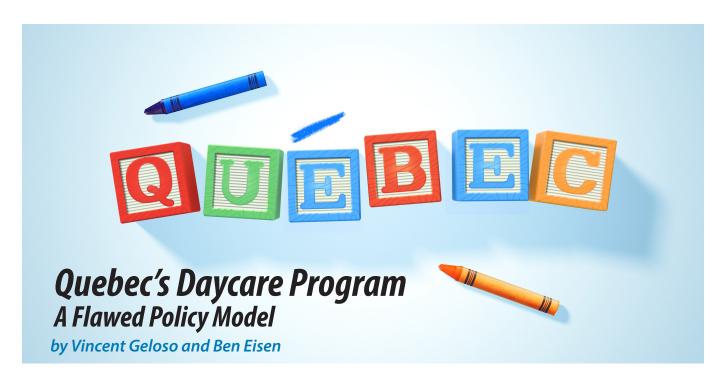
FRASER BULLETIN



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MAIN CONCLUSIONS

- In 1997, Quebec instituted a system of subsidized daycare, providing daycare spots at a daily rate of \$5 per day regardless of parental income. Despite some modest reforms, this "universal" daycare program retains its original structure.
- Quebec's system is expensive. The government spends over \$9,000 per child served, for a total cost of approximately \$2.6 billion in 2014/15.
- Nevertheless, Quebec's daycare system has been held up by some as a model for other provinces: advocates argue increased maternal labour-force participation generates tax revenue that offsets program costs and that the program produces beneficial child development outcomes.
- These claims should be treated skeptically. The resulting tax revenues from increased maternal

- labour-force participation likely do not offset the full cost of Quebec's program. What's more, the effects upon labour-force participation in Quebec cannot easily be generalized to the rest of Canada and daycare based on Quebec's model would likely have significant fiscal costs if adopted elsewhere.
- Evidence for long-lasting child development gains from subsidized daycare is mixed. Troublingly, studies from Quebec show the program has contributed to significantly worse health and social development outcomes.
- Although the program is often described as "universal", Quebec has not solved the problem of access and waiting times despite very high levels of government spending. Lengthy wait times remain in many areas, and children from higher income families are more likely to obtain a place in daycare.

Introduction

In 1997, the province of Quebec instituted a subsidized daycare system. Setting a low and flat daily rate, first at \$5 then at \$7, that system replaced income-contingent tax credits. Recently, the province has abandoned completely flat rates for access to subsidized daycare services and now require that higher-income families pay somewhat higher daily fees. Even these higher rates charged to upper-income families, however, are still heavily subsidized. Since the introduction of Quebec's daycare system, politicians in other provinces, and even at the federal level, have proposed adopting similar programs. The arguments for introducing daycare based on the Quebec model in other provinces rests primarily on two key arguments.

Firstly, proponents claim that the Quebec daycare model significantly boosts maternal labour-force participation and, therefore, growth of GDP and tax revenue. In fact, some proponents have gone so far as to say that as a result of additional tax revenue from increased parental labour force participation that these types of programs essentially "pay for themselves".

Secondly, proponents argue that these types of daycare programs generally improve cognitive and non-cognitive developmental outcomes for

children, enhancing readiness for school and potentially leading to better long-term socioeconomic outcomes in adulthood. According to this argument, spending today on daycare programs represents a wise long-term investment in human capital (Friendly and Rothman, 2009, January 8).

This research bulletin shows both of these arguments have severe flaws. On the first, claims that Quebec-style daycare programs "pay for themselves" through increased maternal labour-force participation are based on mistaken analysis of data from Quebec and faulty assumptions about the extent to which data from there can be generalized to other provinces. Indeed, predictions of dramatic increases in labour-force participation that allow the program to "pay for itself" are likely overstated and the program will, therefore, almost certainly have real fiscal costs.

Claims of impressive, reliable, long-term gains in human capital from daycare programs also lack a strong evidentiary base. In fact, the evidence for improved child-development outcomes and enhanced readiness for school from public spending on daycare programs is weak, and there is some evidence of negative impacts on childdevelopment outcomes.

Does subsidized daycare "pay for itself"?

Young children weigh heavily in the decision of parents (mostly mothers) to enter the labour market. Daycare for children is an important factor in this decision as it is a cost associated with working. This is why the economics literature finds an important role for daycare costs in the decision of married women to enter the workforce. The logic

advanced by many is that reduced daycare costs, through subsidization, will increase labour-force participation on the part of mothers.

Some proponents of Quebec's model of daycare argue that the labour-force participation gains for mothers are so large that the resulting

increase tax revenue actually can completely offset the cost to the government of paying for daycare. In short, the claim goes that daycare programs, in this way, "pay for themselves." Some of the support for that argument has emanated from Quebec economists Pierre Fortin and Suzie St-Cerny and fiscalist Luc Godbout (2012).

This is a claim to be scrutinized carefully, given that one of the major obstacles to the program's adoption elsewhere is the very high price tag. Quebec currently spends over \$2 billion annually on the program, and the inflation-adjusted cost per daycare place has nearly doubled since 1997, climbing from \$4,874 to \$9,823 in 2016 (2016 dollars) (Quebec, Ministère de la Famille, various years). The problem is that the research literature calls into question the claim that Quebec's daycare system pays for itself, and other evidence complicates the notion that this outcome can be generalized and would also be true in other provinces if similar programs were adopted there today.

On the first of these two points, studies have generally found a positive effect from the Quebec daycare program on the labour supplied by parents, but several studies suggest this increase is not sufficient to offset the significant fiscal costs associated with delivering the programs. There have been a range of estimates surrounding the net fiscal costs to the government of Quebec resulting from its daycare program. For example, a paper by Baker, Gruber, and Milligan (2008) estimated that approximately 40% of the cost of the daycare subsidy is recovered by the resulting increase in payroll and income taxes generated by the subsidy. Another estimate by Haeck, Lefebvre and Merrigan (2015) provided a range of scenarios using multiple sets of assumptions. Their paper showed that even in the "best scenario"

available, the Quebec program still had costs that significantly outstripped its fiscal benefits for the provincial government—by approximately \$1.2 billion annually (Haeck, Lefebvre, and Merrigan, 2015).

In short, the best available evidence suggests that, while the daycare subsidy in Quebec did increase maternal participation in the labour force, it did not do so on nearly a large enough scale to result in an increase in tax revenue that covers the cost of the program. In short, there is no free lunch in this policy area. In fact, it is likely that even the estimates we do have about the impact on labour-force participation are overestimated because the introduction of Quebec's daycare program coincided with the reform of employment insurance across the country.

To estimate the net number of mothers participating in the labour force because of the program's existence, statistical tests have to be conducted where a baseline of what would have happened without the policy must be established. The baseline used by most studies for these analyses have been Canadian provinces that did not enact a subsidized daycare program. These models assume that any observed difference in the evolution of workforce participation or employment rates between married women in Quebec and in the rest of Canada, all else held constant, can then be attributed to the policy.

This assumption, however, is problematic. There are in fact several factors that could have a differential effect on labour-force participation in Quebec compared to the rest of Canada that were not properly accounted for. One of those changes, which occurred at the same time as the daycare reform, was a significant reform of employment insurance, which had the effect of increasing labour force participation.

This reform was designed in part to increase labour-force participation and, indeed, it was followed by increases in employment rates across the country. However, the size of the change in employment rates following the reform was not uniform across Canada. Instead, regions with lower rates of labour-force participation, including Quebec and Atlantic Canada, tended to experience the largest increases in the employment rate. In 1997, the labour-force participation rate for women of child-rearing age was 66.5% in the Atlantic Provinces, and 69.7% in Quebec. By comparison, the labour-force participation rate in every other province in the country for this group was above 72%.

It is therefore important to note, since 1997, labour-force participation rates in Atlantic Canada have actually increased at a slightly faster pace than that in Quebec, in spite of

having no subsidized daycare program (figure 1). As a result, models that do not account for differential impacts from changes in the EI program likely overstate the effect of the Quebec daycare program on the labour market.

Moreover, looking at female demographics within Quebec confirms that we may have overestimated the effects of this policy. Indeed, the labour-force participation of women above child-bearing age (above 55 years of age) increased more quickly than that of women of typical child-bearing age who were likely to be influenced in their decision by the provision of a subsidized daycare system (figure 2). Thus, this suggests that a large share of the increase in labour participation stemmed from the reform of employment insurance, and those employment gains may be wrongly attributed by some to subsidized daycare.

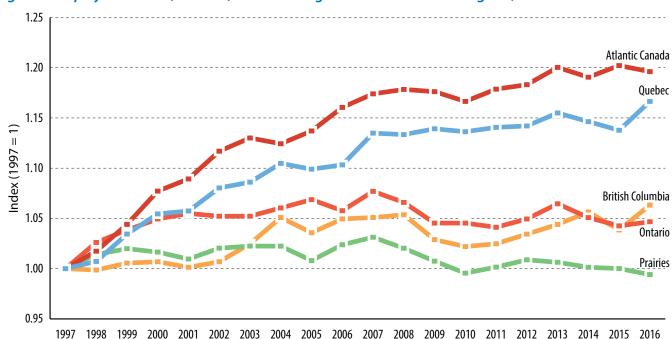


Figure 1: Employment rate (1997 = 1) for women aged 25-44 in Canadian regions, 1997-2016

Note: The averages for the Atlantic and Prairies provinces are weighted by the female population. Source: Statistics Canada, 2017 (CANSIM table 282-0002).

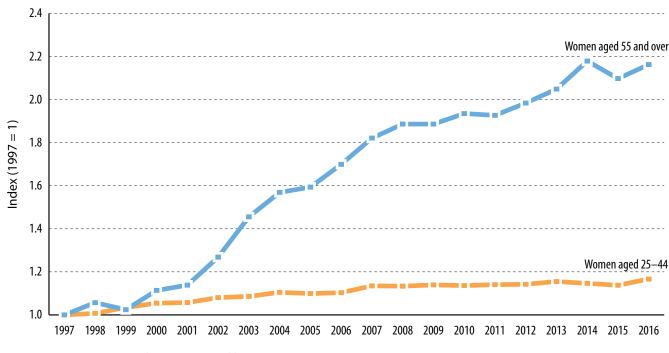


Figure 2: Employment rate (1997 = 1) for women aged 25–44 and 55+ in Quebec, 1997–2016

Source: Statistics Canada, 2017 (CANSIM table 282-0002)

This is important since the estimate of the net fiscal cost of the program mentioned earlier depends largely on the extent of the increase in labour participation attributable to subsidized daycare. If the increase in labour-force participation is reduced by only 25%, the net cost of the program for the provincial government would increase by \$125 million (Haeck, Lefebvre, and Merrigan, 2015).

Also rarely discussed is the fact that the introduction of subsidized daycare may have increased the labour supplied by mothers, but it also reduced the labour supplied by fathers. While few fathers dropped out of the labour force, they did reduce the intensity of their work (Stalker and Ornstein, 2013). This effect is rarely accounted for by the proponents of subsidized daycare.

The analysis above suggests it is not reasonable to conclude that Quebec's program of subsidized daycare has "paid for itself" through increased labour-force participation rates. There are also important questions to be asked about whether other jurisdictions can reasonably expect gains in labour-force participation comparable to those in Quebec. While the gains in labour-force participation in Quebec were insufficient to cover program costs, there are important reasons to suspect those gains may nevertheless be significantly greater than other jurisdictions should expect. Specifically, it is important to recognize that Quebec's labourforce participation rate in 1997 was lower than it is in any province in Canada today. The labour-force participation rate for women aged 25-44 in the rest of Canada today stands at 76.6%; in Quebec in 1997, it was 69.7%. It would, therefore, be a mistake to assume that the introduction of a daycare program based on the Quebec model in any province today would have as big of an impact on women's employment rates as Quebec's program did in that province 20 years ago, given the very different baseline employment levels.

We have seen that Quebec's daycare system is expensive and that it is unlikely that increased labour-force participation yields additional tax revenue that makes up for those expenses. Troublingly, the fiscal costs of the program are continuing to increase. Since the year of the inauguration of subsidized daycare, government spending adjusted for inflation per place has increased 101.6% (Quebec, Ministère de la Famille, various years). A substantial share of this increase derives from the incentives that the new system has created. With the creation of the system came the unionization of daycare workers, both in public centres and in home-based

daycare. This gave a strong position to unions who can deny service and go on strike for wage increases. Limited private competition strengthens the incentives for the government to cave in and has contributed to inflating costs. For example, the 2008 extension of unionization to home-based daycare workers ended up costing the provincial government more than \$1 billion per year (Lessard, 2008). And these costs fail to account for private costs borne by parents in the form of longer waiting time: in order to control costs, the provincial government rations service, which leads to long waiting lists (Baker, Gruber, and Milligan, 2008).

What about other benefits? Arguments from enhanced child development and human capital

While it is clear that the program's costs are growing rapidly and it fails to pay for itself, these facts do not mean that subsidization of daycare on the Quebec model is necessarily a bad idea. There may be other benefits from the program that justify the expense. For example, some proponents of heavy subsidization of daycare argue that these programs enhance children's readiness for school, leading to long-term gains in the development of human capital and better socioeconomic outcomes as adults. These long-term benefits may well be worth paying for in the short term.

Unfortunately, the evidentiary basis for these sorts of arguments is quite weak. It is certainly true that some extremely expensive boutique daycare programs serving very small numbers of children from impoverished high-risk backgrounds have been shown through high-quality studies to produce long-term gains for participants (Coalition for Evidence-Based Policy, undated). However, evidence is extremely

scarce that broader, scaleable programs with lower per-student price tags and targeted at non-poor children can achieve similar results. Indeed, evidence from high-quality longitudinal studies in the United States have repeatedly shown that what cognitive gains are found from centre-based daycare participation tend to fade out quickly over time, and are gone nearly entirely by the third grade (NICHD Early Child Care Research Network, 2002). To the extent that cognitive benefits fade out quickly over time as significant American evidence suggests, it is unrealistic to expect long-term human capital returns from investment in daycare based on the Quebec model.

In addition to this evidence from the United States about the dissipartion of school readiness effects from daycare participation, there is also substantial evidence from Quebec itself that raises significant concerns about the broader effects of that province's daycare program on child development outcomes. For example, one recent study shows

that, on the whole, subsidized daycare did not improve cognitive development in Quebec. When we disaggregate families by income families, signs of a negative impact appear (Haeck, Lefebvre, and Merrigan, 2015). Another study found that mothers have reduced the time they spend playing with their children since the policy was introduced, although it does report an increase in the amount of time spent reading to them. One study, concerned with the subjective well-being reported by parents in surveys of happiness, found a statistically significant decrease. While the effects on subjective well-being were positive for low-income families, they were negative for families in the middle class (Brodeur and Connolly, 2012).

The most important results have emerged from those who found signs of deterioration in noncognitive traits such as increases in aggression and hyperactivity in boys (Baker, Gruber, and Milligan, 2008). Large, significant effects upon health outcomes were discovered, for example. Similarly, large negative effects were found on social development outcomes. Instances of hyperactivity, aggression, and anxiety all increased measurably in the years following

Quebec's policy change. Negative effects on motor and social development were also found.

These latter outcomes are particularly disheartening. Non-cognitive traits, known as soft skills, are incredibly important predictors of outcomes in later life. These soft skills are traits like industriousness, perseverance, patience, and self-control. These skills weigh heavily in determining long-term individual well-being, perhaps even more so than many forms of cognitive skills (Heckman and Kautz, 2012).

In short, the evidence from a number of jurisdictions, but especially Quebec, casts major doubt on the notion that there are important school-readiness and human-capital returns that can be expected from current spending on daycare programs of the Quebec model. Indeed, the evidence from elsewhere suggests that gains in school readiness common fade out, and the evidence from Quebec shows significant negative outcomes in terms of non-cognitive development. Given the high fiscal price tag of these programs, the paucity of clear evidence for positive developmental outcomes is concerning.

Did the Quebec model solve the access problem?

Across Canada, it is a common complaint among parents that it is difficult to find access to a registered daycare space. Some people, when hearing that Quebec has a "universal" daycare system may believe that this means the access problem in that province has been solved, and that access is, in fact, universal. This is not correct: the term "universal" in this context merely means that all families have access to subsidies regardless of income. However, the problem of waiting lists for places in daycare facilities remains. Predictably, with belowmarket prices, demand for the program is high

and, despite more than two billion dollars in public expenditures each year, tens of thousands of children remain on waiting lists (Kozhaya, 2006).

Not all families have access to Quebec's universal system and access is not evenly spread across the income distribution. In fact, the evidence suggests that utilization rates are much higher for upper-income families compared to those with lower incomes (Kohen, 2008). One study conducted shortly after the program's creation, for example, showed that 58% of

students in subsidized daycare spots came from families with incomes above \$60,000, although students in this income group represented a minority of children aged 0 to 4 in Quebec at the time (Kozhaya, 2006). Moreover, the policy has largely been a boon to richer households. The costs after taxes for poor households after the reform were almost identical to the costs prior to the reform. For more affluent households, the change in policy represented a net financial gain and the incentive to provide more work was concentrated in the segment of the

population where mothers had access to betterpaid jobs (Haeck, Lefebvre, and Merrigan, 2015).

It is important to stress that lack of access, and unequal access to daycare services is not just a problem in Quebec: they are problems across Canada. However, the available evidence suggests that these problems have not been solved in Quebec under its universal program, where waiting lists remain a problem and where upperincome families are more likely to get a daycare spot than low-income families.

Conclusion

Quebec's subsidized daycare policy has been singled out as a model by advocates for subsidized daycare in other provinces. However, claims about the benefits of Quebec's model should be considered skeptically. The program is expensive, and the preponderance of the research suggests that it does not pay for itself, as has been suggested by some, through increased tax revenue. Furthermore, promises of big gains in children's readiness for school and in long-term human

capital lack a strong evidentiary base. The reality is that for other provinces considering daycare programs based on the Quebec model, there is likely to be a substantial net fiscal cost, and there is reason to be skeptical about long-run returns from that spending in terms of the development of human capital. These realities should be borne in mind whenever any Canadian province is considering following Quebec's lead on daycare.

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