FRASER BULLETIN





MAIN CONCLUSIONS

- British Columbia's NDP government recently announced a series of new policies intended to lay the foundation for "universal", governmentsubsidized, \$10-per-day daycare across the province.
- This major policy intervention seems unnecessary as there does not appear to be a widespread lack of daycare spots in British Columbia: as of 2016, the province-wide average daycare vacancy rate was 30.9%.
- Moreover, Quebec's ongoing, two-decade experiment with subsidized daycare shows that such a program is unlikely to be either affordable or successful. Quebec's system is expensive: the government spends over \$9,000 per child served, for a total cost of approximately \$2.3 billion in 2017.
- Advocates nonetheless argue that subsidized daycare will increase maternal labour-force participation and generate tax revenue that offsets

- program costs; and that the program produces beneficial child-development outcomes.
- In reality, such a program is unlikely to pay for itself. The evidence from Quebec's experience suggests that the tax revenues generated by increased maternal labour-force participation do not offset the full cost of the program.
- Evidence of long-lasting gains for child development from subsidized daycare is mixed and studies from Quebec show the program has contributed to significantly worse health and socialdevelopment outcomes.
- Although Quebec's program is described as "universal", in many areas there are still lengthy waiting lists for places in daycare facilities despite very high levels of government spending. Children from higher income families are more likely to obtain a place in daycare.

Introduction

In last year's provincial election, British Columbia's New Democratic Party (NDP) campaigned on a commitment to institute a \$10-perday subsidized daycare program. Although their \$10-a-day campaign promise does not appear in their government's 2018 budget, initial steps were taken and a commitment to a "universal" public daycare plan remains. Proponents of such plans point to Quebec as an example to follow where, more than 20 years ago, the province implemented a government-subsidized daycare program. The Quebec experience offers important lessons for British Columbia today. Contrary to the rhetoric of those advocating universal daycare, the Quebec model is hardly a success story. In fact, the evidence shows that Quebec has not solved access problems and there is evidence of the program producing negative outcomes in child development. And, despite what proponents claim, the notion that such a policy will pay for itself is unlikely. This publication reviews the evidence from Quebec's experience with subsidized daycare and argues that it should serve as a warning, not a blueprint, for British Columbia and other provinces contemplating a similar daycare policy.

Does British Columbia suffer from a widespread lack of daycare spots?

Before analyzing the Quebec model, it is important to consider the claim that motivates proponents of "universal" or government-subsidized daycare. The claim assumes there is a widespread lack of daycare spots in the province. While it is beyond the scope of this paper to undertake a full survey of the availability and quality of daycare spots in the province, it is instructive to consider the findings of a recent analysis by Ward

and Mrozek (2017). These researchers examined vacancy rates from 2003/04 to 2015/16 across British Columbia's 13 daycare service-delivery areas for three groups of children-infants/toddlers, children aged three to five, and schoolaged children-and found the province-wide average daycare vacancy rate was 30.9% as of 2016. It has never fallen below 30%. Even in Vancouver and Richmond, where vacancy rates were the lowest, space remained at 24%. While some have raised concerns about access for infants and toddlers, where the average daycare vacancy rate was 16.1%, even for this group nowhere are vacancy rates below 10%. In other words, supply exceeds demand for all groups in all regions of the province. Based on the analysis by Ward and Mrozek (2017), British Columbia does not have a widespread problem of lack of daycare spots, certainly not one that would warrant major public policy intervention.

British Columbia's 2018 budget takes steps towards "universal" daycare

Even though British Columbia does not appear to suffer from a widespread lack of daycare, the provincial government nonetheless announced a series of daycare-related policies in its budget of February 2018. Collectively, these policies can be seen as steps towards a version of the Quebec model.¹ Following is a brief summary of the announcements contained in the BC NDP budget.

The budget outlined the government's ten-year vision of "universal" public daycare, which is budgeted to cost taxpayers over \$1 billion in the first three years alone (BC Finance, 2018a). The initiative has four main components: \$237 million to create 22,000 licensed daycare spaces, \$136 million for more early childhood educators,

¹ In fact, one of the supporting budget documents called the collective policy announcements "The Path to Universal Child Care" (BC Finance, 2018b).

and a combined \$630 million for a daycare feereduction program as well as a daycare subsidy. The fee reduction program ranges between \$60 to \$350 per licensed daycare space, and the daycare subsidy is for parents using licensed daycare providers for children under the age of six. The per-child subsidy ranges from \$330 to \$1,250 per month for families with annual incomes below \$45,000. The subsidy steadily reduces as income increases, and cuts off at a gross annual household income of \$111,000 (BC Finance, 2018a).

According to the BC government, the announcements in the budget are "the biggest commitment to childcare in BC history and it lays the foundation for universal child care province-wide" (BC Finance, 2018b: 4). Given that the government's intent is to move towards "universal" subsidized daycare, Quebec's experience is instructive. The following analysis of the Quebec model shows that government-subsidized daycare is costly, does not solve the problems it purports to, and actually can negatively affect early childhood development.

A brief overview of Quebec's daycare program and claims made by proponents

In 1997, the province of Quebec instituted a government-subsidized daycare system. Setting a low and flat daily rate, first at \$5, then at \$7, that system replaced income-contingent tax credits. The provincial government subsidizes what the rates do not cover of the costs on a per-place basis. Recently, the province has abandoned completely flat rates for access to subsidized daycare services and now requires 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 rest 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, these types of programs essentially pay for themselves. Even the BC NDP's platform claims that "the \$10 a day plan will pay for itself over time ... boosting our economy" (BC NDP, 2017: 9).²

Secondly, proponents argue that these types of government daycare programs generally improve cognitive (that is, school readiness) and noncognitive (that is, social skills) developmental outcomes for children, enhancing readiness for school and potentially leading to better longterm socioeconomic outcomes in adulthood. According to this argument, spending today on daycare programs represents a wise longterm investment in human capital (Friendly and Rothman, 2009, January 8).

As this publication will show, 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 a 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

² This claim is based on projections contained in a consultant report commissioned by the Early Childhood Educators of BC (Fairholm and Anderson, 2017).

that allow the program to pay for itself are likely overstated and the program will, therefore, almost certainly have net fiscal costs. This is of great importance to British Columbia's NDP government since the provincial budget currently has little to no fiscal room to undertake significant increases in government spending if the NDP's campaign promise to balance the budget is to be kept.

Claims of impressive, reliable, long-term gains in human capital from daycare programs also lack a strong evidentiary base. 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 effects on child-development outcomes. As provinces like British Columbia design new daycare policies, they should recognize the limitations of Quebec's model and pursue a different approach.

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. For this reason, the economics literature finds an important role for daycare costs in the decision of women with children to enter the workforce. The logic advanced by many is that reduced daycare costs, through some form of government subsidy, 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 increased tax revenue can completely offset the cost to the government of paying for daycare. In short, the claim is that daycare programs, in this way, pay for themselves. Support for that argument has been put forward by Quebec economists Pierre Fortin,

Suzie St-Cerny, and Luc Godbout (2012), who argued that 70,000 women entered the labour force from 1997 to 2012 as a result of the policy.

This is a claim to be scrutinized carefully, given that one of the major obstacles to the program's adoption elsewhere-including British Columbiais its very high price tag. Quebec currently spends over \$2 billion annually on the program. At the beginning of the program in 1997, the cost per daycare place stood at \$4,921; it surged to \$11,011 in fiscal year 2013/14 (2017 dollars) (Quebec, Ministère de la Famille and Conseil du Trésor, various years). Since then, public expenditures have decreased slightly to \$9,772 per place in 2017 (2017 dollars). However, this is not the result of improved management controlling costs. As even Fortin (2017: 4) concedes, it is largely the result of the indexed fee schedule rising with family income, which did not change total costs but shifted a greater burden onto users. The research literature calls into question the claim that Quebec's daycare system pays for itself; and the evidence raises serious questions about whether this outcome can be generalized and whether it would hold 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 program. There have been a range of estimates surrounding the net fiscal costs to the Quebec government 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). Further, added to these public costs are the private costs borne by parents in the form of longer waiting times, the effect of the long queues that form as the provincial government rations the number of subsidized places in its effort to control costs (Baker, Gruber, and Milligan, 2008).

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. Indeed, it is likely that the impact on labour-force participation is 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 adopt 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, presents a problem as there are several factors, not properly accounted for, that could have a differential effect on

labour-force participation in Quebec compared to the rest of Canada. One factor-a change that occurred at the same time as the daycare reformwas 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 employment rate for women of child-rearing age was 65.5% in the Atlantic Provinces, and 69.7% in Quebec. By comparison, the employment rate in every other province in the country for this group was above 72%.

It is therefore important to note that, since 1997, employment rates for women in Atlantic Canada, where there are no subsidized daycare programs, have actually increased at a slightly faster pace than that in Quebec (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 researchers may have overestimated the effects of this policy. Indeed, the employment rate of women *above* child-bearing age (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). This suggests that a large share of the increase in labour participation stemmed from the reform of EI, and those employment gains may be wrongly attributed by some to subsidized daycare.

Figure 1: Employment rate (1997 = 1) among women aged 25–44 in Canadian regions, 1997–2017

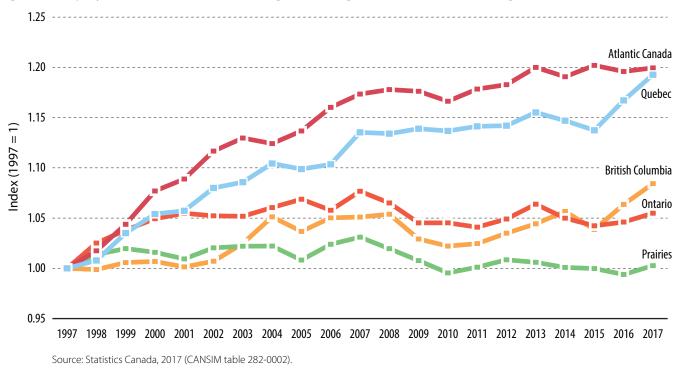
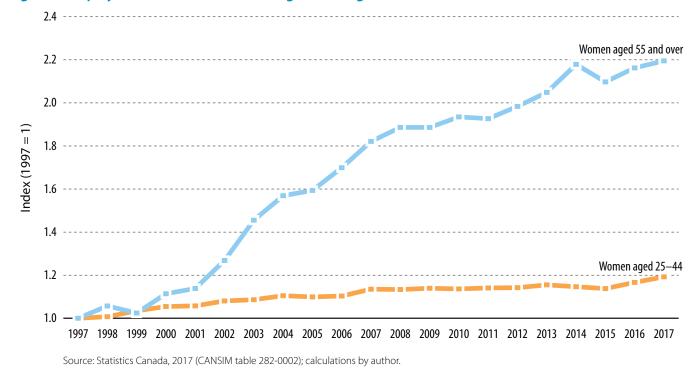


Figure 2: Employment rate (1997 = 1) among women aged 25-44 and 55+ in Quebec, 1997-2017



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 attributed to Quebec's subsidized daycare 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).

It is also worth mentioning the only study that found that Quebec's daycare program pays for itself, that by Fortin, St-Cerny, and Godbout, which, crucially, did not address this problem and was also based on dubious assumptions. Fortin and his colleagues assumed that the women who entered the labour force were 89% as productive as the average Quebec worker (2012: 16). This is how they arrived at a net benefit for the economy of \$5.1 billion and additional provincial government revenues of \$1.48 billion. The problem is that the women who entered the labour market were not as productive as the authors assume. According to Quebec's main statistical agency (Institut de la Statistique du Québec, 2013), only women with a university degree exceed the 89% productivity level assumed. Other women have much lower ratios: around 60% for women without a high-school degree, around 77% for women with a high-school degree, and around 87% for women who went to university but did not obtain a degree. In total, the ratio is closer to 80%. This is enough to cut their estimate of the benefits by 11%. Moreover, Fortin and colleagues (2012) assumed that women returned to work full time. This is unlikely since, at the time of their study, women worked 7.7% fewer hours per week than men (Institut de la Statistique du Québec, 2013); this would further inflate their overestimate of the benefits of daycare subsidized by government. Consequently, Fortin, St-Cerny, and Godbout's estimates overshot the mark because they

overestimated time worked and the wage rate at which they worked, and did not take into account the accuracy of the estimated increase in the number of working mothers.

While 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 about whether other jurisdictions can reasonably expect gains in the female employment rate comparable to those in Quebec. While the gains in labourforce participation in Quebec were insufficient to cover program costs, there are reasons to suspect the gains experienced in Quebec may nevertheless be significantly greater than other jurisdictions should expect. Quebec's employment rate in 1997 among women aged 25 to 44 was lower than it is in any Canadian province today. When Quebec implemented subsidized daycare, the employment rate of women of childrearing age was 69.7%. Quebec's rate for the last available year (2017) stands at 83.1%, while British Columbia's rate is 78.8%. These differences suggest that the gains to be made under the BC NDP's plan will be much smaller because British Columbia would not start from the same low rate as Quebec did in 1997.

Moreover, the flawed high-bound estimate of 70,000 new jobs added in Quebec generated by Fortin, St-Cerny, and Godbout (2012) is very close to the figure proposed for British Columbia by Fairholm and Anderson (2017). This is despite the fact that Quebec is 1.77 times more populous than British Columbia and that Quebec started from a lower floor. This being the case, Fairholm and Anderson's estimate of 69,100 new full-time jobs appears highly implausible. In sum, there are not only reasons to be skeptical about the returns of government-subsidized daycare in

Quebec, it is also unlikely that British Columbia will be able to do better based on its current female employment rate.

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

While it is clear that the costs of Quebec's daycare program have grown rapidly (nearly doubling since inception) and that the program has failed to pay for itself, these facts alone do not mean that Quebec's model of daycare subsidization is necessarily a bad idea. There may be other benefits from the program that justify the expense. For example, some proponents of significant daycare subsidies argue that these programs enhance children's readiness for school, leading to longterm gains in the development of human capital and better socioeconomic outcomes as adults. Specifically, proponents argue interventions such as Quebec's daycare program that improve early cognitive and non-cognitive abilities (social skills and other "soft skills") may generate improvements in readiness for school, thereby increasing the likelihood of students' completing a high school or even a college degree. As these longterm benefits entail greater chances of upward economic mobility, it is argued that it may well be worth paying for in the short term.

Unfortunately, on balance the results from Quebec's experience with government-subsidized daycare actually point to modest signs that it hinders non-cognitive development and has no impact on cognitive development. Some studies, notably Geoffroy *et al.* (2010) and Laurin *et al.* (2015),³ find positive effects on cognitive skills.

However, Haeck, Lefebvre, and Merrigan (2015: 150) find overall negative effects that are not statistically significant for the population most likely to experience positive effects (that is, the fourto-five year old population). Moreover, they find that the effects are uneven, with lower-income children experiencing some statistically significant negative developments. Lebihan, Haeck, and Merrigan (Forthcoming) also find negative effects from Quebec's daycare program, but these negative effects receded over time. On the other hand, Brodeur and Connelly (2013) find that the policy reduced parental well-being for middle-income families (even if it appears to have increased wellbeing at the lower end), which-if not properly accounted for in other studies-might mitigate the positive effects of the policy on child outcomes. However, Baker, Gruber, and Milligan (2008; 2015) find that, while there were no persistent effects on cognitive abilities, the policy had a lasting negative effect on non-cognitive abilities. These seemingly negative developments in noncognitive skills are particularly worrisome as noncognitive traits (that is, soft skills) are key predictors of later life outcomes (Almund, Duckworth, Heckman, and Kautz, 2001; Borghans, Duckworth, and Heckman, 2008; Heckman and Kautz, 2012). Any deterioration on this front should invite caution on the part of anyone thinking of replicating Quebec's daycare policy in British Columbia. Overall, there is a dearth of positive evidence for cognitive skills and most of the evidence points to hindrances on non-cognitive skills.

In short, the evidence from Quebec casts major doubt on the notion that there are important school-readiness and human-capital returns that

³ Fortin (2017) used the 2015 study by Laurin *et al.* to defend Quebec's daycare subsidies even though Laurin *et al.* do not. They simply take a cohort of 1997–1998 babies and assess long-run outcomes for non-users and users of all types of daycare services. They do not ask the counterfactual question whether or not outcomes would have been superior for the parents who moved their children from informal (for example, home-based) care to formal care absent this policy.

can be expected from current spending on daycare programs of the Quebec model. Indeed, the evidence suggests that gains in school readiness are negligible and there are significant negative outcomes in terms of non-cognitive development. Given the high fiscal price tag of these programs, the dearth of clear evidence for positive developmental outcomes is concerning.

Did the Quebec model make daycare more available?

In the case of Quebec, one should not take "universal" as synonymous with saying that the problem of access 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 below-market prices, demand for the program is high and, despite more than \$2 billion in public expenditures each year, tens of thousands of children remain on waiting lists (Kozhaya, 2006).

In response to the lack of spaces in Quebec, the number of unsubsidized daycare centres has increased rapidly. These unsubsidized alternatives, where rates vary between \$37 and \$41 per day (Ministère de la famille, 2014: 5), accounted for 47% of the increase in the total number of daycare spaces between 2003 and 2017 and they went from representing 0.98% of all places in 2003 to 8% in 2011 and to 21% in 2017 (Ministère de la famille, 2017). That parents have increasingly turned to unsubsidized alternatives to meet their need is clear evidence that the access problem has not been solved by the policy of subsidized daycare.

Moreover, it is worth pointing out that the introduction of the policy likely disproportionately helped higher-income Quebec families. Haeck, Lefebvre, and Merrigan (2015) found that the increase in labour force participation—that is, the mothers who began using daycare services—was mainly driven by highly educated mothers—those from richer households—rather than mothers from lower—income households. This has a corollary implication: if the parents who decided to use daycare services because of the reform are high—income parents, then the policy has disproportionately helped high—income parents.

One study conducted shortly after the program's creation, for example, showed that 58% of students in subsidized daycare spaces 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 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).

The available evidence suggests that problems relating to lack of access and unequal access to daycare services have not been solved in Quebec under its subsidized daycare 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 policy of providing subsidized daycare 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 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-such as British Columbiapursuing daycare programs based on the Quebec model, there is likely to be a substantial net fiscal cost, and there is reason to be skeptical that there

will be long-run returns from that spending from the development of human capital. These realities should be borne in mind whenever any Canadian province is considering following Quebec's lead on daycare. As British Columbia's government launches a new policy for government-subsidized daycare, with the goal of a "universal" system, Quebec's experience shows the perils of such a course.

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