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# **The Child and Dependent Care Credit: Impact of Selected Policy Options**

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## Summary

Some policymakers have shown interest in having the federal government offset some of the costs families incur for child care. The child and dependent care tax credit (CDCTC or “child care credit”) reimburses some taxpayers for a portion of their out-of-pocket child care expenses. The CDCTC is a nonrefundable tax credit, meaning taxpayers with little or no income tax liability—including many low-income taxpayers—receive little if any credit. Using the TRIM3 model, this report provides estimates of key characteristics of the CDCTC under current law and estimates the distributional effect of selected policy options that would change the credit. Estimates presented in this report are derived using 2014 calendar year data. Hence, estimates reflect 2014 credit amounts as well as the impact of policy options if implemented in 2014.

Analysis of the credit under current law indicates

- A significant amount of the benefit goes to higher-income taxpayers. An estimated 35% of the tax units claiming the credit were in the highest-income quintile (top 20%) in 2014. In contrast, 1% of all CDCTC recipient families were in the lowest-income quintile in the same year.
- Over 7 out of 10 CDCTC families were married couple families where both parents worked, with the remaining being single parents who worked.
- The typical (median) amount and range of spending on child care increased with income among credit recipients.

This report estimates the distributional impact of four policy options to modify the CDCTC.

1. **Making the credit refundable.** Refundability would primarily benefit families in the bottom two income quintiles.
2. **Convert the credit into a deduction.** Converting the credit to an above-the-line deduction would primarily benefit the top 20% of taxpayers. Some taxpayers in the second-lowest income quintile would receive a smaller benefit in terms of tax savings with a deduction than with a credit.
3. **Increasing the credit rate.** Increasing the credit rate to a uniform 50% would primarily benefit the top 40% of taxpayers.
4. **Increase the maximum amount of expenses.** Doubling the amount of allowable expenses that could be applied toward the credit would primarily benefit the top 40% of taxpayers.

One major factor driving these estimates is the underlying distribution of out-of-pocket child care expenses. Lower-income families with children tend to have significantly lower out-of-pocket child care expenses than do higher-income taxpayers. Lower out-of-pocket child care expenses do not necessarily mean that lower-income people do not have child care needs; rather, it may indicate that these needs are met informally. In contrast, policy options that increase the amount of allowable expenses, increase the credit rate, or are based on the amount of expenses (like a deduction) will tend to provide the largest benefit to the higher-income taxpayers who have higher child care expenditures to begin with.

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## Introduction

Some policymakers have shown interest in having the federal government offset some of the costs families incur for child care, most recently as part of the tax reform debate in the 115<sup>th</sup> Congress.<sup>1</sup> The child and dependent care tax credit (CDCTC or “child care credit”) is designed to reimburse taxpayers for a portion of their out-of-pocket child care expenses.<sup>2</sup> This report analyzes how selected policy changes to the CDCTC—such as making the credit refundable or increasing the maximum expenses that could be claimed for the credit—would affect taxpayers.

The report first briefly summarizes key components of the CDCTC, including reviewing eligibility requirements and how the credit is calculated. The report then provides estimates of selected characteristics of families—such as income, number of children, marital status, and child care expenses—that claim the credit and, where appropriate, contrasts them with families that do not claim the credit. Comparing and contrasting differences and similarities in these populations can help explain the current impact of the credit and the potential rationales for policy changes. The report then turns to an analysis of four selected policy changes to the current credit: (1) making the current credit refundable, (2) converting the credit to a deduction, (3) increasing the credit rate, and (4) increasing the amount of qualifying expenses. The report does not describe all potential ways to modify the credit. Policymakers may “mix and match” policy options in numerous ways to achieve a desired policy goal.

## Overview of the CDCTC

The CDCTC is a nonrefundable tax credit that reduces a taxpayer’s federal income tax liability based on child and dependent care expenses incurred. A taxpayer must meet a variety of eligibility criteria, including incurring qualifying child and dependent care expenses for a qualifying individual and having earned income. These three terms are defined below.<sup>3</sup>

1. **Qualifying expenses:** Qualifying expenses for the credit are generally defined as expenses incurred for the care of a qualifying individual so that a taxpayer (and his or her spouse, if filing jointly) can work or look for work.<sup>4</sup> Qualifying expenses are reduced dollar-for-dollar for employer-sponsored child and dependent care expenses excluded from income.
2. **Qualifying individual:** A qualifying individual for the CDCTC is either (1) the taxpayer’s dependent child under 13 years of age or (2) the taxpayer’s spouse or dependent who is incapable of self-care.
3. **Earned income:** A taxpayer must have earned income to claim the credit. For married couples, both spouses must have earnings unless one is a student or incapable of self-care.

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<sup>1</sup> In the 115<sup>th</sup> Congress, see, for example, S. 208, S. 470, S. 598, H.R. 2633, H.R. 2238, H.R. 1959, H.R. 775, and H.R. 3632.

<sup>2</sup> In addition to the CDCTC, taxpayers may be eligible for the exclusion for employer-sponsored child care. However, due to data limitations, this tax benefit is not examined in this report.

<sup>3</sup> For a more detailed overview of this credit, see CRS Report R44993, *Child and Dependent Care Tax Benefits: How They Work and Who Receives Them*, by Margot L. Crandall-Hollick.

<sup>4</sup> Married taxpayers who do not file a joint return are ineligible for the credit.

The CDCTC is calculated by multiplying the amount of qualifying expenses—a maximum of \$3,000 if the taxpayer has one qualifying individual and up to \$6,000 if the taxpayer has two or more qualifying individuals—by the appropriate credit rate. The maximum dollar amounts of allowable expenses are not adjusted for inflation under current law. For taxpayers with two or more qualifying individuals, the maximum expense threshold is per taxpayer irrespective of actual child and dependent care expenses of each qualifying individual. Hence, if a taxpayer has two qualifying individuals and has incurred no qualifying expenses for one individual and \$6,000 for the other, he or she can claim a credit for up to \$6,000 of qualifying expenses.

The credit rate depends on the taxpayer’s adjusted gross income (AGI), with a maximum credit rate of 35%, declining as AGI increases to 20% for taxpayers with AGI above \$43,000, as illustrated in **Table 1**. These AGI levels are not adjusted for inflation under current law.

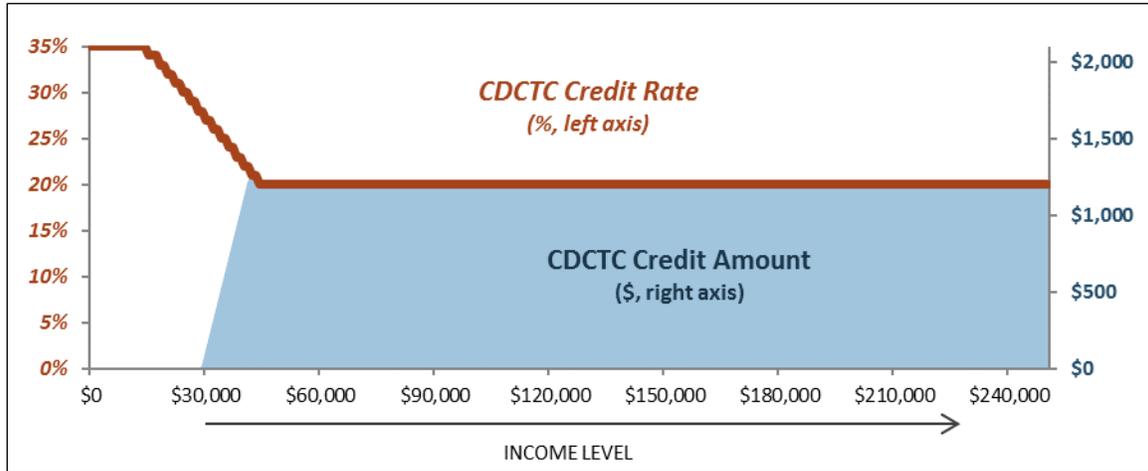
**Table 1. Credit Rate and Maximum Credit Amount**  
By Adjusted Gross Income (AGI)

Adjusted Gross Income (AGI) (over-but not over)	Credit Rate	Maximum Statutory Credit Amount	
		One Child (\$3,000 max expenses)	Two or More Children (\$6,000 max expenses)
\$0-\$15,000	35%	\$1,050	\$2,100
\$15,000-\$17,000	34%	\$1,020	\$2,040
\$17,000-\$19,000	33%	\$990	\$1,980
\$19,000-\$21,000	32%	\$960	\$1,920
\$21,000-\$23,000	31%	\$930	\$1,860
\$23,000-\$25,000	30%	\$900	\$1,800
\$25,000-\$27,000	29%	\$870	\$1,740
\$27,000-\$29,000	28%	\$840	\$1,680
\$29,000-\$31,000	27%	\$810	\$1,620
\$31,000-\$33,000	26%	\$780	\$1,560
\$33,000-\$35,000	25%	\$750	\$1,500
\$35,000-\$37,000	24%	\$720	\$1,440
\$37,000-\$39,000	23%	\$690	\$1,380
\$39,000-\$41,000	22%	\$660	\$1,320
\$41,000-\$43,000	21%	\$630	\$1,260
\$43,000+	20%	\$600	\$1,200

**Source:** IRS Publication 503 and Internal Revenue Code Section 21.

Even though the credit formula—due to the higher credit rate—is more generous toward lower-income taxpayers, many lower-income taxpayers receive little or no credit since the credit is nonrefundable, as illustrated in **Figure 1**.

**Figure I. Child and Dependent Care Credit for Married Couple with Two Qualifying Children, by Income Level**



**Source:** CRS calculations based on Internal Revenue Code Section 21.

**Notes:** This is a stylized example of a married couple filing jointly, assuming that they claim the standard deduction and four personal exemptions and no other tax benefits. It also assumes that their amount of qualifying expenses for the credit is \$6,000.

### The Employer Exclusion for Child Care and Estimates in this Report

In addition to the CDCTC, taxpayers can exclude from their income up to \$5,000 of employer-sponsored child and dependent care benefits. Since the value of these benefits is excluded from wages, it is not subject to income or payroll taxes. Employer-sponsored child and dependent care benefits can be provided in various forms but are commonly provided in the form of a flexible spending account (FSA). FSAs allow employees to set aside a portion of their salary on a pre-tax basis (i.e., under a “cafeteria plan”) to be used for qualifying expenses.

Eligibility rules and definitions of the exclusion are virtually identical to those of the credit. However, there is one major difference: The \$5,000 limit applies irrespective of the number of qualifying individuals. Taxpayers can claim both the exclusion and the tax credit but not for the same out-of-pocket child and dependent care expenses.

In addition, for every pre-tax (i.e., excluded) dollar of employer-sponsored child and dependent care, the taxpayer must reduce the maximum amount of qualifying expenses for the credit (up to \$3,000 for one child, \$6,000 for two or more children). For example, if a family had one child and \$10,000 in annual child care expenses and contributed \$5,000 annually to their employer’s FSA, the family could not claim the CDCTC.<sup>5</sup> The amount of pre-tax dollars in the FSA (\$5,000) would eliminate the maximum amount of expenses that could be applied to the credit (\$3,000). If in the same year, the family had a second child, and all else remained the same, they could claim \$5,000 tax-free through their FSA and claim the remaining allowable expense of \$1,000 (\$6,000 max for two or more children minus \$5,000 in the FSA) for the CDCTC.

While the Census data used for this report include data on a household’s out-of-pocket child care spending—expenses that can be applied toward the CDCTC—the data *do not include* a variable on child care expenses paid with a child care FSA or other pre-tax dollars. Hence, if a family in the model has a given amount of out-of-pocket child care expenses, they could have had up to \$5,000 in additional child care expenses that are not reported. However, the estimates in this report assume that 22% of taxpayers with more than \$100,000 in income use an FSA and adjusts out-of-pocket expenditures for each family accordingly. However, without detailed information on which tax units

<sup>5</sup> Employer-sponsored child and dependent care must be provided under a written plan that meets certain conditions. Note that under a cafeteria plan, employees have the choice not to accept the exclusion and hence could apply additional child and dependent care expenses toward the credit. However, in practice, most taxpayers will receive a greater marginal benefit from the exclusion than from the credit. For example, if a taxpayer has \$100,000 of AGI and is subject to a marginal income tax rate of 25% and 7.65% of payroll taxes, his or her tax bill would be reduced by 32.65 (25+7.65) cents for every dollar put in the FSA. In comparison, the credit would lower his or her tax bill by 20 cents for every dollar applied toward the credit.

receive FSAs and the exact amount of FSA dollars used, we cannot analyze the impact of any changes to the FSA. Hence, for the purposes of this analysis, we assume that the current exclusion is unchanged from current law. However, if the exclusion were to be changed or eliminated, the impact would likely be concentrated among the higher-income quintiles that are more likely to benefit from this tax provision.

## Data Methods and Concepts

Unless otherwise specified, CRS derived the estimates in this report using sample data from a Census household survey and the Transfer Income Model, version 3 (TRIM3) microsimulation model. Since there are no data on characteristics of every American family (e.g., population data)—including their child care spending, benefit receipt, and socioeconomic and demographic characteristics—researchers use survey data from samples of families to estimate these characteristics. Additionally, some of the information needed for this analysis—such as tax liabilities and benefits and receipt of subsidies from Child Care and Development Fund—is not available directly from the Census household survey. The value for these variables has been estimated as part of the static TRIM3 microsimulation model.

As with all models, estimates derived from TRIM are subject to a number of caveats and limitations. Since these are estimates generated from a sample of the population, there is potential for sampling error and model error (e.g., errors related to how benefit receipt is assigned).

**Appendix A** provides more detailed information on the methodology used to develop the estimates in this report along with data limitations. Other key assumptions are described in **Appendix B**.

Finally, estimates derived using the TRIM3 model and presented in this report may differ from administrative data provided by the Internal Revenue Service (IRS) Statistics of Income (SOI) for several reasons. For instance, SOI data on tax units claiming various credits tend to be higher than TRIM3 estimates due to misreporting on the Census survey.

## Key Terms Used in this Report

To understand and interpret the estimates presented in the remainder of this report, key terms and concepts are discussed below.

- **Year of analysis.** Estimates presented in this report are derived using 2014 calendar year data. Hence, estimates reflect 2014 credit amounts as well as the impact of policy options in 2014.
- **Tax unit.** This term represents a tax filer, his or her spouse (if present), and any dependents of the tax filer. A tax unit includes either an individual (or, in the case of a married couple, both spouses) and all the dependents of the individual or married couple. Tax units were estimated by TRIM3 based on the characteristics and relationships among people in the household. The term *taxpayer* is used interchangeably with *tax unit* throughout this report.
- **Analyzed population.** The population of taxpayers examined includes tax units with at least one dependent child under the age of 13. An estimated 19% of tax units in 2014 had a child under the age of 13.<sup>6</sup> (For this analysis, the child was under the age of 13 for all of 2014.) This population is further broken down into:

<sup>6</sup> The number of tax units with children under the age of 13 and the total number of tax units differ from the number of (continued...)

- **Recipients** who are defined as tax units with at least one dependent child under the age of 13 who claim the CDCTC.
- **Nonrecipients** who are defined as tax units with at least one child under 13 who do not currently claim the credit. This includes taxpayers who may be ineligible for the credit under current law because, for example, neither spouse works or has earnings.
- **Income quintile.** This report analyzes current policy and the impact of policy changes for specific income quintiles of this population. An income quintile is constructed by first ordering tax units from lowest to highest income and then selecting 20% of tax units for each quintile. Hence, the “bottom” quintile (i.e., quintile 1) represents the 20% of taxpayers with the lowest income, and the top quintile (i.e., quintile 5) represents the 20% of taxpayers with the highest income. For the purposes of this analysis, income is defined as cash income, which may be larger than AGI.

**Table 2. Lowest Income of Each Quintile**

Quintile	Graphical Reference	Lowest Income Level
1	Lowest 20%	\$0 <sup>a</sup>
2	Second 20%	\$19,401
3	Middle 20%	\$39,002
4	Fourth 20%	\$69,040
5	Highest 20%	\$114,809

**Source:** Estimated by CRS based on data from the Census Bureau’s March 2015 Annual Social and Economic Supplement (ASEC) to the Current Population Survey, augmented by information from the Transfer Income Model, version 3 (TRIM3). The 2015 ASEC includes information on the prior year (2014).

**Notes:** For the purposes of this analysis, income is defined as cash income.

- The lowest income (bottom of quintile 1) is a negative number, as business losses for the self-employed are negative earnings.

## Selected Characteristics of CDCTC Recipients

The following analyses and associated figures provide estimates of several characteristics of taxpayers that currently receive the CDCTC, in some cases comparing them to the overall population of tax units with dependent children under the age of 13 and in others comparing them to nonrecipients of the CDCTC. Unless otherwise indicated, all of the data provided are estimates based on the TRIM3 model.

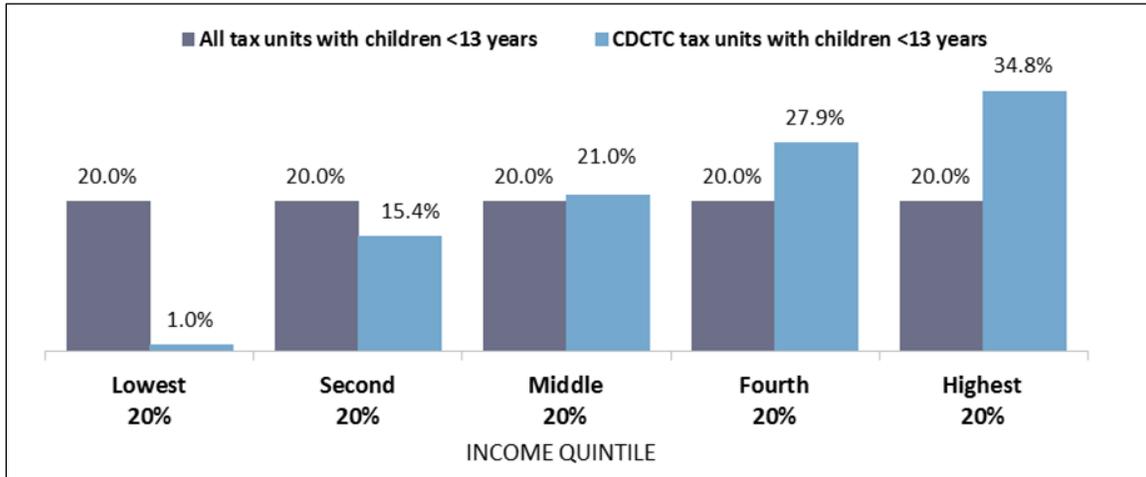
(...continued)

tax returns with children under 13 and the total number of tax returns. The estimated tax units used in this analysis includes nonfilers and excludes tax units (tax filers and nonfilers) who were claimed as dependent on another tax return.

## Income/Earnings

Among CDCTC recipients, median income was estimated to be \$88,036 in 2014. In comparison, among all tax units with at least 1 dependent child under age 13, median income was estimated to be \$52,000 in 2014. This difference may arise since taxpayers must have earnings to claim the credit, so very low-income taxpayers without any earnings are ineligible. In addition, since the CDCTC is nonrefundable, low-income taxpayers with earnings are generally ineligible for the credit, as illustrated in **Figure 2**.

**Figure 2. Estimated Distribution of CDCTC Taxpayers by Income Quintile**



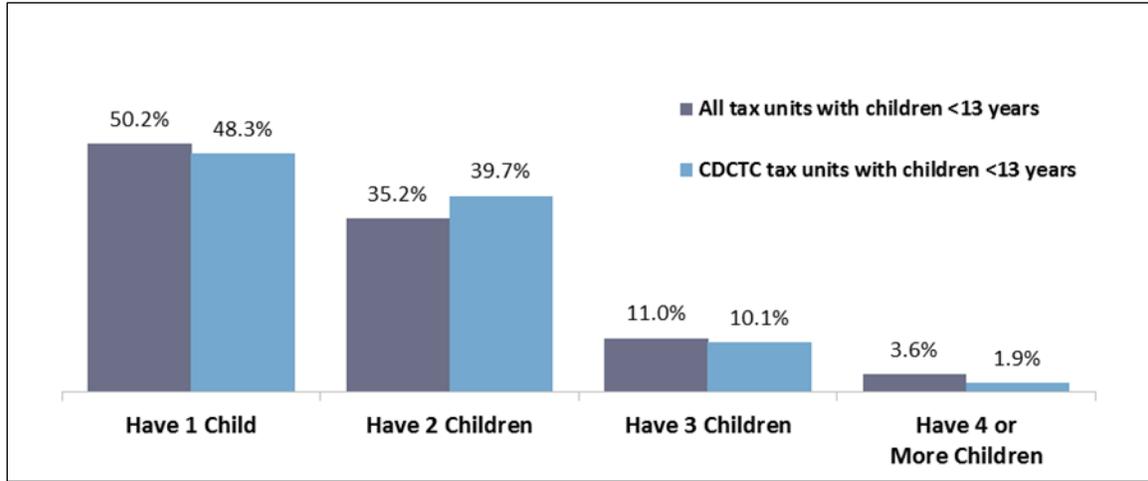
**Source:** Estimated by CRS based on data from the Census Bureau’s March 2015 Annual Social and Economic Supplement (ASEC) to the Current Population Survey, augmented by information from the Transfer Income Model, version 3 (TRIM3). The 2015 ASEC includes information on the prior year (2014).

**Notes:** Income quintiles range from lowest to highest income.

## Number of Children

CDCTC recipients generally have a similar number of children as the general population of tax units with at least 1 dependent child under 13 years old, as illustrated in **Figure 3**. Nearly half have one child, and more than one-third have two children.

**Figure 3. Estimated Number of Children of CDCTC Recipients**

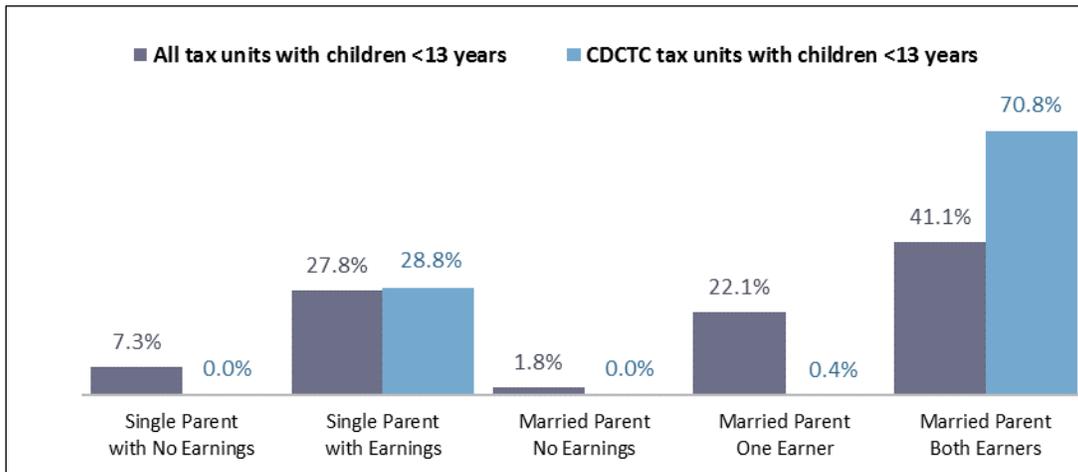


**Source:** Estimated by CRS based on data from the Census Bureau’s March 2015 Annual Social and Economic Supplement (ASEC) to the Current Population Survey, augmented by information from the Transfer Income Model, version 3 (TRIM3). The 2015 ASEC includes information on the prior year (2014).

## Marital and Earnings Status

The majority of CDCTC recipients—70.8%—are married, dual-earning families, as illustrated in **Figure 4**. To be eligible for the CDCTC under current law, each spouse in the tax unit (except in some limited circumstances) must work. In contrast, among the broader population of tax units with children under 13 years old, almost one-third (31.2%) include at least 1 parent without earnings.

**Figure 4. Estimated Marital and Earnings Status of CDCTC Recipients**

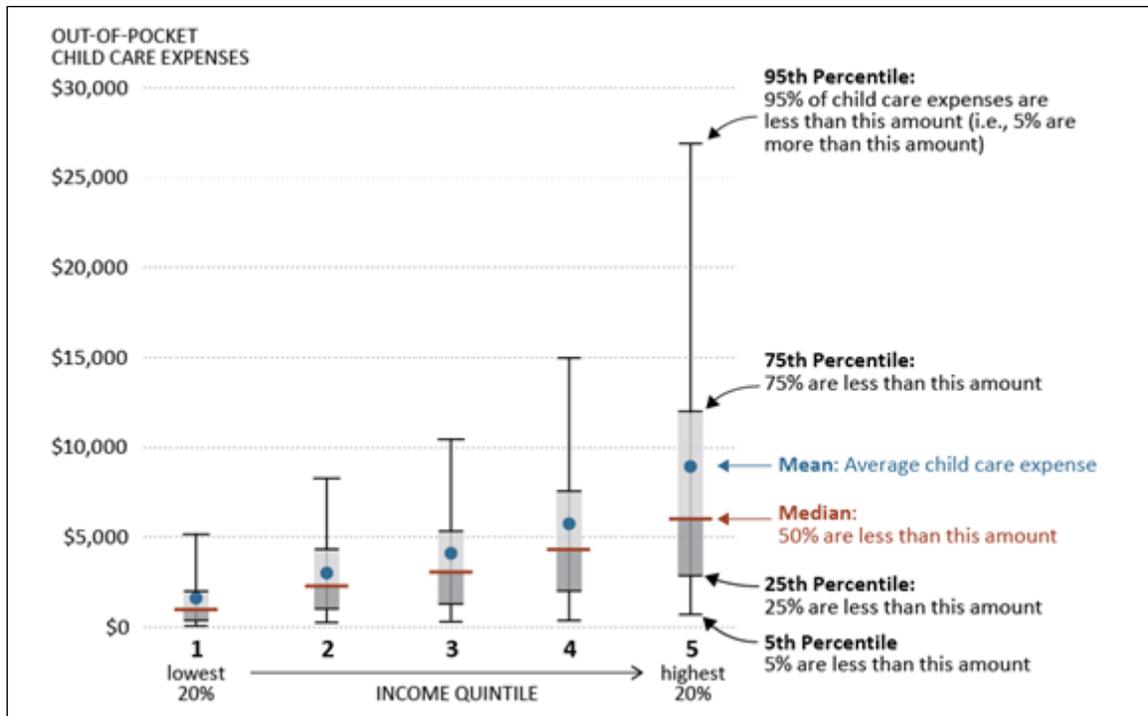


**Source:** Estimated by CRS based on data from the Census Bureau’s March 2015 Annual Social and Economic Supplement (ASEC) to the Current Population Survey, augmented by information from the Transfer Income Model, version 3 (TRIM3). The 2015 ASEC includes information on the prior year (2014).

## Child Care Expenses

Among all taxpayers with children under 13 years old, out-of-pocket child care expenses vary widely, as illustrated in **Figure 5**. Taxpayers in the lowest income quintile have a median out-of-pocket child care expense of \$857, with some taxpayers in this quintile incurring an estimated \$5,000 in out-of-pocket child care and others incurring no out-of-pocket child care expenses. In contrast, taxpayers in the highest income quintile have a median out-of-pocket child care expense of \$6,000. In addition, the range of child care expenses is much larger among taxpayers in the highest income quintile, with some taxpayers having over \$25,000 in child care expenses and others in this group having very little in out-of-pocket child care expenses.

**Figure 5. Estimated Distribution of Out-of-Pocket Child Care Expenses, 2014**  
By Income Quintile



**Source:** Estimated by CRS based on data from the Census Bureau’s March 2015 Annual Social and Economic Supplement (ASEC) to the Current Population Survey, augmented by information from the Transfer Income Model, version 3 (TRIM3). The 2015 ASEC includes information on the prior year (2014).

**Notes:** Income quintiles range from lowest to highest income.

## Selected Policy Options

The following analyses and associated figures display estimates of the distributional impact of selected policy changes to the CDCTC. Due to data limitations, all of these estimates assume that the exclusion for employer-sponsored child care is unchanged from current law.

The two panels on each figure summarize the distributional impact: The first (left) panel estimates the change in the CDCTC across the population grouped into income quintiles (information on these income quintiles can be found in **Table 2**); the second (right) panel is an illustration of how the selected policy option would affect a specific type of family at varying

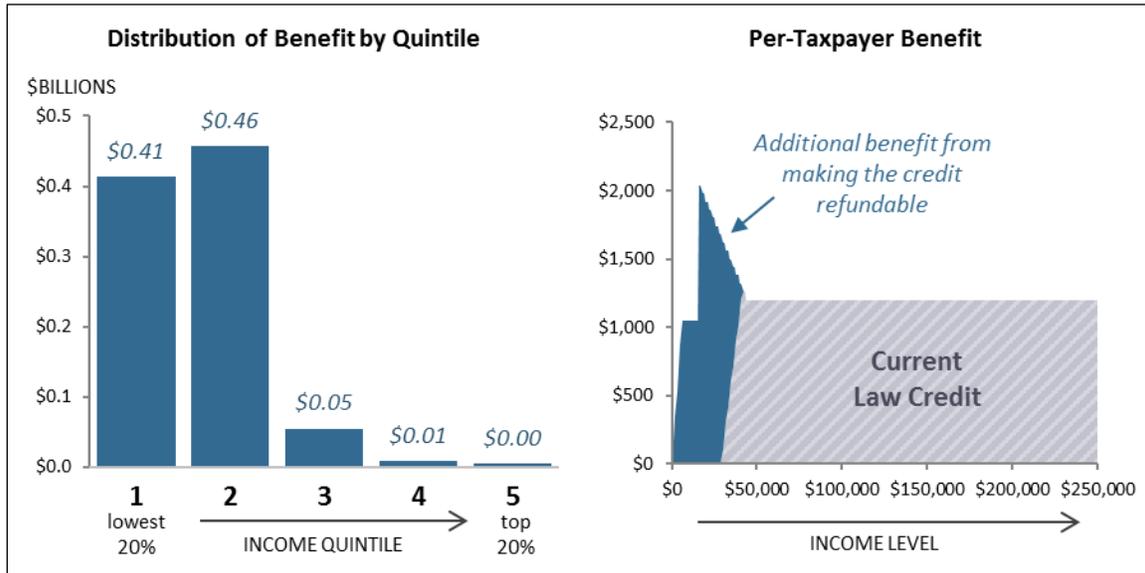
income levels. In this report, the family in the left panel is assumed to be a married couple (filing jointly) with two children and total qualified child care expenses of \$6,000 when working full-time. (Child care expenses were pro-rated for part-time work.) This family is referred to as “the hypothetical family” throughout the remainder of the report.

## What Is the Impact of Making the Credit Refundable?

Policymakers may be interested in making the CDCTC a refundable credit.<sup>7</sup> The current CDCTC is a nonrefundable credit, meaning the value of the credit is limited by the taxpayer’s income tax liability. If a taxpayer is eligible for a \$1,000 CDCTC but has \$400 in income tax liability, he or she could claim a \$400 CDCTC and forfeit the difference (\$600). If the credit were refundable, the taxpayer could claim the full \$1,000 value of the credit, with \$400 reducing his or her tax liability to zero (the nonrefundable portion) and \$600 claimed as a refund (the refundable portion). Since many low-income taxpayers have little to no income tax liability, they generally do not benefit from nonrefundable tax credits.

Making the credit refundable would benefit lower-income populations. Specifically, taxpayers in the lowest two quintiles (i.e., the bottom 40% of taxpayers by income) would receive almost all of the estimated \$1 billion in additional credit dollars from this policy change, as illustrated in **Figure 6**. Under current law, many low-income taxpayers have little to no income tax liability and, hence, are not eligible for nonrefundable tax credits such as the CDCTC.

**Figure 6. Estimated Distributional Impact of Making the CDCTC Refundable**



**Source:** CRS estimated distribution of the benefit by income quintile (left panel) based on data from the Census Bureau’s March 2015 Annual Social and Economic Supplement to the Current Population Survey, augmented by information from the Transfer Income Model, version 3 (TRIM3). CRS computed the illustration of impact for a hypothetical married couple with two children and \$6,000 in child care expenses (right panel) using the Federal Income Tax Calculator (see **Appendix A**).

**Notes:** Changes are modeled as if they occurred in 2014. The blue regions indicate the additional benefit from making the credit refundable. The exclusion for employer-sponsored child care is assumed to be unchanged from current law.

<sup>7</sup> See, for example, the PACE Act in the 115<sup>th</sup> Congress (S. 208 and H.R. 3632).

## What Is the Impact of Converting the Credit to a Deduction?

Before the CDCTC went into effect in 1976, taxpayers who itemized deductions could deduct child care costs. More recently, there have been proposals to convert the credit into an above-the-line deduction available to all taxpayers irrespective of whether they itemize or not.<sup>8</sup> For the purposes of the left panel in **Figure 7**, our analysis assumes that the current credit is converted to an above-the-line deduction where the amount deducted by the taxpayer equals *all* of the tax unit's out-of-pocket expenses (excluding any expenses reimbursed through employer-provided child care assistance). In other words, if a taxpayer has \$10,000 of out-of-pocket child care expenses, he or she would be able to deduct \$10,000 from his or her income to calculate taxable income. In the right panel of **Figure 7**, we assume the hypothetical family has \$6,000 of out-of-pocket expenses.

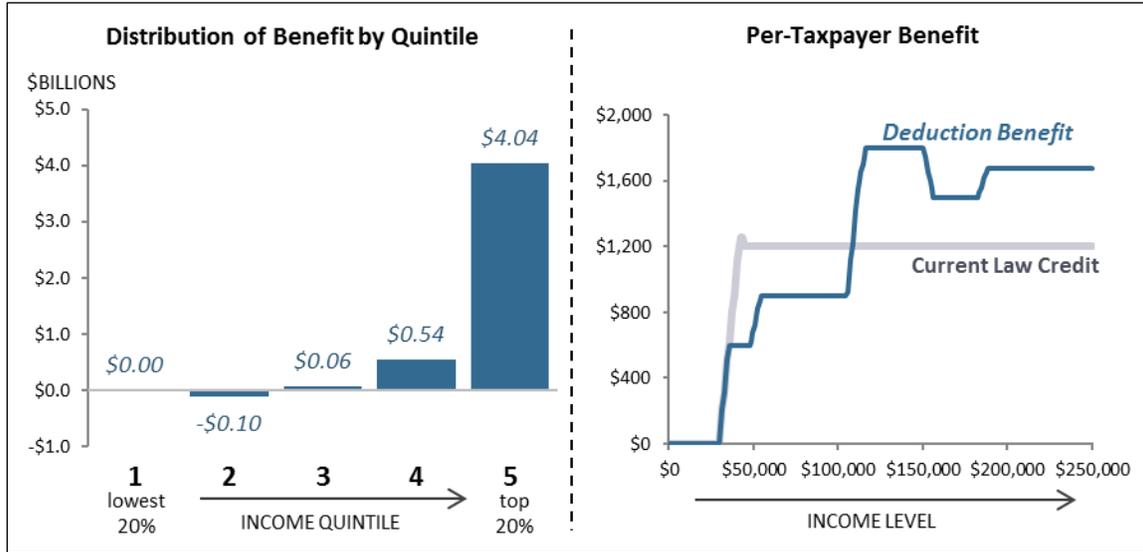
Our analysis indicates that this policy change would cost approximately \$4.5 billion per year and benefit upper-income taxpayers. This is likely a result of two factors. First, higher-income taxpayers tend to have more expenses to deduct, as illustrated in **Figure 5**. Second, all else being equal, deductions provide the greatest tax savings to taxpayers facing the highest tax rates. Any tax provision that lowers taxable income—such as a deduction—will result in a greater tax savings for taxpayers in a higher marginal tax bracket. A \$100 deduction for a taxpayer in the 35% bracket saves the taxpayer \$35. The same \$100 deduction for a taxpayer in the 15% bracket saves the taxpayer \$15.

Some taxpayers may receive a smaller benefit in terms of tax savings with a deduction than with a credit. In **Figure 7**, married couples with income between \$40,000 and \$100,000 see a lower benefit—in terms of tax savings—from the deduction than from the credit. For these taxpayers, the subsidy from the credit (the credit rate) is larger than the subsidy from the deduction (their marginal tax rate). Other taxpayers see the value of the deduction (in terms of tax savings) fall between approximately \$150,000 and \$200,000. This is due to other factors in the tax code, such as the phase-out of the child tax credit, which, all else being equal, increases tax liability.

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<sup>8</sup> “Fact Sheet: Donald J. Trump’s New Child Care Plan,” press release, [http://assets.donaldjtrump.com/CHILD\\_CARE\\_FACT\\_SHEET.pdf](http://assets.donaldjtrump.com/CHILD_CARE_FACT_SHEET.pdf).

**Figure 7. Estimated Distributional Impact of Converting the Credit to a Deduction**



**Source:** CRS estimated distribution of the benefit by income quintile (left panel) based on data from the Census Bureau’s March 2015 Annual Social and Economic Supplement to the Current Population Survey, augmented by information from the Transfer Income Model, version 3 (TRIM3). CRS computed the illustration of impact for a hypothetical married couple with two children and \$6,000 in child care expenses (right panel) using the Federal Income Tax Calculator (see **Appendix A**).

**Notes:** Changes are modeled as if they occurred in 2014. This deduction is structured as an above-the-line deduction and hence available to all taxpayers. The exclusion for employer-sponsored child care is assumed to be unchanged from current law. The per-taxpayer benefit (right panel) represents dollars of tax savings.

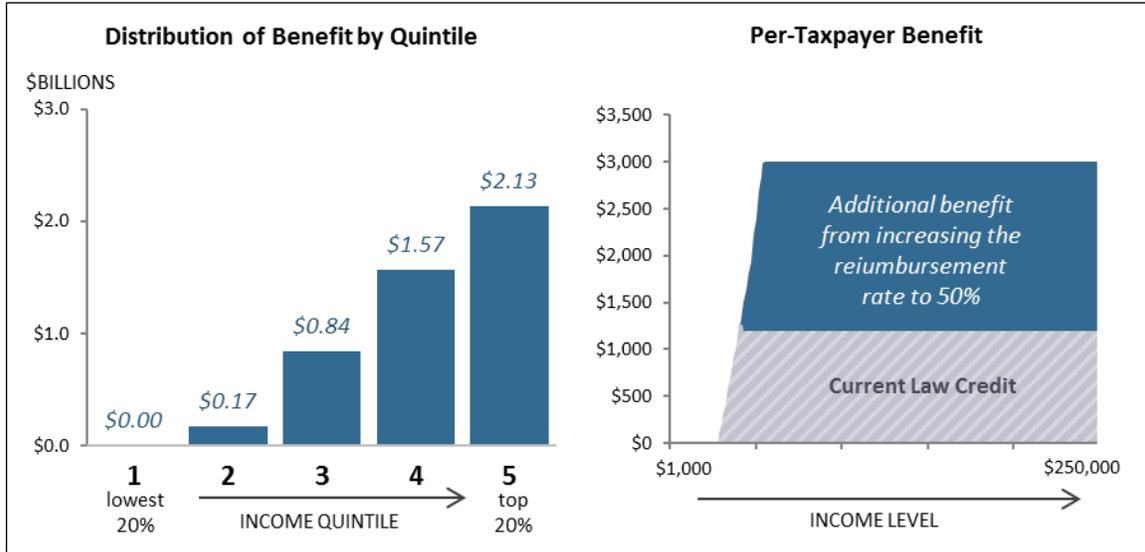
## What Is the Impact of Changing the Credit Rate?

Policymakers may be interested in changing the credit rate. The current credit rate is a declining sliding scale where the lowest-income taxpayers have a greater proportion of their expenses (35%) offset by the credit than higher-income taxpayers (20%). Under current law, lower-income taxpayers generally do not benefit from the higher credit rate because the credit is nonrefundable. See **Figure 1**.

For purposes of this policy option, the credit rate is increased to a uniform 50% for all taxpayers. Increasing the credit rate to 50% and making it uniform among all taxpayers would imply that the credit subsidizes 50 cents for every dollar of expenses (up to the statutory maximums of \$3,000 for one child and \$6,000 for two or more children).

Our analysis illustrated in **Figure 8** indicates that this policy change would cost approximately \$4.7 billion per year and benefit upper-income taxpayers. This is likely because, as previously discussed, higher-income taxpayers tend to have higher child care expenses. A 50% credit rate applied to \$1,000 of expenses would result in a \$500 credit, while a 50% credit rate applied to \$6,000 of expenses would result in a \$3,000 credit.

**Figure 8. Estimated Distributional Impact of Increasing the Credit Rate to 50%**



**Source:** CRS estimated distribution of the benefit by income quintile (left panel) based on data from the Census Bureau’s March 2015 Annual Social and Economic Supplement to the Current Population Survey, augmented by information from the Transfer Income Model, version 3 (TRIM3). CRS computed the illustration of impact for a hypothetical married couple with two children and \$6,000 in child care expenses (right panel) using the Federal Income Tax Calculator (see **Appendix A**).

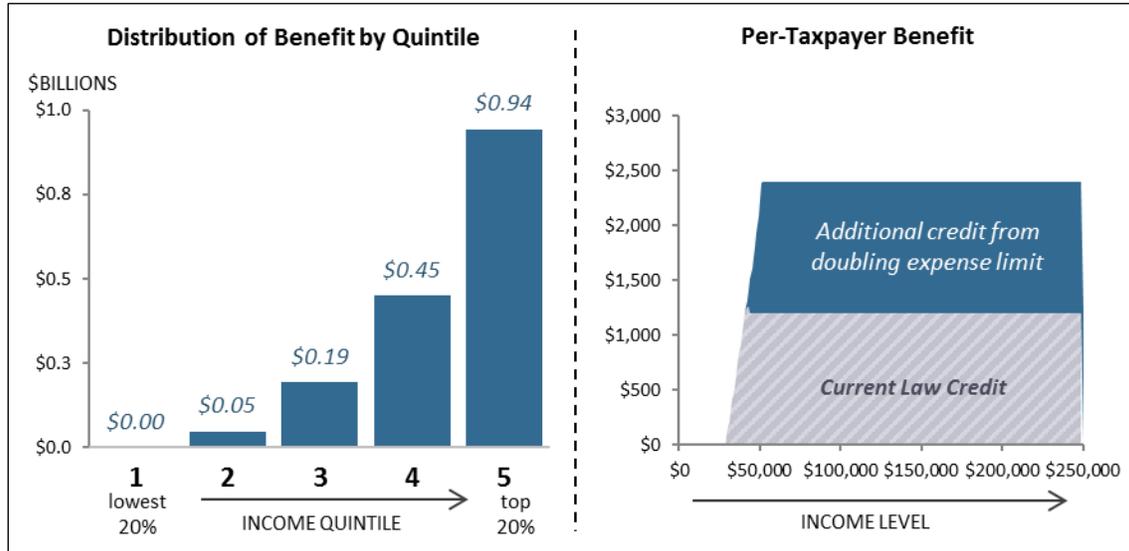
**Notes:** Changes are modeled as if they occurred in 2014. The exclusion for employer-sponsored child care is assumed to be unchanged from current law. The blue regions indicate the additional benefit from increasing the credit rate to 50%. The sliding scale of 35%-20% is replaced with a uniform credit rate of 50%. The exclusion for employer-sponsored child care is assumed to be unchanged from current law.

## What Is the Impact of Increasing the Amount of Qualifying Expenses?

Policymakers may be interested in increasing the maximum amount of expenses that can be used to calculate the credit. Currently, taxpayers can claim the credit for the first \$3,000 of child care expenses if they have one child and \$6,000 of child care expenses if they have two or more. Our analysis assumes that these amounts are doubled to \$6,000 and \$12,000, respectively.

Our analysis indicates that this policy option would have cost approximately \$1.6 billion in 2014. The majority of the benefit would have accrued to the highest-income taxpayers—namely, those in the top two income quintiles—as illustrated in **Figure 9**. Once again, the main driver of these estimates is likely that higher-income taxpayers tend to have higher expenses than lower- and moderate-income taxpayers. All else being equal, claiming more dollars of expenses when calculating the credit will result in a larger credit.

**Figure 9. Estimated Distributional Impact of Doubling the Maximum Amount of Qualifying Expenses**



**Source:** CRS estimated distribution of the benefit by income quintile (left panel) based on data from the Census Bureau’s March 2015 Annual Social and Economic Supplement to the Current Population Survey, augmented by information from the Transfer Income Model, version 3 (TRIM3). CRS computed the illustration of impact for a hypothetical married couple with two children and \$6,000 in child care expenses (right panel) using the Federal Income Tax Calculator (see **Appendix A**).

**Notes:** Changes are modeled as if they occurred in 2014. The exclusion for employer-sponsored child care is assumed to be unchanged from current law. The blue regions indicate the additional benefit from doubling the maximum of expenses from \$3,000 to \$6,000 for one qualifying child and from \$6,000 to \$12,000 for two or more qualifying children. The exclusion for employer-sponsored child care is assumed to be unchanged from current law.

## Concluding Remarks

The distributional impact of the selected policy changes examined in this report is largely driven by two factors: child care expenditures and the refundability of the credit. The options illustrate some of the policy tradeoffs that would arise from changing the tax treatment of out-of-pocket child care expenses.

The current CDCTC does not reach the lowest-income families because they tend to owe no federal taxes, and the nonrefundable credit does not benefit them—but also because a small percentage of them pay for child care. When lower-income families do have their children in paid care, their out-of-pocket expenditures tend to be low. Lower out-of-pocket child care expenses does not necessarily mean that lower-income population do not have child care needs; rather, it may indicate that these needs are met informally—such as having a neighbor or relative watch a child during the workday.<sup>9</sup> These informal arrangements may not result in formal child care payment.

<sup>9</sup> Sarah Grady, Lisa Corcoran and Katrina Steinley, “Early Childhood Program Participation, Results from the National Household Education Surveys Program of 2016,” U.S. Department of Education, NCEES 2017-01, September 2017, <https://nces.ed.gov/pubs2017/2017101.pdf>. See also Nicole Forry et al., “Child Care Decision-Making Literature Review,” U.S. Department of Health and Human Services, OPRE Brief 2013-45, December 2013, [https://www.acf.hhs.gov/sites/default/files/opre/child\\_care\\_decision\\_making\\_literature\\_review\\_pdf\\_version\\_v2.pdf](https://www.acf.hhs.gov/sites/default/files/opre/child_care_decision_making_literature_review_pdf_version_v2.pdf).

The aggregate cost of making the CDCTC refundable (an estimated \$1 billion per year) is significantly less than the estimated cost of other policy options discussed in this report. Since lower-income populations tend to have a lower level of qualifying expenses to begin with (see **Figure 5**), their credit amount (even when refundable) will still tend to be lower than that of a higher-income taxpayer. The cost of making the CDCTC refundable would be higher if making the credit refundable induced more lower-income families to have their children in paid care. However, a once-a-year tax credit may, even if refundable, may be of limited value to lower-income families. These families would still have to spend out of pocket, on an ongoing basis, what could be a relatively large share of their incomes in order to qualify for that tax subsidy.

Policy options that increase the amount of allowable expenses, increase the credit rate, or are based on the amount of expenses (such as a deduction) will tend to provide the largest benefit to the higher-income taxpayers who have higher child care expenditures to begin with (see **Figure 5**). The options to enhance the CDCTC through increasing the credit rate or maximum expenses would provide additional tax relief and assistance in paying for child care costs. On the other hand, converting the CDCTC to a deduction creates both “winners” and some “losers,” with the biggest winners being the highest-income taxpayers.

## **Appendix A. Policy Simulation Models**

This report examines four options for altering the CDCTC: (1) making the credit refundable, (2) converting the credit to a deduction in determining AGI, (3) raising the credit rate to 50% of qualified child care expenses, and (4) doubling the maximum qualified child care expenses allowed by the credit. The effect of each option was simulated by two microsimulation models. Microsimulation models apply a set of program rules to individual or family units to estimate their federal and state taxes as well as eligibility and receipt of benefits from government programs.

The first model is the TRIM3 microsimulation model that estimates federal income tax credits and liabilities for the entire population under current law and each policy proposal. The second microsimulation model used in this report is a tax calculator that determines federal income tax credits and liabilities for a specified type of tax filer under current law and each policy option.

### **Federal Income Tax Calculator**

The effect of the four policy options to change the CDCTC is illustrated in this report by examining how it would affect a specified type of family over a range of potential earnings (\$0 to \$250,000 per year). The hypothetical family examined is a married couple with two children, ages one and seven. For three of the four options, the family is assumed to have \$6,000 in annual child care expenses that qualify for the CDCTC. Thus, for these options a family is assumed to have the maximum allowable qualified child care expenses for the credit. To illustrate the effect of doubling the maximum expenses, the family is assumed for that option to have \$12,000 in child care expenses.

In order to calculate the CDCTC and federal income tax liability for this hypothetical family, some additional assumptions are required. The family is assumed to take the standard deduction and not itemize deductions. All children are assumed to be dependents of the tax filer and be qualified children for the purposes of the CDCTC. The taxpayer files as married, filing jointly.

The calculator also assumes that both parents work and that earnings (and, in some cases, hours) are split evenly among the couple. At lower levels of income, it is also assumed that each parent earns per hour at least the federal minimum wage. If the parents' earnings are below that representing 40 hours per week at the federal minimum wage, their hours are determined by dividing their earnings by the federal minimum wage. If they are assumed to work less than 20 hours per week, they are assumed to use part-time child care, and their child care expenses are pro-rated to half of the child care expenses that they would incur if they used full-time child care. This assumption at lower levels most affects the proposal to make the CDCTC refundable.

The “case” or “hypothetical family” approach to simulating policy change provides the reader with a sense of how both current policy and a policy option is structured: how it affects an individual taxpayer as certain circumstances (in this case, earnings) change while other circumstances are held constant. However, there are limitations to what such types of analyses provides. For instance, the “hypothetical family” does not represent all types of families that are affected by the policy. The effect of child care expenses on federal taxes varies with a taxpayer's number of children, marital status, earnings, and amount of child care expenses.

### **TRIM3 Microsimulation Model**

To examine how the four options would change the federal income tax subsidy for child care expenses for the population as a whole and across the income distribution, this report uses

estimates using the TRIM3 microsimulation model. TRIM3 is a microsimulation model for government benefit receipt that is primarily funded by the U.S. Department of Health and Human Services and maintained at the Urban Institute. It estimates the current federal tax credits and liabilities and has the capability of estimating policy change.

### **The Annual Social and Economic (ASEC) Supplement to the Current Population Survey**

TRIM3 makes its estimates based on a sample of the population of the United States. The sample is from a U.S. Census Bureau household survey, the Annual Social and Economic (ASEC) Supplement to the Current Population Survey. The ASEC is a household survey of the civilian, noninstitutionalized population conducted by the Census Bureau in February through April of each year.<sup>10</sup> There are approximately 94,000 households in the ASEC. The ASEC includes questions related to household members' demographic characteristics, work experience, and earnings in the prior year. In addition, the ASEC includes questions about health insurance coverage in the prior year.

The ASEC is a survey of a sample of households in the United States. Estimates discussed in this report were then weighted in order to make the ASEC-TRIM3 sample estimates representative of the population of U.S. households. As the estimates in this memorandum come from a sample, they are subject to sampling error. Additionally, the information on the ASEC is based on respondents' answers to the survey questions.<sup>11</sup>

### **TRIM3 Microsimulation Model**

TRIM3 applies the rules in effect during the year to the population for that year. For this report, we have estimates that used the 2015 ASEC that permits estimates of federal income tax credits and liabilities that were earned by families in calendar year 2014. CRS uses information made available publically on the TRIM website (<http://trim3.urban.org/T3Welcome.php>).

The estimates in this report use information from the TRIM3 federal income tax module for 2014. The module uses data from the ASEC to simulate federal tax filing units (e.g., taxpayer and, for those married filing jointly, the spouse) and to identify "extended" tax filing units that include the tax filers and their dependents. This report uses the extended tax unit as its unit of analysis. It should be noted that TRIM3 creates tax units not only for tax filers but for all potential filers (that is, those who do not file their taxes).

The report examines extended tax units with dependents under the age of 13. It then sorts these units by their total money income. This includes market income from sources such as wages and salaries and interest. It also includes cash government benefits from Social Security and Unemployment Insurance, as well as cash public assistance payments from the Temporary

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<sup>10</sup> The ASEC is a supplement to the monthly Current Population Survey that is used to produce labor force statistics such as monthly labor force participation, employment, and unemployment statistics. The ASEC supplement is conducted of the entire sample interviewed in March of each year, plus one-fourth of the sample interviewed in February and one-fourth of the sample interviewed in April of each year.

<sup>11</sup> If some respondents to the ASEC answered the questions inaccurately, it would affect the estimates in this report. While ASEC does not ask questions about federal taxes of its respondents, TRIM3 uses respondents' self-reported information on household and family composition to place people within that household into tax filing units. Misreporting of household and family composition information might affect the accuracy of the tax information estimated from TRIM3. Misreporting of income that is used in the tax calculation would also affect the estimates in this report.

Assistance for Needy Families block grant and Supplemental Security Income. It excludes the value of noncash benefits, such as Medicaid and Supplemental Nutrition Assistance Program benefits. For constructing the income quintiles, this report uses total money income rather than AGI of the tax unit in order to base the income quintiles on an income concept exogenous to the federal income tax system. One of the options—the option to convert the CDCTC to an above-the-line deduction in determining AGI—affects AGI itself and thus cannot be used to evaluate that policy option.

Respondents to the ASEC questionnaire are asked for their out-of-pocket child care expenditures. TRIM3 uses these responses and augments them with the estimated copayment required of families that have their child care subsidized through the Child Care and Development Block Grant. TRIM3 also further adjusts child care expenses for higher-income taxpayers. It assumes that some higher-income taxpayers use employer-sponsored tax preferred savings accounts for dependent care, and it adjusts downward the qualified child care expenses for the CDCTC for such taxpayers.

The version of TRIM3 available to CRS permits static estimates of the impact of policy changes. That is, it does not permit modifying people's behavior (e.g., that they work more or spend more for child care in response to larger subsidies).

## Appendix B. Assumptions and Caveats of Analysis

In order to analyze key characteristics of current CDCTC recipients and the impact of selected policy options, several simplifying assumptions were made, including

- **The credit is claimed for child care expenses exclusively.** Administrative data from the IRS<sup>12</sup> indicate that virtually all of the credit dollars are based on child care expenses and not expenses for the care of older dependents. Since the scope of this report is focused on child care, the analysis focuses on eligible families with children and analyzes the policy impact among this population exclusively.
- **Taxpayers may be eligible to claim an exclusion for employer-provided child care and the CDCTC.** TRIM3 assumes certain taxpayers receive this benefit and calculates their eligible expenses for the credit accordingly. For the purposes of this analysis, we assume that the FSA is unchanged when making modifications to the credit. This may lead to an underestimation of the impact on the credit.

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<sup>12</sup> See Table 4 in CRS Report R44993, *Child and Dependent Care Tax Benefits: How They Work and Who Receives Them*, by Margot L. Crandall-Hollick.