



THE EFFECTS OF CHILD CARE SUBSIDIES ON MATERNAL LABOR FORCE PARTICIPATION IN THE UNITED STATES

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One of the primary motivations for public investment in early care and education is its potential to increase parental employment. Indeed, economic theory and empirical evidence suggest that such support can improve parental labor force participation rates, particularly by bringing more mothers into the workforce.¹ This brief provides policymakers and researchers with new evidence from a study on the effects of child care subsidy policies in the United States on maternal labor force participation and employment.

Key findings

- Higher child care subsidy expenditures significantly increase labor force participation and employment rates of low-income mothers in the United States.
- A 10 percent increase in per child in Child Care and Development Fund (CCDF) expenditures would correspond to between half and two-thirds of a percent increase in employment among low-income women with young children.
- Tripling CCDF subsidy expenditures (currently only 15 percent of eligible children receive subsidies), would lead to the employment of more than 652,000 additional women with children under age 13.

Background

Research generally has demonstrated the employment benefits of providing child care. However, much of the existing research on the effects of child care policies on parental labor force participation was conducted prior to the early 2000s, or in non-U.S. contexts (e.g., Quebec, Norway, Argentina).² A 2016 literature review by Taryn Morrissey reported that a 10 percent reduction in the price of child care would lead to anywhere from a 0.25 to an 11 percent increase in maternal employment, depending on the study.³ This review also reported generally stronger effects for single mothers, those with younger children, and with lower family incomes. However, more contemporary research in the U.S. is needed given the significant changes in the early child care and education and employment landscapes over the last 15 years.

The study described in this brief helps to fill that gap in the literature and provides updated estimates of the impact of the Child Care and Development Fund (CCDF), which provides access to child care assistance for low-income families so they can work, attend school, or enroll in training to improve family well-being and children's early learning and development. The CCDF provided subsidies for 1.4 million children from 853,000 families in fiscal year 2014, with approximately \$6.6 billion invested in direct services. In order to be eligible to receive a subsidy, a parent must work, attend school, or engage in training. Using nationally representative data and quasi-experimental methods, this study examined the effects of CCDF expenditures and policy parameters on maternal employment outcomes.

Study Design

The study took advantage of 10 years of data (2003-2012) on state policies to isolate the effects of CCDF expenditures and policies on the employment outcomes of low-income mothers. Demographic, income, and employment data from the Current Population Survey (CPS) Annual Social and Economic Supplement were merged with administrative data on state child care subsidy direct services expenditures from the CCDF Financial Reporting Form ACF-696 and annual state policy parameters from the cross-state CCDF State Policies Database.

Using a difference-in-differences model that accounts for state fixed effects, the analysis compared changes in employment outcomes of likely CCDF-eligible mothers of children ages 0-12 with those of ineligible women without children ages 0-12, aiming to identify effects of state CCDF policies and expenditures on employment outcomes of eligible mothers. The model controlled for age, race/ethnicity, marital status, educational attainment, state median income, state unemployment rate, and the interaction between state unemployment rate and each of the policy variables.

The following variables were also assessed for their effects on mothers' probability of being employed as well as their probability of participation in the labor force (the latter includes both those who are employed and those who are unemployed but seeking work):

- State-level CCDF per child direct services expenditures
- Copayment rates
- Income-eligibility thresholds
- Length of the eligibility redetermination period
- Whether job search was an eligible activity at initial eligibility determination

More details on the study design and methods can be found in the study's technical report.

Findings

The study found that increased CCDF expenditures increased the probability of employment and labor force participation among eligible mothers. This effect was robust across various sub-groups of mothers, including all mothers with children under age 13 and family incomes under

85 percent of state median income, as well as other groups. The pattern of findings suggest that CCDF investments may have stronger effects for more disadvantaged mothers, such as single mothers, mothers of younger children, and mothers under 50 percent of state median income. This pattern is consistent with findings in the literature as previously described.

It is possible that this study underestimates the impact of subsidies. These effects were estimated by assessing employment outcomes for all potentially eligible women, rather than those who actually received the benefit of child care subsidies. Given the scarcity of child care subsidies, many fully eligible mothers do not actually receive subsidies. Nationally, fewer than 20 percent of eligible families received child care subsidies during the study period,⁴ and many states had waiting lists for CCDF assistance. This suggests that the effects for women receiving subsidies may actually be higher.

The table below shows the relationship between CCDF expenditures and employment and labor force participation for women with children under age 13, single women with children under 13, women with children under age four (who may also have older children), and women with children under 13 with incomes under 50 percent of state median income. Consistent with prior research, these estimates indicate that a 10 percent increase in CCDF expenditures could result in around a half a percent increase in maternal employment or labor force participation rates among mothers with children under age 13, and around two-thirds of a percent increase in employment among mothers with children under age four.

Estimated Impact of CCDF Expenditures on Employment & Labor Force Participation

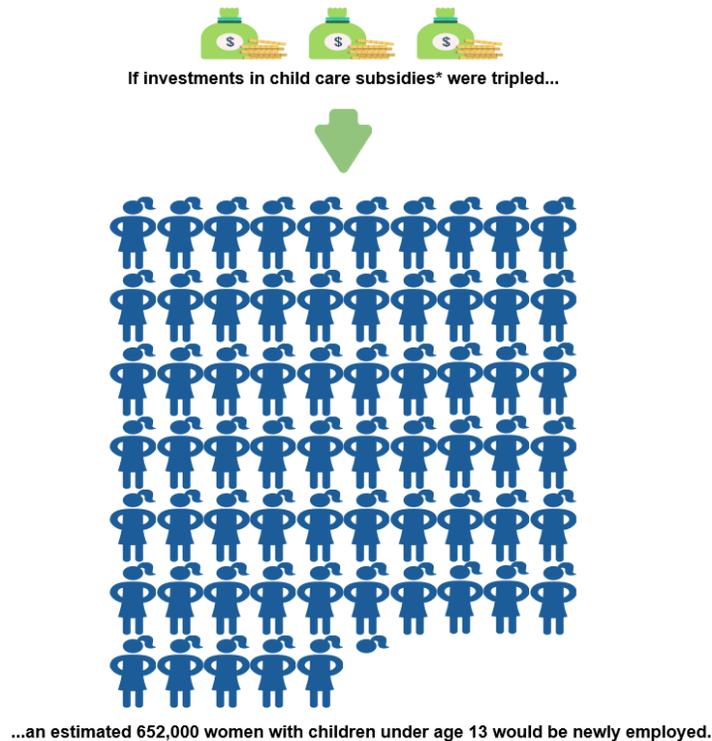
Sub-Sample of Eligible Women (under 85% of State Median Income (SMI) unless otherwise noted)	Percent Increase in Employment (associated with a 10% increase in CCDF expenditures)	Percent Increase in Labor Force Participation (associated with a 10% increase in CCDF expenditures)
Women with children ages 0 to 12	0.48 %	0.47 %
Single women with children ages 0 to 12	0.58 %	0.52 %
Women with children ages 0 to 3	0.68 %	0.59 %
Women with children ages 0 to 12 under 50% SMI	0.60 %	0.59 %

To contextualize these findings, if CCDF expenditures were tripled, an estimated 325,000 mothers with children under age four would choose to enter the labor force. In addition, more than 375,000 mothers with children under age four would be newly employed; this estimate would include both women who were unemployed and looking for work, and women who were

not in the labor force previously. Our modeling assumes that some women not currently in the labor force would become employed, though we were unable to estimate the number.

Apart from the level of state expenditures on CCDF, the effects of other state policies were not as conclusive. The study did not identify a relationship between employment outcomes and different policies on job search allowance or the length of eligibility redetermination periods. Higher income eligibility threshold policies decreased the probability that mothers were in the labor force, but had no effect on whether they were employed. However, these findings were not consistent across analyses of single mothers or women with children under age four. In addition, while policies that allowed higher family copayments resulted in higher labor force participation and employment rates, these findings were inconsistent across sub-samples. More information about these results can be found in the study's technical report.⁵

Investing in Child Care Will Increase Mothers' Employment



Conclusion

This study provides updated estimates of the impact of child care subsidies on maternal employment and labor force participation in the contemporary U.S. context, including findings that have important implications for child care policy and for employment policies more generally. These findings suggest that expanding subsidies for child care can significantly improve employment outcomes for hundreds of thousands of low-income mothers.

The findings should be interpreted in the context of the CCDF program that operated from 2003-2012. During that time, funding for CCDF was limited, and states made tradeoffs between increasing subsidy reimbursement rates, family copayment rates, and the length of a subsidy (thus allowing it to serve more children and families). The reauthorization of the Child Care and Development Block Grant (CCDBG) Act of 2014 and the CCDF final rule published in September of 2016 also include new subsidy policies that will increase the length or duration that a family receives a child care subsidy. These changes to CCDF may influence the magnitude of estimated effects. Further research should explore whether providing a more stable and continuous subsidy will result in CCDF investments having an even greater impact on maternal employment outcomes.

As states work to implement new requirements in the reauthorized CCDBG Act, which governs CCDF funding, policymakers may want to consider the employment benefits of expanding access to child care subsidies to more low-income working families. Such an investment would likely improve labor force participation and employment rates among mothers. In addition, these improved employment outcomes are likely to have immediate economic benefits for families, which improve child development, and also help society through increased tax revenues in addition to the long-term human capital benefits of investments in young children.

¹ Morrissey T. Child care and parent labor force participation: a review of the research literature. Rev Econ Househ 2016. doi:10.1007/s11150-016-9331-3.

² Morrissey T. Child care and parent labor force participation: a review of the research literature. Rev Econ Househ 2016. doi:10.1007/s11150-016-9331-3.

³ Morrissey T. Child care and parent labor force participation: a review of the research literature. Rev Econ Househ 2016.. doi:10.1007/s11150-016-9331-3.

⁴ Chien N. Estimates of child care eligibility and receipt for fiscal year 2012. Washington, DC: Office of the Assistant Secretary for Planning and Evaluation, US. Department of Health and Human Services; 2015.

⁵ <https://aspe.hhs.gov/pdf-report/effects-ccdf-subsidy-program-employment-outcomes-low-income-mothers>