

## Public Investments in Child Care

Elizabeth U. Cascio



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Our strategy calls for combining public investment, a secure social safety net, and fiscal discipline. In that framework, the Project puts forward innovative proposals from leading economic thinkers — based on credible evidence and experience, not ideology or doctrine — to introduce new and effective policy options into the national debate.

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## NOTE

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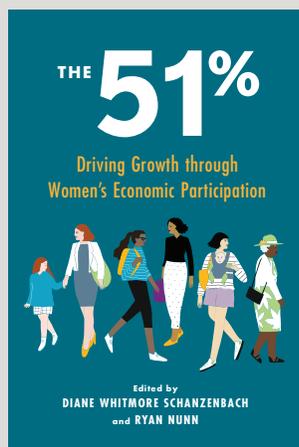
# Public Investments in Child Care

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A CHAPTER IN THE RECENTLY RELEASED HAMILTON PROJECT BOOK



## The 51%: Driving Growth through Women's Economic Participation

The U.S. economy will not operate at its full potential unless government and employers remove impediments to full participation by women in the labor market. The failure to address structural problems in labor markets—including tax and employment policy—does more than hold back women's careers and aspirations for a better life. In fact, barriers to participation by women also act as brakes on the national economy, stifling the economy's ability to fully apply the talents of 51 percent of the population. By acting to remove barriers to women's participation, we can realize stronger economic growth that will be more broadly shared by the American people.

# Abstract

Child care is a necessity for working women with young children. Yet, the costs of high-quality center-based child care in the United States—particularly for children under age five—are prohibitively high for many families. In this proposal, I describe a multifaceted approach to child-care policy that reduces the financial burden of child care, encourages maternal employment, and supports child development. I propose to replace existing federal child-care tax policies with a single refundable federal child-care tax credit that is more generous to lower-income families and families with children under the age of five. To address child care quality, I propose investments in Quality Rating and Improvement Systems and in expansion of universal preschool for four-year-olds. State and local governments could pursue these investments on their own or with federal assistance.

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# Introduction

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Though public schools across the United States provide free child care during the school day starting at about age five, there is more limited subsidization of the care of children under age five (Cascio 2009; Fitzpatrick 2012; Gelbach 2002). This is particularly the case for infants and toddlers, where care possibilities range from informal arrangements with relatives, neighbors, or friends to enrollment in private child-care centers. Costs vary dramatically along the spectrum of formality: although informal caregivers might not charge a fee, the average center-based program for infants costs nearly \$16,200 per year in 2016 dollars (Datta et al. 2015).

Such high sticker prices make center-based care—if not employment itself—unrealistic for many mothers of young children. In 2015 about 68 percent of mothers with children under age five were employed at all; a slim majority of these workers were employed full time and full year. And of all working mothers only 44 percent incurred any child-care costs as a result of their employment, with expenses averaging \$6,200—or about 17 percent of the average mother’s earnings—among those paying for care (author’s calculations; Bureau of Labor Statistics [BLS] 2016). Informal care arrangements for young children are therefore common, but when families pay for child care, they can represent a substantial share of income.<sup>1</sup>

Statistics such as these have motivated recent proposals to change the tax treatment of child-care costs. Among these is a suite of reforms proposed by President Trump during the 2016

presidential election campaign. As described by Batchelder et al. (2017, 1), however, these proposals—a new tax deduction, a refundable tax credit, and a tax-preferred dependent care savings account—“provide limited benefits to those who are likely to need the most help affording child care.” Current federal tax policy regarding child care is already regressive, and means-tested federal subsidies for child care are limited. Both existing federal policy and tax proposals like Trump’s also treat all children under the age of 13 equally, despite the larger costs of caring for younger children, and take no steps to ensure that child care quality is high. How the youngest children spend their time has long-term implications not just for the children themselves, but also for the future U.S. economy.

In this proposal, I describe a multifaceted approach to child-care policy that aims to achieve three goals: (1) relieving the financial burden of child care, (2) encouraging maternal employment, and (3) supporting child development. My central proposal is to replace existing federal child-care tax policy with a new, refundable, federal child-care tax credit that is more generous not only for lower-income families, but also for families with children under the age of five. Because tax policy cannot easily ensure child care quality, I then discuss two supplementary proposals to support quality in center-based program offerings for young children: continued investments in Quality Rating and Improvement Systems and in preschool expansion. State and local governments could pursue these investments on their own or with the help of federal dollars.

# The Challenge

## CURRENT CHILD-CARE POLICY

The existing child-care policy landscape in the United States consists of a patchwork quilt of programs with different goals—human capital development versus work support—run by different agencies if not different levels of government, and serving children of different ages and income levels. Table 1 outlines the major programs, by child age. To encompass the dual role of these programs, I refer to them collectively as early childhood education and care (ECEC) from here forward. For completeness, the table incorporates public K–12 education, which provides free child care during the school day. In October 2014 over 85 percent of five- to twelve-year-olds were enrolled in public schools, compared to 1.2 percent of children

under age five—statistics that are not surprising given that most children are eligible for kindergarten only if they have turned five years old by the fall of a given academic year.

Among children under age five, preschoolers (ages three and four) are more likely to be served via direct public provision—or in school-like programs that also provide child care—than are infants (aged under one) and toddlers (ages one and two). Since the 1980s, large gains in publicly funded ECEC for preschool-age children, particularly for four-year-olds, have come through state-funded (pre-K) programs (Cascio and Schanzenbach 2013). In 2014–15 an estimated 1.16 million four-year-olds (29 percent of all four-year-olds) and 193,000 three-year-olds (4.8 percent of all three-year-olds) participated

TABLE 1.  
Spending and Coverage of Major ECEC Programs, by Child Age

		Spending <sup>a</sup> (billions of 2016 dollars)	Percent of children served, by child age							Percent of families with children served	Eligibility
			0	1	2	3	4	0 to 4	5 to 12		
Direct provision	K-12 Education (Public)	632	-	-	-	1.3	4.9	1.2	86.4	-	Usually based on age
	State- Funded Pre-K	6.25		0.24		4.8	29.0	7.0	-	-	Varies by state; ≤185% FPL common
	Head Start	8.67	1.4	1.4	2.2	9.9	12.1	5.4	-	-	≤130% FPL
Tax and subsidy policy	CCDF Child Care Subsidies	5.42	1.8	3.5	4.6	4.9	4.5	3.9	1.7	1.7	Varies by state; no more than 85% SMI
	CDCTC	3.42	-	-	-	-	-	-	-	12.5	Earned income > 0 <sup>c,d</sup>
	Dependent Care FSAs <sup>b</sup>	1.14	-	-	-	-	-	-	-	2.8	Employer must offer <sup>d</sup>

Note: - = not applicable/available; FPL = federal poverty line; SMI = state median income; CCDF = Child Care and Development Fund; CDCTC = Child and Dependent Care Tax Credit; DCFSAs = Dependent Care Flexible Spending Account. Percentages of children enrolled in public K–12 education were calculated from the 2014 October Current Population Survey; K–12 spending is drawn from the *The Condition of Education 2017* (NCES 2017) and pertains to the 2013–14 academic year. Figures for the CDCTC and DCFSAs correspond to the 2016 tax year, while figures for Head Start, state-funded pre-K programs, and CCDF child-care subsidies correspond to the 2015 fiscal year (2014–15 program year), with monetary values inflated to 2016 dollars using the CPI-U. These program-specific enrollment numbers by age were normalized by Census Bureau estimates of population for July 1, 2014, and the number of family beneficiaries were normalized by the Urban-Brookings Tax Policy Center's estimates of the number of tax-filing units with children in the 2016 tax year.

a. These are outlays by the federal government (in the case of Head Start, CCDF child-care subsidies, the CDCTC, and DCFSAs); state governments (in the case of state-funded pre-K); and state, local, and federal governments (in the case of K–12 education).

b. Also known as the “child-care exclusion” or the “employment exclusion.”

c. Both parents in a married couple must work for the couple to be able to claim the CDCTC.

d. In practice, beneficiaries have positive tax liability.

in state pre-K programs (Barnett et al. 2016). Most of these programs focus on disadvantaged children, but some, such as large, well-known, and long-operating programs in Georgia and Oklahoma, are universal. (See box 1.) Though perennially underfunded, the federal Head Start program has provided targeted ECEC to economically disadvantaged preschoolers since the mid-1960s. That program enrolled about 484,000 four-year-olds (12.1 percent) and 396,000 three-year-olds (9.9 percent) in 2014–15.<sup>2</sup>

Available (but still rare) for infants and toddler are subsidies that can be used to offset the costs of child care on the private market. Subject to availability, the Child Care and Development Fund, which consolidated federal child-care subsidy programs into a block grant as part of federal welfare reform in 1996, provides means-tested vouchers for child care to working applicants with children under age 13. States have considerable discretion regarding reimbursement rates and copayments, and are free to set the income test at less than the federally suggested 85 percent of state median income. In the average month in the 2015 fiscal year, CCDF child-care subsidies helped to fund the care of about 70,000 infants (1.8 percent) and 321,000 toddlers (4.1 percent). They also served about 196,000 three-year-olds (4.9 percent) and 180,610 four-year-olds (4.5 percent).<sup>3</sup>

Two additional tax programs—the Child and Dependent Care Tax Credit (CDCTC) and Dependent Care Flexible Spending Accounts (DCFSAs, sometimes referred to as the “employment exclusion” or “child-care exclusion”)—provide preferential tax treatment for the costs of caring for children under age 13.

However, these policies are neither generous nor likely to help the families most financially burdened by child care (Maag 2013). The CDCTC maxes out at \$1,050 for families with one child and at \$2,100 for families with two or more children. As a nonrefundable tax credit, it benefits only those families with positive tax liability; in 2016 nearly 40 percent of CDCTC benefits went to families with incomes of \$100,000 or more. In practice, the program provides \$3.4 billion in benefits annually and reaches only 12.5 percent of families with children. The distribution of benefits from DCFSAs, which allow families to set aside up to \$5,000 in pretax earnings annually for child care, is even more weighted to higher-income families, but the program is smaller, reaching 2.8 percent of families at a cost of \$1.14 billion.

Since the programs listed in table 1 vary in terms of the populations they reach, the fraction of disadvantaged children affected could be considerably different from the overall rates reported. To get a sense of the age and income variation in subsidy generosity, figure 1 plots school enrollment rates by child age and family income, where family income is divided into two groups—less than \$25,000 (roughly the federal poverty line) and at least \$75,000 annually. As expected, three- and four-year-old children of lower-income families (depicted by the purple lines) are more likely to be enrolled in public programs. However, at these young ages the higher rate of private enrollment among children of higher-income families (depicted by the light green lines) offsets the public enrollment gap. Overall, enrollment is 12 percentage points higher for four-year-olds with higher-income families (75 percent for higher-income families versus 63 percent for lower-income

#### BOX 1.

### Universal versus Targeted ECEC Programs

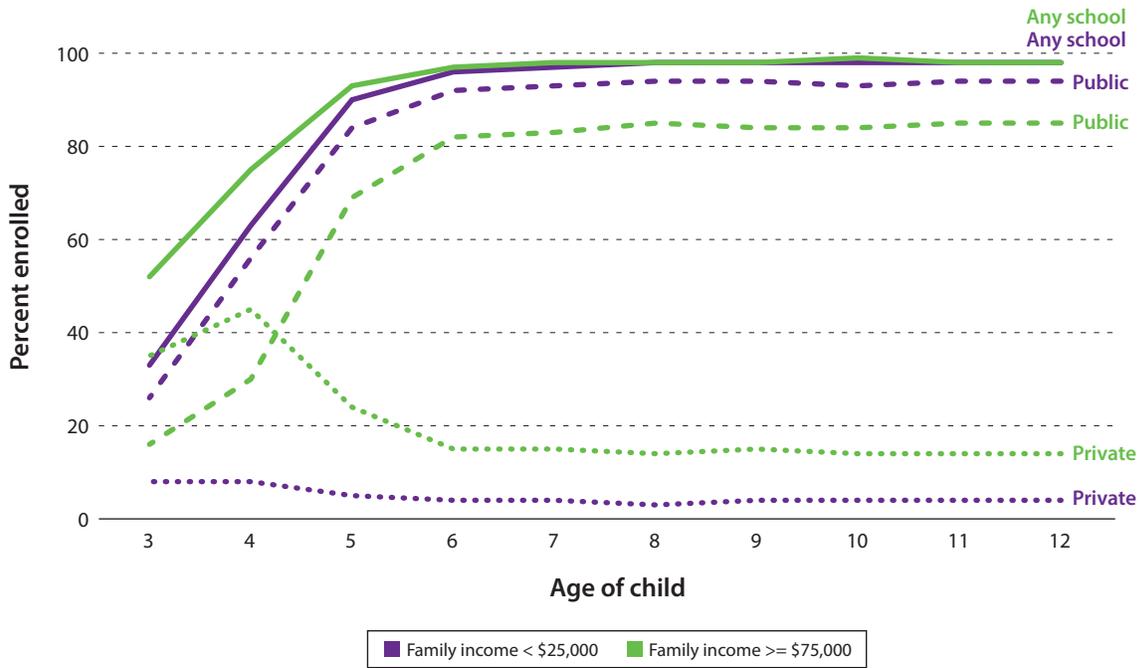
ECEC programs can be divided into two mutually exclusive groups. Universal ECEC serves all children who meet age requirements (and, if applicable, residency requirements). Prominent examples of universal ECEC include the pre-K programs in the states of Georgia and Oklahoma—first funded in 1995 and 1998, respectively—the effects of which have been widely studied (e.g., Cascio and Schanzenbach 2013; Fitzpatrick 2008, 2010; Gormley and Gayer 2005).

By contrast, targeted ECEC programs impose additional eligibility requirements in an attempt to limit service to economically and/or socially disadvantaged children. Means-testing, or the application of eligibility cutoffs based on family income, is the most common targeting technique. For example, most slots in Head Start are reserved for children from families with incomes at or below 130 percent of the federal poverty line (FPL), and Child Care and Development Fund (CCDF) subsidies have family income thresholds that vary across states. Many state pre-K programs also establish eligibility based on the income threshold for reduced-price school lunch (185 percent FPL). However, other state pre-K programs use alternative criteria, such as maternal education, teenage motherhood, or status as an English language learner, to establish eligibility.

Regardless of whether an ECEC program is universal or targeted, meeting eligibility requirements does not ensure a spot in the program. Appropriations for Head Start have never been large enough to enroll all children who meet eligibility criteria. Some universal state pre-K programs operate out of a limited number of sites and so do not serve all children within the state who meet eligibility requirements. Furthermore, ECEC attendance is not mandatory for eligible children.

FIGURE 1.

### Overall, Public, and Private School Enrollment, by Age of Child and Family Income

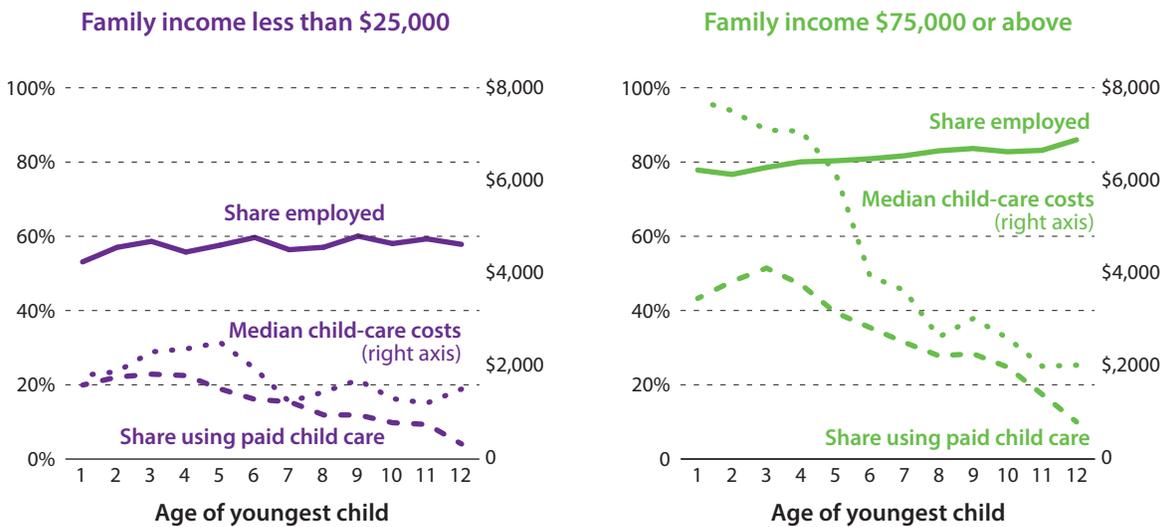


Source: Author's calculations from the 2011–14 October Education Supplements of the Current Population Survey (Flood et al. 2015).  
 Note: Family income pertains to family of the householder. School enrollment includes nursery school, preschool, pre-K, and K-12 education.



FIGURE 2.

### Maternal Employment and Child-Care Expenses by Age of Youngest Child and Family Income



Source: Author's calculations from the 2011–16 Current Population Survey Annual Social and Economic Supplement (ASEC).  
 Note: All dollar values are in 2016 dollars. A mother is categorized as employed if she had positive wage, salary, or self-employment income the prior year. Child care spending variables also correspond to the prior year, when children would have been on average more than a half year younger than reported on the horizontal axis. Median child-care costs (right axis) are calculated among the subsample of mothers with any child-care spending.



mothers) and 19 percentage points higher for three-year-olds with higher-income families (52 percent versus 33 percent).<sup>4</sup> Other data also suggest substantial socioeconomic gaps in participation in center-based care for infants and toddlers (Laughlin 2013).

Figure 2 provides an alternative visualization of the age and income variation in subsidy generosity, showing the percent of families using any paid child care (left axis) and median amount spent (among families with positive spending, right axis) by family income and the age of youngest child. Consistent with the targeted nature of most of the programs just described, higher-income mothers are more likely to be paying out of pocket and to pay more for child care than their lower-income counterparts at all child ages. However, income-based differences in the likelihood of paying for child care and in the median amount paid out of pocket shrink dramatically between when a youngest child is age four and age six, as children age into public school eligibility. Even so, paying substantial sums for child care remains common among mothers with school-age children.

## IMPACTS

It is uncontroversial that policies like those outlined in table 1 relieve the financial burden of child-care costs. But to what extent do they achieve the other two policy goals of supporting maternal employment and promoting child development? How sensitive is maternal employment to subsidies, and which program characteristics are most important for child development? In practice, the goal of the program is the key determinant of what it achieves.

### *Maternal Employment*

In theory, the higher are child-care costs, the more they offset a mother's earnings, and the greater the chance that it is not economically sensible for her to work. However, an impact of child-care costs on employment can be hard to detect. This is evident in figure 2, which does not show a large increase in maternal employment as children age into school eligibility and families experience a reduction in child-care costs (Lubotsky and Qureshi 2017). Studies that exploit quasi-experimental variation in eligibility for public school kindergarten (Cascio 2009; Fitzpatrick 2012; Gelbach 2002) and universal pre-K (Cascio and Schanzenbach 2013; Fitzpatrick 2010) generally confirm this result. (One exception is for single women responding to child care costs for their youngest child [Cascio 2009; Fitzpatrick 2012].) A possible explanation is that a full day of school typically does not cover the entire workday, and child-care expenses do not fall to zero when a child becomes school-eligible.

By contrast, studies of child-care subsidies in the form of vouchers to parents or providers tend to find more systematic impacts on maternal employment. In particular, Tekin

(2005) and Blau and Tekin (2007) show that the child-care subsidies provided through the Child Care and Development Fund—which can cover the full work day and are designed to promote employment—increase the employment chances of low-income single women.<sup>5</sup> More generally, the labor supply decisions of single women have over time become more sensitive to wages (Eissa and Liebman 1996; McClelland and Mok 2012; Meyer and Rosenbaum 2001).

Recent declines in employment of less-educated single mothers with young children have been noticeable, but for less-educated married mothers, they have been staggering: between 2000 and 2016 the likelihood of earning any income during the prior year fell by more than 13 percentage points for married mothers with young children and no more than a high school diploma, compared to a 6 percentage-point decline for their single counterparts (author's calculations; Flood et al. 2015). While the role of rising child-care costs in these declines is unclear, policies to make child care more affordable, such as the tax credit proposal outlined in this paper, could promote employment among mothers.<sup>6</sup> However, it is important to realize that such efforts might end up being more effective for single women, because the employment of married women has recently been less responsive to changes in after-tax wages (Blau and Kahn 2007; Heim 2007).

### *Child Development*

Unfortunately, the same child-care subsidies that increase maternal employment might actually be detrimental for children. For example, Herbst and Tekin (2010a, 2010b) show that CCDF child-care subsidies lowered test performance of children with single mothers, at least in the short term. The authors attribute this finding to a lack of concern over ECEC quality in allocation of the subsidies.<sup>7</sup> Without simultaneously addressing the issue of quality, new child-care tax or subsidy policy could therefore leave children worse off even while it facilitates maternal employment.

What defines high-quality ECEC? In practice, it is not something as simple as licensure of child-care providers. Though important, child-care regulations and licensing are first and foremost intended to ensure children's safety, making them a poor guarantor of quality; in fact, nearly three quarters of CCDF subsidy beneficiaries already use licensed centers. There is tremendous variation in the quality of ECEC among licensed programs. Variation exists in structural quality, indicated by class size and teacher education, where programs differ in how far they exceed minimum regulatory standards. Variation also exists in process quality, for example in the level of stimulation and support evident in interactions between children and their caregivers, which is not regulated at all. Process quality appears to be more predictive of test score gains than are the traditional input measures. (See box 2.)

## BOX 2.

### Structural Quality versus Process Quality

ECEC scholars differentiate two dimensions of quality: (1) structural quality and (2) process quality. A comprehensive overview of the evidence on preschool education (Yoshikawa et al. 2013, 6) described the two dimensions of quality as follows: “Process quality features—children’s immediate experience of positive and stimulating interactions—are the most important contributors to children’s gains in language, literacy, mathematics, and social skills. Structural features of quality (those features of quality that can be changed by structuring the setting differently or putting different requirements for staff in place, like group size, ratio, or teacher qualifications) help to create the conditions for positive process quality, but do not ensure that it will occur.” Measurement of process quality is much more fraught than measurement of structural quality. The most well-known and oft-used process quality metric is the Classroom Assessment Scoring System (or CLASS), which is based on a rubric and observation by trained personnel. Sabol et al. (2013) find CLASS to be more predictive of children’s test score gains than traditional input measures. Likewise, Araujo, Dormal, and Schady (2017) find that infants and toddlers who are effectively randomly assigned within child-care centers to caregivers with higher CLASS scores have better development outcomes; assignment to a caregiver with more experience improves child outcomes as well, but caregiver education—a structural quality measure—has no impact.

Directly provided ECEC appears more likely to be high quality than the child-care options available to low-income families receiving CCDF subsidies. A growing literature documents the positive test score impacts of universal pre-K for disadvantaged four-year-olds, both in the short run (Cascio 2017; Gormley and Gayer 2005; Weiland and Yoshikawa 2013) and over the medium term (Cascio and Schanzenbach 2013; Fitzpatrick 2008). Many of these universal pre-K programs are thought to have high levels of both structural and process quality; the alternatives to universal pre-K generally include other center-based programs, and universal pre-K still confers benefits relative to those programs. Head Start does not appear

to perform as well on average on either quality dimension, but it might still improve short-term outcomes for disadvantaged children relative to informal child-care arrangements or parental care (Kline and Walters 2016). Studies of early cohorts of Head Start participants, for whom parental care was the likely alternative to the program, suggest that these short-term benefits could translate into longer-term social and economic gains (Garces, Thomas, and Currie 2002; Ludwig and Miller 2007).<sup>8</sup> Thus, though it might not have large effects on maternal employment, publicly provided ECEC appears to promote child development while reducing the burden of child-care costs.

# A New Approach

The policy challenge is to design a program that simultaneously encourages and supports maternal employment while enabling enrollment in ECEC that meets children’s developmental needs, particularly in more disadvantaged families where the social returns to both are high. To achieve this, I advocate a multifaceted approach founded on two central insights from the data and literature. The first is that current child-care tax policy is inefficiently targeted, in terms of both child age and the family income of beneficiaries. Reallocating existing benefits toward children under the age of five and toward lower-income families—and supplementing those reallocated funds with new federal dollars—would dramatically increase social impact. The second insight is that tax policy alone cannot achieve the goal of promoting child development: doing so will require additional supports.

## IMPROVING TARGETING OF CHILD-CARE TAX POLICY

I propose eliminating the Child and Dependent Care Tax Credit and the Dependent Care Flexible Spending Account and replacing them with a new refundable child-care tax credit. As with the CDCTC, families would be eligible for this new credit if they have positive earned income and children under age 13 with qualifying child-care expenses. However, the proposed credit differs from the CDCTC in being refundable, which allows it to focus on families with no tax liability and thus with the greatest need, and in distinguishing between children four years old and younger and five- to twelve-year-olds. It also limits eligibility to those with adjusted gross income (AGI) at or below \$70,000. In these ways, it is similar to the child-care credit proposed by Ziliak (2014).

Table 2 outlines the schedule for the proposed child-care tax credit. The credit is the product of a base and a rate. The proposed credit base is \$4,000 each for the first two children with qualifying child-care expenses, \$2,000 for the third child with qualifying expenses, and \$0 for additional children with qualifying expenses; the maximum base is thus \$10,000. The proposed credit rate then depends on both the age of the child and the family’s AGI. For families that are eligible for the maximum credit—those with positive earned income but AGI below \$25,000—the credit rate is 100 percent for newborns to four-year-olds and 50 percent for five- to twelve-year-olds.<sup>9</sup> For families eligible for a credit below the maximum—those with positive earned income and with AGI between \$25,000 and \$70,000—the credit rate declines linearly with AGI. In particular, the credit rate for a newborn to four-year-old (five- to twelve-year-old) is reduced by 10 percentage points (5 percentage points) for every additional \$5,000 in AGI.<sup>10</sup> For a family with one child under age five and an AGI of \$45,000, the credit would be \$2,400 (or  $\$4,000 - 0.1 \times \$4,000 \times [(\$45,000 - \$25,000) / \$5,000]$ ).

The different credit rates by child age raise the issue of how the first, second, and third children are to be determined for the purposes of calculating the credit. For families that have qualifying expenses spanning both age ranges, the credit is determined by arraying children with qualifying child-care expenses from youngest to oldest. For example, a family with two children ages zero to four, and one child ages five to twelve could receive a maximum credit of \$9,000 (\$4,000 each for the two youngest children, plus \$1,000 for the third child). Similarly, a family with one child ages zero to four and two children ages five to twelve would face a schedule with a

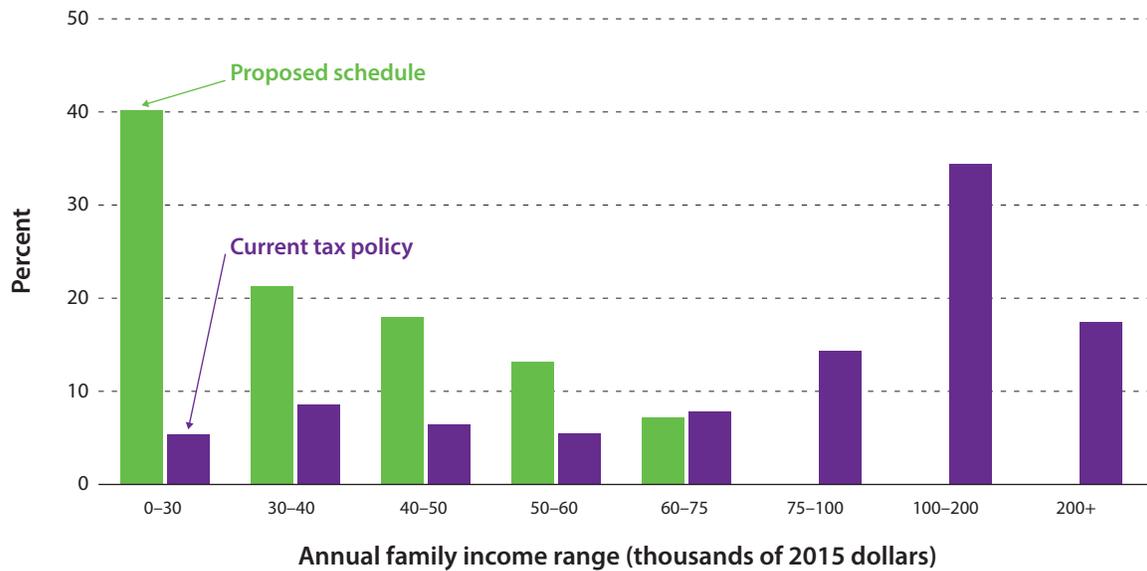
TABLE 2. Schedule for the Proposed Child-Care Tax Credit

Age of child	0 to \$25,000	\$25,000 to \$70,000	\$70,000 or more
Less than 5 years old	100%	Reduced 10 percentage points for every \$5,000 in adjusted gross income	0%
Between 5 and 13 years old	50%	Reduced 5 percentage points for every \$5,000 in adjusted gross income	0%

Note: The credit is the product of the credit rate listed above, which depends on the age of the child, adjusted gross income, and the credit base. The credit base is \$4,000 for the first child with qualifying child-care expenses, \$4,000 for the second child with qualifying child-care expenses, \$2,000 for the third child with qualifying child-care expenses, and \$0 for additional children.

FIGURE 3.

## Distribution of Benefits under Current and Proposed Tax Policy by Annual Family Income



Source: Author's calculations based on Current Population Survey Annual Social and Economic Supplement 2016 and Internal Revenue Service 2016.

Note: Green bars show author's calculations from the 2016 ASEC based on income and child-care expenses in the 2015 tax year; purple bars show 2016 tax year distribution of benefits under the Child and Dependent Care Tax Credit and Dependent Care Flexible Spending Accounts. See endnote 11 for more details. Bins include the lower-bound value but exclude the upper-bound value.



maximum credit of \$7,000 (\$4,000 for the first child, \$2,000 for the second child, and \$1,000 for the third child). A family with one child in each age category would face a schedule with a maximum credit of \$6,000 (\$4,000 for the first child, \$2,000 for the second).

Because the credit is refundable, credit amounts that exceed a family's tax liability can still be received by families to offset child-care costs on the private market. The green bars in figure 3 and 4 demonstrate how this feature would affect progressivity by plotting what the distribution of benefits by AGI would have looked like if the proposed schedule had applied to families in the 2015 tax year; the purple bars give the analogous figures under current child-care tax policy.<sup>11</sup> They are dramatically different: benefits under the proposed credit not only favor lower-income families, but are also considerably larger per family—even for families with no children under age five—for those with AGIs less than \$60,000. Starting in the \$60,000 to \$75,000 income range, families lose benefits for which they were previously eligible. However, the average ratio of out-of-pocket child-care costs to family income is constant at 6.5 percent between \$60,000 and \$100,000.

Additional calculations suggest that if the proposed credit had been in effect in 2015, it would have cost the federal government about \$5.57 billion—a little over a billion more than the CDCTC and Dependent Care FSAs. However, this is a

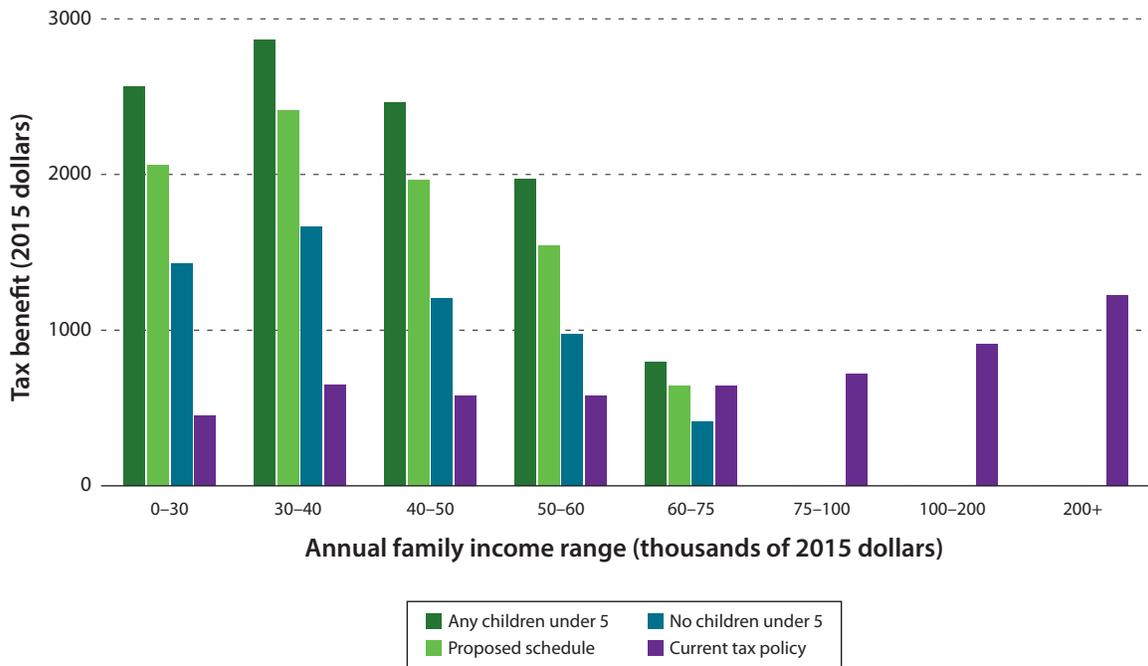
lower-bound estimate of program costs, since the intent of the proposal is to encourage more families to take up formal child-care options for their children and to increase employment. At current expense levels, the average ratio of out-of-pocket expenses to family income under the proposal for families with annual incomes less than \$60,000 is considerably lower than 6.5 percent, suggesting that there is scope for lower-income families to increase their child-care spending under this policy.

Establishing an upper bound of potential program costs is difficult, but can be projected under several scenarios. For example, if all working women incurred child-care expenses equal to the average among women with any expenses given their income and the number and age distribution of children, the program cost would be about \$20 billion. If instead all working women upgraded their child care such that expenses were at or above the available credit, the total program cost would rise to \$28 billion. Of course, if more women started working in response to the credit under either of these scenarios, the cost of the program would be higher. However, it is unlikely that all families with working mothers would receive the maximum credit for which they are eligible.<sup>12</sup>

An important caveat is that if the child-care tax credit is available only in a large lump sum once a year, like the Earned Income Tax Credit (EITC), it will likely provide weaker

FIGURE 4.

## Average Tax Benefit among Claimants, by Family Income and Presence of Children



Source: Author's calculations based on Current Population Survey Annual Social and Economic Supplement 2016 and Internal Revenue Service 2016.

Note: Green bars show author's calculations from the 2016 ASEC based on income and child-care expenses in the 2015 tax year; purple bars show 2016 tax year distribution of benefits under the Child and Dependent Care Tax Credit and Dependent Care Flexible Spending Accounts. See endnote 11 for more details. Bins include the lower-bound value but exclude the upper-bound value.



incentives to upgrade ECEC experiences and to enter the labor force, particularly for the lowest-income families. An advance credit would allow recipients to access some portion of the credit throughout the year, making it easier to pay monthly or bi-weekly child-care bills. The key feature of any successful advance credit would be providing liquidity sufficient to pay these bills, but not so much that a tax-filer ends up owing the federal government when predicted child-care expenses are not realized (Ziliak 2014). Because achieving this is potentially difficult, I recommend that the IRS experiment with an advance child-care tax credit before any large-scale implementation.

### QUALITY SUPPORTS

A limitation of current CCDF child-care subsidies and the proposed refundable child-care tax credit is that they do not make quality distinctions between providers. While potentially effective in easing the child-care cost burden and even in moving children toward center-based care and their mothers toward employment, tax or subsidy policy cannot alone ensure that ECEC is well-designed for child development. One approach to supporting quality would be to improve the dissemination of information to parents and to provide funds for professional development of child-care providers; another

is to invest more in directly provided preschool. This proposal takes both approaches.

### Accountability (Quality Rating and Improvement Systems)

Recent research suggests that parents have a difficult time recognizing either structural or process quality in ECEC settings (Bassok, Miller, and Galdo 2016; Araujo, Dormal, and Schady 2017). Ongoing state and local efforts to promote accountability in ECEC, commonly referred to as Quality Rating and Improvement Systems (QRISs), are explicitly designed to address this problem. As of January 2017 38 states and the District of Columbia had statewide QRISs in place; three other states had substate programs, and seven more states were in the planning phase (QRIS n.d.). The goal of a QRIS is to improve both the functioning of ECEC markets and child outcomes through dissemination of simplified information about the quality of various local ECEC options, much like public report-card accountability in K-12 education. Improved information may prompt parents to choose higher-quality options to the extent that it is financially possible, encouraging lower-quality providers to reallocate existing resources to “level up” or risk being driven out of the market.

Unfortunately, there is little evidence to date on whether QRISs shift parents toward higher-quality centers. However, experimental evidence from low-cost informational interventions in K–12 education (Hastings and Weinstein 2008) suggests that QRISs could be a promising, relatively low-cost means of promoting quality in ECEC. An important caveat, however, is that the content of the information disseminated matters: as Sabol et al. (2013) point out, many QRIS scoring algorithms focus on structural quality measures with weak or nonexistent correlations with child outcomes. Though it would come at some expense, including measures such as Classroom Assessment Scoring System (CLASS) in these algorithms (see box 2) could greatly improve their efficacy. Even so, not all child-care markets are thick with high-quality providers, suggesting that additional resources for professional development would be helpful. I therefore propose that state governments incorporate process quality measures into their existing and planned QRISs and accompany these QRIS programs with grant opportunities for professional development among child-care providers. This would enhance their usefulness to families and gradually improve the quality of market-provided child care, with attendant benefits for children in the long run.

### *Reaching More Children through Direct Provision*

Another approach to improving quality in ECEC offerings is to provide more ECEC directly. However, states seem to have less appetite for pre-K expansion than they once did. Although state investments in pre-K programs have grown tremendously since the 1980s, these investments have slowed in recent years, possibly due to budgetary pressures from the Great Recession. The 2014–15 enrollment rate of four-year-olds in state pre-K programs was more than double what it was in 2001–2 (29 versus 14 percent), but it has changed little since 2009–10 (Barnett et al. 2016).

It might therefore not be particularly helpful to suggest spending more on preschool without providing some guidance as to how preschool dollars could be spent more efficiently. The great variation in pre-K program characteristics across states provides some insight into which types of approaches might be more or less productive. In terms of new programs, for example, one way to save on capital costs is to offer the state subsidy through private child-care centers, or even via in-home family day-care settings.<sup>13</sup> Such programs may be more difficult to monitor, and thus can present challenges in

ensuring quality. Limited financial support from the state may also result in diminished capacity or lower quality of care for infants and toddlers, as private providers reallocate resources toward preschoolers to meet state standards (Bassok, Miller, and Galdo 2016). However, using private child-care centers helps make efficient use of existing child-care infrastructure. It is possible that although such programs are less expensive, they nonetheless have the same impact on children as programs operated through public schools.

Starting a new pre-K program or continuing to operate an existing one also involves choices about how to allocate current expenditures, and not just capital expenditures. Typically, states monitor structural quality—inputs such as class size and teacher education—and use these as quality markers. With the exception of class size requirements, though, few input measures appear to improve program effects; for example, requiring pre-K teachers to have a four-year college degree does not appear to boost gains in pre-K or for Head Start (Cascio 2017; Walters 2015). Holding program standards constant, recent research finds that low-income four-year-olds benefit more from universal state pre-K programs than from targeted programs (Cascio 2017). In serving more children, the universal programs are more expensive, but such findings raise the question of whether existing pre-K resources could be reallocated toward reaching more children without diminishing child outcomes. While more research is needed, serving more children while mandating fewer inputs may be preferable to mandating expensive standards with no proven track record and serving fewer students.

The findings in Cascio (2017) might owe in part to the fact that targeted pre-K programs generally draw their enrollees from a very similar program—Head Start. While this might diminish the gains from targeted pre-K enrollment, it also presents an opportunity, opening up slots in Head Start programs for children ages three and under. Enrollment of three-year-olds in Head Start has increased as enrollment of four-year-olds has fallen, and Bassok (2012) presents evidence that the two trends are causally linked. State pre-K expansion efforts thus have the potential for positive spillovers on younger children, increasing their exposure to publicly provided ECEC. Improved coordination between ECEC providers at the local level could help to maximize enrollment of preschool-age children in publicly funded programs.

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# Questions and Concerns

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## ***1. Why not have different tax credit schedules for licensed and nonlicensed care?***

The proposed tax credit does not distinguish between care by licensed and unlicensed providers, as was done in Ziliak (2014), a proposal on which I build. There are four reasons for this decision. First, by not conditioning the schedule on licensure of the child-care provider, I attempt to minimize the administrative burden of the credit. Licensure would need to be verified against state records, and it would be more efficient to allocate funds that would have been spent on administration toward the quality supports described in the proposal. Second, licensure is not a good measure of quality of care. Third, many lower-income workers might need child-care services during nonstandard hours, when fewer licensed options are available. Finally, many of the care options available for school-age children, including after-school programs and summer camps, are not licensed or even subject to licensing. The definition of “qualifying child-care expenses” will remain the same as under the CDCTC so as to include these programs.

## ***2. What are the benefits and disadvantages of an advance child-care tax credit?***

If not available in advance, the proposed refundable credit would be paid in a lump sum to families after tax filing, well after child-care expenses are incurred. A family would therefore need to be able to pay for child care out of pocket when payment is due. For families without significant savings, this would limit child-care options, and possibly preclude enrollment in the centers that are most beneficial for child development.

A seemingly simple solution to this problem would be to allow families to draw on their credit in advance. However, the logistics of an advance credit would be quite complicated.

To the extent that actual child-care expenses and income are difficult to predict—a particular problem for lower-income families where engagement with the labor market and child-care sector can be more tenuous—families might end up owing money back to the IRS. One work-around is to allow participants to draw some percentage of their prior tax year’s credit, as proposed by Ziliak (2014), but this raises the challenge that child-care expenses drop dramatically as kids age into school, in addition to the problem of income that varies from year to year.

Ultimately, we do not know how an advance child-care tax credit would work in practice. It is for this reason that I suggest that the IRS experiment with advance credits of different structures using a representative sample of eligible filers before implementing any advance credit at scale. If the logistics of an advance credit prove too challenging for those at the bottom of the income distribution, I would recommend complementing this proposal with an expansion to the CCDF that favored families with children under age 5.

## ***3. Is it undesirable to provide the proposed tax credit to families that already pay for child care?***

For families that would have purchased child care even in the absence of the subsidy, the proposed child-care tax credit represents a potentially large cash transfer. For these families, the credit would affect children through a different channel—increases in family disposable income. There is an emerging body of evidence to suggest that the additional family income from transfers is spent in ways that benefit children: at birth, in the form of higher birth weights (see Hoynes, Miller, and Simon 2015); in adolescence, in the form of higher test scores (see Dahl and Lochner 2012); and in young adulthood, in the form of higher rates of college attendance (see Manoli and Turner 2014).

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# Conclusion

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**H**igh-quality ECEC represents both investment in a child's human capital, which will yield private and social returns in the future, and support for maternal employment. Yet, all too often, policy discussions about supporting employment of women with children and supporting child development take place in isolation. This is unproductive, leading to policy proposals that emphasize one at the expense of the other.

This policy paper has built on the evidence regarding child care and preschool education to propose reforms that would make high-quality, work-supportive ECEC a reality for more mothers. The centerpiece proposal in this agenda is a new child-care tax credit that is refundable, targeted toward

families earning less than \$70,000 a year, and more generous for families with children under age five. Simulations based on status quo child-care expenditures suggest that this credit would significantly improve the targeting of tax benefits without greatly increasing government outlays overall. However, if the program were successful in its goals of increasing labor force participation among mothers with young children and helping parents to enroll their children in higher quality ECEC programs, outlays would increase. In addition, improvements in dissemination of information about ECEC quality and direct provision of high-quality ECEC will help more children participate in ECEC programs that are beneficial for their development.

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# Author

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# Endnotes

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1. These figures are consistent with those reported in the Census Bureau's Survey of Income and Program Participation (SIPP; Census Bureau 2013). In Spring 2011 48.6 percent of preschool-age children of employed mothers were in the care of their parents (including a small share who stay with their mother while she works) or with other relatives. Only 25.2 percent were in an organized facility, and 9.8 percent were in other nonrelative care in the provider's home, including family day care (Laughlin 2013). Macartney and Laughlin (2011) compare the child-care spending questions in the Current Population Survey Annual Social and Economic Supplement (Bureau of Labor Statistics [BLS], various years) and SIPP (Census Bureau 2013) and find them to be largely similar.
2. Head Start enrollment figures are calculated from Head Start (2015). Population figures used to create age-specific percentages are from the single-year-of-age-specific population estimates as of July 1, 2014, reported by the Census Bureau (2017).
3. Estimates were obtained using the aggregate average number of children served and their age distribution from Office of Child Care (2016).
4. Notably, overall public school enrollment rates by age in the October Current Population Survey are comparable to those implied by the figures in table 1: 42 percent for four-year-olds (versus the 46 percent implied by table 1) and 21 percent for three-year-olds (versus 20 percent). Private school enrollment rates of children from higher-income families in the October CPS are also similar to the fraction of mothers reporting paying for child care in the CPS ASEC, but more so for four-year-olds (45 versus 47 percent) than for three-year-olds (35 versus 51 percent). However, private school enrollment rates of children from lower-income families are considerably lower than the fraction of lower-income mothers paying for child care (7.8 versus 22 percent for four-year-olds and 7.6 versus 23 percent for three-year-olds). These statistics imply that school-based private child-care arrangements are more common for more-advantaged children, and, among more-advantaged children, those who are older.
5. Relatedly, the Canadian province of Québec's subsidized child-care program significantly increased employment (Lefèbvre and Merrigan 2008), even among married mothers (Baker, Gruber, and Milligan 2008).
6. On the one hand, increases in out-of-pocket child-care expenses have been particularly steep since 1999 (Laughlin 2013), whereas the wages of the less-educated have stagnated. On the other hand, employment declines are quite similar among less-educated women overall (Black, Schanzenbach, and Breitwieser 2017), and either subsidy programs did not shrink (CCDF subsidies, Head Start) or they expanded (state-funded pre-K).
7. Québec's subsidized child-care program also appears to have negatively affected child development along a number of dimensions (see, e.g., Baker, Gruber, and Milligan 2008).
8. Even larger longer-term effects are found for so-called model ECEC interventions that were conducted in the 1960s and 1970s, such as the Perry Preschool Project (Heckman et al. 2010) and the Carolina Abecedarian Project (García et al. 2016). The latter also served infants and toddlers, suggesting that directly provided ECEC for younger children might be similarly beneficial.
9. The choice of credit rate for five- to twelve-year-olds was informed by data on the unsubsidized prices of full-time, full-year center-based care (Datta et al. 2015). In 2012 (real 2016 dollars) the median hourly price for center-based care of children under age five ranged from \$3.75 (for four-year-olds) to \$4.60 (for infants); median hourly rates for center-based care were similar for school-age children and for preschoolers (\$3.85). Under the assumption of 15 hours of care per week during the school year and 14 weeks of full-time care during the summer, the median annual price of center-based care for one school-age child is \$4,225. By comparison, the median annual price of center-based care for an infant is \$9,135—about twice as much.
10. This is a similar schedule to that proposed by Ziliak (2014), with the exceptions that I impose a greater penalty for older children, which is consistent with data on unsubsidized prices of center-based care (Datta et al. 2015) and actual child-care expenses by child age (such as in figure 2); that the schedule is not differentiated by licensed and unlicensed care (see below); and that the proposed credit itself is more generous in allowing for differentiation across families with up to three children.
11. Simulations of the proposed credit are based on my calculations from the 2016 ASEC. I applied the proposed child-care tax credit schedule (table 2) to child-care expenditure amounts and income for 2015 reported by ASEC respondents. For these calculations, I limited attention to primary family households to minimize misclassification error in the assignment of child-care expenses, which are reported at the household level. Whether the household has positive earned income is determined by the earnings of the reference person. Because child-care expenses are not reported separately by child, I assumed that all children in a family had qualifying child-care expenses.
12. Under the extreme assumption that all families take the largest credit for which they were eligible, the cost of the program would be approximately \$38 billion. This scenario is unrealistic, however, since it requires all families—including those where mothers are not currently working—to take up a child-care option that is at least as expensive as the credit. As described above, a labor supply response is possible, particularly for female-headed families, but it is not likely to take mothers to full employment.
13. Such an approach is taken by Georgia, where about half of four-year-olds in the state-funded pre-K are enrolled in private centers, and by Florida, where nearly all are.

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## Highlights

Elizabeth Cascio of Dartmouth College proposes a redesigned child-care tax credit aimed at reducing the financial burden of child care for working women with young children.

## The Proposals

**Replace existing federal child-care tax policies with a single refundable federal child-care tax credit.** This credit would be more generous to lower-income families and those families with children under the age of five.

**Invest in Quality Rating and Improvement Systems to promote accountability in child care.** These systems would improve the functioning of child-care markets and child outcomes by disseminating information about the quality of local child-care options.

**Expand universal preschool for four-year-olds.** Cascio outlines the evidence for the consistently positive impacts of direct child care provision and suggests productive approaches for designing universal pre-K programs.

## Benefits

This multifaceted approach to child-care policy would relieve the burden of child-care costs for lower-income families, encourage maternal employment, and support child development.



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