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Guaranteed Minimum Income: the Case of Quebec *

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Abstract/Résumé

This paper explores the concept of a guaranteed minimum income (GMI), proposes an inclusive and operational definition that helps clarify the debate, and proposes an analysis that attempts to show the implications of implementing a GMI in Quebec in its absolute form, namely the universal allowance, or in the form of a negative tax. Our results show significant problems of equity, work incentives or social acceptability. The cost would also be important for public finances. We conclude that both forms of GMI would be difficult to implement in Quebec.

Keywords/Mots-clés: Universal Allowance, Negative Income Tax, Quebec

JEL Codes/Codes JEL: I38, P2, D63, H24

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1 Introduction

In recent years, the concept of a guaranteed minimum income (GMI hereafter) has generated new interest among policy makers, researchers, and the general public. With the Covid19 crisis, "temporary" or/and "permanent" guaranteed minimum income schemes are proposed in several countries to support regular and non-regular workers (e.g., selfemployed, short-term, part-time, etc.). Various issues, both old and new, motivated this renewed interest : the inefficiency of existing welfare programs in the fight against poverty, distortions of labour market incentives, the stigmatization of the social assistance recipients, the technology and automatization era, the current demographic changes, and globalization. These topics, as well as many others, are often brought up in debates about GMI. This paper aims to shed some lights on the implications of a universal implementation.

At the same time, previous to the Covid19 crisis, a number of programs or pilots that claim to be universal basic income have been or are currently being applied and tested.¹ The list in Appendix A illustrates that there is global interest in the concept of guaranteed minimum income. The committee reviewed 26 applications and experiments in developed, emerging and developing countries. Since the early 2000s, a significant number of jurisdictions have conducted income support experiments of varying size that have been presented as a guaranteed minimum income. A similar interest occurred in the early 1970s.

The Covid19 pandemic has led countries to put in place emergency measures, extending coverage to a larger population. In Canada, starting in March 2020 the federal government enacted, as an urgency measure among other supports, the Canada Emergency Response Benefit (CERB). This was an emergency measure among others designed to give support both regular and non-regular workers.² This measure was extended to students (CESB) in April 2020. This was not the first time the Canada had taken an interest in the idea of a universal basic income. Following the example set by the Manitoba experiment in the 1970s, the Quebec government instituted the Expert Committee on Guaranteed Minimum Income to "make recommendations to the Minister of Employment and Social Solidarity and the Minister of Finance on matters pertaining to income support".³ The three of us

^{1.} An extensive but a non-exhaustive list of programs has been compiled in Appendix.

 $^{2. \ {\}tt https://www.canada.ca/en/department-finance/economic-response-plan.html}$

^{3.} The report includes 3 volumes and a progress report. This paper is a summary of the more theoretical parts. See references in the bibliography. Volume 1 includes a summary and recommendations.https: //www.mtess.gouv.qc.ca/grands-dossiers/revenu_min_garanti_en.asp

were members of this committee. In 2017, following a public consultation, the government of Ontario⁴ also launched a pilot project to determine whether Guaranteed Minimum Income was an effective way to lift people out of poverty and improve the situation of the poorest, particularly in terms of health, housing and employment. Initially planned for 3 years, the government of Ontario decided to stop it in March 2019 with the objective of proposing a different reform of the income support system. Currently, there is a formal Committee in British Columbia evaluating a project meant to « study the potential for using a basic income approach in its efforts to reduce poverty and prepare for the emerging economy » ⁵. The Canadian researchers have also taken an interest in their different forms of GMI as shown by an important number of studies such as Koebel et Pohler (2019), Stevens et Simpson (2017) and Stevens et Simpson (2018)⁶.

Our Committee considers that most of these applications and experiments contribute in a very limited way to the Committee's reflections and analyses. It is very difficult to find reliable, accurate information on these projects. It is above all extremely delicate to establish parallels with Quebec's situation, to draw lessons for this review. The institutional situation is often too different to establish conclusions about these applications and experiments that could be used in Quebec's context.

Since the 1960s, the idea of introducing a guaranteed minimum income has been promoted by several economists from different schools of thought. In 1962, Milton Friedman proposed a complete reform of the American welfare system, recommending the abolition of all social protection schemes and their replacement by a negative income tax. At the same time, James Tobin also imagined the creation of a GMI, not to reduce the size and intervention of the government, but rather as a complement to the existing social safety net. Thirty years later, James Meade supported the payment of a "citizen's income" because wealth is the result of collective work and much of the human activity essential to society - such as domestic work - is not paid in the capitalist economy. In recent years, new proposals for GMI have been formulated, linked to the debate on rising inequality in developed countries, changes in the labour market and the prospects for the rapid disappearance of several occupations. Still others, such as Van Parijs (1991); Van Parijs *et al.* (1997) see the establishment of a GMI as a way of offering everyone "the freedom to do what they want to do" and more broadly to uphold the principle of social justice

^{4.} Cf. Report of the consultation :

https://www.ontario.ca/page/basic-income-consultations-what-we-heard

 $^{5.} See \ \texttt{https://engage.gov.bc.ca/bcpovertyreduction/basic-income/.}$

^{6.} Other interesting articles include Boadway *et al.* (2018), Simpson *et al.* (2017), Rhys Kesselman (2018), L. Forget (2011) and Lacroix (2019).

(Bidadanure et Uhuru, 2019).

In this debate about the implementation of a guaranteed minimum income, we propose an illustration of what could be the application of a GMI in Quebec in its absolute form, namely the universal allowance, or in the form of a negative tax in its complete form i.e. an income support program that is fully supported by a negative tax. These GMI models are often the ones used to justify or criticize the implementation of such an income support system. The results show significant problems of equity, work incentives or social acceptability⁷. Our contribution is not intended to be an exhaustive review of the literature on the GMI concept. Rather, it is intended to be a reflection on a more inclusive, open and operational definition, as well as a summary and an analysis based on specific principles of the most significant numerical microsimulations that were run under the Committee's initiatives.

After introducing the different formats of the guaranteed minimum income, we propose an inclusive definition of the concept (Section 2). In Section 3, we describe the Quebec social assistance system. We then analyse the simulations for the first two formats – universal allowance and negative income tax – by evaluating how well each system does on the basis of three principles : equity, incentive to work and efficiency (Section 4). In the final section (Section 5), we conclude by examining the feasibility for the government of Québec to implement a GMI and by discussing the alternatives that we choose to recommend.

2 Definition and Principles

The meaning of the term "guaranteed minimum income", must first be specified because it is used to designate income support schemes that sometimes differ significantly (such as Guaranteed Annual Income, Universal Allowance, Social Dividend, Basic Income, Unconditional basic Income, Citizenship Income, Citizen Income, Universal Income or Living Income....). We thus define Guaranteed Minimum Income (GMI hereafter) as a program or a scheme that is set up by a government to provide every person with the guarantee of an income of a certain level. Thus, a GMI presents three characteristics : (1) it is an

^{7.} Social acceptability qualitatively attests to compliance with each of the three principles. Noncompliance with any principle will be enough to endanger society's acceptance of the measure. Conversely, an equitable, efficient measure that promotes work will have every chance of being socially acceptable, especially if its terms guarantee accessibility. Note, however, that, in terms of income support, social acceptability is also associated with other factors in relation to the proposed system, i.e. respect for work value and observance of certain economic principles such as inclusive economic growth.

income, which means that the payments are made in the form of money, rather than goods or services, (2) the income is a minimum, which means it is based on a certain threshold, and (3) the income is guaranteed, in the sense that everyone is certain to have access to these minimum resources.

In reality, GMI schemes can take many forms. In the literature, we find three different forms of guaranteed minimum income schemes : universal allowance, negative income tax, and basic income support plans.

The first of those, *universal allowance*, could be qualified as the "a bsolute" form of GMI, in the sense that it fully corresponds to the concept in its entirety (see Van Parijs et Vanderborght (2005, 2017), Stephens (2019)). Universal allowance is a universal income with the following properties. First, universal allowance is unconditional, which means it is paid to everyone, regardless of age or any other socioeconomic characteristics. Second, it is paid regardless of resources (income and assets) and is therefore uniform. Third, it is paid with no requirements in exchange. And fourth, universal allowance is combinable, individual and is not taxable.

The second basic income regime system we find in the literature is a NIT, that is to say a negative income tax, which can be defined as a benefit paid by the tax administration to the taxpayer, calculated on the basis of that taxpayer's income and integrated within the taxation system. It takes the form of a refundable tax credit, beyond which any other earned income is taxable. It is the refundable nature of the tax credit that allows for the payment of a negative income tax to people with no or low earned income (see Friedman (1962); Tobin *et al.* (1967)). In its most complete form, negative income tax is based on a uniform and universal refundable tax credit, which makes it similar to a universal allowance.

The properties of negative income tax stem from the uniform and universal nature of the refundable tax credit and its integration with the taxation system. It involves a refundable tax credit, which is non-taxable by definition, and is conditional on earned income (and is therefore decreases as payable income tax increases), but paid regardless of assets. Negative income tax is conditional on filing an income tax return. While it may be drawn concurrently with other sources of income, it is not necessarily paid on an individual basis.

The third form of GMI is the basic income support plan. It has characteristics that reflect the initial definition of GMI but do not provide all the requirements of the most absolute form—universal income—or the most complete form of negative income tax. These are the income support methods defined in most developed countries, to provide the most vulnerable people with minimum resources based on a minimum threshold. These types of assistance are guaranteed in the sense that anyone without resources can access them. However, they are paid only to people targeted for a lack of resources. In some cases, these types of assistance may also be classified as one of the least complete form of negative income tax.

The assistance granted under basic income support plans is conditional on income and assets. It is also often conditional on work availability requirements. The assistance granted under basic income support plans is generally combinable, not individual and often taxable. It is usually a decreasing function of income. Reviewing the three types of GMI and their respective properties, we define a general concept that contains these three forms. It demonstrates that the concept can be applied under very diverse conditions, each with its own advantages and set of concerns.

We define a GMI as "any system that offers a guarantee of monetary resources for all, with the amount of those resources being related to a minimum threshold."

Our definition : A guaranteed minimum income is a system that offers a guarantee of resources for all, the amount of these resources being related to a minimum threshold.					
Properties	Universal allowance	Negative income tax	Basic income support plans		
Unconditional					
Without regard for age	Yes	Not necessarily	No		
Without regard for income and assets	Yes	No, conditional on earned income	No		
No requirements imposed in exchange [*]	Yes	Yes	Generally, no		
Combinable**	Yes	Yes	Generally, yes		
Individual	Yes	Not necessarily	Generally, no		
Non-taxable	Yes	Yes	Generally, no		

 $\label{eq:TABLE 1:} TABLE \ 1:$ Summary of the properties of the three forms of guaranteed minimum income

*Of course citizenship or resident or filling taxes could be applied. **Combinable

with other social transferts. Source :Boccanfuso et al. (2017a)

In this paper, we show the simulations for the first two types of GMI, universal allowance and negative income tax, which are usually claimed to be alternative systems that do not suffer from the disadvantages of our current welfare system. We analyse the simulations by evaluating how well each system does on the basis of three principles : equity, incentive to work and efficiency.

The first of those three principles, equity, forms the basis of all income redistribution systems. It is the principle by which equal opportunity and equality before the law must be assured for all individuals. The principle of equity is the foundation of a just society, according to philosopher Rawls (2009), who ascribed that meaning to the term. We usually differentiate between horizontal and vertical equity. Horizontal equity means that two persons with equal conditions should be treated equally. Vertical equity refers to two persons whose positions are different in terms of needs or means to pay. With respect to income support, someone who is in a more disadvantaged situation must receive more support. Conversely, under this same principle, someone with a more advantageous situation must be required to contribute more than someone who is more disadvantaged.

The second principle we use is that of the incentive to work. This principle means that the applicable system must reward effort by favouring the initiatives persons undertake to enter and stay in the labour market. The incentive to work principle must be interpreted broadly, to include the incentive to education and training, which are, from this perspective, tools for entering the labour market. The incentive to work principle is important in two ways. Bringing someone into the labour market is a preferred, long-lasting means of combating poverty because it improves that person's standard of living. The incentive to work principle is therefore aligned with the principle of equity previously selected. In terms of economic activity and financing income support measures, it is essential to have as many persons in the labour market as possible.

The third principle, efficiency, is related to the context of limited resources. These resources should be distributed as efficiently as possible. More specifically, the principle of efficiency refers to the ratio between cost and outcome for the use of resources for a given objective. In this paper, the efficiency principle means we consider the government's financial means and the system's or measures' cost for public finances.

3 Social Assistance in Quebec

Before going through different theoretical simulations on GMI, we present a short summary of Quebec's social assistance system, which took the form that we know today in the 1970's. Until then, the plan consisted of several heterogeneous measures aimed at targeted vulnerable clienteles, such as "needy mothers" and blind or disabled persons. The Social Assistance Act that came into force in November 1970 marked the introduction of a genuine income security system based on the principle of last resort and defining for the first-time access to a minimum income as a right with reciprocity requirements. The 1990s were marked by major reforms. Incentives to work were introduced and social assistance is modulated according to needs and considering employment constraints. Since 2000, Quebec's income support system has been undergoing a new wave of reforms, relying instead on incentives or support measures, adapted to the clientele through specific programs. Since then, adjustments have been made to the eligibility criteria as well as to the amounts of assistance paid. In our study, we considered the income support measures currently implemented by the Quebec government, as well as those defined by the federal government, under three main objectives.

- Basic financial assistance consists of providing a basic income to the poorest households as well as to low-income households, in order to ensure them an adequate standard of living. Among these aids we find social assistance, mainly financial assistance of last resort, as well as the refundable tax credit for solidarity aimed at compensating for the regressive effect of the QST and property taxes. These two measures account for more than 90% of the basic financial assistance offered by Quebec. While the federal government intervenes primarily with seniors (Old Age Security and Guaranteed Income Supplement), Quebec's measures mentioned in the previous paragraph are aimed at the rest of the population. These last measures account for half of the total basic assistance funded by the Government of Quebec while the old age and pension measures constitutes three-quarters of the basic assistance funded by the federal government. The federal government thus finances 72.4% of the basic financial assistance measures in the province of Quebec.
- Family assistance recognizes the additional needs of having children in a household in order to meet their needs. This assistance is also intended to support a single parent with young children to help them balance work and family. Measures in place include support for children, the reduced-contribution child care program and the refundable tax credit for child care expenses. Assistance to families accounts for nearly half of the amounts allocated by the Government of Quebec to income support, and one-quarter of the amounts allocated by the federal government to income support. The assistance provided by the Government of Quebec is barely higher than that offered by the federal government.
- The measures aimed at financial assistance for childcare constitute both financial assistance for families and support for parents' integration into employment, the third objective. Through work incentives, the government seeks to encourage long-

term financial independence, collective enrichment and social integration, enabling beneficiaries to increase their disposable income. This is particularly the case with the employment premium, the aim of which is to enhance the work effort by encouraging people receiving social assistance to leave the programme and return to the labour market. There is also the tax shield introduced in 2016, with the aim of limiting the loss of certain sociofiscal transfers for households that increase their income.

In terms of work incentives, Quebec intervenes more than the federal government, and measures funded by the Quebec government account for two-thirds of total assistance. In the Appendix B you can also find the list of different social programs and a table with a summary of expenses of the social assistance system in Quebec for the three main objectives⁸.

4 Simulations

The simulations were conducted for the 2017 tax year using the Disposable Income Model, constructed and managed by the Ministry of Finance. This model calculates disposable income and the impact of a change in taxation and transfer programs for different typical households according to different characteristics (single persons or couples, with or without children, benefiting from different levels of income, in employment or not, or retired, etc.). The cost of each scenario was calculated using the extensive databases available to the Ministry of Finance.

4.1 Universal Allowance

We propose two series of simulations. The first simulation considers a universal allowance that satisfies all the properties listed above. Namely, it is unconditional, cumulative, individual and non-taxable. It also replaces almost all of the current support and financed by the elimination of the replaced measures (Scenario 1). In the second simulation, we consider a universal allowance made up by only a part of the current support – i.e. a portion of last-resort financial assistance (Scenario 2).

Scenario 1 is simulated, in which the replacement is only carried out for persons aged 18 to 64, so as to not jeopardize family support and federal pension benefits measures 9 .

^{8.} See Boccanfuso et al. (2017c) for a complete diagnostic of the social assistance system in Quebec.

^{9.} We exclude persons aged 65 and over, since they are primarily covered by income support measures

The measures abolished and replaced by the universal allowance are all income support measures implemented by Quebec - basic financial assistance and work incentives ¹⁰. The redistributed assistance represents \$4.4 billion in 2017 to be reallocated among 5 million adults aged 18 to 64¹¹. Based on the methodology developed by the OECD (2017), the allowance paid is \$878 per adult ¹². The amount of assistance offered to each person would thus correspond to 10.8% of the maximum last-resort financial assistance to which person under 65 living alone without limited employment capacity is entitled (i.e. \$8136).

This first simulation shows that the main losers would be low-income households, and in particular households receiving last-resort financial assistance. For low-income households without children, the loss is even greater because they do not benefit f rom continued support for children. Just over 900,000 households would suffer an average loss of \$3,213. For these households, the universal allowance would not be sufficient to compensate for the loss of the abolished measures. Some households would be more severely affected. For example, single social assistance recipients without employment constraints but no income from work would see their disposable income decreases from \$9,389 in the current system to \$1,158¹³ in Scenario 1, a loss of \$8,231.

Replacing some of the current income support with a universal allowance results in a significant decrease in disposable income for the lowest income individuals. Indeed, households earning less than \$15,000 suffer an average loss of \$2,367. For those earning between \$15,000 and \$35,000, the average loss is \$239. The results show that the higher

11. Another scenario was simulated considering the entire population under 65 years. The measures abolished and replaced by the universal allowance are all the income support measures put in place by Quebec - basic financial assistance, family assistance and work incentives - excluding student financial assistance and the tax credit for experienced workers. The measures thus abolished represented \$9.6 billion in assistance in 2017. This reallocation provides an annual allowance of \$1,637 per adult aged 18 to 64 (5.1 million people). Households with dependent children would receive an additional annual amount of \$737 per dependent child (1.6 million dependent children involved). Based on the OECD methodology (2017), the amount awarded for each dependent child is 45% of the adult amount. This proportion is obtained by calculating the proportion of the gap between the market basket measure of a couple with one child (three-person family).

12. The amount per adult is determined by dividing the redistributed assistance by the number of people aged between 18 and 64.

13. \$1,158 is composed of the \$878 from the Quebec allowance and the remaining, \$280, comes from the Federal government.

that fall under the responsibility of the federal government and they continue to benefit from other current income support measures in Quebec.

^{10.} We exclude student financial assistance, the tax credit for experienced workers and family assistance measures.

Total household income	Number of households	Amount (\$ Millions)	Average amount (\$)
Less than \$15,000	936 487	-2 217	-2 367
\$15,000 to \$35,000	1 298 392	-310	-239
\$35,000 to \$50,000	624 042	170	273
\$50,000 or more	$1 \ 997 \ 615$	$2,\!357$	1,180
Total	4,856,536		_

TABLE 2:Scenario 1 – Financial Impact for Households by Income Group - 2017

Note : Due to rounding, the sum of amounts may not add up to the total shown.

Source : Boccanfuso *et al.* (2017b)

the household income, the higher the gain, which is explained by the fact that the highincome taxpayer does not suffer a loss related to the abolition of measures in the current income support system, but would benefit from the new a llowance. Thus, the average gain for households with incomes between \$35,000 and \$50,000 is \$273. The income of households with incomes above \$50,000 is estimated at \$1,180 (see Table 2). Since the previous Scenario has many losers among the poorest, we propose another Scenario.

Scenario 2, we assume that the universal allowance paid replaces part of the last resort financial a ssistance c urrently g ranted w ith a n e quivalent a mount. A ll o ther provisions of the income support system would remain unchanged. The amount of the universal allowance corresponds to 50% of the maximum last-resort financial a ssistance t o which a couple without limited capacity for employment is entitled, i.e. \$5832 per year. This allowance would be paid out to all the persons aged 18 to 64. All other provisions of the income support system remain the same. When the universal allowance is less than the last-resort financial a ssistance p reviously p aid, a n a dditional a mount of last-resort financial assistance is paid to compensate for the difference. For example, a single person without limited capacity for employment currently receives \$8,136 in last-resort financial assistance. In this Scenario, this person would receive the same amount. However, \$5,832 would be given as a universal allowance. The remaining \$2,304 would be financial assistance of last resort (TABLE 3).

In the Scenario 2, the abolished measures only save \$1.8 billion in last-resort financial assistance, while the gross cost of the universal allowance is estimated at \$29.2 billion. Thus, the net financial impact of the implementation of this universal allocation amounts to \$27.4 billion that the government will have to finance. Since we assume that all people

$TABLE \ 3:$ Scenario 2 – Illustration of the proposed allocation and amendment of last-resort financial assistance - 2017

(in dollars, on an annual basis)

	Couple			Single person		
	Maximum benefit financial assistance of last resort	Universal allowance (per spouse)	Total	Maximum benefit financial assistance of last resort	Universal allowance	Total
Without limited employment	capacity for					
- Current system	11 664	_	11 664	8 136	_	8 136
- With universal allowance	_	5 832	11 664	2 304	5 832	8 136

Source : Boccanfuso *et al.* (2017b)

receive at least the level of income support currently received, there are no losers in this Scenario. Nearly 1.4 million households would receive an unchanged level of assistance. TABLE 4 shows that even if, on average, households across all income levels see their disposable income increase, households with total income above \$50,000 experience a higher average gain (+ \$8,055). Not surprisingly, the average gain of households with total incomes below \$15,000 is the lowest (+ \$3,569).

TABLE 4: Scenario 2 – Financial Impact for Households by Income Group - 2017

Total household income	Number of households	Amount (\$ Millions)	Average amount (\$)
Less than \$15,000	936 487	3 342	3 569
\$15,000 to \$35,000	1 298 392	4 694	3 615
\$35,000 to \$50,000	624 042	3 282	5 259
\$50,000 or more	$1 \ 997 \ 615$	16 091	8 055
Total	4 856 536	27 410	_

Note : Due to rounding, the sum of amounts may not add up to the total shown.

Source : Boccanfuso et al. (2017b)

Respect for the three principles

By introducing unconditional income and asset support for all adults under 65 years of age, the Scenario 1 respects the freedom of choice of individuals and therefore does not fuel prejudices against those who receive it. However, the principle of equity is violated by

the fact that replacing most income support with this universal allowance impoverishes most of the poorest people, because of the transfer of part of the current support to richer households. Not only does this measure not reduce poverty, but for the majority of the poorest people, especially single people or couples without children, the coverage rate compared to the threshold of the market basket measure is considerably reduced. As far as work incentive is concerned, replacing the current aid, which strongly decreases with income, by the universal allowance would lead to a significant reduction in marginal effective tax rates. This constitutes an incentive to work. By maintaining family assistance for childcare (subsidized childcare program or refundable tax credit for childcare expenses), this universal allowance does not either hinder integration into the labour market, especially for women. This Scenario respects the government's ability to pay since it consists of redistributing assistance already granted. However, the concern for social acceptability would not be met, because of the redistribution of income at the expense of the poorest.

In Scenario 2, there are no losers. Indeed, among the people with the lowest incomes, there are a large number for whom the measure has no effect. Conversely, many of the winners are among those with medium to high incomes. With respect to work incentives, the universal allowance defined in S cenario 2 does not decrease with i ncome. It thus constitutes a significant r eduction in m arginal effective t ax r ates for r ecipients of last-resort financial assistance and c ould i ncrease the incentive t o work. However, the effect is different for workers who could, by exiting the labour market, maintain an equivalent total income thanks to the universal allowance.

In terms of efficiency, while couples receiving last-resort financial assistance were subject to audits of their assets and income, the automatic payment of the same amount as a universal allowance becomes easier. However, as soon as the amount of the universal allowance does not compensate for the total amount of assistance (for example, the \$2, 304 for the single person in TABLE 3), this simplification disappears since this amount is allocated according to the current rules of the system. This is also true for single-parent families and households with temporary or severe employment constraints. Also, 96% of households receiving last-resort financial assistance receive assistance distributed b etween the two systems. This therefore limits the efficiency gains attributable to the implementation of a universal allowance as simulated in Scenario 2. In addition to this and as previously mentioned, this Scenario does not propose any funding to offset the net cost of \$27.4 billion that the government would have to face with the implementation of this universal allowance. Given that personal income taxes represent \$29 billion in government revenues in 2017-2018, this is a significant sum. In addition, unlike the first Scenario, the second would not be efficient. The savings associated with the administration of the program would be limited, and the high cost of the measure would result in the need to identify sources of funding for the government that could lead to new losers.

To summarize, the two scenarios presented above allow us to conclude that the principle of universal allowance despite apparently interesting properties also has limitations. However, these effects differ according to the amount allocated to individuals. The principle of universal benefit has a positive effect on work incentives. This is especially the case for social assistance recipients, based on lower marginal effective tax rates. However, when the amount of the universal allowance increases, the work incentive effect decreases, particularly for workers whose income is higher than social assistance. Indeed, these workers could reduce their work effort while maintaining a total income equivalent to the income they received before the benefit was introduced (see TABLE 5).

	Universal Allowance	
	Scenario 1	Scenario 2
Description	Assistance replacing almost all of the current support, except family assistance (OECD ap- proach)	Assistance equal to 50% of the social assistance paid to a couple(1)
Persons targeted	18 to 64 years	18 to 64 years
Amount of assistance for targeted persons	\$878	\$5 832
Payment to individual or household	Individual	Individual
Financing identified		
– Gross costs for the government	\$4.4 billion	\$29.2 billion
– Financing identified	Redistribution of current assis- tance, excluding family assis- tance (\$4.4 billion)	Replaces part of the current support (\$1.8 bil- lion)
– Net costs for the government	\$0	\$27.4 billion
Compliance with principles		
– Equity	Drop in disposable income for many poor households	No one loses out. However, many winners among the richest households
– Incentive to work	Greater incentive to work for so- cial assistance recipients	Positive effect for social assistance recipients Negative effect for workers who do not receive social assistance
– Efficiency	Major simplification, but main- tains current measures for chil- dren and seniors	Limited administrative savings

TABLE 5:

Application of universal allowance

4.2 Negative Income Tax

Next, a negative income tax simulation is considered. It partly consists of the current last-resort financial assistance and is financed by income tax. ¹⁴ This series of simulations seeks to finance the same assistance as in the two previous universal allowance scenarios and was based on the same assumptions for replacing the current support. The amount of assistance is the same as in Scenario 2. This corresponds to 50% of the maximum last-resort financial assistance to which a couple without limited capacity employment is entitled, i.e. \$5832 per . Two scenarios were simulated, in which the negative tax would apply to persons aged 18 to 64. In Scenario 3, the single tax rate would be modified. A second variant, Scenario 4, is financed by a two-rate tax table, i.e. one rate for the first \$100000 of income and a second for any income over this amount.

Scenario 3 is a negative tax whose refundable tax credit is granted to all persons aged 18 to 64 and is financed by a new single r ate t ax t able, without a basic p ersonal amount. The support provided replaces part of last-resort financial assistance with an equivalent amount. Current recipients of last-resort financial assistance r eceiving more than the refundable tax credit continue to receive an amount from this program. The amount they continue to receive is the difference between the current benefit and the refundable tax credit.

We made several assumptions. The aid is granted to all persons aged 18 to 64, on an individual basis, in the form of a refundable tax credit. These individuals continue to benefit f rom f ederal i ncome s upport m easures a s w ell a s o ther m easures i n Quebec's current income support system. Last-resort financial a sistance b enefits ar e re duced by the amount of the refundable tax credit. A couple with no employment constraints and no other income is therefore no longer receiving last resort financial a sistance, b ut its equivalent in the form of a refundable tax credit. All other provisions of the income support plan remain unchanged. The cost is the same as in the Scenario 2.

The net cost of the refundable tax credit is funded through the introduction of a new tax table, replacing Quebec's current tax table for persons under 65 years of age. The basic personal amount is abolished which means that the first dollar earned is taxed. The tax credit is not included in the calculation of taxable income. According to the simulation, in order to finance the n et c ost of the refundable tax credit i n a ddition to the public expenditures currently financed by the personal income tax, the single rate must be equal

^{14.} We did not simulate financing from other tax sources, such as corporate or sales taxes or new forms of taxation.

to 26.5%. The threshold at which a taxpayer pays more tax than they receive assistance under the refundable tax credit is \$22,008. The federal tax table is not changed and is added to the Quebec tax table. Québec's new tax table brings personal income tax revenues of \$29 billion (2017-2018 data) to \$56.4 billion, an increase of almost 95%. This amount allows both to maintain the financing of public expenditures and to finance the refundable tax credit.

In Scenario 3, we must distinguish between the results related to the refundable tax credit only from the introduction of a new tax table to finance the tax credit. Let us consider first the effect of the refundable tax credit on households receiving financial assistance of last resort. Current recipients of last-resort financial assistance who receive a maximum benefit will be fully covered by the new allowance or the new refundable tax credit. Their financial situation remains unchanged in the new system. Overall, all current recipients of last-resort financial assistance receive at least the same assistance. When the refundable tax credit is less than the last-resort financial assistance previously paid, a supplementary amount of last-resort financial assistance is paid to offset the difference. A couple without employment constraints no longer receives financial assistance of last resort, but at least its equivalent in the form of a refundable tax credit.

 $TABLE\ 6:$ Scenario 2 – Illustration of the proposed allocation and amendment of last-resort financial assistance - 2017

	Couple		Single person			
	Maximum benefit financial assistance of last resort Financial Assitance	Negative tax - tax credit (per spouse)	Total	Maximum benefit financial assistance of last resort Financial Assitance	Negative tax - tax credit	Total
Without constraints	to employment					
– Current system	11 664		$11 \ 664$	8 136		8 136
– With negative tax	—	5 832	11 664	2 304	5 832	8 136

(in dollars, on an annual basis)

Source : Boccanfuso *et al.* (2017b)

Compared to universal allowance scenarios offering equivalent assistance, this negative tax scenario creates losers because of the funding needs associated to it. Thanks to the payment of the negative tax and taking into account the effect of its financing, just over 1.7 million households would see their support increase on average by \$2,877. Increasing the tax rate for all taxpayers would result in 2 million households paying more tax than they would receive from the new tax credit. The average loss of these would be \$2,423. The scenario would be neutral for nearly 1.1 million households.

This scenario results in an average increase in disposable income for households with incomes below \$50,000, but a decline for those with incomes of \$50,000 or more. TABLE 7 summarizes the average gains and losses.

TABLE 7:
Scenario 2 – Financial Impact for Households by Income Group - 2017

Total household income	Number of households	Amount (\$ Millions)	Average amount (\$)
Less than \$15,000	936 487	2 228	2 379
\$15,000 to \$35,000	1 298 392	1 463	1 127
\$35,000 to \$50,000	624 042	241	387
\$50,000 or more	$1 \ 997 \ 615$	-3 933	-1 969
Total	4 856 536		_

Note : Due to rounding, the sum of amounts may not add up to the total shown.

Source : Boccanfuso et al. (2017b)

According to the detailed results obtained, the main losers would be certain low-income households whose situation would deteriorate as a result of the elimination of the basic personal amount, since they would henceforth have to pay tax from the first d ollar of earned income, as well as taxpayers with incomes over \$50,000, because their tax rate would be higher.

Scenario 4, is a negative tax whose refundable tax credit is granted to all persons aged 18 to 64 and is financed by a new two-rate tax table, without a basic personal amount. The only difference with Scenario 3 is the definition of the tax table, which has two rates instead of being single rate. This variant aims to restore part of the progressivity of the tax system.

According to the simulation carried out, to finance the net cost of the refundable tax credit in addition to the public expenditures currently financed by the personal income tax, the two rates must be 24.1% for the first \$100, 0 00 and 48.2% for each dollar a bove that, compared to the single rate of 26.5% in Scenario 3.The threshold at which a taxpayer pays more tax than he receives assistance under the refundable tax credit is \$24, 199 compared to \$22,008 in Scenario 3. The cost is the same as Scenario 2 and 3.

Compared to Scenario 3, the change in Scenario 4 in funding changes the number of winners and losers. In all, Scenario 4 creates more winners and fewer losers than Scenario 3. However, for the losers, the average loss is increased. Thanks to the payment of the negative tax and taking into account the effect of its financing, nearly 2.3 million households would see their support increase on average by \$2,729. Increasing the tax rate for all taxpayers would result in 1.5 million households paying more tax than they would receive from the new credit. The average loss of these would be \$4,120. The scenario would be neutral for nearly 1.1 million households.

Scenario 4 results on average in an increase in disposable income for households with incomes below \$50,000. Households with incomes of \$50,000 or more experience a decline in their disposable income (see TABLE 8). According to the detailed results obtained, the main losers would be certain low-income households whose situation would deteriorate due to the elimination of the basic personal amount; taxpayers with incomes over \$50,000.

Scenario 2 – Financial Impact for Households by Income Group - 2017					
Total household income	Number of households	Amount (\$ Millions)	Average amount (\$)		
Less than \$15,000	936 487	2 334	2 492		
\$15,000 to \$35,000	1 298 392	1 822	1 404		
\$35,000 to \$50,000	624 042	645	1034		
\$50,000 or more	1 997 615	-4801	-2 403		
Total	4 856 536		_		

TABLE 8: Scenario 2 – Financial Impact for Households by Income Group - 2017

Note : Due to rounding, the sum of amounts may not add up to the total shown.

Source : Boccanfuso *et al.* (2017b)

Respect for the three principles

In terms of equity for the Scenario 3, by partially transforming last-resort financial assistance into a form of a flat-rate refundable tax credit, the payment becomes conditional only on income, because of the tax levied. To benefit from the basic allowance, taxpayers would no longer be subject to any asset condition and would only be subject to income verification when filing the annual in come tax return. The measure provides individuals with freedom of choice and would not be likely to fuel prejudices against them. Providers of last-resort financial assistance with no other income would not see their situation improve, since their benefit would be reduced by the amount of the new refundable tax credit provided for in the negative tax.

It should be added that the element of unconditionality with respect to the assets held introduced with the negative tax raises a problem of vertical equity, or of equity between two persons placed under different conditions : a person with significant assets would have the same support as someone who does not, if they have the same income.

The introduction of a single tax rate also runs counter to the principle of vertical equity, by limiting tax progressivity. In addition, the application of different tax regimes according to age (before age 65 and from age 65) can constitute an equity issue.

The Scenario 4 is similar to Scenario 3. On the other hand, and still compared to Scenario 3, the introduction of two tax rates instead of a single rate limits the decrease in tax progressivity and thus reduces vertical equity, namely the equity between two people placed in different conditions. The fact that the tax rate is unconditional with respect to personal assets raises another problem of vertical equity : a person with significant assets would have the same support as a person with relatively few assets, as long as they have the same income.

About the incentive to work in the Scenario 3, since the value of the refundable tax credit itself is not decreasing in income, the marginal effective tax rate of households receiving financial assistance of last resort decreases, even if their income tax rate is higher. Recipients of last-resort financial assistance, who faced a 100% reduction in their assistance on every dollar earned beyond the exemption (before the work premium was applied), now pay only 26.5% in tax on these incomes. For all other taxpayers, the increase in the tax rate represents an increase in marginal effective tax rates, reducing their incentive to work.

As in Scenario 3, for the Scenario 4, the value of the refundable tax credit does not decrease with income. Consequently, the marginal effective tax rate of households receiving last-resort financial assistance r ecourse d ecreases, e ven if t heir i ncome t ax r ate is higher. Recipients of last-resort financial assistance, who faced a 100% reduction in their assistance on every dollar earned beyond the exemption (before the work premium was applied), are now subject only to a 24.1% tax on these incomes.

For all other taxpayers, the increase in the tax rate represents an increase in marginal effective tax rates, reducing incentives to work. For households subject to the second tax rate in the tax table, i.e. workers earning more than \$100,000, the negative effect on the incentive to work will be even greater because of the very high marginal effective tax rate they would have to face (48.2% plus federal tax).

About the efficiency, the income redistribution scheme in the Scenario 3 is simplified, but in a limited way, because of the need to maintain the last resort financial assistance program for 96% of current claimants. In addition, the application of different tax regimes

according to age can be a source of complexity. The measure is fully funded. Single tax rate financing helps to meet the state's ability to pay. Scenario 4 is similar to Scenario 3. The measure is fully funded. Financing with two tax rates makes it possible to respect the state's ability to pay.

To summarize, negative tax financing by a two-rate tax table r ather than a single-rate tax table does not significantly change the conclusions d rawn with S cenario 1. Scenario 1 and Scenario 2 present broadly similar results. In both cases, we see that, in terms of equity, a negative tax replacing part of last-resort financial assistance with an equivalent refundable tax credit (\$5,832 per adult) granted to all persons ages 18 to 64 and funded by a single tax rate would be broadly beneficial for people with incomes below \$50,000. On the other hand, recipients of last-resort financial assistance, without o ther income, would not see their situation improve. Both scenarios would be neutral for people aged 65 and over.

Because of the high tax rate in Quebec to be applied (26.5% for Scenario 1, and 24.1% and 48.2% for Scenario 1) plus federal taxation, both scenarios would leave many worse off. In 2016, the average tax rate in Quebec was 9.6% (Ministère des finances du Québec, 2020). A significant number of low-income people would lose as a result of the abolition of the basic personal amount. The introduction of different age-dependent tax regimes - (before age 65 and from age 65) can be an equity issue. A significant number of low-income people would be left worse off as a result of the abolition of the basic personal amount.

In Scenario 3, the introduction of different tax regimes according to age (before age 65 and from age 65) can be an equity issue. Compared to this first scenario, Scenario 2 introduces two tax rates, which partly restores tax progressivity, but imposes a very high tax burden on high-income households.

If Scenario 4 raises issues of vertical equity due to the unconditionality of the aid in relation to the assets held and the reduction of the progressivity of the tax system. Just like in Scenario 3, it does so, however, less than in Scenario 1.

For both scenarios, in the case of work incentives, the results would be positive for households receiving last-resort financial assistance, but negative for other taxpayers. In terms of efficiency, the system would respect the government's ability to pay but impose a high tax burden on taxpayers. Administrative savings would be limited. The introduction of separate tax regimes by age may also be an efficiency issue.

Social acceptability would also not be met due to the high tax burden and the presence of losers among low-income earners. The results of these scenarios show that the tax rate that would be required would lead to a great number of households that would lose large and significant amounts of income. Overall, taxpayers would have to pay two to three times the current tax rate to the government of Québec.¹⁵ The negative tax with a single tax rate (or two rates, in the case of Scenario 4) overall would be beneficial for those with the lowest incomes, but many others would lose out, in particular, taxpayers with medium and high incomes.

No matter the scenario, the comprehensive negative income tax raises issues of equity, due to the fact that the resulting tax system would be less progressive.

With regard to work incentives, the results would be positive among low-income households, but negative among other taxpayers, due to resulting high tax rate.

In terms of efficiency, the various scenarios would maintain the government's ability to pay, but the administrative savings would be limited.

^{15.} For example, the single tax rate is 27% in scenario 3 in the report volume 1 compare to a 9%. For its part, scenario 4 calls for two rates, i.e. 24% and 48%. In comparison, under the current tax structure, the average tax rate was 9.6% in Québec in 2016. These rates only cover Québec tax, to which federal tax must be added.

	Comprehensive Negative Income T	lax
	Scenario 3	Scenario 4
Description	Assistance equal to 50% of the social assistance paid to a couple $[1]$	Assistance equal to 50% of the social assistance paid to a couple [1]
Persons targeted	18 to 64 years	18 to 64 years
Amount of assistance for targeted persons	\$5 832	\$5 832
Payment to individual or household	Individual	Individual
Financing identified		
– Gross costs for the government	\$29.2 billion	\$29.2 billion
– Financing identified	Replaces part of the current support (\$1.8 billion) Single tax rate of 26.5% ^[2] in Québec with elimination of the basic personal amount (\$27.4 billion)	Replaces part of the current support (\$1.8 billion) Two tax rates in Québec, i.e. 24.1% on income below (or equal to) \$100 000 and 48.2% ^[2]] on income over that amount, with elimination of the basic personal amount (\$27.4 bil- lion)
– Net costs for the government	\$0 B]	\$0 b]
Compliance with principles		
– Equity	Tax system becomes less progressive Vertical equity issues	Tax system becomes less progressive Vertical equity issues
– Incentive to work	Positive effect for social assistance reci- pients	Positive effect for social assistance reci- pients
	Negative effect for other taxpayers	Negative effect for other taxpayers
	Within the government's ability to pay	Within the government's ability to pay
– Efficiency	Limited administrative savings	Limited administrative savings
	Complexity of applying separate tax re- gimes according to age	Complexity of applying separate tax re- gimes according to age

TABLE 10: Application of an absolute form of comprehensive negative income tax

¹ Current recipients of last-resort financial assistance who receive more than \$5832 would continue to receive amounts under this program. The amount they would receive would correspond to the difference between the current benefit and the universal allowance of \$5832.
 ² In 2016, the average tax rate in Québec was 9.6%

 3 Program management fees are not included in the cost of the scenarios or in their funding.

5 Conclusion and Discussion

Since the very notion of a guaranteed minimum income has become a political issue, the report first explores the concept of a guaranteed minimum income and proposes an inclusive and operational definition that helps clarify the debate and also serves as a guide for many of our recommendations. Thus, it appears that the two forms of guaranteed minimum income considered in this article, namely universal allowance and negative income tax, which are both based on the principles of equity, incentive to work and efficiency, would be difficult to implement in Quebec.

Overall, the Quebec income support system appears to be mostly complex. As a matter of fact, it tends to pay specific attention to specific groups, specific situations and specific needs. However, a number of improvements in terms of access to the system, administrative simplicity, transparency, and adaptability to the transition periods associated with the new economy appear to be needed and figure explicitly in our recommendations. By new economy, we mean the emerging challenges of recent years, such as how AI could affect labour markets and the economy, or how the Covid19 crisis encourages us to re-think how to address possible lockdowns during future pandemics.

Generally speaking, our recommendations are in line with our core definition of a GMI, and it is expected that they do more to support labour market integration. In fact, the view of the Committee is that the poor persons who are able to re-enter the labour market, pursue education and training must somehow be helped and encouraged financially.

Finally, it appeared to us that the key to solve practical issues about the adequate support of the needy resides in the availability of rigorous and reliable data in the future.

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6 Appendix A

U.S. (Alaska)	Alaska Permanent Fund Dividend	1982-
U.S. (N.J. & Pennsylvania)	New Jersey Income Maintenance Experiment	1968-1972
U.S. (N. Carolina & Iowa)	The Rural Income Maintenance Experiment	1969-1973
U.S. (Gary, Indiana)	Gary Income Maintenance Experiment	1971-1974
U.S. (Seattle & Denver)	Seattle-Denver Income Maintenance Experiment	1971-1982
U.S. (NYC)	Opportunity NYC – Family Rewards	2007-2010
China	Zuidi shenghuo baozhang or Dibao	1999-
Macau	Wealth Partaking Scheme	2008-
Portugal	Rendimento Minimo Garantido	1996-
Mexico	PROSPERA Programa de Inclusión Social	1997-
Brasil	Bolsa Família	2003-
Brasil (Quatinga Velho)	Basic Income Unconditional	2008-2014
Iran	Fuel Subsidy Reform	2010-
United Kingdom	Universal Credit	2013-
Canada (Manitoba)	Manitoba Basic Annual Income Experiment – Mincome	1974-1979
Canada (Ontario)	Ontario Basic Income Pilot Project	2018-2019
Uganda	Youth Opportunities Program	2006
Namibia	Basic Income Grant Pilot Project	2008-2009
India	Madhya Pradesh Unconditional Cash Transfer Project	2011-2012
Kenya	GiveDirectly Unconditional Cash Transfer Program	2011-2013
Switzerland	L'initiative pour un revenu de base inconditionnel	2016
Finland	Finland Basic Income Pilot	2017-2018
Netherlands	Netherlands Basic Income Pilot	2018-2019

TABLE 11:

7 Appendix B

The assistance programmes are financed by taxes and cover individuals in various situations or facing certain expenses, without contribution conditions. However, they are sometimes conditional on income and assets. The assistance programs in force in Quebec are aimed at one or other of the three objectives previously identified.

- Basic financial assistance Basic financial assistance consists of the following :
 - The social assistance mainly financial assistance of last resort (Government of Quebec);
 - The solidarity tax credit (Government of Quebec);
 - The Shelter Allowance Program (Government of Quebec);
 - Student financial assistance (Government of Quebec, partly funded by a transfer from the federal government);
 - The Old Age Security pension and the Guaranteed Income Supplement (federal government);
 - The refundable tax credit for the goods and services tax (GST) (federal government).

 Family assistance In terms of financial assistance to families, the programs offered are :

- The support for children (Government of Quebec);
- The Reduced Contribution Daycare Services Program (Government of Quebec);
- The refundable tax credit for child care expenses (Government of Quebec);
- Canada Child Allowance (federal government);
- The child care expense deduction (federal government).
- Incentive to work The incentive to work consists of the following components :
 - the work premium (Government of Quebec);
 - the work premium (Government of Quebec);
 - the tax credit for experienced workers (Government of Quebec);
 - the Working Income Tax Benefit (federal government).

TABLE 12:

Comparative expenditures of income support measures put in place by the Government of Quebec and the federal government - 2015

(in millions of dollars, unless otherwise indicated)

Government of Quebec	Amount	Federal government	Amount	Total
Basic financial assistance				
Financial assistance of last resort	2 881	Old Age Security pension	$9\ 425$	
Refundable Solidarity Tax Credit	1 844	Guaranteed Income Supplement	$3\ 021\ ^{(1)}$	
Shelter Allowance Program	74	Refundable tax credit for the GST $^{\left(2\right) }$	902	
Student financial assistance (portion funded by Quebec)	$405^{(3)}$	Federal share of the funding of student financial assistance	275	
Subtotal	5 204	Subtotal	13 623	18 827
Québec's share of basic financial assis- tance expenditures	27,6~%	Federal government's share of basic fi- nancial assistance expenditures	72,4~%	
Family assistance				
Support for children $^{(4)}$	$2\ 214$	Canada Child Allowance $^{(5), (6)}$	2539	
Reduced Contribution Daycare Ser- vices Program	2 307	Universal child care benefit $^{\rm (6)}$	1 792	
Refundable tax credit for child care expenses	609	Child care expense deduction	241	
Subtotal	$5\ 130$	Subtotal	4 572	9 702
Quebec's share of family assistance expenses	52,9~%	Federal government's share of family assistance expenses	47,1 %	
Incentive to work				
Work premium $^{(7), (8)}$	344			
Tax shield (8)	61	Working Income Tax Benefit	255	
Tax credit for experienced workers (8)	100	_		
Subtotal	505	Subtotal	255	760
Quebec's share in work incentive expenditures	66,4~%	Federal government's share in work in- centive expenditures	33,6~%	
Total	10 839		$18 \ 450$	29 289
Quebec's share of total income support expenditures	37,0 %	Federal government's share of total in- come support expenditure	63,0 %	

Note 1 : The amounts for 2015 are projections. The federal amounts are estimated by applying the proportion of Quebec taxpayers to all the statistics from federal tax expenditures or benefit statistics.

(1) Including the allowance for people aged 60 to 64 and the Allowance for the Survivor.

(2) Goods and services tax.

(3) In 2014-2015, students benefited from \$ 1,178 million in student financial assistance. Of this amount, \$ 600 million was paid in the form of grants and \$ 578 million in the form of loans. Spending in Quebec is \$ 680 million, which includes the amount of grants and the interest paid on loans.

(4) Including the Supplement for Handicapped Children.

(5) Including the National Child Benefit Supplement and the Child Disability Benefit.

(6) These family benefits have been abolished and replaced by the Canada Child Benefit since July 2016.

(7) Including the work premium adapted to people with severe employment constraints and the supplement for long-term recipients leaving the last resort financial assistance or the Alternative jeunesse program.

(8) As an illustration, the cost presented for 2015 takes into account the improvements in the 2015-2016 and 2016-2017 budgets, even if the latter did not come into force until 2016.