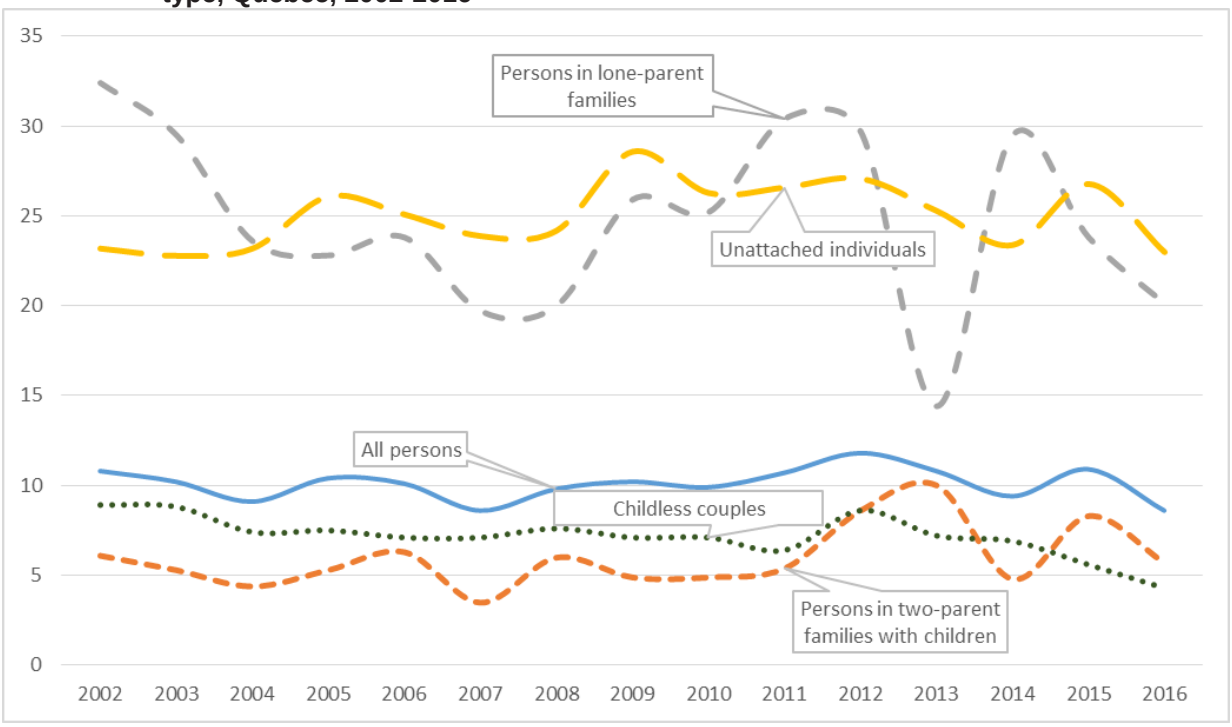
Caution: There is a series rupture between 2005 and 2006. (*See STATISTICS CANADA [2015a].*)
Source: STATISTICS CANADA, CANSIM 206-0041; CEPE compilation, April 2018.

The analysis of the observed trend (Figure 1) allows us to find a sudden increase in 2007 to 2008, which is sharper among children (persons under age 18). Among persons 65 and over, the

increase arrives somewhat later. The low income rate for that age group increases significantly between 2008 and 2010.

Compared with the rate for all persons, for example, unattached individuals and persons in lone-parent families continue to see the highest low income rates (Figure 2). However, the situation of persons in families with at least two members differs considerably depending on whether the family is headed by a single parent or two parents. The low income rate for persons in two-parent families with at least one child has been relatively low since 2002. However, the data specific to persons in families with children must be interpreted with caution because of their small sample size and variability.

Figure 2 – Low income rates based on the market basket measure (MBM, 2011 base) by family type, Québec, 2002-2016



Caution: There is a series rupture between 2005 and 2006. (*See STATISTICS CANADA [2015a].*)
Source: STATISTICS CANADA, CANSIM 206-0042; CEPE compilation, April 2018.

All data for persons aged 65 and over must also be interpreted with caution because of the relatively small sample size. Data for unattached seniors often follow a sawtooth pattern, with wide year-to-year fluctuations. The low income rate among unattached individuals under 65 years of age is often over 30 % during the study period, and basically identical by sex, as we observe the 2016 data for males (30.1 %) or females (29.5 %).

1.2.2 Low income measure (LIM)

According to Statistics Canada's LIM, a household is in low income if its income is less than half the median [11] household income in the population, adjusted for household size and type (CEPE, 2014, Appendix 2). The LIM can be calculated based on before-tax income (LIM-BT) or after-tax income (LIM-AT). Some organizations, such as Statistics Canada, the Organisation for Economic Co-operation and Development (OECD) and the United Nations Development Programme (UNDP), set their low income threshold at 50 % of the median household income, while others, such as the European Union and its member states, set theirs at 60 % of the median. The LIM thus enables international comparisons.

According to this measure, at 50 % of the median, the low income rate for persons aged 16 and over, based on the age and sex of the main income earner, have hardly changed during the 2002-2015 period (Table 5).

Table 5 Low income threshold rate for individuals aged 16 and over, according to the low income measure (LIM), after tax, by the age and sex of the main income earner, Québec, 2002-2015

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
All persons, ages 16 and over	11.0	10.6	10.3	11.0	10.5	10.2	10.4	10.2	11.1	10.9	10.9	10.7	10.3	11.4
Males	9.2	9.5	9.7	9.6	9.6	8.9	9.1	9.6	10.8	10.3	10.5	10.0	9.5	11.2
Females	12.6	11.7	11.0	12.4	11.3	11.5	11.7	10.8	11.4	11.6	11.3	11.4	11.1	11.6
Age														
Under 65	11.6	11.4	11.0	11.5	11.2	10.7	11.1	10.5	11.2	10.8	11.7	11.5	10.7	11.9
Males	9.8	10.5	10.6	10.6	10.3	9.5	9.8	10.3	11.3	10.6	11.5	11.2	9.9	12.1
Females	13.5	12.4	11.4	12.5	12.1	12.0	12.4	10.7	11.2	11.1	12.0	11.8	11.5	11.7
Under 25	14.3	14.0	12.0	13.9	13.3	10.9	10.8	10.6	10.0	9.5	11.8	12.9	8.9	14.7
Males	12.5	13.6	11.6	12.6	13.1	9.7	9.8	13.1	10.5	8.9	10.8	11.0	9.6	17.3
Females	16.1	14.4	12.6	15.3	13.6	12.2	11.7	8.0	9.5	10.3	12.8	14.9	8.2	11.9
25 to 44	9.2	9.5	9.5	8.6	8.2	8.6	9.7	9.5	9.9	9.7	12.1	11.4	10.5	10.5
Males	7.8	8.6	9.7	7.8	7.8	8.0	7.9	8.8	10.0	9.3	11.6	11.5	8.2	9.7
Females	10.6	10.5	9.4	9.5	8.5	9.3	11.6	10.3	9.7	10.1	12.6	11.2	12.8	11.4
45 to 64	13.2	12.4	12.1	13.6	13.3	12.7	12.5	11.3	13.0	12.4	11.4	11.1	11.6	12.2
Males	10.7	11.2	11.2	12.6	11.7	10.9	11.5	10.6	12.8	12.5	11.7	11.0	11.5	12.3
Females	15.6	13.5	12.9	14.5	14.9	14.4	13.4	12.0	13.1	12.3	11.1	11.2	11.6	12.0
65 and over	7.2	6.3	6.8	8.3	6.7	7.7	7.2	8.9	10.5	11.4	7.4	7.3	8.7	9.4
Males	5.8	3.2	3.9	3.7	5.5	5.7	5.3	5.9	8.2	8.7	5.9	4.5	7.7	7.4
Females	8.3	8.7	9.1	11.8	7.8	9.3	8.7	11.4	12.3	13.6	8.7	9.7	9.6	11.1

Caution: There is a series rupture between 2011 and 2012. (*See STATISTICS CANADA [2015a].*)

Sources: STATISTICS CANADA, *Canadian Income Survey (CIS)*; Institut de la statistique du Québec, April 2018.

11. The median splits the population in two, with half the population below the median and the other half, above it.

1.3 Interregional comparisons

To date, the provincial LIM median income has been used for interregional comparisons of low income in Québec. The Institut de la statistique du Québec (ISQ) releases these data annually using federal taxation statistics. These comparisons make it possible to observe that between 2002 and 2014, some regions of Québec show a decline in the LIM low income rate (e.g., Abitibi-Témiscamingue and Gaspésie–Îles-de-la-Madeleine). For others, the rate has been relatively stable (e.g., Laval and Nord-du-Québec). The Chaudière-Appalaches and Capitale-Nationale regions had the most favourable rates in 2014, under 5 %, while the Nord-du-Québec and Montréal regions had the worst rates, at around 15 % (Table 6 and Figure 3).

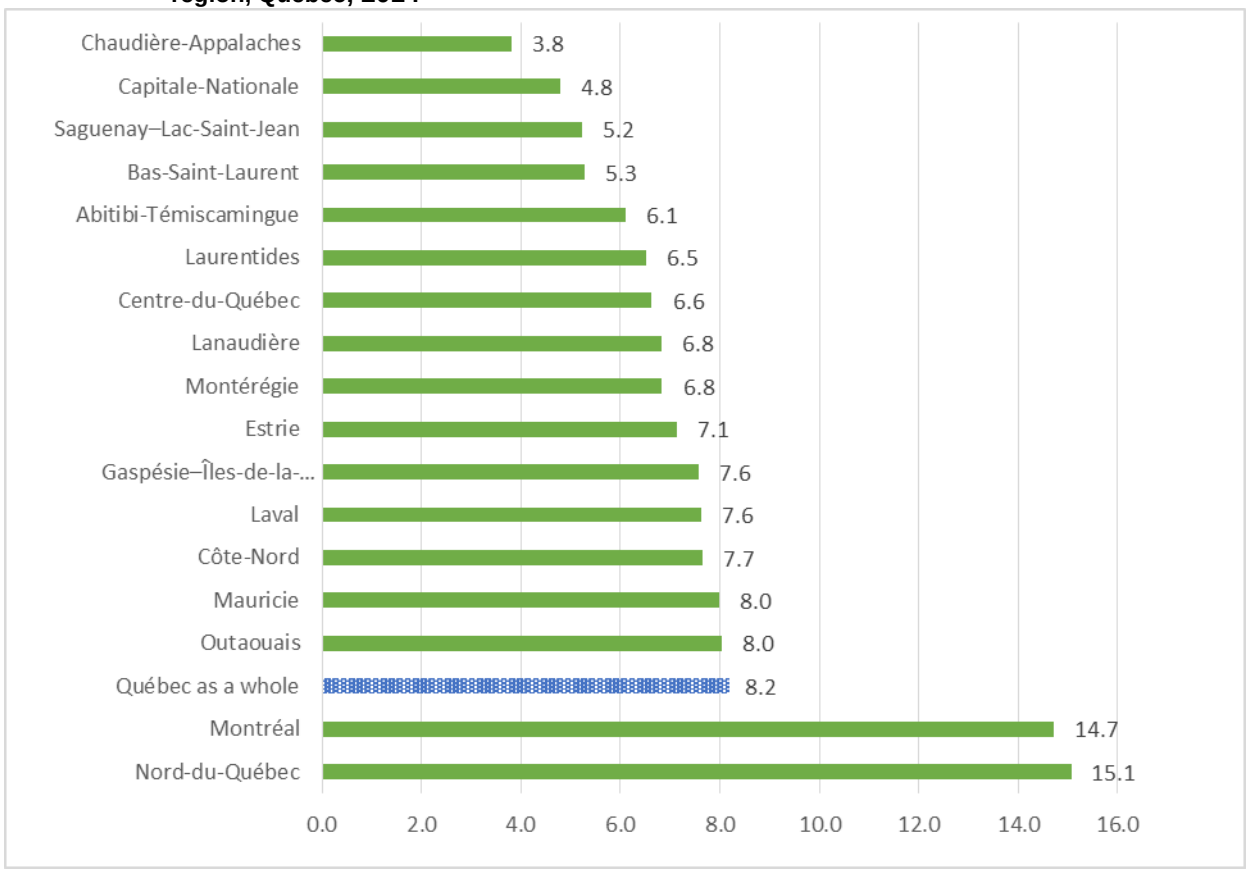
Table 6 Low income threshold rate for families, according to the low income measure (LIM), by administrative region and variation 2002-2014, Québec, 2002-2014

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Variation in percentage points 2002-2014
Bas-Saint-Laurent	8.4	8.4	8.1	7.4	7.3	7.7	7.3	6.9	6.1	5.6	5.3	5.1	5.3	-3.1
Saguenay–Lac-Saint-Jean	8.5	8.4	8.1	7.6	7.2	7.4	7.0	6.7	6.0	5.5	5.0	5.1	5.2	-3.3
Capitale-Nationale	6.9	6.7	6.7	6.2	6.0	6.3	5.9	5.9	5.5	5.1	4.9	4.8	4.8	-2.1
Mauricie	10.4	10.4	10.4	9.9	9.4	10.0	9.7	9.6	8.9	8.3	7.8	8.0	8.0	-2.4
Estrie	8.6	8.8	8.7	8.2	8.4	9.1	9.0	9.1	8.7	8.0	7.5	7.2	7.1	-1.5
Montréal	16.5	17.0	17.1	16.7	16.1	16.8	16.7	17.0	16.6	15.8	15.1	14.7	14.7	-1.8
Outaouais	9.9	9.8	9.8	9.1	9.1	9.4	9.0	8.9	8.4	8.1	7.9	7.9	8.0	-1.9
Abitibi-Témiscamingue	9.9	10.1	9.7	8.6	8.3	8.6	8.1	8.0	7.1	6.4	5.8	5.8	6.1	-3.8
Côte-Nord	10.5	9.9	10.2	9.7	9.7	10.1	10.0	9.7	8.5	8.1	7.5	7.5	7.7	-2.8
Nord-du-Québec	14.4	14.2	15.0	14.8	16.5	17.5	14.9	16.0	15.4	15.2	14.5	15.2	15.1	0.7
Gaspésie–Îles-de-la-Madeleine	11.5	11.0	10.8	10.4	9.9	10.4	10.0	9.7	8.8	8.2	7.5	7.5	7.6	-3.9
Chaudière-Appalaches	5.9	5.8	5.7	5.3	5.3	5.7	5.5	5.4	4.8	4.4	3.9	3.8	3.8	-2.1
Laval	7.5	7.6	7.7	7.3	7.4	8.0	8.1	8.4	8.1	7.8	7.5	7.5	7.6	0.1
Lanaudière	8.5	8.2	7.9	7.3	7.3	8.1	8.0	8.1	7.5	7.0	6.7	6.7	6.8	-1.7
Laurentides	8.5	8.2	8.0	7.4	7.3	8.1	7.9	7.9	7.3	7.0	6.5	6.4	6.5	-2.0
Montérégie	7.8	7.8	7.6	7.2	7.1	8.0	7.8	8.0	7.5	7.2	6.8	6.8	6.8	-1.0
Centre-du-Québec	8.3	8.5	8.4	7.8	7.9	8.5	8.4	8.6	7.8	7.2	6.7	6.6	6.6	-1.7
Québec as a whole	10.2	10.1	10.0	9.6	9.3	9.9	9.7	9.8	9.3	8.8	8.3	8.2	8.2	-2.0

Caution: There is a series rupture between 2011 and 2012. (*See STATISTICS CANADA [2015a].*)

Sources: STATISTICS CANADA, T1 Family File (T1FF); Institut de la statistique du Québec compilation, April 2018.

Figure 3 – Low income rate for families, according to the low income measure (LIM), by administrative region, Québec, 2014



Notes: The data are sorted by rate for each region. No precision measures are available.
Sources: STATISTICS CANADA, Family File (T1FF); Institut de la statistique du Québec; CEPE compilation, April 2018.

Thus, 15 of the Québec administrative regions showed improvement between 2002 and 2014, that is, all regions except Laval and Nord-du-Québec, where there is no change or almost no change.

1.4 Interprovincial comparisons

A comparison using the MBM shows where Quebeckers stand in relation to residents of the other provinces (Tables 7 to 10 and Figure 4). Québec belongs to a group of six provinces (Alberta, Québec Saskatchewan, Manitoba, Newfoundland and Labrador, and Prince Edward Island) which differs from another group of four provinces, whose low income rates were significantly higher in 2016 (Ontario, New Brunswick, British Columbia and Nova Scotia).

An examination of MBM low income rates from 2002 to 2016 is more favourable in certain provinces, like Newfoundland and Labrador or, some provinces in the West of Canada, but most of these had a higher rate than Québec at the beginning of the period. In Newfoundland and Labrador, for example, the variation of 8.9 percentage points can be explained by the fact that the rate fell from 19.7 % in 2002 to 10.8 % in 2016. The drop may be seen in relation to the growth of petroleum industry in that province. Québec, despite some fluctuations, dropped globally from 2002 to 2016, from 10.8 % to 8.6 %.

Table 7 **Low income rates, based on the market basket measure (MBM, base 2011), all persons, by province, and variation 2002-2016, Canada, 2002-2016**

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Variation in percentage points 2002-2016
Newfoundland and Labrador	19.7	16.6	18.4	16.0	14.2	12.1	12.5	13.5	13.6	11.9	11.1	12.0	11.6	12.1	10.8	-8.9
Prince Edward Island	15.1	13.3	12.9	11.6	12.8	10.6	12.2	11.6	13.1	11.8	12.9	15.7	10.7	14.0	11.3	-3.8
Nova Scotia	16.1	16.4	14.5	14.3	13.9	12.9	13.9	15.5	14.7	14.1	15.7	13.4	14.8	13.8	12.9	-3.2
New Brunswick	16.4	16.3	14.9	16.1	14.1	12.4	13.1	13.5	13.7	12.6	14.2	12.9	12.3	13.7	11.8	-4.6
Québec	10.8	10.2	9.1	10.4	10.1	8.6	9.8	10.2	9.9	10.7	11.8	10.8	9.4	10.9	8.6	-2.2
Ontario	12.1	11.8	12.9	12.3	13.9	12.5	11.8	13.4	12.9	13.1	14.0	13.9	12.4	12.9	11.8	-0.3
Manitoba	12.8	11.5	10.9	11.6	11.9	10.0	9.9	12.3	11.4	11.8	11.6	11.2	11.0	12.0	9.4	-3.4
Saskatchewan	13.7	12.7	13.7	13.5	13.1	12.1	10.8	11.4	11.1	10.7	10.3	10.2	10.3	10.7	9.2	-4.5
Alberta	10.5	12.6	12.2	9.9	8.4	7.7	8.1	11.2	9.9	10.7	7.8	7.9	8.3	8.2	8.6	-1.9
British Columbia	19.5	18.8	17.6	15.8	17.1	13.9	13.5	16.2	16.2	17.2	14.3	13.0	13.2	14.8	12.0	-7.5
Canada	13.0	12.7	12.7	12.3	12.7	11.1	11.2	12.7	12.3	12.7	12.7	12.1	11.3	12.1	10.6	-2.4

*: Use with caution, coefficient of variation > 16.6 % and ≤ 33.3 %.

Caution: There is a series rupture between 2005 and 2006. (*See STATISTICS CANADA [2015a].*)

Source: STATISTICS CANADA, CANSIM 206-0041; CEPE compilation, April 2018.

Table 8 **Low income rates, based on the market basket measure (MBM, base 2011), persons under age 18, by province, and variation 2002-2016, Canada, 2002-2016**

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Variation in percentage points 2002-2016
Newfoundland and Labrador	28.2	22.6	26.0	23.2	18.6	14.9	16.8	19.7	16.9	14.3	13.4	16.2	12.1	14.1*	11.7*	-16.5
Prince Edward Island	18.3	18.0*	16.9*	13.4*	14.1*	12.3*	15.9*	14.4*	21.5*	15.3*	13.8*	20.4*	8.3*	14.6*	15.4*	-2.9
Nova Scotia	23.9	23.9	21.2	19.7	18.1	16.3	16.0	18.5	16.9	19.7	23.8	17.5	19.8*	15.7*	14.0	-9.9
New Brunswick	20.6	22.0	19.1	20.9	17.8	16.2	17.2	18.4	15.6	14.1	17.5	17.8	17.8	14.6*	14.3*	-6.3
Québec	11.6	9.8	8.3	9.3	9.8	6.9	9.1	9.5	8.1	10.2	11.5	11.1	8.7	11.2	8.2	-3.4
Ontario	15.1	14.5	16.5	16.0	17.5	15.2	13.4	14.8	14.5	14.4	18.4	17.7	13.6	14.4	13.2	-1.9
Manitoba	18.9	16.6	13.3	14.6	13.2	11.5	12.5	16.5	16.9*	18.1	16.0	14.5	16.2	16.4	11.9	-7.0
Saskatchewan	20.0	17.9	18.4*	19.2	19.0	18.3	15.0	15.9	13.1	13.6	12.8	13.0	13.5*	14.7	10.7*	-9.3
Alberta	11.3	15.5	15.2	11.6	9.4	9.1	10.8	14.4	10.5*	11.8	7.4*	9.0*	9.4*	10.0*	7.3*	-4.0
British Columbia	25.3	26.2	24.4	20.7	23.2	19.2	15.4	19.3	18.5	21.6	16.1	14.8	15.1	14.5	12.0	-13.3
Canada	16.1	15.8	15.8	15.0	15.5	13.1	12.6	14.5	13.3	14.3	15.0	14.5	12.4	13.3	11.0	-5.1

*: Use with caution, coefficient of variation > 16.6 % and ≤ 33.3 %.

Caution: There is a series rupture between 2005 and 2006. (*See STATISTICS CANADA [2015a].*)

Source: STATISTICS CANADA, CANSIM 206-0041; CEPE compilation, April 2018.

Table 9 **Low income rates, based on the market basket measure (MBM, base 2011), persons aged 18 to 64, by province, and variation 2002-2016, Canada, 2002-2016**

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Variation in percentage points 2002-2016
Newfoundland and Labrador	19.5	16.8	18.6	15.9	14.5	12.4	12.8	13.4	13.7	11.8	11.3	12.1	11.6	12.5	12.0	-7.5
Prince Edward Island	14.8	12.9	12.0	10.9	12.0	10.2	11.0	10.8	11.4	10.3	12.9	14.4	11.5	14.9	11.1	-3.7
Nova Scotia	15.5	16.1	14.3	14.3	14.3	13.3	14.8	15.8	15.0	13.8	15.7	13.7	15.5	15.0	15.2	-0.3
New Brunswick	16.9	16.3	15.2	16.6	14.8	13.2	14.0	14.1	14.7	13.3	14.5	13.1	12.5	14.9	12.3	-4.6
Québec	12.0	11.8	10.8	12.2	11.7	10.4	11.6	11.4	11.3	12.0	13.5	12.7	11.0	12.8	10.2	-1.8
Ontario	12.6	12.4	13.6	12.8	14.5	13.4	12.6	14.5	14.0	13.9	14.7	14.9	14.2	14.3	12.9	0.3
Manitoba	12.5	11.4	11.6	12.1	13.3	10.9	10.7	12.4	11.2	11.7	11.8	11.9	10.9	12.2	10.2	-2.3
Saskatchewan	13.6	13.4	14.3	13.8	13.3	12.2	10.8	11.5	12.0	10.9	10.9	10.8	10.8	10.7	9.8	-3.8
Alberta	11.5	13.0	12.6	10.6	9.0	8.0	8.1	11.4	10.7	11.6	8.7	8.7	8.7	8.7	9.9	-1.6
British Columbia	19.6	18.6	17.8	16.3	17.5	14.0	14.1	17.2	17.6	17.7	15.7	14.4	14.4	16.7	13.5	-6.1
Canada	13.6	13.4	13.5	13.1	13.6	12.0	12.0	13.6	13.3	13.5	13.6	13.3	12.6	13.4	11.9	-1.7

*: Use with caution, coefficient of variation > 16.6 % and ≤ 33.3 %.
Caution: There is a series rupture between 2005 and 2006. (*See STATISTICS CANADA [2015a].*)
Source: STATISTICS CANADA, CANSIM 206-0041; CEPE compilation, April 2018.

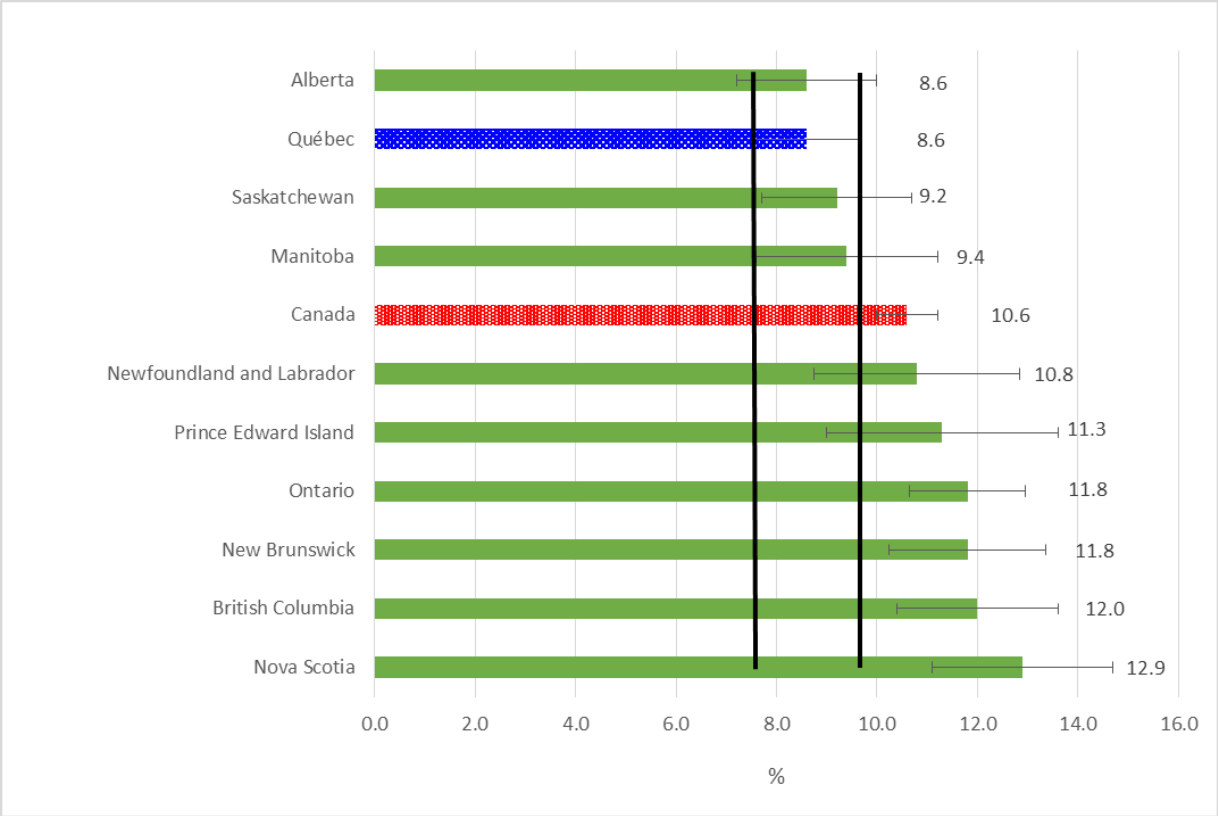
Table 10 **Low income rates, based on the market basket measure (MBM, base 2011), persons aged 65 and over, by province, and variation 2002-2016, Canada, 2002-2016**

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Variation in percentage points 2002-2016
Newfoundland and Labrador	5.8*	5.4*	5.4*	5.7*	6.5*	6.9*	5.6*	6.4*	8.8*	9.6*	7.9*	7.2*	10.7*	8.9	6.3*	0.5
Prince Edward Island	10.7*	7.3*	10.3*	11.9*	14.3*	9.4*	11.9*	11.4*	9.1*	13.7*	11.7*	15.1*	10.9*	10.2*	8.0*	-2.7
Nova Scotia	6.4*	6.7*	5.9*	6.6*	6.5*	6.3*	7.2*	10.8	11.3	9.1	7.3*	8.4	7.5	8.1	4.7*	-1.7
New Brunswick	6.5*	7.2	6.9*	6.4*	5.7*	3.9*	3.7*	4.6*	7.4*	7.6*	9.6	7.2	6.0*	9.0*	7.7	1.2
Québec	3.5*	1.9*	1.5*	2.9*	2.6*	2.6*	2.9*	5.7*	6.2*	5.7	5.1	3.1*	4.0	3.6	3.5*	0.0
Ontario	3.6	3.3	2.5*	2.9*	4.1*	3.5*	5.2*	5.6*	5.4*	7.6*	5.1	4.6*	3.8*	4.9	5.4	1.8
Manitoba	3.4*	2.7*	3.2*	3.6*	3.4*	3.6*	F	4.8*	3.2*	2.7*	3.9*	3.1*	4.1*	4.8*	2.5*	-0.9
Saskatchewan	3.3*	1.4*	3.7*	3.1*	2.9*	2.3*	3.9*	4.2*	F	5.4*	3.9*	3.2*	3.5*	4.8*	4.3*	1.0
Alberta	2.1*	2.7*	2.1*	F	F	F	F	F	2.8*	F	2.6*	F	F	1.9*	3.7*	1.6
British Columbia	9.6*	8.3	6.4	5.5*	6.2*	5.8*	7.6*	7.3*	7.2*	9.4*	6.7	5.3*	6.3	8.1	6.5*	-3.1
Canada	4.5	3.8	3.1	3.5	4.0	3.6	4.6	5.7	5.8	6.8	5.3	4.2	4.5	5.1	4.9	0.4

*: Use with caution, coefficient of variation > 16.6 % and ≤ 33.3 %.
F: Data not published.
Caution: There is a series rupture between 2005 and 2006. (*See STATISTICS CANADA [2015a].*)
Source: STATISTICS CANADA, CANSIM 206-0041; CEPE compilation, April 2018.

Interprovincially, Québec compares favourably to the rest of the provinces in terms of low income among all persons and among children and seniors.

Figure 4 − Low income rates based on the market basket measure (MBM 2011 base), all persons, Canada and the provinces, 2016



Note: The two vertical black lines represent the lower and upper limits of Québec's 95 % confidence interval.

Source: STATISTICS CANADA, CANSIM 206-0041; CEPE compilation, April 2018.

In a recent study, McGill scholars have used the LIM adjusted to the median income of each province, which is a new way to characterize this measure. Statistics Canada publishes only the pan-canadian LIM, leading to measurement biases due to differences in median income across provinces (that is why the ISQ has been calculating the LIM for a long time using the Quebec median). In this study, the authors have calculated the LIM for each province and came to some interesting observations regarding the interprovincial comparisons of low income. With the exception of unattached individuals, whose rates are comparable to those of the other provinces, Québec scores significantly better in other categories, especially that of families with children (VAN DEN BERG, Axel et al., 2017).

An examination of MBM low income rates from 2002 to 2016 in selected census metropolitan areas (CMAs)[12] shows that Montréal (10.1 % in 2016) performs well compared with other major cities in Canada, outpacing Toronto (14.7 %) and Vancouver (11.9 %). However, the Montréal CMA has a low income rate that is higher than the Québec CMA rate. Finally, the analysis of the observed variation in low income rates based on the MBM from 2002 to 2016 shows that the rate

12. A census metropolitan area is formed by one or more adjacent municipalities centered around a core. A CMA must have a total population of at least 100 000, of which 50 000 or more must live in the core.

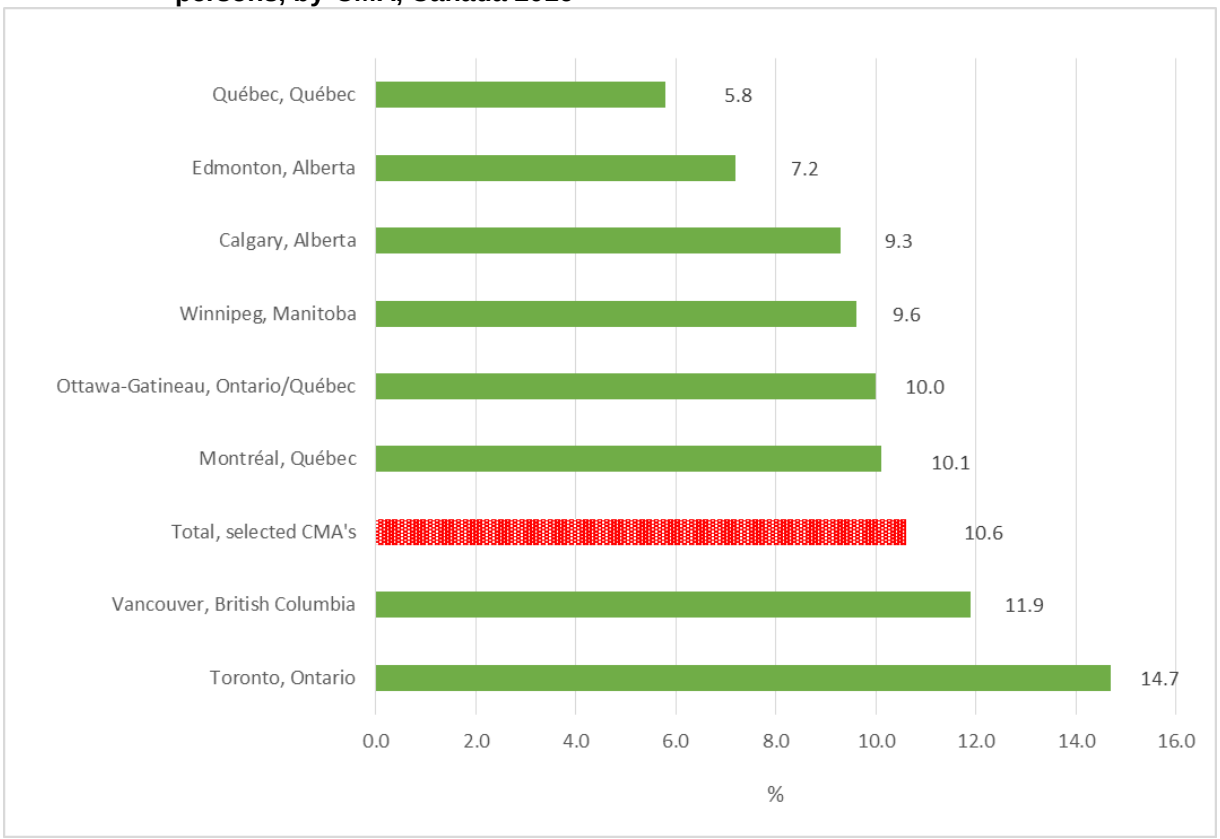
is more favourable in some CMAs, including Edmonton and Vancouver. At the other end, it is less favourable in Toronto (Table 11 and Figure 5).

Table 11 Low income rates based on the market basket measure (MBM 2011 base), all persons, by CMA, and variation between 2002 and 2016, Canada, 2002-2016

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Variation in percentage points 2002-2016
Total. selected census metropolitan areas	13.0	12.7	12.7	12.3	12.7	11.1	11.2	12.7	12.3	12.7	12.7	12.1	11.3	12.1	10.6	-0.9
Québec. Québec	8.1*	7.4*	6.6*	7.0*	5.6*	6.8*	4.4*	3.6*	5.8*	6.3*	9.3*	5.1*	9.3*	6.3*	5.8*	-1.8
Montréal. Québec	11.9	11.6	9.3	11.0	12.0	10.1	12.4	12.7	11.1	12.4	14.3	13.7	9.5	13.4	10.1	1.5
Ottawa-Gatineau. Ontario/Québec	11.0*	12.7	12.3	10.2	11.0	8.5	13.2*	10.8*	11.6*	10.5*	11.8	12.9*	10.9*	12.9	10.0	1.9
Toronto. Ontario	14.2	12.2	14.1	14.8	17.5	16.3	14.3	16.5	16.2	16.2	18.2	17.6	16.3	16.2	14.7	2.0
Winnipeg. Manitoba	12.7	10.0	9.6	9.8	10.8	9.0	9.7	11.3	10.3	10.4	12.7	12.3	10.5	13.2	9.6	0.5
Calgary. Alberta	10.2	14.7	10.3	9.4	8.3	6.9	7.3*	9.4	9.9	10.9	9.0*	9.9*	8.9*	9.8*	9.3*	-0.4
Edmonton. Alberta	9.9*	8.5	10.6	8.2	7.1	5.9	7.7	12.3	9.6	10.9	6.4*	7.3*	9.0*	6.4*	7.2	-3.5
Vancouver. British Columbia	20.4	18.2	17.8	15.9	19.4	15.5	14.9	18.8	16.8	18.9	13.9	13.1	14.0	16.4	11.9	-4.0

*: Use with caution, coefficient of variation > 16.6 % and ≤ 33.3 %.
Caution: There is a series rupture between 2005 and 2006. (*See STATISTICS CANADA [2015a].*)
Source: STATISTICS CANADA, CANSIM 206-0041; CEPE compilation, April 2018.

Figure 5 − Low income rates based, on the market basket measure (MBM 2011 base), all persons, by CMA, Canada 2016



Notes: Sorted according to the rate for each region. No precision measures are available.
Source: STATISTICS CANADA, CANSIM 206-0041; CEPE compilation, April 2018.

1.5 International comparisons

For international comparisons, most countries use thresholds of 50 % or 60 % of median income, depending on the standard in force in the countries being compared. The results of national surveys conducted to produce statistics on income and living conditions (EU-SILC) enable a comparison of low income rates using the threshold of 60 % of median income. The standard errors for these data also call for qualification of the observed differences between countries. Québec, considered as a distinct entity can thus be compared with a subset of 18 of the most economically developed OECD countries[13]. In fact, the comparison is between several countries and a province. The data provided by the EU-SILC make it possible to determine a certain comparability between the member countries (to which are added here Canada in its totality and Canada without Québec), but also, despite the limits unavoidably imposed by several national surveys involved, a comparability with the Québec results. In 2014, Québec, according to the 60 % of median income threshold, is in a group of countries outpaced by another, better performing group (Table 12 and Figure 6).

The estimated confidence intervals make it possible to identify the countries that are similar to Québec and those that are different in a statistically significant manner with respect to low income rates[14]. According to Figure 6, in 2014, Québec is still not among the industrialized countries with the fewest poor people. Section 4 of the *Act to combat poverty and social exclusion* provides as follows: “The national strategy is intended to progressively make Québec, by March 5, 2013, one of the industrialized nations having the least number of persons living in poverty, according to recognized methods for making international comparisons.” In this regard, Québec is outpaced significantly by a group of six countries (Norway, Netherlands, Denmark, Finland, France and Switzerland). It is part of a second group (Austria, Sweden, Belgium, Québec Luxembourg, Ireland, Germany and the United Kingdom) which significantly outpaces a third group (Italy, Portugal, Greece and Spain). The absence of a confidence interval for Canada in its totality and Canada without Québec makes it impossible to situate them with respect to Québec. Thus, we may observe higher rates for them than for Québec without knowing if that difference is statistically significant.

13. The 18 countries include the EU-15 Member States plus Canada, Norway and Switzerland. The EU-15 countries are referred to as the most economically developed member countries in the European Union. The EU-15 member states are: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden and United Kingdom. The situation of the United States could be added here, but in this particular case, the measure in effect (Orshansky thresholds and the Supplemental Poverty Measure) are based on calculation methods that do not allow international comparisons. The U.S. is also an OECD country, but the OECD data on low incomes are less rigorously compiled than Eurostat data.

14. Although the surveys providing the European countries’ data are not necessarily identical from one country to another, the survey framework (EU-SILC) ensures respect for certain criteria (primarily the minimum sample sizes), so as to ensure comparability (EUROSTAT, 2018).

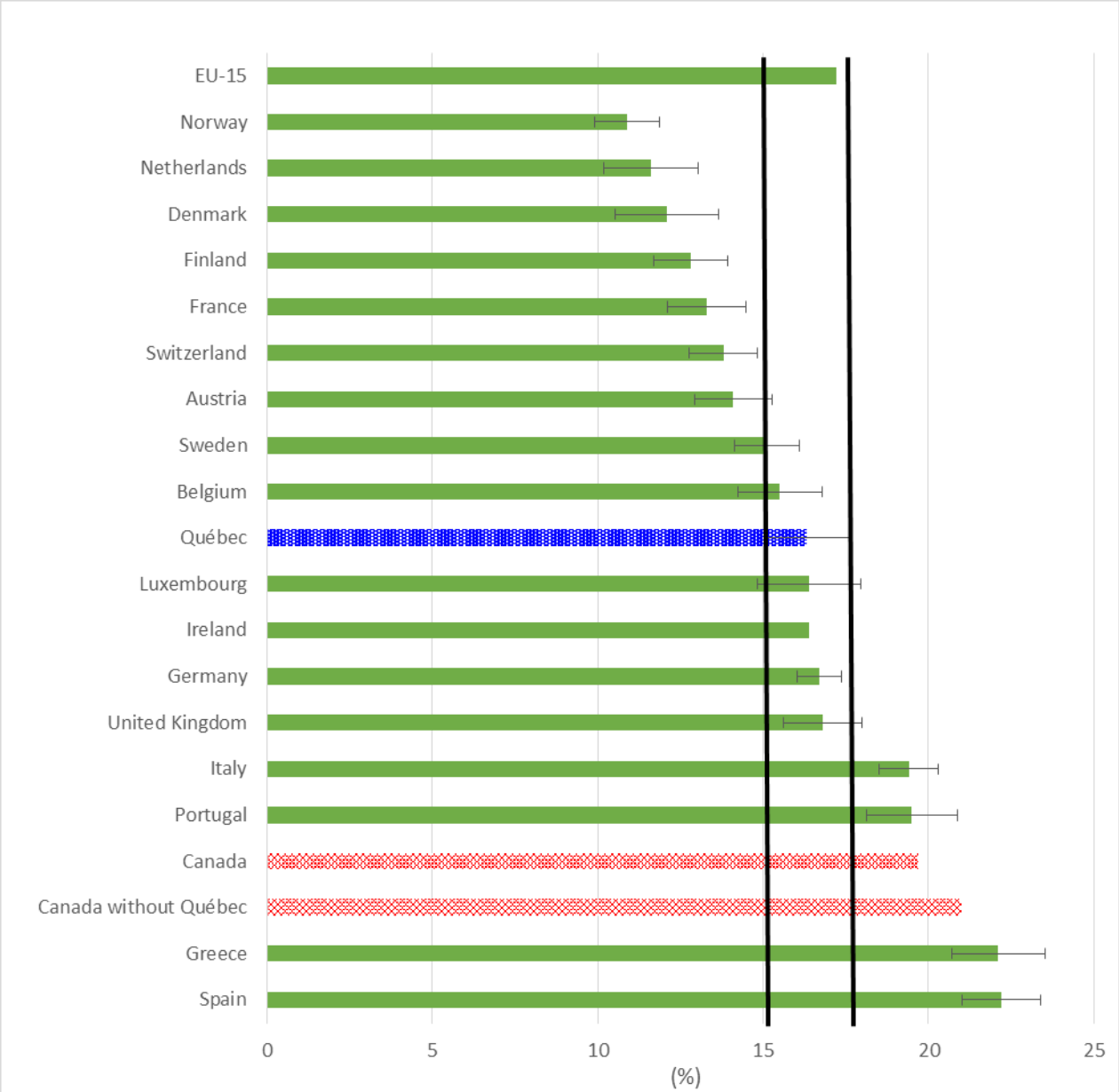
Table 12 **Low income rates at 60 % of adjusted median after-tax income, all persons in households, by country, 2014**

Country	Low income rate	Standard Error	Lower limit 95%	Upper limit 95%
EU-15	17.2	n.d.	n.d.	n.d.
Norway	10.9	0.50	9.9	11.9
Netherlands	11.6	0.73	10.2	13.0
Denmark	12.1	0.80	10.5	13.7
Finland	12.8	0.57	11.7	13.9
France	13.3	0.60	12.1	14.5
Switzerland	13.8	0.53	12.8	14.8
Austria	14.1	0.60	12.9	15.3
Sweden	15.1	0.50	14.1	16.1
Belgium	15.5	0.65	14.2	16.8
Québec	16.3	0.67	15.0	17.6
Luxembourg	16.4	0.80	14.8	18.0
Ireland	16.4	n.d.	n.d.	n.d.
Germany	16.7	0.34	16.0	17.4
United Kingdom	16.8	0.60	15.6	18.0
Italy	19.4	0.46	18.5	20.3
Portugal	19.5	0.70	18.1	20.9
Canada	19.7	n.d.	n.d.	n.d.
Canada without Québec	21.0	n.d.	n.d.	n.d.
Greece	22.1	0.72	20.7	23.5
Spain	22.2	0.60	21.0	23.4

Notes: Low income threshold set at 60 % of median income (Québec median in the case of Québec). The 95 % confidence interval limits are provided;
n.d.: no data.

Sources: STATISTICS CANADA; EUROSTAT (2018), European Union Survey on Income and Living Conditions; CEPE compilation, April 2018.

Figure 6 − Low income rates at 60 % of adjusted median after-tax income, all persons in households, by country, 2014



Notes: Low income threshold set at 60 % of median income (Québec median in the case of Québec). The 95 % confidence interval limits are provided (except for EU-15, Ireland and Canada, for which data is not available). The black vertical lines show the estimated confidence interval limits for Québec.

Sources: STATISTICS CANADA, Canada Income Survey (CIS); EUROSTAT (2018), European Union Survey on Income and Living Conditions (EU-SILC), CEPE compilation, April 2018.

In 2014, Québec is still behind the Scandinavian countries (except Sweden) and several other countries with respect to the rate for persons living in poverty, based on recognized methods for making international comparisons.

1.5.1 Changes over time

Between 2001 and 2014, a subset of 15 European countries (EU-15) saw its low income rate (using the threshold of 50 % of median income) increase by 0.8 percentage points on average. If Québec had been considered as a distinct entity, its rate[15] would have increased 0.4 percentage points. In terms of the low income rate (at 60 % of the median), most of the countries showed increasing rates, during the same period, Québec's rate increased by 0.6 percentage points. Note however that several countries had relatively low starting rates (in 2001). Several of them had rates below 6 % at the 50 % of median threshold, and they were still in a better position than Québec in 2014, in spite of the increases observed (Table 13).

Table 13 After-tax low income rates (50 % and 60 % of adjusted median income), all persons in households, by country, and variation between 2001 and 2014

Country	2001 rate (%)		2014 rate (%)		Variation in percentage points, 2001-2014	
	50 %	60 %	50 %	60 %	50 %	60 %
Ireland	15.0	21.0	8.8	16.4	-6.2	-4.6
United Kingdom	10.0	18.0	9.5	16.8	-0.5	-1.2
Portugal	13.0	20.0	13.8	19.5	0.8	-0.5
Norway	n.d.	11.0	6.2	10.9	n.d.	-0.1
France	6.0	13.0	6.7	13.3	0.7	0.3
Italy	13.0	19.0	12.7	19.4	-0.3	0.4
Netherlands	6.0	11.0	5.9	11.6	-0.1	0.6
Québec	**10.2**	**15.7**	**10.6**	**16.3**	**0.4**	**0.6**
UE-15	9.0	15.0	9.8	16.4	0.8	1.4
Finland	4.0	11.0	5.5	12.8	1.5	1.8
Denmark	4.0	10.0	6.6	12.1	2.6	2.1
Austria	6.0	12.0	8.2	14.1	2.2	2.1
Greece	14.0	20.0	15.8	22.1	1.8	2.1
Canada	**11.2**	**17.5**	**12.6**	**19.7**	**1.4**	**2.2**
Belgium	6.0	13.0	8.6	15.5	2.6	2.5
Canada without Québec	**11.6**	**18.4**	**14.1**	**21.0**	**2.5**	**2.6**
Spain	13.0	19.0	15.9	22.2	2.9	3.2
Luxembourg	6.0	12.0	8.1	16.4	2.1	4.4
Germany	6.0	11.0	10.5	16.7	4.5	5.7
Sweden	5.0	9.0	8.5	15.1	3.5	6.1
Switzerland	n.d.	n.d.	7.8	13.8	n.d.	n.d.

Note: Québec median in the case of Québec; Canada median is the case of Canada and Canada without Québec.

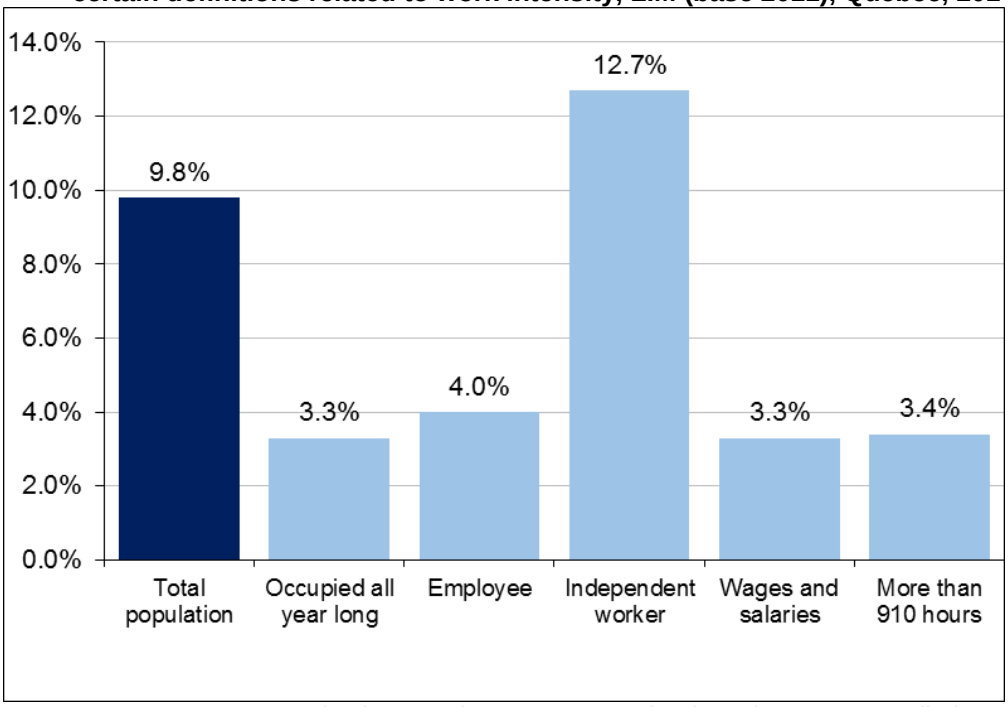
Sources: STATISTICS CANADA, Canadian Income Survey (CIS); EUROSTAT (2018), European Union Survey on Income and Living Conditions (EU-SILC); CEPE compilation, April 2018.

15. In Table 6, the 8.2 % rate shown for the LIM 50 % for Québec in 2014 is the rate for families, whereas in Table 13, the rate shown is for people in households (to conform with the European definitions).

1.6 The working poor

Low-income work is an important issue among frequently raised that concern the fight against poverty. In fact, if work is often an effective gateway for leaving a low-income situation, access to employment is not always the key to a decent standard of living. The proportion of low-income workers (based on the definitions used here)[16] is shown in the following graph (Figure 7). That population includes people aged 18 to 64 who were not pursuing full-time studies during the reference year[17]. We immediately see that for all except self-employed workers, having a job considerably reduces the risk of living in a low-income situation, regardless of the definition used.

Figure 7 − Low income rate for people aged 18 to 64 not pursuing full-time studies, based on certain definitions related to work intensity, LIM (base 2011), Québec, 2014



Source: STATISTICS CANADA, *Survey of Labour and Income Dynamics (SLID)*, CEPE compilation, April 2018.

16. The definition used to characterize work intensity has a direct influence on the proportion of low-income workers in the overall population. Thus, choosing activity status as a variable of intensity (someone who declares having been occupied throughout a given year), category of workers (employed or self-employed), main source of income (wages or salaries) or having worked more than 910 hours during the year (FLEURY and FORTIN, 2004; 2006) may change the results obtained. These definitions are used to see whether having a job with a certain work intensity reduces a person's risk of experiencing a low-income spell. The literature also provides other, less strict, definitions to quality work effort. For example, France uses as a criterion having a job for at least one month during a given year to define a low-income worker whereas the U.S. criterion is having been in the labour force (unemployed or employed) during at least six months of the year. The conclusions therefore vary slightly depending on the way in which low-income work is defined.

17. The sample is limited to persons under age 65 because of the differences in income dynamics and the structure of government transfers for seniors as opposed to the rest of the population.

We saw that self-employed workers have a low income rate far greater than that of the overall population and that for other definitions. That observation could justify that the analysis of low-income work should be presented separately for employees and self-employed workers so as to concentrate as much as possible on homogenous groups. Another essential reason is that data on income from self-employment is generally less reliable than data on wages and salaries, particularly because of taxation differences (BARDONE and GUIO, 2005). Because of this and the desire to emphasize the low-income dynamics of wage earners, self-employed are excluded from the target population.

Finally, in terms of family income, it should be noted that low-income workers are not always workers with low employment gains. As observed by FLEURY and FORTIN (2004, 2006), this distinction is important; it implies an interaction between two usually distinct spheres: work, which is observed on the individual level, and low income, which is observed at the family level. On that basis, we define a worker with low gains as a person who has a certain work intensity but draws from it a low income. However that person is not considered as being a low-income person if his or her needs are met by his or her own gains but also by those of other family members. In other words, a worker with low gains is not considered to be a low-income worker if his or her spouse earns, for example, $100 000 a year or if she has other income sources (investments, retirement pension, etc.). Therefore, the intersection of these two spheres (individual and family) makes it possible not only to observe the economic well-being of individuals but also the well-being of children and other dependants living in families with at least one working member.

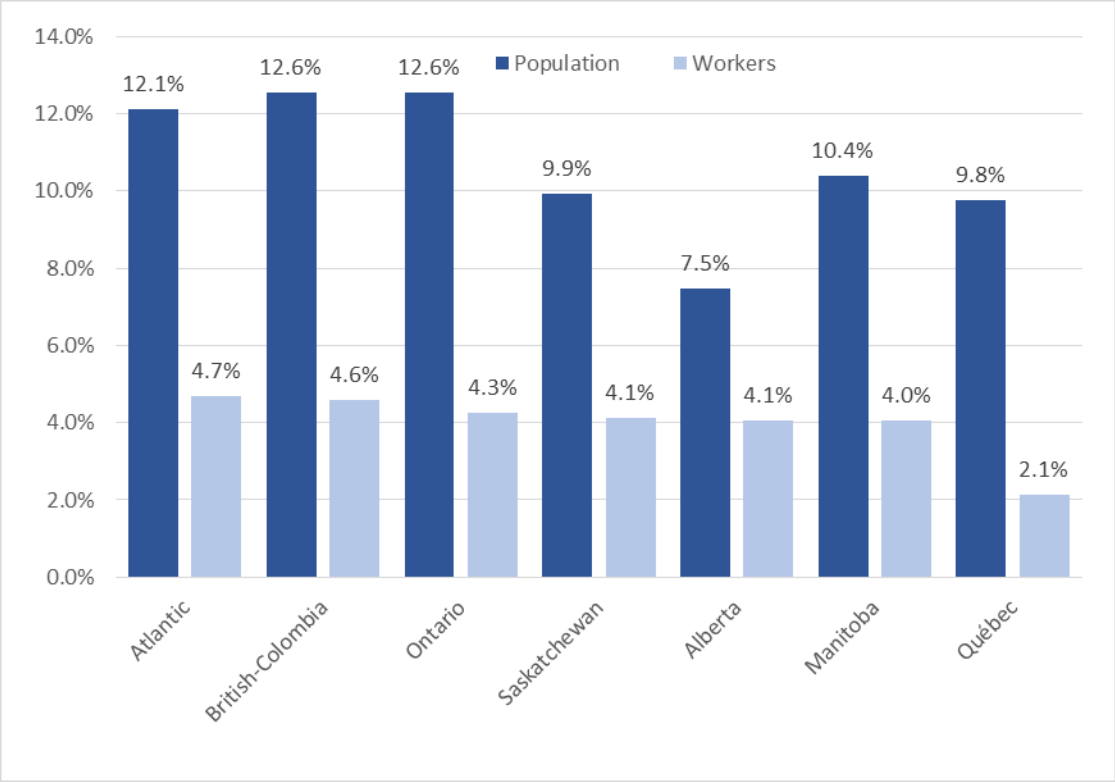
For our analysis, we select those who declare working more than 910 hours (26 x 35 hours or 6 months) during the reference year. That choice is based, among other considerations, on Canadian laws that control access to employment insurance, which provide in particular that new beneficiaries must have accumulated at least 910 hours of work over the previous 52 weeks[18]. Thus in this report, low-income workers are defined as persons who worked more than 910 hours during the reference year (FLEURY and FORTIN, 2004; 2006), but whose non-discretionary family disposable income is below the low income threshold based on the MBM.

Having paid employment greatly reduces the risk of falling in a low-income situation. In fact, the low income rate for employed persons is more than four times lower than the rate for the overall population in 2014. Slightly more than one person in seven (15.9 %) is considered to be a paid worker.

In 2014, Québec had around 57 600 low-income workers, which is 2.1 % of the population aged 18 to 64 that is not pursuing full-time studies (excluding self-employed workers). In 2014, Québec has the lowest proportion of low-income workers among all the Canadian provinces. (Figure 8).

18. That was the case until July 2016, when the rule was changed from 910 hours to an interval between 420 and 700 hours, depending on the regional unemployment rate. Furthermore, so as to better identify workers with a certain work intensity, using this definition makes it possible to exclude persons who say they were occupied throughout the year or still employed but having a low number of hours worked.

Figure 8 – Low income rate for entire population and workers, excluding self-employed workers, more than 910 hours worked, by province of residence, MBM (base 2011), Québec, 2014



Source: STATISTICS CANADA, *Canada Income Survey (CIS)*; CEPE compilation, April 2018.

Thus, not all workers have a standard of living allowing them to meet their basic needs and the needs of their families. Low worker incomes can be due to various job market problems, such as recurring unemployment or unstable jobs, inability to find full-time work or low wages (SAVARD, 2013). Personal characteristics of working-age people (sex, age, family structure, etc.) many also play a role.

Women have a higher risk of living in a low income situation to the extent that they are overrepresented in this category in spite of having paid employment. Although this phenomenon affects both the young and older persons, we observed that more than 40 % of low-income workers are under the age of 30 although they account for only 15.3 % of workers who do not have low incomes (Table 14).

Table 14 Distribution of workers by income status (MBM, base 2011) and certain socioeconomic characteristics, Québec, 2014

	Workers, not low income	Working poor
Sex		
Male	55.3	37.4
Female	44.7	62.6
Age		
Under age 30	15.3	42.0
30 to 34	40.7	44.5
45 to 64	44.0	13.5
Family unit		
Unattached individuals	18.5	33.9
Economic family, two persons or more	81.5	66.1

Source: STATISTICS CANADA, *Canada Income Survey (CIS)*; CEPE compilation, April 2018.

Furthermore, a person's family structure is important. Based on the statistics, we find that more than one working poor person out of three (33.9 %) is an unattached individual, compared with less than one worker out of five (18.5 %) in the non-working poor population. Finally, although low income work is a reality for economic families having two or more persons, those families are not overrepresented to the same extent as unattached individuals.

2. DISPOSABLE INCOME AND AFTER-TAX LOW INCOME THRESHOLDS BASED ON VARIOUS SOCIAL AND FISCAL SCENARIOS

An implicit threshold is a baseline threshold determined by a social or fiscal measure. For example, an implicit threshold might correspond to various existing thresholds, such as the zero tax threshold, the last-resort financial assistance exit threshold, the working income tax benefit exit threshold or the salary earned at a minimum-wage job for a set number of hours. The correspondence between the thresholds of each of the low income measures, as well as other implicit tax-specific thresholds and the thresholds for various government programs makes it possible to gauge changes in the situation of Quebeckers in relation to Québec itself.

For that purpose, we simulated typical cases, using a disposable income model employed by the Ministère du Travail, de l'Emploi et de la Solidarité sociale and were able to see the changes, between 2004 and 2017, in the relative level of personal and family disposable income in relation to existing thresholds. The parameters used were those in force on July 1, 2004 and July 1, 2017 and applied throughout the year.

The tables on the following pages illustrate the implicit thresholds relative to different low income thresholds (LIM 50 %, LIM 60 %[19] and Montréal MBM), based on the typical cases of unattached individuals, unattached individuals with severe employment constraints, lone-parent families with one child aged 3, childless couples with one income, and two-parent families with one income and two children. The first column presents the implicit thresholds and the next three, the coverage rate for each of the two years, measured according to the ratio of implicit thresholds to the three thresholds used. The coverage rate thus equals the proportion of disposable income corresponding to each of the implicit thresholds in relation to the three thresholds used.

The value of each threshold is indicated in the two figures (2004 and 2017) accompanying each table. We can see that some people with a disposable income at least equal to the implicit threshold are either in a deficit position (ratio below 100 %) or a surplus position (ratio over 100 %). The typical cases presented allow us to establish these coverage rates for individuals or families with a disposable income at least equal to the implicit threshold.

The implicit thresholds were chosen on the basis of certain tax rules (e.g. Québec and federal zero tax thresholds) or thresholds determined by certain social programs (e.g., last-resort financial assistance exit threshold). Some of the programs in question were introduced after 2004 (reference year prior to implementation of the fiscal measures contained in the first government plan to combat poverty). In other words, these programs exist in 2017, but did not exist in 2004 (e.g., the working income tax benefit exit threshold (WITB), the exit threshold for the solidarity tax credit, which replaced the QST credit in 2011, the property tax refund and the credit for individuals living in northern villages).

19. The 60 % LIM is used especially in the European Union.

2.1 Unattached individuals

In most cases, the gap narrowed between 2004 and 2017, but in some it remained the same or barely changed, and in others actually widened slightly, especially among unattached individuals (Tables 15 to 19).

For example, the Montréal MBM threshold for an unattached individual was $13 189 in 2004 and $18 125 in 2017, after being indexed to the cost of living [20]. Thus, the coverage rate for an unattached individual who worked at a minimum-wage job 35 hours a week and had a disposable income of $12 785 in 2004 and $19 139 in 2017 rose from 96.9 % to 105.6 % in 2016.

For both the 50 % and 60 % median income LIMs, whose thresholds rose considerably between 2004 and 2017[21], the LIM coverage rates are lower than the MBM rates. Taking the same example, with the 50 % LIM, the coverage rate for an unattached individual who works at a minimum-wage job 35 hours a week rose from 91.1 % in 2004 to 95.3 % in 2017. Using the 60 % LIM, the same person saw his or her coverage rate increase from 75.9 % in 2004 to 79.4 % in 2017. Whereas the coverage rate for persons receiving last-resort financial assistance is 51.8 % using the Montréal MBM threshold in 2017, it is 46.7 % using the 50 % LIM threshold and 38.9 % using the 60 % LIM threshold (Table 15).

20. The 7 % increase previously mentioned (FRÉCHET et al., 2010a) was not applied in the following tables and figures, as it was not applied in the CEPE's Advice to the Minister (2009). Where possible, the CEPE prefers to apply published thresholds, even though they are indexed, to account for the cost of living. Indeed, the objective is not so much to compare thresholds against each other, but rather to compare implicit thresholds against selected low income thresholds. Also, income tax, payroll tax and childcare expenses have already been deducted from the implicit thresholds to avoid double counting (with the MBM plus 7 %). Moreover, the 7 % increase is valid only for disposable income levels near the MBM threshold (± 5 %).

21. Primarily as a result of the changes made to the LIM methodology in 2008, based on recommendations by the Canberra Group (2001) and aimed at bringing the methodology closer in line with international norms and practices. (MURPHY et al., 2010). These changes are as follows:

1. Household replaces economic family as the basic accounting unit in which individuals pool income and enjoy economies of scale in consumption.
2. The square-root-of-household-size equivalence scale is adopted to adjust household income (previously, Statistics Canada's 40/30 scale was used).
3. Personal income weights, rather than household income weights, are used. Person weighting produces an estimate of the overall distribution of income among individuals in the population, assuming that all household or family incomes are pooled.

Table 15 Disposable income, after-tax low income thresholds and coverage rates (implicit thresholds/thresholds), unattached individuals, Québec, 2004 and 2017

		Implicit threshold	Coverage rate %		
		Current $	LIM 50%	LIM 60%	Montréal MBM
2004	LRFA	7 081	50.5	42.1	53.7
	LRFA $200	9 672	68.9	57.4	73.3
	Federal zero tax threshold	9 826	70.0	58.4	74.5
	Exit threshold - LRFA	10 111	72.1	60.1	76.7
	Québec zero tax threshold	12 383	88.3	73.5	93.9
	Minimum wage	12 785	91.1	75.9	96.9
2017	LRFA	9 389	46.7	38.9	51.8
	LRFA $200	11 832	58.9	49.1	65.3
	Exit threshold - LRFA	14 222	70.8	59.0	78.5
	Federal zero tax threshold	16 060	79.9	66.6	88.6
	Québec zero tax threshold	18 158	90.4	75.3	100.2
	Exit threshold - work premium	18 547	92.3	76.9	102.3
	Minimum wage	19 139	95.3	79.4	105.6
	Exit threshold - WITB	19 194	95.5	79.6	105.9
	Exit threshold - STC	36 567	182.0	151.7	201.7

Notes: Individuals under 50 years of age in 2017 (eligible for the shelter allowance).
LRFA: last-resort financial assistance.
LRFA $200: last-resort financial assistance with allowable work income of $200.
WITB: working income tax benefit.
STC: solidarity tax credit (in 2011, the STC replaced the QST credit, the property tax refund and the credit for individuals living in northern villages).
Simulations take into account the known parameters in force **in July 2004 and July 2017**: personal disposable income by household type, i.e., income plus transfers, less payroll tax, income tax and employment-related expenses.
Transfers if applicable: last-resort financial assistance benefit, work premium, working income tax benefit, shelter allowance, QST credit, GST credit, property tax refund.
Source: MTESS, Direction des politiques d'assistance sociale; CEPE compilation.

Returning to the 51.8 % coverage rate with respect to Montréal MBM for unattached persons, we can recall that as a measure of solidarity, social assistance benefits for those who do not receive the shelter allowance increased by $50 in between February 2014 and January 2017 (GOUVERNEMENT DU QUÉBEC, MINISTÈRE DU CONSEIL EXÉCUTIF AND MINISTÈRE DE L'EMPLOI ET DE LA SOLIDARITÉ SOCIALE, 2013: 14). That may explain why the coverage rate for unattached persons with respect to the MBM has increased slightly since the 2013 floor, when it fell below 50 % (more precisely 49.0 % in 2013, see CEPE, 2014: 31).

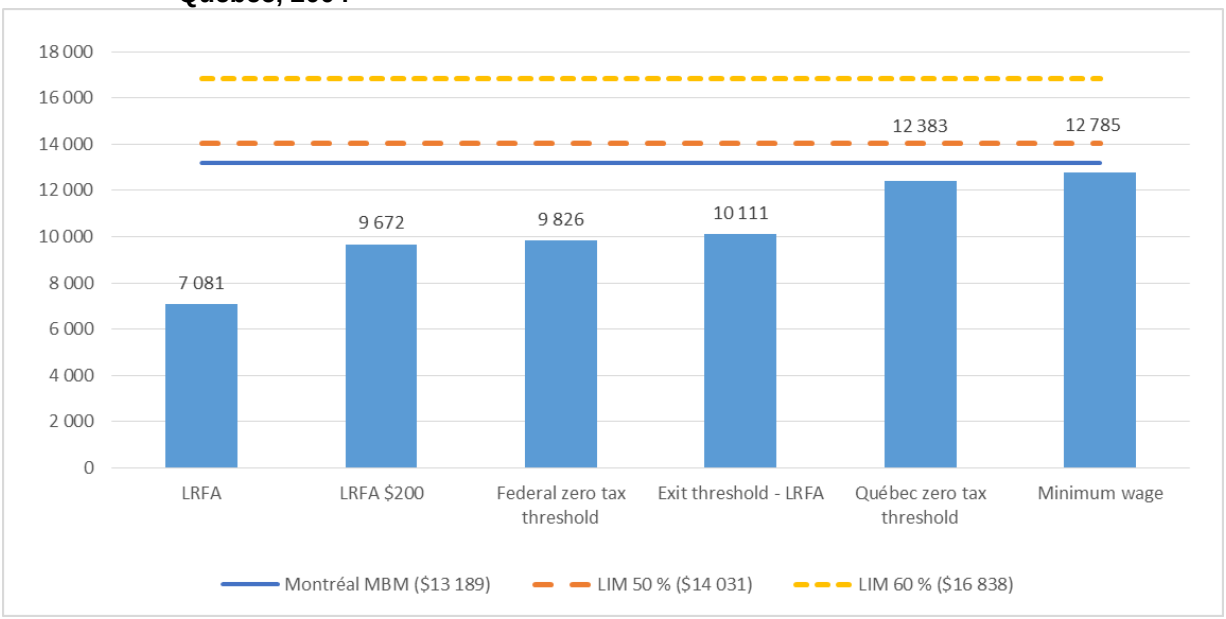
The situation remains however a case of "catching up" with respect to 2004, and in its third government action plan, the government announced that the target for unattached individuals and couples without children and without employment limitations would be 55 % of the MBM in 2021 (GOUVERNEMENT DU QUÉBEC, MINISTÈRE DU TRAVAIL, DE L'EMPLOI ET DE LA SOLIDARITÉ SOCIALE, 2017: 35), based on the recommendation of the Expert Committee on Guaranteed Minimum Income (BOCCANFUSO et al., 2017: 117).

Two figures illustrate the changes over time for each typical case under study. The first figure shows the situation in 2004, that is, the year prior to implementation of the first government action plan to combat poverty and social exclusion, including the financial measures (in particular the

child assistance payment and the work premium) which came into force in January 2005 (GOUVERNEMENT DU QUÉBEC, MINISTÈRE DE L'EMPLOI, DE LA SOLIDARITÉ SOCIALE ET DE LA FAMILLE, 2004). The second figure illustrates the situation in 2017, taking into account the known parameters used for the purposes of this progress report (Figures 9 and 10).

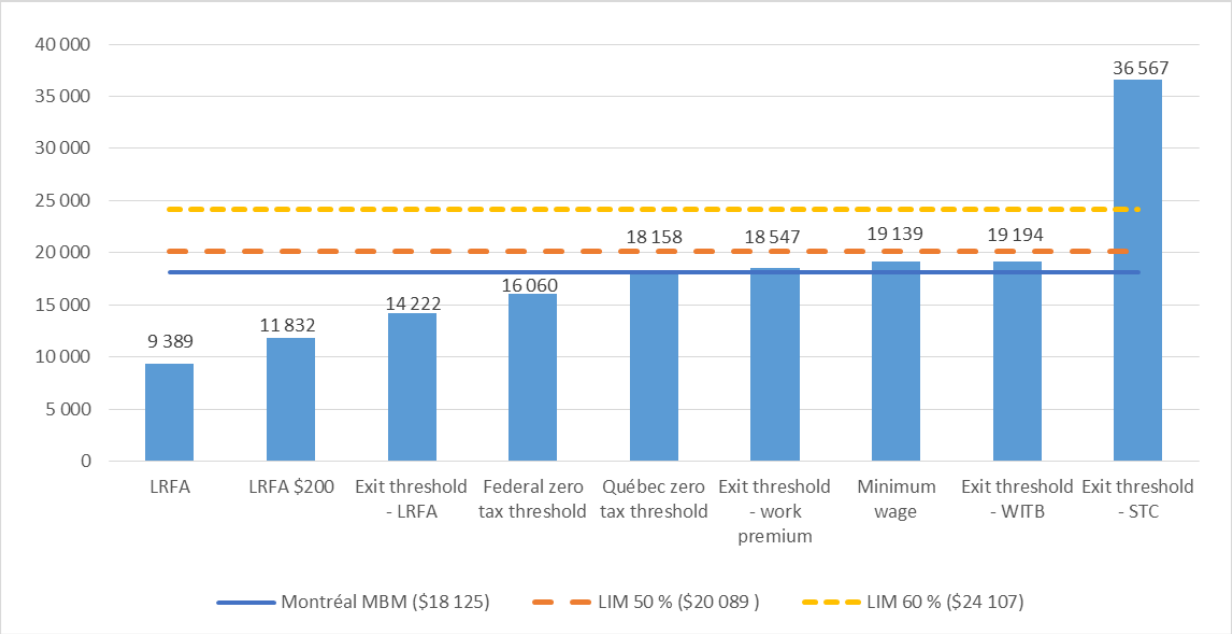
Thus, in 2004, unattached individuals with a disposable income at least equal to the implicit thresholds were below all of the low income thresholds. Individuals working 35 hours a week at minimum wage were actually in a deficit position relative to the 50 % LIM, the 60 % LIM or the Montréal MBM. In 2017, the gaps widened in some cases and narrowed in others for individuals under 50 years of age (owing to the new rules for the shelter allowance) the gaps sometimes increase, sometimes decrease: unattached individuals with a disposable income at least equal to some of the implicit thresholds (last-resort financial assistance, $200 in allowable work income, last-resort financial assistance exit threshold or federal zero tax threshold) fall below the Montréal MBM threshold. However, that group reaches or is above the Montréal MBM with all of the other thresholds (TABLE 15 and Figures 9 and 10).

Figure 9 − Disposable income and after-tax low income thresholds, unattached individuals, Québec, 2004



Notes: LRFA: last-resort financial assistance.
LRFA $200: last-resort financial assistance with allowable work income of $200.
Simulations take into account the known parameters in force **in July 2004 and July 2017**: personal disposable income by household type, i.e., income plus transfers, less payroll tax, income tax and employment-related expenses.
Transfers if applicable: last-resort financial assistance benefit, work premium, working income tax benefit, shelter allowance, QST credit, GST credit, property tax refund.
Source: MTESS, Direction des politiques d'assistance sociale; CEPE compilation.

Figure 10 − Disposable income and after-tax low income thresholds, unattached individuals under 50 years of age, Québec, 2017



Notes: Individuals under 50 years of age in 2017 (eligible for the shelter allowance).
LRFA: last-resort financial assistance.
LRFA $200: last-resort financial assistance with allowable work income of $200.
WITB: working income tax benefit.
STC: solidarity tax credit (in 2011, the STC replaced the QST credit, the property tax refund and the credit for individuals living in northern villages).
Simulations take into account the known parameters in force **in July 2004 and July 2017**: personal disposable income by household type, i.e., income plus transfers, less payroll tax, income tax and employment-related expenses.
Transfers if applicable: last-resort financial assistance benefit, work premium, working income tax benefit, solidarity tax credit, shelter allowance, GST credit.

Source: MTESS, Direction des politiques d'assistance sociale; CEPE compilation.

2.2 Persons with severely limited capacity for employment

Similarly, unattached individuals with severe employment constraints and a disposable income at least equal to the implicit thresholds were also below all low income thresholds in 2004. Individuals working 35 hours a week at minimum wage were actually in a deficit position relative to the 50 % LIM, the 60 % LIM or the Montréal MBM. In 2017, for persons under age 50, the gaps barely change and often narrow: unattached individuals with severely limited capacity for employment and a disposable income at least equal to some of the implicit thresholds (last-resort financial assistance, $100 in allowable work income, federal zero tax threshold or last-resort financial assistance exit threshold) still fall below the Montréal MBM threshold. However, they are above the Montréal MBM for all other thresholds (Table 16 and Figures 11 and 12).

Table 16 Disposable income, after-tax low income thresholds and coverage rates (implicit thresholds/thresholds), unattached individuals with severely limited capacity for employment, Québec, 2004 and 2017

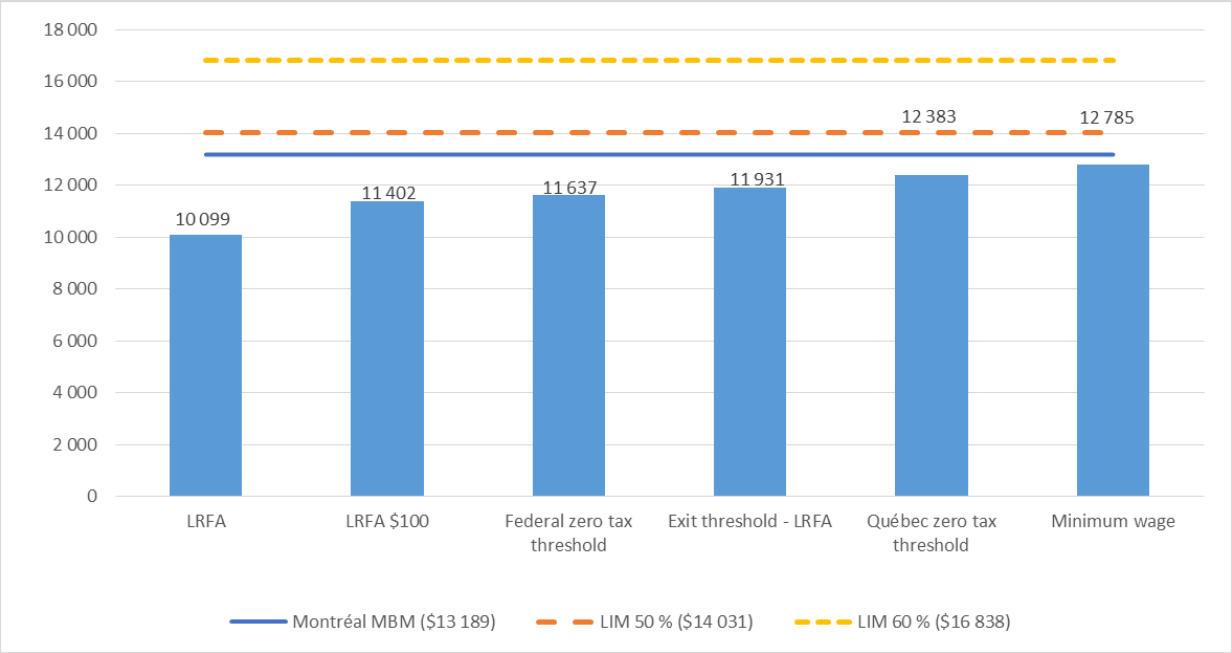
		Implicit threshold	Coverage rate %		
		Current $	LIM 50%	LIM 60%	Montréal MBM
2004	LRFA	10 099	72.0	60.0	76.6
	LRFA $100	11 402	81.3	67.7	86.5
	Federal zero tax threshold	11 637	82.9	69.1	88.2
	Exit threshold - LRFA	11 931	85.0	70.9	90.5
	Québec zero tax threshold	12 383	88.3	73.5	93.9
	Minimum wage	12 785	91.1	75.9	96.9
2017	LRFA	12 749	63.5	52.9	70.3
	LRFA 100 $	13 973	69.6	58.0	77.1
	Exit threshold - LRFA	17 305	86.1	71.8	95.5
	Federal zero tax threshold	17 438	86.8	72.3	96.2
	Québec zero tax threshold	19 600	97.6	81.3	108.1
	Minimum wage	20 427	101.0	84.2	112.0
	Exit threshold - WITB suppl. hand. Person	21 180	105.4	87.9	116.9
	Exit threshold - Adapted work premium	23 620	117.6	98.0	130.3
	Exit threshold - STC	36 567	182.0	151.7	201.7

Notes: Individuals under 50 years of age in 2017 (eligible for the shelter allowance).
LRFA: last-resort financial assistance.
LRFA $100: last-resort financial assistance with allowable work income of $100.
WITB: working income tax benefit.
STC: solidarity tax credit (in 2011, the STC replaced the QST credit, the property tax refund and the credit for individuals living in northern villages).
Simulations take into account the known parameters in force **in July 2004 and July 2017**: personal disposable income by household type, i.e. income plus transfers, less payroll tax, income tax and employment-related expenses.
Transfers if applicable: last-resort financial assistance benefit, work premium, working income tax benefit, shelter allowance, QST credit, GST credit, property tax refund.

Source: MTESS, Direction des politiques d'assistance sociale; CEPE compilation.

Also in its third action plan, the government announced that the target for unattached individuals with a severely limited capacity for employment who have received benefits under the Social Solidarity Program for 66 of the preceding 72 months has been set at the MBM threshold in 2023 (GOUVERNEMENT DU QUÉBEC, MINISTÈRE DU TRAVAIL, DE L'EMPLOI ET DE LA SOLIDARITÉ SOCIALE, 2017: 34), and is based on the recommendation of the Expert Committee on Guaranteed Minimum Income (BOCCANFUSO et al., 2017: 117)

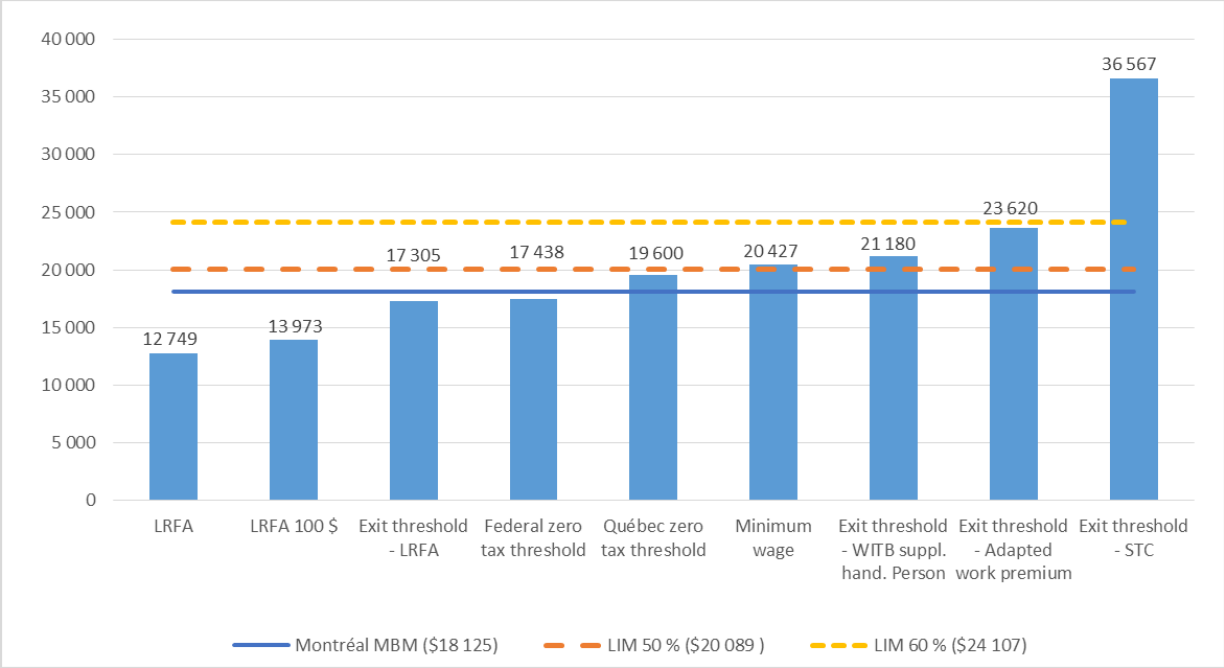
Figure 11 − Disposable income and after-tax low income thresholds, unattached individuals with severely limited capacity for employment, Québec, 2004



Notes: LRFA: last-resort financial assistance.
LRFA $100: last-resort financial assistance with allowable work income of $100.
Simulations take into account the known parameters in force **in July 2004**: personal disposable income by household type, i.e. income plus transfers, less payroll tax, income tax and employment-related expenses.
Transfers if applicable: last-resort financial assistance benefit, work premium, working income tax benefit, shelter allowance, QST credit, GST credit, property tax refund.

Sources: MTESS, Direction des politiques d'assistance sociale; CEPE compilation.

Figure 12 – Disposable income and after-tax low income thresholds, unattached individuals under 50 years of age with severely limited capacity for employment constraints, Québec, 2017



Notes: Persons under age 50 in 2017 (eligible for the shelter allocation).
LRFA: last-resort financial assistance.
LRFA $100: last-resort financial assistance with allowable work income of $100.
WITB: working income tax benefit.
STC: solidarity tax credit (in 2011, the STC replaced the QST credit, the property tax refund and the credit for individuals living in northern villages).
Simulations take into account the known parameters in force **in July 2017**: personal disposable income by household type, i.e. income plus transfers, less payroll tax, income tax and employment-related expenses.
Transfers if applicable: last-resort financial assistance benefit, work premium, working income tax benefit, solidarity tax credit, shelter allowance, GST credit.

Sources: MTESS, Direction des politiques d'assistance sociale; CEPE compilation.

2.3 Lone-parent families with a child aged 3

In 2004, lone-parent families with a disposable income at least equal to some of the implicit thresholds (last-resort financial assistance, $200 in allowable work income) were below the Montréal MBM threshold. All other thresholds put them above the Montréal MBM threshold. In 2017, lone-parent families with a disposable income at least equal to some of the implicit thresholds (last-resort financial assistance and $200 in allowable work income and threshold for leaving LRFA) also fell below the Montréal MBM threshold. All other thresholds put them above the Montréal MBM threshold (*Table 17* et *figures 13* et *14*).

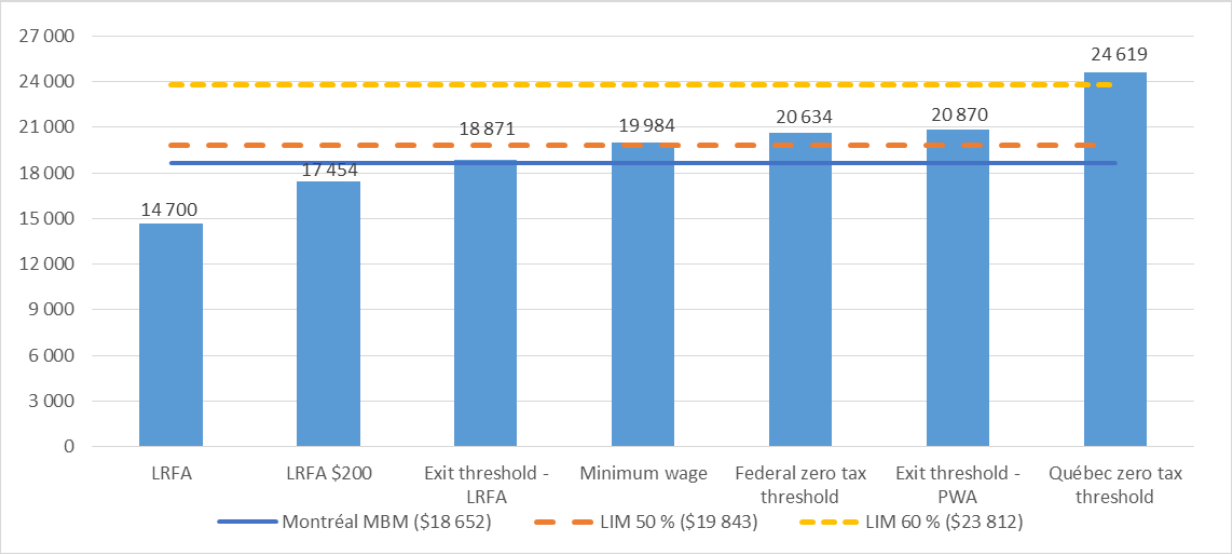
Table 17 Disposable income, after-tax low income thresholds and coverage rate (implicit thresholds/thresholds), lone-parent families with one child aged 3, Québec, 2004 and 2017

		Implicit threshold	Coverage rate %		
		Current $	LIM 50%	LIM 60%	Montréal MBM
2004	LRFA	14 700	74.1	61.7	78.8
	LRFA $200	17 454	88.0	73.3	93.6
	Exit threshold - LRFA	18 871	95.1	79.3	101.2
	Minimum wage	19 984	100.7	83.9	107.1
	Federal zero tax threshold	20 634	104.0	86.7	110.6
	Exit threshold - PWA	20 870	105.2	87.6	111.9
	Québec zero tax threshold	24 619	124.1	103.4	132.0
2017	LRFA	21 545	75.8	63.2	84.1
	LRFA $200	22 943	80.8	67.3	89.5
	Exit threshold - LRFA	25 236	88.8	74.0	98.4
	Québec zero tax threshold	29 106	102.4	85.4	113.5
	Exit threshold - WITB	29 861	105.1	87.6	116.5
	Minimum wage	30 378	106.9	89.1	118.5
	Federal zero tax threshold	34 865	122.7	102.3	136.0
	Exit threshold - Work premium	38 190	134.4	112.0	149.0
	Exit threshold - STC	44 965	158.3	131.9	175.4

Notes: LRFA: last-resort financial assistance.
LRFA $200: last-resort financial assistance with allowable work income of $200.
PWA: Parental Wage Assistance Program (replaced by the work premium in 2005).
WITB: working income tax benefit.
STC: solidarity tax credit (in 2011, the STC replaced the QST credit, the property tax refund and the credit for individuals living in northern villages).
Simulations take into account the known parameters in force **in July 2004 and July 2017**: personal disposable income by household type, i.e., income plus transfers, less payroll tax, income tax and employment-related expenses.
Transfers if applicable: last-resort financial assistance benefit, Canada child tax benefit, universal child care benefit, Canada child benefit, child assistance payment, work premium, working income tax benefit, shelter allowance, QST credit, GST credit, Québec tax credit for childcare expenses, property tax refund.
Preschool child: 260 days in a reduced-contribution childcare service. Child aged 5 or over: 200 days in a reduced-contribution childcare service and 60 days in a regular childcare service costing $25 a day. It is assumed that no childcare services are used where work income is zero.

Source: MTESS, Direction des politiques d'assistance sociale; CEPE compilation.

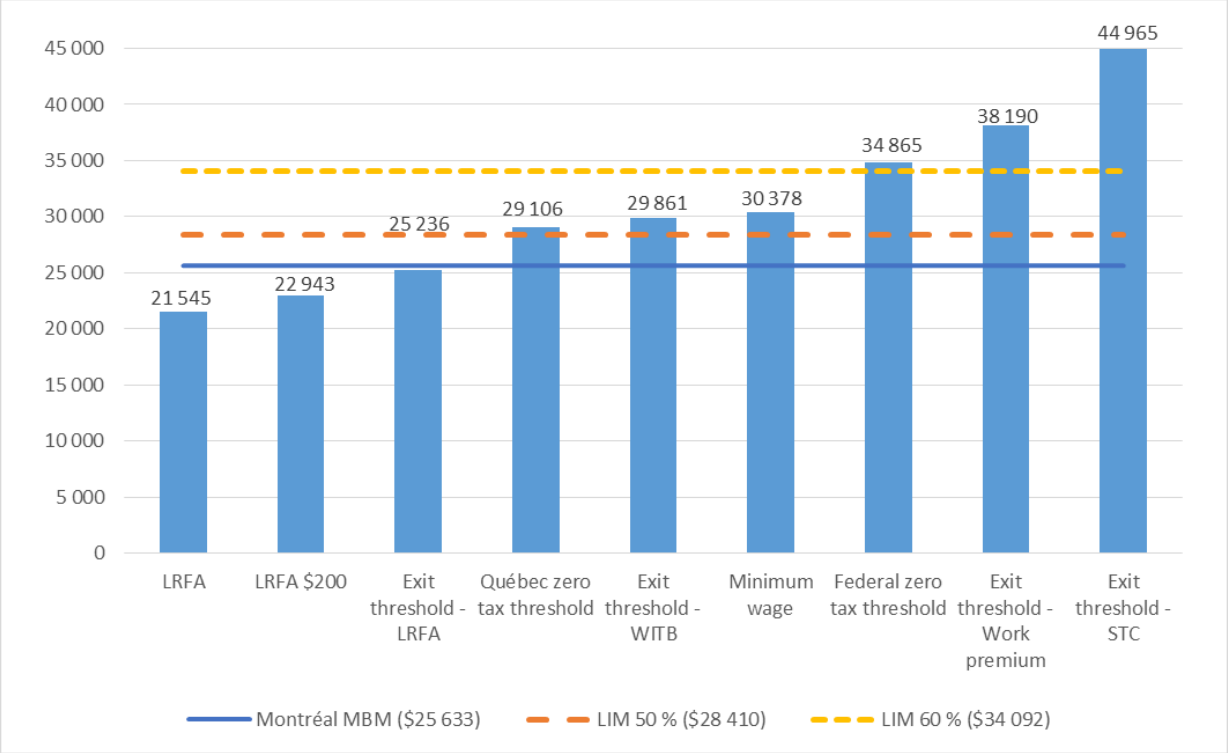
Figure 13 − Disposable income, after-tax low income thresholds, lone-parent with a child aged 3, Québec, 2004



Notes: LRFA: last-resort financial assistance.
LRFA $200: last-resort financial assistance with allowable work income of $200.
PWA: Parental Wage Assistance Program (replaced by the work premium in 2005).
Simulations take into account the known parameters in force **in July 2004**: personal disposable income by household type, i.e., income plus transfers, less payroll tax, income tax and employment-related expenses.
Transfers if applicable: last-resort financial assistance benefit, Canada child tax benefit, universal child care benefit, child assistance payment, work premium, working income tax benefit, shelter allowance, QST credit, GST credit, Québec tax credit for childcare expenses, property tax refund.
Preschool child: 260 days in a reduced-contribution childcare service. Child aged 5 or over: 200 days in a reduced-contribution childcare service and 60 days in a regular childcare service costing $25 a day. It is assumed that no childcare services are used where work income is zero.

Source: MTESS, Direction des politiques d'assistance sociale; CEPE compilation.

Figure 14 − Disposable income, after-tax low income thresholds, lone-parent with a child aged 3, Québec, 2017



Notes: LRFA: last-resort financial assistance.
LRFA $200: last-resort financial assistance with allowable work income of $200.
WITB: working income tax benefit.
STC: solidarity tax credit (in 2011, the STC replaced the QST credit, the property tax refund and the credit for individuals living in northern villages).
Simulations take into account the known parameters in force in **July 2017:** personal disposable income by household type, i.e., income plus transfers, less payroll tax, income tax and employment-related expenses.
Transfers if applicable: last-resort financial assistance benefit, Canada child tax benefit, universal child care benefit, child assistance payment, work premium, working income tax benefit, solidarity tax credit, shelter allowance, GST credit, Québec tax credit for childcare expenses.
Preschool child: 260 days in a reduced-contribution childcare service. Child aged 5 or over: 200 days in a reduced-contribution childcare service and 60 days in a regular childcare service costing $25 a day. It is assumed that no childcare services are used where work income is zero.
Source: MTESS, Direction des politiques d'assistance sociale; CEPE compilation.

2.4 Childless couples with one income

In the case of childless couples with one income, in 2004 only those with a disposable income at least equal to the Québec zero tax threshold reached the Montréal MBM and LIM 50 % thresholds. In 2017, the gaps had barely changed in some cases and narrowed in others, and except for couples with a disposable income at least equal to some of the implicit thresholds (last-resort financial assistance with allowable work income, exit threshold and minimum wage), all of the other thresholds place childless couples with one income above the Montréal MBM threshold (Table 18 and figures 15 and 16).

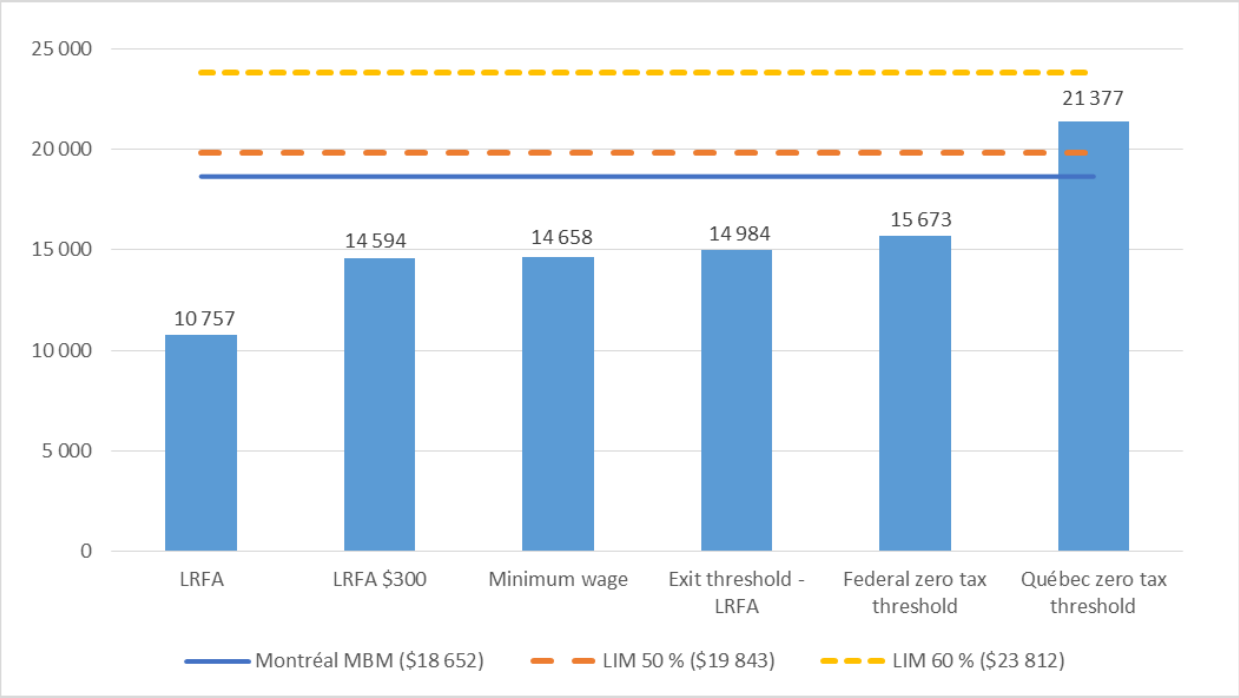
Table 18 Disposable income, after-tax low income thresholds and coverage rate (implicit thresholds/thresholds), childless couples with one income, Québec, 2004 and 2017

		Implicit threshold	Coverage rate %		
		Current $	LIM 50%	LIM 60%	Montréal MBM
2004	LRFA	10 757	54.2	45.2	57.7
	LRFA $300	14 594	73.5	61.3	78.2
	Minimum wage	14 658	73.9	61.6	78.6
	Exit threshold - LRFA	14 984	75.5	62.9	80.3
	Federal zero tax threshold	15 673	79.0	65.8	84.0
	Québec zero tax threshold	21 377	107.7	89.8	114.6
2017	LRFA	13 464	47.4	39.5	52.5
	LFRA $300	17 087	60.1	50.1	66.7
	Exit threshold - LRFA	20 795	73.2	61.0	81.1
	Minimum wage	23 797	83.8	69.8	92.8
	Federal zero tax threshold	27 656	97.3	81.1	107.9
	Exit threshold - Work premium	28 860	101.6	84.7	112.6
	Federal zero tax threshold	30 028	105.7	88.1	117.1
	Exit threshold - WITB	30 388	107.0	89.1	118.6
	Exit threshold - STC	42 350	149.1	124.2	165.2

Notes: Persons under age 50 in 2017 (eligible for the shelter allocation).
LRFA: last-resort financial assistance.
LRFA $300: last-resort financial assistance with allowable work income of $300.
WITB: working income tax benefit.
STC: solidarity tax credit (in 2011, the STC replaced the QST credit, the property tax refund and the credit for individuals living in northern villages).
Simulations take into account the known parameters in force **in July 2004 and July 2017**: personal disposable income by household type, i.e., income plus transfers, less payroll tax, income tax and employment-related expenses.
Transfers if applicable: last-resort financial assistance benefit, work premium, working income tax benefit, shelter allowance, QST credit, GST credit, property tax refund.

Source: MTESS, Direction des politiques d'assistance sociale; CEPE compilation.

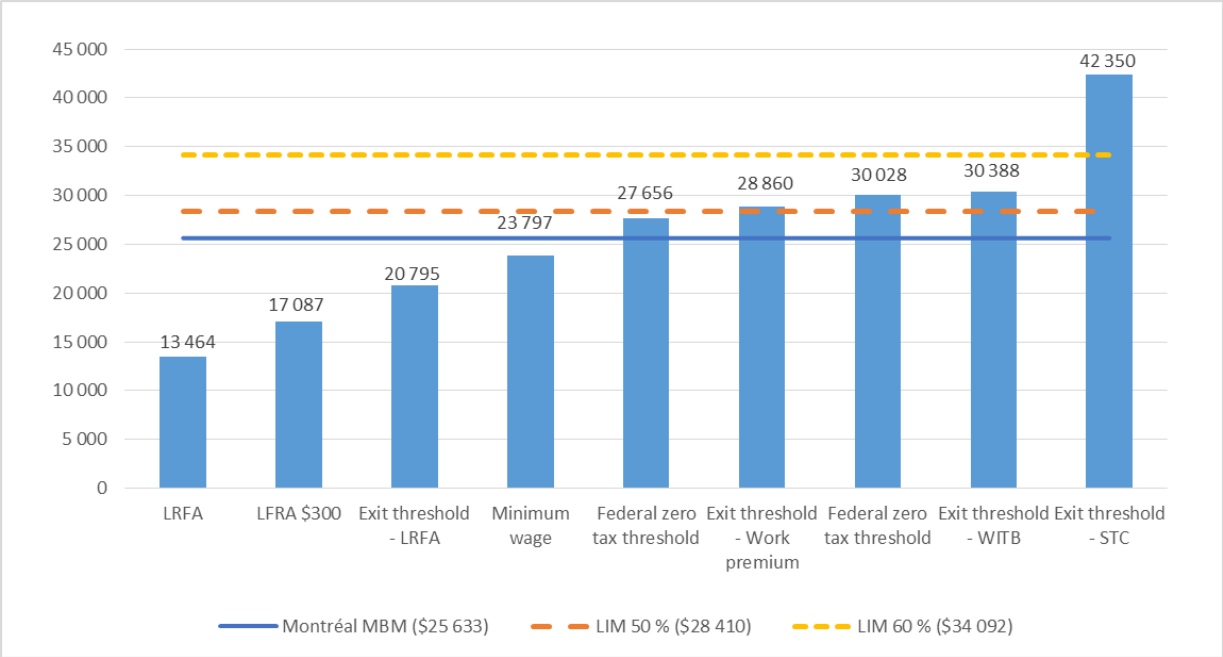
Figure 15 − Disposable income and after-tax low income thresholds, childless couples with one income, Québec, 2004



Notes: LRFA: last-resort financial assistance.
LRFA $300: last-resort financial assistance with allowable work income of $300.
STC: solidarity tax credit (in 2011, the STC replaced the QST credit, the property tax refund and the credit for individuals living in northern villages).
Simulations take into account the known parameters in force **in July 2004**: personal disposable income by household type, i.e. income plus transfers, less payroll tax, income tax and employment-related expenses.
Transfers if applicable: last-resort financial assistance benefit, work premium, working income tax benefit, shelter allowance, QST credit, GST credit, property tax refund.

Source: MTESS, Direction des politiques d'assistance sociale; CEPE compilation.

Figure 16 − Disposable income and after-tax low income thresholds, childless couples with one income (adults under 50 years of age), Québec, 2017



Notes: Persons under age 50 in 2017 (eligible for the shelter allowance).
LRFA: last-resort financial assistance.
LRFA $300: last-resort financial assistance with allowable work income of $300.
WITB: working income tax benefit.
Simulations take into account the known parameters in force in **July 2017:** personal disposable income by household type, i.e., income plus transfers, less payroll tax, income tax and employment-related expenses.
Transfers if applicable: last-resort financial assistance benefit, work premium, working income tax benefit, solidarity tax credit, shelter allowance, GST credit.
Source: MTESS, Direction des politiques d'assistance sociale; CEPE compilation.

2.5 Two-parent families with one income and two children

Lastly, two-parent families with one income and two children and a disposable income at least equal to some of the implicit thresholds (last-resort financial assistance with allowable work income) did not reach the 2004 Montréal MBM threshold. However, they were above it with all other thresholds. In 2017, the gaps narrowed and only families with a disposable income at least equal to last-resort financial assistance and allowable work income did not reach the Montréal MBM threshold. All other thresholds lift families above the Montréal MBM threshold (Table 19 and Figures 17 and 18).

Table 19 Disposable income, after-tax low income thresholds and coverage rate (implicit thresholds/thresholds), two-parent families with one income and two children, Québec, 2004 and 2017

		Implicit threshold	Coverage rate %		
		Current $	LIM 50%	LIM 60%	Montréal MBM
2004	LRFA	20 074	71.5	59.6	76.1
	LRFA $300	24 468	87.2	72.7	92.8
	Minimum wage	26 511	94.5	78.7	100.5
	Federal zero tax threshold	26 446	94.2	78.5	100.3
	Exit threshold - LRFA	26 566	94.7	78.9	100.7
	Exit threshold - PWA	27 586	98.3	81.9	104.6
	Québec zero tax threshold	33 365	118.9	99.1	126.5
2017	LRFA	30 368	75.6	63.0	83.8
	LFRA $300	33 993	84.6	70.5	93.8
	Exit threshold - LRFA	38 142	94.9	79.1	105.2
	Minimum wage	41 160	102.4	85.4	113.5
	Federal zero tax threshold	41 459	103.2	86.0	114.4
	Exit threshold - WITB	44 905	111.8	93.1	123.9
	Québec zero tax threshold	47 751	118.8	99.0	131.7
	Exit threshold - work premium	52 183	129.9	108.2	144.0
	Exit threshold - STC	55 785	138.8	115.7	153.9

Notes: LRFA: last-resort financial assistance.

LRFA $300: last-resort financial assistance with allowable work income of $300.

WITB: working income tax benefit.

STC: solidarity tax credit (in 2011, the STC replaced the QST credit, the property tax refund and the credit for individuals living in northern villages).

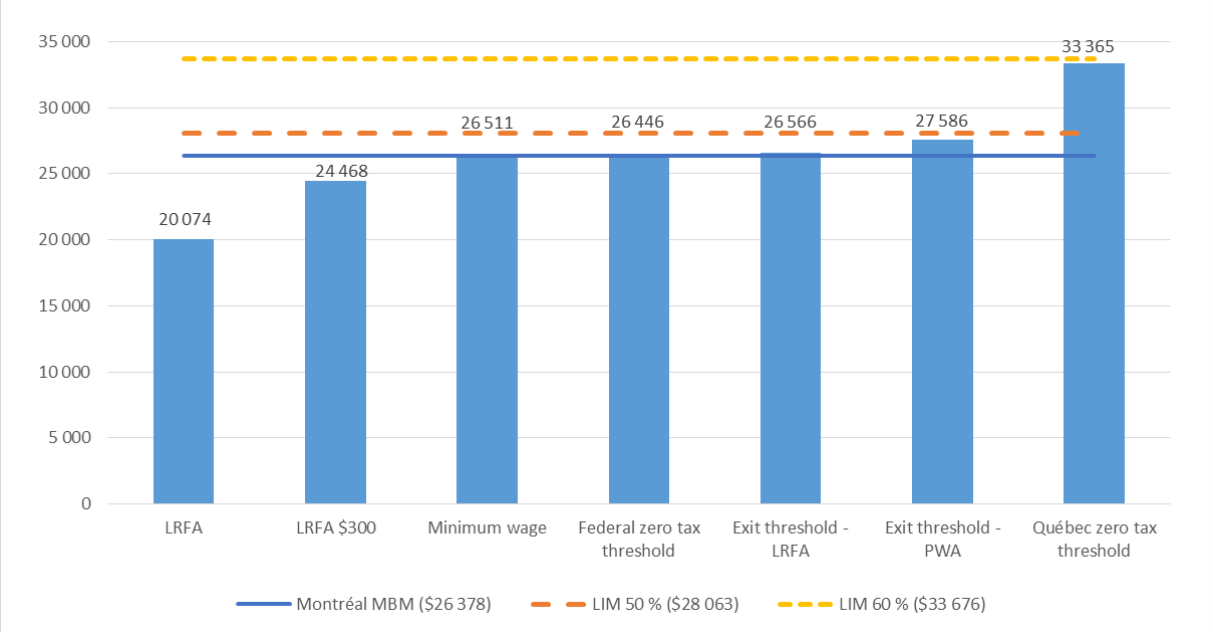
Simulations take into account the known parameters in force in **July 2017:** personal disposable income by household type, i.e., income plus transfers, less payroll tax, income tax and employment-related expenses.

Transfers if applicable: last-resort financial assistance benefit, Canada child tax benefit, universal child care benefit, child assistance payment, work premium, working income tax benefit, solidarity tax credit, shelter allowance, GST credit, Québec tax credit for childcare expenses, property tax refund.

Preschool child: 260 days in a reduced-contribution childcare service. Child aged 5 or over: 200 days in a reduced-contribution childcare service and 60 days in a regular childcare service costing $25 a day. It is assumed that no childcare services are used where work income is zero.

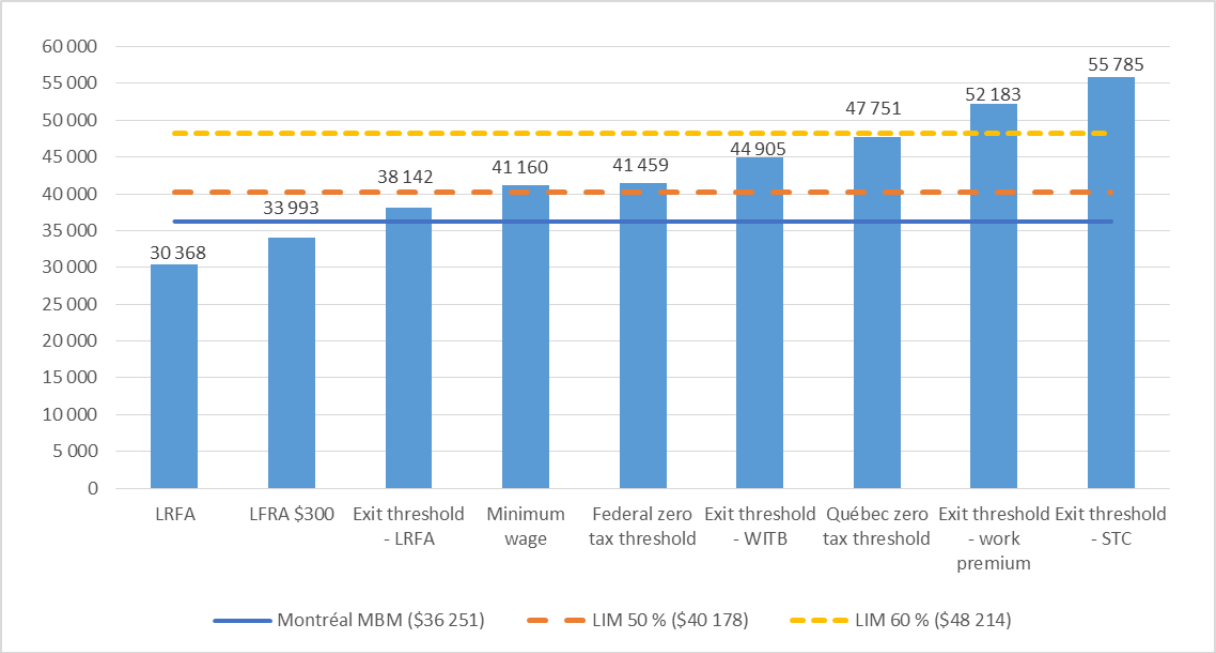
Source: MTESS, Direction des politiques d'assistance sociale; CEPE compilation.

Figure 17 − Disposable income and after-tax low income thresholds, two-parent families with one income and two children, Québec, 2004



Notes: LRFA: last-resort financial assistance.
LRFA $300: last-resort financial assistance with allowable work income of $300.
WITB: working income tax benefit.
WITB: working income tax benefit.
STC: solidarity tax credit (in 2011, the STC replaced the QST credit, the property tax refund and the credit for individuals living in northern villages).
Simulations take into account the known parameters in force in **July 2017**: personal disposable income by household type, i.e. income plus transfers, less payroll tax, income tax and employment-related expenses.
Transfers if applicable: last-resort financial assistance benefit, Canada child tax benefit, universal child care benefit, child assistance payment, work premium, working income tax benefit, solidarity tax credit, shelter allowance, QST credit, Québec tax credit for childcare expenses.
Preschool child: 260 days in a reduced-contribution childcare service. Child aged 5 or over: 200 days in a reduced-contribution childcare service and 60 days in a regular childcare service costing $25 a day. It is assumed that no childcare services are used where work income is zero.
Sources: MTESS, Direction des politiques d'assistance sociale; CEPE compilation.

Figure 18 − Disposable income and after-tax low income thresholds, two-parent families with one income and two children, Québec, 2017



Notes: LRFA: last-resort financial assistance.
LRFA $300: last-resort financial assistance with allowable work income of $300.
WITB: working income tax benefit.
WITB: working income tax benefit.
STC: solidarity tax credit (in 2011, the STC replaced the QST credit, the property tax refund and the credit for individuals living in northern villages).
Simulations take into account the known parameters in force in **July 2017**: personal disposable income by household type, i.e. income plus transfers, less payroll tax, income tax and employment-related expenses.
Transfers if applicable: last-resort financial assistance benefit, Canada child tax benefit, universal child care benefit, child assistance payment, work premium, working income tax benefit, solidarity tax credit, shelter allowance, QST credit, Québec tax credit for childcare expenses.
Preschool child: 260 days in a reduced-contribution childcare service. Child aged 5 or over: 200 days in a reduced-contribution childcare service and 60 days in a regular childcare service costing $25 a day. It is assumed that no childcare services are used where work income is zero.
Sources: MTESS, Direction des politiques d'assistance sociale; CEPE compilation.

In short, an examination of the implicit thresholds shows that relative progress has been made in most of the typical cases presented in this report. However, whether or not a family has children makes a difference, which no doubt reflects the recent advances made through Québec's family and anti-poverty policies, in particular the stronger measures to fight poverty among families with children. In addition there is the federal government's Canada Child Benefit (CCB), which replaces the Canada Child Tax Benefit (CCTB), including the National Child Benefit Supplement (NCBS) and the Universal Child Care Benefit (UCCB) for which payments began in July 2016, which increases the benefits for children with children.

3. INCOME AND WEALTH INEQUALITY

3.1 Gini coefficient

The Gini coefficient is a measure of income inequality, more precisely a measure of inequality in the distribution of income and is simple and easy to interpret. Its value ranges from 0 to 1, where 0 represents perfect equality (each population percentile has an equivalent proportion of income), and 1 represents perfect inequality (a single individual has all incomes)[22].

The Gini coefficient increases for all family units during the 1990s, both in Québec and in the other provinces. Thereafter, the situation becomes relatively stable. Finally, in 2016, the Gini coefficients are higher than those observed more than 20 years before. Compared with some of the other provinces, the gap is still in Québec's favour (Table 20 and Figure 19).

Table 20 Change in Gini coefficient for all family units based on adjusted after-tax income, Canada and its provinces, 1990-2016

	Newfoundland-and-Labrador	Prince Edward Island	Nova-Scotia	New-Brunswick	Québec	Ontario	Manitoba	Saskatchewan	Alberta	British-Columbia	Canada
1990	0.278	0.257	0.270	0.269	0.269	0.280	0.279	0.306	0.289	0.290	0.286
1991	0.282	0.259	0.271	0.274	0.278	0.291	0.287	0.296	0.301	0.283	0.292
1992	0.294	0.253	0.278	0.274	0.270	0.287	0.288	0.308	0.312	0.295	0.291
1993	0.271	0.240	0.275	0.266	0.274	0.291	0.274	0.293	0.290	0.285	0.289
1994	0.275	0.238	0.280	0.272	0.278	0.292	0.282	0.285	0.291	0.282	0.290
1995	0.285	0.244	0.272	0.274	0.280	0.294	0.276	0.293	0.294	0.289	0.293
1996	0.277	0.248	0.278	0.274	0.290	0.305	0.281	0.285	0.300	0.298	0.301
1997	0.271	0.250	0.288	0.278	0.290	0.305	0.279	0.280	0.308	0.302	0.304
1998	0.292	0.260	0.297	0.285	0.295	0.311	0.296	0.295	0.325	0.304	0.311
1999	0.301	0.283	0.289	0.283	0.284	0.318	0.287	0.283	0.303	0.312	0.310
2000	0.302	0.285	0.295	0.291	0.294	0.325	0.290	0.295	0.312	0.312	0.317
2001	0.290	0.277	0.298	0.290	0.298	0.321	0.291	0.296	0.311	0.328	0.318
2002	0.305	0.285	0.302	0.291	0.301	0.320	0.305	0.296	0.298	0.341	0.318
2003	0.296	0.267	0.295	0.297	0.295	0.321	0.295	0.304	0.311	0.324	0.316
2004	0.299	0.267	0.292	0.298	0.299	0.332	0.297	0.307	0.310	0.328	0.322
2005	0.302	0.257	0.293	0.293	0.296	0.321	0.298	0.325	0.303	0.325	0.317
2006	0.298	0.268	0.294	0.285	0.293	0.319	0.309	0.324	0.314	0.320	0.316
2007	0.296	0.252	0.290	0.283	0.294	0.319	0.313	0.328	0.318	0.314	0.316
2008	0.301	0.263	0.294	0.279	0.293	0.319	0.305	0.308	0.309	0.311	0.314
2009	0.300	0.254	0.306	0.287	0.286	0.319	0.293	0.316	0.320	0.321	0.315
2010	0.308	0.258	0.292	0.279	0.286	0.320	0.296	0.311	0.320	0.322	0.315
2011	0.303	0.265	0.280	0.289	0.291	0.311	0.292	0.306	0.326	0.312	0.311
2012	0.299	0.257	0.292	0.288	0.297	0.322	0.298	0.297	0.307	0.313	0.316
2013	0.306	0.285	0.302	0.283	0.292	0.327	0.294	0.307	0.313	0.318	0.318
2014	0.293	0.275	0.291	0.277	0.281	0.316	0.297	0.307	0.319	0.308	0.311
2015	0.314	0.279	0.298	0.273	0.285	0.318	0.300	0.303	0.324	0.312	0.314
2016	0.301	0.269	0.297	0.278	0.284	0.320	0.290	0.290	0.297	0.296	0.306

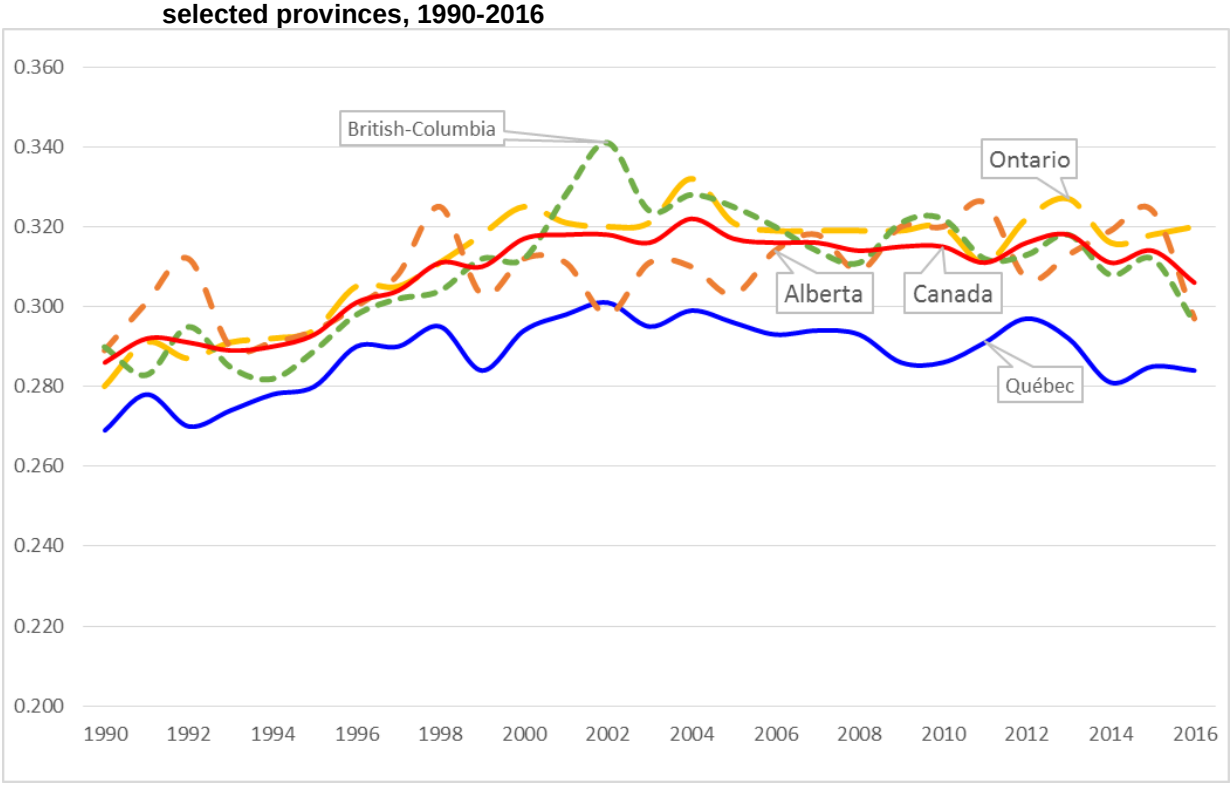
Note: Statistics Canada always computes the Gini coefficient for economic families of two persons or more and unattached individuals, which make up "all family units."

Caution: There is a series rupture between 2005 and 2006. (See STATISTICS CANADA [2015a].)

Source: STATISTICS CANADA, CANSIM 206-0033; CEPE compilation, April 2018.

22. For a more detailed definition, see: http://www.stat.gouv.qc.ca/statistiques/conditions-vie-societe/revenu/inegalite-revenu/cdmi.html.

Figure 19 − Gini coefficient for all family units based on adjusted after-tax income, Québec and selected provinces, 1990-2016



Note: In this figure, the scale ranges from 0.200 to 0.360. Statistics Canada always computes the Gini coefficient for economic families of two persons or more and unattached individuals, which make up "all family units."

Caution: There is a series rupture between 2005 and 2006. (See STATISTICS CANADA [2015a].)

Source: STATISTICS CANADA, CANSIM 206-0033; CEPE compilation, April 2018.

Recent OECD studies discuss the increase in income inequalities over the last 30 years in several member countries, including Canada. The gap between rich and poor has widened. The phenomenon is partly attributable to an increasing disparity in work incomes: those of the rich have increased much more rapidly than those of the poor (bonuses for senior executives, technological progress the favours workers who are more highly skilled, decline of unions, etc.). Moreover, changes in family structures result in numerous households profiting less from economies of scale than in the past (more unattached individuals) and an increasing number of double-income families.

Finally, with respect to the extent of inequalities, one critic recently stated that they are underestimated. That would result from the differences between the accounting of individual income and enterprise income. For a person whose income is considered in whole or in part to be income from his or her enterprise, the "top income shares are significantly higher when CCPC incomes are included" (WOLFSON et al., 2016).

The following data show changes in the Gini coefficient between 1995 and 2016 in 15 European Union countries (UE-15) with which we usually make comparisons, as well as in Norway, Switzerland, the U.S., Canada and Québec, based on adjusted after-tax income (adult equivalent) (Table 21 and Figure 20).

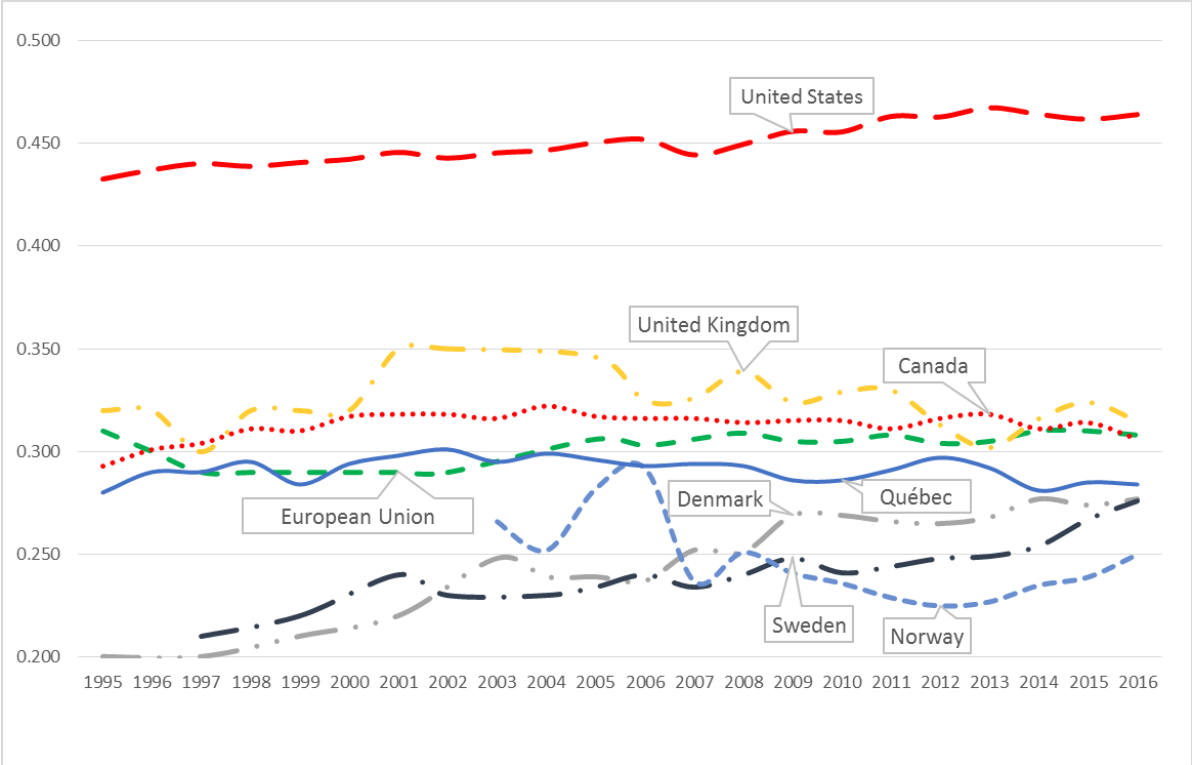
Table 21 Change in Gini coefficient based on after-tax income, adjusted for family size, selected countries, Canada and Québec, 1995-2016

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
European Union (27 countries)	0.310	0.300	0.290	0.290	0.290	0.290	0.290	0.290	n.d.	n.d.	0.306	0.303	0.306	0.309	0.305	0.305	0.308	0.304	0.305	0.310	0.310	0.308
Belgium	0.290	0.280	0.270	0.270	0.290	0.300	0.280	n.d.	0.283	0.261	0.280	0.278	0.263	0.275	0.264	0.266	0.263	0.265	0.259	0.259	0.262	0.263
Denmark	0.200	n.d.	0.200	n.d.	0.210	n.d.	0.220	n.d.	0.248	0.239	0.239	0.237	0.252	0.251	0.269	0.269	0.266	0.265	0.268	0.277	0.274	0.277
Germany	0.290	0.270	0.250	0.250	0.250	0.250	0.250	n.d.	n.d.	n.d.	0.261	0.268	0.304	0.302	0.291	0.293	0.290	0.283	0.297	0.307	0.301	0.295
Ireland	0.330	0.330	0.330	0.340	0.320	0.300	0.290	n.d.	0.306	0.315	0.319	0.319	0.313	0.299	0.288	0.307	0.298	0.305	0.307	0.311	0.298	0.295
Greece	0.350	0.340	0.350	0.350	0.340	0.330	0.330	n.d.	0.347	0.330	0.332	0.343	0.343	0.334	0.331	0.329	0.335	0.343	0.344	0.345	0.342	0.343
Spain	0.340	0.340	0.350	0.340	0.330	0.320	0.330	0.310	n.d.	0.310	0.322	0.319	0.319	0.324	0.329	0.335	0.340	0.342	0.337	0.347	0.346	0.345
France	0.290	0.290	0.290	0.280	0.290	0.280	0.270	0.270	n.d.	0.282	0.277	0.273	0.266	0.298	0.299	0.298	0.308	0.305	0.301	0.292	0.292	0.293
Italy	0.330	0.320	0.310	0.310	0.300	0.290	0.290	n.d.	n.d.	0.329	0.327	0.321	0.320	0.312	0.318	0.317	0.325	0.324	0.328	0.324	0.324	0.331
Luxembourg	0.290	0.280	0.250	0.260	0.270	0.260	0.270	n.d.	0.276	0.265	0.265	0.278	0.274	0.277	0.292	0.279	0.272	0.280	0.304	0.287	0.285	0.310
Netherlands	0.290	0.290	0.260	0.250	0.260	0.290	0.270	0.270	n.d.	n.d.	0.269	0.264	0.276	0.276	0.272	0.255	0.258	0.254	0.251	0.262	0.267	0.269
Austria	0.270	0.260	0.250	0.240	0.260	0.240	0.240	n.d.	0.274	0.258	0.263	0.253	0.262	0.277	0.275	0.283	0.274	0.276	0.270	0.276	0.272	0.272
Portugal	0.370	0.360	0.360	0.370	0.360	0.360	0.370	n.d.	n.d.	0.378	0.381	0.377	0.368	0.358	0.354	0.337	0.342	0.345	0.342	0.345	0.340	0.339
Finland	n.d.	0.220	0.220	0.220	0.240	0.240	0.270	0.260	n.d.	0.255	0.260	0.259	0.262	0.263	0.259	0.254	0.258	0.259	0.254	0.256	0.252	0.254
Sweden	n.d.	n.d.	0.210	n.d.	0.220	n.d.	0.240	0.230	n.d.	0.230	0.234	0.240	0.234	0.240	0.248	0.241	0.244	0.248	0.249	0.254	0.267	0.276
United Kingdom	0.320	0.320	0.300	0.320	0.320	0.320	0.350	0.350	n.d.	n.d.	0.346	0.325	0.326	0.339	0.324	0.329	0.330	0.313	0.302	0.316	0.324	0.315
Norway	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	0.266	0.252	0.282	0.292	0.237	0.251	0.241	0.236	0.229	0.225	0.227	0.235	0.239	0.250
Switzerland	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	0.304	0.311	0.307	0.296	0.297	0.288	0.285	0.295	0.296	0.294
United States	0.433	0.437	0.440	0.439	0.441	0.442	0.446	0.443	0.445	0.447	0.450	0.452	0.444	0.450	0.456	0.456	0.463	0.463	0.467	0.464	0.462	0.464
Canada	0.293	0.301	0.304	0.311	0.310	0.317	0.318	0.318	0.316	0.322	0.317	0.316	0.316	0.314	0.315	0.315	0.311	0.316	0.318	0.311	0.314	0.306
Québec	0.280	0.290	0.290	0.295	0.284	0.294	0.298	0.301	0.295	0.299	0.296	0.293	0.294	0.293	0.286	0.286	0.291	0.297	0.292	0.281	0.285	0.284

Note: Statistics Canada always computes the Gini coefficient for economic families of two persons or more and unattached individuals, which make up “all family units.”

Sources: STATISTICS CANADA, CANSIM 206-0033; EUROSTAT (2018), European Union Survey on Income and Living Conditions (EU-SILC); U.S. CENSUS BUREAU (2018); CEPE compilation, April 2018.

Figure 20 − Gini coefficient based on adjusted after-tax income, selected countries, Canada and Québec, 1995-2016



Note: In this figure, the scale ranges from 0.200 to 0.500. Statistics Canada always computes the Gini coefficient for economic families of two persons or more and unattached individuals, which make up "all family units".

Sources: STATISTICS CANADA, CANSIM 206-0033; EUROSTAT (2018), European Union Survey on income and living conditions (EU-SILC); U.S. CENSUS BUREAU (2018); CEPE compilation, April 2018.

Compared with these countries, Québec ranks in the middle; its Gini coefficient is lower than in a subset of 15 European Union countries and several other OECD countries (United States and Canada), but is higher than in some continental European countries (Belgium, Netherlands, and Austria) and all the Scandinavian countries.

3.2 Interdecile ratios

We can also represent inequalities by ratios between the various population deciles based on income. That means a ratio of the average income of the part of the population with the highest income to the income of the part with the lowest income. The interdecile ratio[23] makes it possible to see how many times the lower decile income is contained in the upper decile income. The measure used is the upper limit of the first and ninth deciles (that is, the upper limit of the first decile is between the first and second deciles; that of the ninth decile is between the ninth and tenth deciles. The result is nine limits for the ten deciles.

23. In previous CEPE progress reports, interquintile ratios were shown. However, because of the recent availability of income ratios by decile in the widely published Statistics Canada files, we decided to use, where possible, interdecile ratios. Using limits above the first and ninth **déciles** however provides a median equivalent of the first and fifth **quintiles**, as presented previously.

Between 1990 and 2016, the purchasing power of all categories shown increased, except for unattached individuals in the first decile, whose purchasing power declined slightly. Purchasing power increased the most for the fifth and sixth deciles among unattached individuals, the first decile among economic families and the second and ninth deciles for all persons (Table 22)[24]. Overall, for economic families and unattached individuals, after transfers and taxes, the average income of the poorest decile is contained 6 times in the average income of the wealthiest decile in 1990 and 6.4 times in 2016. This represents an average of what is observed for economic families and unattached individuals and indicates a slight overall increase in inequalities. In the case of economic families inequalities decreased slightly (4 times in 1990 compared with 3.9 times in 2016), while they increased among unattached individuals (4.4 times in 1990 compared with 5.5 times in 2016). Inside Québec, inequalities increased but the decile portrait of incomes and types of family units must be qualified.

24. Thanks to readers who informed us of an error in this table in the 2016 CEPE Progress Report (CEPE 2017, Table 27 of that edition, p. 70), which did not show the correct data before transfers and taxes. Table 22 in this report shows correct and updated data.

Table 22 **Average income of persons in economic families and unattached individuals, by income decile, 2016 dollars, change in purchasing power between 1990 and 2016, Québec, 1990 and 2016**

	1990				2016				Change in purchasing power between 1990 and 2016 (1990 = 100)	
	Before transfers and taxes	After transfers and taxes	Difference		Before transfers and taxes	After transfers and taxes	Difference		Before transfers and taxes	After transfers and taxes
			$	%			$	%		
Unattached individuals										
1st decile	0	10 500	10 500		0	10 400	10 400			99.0
2nd decile	0	12 900	12 900		300	17 100	16 800	5600.0		132.6
3rd decile	2 000	15 200	13 200	660.0	4 800	20 300	15 500	322.9	240.0	133.6
4th decile	7 500	17 400	9 900	132.0	13 900	23 500	9 600	69.1	185.3	135.1
5th decile	12 600	19 700	7 100	56.3	22 000	27 200	5 200	23.6	174.6	138.1
6th decile	21 300	23 600	2 300	10.8	29 100	32 700	3 600	12.4	136.6	138.6
7th decile	31 000	28 900	-2 100	-6.8	39 000	36 800	-2 200	-5.6	125.8	127.3
8th decile	41 900	36 000	-5 900	-14.1	50 100	43 000	-7 100	-14.2	119.6	119.4
9th decile	60 300	45 800	-14 500	-24.0	68 600	57 600	-11 000	-16.0	113.8	125.8
Ratio 9th d./1st d.		4.4				5.5				
Economic families										
1st decile	4 900	25 100	20 200	412.2	11 500	34 400	22 900	199.1	234.7	137.1
2nd decile	19 700	33 200	13 500	68.5	27 900	44 200	16 300	58.4	141.6	133.1
3rd decile	33 500	40 200	6 700	20.0	40 700	53 000	12 300	30.2	121.5	131.8
4th decile	45 200	47 800	2 600	5.8	53 100	61 100	8 000	15.1	117.5	127.8
5th decile	58 100	54 600	-3 500	-6.0	66 600	70 300	3 700	5.6	114.6	128.8
6th decile	69 800	61 900	-7 900	-11.3	81 900	80 300	-1 600	-2.0	117.3	129.7
7th decile	84 300	70 900	-13 400	-15.9	98 900	92 400	-6 500	-6.6	117.3	130.3
8th decile	101 500	82 200	-19 300	-19.0	122 600	107 900	-14 700	-12.0	120.8	131.3
9th decile	128 300	99 800	-28 500	-22.2	162 700	135 300	-27 400	-16.8	126.8	135.6
Ratio 9th d./1st d.		4.0				3.9				
Unattached individuals and economic families										
1st decile	0	15 200	15 200		300	18 300	18 000	6000.0		120.4
2nd decile	6 900	20 100	13 200	191.3	10 500	24 900	14 400	137.1	152.2	123.9
3rd decile	17 800	27 700	9 900	55.6	22 400	33 200	10 800	48.2	125.8	119.9
4th decile	29 500	34 800	5 300	18.0	33 000	41 200	8 200	24.8	111.9	118.4
5th decile	40 900	43 000	2 100	5.1	44 300	49 500	5 200	11.7	108.3	115.1
6th decile	54 900	51 300	-3 600	-6.6	57 800	60 400	2 600	4.5	105.3	117.7
7th decile	69 100	60 700	-8 400	-12.2	75 000	72 800	-2 200	-2.9	108.5	119.9
8th decile	88 400	72 500	-15 900	-18.0	98 000	89 700	-8 300	-8.5	110.9	123.7
9th decile	115 800	91 100	-24 700	-21.3	138 300	116 600	-21 700	-15.7	119.4	128.0
Ratio 9th d./1st d.		6.0				6.4				

Source: STATISTICS CANADA, CANSIM 206-0031, CEPE compilation, April 2018.

Put briefly, the pictures given by means of the Gini coefficient or interdecile ratios correspond overall on changes in equality. Compared with other societies, including the other Canadian provinces and some European countries, Québec maintained a lower level of inequality, but is still outpaced by the Scandinavian countries and several others.

The ISQ study on changes in income equality in Québec during the last 35 years (CRESPO and RHEAULT, 2014), the authors also noted that by decomposing by income sources, we see that inequalities coming from private incomes played a key role in the increase in income inequality in the 1990s. The redistribution of transfers and taxes did not offset that increase (p. 7).

3.3 Gap (or extent), intensity and severity of poverty

Using income data, low income rates are reasonably well documented, which makes it possible to observe the situation of numerous vulnerable groups. To complete the picture given by those rates, the following elements in particular can be useful: the gap (extent), the intensity and the severity of poverty.

GAP (EXTENT)	Gap between the average revenue of family units or individuals considered to have a low income and the threshold. The gap can be expressed in dollars ($) or in percentage of threshold (%): (threshold - average low income) or (threshold - low income)/threshold
INTENSITY	Difference weighted by the low income rate: ([threshold - low income average]/threshold) x rate
SEVERITY	Intensity calculated by incorporating the income dispersion of the poorest of the poor (indication of the inequality among the poorest themselves), which makes it possible to determine aversion with respect to poverty

Low income rates are sometimes accompanied with a low income *gap*, which represents the shortfall of a low income family with respect to the pertinent low income threshold. For example, a family with an income of $15 000 and whose pertinent low income threshold is $20 000 would have a low income gap of $5 000. That would be a 25 % difference. Several authors have also analysed the *intensity* of low incomes, by measuring the ratio of low income difference to the threshold and then weighting the ratio by the rate[25]. One can even go further, by adding to the intensity a measure of the *severity* of poverty, which takes more into account the income of the poorest of the poor[26].

25. For example, if the average after-tax income of all those who are below the threshold is $7 000, and that the threshold is $10 000, the $3 000 difference divided by the $10 000 threshold gives a ratio of 30 %. That ratio must be interpreted as lower, for example, than a difference of $5 000 for the same threshold, which gives a ratio of 50 %. In addition, weighting the ratio by the low income rate can be interpreted in the same way. The same ratio (30 % or 50 %) will be more “intense” in that it will affect a larger proportion of the population, which we observe with the low income rate. A 30 % ratio combined with a low income rate of 10 % results in an intensity index of 3, while a 30 % ratio combined with a low income rate of 15 % gives an intensity index of 4.5. Likewise, a 50 % ratio combined with a low income rate of 10 % gives an intensity index of 5, and a 50 % ratio combined with a low income rate of 15 % gives an intensity index of 7.5.

26. We include in the intensity formula a dispersion measure related to the persons under the threshold so as to provide an indicator of inequality among the poor themselves. We presume that as the dispersion increases, society will be more inclined to accept that there are very poor people among the poor, and that as it decreases, societal acceptance will decrease, and it will try harder to reduce the inequality among the poor themselves (aversion to poverty).

One way to interpret the data is to compare the two years and interpret all the indexes that have decreased as an improvement in the situation and those that have increased as a deterioration of the situation (Tables 23, 24 and 25).

Over all, from 2002 to 2016, the low income gap (extent) and severity have increased, while the intensity has decreased overall. In fact, it has deteriorated for men but improved for women. By sex, the gap (extent), intensity and severity have increased for men while, for women, the gap did not increase as much and conversely, intensity and severity decreased (Table 23).

Table 23 Complementary indicators: gap, intensity and severity of low income, based on the market basket measure (MBM, base 2011), for all persons and by sex, and changes 2002 to 2016, Québec, 2002 and 2016

		All persons	Males	Females
2002	Low income rate (%)	10.8	10.0	11.7
	Gap (%)	29.5	30.0	29.0
	Intensity (gap x rate)	3.2	3.0	3.4
	Severity (gap^2 x rate)	0.9	0.9	1.0
2016	Low income rate (%)	8.6	9.1	8.1
	Gap (%)	34.5	37.2	31.4
	Intensity (gap x rate)	3.0	3.4	2.5
	Severity (gap^2 x rate)	1.0	1.3	0.8
Variation in % 2002-2016	Gap	16.9	24.0	8.3
	Intensity	-6.9	12.8	-25.0
	Severity	8.9	39.9	-18.8

Source: STATISTICS CANADA, CANSIM 206-0041; CEPE compilation, April 2018.

However, by age, all the indicators increased for seniors (to be interpreted with caution), but decreased globally for the intensity, for younger people and for persons 18 to 64, while the severity decreased for younger people only, having increased in other categories (Table 24).

Table 24 Complementary indicators: gap, intensity and severity of low income, based on the market basket measure (MBM, base 2011), for all persons and by age, and changes 2002 to 2016, Québec, 2002 and 2016

		All persons	Persons under age 18	Persons 18 to 64	Persons 65 and over
2002	Low income rate (%)	10.8	11.6	12.0	3.5*
	Gap (%)	29.5	21.5	32.6	17.9*
	Intensity (gap x rate)	3.2	2.5	3.9	0.6*
	Severity (gap^2 x rate)	0.9	0.5	1.3	0.1*
2016	Low income rate (%)	8.6	8.2	10.2	3.5*
	Gap (%)	34.5	25.2	37.3	27.0*
	Intensity (gap x rate)	3.0	2.1	3.8	0.9*
	Severity (gap^2 x rate)	1.0	0.5	1.4	0.3*
Variation in % 2002-2016	Gap	16.9	17.2	14.4	50.8*
	Intensity	-6.9	-17.1	-2.7	50.8*
	Severity	8.9	-2.9	11.3	127.5*

*: Use with caution, coefficient of variation > 16.6 % and ≤ 33.3 %.
Source: STATISTICS CANADA, CANSIM 206-0041; CEPE compilation, April 2018.

During the same period, with respect to types of family units, all the indicators showed increases for unattached individuals. Gap variations are quite small among persons living in economic families of two or more persons, the gap has decreased among two-parent families with children but increased in the other categories (to be interpreted most often with caution). Intensity and severity have increased in the categories out of the unattached individuals, the only one which has deteriorated (Table 25).

Table 25 Complementary indicators: gap, intensity and severity of low income, based on the market basket measure (MBM, base 2011), for all persons, by family unit type, and changes 2002 to 2016, Québec, 2002 and 2016

		All persons	Unattached persons	Persons in economic families, two persons or more	Childless couples	Persons in families with children	Persons in lone-parent families	Persons in female lone-parent families
2002	Low income rate (%)	10.8	23.2	8.5	8.9*	6.1*	32.4	37.3
	Gap (%)	29.5	36.4	25.8	31.7*	21.5	23.0	22.4
	Intensity (gap x rate)	3.2	8.4	2.2	2.8*	1.3*	7.5	8.4
	Severity (gap^2 x rate)	0.9	3.1	0.6	0.9*	0.3*	1.7	1.9
2016	Low income rate (%)	8.6	23.0	5.4	4.3	5.7*	20.1*	23.1*
	Gap (%)	34.5	42.7	26.6	37.8*	19.8*	26.4	26.0
	Intensity (gap x rate)	3.0	9.8	1.4	1.6*	1.1*	5.3*	6.0*
	Severity (gap^2 x rate)	1.0	4.2	0.4	0.6*	0.2*	1.4*	1.6*
Variation in % 2002-2016	Gap	16.9	17.3	3.1	19.2*	-7.9*	14.8	16.1
	Intensity	-6.9	16.3	-34.5	-42.4*	-13.9*	-28.8*	-28.1*
	Severity	8.9	36.4	-32.5	-31.3*	-20.8*	-18.3*	-16.6*

*: Use with caution, coefficient of variation > 16.6 % and ≤ 33.3 %.
Source: STATISTICS CANADA, CANSIM 206-0042; CEPE compilation, April 2018.

Thus, from 2002 to 2016, low income rates as well as intensity and severity of poverty increased for unattached individuals. One explanation sometimes put forward is that people who were able to leave a low income situation by departing from a family, leaving the others behind them, further from those thresholds (gap or extent), which may have an impact on the intensity and severity of poverty.

A complementary illustration of the differences is also provided with one of the indicators selected in the framework of the Québec indicators of sustainable development, i.e., “excess family income”. In reality that income may be in deficit with respect to the MBM adjusted for family size. It makes it possible to observe the average differences between available family income by income quintiles and the market basket measure (MBM) threshold, adjusted for family size. The data currently available for Québec, published by the Institut de la statistique du Québec, cover the period from 2002 to 2015 (Table 26).

Table 26 Excess family income (average gaps between disposal family income and the low income threshold using the MBM), adjusted for family size, by quintile, 2015 dollars, Québec, 2002-2015

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Lower quintile	-2 999	-2 915	-2 540	-3 621	-2 974	-2 972	-3 316	-3 862	-4 218	-4 273	-4 902	-4 627	-3 463	-4 744
Second quintile	6 113	6 252	6 553	5 953	6 392	7 083	6 474	6 352	6 172	5 747	6 175	6 355	6 921	6 421
Third quintile	12 885	13 055	13 367	13 222	13 536	14 624	14 203	14 119	13 896	13 571	13 859	14 093	14 559	14 312
Fourth quintile	21 910	22 077	22 663	22 397	22 804	24 028	24 019	23 515	23 433	22 929	23 781	23 889	24 247	24 348
Upper quintile	47 048	46 391	48 075	47 026	48 592	49 938	50 609	50 472	49 898	49 721	51 183	49 956	50 284	49 567

Source: Banque de données des statistiques officielles sur le Québec (BDSO), *Revenu familial excédentaire*, ISQ compilation, website consulted in April 2018.

We see that the situation for the lower quintile family units has deteriorated over time. It is striking to find that for the lower quintile, the income deficit continues to increase (in constant dollars). It varies in a somewhat cyclical manner, but overall, after 2010, the deficit went over $4 000 for several years (reaching $4 902 in 2012 and then falling back to $3 463 in 2014) before rising to $4744 in 2015) although it was less than $3000 at the beginning of the period ($2 999 in 2002). On the other hand, excess income for the other quintiles is still higher for 2015 than for 2002.

3.4 Wealth inequality

From the point of view of wealth inequality, in part distinct from income inequality, the global picture of changes in inequality can be refined. In fact, the picture for Québec shows wealth inequalities that are more striking than those for income. Here, we are interested in total net worth, that is, assets less liabilities. Retirement assets, financial and non-financial (for example, real estate and vehicles) are part of net worth. Among liabilities, we include hypothecary debt (mortgages), other borrowings and credit lines.

In Québec, according to Statistics Canada's most recent Survey of Financial Security (SFS), in 2016, the portion of the net wealth for the upper quintile is 68.3 %. However, it seems to have only slightly changed since 1999 (70.0 %). The change in wealth according to the net assets quintile from 1999 to 2016 shows its strong concentration. In absolute terms, the percentage of total net worth seems to the nil for the first quintile and for each of the others, is 2.2 %, 8.5 %, 20.9 % and 68.3 % in 2016. The first three quintiles thus represent just over 10 % of wealth, while the riches quintile represents more than two thirds (Table 27).

Table 27 **Total assets, total debts and net worth (assets less debts) of family units, by quintile of net assets, 2016 dollars, Québec, 1999, 2005, 2012 and 2016**

		1999			2005			2012			2016		
		Median values	Total values (x 1 000 000)	% of total values on total	Median values	Total values (x 1 000 000)	% of total values on total	Median values	Total values (x 1 000 000)	% of total values on total	Median values	Total values (x 1 000 000)	% of total values on total
1st quintile	Assets	2 900 *	5 559 *	0.6 *	3 500 *	5 446 *	0.4 *	5 900	8 336	0.4	5 700	9 561	0.4
	Debts	6 900 *	6 940 *	6.0 *	8 600 *	5 780 *	3.8 *	7 400 *	7 977	3.1	8 500 *	8 803	2.9
	Net worth	1 400	-1 381	-0.2	1 200	-334	0.0	2 000	359	0.0	2 300	758	0.0
2nd quintile	Assets	44 000	36 705	3.8	37 400	39 061	3.1	58 100	65 948	3.2	66 700	75 930	3.5
	Debts	13 100 *	15 878	13.8	10 800 *	17 807 *	11.8 *	13 300 *	29 646	11.4	19 000	34 075	11.1
	Net worth	31 500	20 826	2.4	29 300	21 254	1.9	44 800	36 303	2.0	49 300	41 854	2.2
3nd quintile	Assets	152 500	100 569	10.3	168 500	122 516	9.6	302 600	222 543	10.8	295 200	235 906	10.8
	Debts	56 400	30 362	26.4	60 600 *	37 295	24.7	109 400	70 076	26.8	110 000	75 360	24.6
	Net worth	105 700	70 207	8.2	124 400	85 221	7.6	208 900	152 467	8.5	208 900	160 546	8.5
4th quintile	Assets	304 100	195 822	20.2	385 000	269 936	21.1	589 200	439 739	21.4	612 000	475 184	21.7
	Debts	49 800	28 157	24.4	62 900 *	41 054	27.2	64 700	61 807	23.7	93 700	81 155	26.5
	Net worth	260 000	167 666	19.6	322 400	228 882	20.3	515 000	377 932	21.0	514 600	394 028	20.9
5th quintile	Assets	718 600	633 033	65.1	911 700	842 447	65.8	1 355 700	1 320 188	64.2	1 303 400	1 395 864	63.7
	Debts	52 500	33 866	29.4	48 000 *	49 121 *	32.5 *	86 200	91 635	35.1	112 000	106 986	34.9
	Net worth	668 700	599 167	70.0	873 700	793 325	70.3	1 233 000	1 228 554	68.4	1 202 200	1 288 878	68.3
Total	Assets	163 800	971 689	100.0	185 400	1 279 407	100.0	320 700	2 056 755	100.0	308 600	2 192 444	100.0
	Debts	29 000	115 204	100.0	28 200	151 059	100.0	36 100	261 140	100.0	45 000	306 379	100.0
	Net worth	105 700	856 485	100.0	124 400	1 128 349	100.0	208 900	1 795 615	100.0	208 900	1 886 065	100.0

*: Use with caution, coefficient of variation > 16.6 % and ≤ 33.3 %.
Source: STATISTICS CANADA, CANSIM 205-0004; CEPE compilation, April 2018.

By identifying generations by age cohorts, we see that wealth transmission is a phenomenon likely to accentuate inequality over the coming years. For older generations, the wealth transmitted may amount to very little, if we do not count the family land for rural populations (which is often divided among several descendants). For younger generations, a larger financial and real estate wealth could become the norm in some situations.

4. INDICATORS OF SOCIAL EXCLUSION

For the first time, CEPE is including indicators of social exclusion in a separate section of its progress report. These indicators are based on extensive work carried out by the Centre. That work resulted in the *Avis sur la mesure de l'exclusion sociale*, (French only), published in 2015 (LECHAUME and SAVARD, 2015), which presented our initial results. We proposed an approach to understanding the question by means of various indicators that could be followed from year to year.

With that perspective in mind, CEPE began by positing the following definition:

> Social exclusion is the result of a constellation of economic, political, institutional and cultural processes, which are often interdependent and cumulative and which sets persons or groups apart in the society.
>
> When social exclusion and poverty come combine, they may mutually reinforce one another over time. Social exclusion associated with poverty may be manifested in particular by limited possibilities an individual (and consequently for his or her family and community) to maintain economic independence, while affecting the integrity of their social identity, health, education, participation in the labour force and in social and family relations networks. Those consequences may in turn impede getting out of poverty.
>
> The mechanisms of social exclusion can be corrected by collective action and public policies.

After adopting a definition, we still had to select indicators useful for showing changes in the area of social exclusion in Québec.

CEPE built its social exclusion measurement on a foundation of nine relevant, reliable and available indicators, which cover the following dimensions:

- Material conditions;
- health;
- work and employment;
- education;
- personal and institutional networks.

Although these indicators take into account numerous factors, there are other indicators just as important that were not selected for various reasons: job market transformations, transportation questions, the experience of being under judicial control and unemployment indemnisation. Nevertheless, our work allowed us to lay the groundwork for regular measurements of social exclusion in Québec, which will be indispensable in terms of combatting poverty, especially since questions related to social inequalities, discrimination and stigmatization are more and more recognized for their potential repercussions on life paths.

The following table shows the main indicators selected and their changes over time. As we will see later, the low-income population is much more at risk of experiencing situations or mechanisms of social exclusion in all the dimensions identified.

4.1 Overall picture

Indicators of social exclusion in Québec

INDICATORS	Last available measure	Change
1. Material conditions		
Proportion of households that have often or sometimes feared lacking food because of financial reasons	31.8 % of low-income households fear lacking food in 2013-2014.	Less than in 2011-2012
Proportion of income allocated to housing	Low-income families allocate 50.5 % of their disposable income to rent payments in 2014.	Falling since 2012
Proportion of households who consider their housing inadequate based on the national occupancy standard	8.6 % of low-income families consider that their housing is inadequate in 2014.	Relatively stable since 2012
2. Health		
Proportion of persons with a permanent incapacity that prevents them from working	8 % of the population aged 18 to 64 that have a permanent incapacity that prevent them from working have a low income in 2013-2014.	Stable since 2007-2008
3. Work and employment		
Proportion of persons on long-term unemployment	11.7 % of unemployed persons have been looking for work for at least 52 weeks in 2016.	Falling since 2014 (-1.7 p.p.)
Proportion of persons involuntarily working part-time	4.2 % jobs are involuntarily part-time in 2016.	Falling slightly since 2000
4. Education		
Proportion of the population aged 25 to 64 without a high school diploma	18.2 % of the Québec population aged 25 to 64 with a low income does not have a high school diploma in 2014.	Declining trend since 2012
Proportion of the population at literacy level 1	14.9 % of the Québec population have a low level of competency for understanding text in 2012 (literacy level 1). The proportion rises to 19 % if those under literacy level 1 are included.	No comparable previous measure
5. Networks (personal and institutional)		
Proportion of persons without acceptable emotional or informational support	26.2 % of low-income persons do not have an acceptable level of emotional or informational support in 2009-2010.	Stable since 2007-2008

4.2 Indicators

4.2.1 Material conditions

Persons whose financial resources are limited must often make difficult choices since they are unable to meet all their basic needs. That situation has in impact on their living conditions and reduces their possibilities for getting out of poverty and social exclusion. The material conditions dimension mainly involves the actual or perceived situation of poverty, the lack of material and financial resources and the lack of capabilities that such poverty entails. Its repercussions are manifested in various spheres of life, in particular food and housing.

- Food insecurity

Food insecurity has been identified as a factor that can characterize the social exclusion of an individual or a family. The proposed indicator, that is, fear of lacking food because of financial reasons, would appear to be an obvious characteristic of the reality of social exclusion associated with poverty.

The proportion of households that have often or sometimes feared lacking food because of financial reasons during the previous 12 months declined in 2013-2014, compared with 2011-2012 (Table 28 and Figure 21). In fact, the analysis of the data showed that the proportion has returned to its level in the preceding period (2011-2012). In 2013-2014, the proportion of low-income households that often or sometimes feared lacking food because of financial reasons is 31.8 %. That proportion is almost six times higher that what is observed for the population that does not have a low income[27].

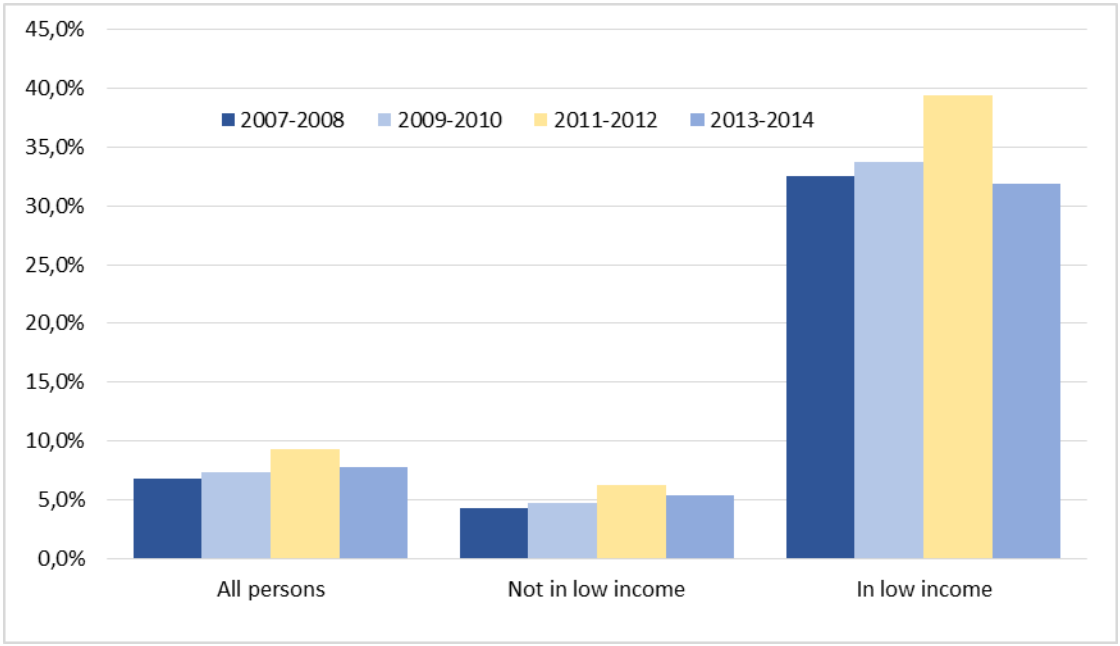
Table 28 Proportion of households that have often or sometimes feared lacking food because of financial reasons during the previous 12 months, by income level, Québec, 2007-2008 à 2013-2014

	2007-2008	2009-2010	2011-2012	2013-2014
All persons	6.8	7.4	9.3	7.7
Not in low income	4.2	4.7	6.3	5.4
In low income	32.6	33.7	39.4	31.8

Source: STATISTICS CANADA, *Canadian Community Health Survey*, CEPE compilation, April 2018.

27. For the purposes of our calculations, households in the first before-tax income decile are considered to have a low income. That choice is based on the fact that in the *Canadian Community Health Survey*, household incomes are compiled only on the basis of income deciles.

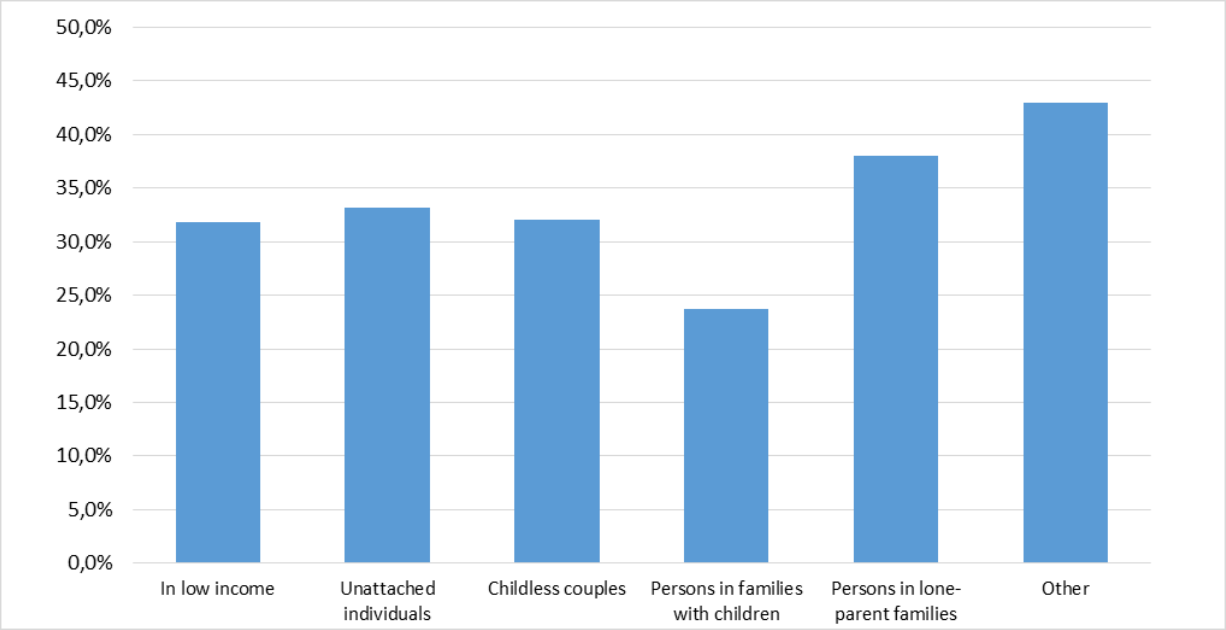
Figure 21 – Proportion of households that have often or sometimes feared lacking food because of financial reasons during the previous 12 months, by income level, Québec, 2007-2008 to 2013-2014



Source: STATISTICS CANADA, *Canadian Community Health Survey*, CEPE compilation, April 2018.

Among all low-income households, we observed that lone-parent families are the most likely to find themselves in this situation. In 2013-2014, almost 32 % of low-income lone-parent families faced that situation (Figure 22).

Figure 22 – Proportion of households that have often or sometimes feared lacking food because of financial reasons during the previous 12 months, by family unit type, Québec, 2013-2014



Source: STATISTICS CANADA, *Canadian Community Health Survey*, CEPE compilation, April 2018.

- Housing

Housing is a basic need. Having decent and affordable housing is a constant preoccupation for the less fortunate because of the share of their budget that goes to that expense. Many studies have shown that it is the most important budget item for every family and that is especially true for persons living on a low income. Among the less fortunate, a significant number have little or no choice when the time comes to find housing. They must take what someone is willing to rent to them, which too often means housing in bad condition, inadequate and usually too expensive.

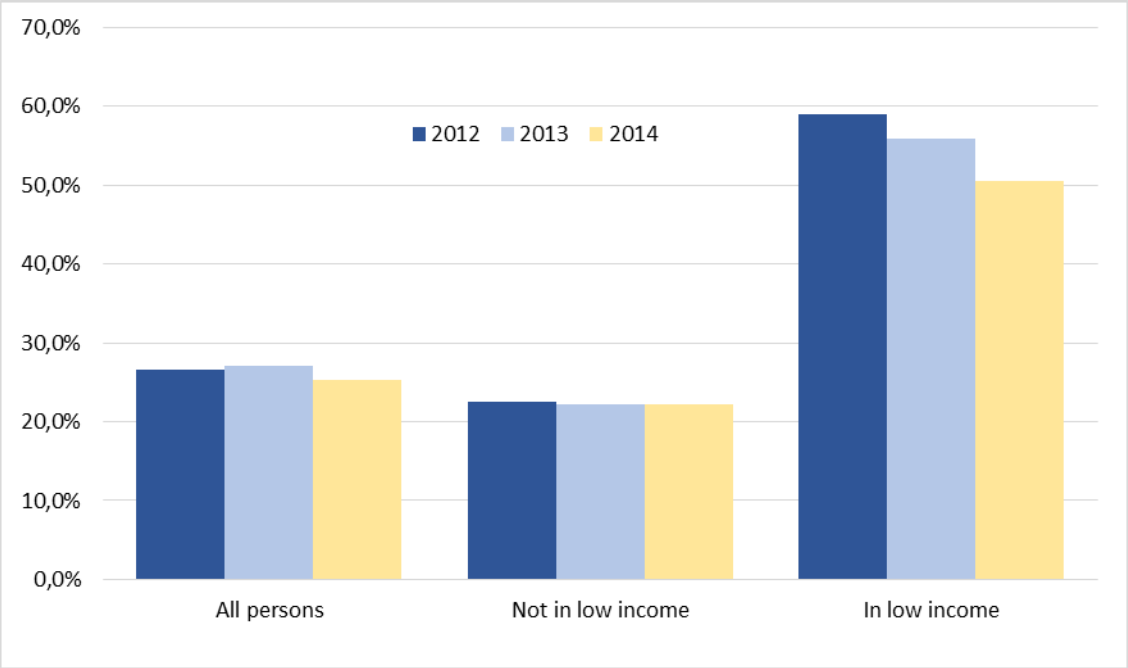
The proportion of disposable income, calculated for the MBM and allocated to housing, has declined slightly since 2012. In 2014, the population as a whole allocated around one quarter of disposable income to housing. However, that proportion climbed to almost half for low-income families (Table 29 and Figure 23).

Table 29 Proportion of family unit disposable income allocated to housing, by income, Québec, 2012-2014

	2012	2013	2014
All persons	26.6	27.1	25.2
Not in low income	22.5	22.3	22.2
In low income	59.0	55.8	50.5

Source: STATISTICS CANADA, *Canadian Income Survey*, CEPE compilation, April 2018.

Figure 23 – Proportion of family unit disposable income allocated to housing, by income, Québec, 2012-2014



Source: STATISTICS CANADA, *Canadian Income Survey*, CEPE compilation, April 2018.

The analysis of the data by type of family unit shows that the portion of disposable household income used for expenses related to housing in low-income households varies greatly depending on the type of family unit. Unattached individuals allocated on average 65 % of their disposable income from 2012 to 2014 to housing. Lone-parent families allocated on average 35 % of their disposable income, childless couples, 45 %, and the portion is over 30 % for couples with children.

Having housing does not necessarily mean that it meets the needs of those living in it. In 2014, in the population as a whole, we observe that 4.4 % of households consider their housing to be inadequate[28]. The proportion is 8.6 % for the low-income population (Table 30 and Figure 24).

28. Our determination of inadequate housing is based on the National Occupancy Standard (NOS). That standard makes it possible to determine if a household's housing is or is not suitable in terms of quality, suitable in terms of size and is affordable. According to the standard, housing is of suitable quality if, in the opinion of the occupants, no major repairs are needed. Housing is affordable if the household allocates to it less than 30 % of its before-tax income. Finally, housing is of suitable size if the number of rooms is sufficient, taking into account the size and makeup of the household, based on the NOS definition. The NOS has determined, on the basis of elements common to the provincial and territorial standards, that a sufficient number of rooms means one room for each of the following:

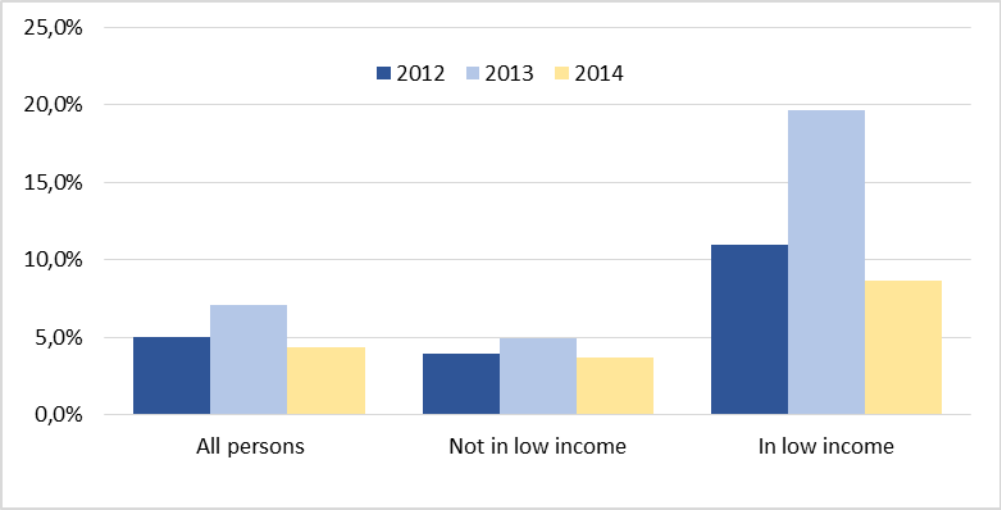
- Two adults forming a couple;
- Any person aged 18 or more who is a member of the household;
- Two children of the same sex and under the age of 18;
- Each additional boy or girl unless there are two children of opposite sex, under the age of 5, who may share the same room.

Table 30 **Proportion of family unit renters who consider their housing inadequate, based on the National Occupancy Standard, by income, Québec, 2012-2014**

	2012	2013	2014
All persons	5.0	7.1	4.4
Not in low income	3.9	4.9	3.7
In low income	11.0	19.7	8.6

Source: STATISTICS CANADA, *Canadian Income Survey*, CEPE compilation, April 2018.

Figure 24 – Proportion of family unit renters who consider their housing inadequate, based on the National Occupancy Standard, by income, Québec, 2012-2014



Source: STATISTICS CANADA, *Canadian Income Survey*, CEPE compilation, April 2018.

4.2.2 Health

Health is a key element in spiraling social exclusion. For persons living in poverty who have health problems, it is much more complex to act on their lives and their environment. Bad health may be the result of some forms of exclusion associated with poverty, but it may also cause some forms of social exclusion by being a precipitating factor. Put succinctly, sickness, whether physical or mental, may be either a cause or a consequence of social exclusion because persons with health problems may be marginalized in some spheres of social life (work, family, friends) or because the lack of financial resources to pay for some types of care jeopardizes the possibility of maintaining one's health.

- Proportion of the population with a permanent incapacity that prevents them from working.

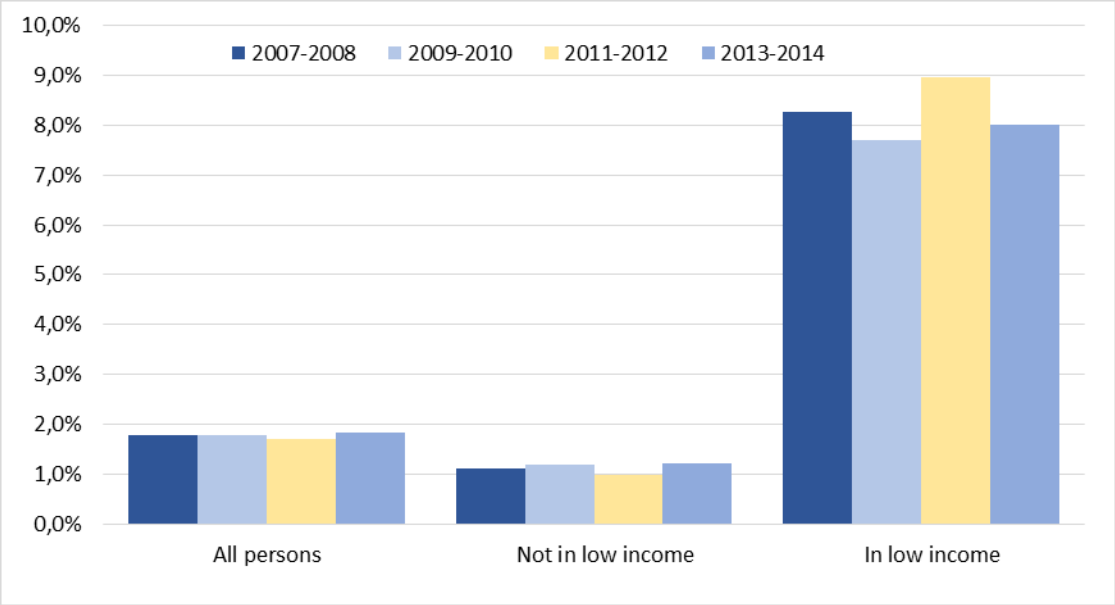
The proportion of the population between the ages of 18 and 64 who have a permanent incapacity, whether physical or mental, that prevents them from working is 1.8 % in 2013-2014, which is similar to the rate in previous years. For the low-income population, the proportion reached 8 % for the same period, that is, a rate four times greater. Finally, it should be noted that men or slightly more at risk than women to have an incapacity that prevents them from working (Table 31 and Figure 25).

Table 31 Proportion of the population aged 18 to 64 with an incapacity that prevents them from working, by income, Québec, 2007-2008 à 2013-2014

	2007-2008	2009-2010	2011-2012	2013-2014
All persons	1.8	1.8	1.7	1.8
Not in low income	1.1	1.2	1.0	1.2
In low income	8.3	7.7	9.0	8.0

Source: STATISTICS CANADA, *Canadian Community Health Survey*, CEPE compilation, April 2018.

Figure 25 – Proportion of the population aged 18 to 64 with an incapacity that prevents them from working, by income, Québec, 2007-2008 à 2013-2014



Source: STATISTICS CANADA, *Canadian Community Health Survey*, CEPE compilation, April 2018.

Furthermore, age is a very important factor because it affects the risk of having a permanent incapacity. The risk increases significantly as of age 45 among low-income persons. Moreover, the fact that they cannot hold a job is more often than not a sign of poverty. In 2013-2014, almost 40 % of persons aged 18 to 64 who have an incapacity preventing them from working are in the low-income category.

4.2.3 Work and employment

Access to a job is one of the best ways to get out of poverty and to facilitate social inclusion. For many people, working procures a degree of economic independence, a certain status and makes it possible to establish regular social relationships while building self-esteem. Nevertheless, some factors jeopardize job market integration for some people.

To take into account those processes and because work is an essential dimension in the equation of poverty and social exclusion, we have selected several indicators to show the degree of accessibility to the job market and to employment.

- Proportion of people on long-term unemployment

A period of prolonged unemployment, defined here as 52 weeks or more of job hunting, can lead to an increase in the probability that the concerned persons are experiencing poverty and therefore may be more at risk of social exclusion. Numerous studies have shown that a prolonged period without a job reduces the probability of "acceptable" reintegration into the job market. One of the underlying factors that partially explains this observation is related to a depreciation of the human capital of persons who experience a prolonged absence from the job market.

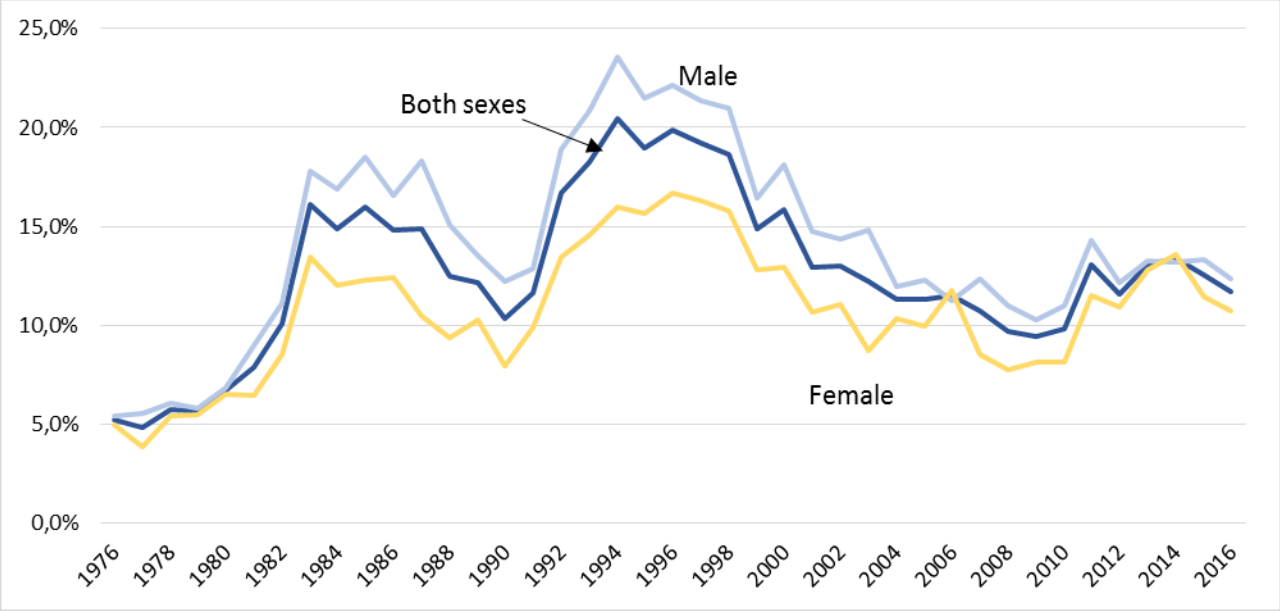
As we can see, spells of prolonged unemployment increase during periods of economic slow-down and decrease when the economy is growing. This shows that there is a certain degree of accessibility or inaccessibility to the job market for persons looking for work. The proportion of men who are strongly affected by unemployment is higher than the proportion of women, and the differences worsened in the 1990s but have tended to decrease in recent years (Table 32 and Figure 26).

Table 32 Proportion of people on long-term unemployment in the overall population of unemployed people, overall and by sex, Québec, 1980-2016

	1980	1985	1990	1995	2000	2005	2010	2015	2016
Both sexes	6.7	15.9	10.3	19.0	15.9	11.3	9.8	12.5	11.7
Male	6.8	18.5	12.2	21.5	18.1	12.3	11.0	13.3	12.3
Female	6.5	12.3	7.9	15.6	13.0	9.9	8.2	11.4	10.7

Source: STATISTICS CANADA, *Labour Force Survey*, CEPE compilation, April 2018.

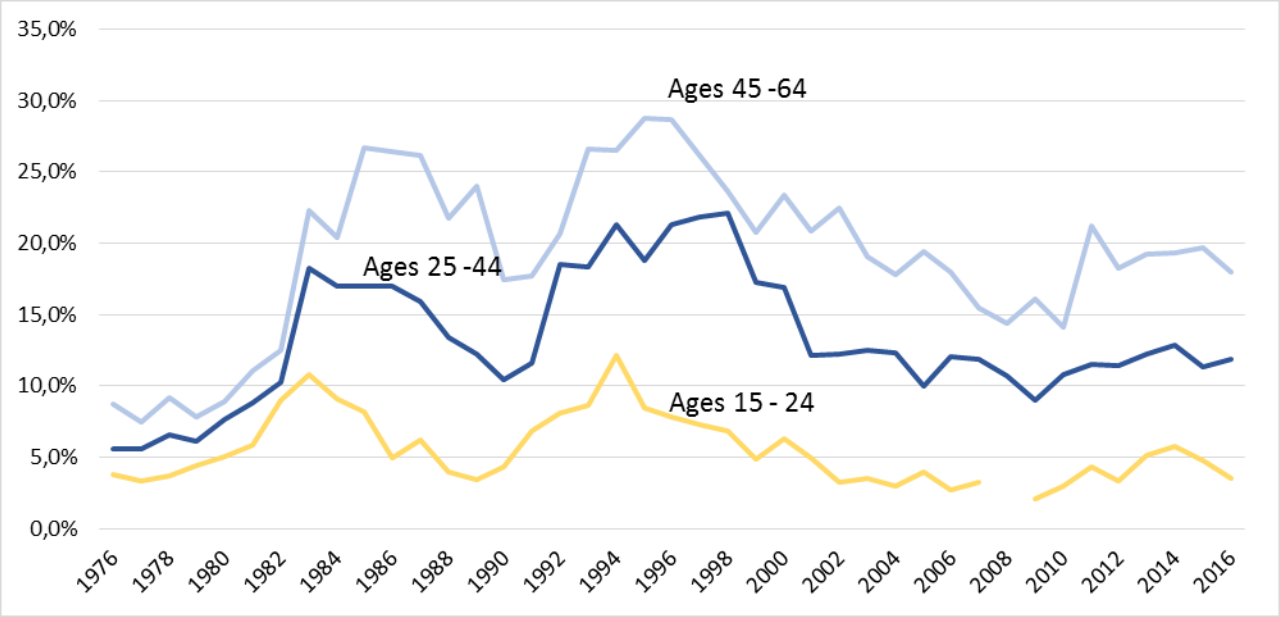
Figure 26 − Proportion of people on long-term unemployment in the overall population of unemployed people, overall and by sex, Québec, 1980-2016



Source: STATISTICS CANADA, *Labour Force Survey*, CEPE compilation, April 2018.

Furthermore, we observed that persons aged 45 to 54 have the highest risk of experiencing a period of prolonged unemployment, while such unemployment is less widespread among persons aged 15 to 24 (Figure 27).

Figure 27 − Proportion of people on long-term unemployment in the overall population of unemployed people, by age group, Québec, 1976-2016



Source: STATISTICS CANADA, *Labour Force Survey*, CEPE compilation, April 2018.

In 2016, out of the 315 000 unemployed persons in Québec, around 37 000 (11.7 %) had been looking for work for at least 52 weeks. Since 2009, the year in which the proportion of people on long-term unemployment reached its lowest level (9.4 %) since the recession at the beginning of the 1980s, we observe a slight increase in this indicator (+2.3 percentage points). This situation is not unrelated to the worldwide economic juncture ups and downs that was hit so hard by the major financial crisis of 2009, which began to resolve itself only very recently. The increase in long-term unemployment in recent years had the overall effect of increasing the risk of poverty and social exclusion for some people.

- Proportion of workers with involuntary part-time work

Although access to a job reduces the risk of low-income and promotes social inclusion, nevertheless some people cannot find a full-time job and have to involuntarily take a part-time job. Unable to find a full-time job, their capacity for improving their living condition is undermined. They run a higher risk of living in poverty, a situation that can precipitate them into the spiral of exclusion.

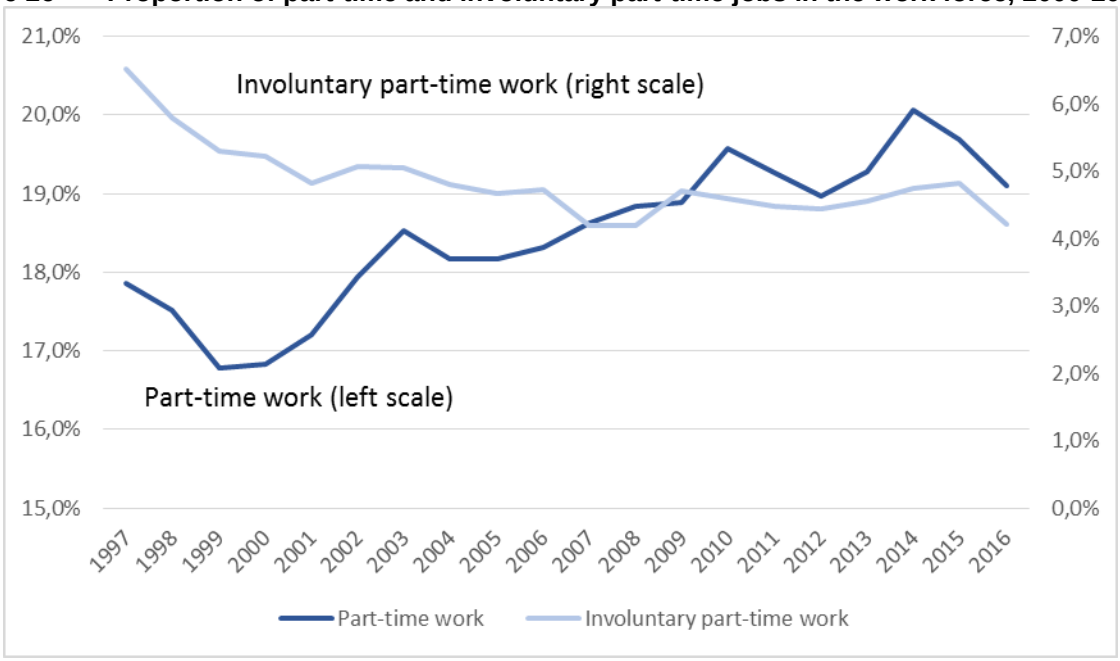
The proportion of persons working part-time has increased slightly since 2000, from 16.8 % to 19.1 % for all labour force members (+2.3 percentage points). In 2016, Québec had about 790 000 part-time workers. During that year, the proportion of involuntary part-time workers in the overall work force scarcely changed, dropping from 5.2 % in 2000 to 4.2 % 16 years later (Table 33 and Figure 28). In 2016, the work force had about 174 000 part-time workers who wanted to find full-time work, a number similar to that observed in 2000.

Table 33 Proportion of part-time and involuntary part-time jobs in the work force, Québec, 2000-2016

	2000	2005	2010	2015	2016
Part-time work	16.8	18.2	19.6	19.7	19.1
Involuntary part-time work	5.2	4.7	4.6	4.8	4.2

Source: STATISTICS CANADA, *Labour Force Survey*, CEPE compilation, April 2018.

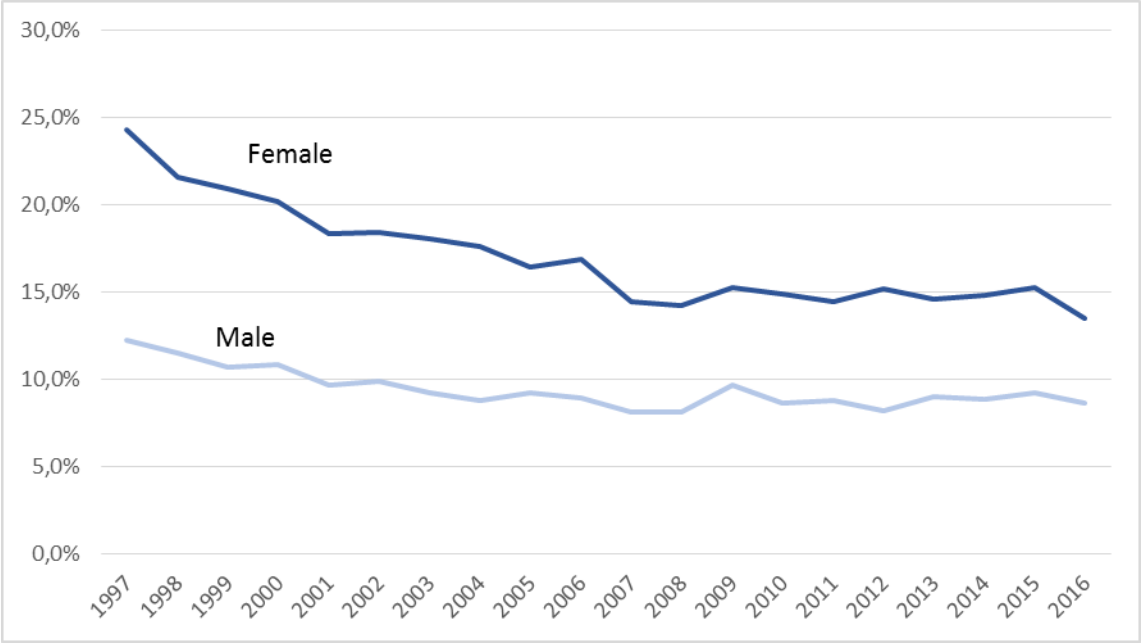
Figure 28 – Proportion of part-time and involuntary part-time jobs in the work force, 2000-2016



Source: STATISTICS CANADA, *Labour Force Survey*, CEPE compilation, April 2018.

Among involuntary part-time workers, we observed that women are more likely to be in that situation even though they would prefer to work full-time. In 2016, 13.5 % of women working part-time were doing so involuntarily, compared with 8.6 % of men (Figure 29).

Figure 29 − Proportion of part-time and involuntary part-time jobs in the overall part-time work force, by sex, Québec 1997-2016



Source: STATISTICS CANADA, *Labour Force Survey*, CEPE compilation, April 2018.

4.2.4 Education and literacy

Education is a major inclusion issue and a protection factor that can greatly facilitate or, conversely, impede social integration and access to the job market.

- Proportion of the population aged 25 to 64 without a high school diploma

In an increasingly knowledge-based economy, worker skills have become a major element for people who want sustainable jobs. In this regard, Québec has made important progress since the 1990s. In fact, according to Statistics Canada's *Labour Force Survey,* the proportion of the population aged 25 to 64 without a high school diploma has considerably declined. In 1990 almost two out of five people (37.9 %) were in that situation. In 2016, their relative weight had dropped to somewhat less than one out of eight (12.2 %).

Although the level of schooling of the population as a whole has increased, the observations that can be drawn may vary when the situation is analyzed from the perspective of low income. According to data in Statistic Canada's *Canadian Income Survey*, based on MBM thresholds for low income[29], we see that the proportion of the low-income population aged 25 to 64 that does not have a high school diploma is clearly higher than the proportion of the overall population. In 2014, one out of five low-income people (18.2 %) in that age group does not have a high school diploma, which is a proportion twice as high as that of the overall population (8.5 %) (Table 34 and Figure 30). Thus, although we observe a large decrease in the population without a high school diploma, we also see that the proportion of people without a high school diploma in the

29. This data source difference can explain the apparent disparity here and in the previous paragraph for the overall population.

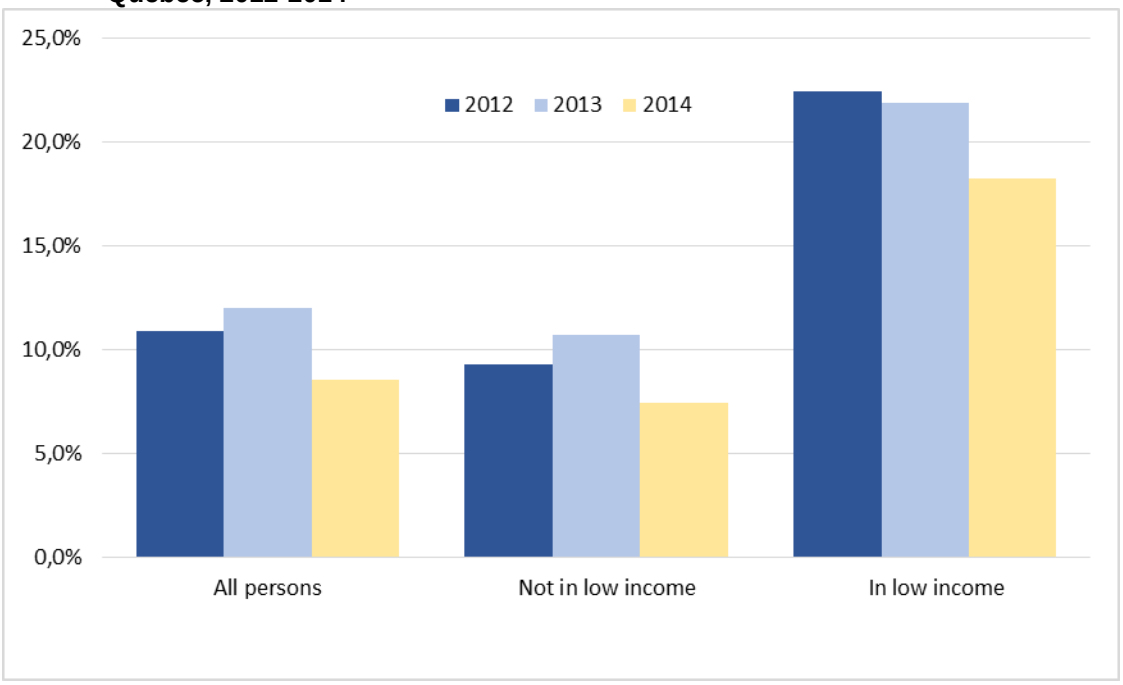
low-income population is increasing. In other words, education is no longer sheltering as many people from poverty as before.

Table 34 **Proportion of the population aged 25 to 64 without a high school diploma, by income, Québec, 2012-2014**

	2012	2013	2014
All persons	10.9	12.0	8.5
Not in low income	9.3	10.7	7.4
In low income	22.4	21.9	18.2

Source: STATISTICS CANADA, *Canadian Income Survey*, CEPE compilation, April 2018.

Figure 30 – Proportion of the population aged 25 to 64 without a high school diploma, by income, Québec, 2012-2014



Source: STATISTICS CANADA, *Canadian Income Survey*, CEPE compilation, April 2018.

- Proportion of the population reaching literacy level 1

Literacy skills[30] are an absolute necessity for full participation in society. Knowing how to read and write is indispensable in all areas of life and in particular when looking for work, caring for one's health, searching for information and maintaining one's knowledge.

30. The Program for the International Assessment of Adult Competencies (PIAAC) evaluates three parameters of basic skills (DESROSIERS et al., 2015). They are literacy (understanding a text), numeracy (understanding numbers) and problem solving in a technological environment. To measure those skills, PIAAC uses a scale of 0 to 500 points divided among five levels. Level 1 corresponds to very weak skills. Level 2 corresponds to weak skills. Level 3 is considered to the lowest level for understanding and using

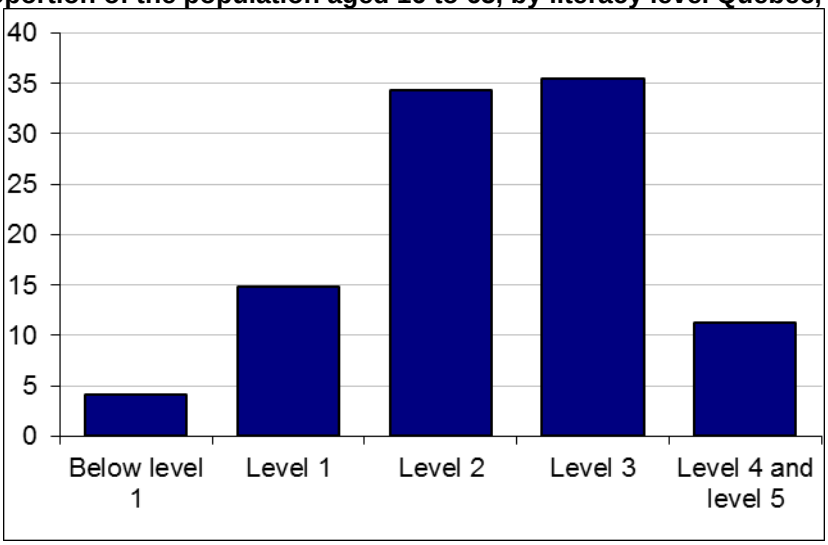
In 2012, 19 % of the Québec population aged 16 and over is at level 1 or less in literacy. In other words, one out of five people in Québec were at a very weak level for literacy. The fact that they are unable to sufficiently understand a written text puts many obstacles in their way and can lead to social exclusion (Table 35 and Figure 31).

Table 35 Proportion of the population aged 16 to 65, by literacy level Québec, 2012

	Below level 1	Level 1	Level 2	Level 3	Level 4 and level 5
Litteracy	4.1	14.9	34.3	35.5	11.3

Source: STATISTICS CANADA (2013). *Programme for the International Assessment of Adult Competencies (PIAAC)*, CEPE compilation, April 2018.

Figure 31 − Proportion of the population aged 16 to 65, by literacy level Québec, 2012



Source: STATISTICS CANADA (2013). *Programme for the International Assessment of Adult Competencies (PIAAC)*, CEPE compilation, April 2018.

4.2.5 Personal and institutional networks

- Proportion of the population that does not have an acceptable level of emotional or informational support

The dimension of personal and institutional networks contains all the processes that involve recourse to institutions, problems in accessing them and participation in organizations or in society in general. Access and participation reinforce the capacity to act by giving people additional tools to function in their precarious state. From that point of view, it is essential to point

information in texts presented to people. It can be seen as the “desirable” skills level for functioning easily in society. Levels 4 and 5 indicate advanced skills.

out that support networks, in particular family, friends and community, are protection factors that are absolutely necessary.

To determine the degree of emotional and informational support, the *Canadian Community Health Survey (CCHS)* asked respondents whether someone is available to listen to them and advise them in periods of crisis and give them information or whether they knew someone in whom they could confide or to whom they could talk or someone who understood their problems. A higher score indicates a higher level of emotional and informational support, on a scale of 0 to 32[31].

In 2009-2010, around 12 % of the population had a weak or moderate social network. An examination of the statistics from the perspective of low income showed, however, that a large proportion of low-income persons live in such a situation. In 2009-2010, one out of four (26.2 %) low-income people could not count on having emotional or informational support at an acceptable level, which is twice as high as the level for the overall population (Table 36 and Figure 32). From 2007-2008 to 2009-2010, the proportion of people with weak or moderate emotional and informational support remained relatively stable.

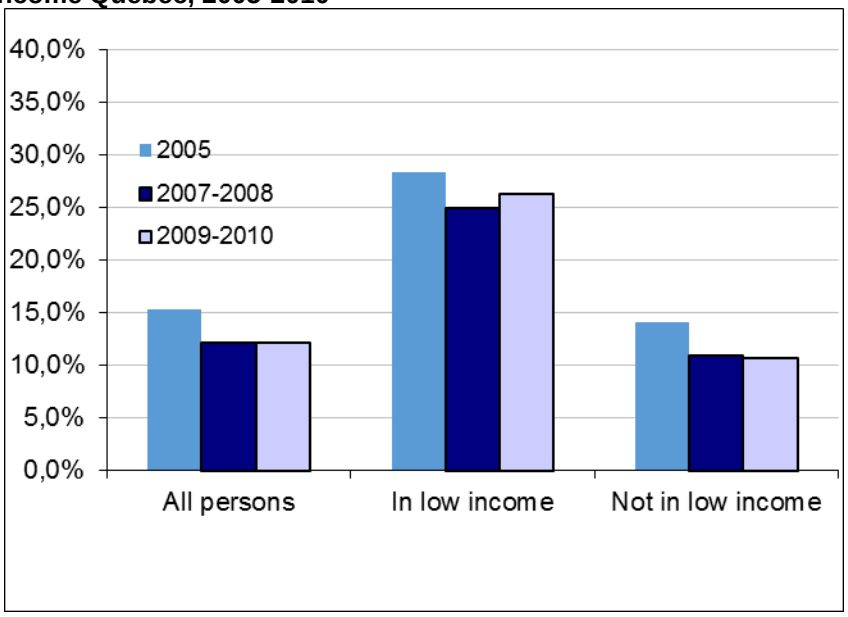
Table 36 Proportion of persons without acceptable emotional and informational support, by income Québec, 2005-2010

	2005	2007-2008	2009-2010
All persons	15.4	12.2	12.1
Not in low income	14.1	10.9	10.7
In low income	28.3	25.0	26.2

Source: STATISTICS CANADA, *Canadian Community Health Survey*, CEPE compilation, April 2018.

31. The scale was developed by SHERBOURNE and STEWART (1991) as an element in the *Medical Outcomes Study Social Support Survey*. The values obtained on the scale of 0 to 32 are grouped into three levels by Statistics Canada: weak (0-10), moderate (11-20) and high (21-32). Someone who replies “never, rarely or sometimes” to the majority of questions does not obtain a high level on the scale. In our case, persons with a low level of support (weak or moderate) are considered to be at risk of social exclusion. For our purposes here, persons in the first before-tax income decile are considered to be at the low-income level.

Figure 32 − Proportion of persons without acceptable emotional and informational support, by income Québec, 2005-2010



Source: STATISTICS CANADA, *Canadian Community Health Survey*, CEPE compilation, April 2018.

In addition, we observed that this situation increases with age. While around 16 % of low-income persons aged 18 to 24 could count on an acceptable level of support in 2009-2010, the proportion climbs to almost 40 % among those aged 55 and over.

Therefore, just as we reported in our 2015 Advisory Opinion, we have again observed that the selected indicators, while not exhaustive for measuring the level of social exclusion associated with poverty, do indeed reveal situations that are not encouraging. Between the earlier report and this one, the indicators have remained relatively stable but do not show any improvement in the social exclusion of low-income persons.

CONCLUSION

The MBM makes it possible to determine that in Québec, in 2016, the low income rate is still 8.6 %, which shows that in spite of some progress, we still have room for improvement.

Some administrative regions fared better than others from 2002 to 2014. That is reflected in improved LIM rates, which sometimes have come close to 4 percentage points. Generally, that is the case for remote regions (or natural resource regions, such as Gaspésie–Îles-de-la-Madeleine and Abitibi-Témiscamingue), but they had a long way to come. In 2014, the Chaudière-Appalaches and Capitale-Nationale regions were in the most favourable situations, while the Montréal and Nord-du-Québec regions were at the other end.

At the pan-Canadian scale, based on the 2016 MBM, the differences are not enough to allow us to distinguish more than two groups of provinces, by using Québec confidence intervals as guides. Québec is part of a first group of six provinces (Alberta, Québec, Saskatchewan, Manitoba, Newfoundland and Labrador and Prince Edward Island), which in turn distinguishes itself from a second group whose low income rates are significantly higher (Ontario, New Brunswick, British Columbia and Nova Scotia). In spite of annual increases in the cost of living, Québec's low income rates have been a bit lower, based on the MBM, than some other provinces, in which the cost of living is significantly higher even if they have higher wages.

In the various CMAs, based on the 2016 MBM, Montréal is slightly ahead of other large cities, including Vancouver and Toronto. Housing costs are without a doubt a factor that benefits Montréal compared with the other metropolitan areas.

On the international stage, in 2014, Québec can be compared with 18 countries (17 European countries and Canada). In this respect, Québec is significantly outpaced by a group of six countries (Norway, Netherlands, Denmark, Finland, France and Switzerland), and belongs to a second group (Austria, Sweden, Belgium, Québec, Luxemburg, Ireland, Germany and the United Kingdom), which, in turn, significantly outpaces a third group (Italy, Portugal, Greece and Spain). The overall rates for Canada or for Canada without Québec are higher than the rates for Québec, but it is not possible to know if the difference is significant. Remember that Section 4 of the *Act to combat poverty and social exclusion* provides as follows: "The national strategy is intended to progressively make Québec, by March 5, 2013, one of the industrialized nations having the least number of persons living in poverty, according to recognized methods for making international comparisons." That target has not been reached, as has already been reported (CEPE, 2017), but performance in the last year indicates a step in the right direction. However, international rate comparisons based on income medians are not always the best indicators of poverty situations, which greatly rely on the shape of the income distribution curve in each country.

From the perspective of the poverty experience, the comparison of the changes over time for various life situation that are revealed by implicit thresholds has made it possible to observe some types of progress in Québec compared with itself. Using typical cases, we can observe the changes from 2004-2017 in the relative size of the disposable income of persons or family units in terms of various existing thresholds. Some typical cases have been studied, that is, those involving unattached individuals, unattached individuals with severely limited capacity for employment, lone-parent families with a child aged 3, couples with an income and without children, and two-parent families with an income and two children. We studied their situation to see whether it had improved or deteriorated. We observed variations between the two periods depending on the case, since we are seeing two distinct realities, depending on the presence or absence of children. That represents, without a doubt, recent advances in family policies and the

fight against poverty in Québec, which has given itself more robust means to combat poverty in families with children. For several years, the situation of unattached individuals and childless couples has been a preoccupation since those groups have not benefited as much as families with children from the measures included in the first two action plans.

The pictures obtained by using Gini coefficients and interdecile ratios generally ressemble each other. Compared with other societies, including other Canadian provinces and certain European countries, Québec has been able to maintain a lower level of inequalities, but it is still outpaced by the Scandinavian countries.

Finally, with respect to social exclusion, several indicators have allowed us to observe that some facets of exclusion associated with poverty are no worse than before and sometimes have slightly improved over time. However, in the current state of things, it is difficult to come to any conclusions on the fundamental trends, because our statistical history is too recent. We can point out above all that for most exclusion indicators, we observed differences that depend on whether a person is or is not living on a low income. Without a doubt, poverty is a major risk factor for social exclusion and such exclusion is a major obstacle to getting out of poverty.

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APPENDICES

APPENDIX 1
NOTES ON METHODOLOGY

Definitions

- Gini coefficient: a measure of income inequality, more precisely a measure of inequality in the distribution of income and is simple and easy to interpret. Its value ranges from 0 to 1, where 0 represents perfect equality (each population percentile has an equivalent proportion of income), and 1 represents perfect inequality (a single individual has all incomes).
- Social exclusion: "Social exclusion is the result of a constellation of economic, political, institutional and cultural processes, which are often interdependent and cumulative and which sets persons or groups apart in the society.

  When social exclusion and poverty come combine, they may mutually reinforce one another over time. Social exclusion associated with poverty may be manifested in particular by limited possibilities an individual (and consequently for his or her family and community) to maintain economic independence, while affecting the integrity of their social identity, health, education, participation in the labour force and in social and family relations networks. Those consequences may in turn impede getting out of poverty.

  The mechanisms of social exclusion can be corrected by collective action and public policies."
- Low income measure (LIM): Being half the income median, the median divides the population into two groups, one half earning less than the median and the other half earning more. The measure is also adjusted according to household size (income equivalent).
- Market basket measure (MBM): A low income measure based on the cost of a basket of goods and services corresponding to a basic standard of living. A family unit whose income is below the cost of a market basket determined as a function of its community (rural region, average city, large city, etc.) is considered to have a low income. The basket includes certain goods and services: food, clothing, shoes, housing, transportation and others (personal care items, household products, furniture, telephone, reading, recreation and leisure).
- Low income rate: percentage of the population that is below the low income threshold, for example, below the threshold determined by the market basket measure. The low income rate (LIM) and the market basket measure (MBM) are the main measures used by CEPE.

Data sources

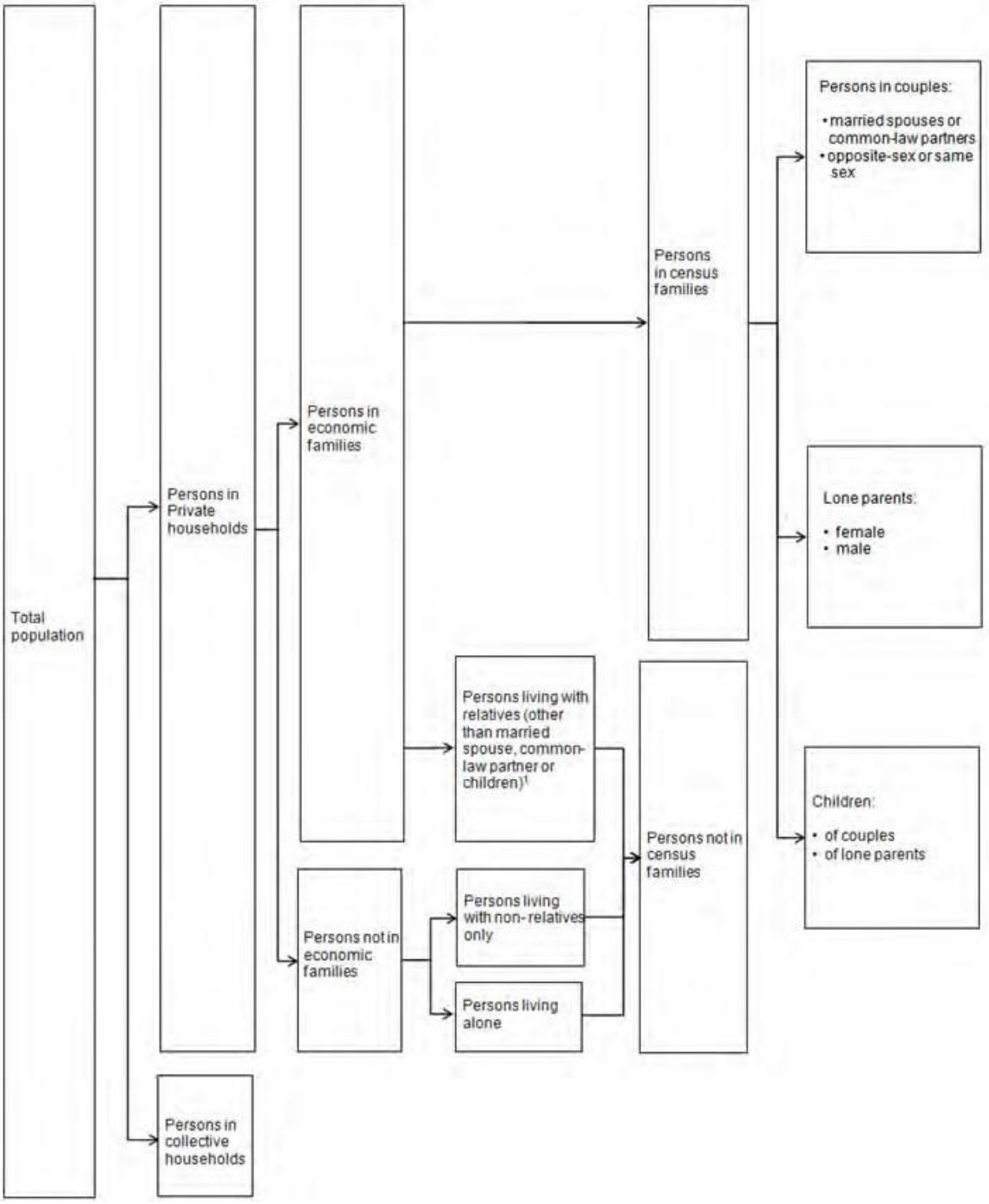
Compilations by the Centre d'étude sur la pauvreté et l'exclusion (CEPE), prepared using the public-use microdata file for the Canadian Income Survey and other surveys may differ somewhat from those of Statistics Canada, the Institut de la statistique du Québec and Employment and Social Development Canada (ESDC), carried out using the master files of those surveys. However, more often than not the diffences are minor.

Statistical units

- Family units (families): unattached individuals and economic families of two or more persons within the meaning given by Statistics Canada.
- Economic family: two or more persons who live in the same dwelling and are related to each other by blood, marriage, common-law relationship or adoption.

- Other units (types of family units): units whose members are 18 years of age or over and are not related by marriage, but are related by blood or adoption (e.g. two adult brothers living together, a mother and her adult child sharing a dwelling).
- Unattached individual: a person living alone or with others to whom he or she is not related; an unattached individual is, therefore, not necessarily the only occupant of the dwelling in which he or she lives.
- Person living alone: an unattached individual in a one-person household.
- Census family: a married couple or a couple living common law (with or without children), or a lone parent with at least one child (of any age) living in the same dwelling. Grandchildren living in the household of at least one of their grandparents (but with no parents present) are considered as being part of the census family of their grandparents.
- Person not in a census family: a member of a household but not a member of a census family. This person may be either related to Person 1 (e.g. sister, brother-in-law, cousin or grandfather) or not related. Thus, persons not in a census family can live in a household consisting of several people. Persons living alone are always considered as persons not in a census family.
- Household: a person or group of persons who occupy the same dwelling and do not have a usual place of residence elsewhere in Canada. The household may consist of a family group (census family), with or without other persons not in the census family, of two or more families sharing a dwelling, of a group of unrelated persons or of one person living alone. Thus, an individual living in a one-person household necessarily lives alone, which is not always the case with “unattached individuals” or “persons not in a census family.”
- CMA: Census Metropolitan Area. An area formed by one or more adjacent municipalities centred around a large urban area (known as the urban core). A census metropolitan area must have a total population of at least 100 000 of which 50 000 or more must live in the urban core.
- Major income earner: the family member with the highest income (if the highest income is earned by more than one person, the oldest person is considered the major income earner).
- Senior (elderly person): person aged 65 or over.

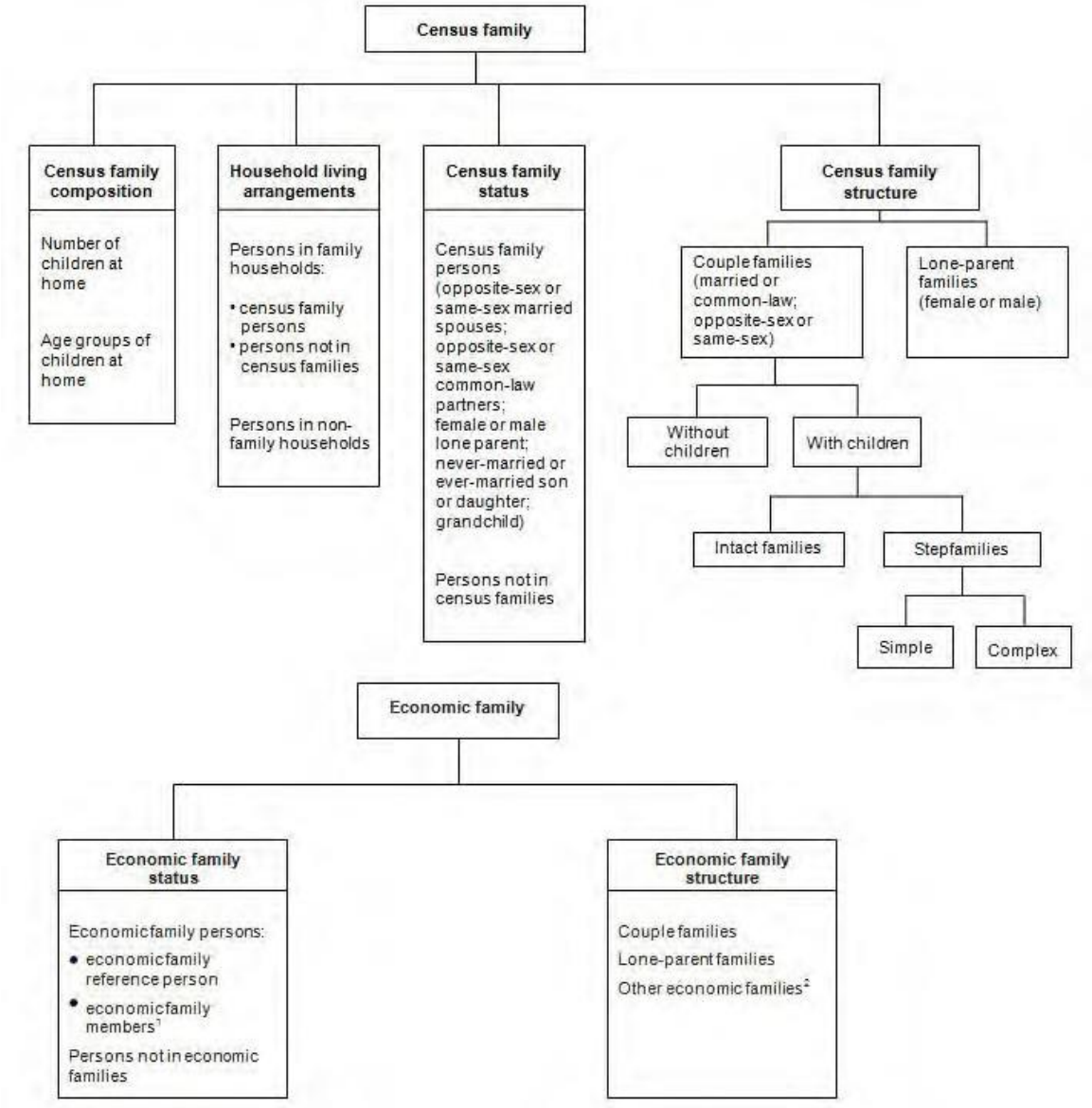
Figure 33 − Family membership and family status



1. Foster children are included

Source: STATISTICS CANADA, *2016 CENSUS DICTIONARY*, Ottawa, Figure 3.1.

Figure 34 − Overview of the census family and economic family variables



1. Foster children are included.
2. Economic family in which the economic family reference person lives with other relatives but does not have a married spouse, common-law partner or child.

Source: STATISTICS CANADA, *2016 CENSUS DICTIONARY*, Ottawa, Figure 3.2.

APPENDIX 2

THE CONCEPT OF AN ADJUSTED LIM, IN *CHRONIC LOW INCOME AMONG IMMIGRANTS IN CANADA AND ITS COMMUNITIES*

CEPE was asked about the use, in a recent research document by Garnett Picot and Yuqian Lu, of Statistics Canada, entitled *Chronic Low Income Among Immigrants in Canada and its Communities*, of a regionally adjusted LIM based on a region's MBM divided by the MBM for Canada.

- *A priori*, several questions arose from a first reading of the research document:
  - The authors discuss combining a relative measure and an absolute measure. They begin with the LIM, that is, a national, pan-Canadian, purely relative measure that is set in time to give it a more absolute character and that is corrected to reflect regional variations by using the ratio of the 2012 MBM to the average value of the MBM for Canada as a whole (an absolute measure).
  - In fact, there is no MBM for Canada as a whole, nor for Québec as a whole. We use the Montréal MBM when we want an estimate concerning nearly half of Québec's population (and certainly not an arithmetic average of various regional thresholds). Of course, one can obtain an estimated MBM for Canada by using weighted data, but that would be a complex procedure since the MBM would be estimated for 49 different geographic entities inside all the provinces.
  - What is the advantage of doing that instead of simply using the MBM? The research document does not provide a very clear explanation.

- We therefore sent a request to Statistics in an effort to find out:
  - If that agency was planning to use the new measure and if it had already tested its validity apart from the work carried out for the research document;
  - The reasons why the authors did not simply use the MBM instead of their combination of a relative measure and an absolute measure.

- In essence, the response from Statistics Canada make it possible to better situate and better understand the authors' approach:
  - The low income measure used in the research document was developed to answer a specific research question concerning chronic low income among immigrants, which is of great interest to researchers and decision makers in the area of immigration. Thus, it is not a standard product that Statistics Canada will publish on a regular basis;
  - The authors did not use the MBM for two reasons:
    - First, the MBM was not available for the period covered by the study (in fact, the MBM is not available for the entire period studied – 2000 to 2012 since the series did not begin until 2002.
    - Second, the LIM is used more frequently and the authors wanted to base their adjusted rate on a commonly accepted measure.
  - The authors had detailed discussions with experts in the area of the low income measure. Before being published, the study was reviewed both internally, by Statistics Canada, and externally by two university professors, as is customary for all research papers published by the Social Analysis and Modeling Division.
  - Because of the way the LIM is used by the authors, it becomes an absolute measure of low income and not a relative measure. They estimate the median

income for the period covered by the study, whose LIM corresponds to half that median. That LIM is kept constant over time and thus becomes a fixed measure of low income and not a relative measure. Derived in this way, the LIM does not vary from year to year and income is deflated to take inflation into account. That approach is used in several areas of research.

- It is known that some analysts in Canada favour a LIM anchored in time, which gives a more absolute character to a measure that is *a priori* relative. That is the authors' point of departure; they suggest simply to weight or regionally adjust the LIM based on the MBM, which takes into account the cost of living in the internal regions of the provinces.
- The LIM published by Statistics Canada is a pan-Canadian measure and has certain biases arising from the fact that the median income varies considerably from one province to another, especially if one wants to compare a province to other provinces. The Institut de la statistique du Québec (ISQ) recalculates the LIM using a pan-Québec median. The main objection to the authors' approach is, without doubt, its use of the pan-Canadian LIM as a point of departure.
- However, using the MBM, if could have been applied here, would have, without doubt, been easier to apply and justify since in their study, the authors seem to be mixing apples and oranges by using relative and absolute measures at the same time, which can be confusing.

CEPE does not recommend the authors' approach, but does not summarily reject it and understands that it was proposed in a very specific context. The researchers are certainly free to innovate and such initiatives can only enrich the debate on poverty indicators, of which we well know the limits.

APPENDIX 3

MEMBERS OF THE CEPE STEERING COMMITTEE

Chair
Céline Bellot, Full Professor
École de travail social, Université de Montréal

Marc De Koninck, Community Organizer
Centre intégré universitaire de santé et de services sociaux (CIUSSS) of the Capitale-Nationale region and chair of the Comité de développement social of Centraide Québec and Chaudière-Appalaches

Marco de Nicolini, Interim Director
Direction de la recherche, ministère du Travail, de l'Emploi et de la Solidarité sociale

Jérôme Martinez, Scientific Manager
Institut national de santé publique du Québec

Sylvie Morel, Full Professor
Département des relations industrielles, Université Laval

Amélie Quesnel-Vallée, Associate Professor
Department of Sociology and Department of Epidemiology, Biostatistics and Occupational Health, McGill University

Luc Savard, Full Professor
Département d'économique, Université de Sherbrooke

Valérie Saysset, General Director
Recherche, évaluation et statistiques, Ministère de l'Éducation et de l'Enseignement supérieur

Anne-Marie Séguin, Research Professor
Institut national de la recherche scientifique – Urbanisation Culture Société