Economic Analysis of HB18-1208

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HB18-1208 expands the Colorado state income tax credit for child care expenses. The credit is now calculated as a small percentage of a similar federal income tax credit, and would be increased by this bill. Theoretically, by increasing the tax credit available in Colorado, the bill makes quality child care more affordable and accessible for families. This paper examines the credibility of this goal and potential success of achieving it.

Specifically, this paper seeks to determine whether the bill aims to correct an existing market inefficiency or redistribute resources and if either justify government intervention. Furthermore, this paper will consider the economic effectiveness of tax credits for child care expenses and will examine the differences in credits across different incomes. Ultimately, this paper finds evidence to support proposed government intervention in this instance, therefore supporting HB18-1208.

The proposed bill increases the existing state income tax credit for all child care expenses. Presently in Colorado, the amount of state income tax credit that families qualify for is based on Adjusted Gross Income (AGI) and is calculated as a percent of the federal income tax credit. AGI is equal to the taxable income before any exemptions or deductions are taken. Currently, for households with AGI less than $25,000, the tax credit is 50% of the federal tax credit. For AGI of $25,001- $35,000, the tax credit is 30%, and for AGI of $35,001 - $60,000, the tax credit is 10%.

The federal income tax credit is capped at costs of $3,000 for the care of one child and $6,000 for the care of two children up to the age of 13. If the AGI is less than $15,000, a family can claim 35% of their expenses up to $3,000 or $6,000, for a maximum of $1,050 credited for the care of one child or $2,100 credited for the care of two.[1] If a family has an AGI of more than $15,000, then this percentage decreases incrementally until it hits 20% for those earning more than $43,000.[2]The federal tax credit is not refundable.

The bill would increase the eligibility of all households with AGI of less than or equal to $150,000 and increase the state tax credit to 80% of the federal tax credit for all eligible households. This scaling means that the credit is progressive and benefits lower income households more. The proposed state bill is refundable but cannot be rolled over to subsequent years. Families can be refunded money if the credit exceeds their tax bill but cannot use the refund against future tax liability.

Currently, the maximum federal credit applies if the family AGI is less than $15,000. The state credit is uniformly 80%, so for families receiving the highest federal credit of $1,050 for one child, the state credit would be an additional $840 to offset care expenses. For families with the highest bracket of AGI, of over $43,000, the combined credit would be of $1,080. For all incomes, the total credit would be 180% the calculated federal credit. Table 1 shows selected examples of tax credits for various income levels. This bill is highly effective in crediting families with children for their care costs.

[1]I.R.C. § 21. (2007)(a)(1)(b)(1)(A).
[2]I.R.C. § 21. (2007)(a)(2).

Table1. Federal, State and Combined Tax Credit levels under proposed bill HB18- 1208.

Adjusted Gross Income (AGI)	Maximum Federal Credit ($)	State Credit ($)	Combined Credit ($)
Less than $15,000	1,050	840	1,890
$30,000	810	648	1,458
$43,000 +	600	480	1,080

The government should only intervene in imperfect markets in instances where they can enhance efficiency. Most market inefficiencies involve under-provided externalities or public goods. If government intervention does not correct an inefficiency, then it is a redistribution effort. Redistribution requires justification that those benefitting are deserving since it interrupts normal market activity.

Child care is an excludable good and consumption of it limits the ability of others to consume it, so it is not a public good. However, research indicates that quality child care has positive externalities. A study from The National Institute of Child Health and Human Development (NICHD) concluded that children exposed to quality child care demonstrated “more security, less separation anxiety and greater preparedness for eventually entering school.”[3] Furthermore, young children in medium to high quality care are more likely to have higher cognitive academic achievement at age 15.

According to the National Research Council, children who are better prepared for school perform better, learn skills quicker and adapt more readily to the school social environment.[4]

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[3]K. Lee Banks, "Effects of Daycare on Child Development," LIVESTRONG.COM, January 4, 2016, https://www.livestrong.com/article/101674-daycare-effects-child-development/.

[4]National Research Council. *How people learn: Brain, mind, experience, and school: Expanded edition*. National Academies Press, 2000.

This increased socialization is the largest public benefit of education by forming a more cohesive and informed citizenry. "A stable and democratic society is impossible without a minimum degree of literacy and knowledge on the part of most citizens and without widespread acceptance of some common set of values." [5] Improved performance in school undoubtedly creates positive externalities so actions that heavily influence education, like child care, are externalities by extension.

Similar studies also find that only two in five children are able to be placed in the medium to high quality care that produces these positive effects.[6] This suggests that higher quality care should be supported to foster positive experiences in child care for children so that they perform better and achieve more when they are older. Because a majority of children do not have access to the necessary quality of child care that leads to this positive effect, an under-served externality exists in the market, and the government has a legitimate role in promoting it.

The bill subsidizes the expenses that parents pay for their child care. This subsidization comes in the form of a tax credit, meaning that it redistributes from people that do not have children to people that do. Tax revenue decreases through the tax credit, and only those with children benefit, placing a larger burden on those without children. Because quality child care benefits society as a whole, the tax credit could potentially justify income redistribution.

While the bill is effective in providing a means for lower income families to give their children the higher quality care that leads to positive effects in development, it also includes tax credits for wealthier families. The current tax credit for child care caps at family income of

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[5]Friedman, Milton. "The role of government in education." (1955).

[6] Watamura et al. "Double Jeopardy: Poorer Social-Emotional Outcomes for Children in the NICHD SECCYD..." *Child Development* 82, no. 1 (2011): 48-65.

$60,000, but the new bill increases that cap to $150,000— a 250% increase. Currently, about one million, or 51% of Colorado households qualify with the $60,000 income cap. Under the bill, 1.76 million, or 89% of Colorado households would become eligible.[7] Families with AGI of $150,000 likely supply high-quality care for their children, and would not greatly improve the quality of care with $480 in additional tax credit. Thus, higher income families will benefit from a redistribution without supplying the positive externality to society of improved care. The bill should not expand the eligibility, as much as proposed, to ensure that only those families that deserve the redistribution will receive it.

In conclusion, this paper finds that HB18-1208 does satisfy an economic need in Colorado. The market naturally under-supplies high-quality child care at accessible prices for lower income families. The government providing an increase in quality care access would benefit the public and warrants a subsidy. This proposal allows for families to select higher quality care for children that will lead to improved cognitive development and social growth that benefit both the child and society as whole. To ensure that the redistribution has the desired effect, adjustments should be made to the policy so that the eligibility requirements are not expanded as drastically as proposed.

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[7] "Household Income in Colorado (State)." *Household Income in Colorado (State) - Statistical Atlas*, statisticalatlas.com/state/Colorado/Household-Income.