Iowa's Child and Dependent Care Tax Credit and Early Childhood Development Tax Credit

Tax Credits Program Evaluation Study

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By
Man Jia
Bob Rogers

Tax Research and Program Analysis Section
Iowa Department of Revenue

Preface

During the 2005 Legislative Session the Iowa Department of Revenue received an appropriation to establish a program to track tax credit awards and claims. In addition, the Department was directed to assist the legislature by performing periodic economic studies of tax credit programs. This is the first economic study completed for the Iowa Child and Dependent Care Tax Credit and the Early Childhood Development Tax Credit.

As part of the evaluation, an advisory panel was convened to provide input and advice on the study's scope and analysis. We wish to thank the members of the panel for their support and inputs:

Charles Bruner	Child and Family Policy Center
Su McCurdy	Iowa Department of Education
Chad Dahm	Iowa Department of Human Services, Bureau of Child Care and Community Services
Barbara Merrill	Association for the Education of Young Children
Mariannette Miller-Meeks	Department of Public Health
Kathy O'Neill	Iowa Family Child Care Association
Peter Orazem	Iowa State University
Joyce Thomsen	Iowa Department of Education

We also want to thank the Bureau of Child Care and Community Services of the Iowa Department of Human Services for providing data about the Child Care Assistance program.

The assistance of an advisory panel implies no responsibility for the content and conclusions of the evaluation study. This study and other evaluations of Iowa tax credits can be found on the Tax Credits Tracking and Analysis Program web page on the Iowa Department of Revenue website.

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Executive Summary

The Iowa Child and Dependent Care (CDC) Tax Credit was enacted in 1977 to provide tax relief to taxpayers with eligible child care costs for qualifying children under age 13 or disabled dependents. The refundable Iowa CDC Tax Credit ranges from 75 to 30 percent of the federal CDC Tax Credit depending on the adjusted gross income of the taxpayer, with a maximum claim of $1,575 for a household with two or more qualified children or dependents for taxpayers with income under $10,000.

The Iowa Early Childhood Development (ECD) Tax Credit was enacted in 2006 to provide tax relief to taxpayers with eligible early childhood development expenses for qualifying children between ages 3 and 5. This refundable credit is equal to 25 percent of the first $1,000 in expenses, resulting in a maximum claim of $250 for each qualifying child.

Both credits can only be claimed by households with Iowa adjusted gross income below $45,000. Taxpayers can claim only one of these two credits in a tax year.

The major findings of the study are these:

Federal and State Tax Programs to Subsidize Child and Dependent Care

- The federal Child and Dependent Care Tax Credit, created in 1976, today allows taxpayers to reduce tax liability between 35 and 20 percent, depending on the income of the taxpayer, of $3,000 in eligible child care expenses for one qualifying child or $6,000 for two or more qualifying children. The federal credit is nonrefundable, but has no income limit.

- In tax year 2012, 22 states and the District of Columbia offered tax credits for child and dependent care costs and four states offered a deduction for these costs. One state offered both a credit and a deduction.

- Thirteen states’ credits are refundable for at least some taxpayers, 10 are fully refundable.

- Eleven states have income limits for taxpayers that want to claim the tax credit. The income limits range from $30,000 to $100,000.

- Seventeen states and D.C., including Iowa, have credits that are based on the federal CDC. Among those states, the maximum percentages of the federal credit offered range from 20 percent in Kentucky and Oklahoma to 110 percent in New York.

State Programs to Support Early Childhood Development

- No other states were identified as having a tax credit for early childhood development expenses in tax year 2012.

- Forty states, including Iowa, and the District of Columbia had some form of state-funded free preschool programs in tax year 2011.

- Iowa has two free preschool programs with State spending per child enrolled in pre-kindergarten/preschool of $3,423 and total State spending of $79 million in 2011.

- One program, the Statewide Voluntary Preschool Program for Four-Year-Old Children, was created in 2007 and covered 21,402 children in 2012 at a cost of $60 million.

Characteristics of Child and Dependent Care Tax Credit Claimants

- For tax year 2011, 26,711 households claimed $7.5 million in CDC Tax Credits. The average claim per household was $280.

- In tax year 2012, an administrative rule change limiting claims to only those taxpayers who are able to claim the federal CDC resulted in the number of claims declining by 25 percent and the total amount of claims declining to $4.5 million.

- For households filing tax returns, reporting a child under age 13 and income below $45,000, only 20.0 percent claimed the CDC Tax Credit in tax year 2011; that rate dropped to 16.8 percent in tax year 2012.

- CDC Tax Credit claimants are limited to low-income taxpayers. In tax year 2011, households with income between $20,000 and $29,999 comprised 30.7 percent of the number of claims and claimed 33.3 percent of the tax credit dollars. Approximately one third of the credit is refunded to claimants.

- Single parents claimed 81.7 percent the credits. Taxpayers aged between 26 and 30 made 29.6 percent of the claims. Households with just one child made 54.5 percent of claims. The age of the oldest qualified child was concentrated between ages 6 and 12.

Characteristics of Early Childhood Development Tax Credit Claimants

- The ECD Tax Credit claims have been increasing since its enactment in 2006. The total amount increased from $0.5 million in 2006 to $0.9 million in 2012. In tax year 2011, 4,715 households claimed $0.8 million in credits with an average claim per household of $159.

- For households filing tax returns, reporting a child between ages 3 and 5 and income below $45,000 in 2011, only 9.2 percent claimed the ECD Tax Credit; in tax year 2012, that rate rose to 11.8 percent.

- ECD Tax Credit claimants are limited to low-income households. In tax year 2011, households with income between $15,000 and $24,999 comprised 26.6 percent of claimants and claimed 25.1 percent of the credit.

- Married households claimed 52.1 percent of the credits. Taxpayers aged between 26 and 30 made 33.7 percent of the claims. Households with just one child made 75.0 percent of claims. The most common age of the qualified child was four.

Analysis of Tax Credit Usage Patterns

- Defined as a period of consecutive tax years during which a taxpayer claims each credit, the claiming spells for the two credits are quite short. The average CDC claiming spell is 2.3 years and the average ECD claiming spell is 1.2 years.

- Compared to taxpayers who were observed claiming the CDC in 2010 only, CDC persistent claimers, those observed claiming the credit in the three consecutive tax years of 2009 through 2011, have more children, are more likely to be a head of household filer, and have lower average income. ECD persistent claimers are more likely to file married joint compared with one-time claimers.

- Entry or exit from claiming the two credits can be explained in part by observed changes in taxpayers' qualifications for the tax credits or other characteristics related to the need for and the availability of child care or preschool. Just over 40 percent of the new claims or exits from claims can be explained by income increasing or decreasing compared with the $45,000 income limit, adding or losing qualifying children meeting the age requirements, starting a new marriage or ending a marriage, and moves into or out of urban counties.

Additional State Benefits for Child Care

- Besides the Iowa CDC Tax Credit, the State of Iowa offers the Child Care Assistance program and participates with the Dependent Care Flexible Spending Accounts to help working parents with their child care costs.

- Child Care Assistance (administrated by the Department of Human Services) covers all or a portion of child care costs for households with income up to 145 percent of the federal poverty level. In fiscal year 2013, the State spent $60.4 million to help nearly 23,000 households with children under age 13.

- Dependent Care Flexible Spending Accounts (FSA) are a tax benefit where employers can offer employees the option to set aside up to $5,000 in pre-tax income each year for eligible child care expenses.

- Overall, for low-income households, Child Care Assistance is the most valuable. For higher-income households who are not eligible for either Child Care Assistance or the Iowa CDC Tax Credit, the FSA still offers some tax relief.

I. Introduction

Iowa offers two tax credits for low-income families with young children to help with the costs of child care or preschool. The Child and Dependent Care (CDC) Tax Credit assists working parents with expenses for the care of a qualifying individual. The Early Childhood Development (ECD) Tax Credit helps parents with preschool expenses for children aged three to five. Taxpayers are allowed to claim only one of these two credits in one tax year.[1]

The CDC Tax Credit is calculated as a percent of the federal CDC Tax Credit ranging from 75 to 30 percent with the rate falling as income rises. Under current law, the maximum Iowa credit is $788 for one child or dependent and $1,575 for two or more. The Iowa credit is not available to families with Iowa income of $45,000 or over. Unlike the federal credit, the Iowa credit is refundable, which means if a taxpayer is eligible for the credit but has no Iowa tax liability the taxpayer can receive a refund equal to the credit.

The ECD Tax Credit is equal to 25 percent of the first $1,000 in eligible expenses paid for early childhood development for each dependent aged three to five. Like the CDC Tax Credit, the ECD Tax Credit is only available to taxpayers whose Iowa income is less than $45,000, and it is also refundable.

This study is organized as follows: Sections II and III provide background information about the two tax credits. Section IV briefly reviews related literature. Using a recent year's claims data for these two tax credits, various demographic characteristics are examined in Section V to describe who claims the credits and which groups of taxpayers benefit most from the credits. In Section VI, the patterns of movement in and out of these two tax credits are investigated based on claims for tax years 1996-2012. Section VII uses example households to consider how the CDC Tax Credit fits with other State programs subsidizing child care. Finally, Section VIII concludes.

II. Federal and State Tax Programs to Subsidize Child and Dependent Care

A. Child Care Costs in Iowa and the U.S

Subsidizing the expenses of child care for working parents is the motivation for the federal and Iowa Child and Dependent Care Tax Credits. Child care can present both a barrier to entering the workforce and an additional expense that makes work less rewarding (Kimmel, 1998, 2002; Gornick and Meyers, 2005; Blau and Currie, 2006). Many low and moderate-income taxpayers pay a significant portion of their incomes for child care. Middle- and upper-middle class parents also find child care is costly (Quart, 2013). For example, the cost of full-time child care for an infant in a child care center was 12 percent of median family income for married couples in Iowa and 39 percent for single parents in 2012 (Child Care Aware of America, 2013). In Iowa, the average

[1] The processing and review of these two tax credit claims is handled by the Iowa Department of Revenue (IDR) as part of its normal examination and audit programs.

annual cost for full-time care for a four-year-old child in a child care center was $7,790 and $6,427 for full-time care in a family child care home in 2012 (see Table 1).[2] These costs nearly equaled the average annual in-state tuition and fees for an Iowa public four-year college which were $7,830 in 2012. Child care is expensive not only in Iowa; the average annual child care cost for a four-year-old child in a child care center in 2012 ranged between $4,312 and $12,355 nationally, while the tuition and fees for a public four-year college ranged between $4,278 and $12,118.

Compared with other states, it is particularly important for Iowa to address the child care costs for working parents based on the child care needs of working families. The 2012 American Community Survey data (U.S. Census Bureau, 2012) show the share of Iowa children under age 6 with both parents in the labor force was 70.4 percent, which was third highest across the country (the nationwide average share is 61.4 percent).

B. Federal Child and Dependent Care Tax Credit

The federal CDC Tax Credit reduces the tax liability of taxpayers incurring eligible expenses for the care of a qualifying person which made it possible for the taxpayer to work or to seek employment.

Prior to this tax provision, the courts had ruled that expenses incurred for the care of a dependent, such as babysitting or daycare, while the taxpayer is at work are not a deductible business expense or work-related expense. Therefore, child care expenses were not deductible under IRC section 162(a) which allowed a deduction for all the ordinary and necessary expenses paid or incurred during the taxable year in carrying on any trade or business. There were two main reasons for the Board of Tax Appeals refusing to allow the child care deduction as a job expense over 70 year ago: first, the expenditures were essentially "personal" expenses; second, a deduction could not be made for an expense that was a substitute for imputed non-taxable income, a housewife's services (Smith V. Commissioner, 1940).

The first kind of federal tax relief for child and dependent care costs appeared in 1954 as an itemized deduction not exceeding $600 for a household regardless of the number of dependents (see Table 2). The deduction was available only to women and widowers and applied to the costs of caring for children ages 11 and younger and dependents incapable of self-care. An income-based phase-out of the deduction applied to married couples, with the allowable deduction for working wives who filed joint returns reduced by the amount a couple's combined adjusted gross income (AGI) exceeded $4,500. This reduction condition was only for working wives (excluding single parents), according to the tax form instructions. There was no phase-out for unmarried women (including married women who were legally separated from their husbands), wives

[2] "Family child care home" is a child care facility in the home of the provider, often a parent. Small family child care homes have one provider and can accept up to eight children, depending on their ages. Large family child care homes have two adults and can take up to 14 children, depending on their ages. Care is often provided for children of different ages.

whose husbands were incapable of self-support, and widowers.[3] In 1964, various changes to the deduction were made including an extension to cover the care of 12-year-olds, allowing the deduction to be claimed by married men whose wives were institutionalized or incapacitated, an increase in the maximum deductible amount to $900 for taxpayers with two or more dependents, and a rise in the starting point of the phase-out for married couples to $6,000. Effective in 1972, all gender-based eligibility rules were removed; the deduction was available to ‘‘individuals.’’ The maximum deductible amount was dramatically increased to $2,400/$3,600/4,800 depending on the number of dependents. The age limitation for qualifying dependents was raised to under age 15. The starting point of the phase-out was increased to $18,000; the amount of eligible expenses was reduced by one-half of excess AGI over $18,000. The phase-out was extended to unmarried taxpayers. The federal benefit remained a deduction through 1975, providing benefit for only those taxpayers who itemized deductions.

Effective in tax year 1976, the federal child care tax benefit was converted to a nonrefundable tax credit equal to 20 percent of eligible child care expenses up to $2,400 for one child and $4,800 for two or more children (see Table 3). There was no phase-out. Effective in tax year 1982, the flat 20 percent rate was changed to a schedule starting at 30 percent for taxpayers with income less than $10,000 and then phasing-down to 20 percent for eligible taxpayers with income over $28,000. In 1983, the ability to claim the CDC was added to the short form, US 1040A. Effective in 1988, Social Security numbers of care providers were required when filing a claim to the tax credit, and overnight camp expenses were no longer considered eligible expenses. Effective in 1989, a qualifying children's age was lowered to under age 13.

The Economic Growth and Tax Relief Reconciliation Act (EGTRRA) of 2001 made numerous expansions to the federal credit beginning in tax year 2003: it raised the top credit rate from 30 percent to 35 percent, boosted the maximum child care expenses eligible for the credit from $2,400 to $3,000 for one child and $4,800 to $6,000 for two or more children, and increased the threshold above which the highest credit rate declined from $10,000 to $15,000. The credit starts at 35 percent for those with AGI between $0 and $15,000 and it is reduced by one percentage point for each $2,000 AGI exceeds $15,000 (see Table 4). For taxpayers with AGI exceeding $43,000, the percentage remains flat at 20 percent. The 2003 version of the federal CDC Tax Credit is the most generous federal benefit to-date. The expansions, originally set to expire in 2010, were extended two years in 2010, and made permanent in 2013.

To claim the federal CDC Tax Credit, the taxpayer is required to file Form 2441 "Child and Dependent Care Expenses" with the individual income tax return. A claim to the federal CDC Tax Credit requires a qualified child or dependent, eligible expenses, and meeting additional requirements for the taxpayer (IRS Publication 503, 2013).

A qualifying child or dependent is defined as:

[3] Section 214 of the Internal Revenue Code of 1954: Starting in 1963, Congress exempted some married women who had been deserted by their husbands from the phase-out.

- A child who is under age 13 when the care is provided;
- A spouse who is physically or mentally incapable of self-care and who has the same principal place of abode as the taxpayer for more than half of the year; or.[4]
- A dependent of any age who is physically or mentally incapable of self-care and who has the same principal place of abode as the taxpayer for more than half of the year. For this purpose, whether an individual is the taxpayer's dependent is determined without regard to the individual's gross income, whether the individual files a joint return, or whether a dependent of another taxpayer.
- If a qualifying child or dependent lives with a taxpayer for only part of the tax year, only those expenses paid during that part of the year can be included in calculating the credit. A noncustodial parent may not treat a child as a qualifying individual for purposes of the credit even if the noncustodial parent may claim an exemption for the child.[5]

Eligible expenses for the federal CDC Tax Credit must be work-related to qualify for the credit.[6] Expenses are considered work-related only if both of the following are true. First, they allow the taxpayer (and the spouse if filing jointly) to work or look for work. Second, they are for a qualifying child's care. Eligible expenses must be equal to or less than the earnings of a secondary worker in a household filing jointly.

Eligible expenses do not include:

- Child support payments.
- Any child care benefits provided by an employer that a taxpayer excludes from gross income.
- Expenses covered by wages diverted to a pre-tax flexible spending account for child care expenses.
- Expenses reimbursed by a state social service agency unless the taxpayer includes the reimbursement in income.
- Expenses incurred during a period where a taxpayer worked or actively looked for work during only part of the period. Generally, the taxpayer must calculate the expenses for each day. However, there are special rules for temporary absences or part-time work.[7]

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[4] An individual is physically or mentally incapable of self-care if, as a result of a physical or mental defect, the individual is incapable of caring for his or her hygiene or nutritional needs, or requires the full-time attention of another person for the individual's own safety or the safety of others.
[5] For more information on divorced or separated parents or parents who live apart at all times during the last six months of the year, refer to the topic "Child of Divorced or Separated Parents or Parents Living Apart" in Publication 503, Child and Dependent Care Expenses.
[6] References to a qualifying child or eligible child care expenses, hereafter in this paper, are intended to include qualified dependents or eligible dependent care expenses as well.
[7] See the topic "Working or Looking for Work" in Publication 503, Child and Dependent Care Expenses for more details.

In addition, taxpayers are required to meet the following conditions to be eligible for the credit:

- Married couples must file a joint return to take the credit; married separate filing status cannot be used. However, if the taxpayer is legally separated or living apart from the spouse, he or she may be able to file a separate return and still take the credit.
- If the taxpayer is filing a joint return, both the taxpayer and spouse must have earned income unless one spouse is a full-time student. Earned income includes wages, salaries, tips, other taxable employee compensation, and net earnings from self-employment. A net loss from self-employment reduces earned income. Earned income also includes strike benefits and any disability pay a taxpayer reports as wages.
- The taxpayer must report the name, address, and taxpayer identification number (either the Social Security number or the employer identification number) of the child care provider. If the child care provider is a tax-exempt organization, taxpayers need only report the name and address on the return. If taxpayers cannot provide information regarding the child care provider, they may still be eligible for the credit if they can show that they exercised due diligence in attempting to provide the required information.

The federal CDC does not have an upper income limit. Therefore, it is not specifically targeted to low-income taxpayers, although the sliding scale rate structure has the potential to benefit low-income taxpayers more. The maximum federal credit that can be claimed by a taxpayer with maximum eligible child care expenses for two qualifying children is $2,100 if AGI is below $15,000 (see Figure 1). That amount falls as AGI increases until flattening to $1,200 at $43,000 or higher of AGI. The maximum eligible expenses and the income brackets are not indexed. Thus, each year the real value of these provisions erodes as a result of inflation.

The federal credit is nonrefundable. That is, it can only be used to offset income tax liability prior to any refundable credits, such as the federal Earned Income Tax Credit, and does not benefit those without federal tax liability. Any credit that cannot be used against current tax year liability cannot be carried forward to future tax years.

C. Iowa Child and Dependent Care Tax Credit

The Iowa Child and Dependent Care Tax Credit is targeted to low- and moderate-income families with Iowa adjusted gross income below $45,000. The goal for the tax credit is to make it financially easier for parents to work by offsetting child care costs when parents work or seek work.

The Iowa CDC Tax Credit went into effect on January 1, 1977 as a nonrefundable tax credit equal to five percent of the federal credit (see Table 3). In 1983, the state credit percentage was increased from five percent to ten percent of the federal credit. The state credit percentage was increased again in 1986 to 45 percent of the federal credit.

In 1990, the CDC became a sliding scale percentage of the federal credit spanning 75 to 10 percent and also became refundable. The change to a refundable credit meant that taxpayers with a claim that exceeded their Iowa tax liability could receive a payment from the State equal to the amount of the tax credit that exceeded tax liability. In 1993, an income limit was introduced. Only taxpayers with Iowa AGI below $40,000 were allowed to claim the CDC, and the credit rate range was truncated to between 75 and 40 percent. An additional income bracket was added effective January 1, 2006 to allow taxpayers with AGI between $40,000 and $44,999 to claim a credit equal to 30 percent of the federal credit.

Before tax year 2012, the state credit could be claimed as long as the taxpayer was eligible for the federal credit, even if the taxpayer was not able to claim the nonrefundable federal credit due to a lack of tax liability. In response to some taxpayer protests generated from audits, effective in tax year 2012, the administrative rule pertaining to the CDC tax credit, which stated that the Iowa CDC Tax Credit is a percent of the *allowed* federal CDC, was revised to clarify the that the *allowed* credit equals the actual amount of federal CDC received by the taxpayer.[8] As a result, taxpayers with no federal tax liability who did not receive any nonrefundable federal CDC could no longer claim the Iowa CDC.

Under current law, the refundable Iowa CDC Tax Credit is available to taxpayers with income less than $45,000 (see Table 4). The maximum Iowa credit is $788 for one qualifying child. For households with two and more qualifying children, the maximum Iowa credit is $1,575 for claimants with Iowa AGI below $10,000. The credit phases down to $540 for claimants with Iowa AGI between $40,000 and $44,999 (see Figure 1). To claim this credit, taxpayers must include a copy of their completed federal form 2441 or Schedule 2 of the federal 1040A. The CDC cannot be claimed if the ECD is claimed.

For nonresidents and part-year residents, the tax credit must be prorated based on the ratio of Iowa-source income to total income. For married separate filers on the same return the combined AGI of both spouses must be used in computing the credit. The credit must be divided between spouses in the ratio of each spouse’s net income to their combined net income.

D. Child and Dependent Care Tax Benefits in Other States

Across the country, twenty-seven states and the District of Columbia had some form of tax benefit that offered assistance to working families paying for child and dependent

[8] Iowa Administrative Bulletin (September 9, 2012) amended subrule 42.15(1) to provide additional clarification on how the Iowa CDC Tax Credit for Iowa individual income tax is computed by adding the bolded sentence: “42.15(1) Computation of the Iowa child and dependent care credit. The Iowa child and dependent care credit is computed as a percentage of the child and dependent care credit which is allowed for federal income tax purposes under Section 21 of the Internal Revenue Code. **For taxpayers whose federal child and dependent care credit is limited to their federal tax liability, the Iowa credit shall be computed based on the lesser amount**.” This change is supported by case law which claims that tax credits and exemptions from taxation are to be construed strictly against the taxpayer and liberally in favor of the taxing body.

care expenses in tax year 2012 (see Table 5).[9] Most state CDC provisions are linked to the federal credit, meaning that the taxpayer's state credit or deduction is determined by some or all of the provisions of the federal credit. Quite a few states have significantly modified their credit relative to the federal CDC in two ways: by making the credit refundable (families receive the credit even if it exceeds the amount of taxes owed) or by linking the credit to the child care program's quality. A few states have CDC provisions that are not tied to the federal credit.

As of tax year 2012, four states, Idaho, Maryland, Massachusetts, and Virginia, offer tax deductions for eligible expenses determined by federal CDC expenses (Montana provides a deduction that is not determined by federal CDC expenses). The maximum value of these state tax deductions ranges from a high of $509 in Massachusetts to a low of $345 in Virginia.

Twenty-two states and the D.C. had Child and Dependent Care Tax Credits for tax year 2012 (see Table 5). Most state tax credits are closely related to the federal CDC.

Seventeen states and the D.C. provide a tax credit whose amount is a percentage of the federal credit.[10] Six of the eighteen states have a CDC with a top rate of 25 percent or lower: Arkansas (both credits), Kansas, Kentucky, Oklahoma, Rhode Island, and Vermont (Child and Dependent Care Credit). The top rate is above 25 percent but below 50 percent in D.C., Georgia, and Maryland. Eight states have a top percentage between 50 percent and 100 percent: California, Colorado, Delaware, Iowa, Louisiana (Child Care Credit), Maine, Minnesota, and Vermont (Low Income Child & Dependent Care Credit). The top rate equals or exceeds 100 percent in four states: Louisiana (School Readiness Credit), Nebraska, New York, and Ohio.

The maximum value of the credits ranges from a low of $420 in Arkansas, Kentucky, and Oklahoma to a high of $2,310 in New York for two qualifying children. The maximum credit amount of Louisiana's School Readiness Credit may exceed $2,310 for more than two qualifying children since that credit allows the calculation of each qualifying child separately.

Four states, Louisiana (Household Expense Credit), North Carolina, Oregon, and South Carolina, provide a tax credit equal to a percentage of the child care expenses eligible for the federal credit. This type of credit is similar in structure to state credits that are a flat percentage of the federal credit as long as the state credit percentages of federal expenses decrease as income increases, otherwise the progressive characteristics of the federal credit will be lost. Louisiana, North Carolina, and Oregon vary the percentage inversely with income; South Carolina offers a credit equal to a seven

[9] Kansas repealed its CDC Credit in tax year 2013. This study counts Kansas's credit since the state tax provisions are reported for tax year 2012.

[10] The seventeen states are: Arkansas, California, Colorado, Delaware, Georgia, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Nebraska, New York, Ohio, Oklahoma, Rhode Island, and Vermont. Eight of the seventeen states have a sliding scale of credit rates, including Iowa (Iowa's top rate is 75 percent), with the top rates ranging from a low of 20 percent to a high of 110 percent.

percent of expenses for all taxpayers. The maximum value of the credits in these four states ranges from a high of $2,100 in Louisiana to a low of $420 in South Carolina.

Three states, New Mexico, Hawaii, and Oregon provide tax credits not determined by the federal credit.[11] New Mexico provides a credit of 40 percent of child care expenses, up to $8 per day, per child, with a maximum credit of $1,200. However, the taxpayer must reduce their state credit by the amount of federal CDC claimed against federal tax liability. Hawaii provides a tax credit for child and dependent care expenses up to $2,400 for one child or $4,800 for two or more children. Its credit is 15 to 25 percent of child care expenses, with lower-income tax filers receiving the higher percentages, for a maximum credit amount of $600 or $1,200. Oregon provides a refundable tax credit for an unlimited amount of child care expenses. Its credit is 8 to 40 percent of eligible child care expenses, with lower-income tax filers receiving the higher percentages, with no maximum credit amount. The credit rate is based on Oregon AGI and the poverty level which is a function of household size.

The credit is fully refundable in eight states: California, Colorado, Hawaii, Iowa, Minnesota, New Mexico, New York, and Oregon. Five states, Arkansas, Louisiana (Child Care Credit and School Readiness Tax Credit), Maine, Nebraska, and Vermont, have credits that are fully refundable for taxpayers whose incomes are below threshold values and nonrefundable for those whose income are above. New York’s credits are refundable for residents, nonrefundable for nonresidents, and partially refundable for part-year residents.

Four states, Arkansas, Louisiana (School Readiness Tax Credit), Maine, and Vermont, have higher tax credits available to families who use higher quality child care. Arkansas's Early Childhood Program Credit is for care provided to children in state-accredited programs. The Louisiana School Readiness Tax Credit is a percentage of the existing Louisiana Child Care Credit, with that percentage increasing with the facility’s Quality Rating System (QRS) rating. Only facilities rated two stars and higher qualify for the additional credit, and five-star providers qualify the taxpayer for a credit worth 200 percent of their Louisiana Child Care Credit. Maine doubles the credit (from 21.5 to 43 percent of the federal CDC) for taxpayers who use an early childhood program that has a quality certificate. Vermont allows a higher credit (from 24 to 50 percent) if the program meets national accreditation or credential standards.

Like the federal credit, most of the state provisions do not adjust the tax credit parameters for inflation. Only two state provisions include indexing. Oregon’s Working Family Child Care Credit is based on a household’s income relative to the federal poverty level (which is adjusted annually for inflation). The other is Minnesota’s CDC Tax Credit.

[11] Montana provides a deduction for eligible child and dependent care expenses not determined by federal credit.

E. Comparison of Tax Benefits for Child Care Expenses between Iowa and Neighboring States

Based on criteria identified in the National Women's Law Center's comparison report regarding the generosity of child care tax assistance (criteria include adequacy as measured by the tax benefit's rate, whether the benefit is a credit or deduction, and refundability, with 100 maximum grade points), Iowa's CDC Tax Credit earned a grade of 66 and a rank of seventh among all states for tax year 2010. Only Oregon (84), New York (83), Louisiana (77), Minnesota (74), Nebraska (71), and California (69), were evaluated to have more generous tax provisions than Iowa.

When focusing on Iowa's six neighboring states, it is notable that Minnesota and Nebraska are considered to have more generous CDC Tax Credits than Iowa, while Illinois, Missouri, and Wisconsin do not have state tax benefits for child care expenses and South Dakota does not have an individual income tax.

In tax year 2012, the Minnesota tax credit for filers with income up to $24,300 equals the lesser of 100 percent of the federal credit (for which the claimant is eligible, not the amount actually received), or $720 for one child or $1,440 for two or more children. For filers with income over $24,300, the credit was reduced by $18 for every additional $350 of income for filers with one qualifying child and $36 for every $350 of income for filers with two or more qualifying children. In tax year 2012, the credit fully phased out at $37,950 in household income. The income thresholds are adjusted each year for inflation.[12] The Minnesota credit uses a broad measure of income that includes all income subject to the income tax plus most nontaxable cash income, such as welfare benefits, tax-exempt bond interest, workers' compensation benefits, and so forth. The measure does not include noncash benefits that are not subject to tax, such as employee fringe benefits, Medical Assistance, and food stamps. In tax year 2010, Minnesotans claimed $14.4 million of state Child and Dependent Care Tax Credits with an average credit claim of $395 (Manzi, 2012).

Nebraska allows a state tax credit for all filers with expenses eligible for the federal credit. It is refundable only if income is below $29,000. In 2012, filers earning less than $22,000 could claim 100 percent of the federal credit; filers earning between $22,000 and $29,000 could claim a percentage between 90 and 25 percent of the federal credit. Taxpayers with income above $29,000 are eligible for a nonrefundable credit equal to 25 percent of the federal credit. The maximum credit for one child is $1,050 and the maximum credit for two or more children is $2,100. In tax year 2010 Nebraska's credit totaled $12.5 million, with $7.0 million refunded to taxpayers and $5.5 million as nonrefundable credits (Nebraska Department of Revenue, 2010).

[12] In tax year 2013, the Minnesota state credit phase-out begins when income exceeds $24,920, and the state credit is fully phased out when income exceeds $38,570.

III. State Programs to Support Early Childhood Development

A. Iowa Early Childhood Development Tax Credit

Iowa's Early Childhood Development Tax Credit was enacted in tax year 2005 and went into effect starting January 1, 2006. The goal of the tax credit is to help households with their children's early childhood expenses, particularly their preschool expenses, thus encouraging parents to invest in the development of young children and prepare them for school.

The ECD Tax Credit equals 25 percent of the first $1,000 of eligible expenses paid in a tax year for each dependent aged three through five. There is no limit on the number of dependents for which a household can claim the ECD, but the tax credit is only available to taxpayers whose Iowa adjusted gross income is less than $45,000. The ECD is refundable.

Early childhood development expenses eligible for the credit include the following:

- Services provided to the dependent by a preschool;[13]
- Books that improve child development, such as textbooks, music and art books, teacher's editions and reading books;
- Instructional materials required to be used in a lesson activity, such as paper, notebooks, pencils and art supplies;
- Lesson plans and curricula;
- Child development and educational activities outside the home, such as drama, art, music and museum activities and the entrance fees for such activities.

Early childhood development expenses that are not eligible for the credit include:

- Food, lodging, or membership fees relating to child development and educational activities outside the home;
- Services, materials, or activities for the teaching of religious tenets, doctrines, or worship, if the purpose of these expenses is to instill those tenets, doctrines, or worship.

For nonresidents and part-year residents, this credit may be claimed in full. For credits claimed by married taxpayers who elect to file separately on a combined return, the ECD Tax Credit shall be prorated to each spouse in the ratio of each spouse's net income to their combined net income. This credit cannot be claimed in the same tax year that the CDC Tax Credit is claimed.

B. Other Subsidies for Preschool Expenses in Iowa and Other States

[13] "Preschool" is defined in Section 237A.1, Code of Iowa as "a child care facility which provides to children ages three through five, for periods of time not exceeding three hours per day, programs designed to help the children to develop intellectual skills, social skills, and motor skills, and to extend their interest and understanding of the world about them."

Besides the ECD Tax Credit, Iowa supports two State-funded pre-K programs, the Statewide Voluntary Preschool Program for Four-Year-Old Children (SWVPP) and Shared Visions. These two programs are offered in conjunction with other State and federally funded preschool programs such as Head Start, Early Childhood Special Education, and Title I.

In 2007, the Iowa legislature created SWVPP.[14] The Iowa Department of Education provides administration and oversight for the program. The purpose of SWVPP is to provide an opportunity for all four-year-old children in the state of Iowa to enter school ready to learn by expanding access to research-based preschool curricula and licensed teaching staff. In calendar year 2011, 20,396 children were enrolled in SWVPP and 21,402 children were enrolled in calendar year 2012 (an additional 2,170 children also participated but received funding from other sources) (Iowa Department of Education. 2013b). Currently, the program is offered in 91 percent of Iowa's school districts. The funding totaled $58 million in 2011 and $60 million in 2012.

The Shared Visions Preschool Program was established in 1989 and is also administrated by the Iowa Department of Education. Shared Visions offers high quality child development programs for at-risk children ages three to five years whose families have an income below 130 percent of the poverty level. In calendar year 2010, State of Iowa funds totaling $0.7 million served 1,181 children. In 2011, State funding, totaling $0.7 million, served 1,048 children (Iowa Department of Education. 2013a).

Along with federal programs targeted at offsetting preschool expenses (e.g., Head Start and Early Head Start, Title-I Preschool), many states offer state-funded programs to offset preschool costs. Barnett et. al. (2012) summarized those programs, noting that as of the end of calendar year 2011, a total of forty states (including Iowa) and D.C. had some form of state-funded free preschool programs (see Table 6). In 2011, those states spent over $5.3 billion on preschool programs, not including special education funds.[15] Among the forty states, Iowa's two preschool programs ranked seventh for four-year-old access to quality preschool programming, 17th for three-year-old access to quality preschool programming, and 26th for the amount of state spending on access to quality preschool (see Table 7).

According to Barnett et. al. (2012), Iowa's state spending per child enrolled in pre-kindergarten/preschool was $3,423 in tax year 2011 and the total state spending on pre-kindergarten/preschool was $78.5 million (including SWVPP, Shared Visions, and other programs). Among Iowa's six neighboring states, only Minnesota had state per child spending for pre-kindergarten/preschool programs higher than Iowa at $7,592. The other neighboring states had the following per child spending for pre-kindergarten/preschool: Illinois ($3,210), Wisconsin ($3,205), Missouri ($2,682), and Nebraska ($944). South Dakota did not have a state-funded preschool program.

[14] Iowa Code section 256C by Iowa Acts 2007 (HF 877).

[15] As of the end of 2011, the ten states that did not have state funded pre-kindergarten initiatives were Hawaii, Idaho, Indiana, Mississippi, Montana, New Hampshire, North Dakota, South Dakota, Utah, and Wyoming.

IV. Literature Review

A. Literature on Child Care

Numerous studies have analyzed the federal CDC and a few studies have discussed state tax provisions for child care. This section briefly reviews that existing literature, beginning with discussions of the federal CDC Tax Credit, and then turning to state child care tax benefits.

A majority of studies on the federal CDC Tax Credit used individual income tax return data to analyze characteristics of the claimants (Dickert-Conlin et al., 2005; Miller and Mumford, 2012). The limitation of this data source is missing information for potential claimers, those who did not claim the credit for some reason (e.g., ignorance of the CDC, lack of tax liability against which to claim the nonrefundable credit) but who were likely qualified for the credit. A few papers used survey data to get around that problem. For example, Gentry and Hagy (1996) employed the National Child Care Survey data to examine the distributional effects of the federal CDC among families with children. Although survey data can provide information about potential claimers, the disadvantage of self-reported claim data is inaccuracy (e.g., Gentry and Hagy pointed out in their paper that some low-income taxpayers who did not claim the federal CDC misreport claiming CDC in the survey).

Most researchers agree with the justification of providing tax benefits for work-related child care expenses. For example, Viard (2010) claimed that the federal tax credit plays an important role in encouraging work by providing tax relief for expenses that are closely linked to work. By contrast, a few researchers have raised criticism and objections to the federal CDC. The first type of criticism is related to simply the existence of tax relief for work-related expenses, such as child care. For example, Dubay and Donovan (2010) criticized the federal CDC because it "discriminates among families with comparable incomes and work effort simply on the basis of their decision to use or not use paid day care providers." The second is focused on the beneficiaries of the credit. Johnston (2010) criticized the federal credit for having "uncertain" beneficiaries. Johnston argued that child care tax credits may actually benefit businesses and not workers because of two reasons: employers can pay workers less, and more workers would be attracted to the labor market.

The literature has documented that the CDC benefits flow mainly to middle- and high-income families, while lower-income families only receive negligible benefit from the credit. Existing literature (Altshuler and Schwartz, 1996; Gentry and Hagy, 1996; and Eiler and Hrung, 2003) provides three main reasons for the fact that low-income families are less likely to claim the credit: first, they do not have tax liability against which to apply this nonrefundable tax credit; second, they do not work; third, they do not have qualifying child care expenses. IRS tax return data show that in tax year 2010, taxpayers with children and income between $75,000 and $200,000 benefit most from the credit, receiving approximately one-third of the total tax benefits while families with income under $50,000 received less than 30 percent of total federal CDC Tax Credit benefits.

Regarding the lack of eligible child care expenses of low-income taxpayers, Gitterman and Cotton (2003) pointed out that a large portion of low-income parents rely on informal child care provided by relatives, friends, or neighbors. Those informal providers may not be willing to provide such care if they knew that information about their income-producing activities will be furnished to the IRS. Forry and Andersona (2008) also discussed how low-income taxpayers failure to claim the CDC may be associated with their tendency to rely on relative care and unregulated family day care.

Despite the low utilization of the federal CDC by low-income households, Ellwood and Liebman (2001) argued that middle-income parents receive substantially smaller total tax benefits associated with children compared with low-income and high-income families based on the cumulative effects of federal tax benefits for parents (CDC, together with the EITC, dependent exemption, Child Tax Credit, employer-provided dependent care, and other tax benefits).

Some studies have attempted to estimate the impact of the federal CDC on households' use of child care. Studies have found that when the financial implications of a tax change are not highly salient, the tax change induces an under-response compared to the effect of an equivalent price change. Nevertheless, Miller and Mumford (2012) showed evidence that taxpayers over-responded to recent changes in the federal CDC. The 2003 expansion of the federal CDC Tax Credit would have appeared as an unambiguous decrease in the after-tax price of child care, holding other things equal. The same legislation expanded the federal refundable Child Tax Credit by increasing the credit from $600 to $1,000 per child and providing advance tax refund checks of $400 per child. For many low-income taxpayers, the increase of the Child Tax Credit reduced their federal tax liability, which reduced the value of the nonrefundable federal CDC. As a result, the after-tax price of child care actually increased for many low-income taxpayers. But this interaction is not obvious to taxpayers. The authors estimated that a one dollar increase in the perceived value of the federal CDC caused a 99 cent increase in annual child-care expenditures.

By reducing the effective cost of child care, the CDC could increase labor force participation in households with young children. Anderson and Levine (2000) estimated that the overall elasticity of mothers' labor force participation with respect to the market price of child care is between -0.05 and -0.35. Thus a 10 percent decrease in the price of child care increases labor force participation of mothers by 0.5 percent to 3.5 percent. Although the employment effect of tax benefits for child care has been documented by many studies, only a few of them are focused on the federal CDC Tax Credit. For example, Averett et al. (1997) suggested that women's labor supply responded to the effective wage (the wage net of child care costs and the subsidy) rather than to the gross wage. Their policy simulation showed that the current federal CDC substantially increases labor supply; women's annual working hours are estimated to be 12.9 percent higher from 929 hours without the federal CDC to 1,066 hours with the credit.

Along with discussions and analysis of the effects of the existing federal CDC, many articles included proposals to modify the credit (Burman et al., 2005; Rohaly, 2007; Maag et al., 2011; Faulhaber, 2013). These reform suggestions focused on three points: first, changing the federal CDC into partially or fully refundable to give low-income taxpayers more access to the credit; second, indexing the eligible expenses and income brackets so their value does not erode over time; and third, raising the eligible expense limits for the credit to reflect or even fully match the actual price of child care. Rohaly (2007) estimated making the federal credit fully refundable beginning in tax year 2008 would reduce federal tax revenues by $18.4 billion between 2008 and 2017 . In addition, some studies (Carasso et al., 2003; Hassett et al., 2009; Maag, 2010) argued for some unified tax benefit with respect to children by combining the dependent exemption, Child Tax Credit, EITC, CDC, etc. into one tax benefit to simplify the tax code.

In comparison with the large body of literature on the federal CDC, fewer studies have examined the claimants and effects of state CDC Tax Credits.

One strand of this literature compares a particular state's tax provisions for child care to the federal credit. For instance, Manzi (2012) analyzed the Minnesota CDC Tax Credit. The author argued that the Minnesota CDC better targets low-income taxpayers by noting that 78 percent of federal CDC Tax Credits are claimed by those with incomes over $50,000, while 46 percent of the Minnesota CDC Tax Credits are claimed by those with incomes under $20,000. For the North Carolina Credit for CDC Expenses, McLenaghan (2011) found 20 percent of the federal tax credit went to families with incomes under $40,000 in 2006, but more than 35 percent of the North Carolina tax credit went to families with incomes under the same threshold. Therefore, McLenaghan claimed the North Carolina CDC is "especially important to low- and moderate income families" because many of them have greater state income tax liability than federal income tax liability.

Two prior Tax Credits Program Evaluation Studies completed by the Iowa Department of Revenue have included information about CDC and ECD claimants. Using Iowa individual income tax return data, Jin and Rogers (2012) and Rogers and Gullickson (2012) compared the CDC and ECD claimants' distribution by income level to the Iowa Earned Income Tax Credit (EITC) for tax year 2009 and the Iowa Tuition and Textbook Tax Credit (TTC) for tax year 2010, respectively. Those two papers found that the percentage of low-income claimants was highest for the EITC, followed by the CDC, the ECD, and last the TTC. Gullickson and Harris (2007) analyzed the dynamics (trend, exist, and entry) of the four Iowa family credits including the CDC along with the Dependent Credit, EITC ,and TTC between tax years 1996-2007; they did not include the ECD because the credit was first available in 2006. They found that the average number of years that taxpayers consecutively claimed the CDC was approximately two years; taxpayers with repeated CDC claims were less likely to be married and had lower average income than one-time claimers; and adding a dependent, an end of a marriage, a drop of earned income, and entry into the labor force were major reasons for new CDC claims.

Another branch of literature analyzed the variation of cross-state tax provisions. Polakova and Viard (2013) examined the variation in state tax policies for child care. They found that states with higher income tax rates are more likely to provide tax relief for child care costs. Other factors they found positively correlated with the propensity of providing state tax benefits for child care are the fraction of the state's voters who cast their ballots for Obama in the November 2012 presidential election, allowance of same-sex marriage in January 2013, and the state's marriage rates in 2010.

B. Literature on Early Childhood Development

A large body of literature has discussed the importance of early childhood investment based on short-run or long-run positive effects of early education on children especially low-income children, such as cognitive ability, non-cognitive ability, lifetime earnings, labor supply, and various social outcomes (e.g., Cunha and Heckman, 2006; Heckman et al., 2010a, 2010b; Duncan and Magnuson, 2013) .The investment programs discussed are focused on Head Start, Child Care Subsidies, government-funded preschool programs, and the Special Supplemental Nutrition Program for Women, Infants and Children (WIC). Few studies discuss the early childhood development from the parents view. As Duncan and Magnuson (2013) pointed out, compared with other early education programs, few low-income children can benefit from federal or state tax credits because they can only claim limited amounts and the sizes of tax credits are typically small.

V. Analysis of Child and Dependent Care Tax Credit and Early Childhood Development Tax Credit Claims and Claimants

The main data source used in this study is Iowa individual income tax returns which include taxpayers' income, tax credits claimed, and tax liability. The taxpayers' age, county of residence, number of dependents, and the ages of up to four dependents are also available. Unfortunately, typical demographic measures such as educational attainment, gender, and race of taxpayers are not available. The analysis focuses on tax year 2011 as that is the most recent year of completed return data.[16]

A. Claims to the Tax Credits

Between 1977 and 2012, the total amount of the Iowa Child and Dependent Care Tax Credit claims increased from $1.6 million to a high of $15.5 million in 1988 before falling to $4.5 million in 2012 (see Table 8 and Figure 2).[17] Between 1984 and 2012, the number of taxpayers claiming the CDC Tax Credit increased to a high of 176.8 thousand in 1988 when the credit had no income limit, before declining to 23,376 in 2012 (prior to 1984, data for the number of claims are not available). The number of claimants presented here is on a taxpayer basis, thus households filing married

[16] Tax year 2012 returns were filed during 2013 through the extended filing due date of October 31, 2013 and were reviewed through the entire year. Therefore, 2012 data were not complete for this study although data for the majority of returns was available.

[17] In this section, all amounts provided are nominal (not adjusted for inflation).

separately on the same return are counted as two taxpayers.[18] The average amount claimed per return increased from $66 in 1984 to a high of $243 in 2005, then falling to $193 in 2012.

Over the years, changes in the tax provisions for the federal and Iowa CDC have caused variation in claims numbers and amounts. The largest increase in the total amount of claims from $3.5 million to $8.1 million (134.4%) occurred between 1982 and 1983, reflecting that in 1983 the Iowa credit percentage linked to federal credit rose from 5 percent to 10 percent. Between 1992 and 1993, the number of claims decreased dramatically from 145.3 thousand to 67.8 thousand (-53.3%). Starting in 1993, the Iowa Child and Dependent Care could only be claimed by households with income below $40,000. The introduction of an income limit also decreased the total claimant amount from $10.4 million to $7.9 million (-24.0%). As a result, in 1993 the average claim amount experienced the biggest increase from $72 to $117 (62.8%) because higher income claimants eligible for only 30 percent or less of the federal credit were no longer qualified to claim the Iowa CDC. In 2003, the federal CDC expansion explains the increase in the total amount claimed from $6.2 million to $8.4 million (35.5%). In 2006, raising the Iowa income limit to $45,000 led to an increase of claimants from 33.9 thousand to 39.4 thousand (16.3%) in counts and an increase in total credit dollars from $8.2 million to $8.9 million (8.2%). After 2006, both the counts and amounts of claims have been decreasing gradually, which is consistent with the slow growth of the federal CDC in recent years, as both credits' parameters are not indexed. With the administrative rule change in 2012 clarifying that Iowa claims are a share of actual federal claims, the number of claims dropped approximately one quarter and total claims dropped 40 percent.

Both the number of taxpayers making claims and the total amount of claims have been increasing since the enactment of the ECD in 2006. Between 2006 and 2012, the number of ECD claimants, measured on an individual taxpayer basis, increased from 3,218 to 5,768 while the amount of claims increased from $0.5 million to $0.9 million (see Table 9 and Figure 3). In 2007, the second year after enactment of the ECD, the number of claims rose from 3,507 to 3,790 (8.1%) and the amount of claims increased by $45,000 (10.5%). The largest increase in claims occurred between 2010 and 2011; the number of claims increased from 4,303 to 5,112 (18.8%) and the amounts of claims rose from $0.6 million to $0.8 million (26.7%). There is no policy change to explain the increases. It is possible that taxpayers are becoming more aware of the credit over time.

Another way to assess the tax credit claims is to look at the take-up rate (or utilization rate) over time. The take-up rate for the CDC is measured as the share of CDC claimants to the number of households filing tax returns with income below $45,000 and with at least one dependent under age 13 who did not make a claim to the ECD which would make them ineligible for a CDC claim. Because the Iowa Earned Income Tax Credit was available for working parents with earned income up to $41,132 with one child, $46,044 for two children, and $49,078 for three or more children in tax year 2011,

[18] Historical claimant counts prior to 1995 are only available from the IDR Individual Income Tax Annual Statistical Reports which present tax credit claim counts on an individual taxpayer basis.

it is believed that most low-income working parents would file an Iowa tax return. However, many of these households may not use child care either because a parent is available to provide the care, or care is provided by another relative at no cost. Therefore, it is expected that take-up rates for the credit will be well below 100 percent. Indeed, the CDC take-up rates have been below 26.0 percent (see Figure 4). In general the take-up rate of the CDC has been decreasing from 26.0 percent to 17.8 percent in 2012.

The ECD take-up rate is measured as the share of households with at least one child between ages 3 and 5 and income less than $45,000 who did not make a claim to the CDC which would make them ineligible for an ECD claim. Again, it is expected that the take-up rate will be well below 100 percent because many alternatives to paying for preschool are available, including State child care programs that support early childhood development. Also, it is not necessary for parents to invest in early childhood development, so taxpayers may not have eligible expenses. Overall, the take-up rate of the ECD is lower than that for the CDC. In contrast to the CDC take-up rate, the ECD's take-up rate has been increasing quickly in recent years: The rate jumped from 9.7 percent in 2010 to 12.1 percent in 2011, and then in 2012 it rose to 13.4 percent (see Figure 4).

Take-up rates were also analyzed on a county level, based on the county reported by households on the tax returns. In tax year 2011, CDC take-up rates ranged from 32.0 percent in Carroll County to 11.0 percent in Wayne County (see Figure 5). For the ECD, Greene County had the highest take-up rate at 18.4 percent, followed by Marion County at 18.3 percent. Buena Vista County had the lowest take-up rate at 2.2 percent (see Figure 6).

B. Child and Dependent Care Tax Credit Claimant Characteristics

In tax year 2011, 7.7 percent of claimants reported Iowa adjusted gross income less than $10,000, 37.1 percent reported AGI between $10,000 and $24,999, and the remaining 55 percent of claimants reported between $25,000 and $44,999 in AGI (see Table 10). Note that claims are reported on a household basis; returns filing married separate on the same return are counted as one claimant. In terms of the amount of credits claimed, 9.6 percent was claimed by taxpayers with AGI less than $10,000. The pattern of the average CDC claim by income group shows the structure of the CDC as it relates to income, with the average credit being higher at lower income levels and then falling as the credit rate phases-out. Those with negative AGI had the highest average claim at $484. Between AGI levels of $20,000 and $45,000, the average claim decreased from $357 to $136. The administrative rule change effective in tax year 2012 resulted in a drop in the share of households making claims and the share of claims received by those with AGI less than $10,000 (see Table 11). Preliminary tax year 2012 claims by income demonstrate the impact of that rule change with only 1.6 percent of claimants and 2.4 percent of claims going those taxpayers.

With many CDC Tax Credit claimants reporting low income, for tax year 2010, about one third of the credit was received by households as a refund (see Table 12).[19] It is not surprising to see that the refunded portion is higher for low-income households. For taxpayers' with income less than $15,000, over 90 percent of the credit amount was refunded. For those with income between $15,000 and $19,999, about one-half of the credit was refunded. For claimants with income between $20,000 and $45,000, the majority of the credit was used to offset Iowa tax liability. Overall, 16.7 percent of claimants received a full refund of the credit, 65.8 percent used the entire credit to offset liability, and the remaining 17.6 percent of claimants used part of the credit to offset liability and received part as a refund.

Head of household filers made up the largest share of CDC claims by filing status (67.2%), followed by married filing separately on combined returns (18.5%), single filers (8.1%), married joint filers (6.0%), and qualifying widow(er) (0.2%) (see Table 13). In total, unmarried taxpayers - single, head of household or qualifying widow(er) - comprised 75.5 percent of all CDC claimants, while married filers accounted for 24.5 percent. When viewed by amount of credits claimed by filing status, taxpayers filing as head of household claimed the largest share (72.3%). Taxpayers using married filing separately on combined returns, who had the second largest share of claims, also had the second largest share of the amount of credits claimed (13.0%).

The majority of CDC claimants had one dependent under age 13 (54.5%) and one-fourth had two dependents (25.9%), while households with three or more dependents under age 13 made up 8.0 percent of claimants. In terms of amount of credits claimed, households with one or two dependents claimed the largest shares of credit dollars (51.8% and 30.1% respectively). It is noticeable that 1.0 percent of taxpayers reported no dependent under age 13 but claimed the CDC Tax Credit. This might reflect several possible explanations such as a disabled spouse, a disabled dependent aged 13 or older, or a child care arrangement after divorce.[20] The eldest child in all children under age 13 in a household were concentrated between ages 6 and 12 at 42.2 percent. The highest average household tax credit claim of $362 was made by households with two dependents under age 13.

Taxpayers making CDC claims were concentrated in the age groups of 26-30 and 31-35 (defined using the primary taxpayer's age). The plurality of claims were made by households where the primary taxpayer was between ages 26 and 30, both in terms of the number of claims (29.6%) and in terms of the amount of credits claimed (31.3%). In addition, nearly one-fourth of all claims (23.8%) and dollars claimed (23.5%) were made by households in which the taxpayer was between the ages of 31 and 35. This is not surprising because these taxpayers are most likely to have young children at home. These taxpayers are also relatively new to the labor force and are more likely to have lower earnings to meet the income limit of the tax credit.

[19] Tax year 2010 data were reported for the refundability distribution because a data problem exists with the tax year 2011 return data regarding the calculation of tax liability.
[20] Child age information is pulled from federal tax return data which contains the birthdates of up to four children. However, not all Iowa returns were able to be matched to a federal return.

Nearly all CDC claims were made by Iowa residents; 25,444 (95.3%) Iowa resident households claimed $7.2 million (96.8%) in tax credits in tax year 2011 (see Table 13). Nonresidents may claim the Iowa CDC if they have Iowa-source income. In 2011, 1,267 (4.7%) claimed $0.2 million in CDC Tax Credits.

Federal Form 2441 provides some information about eligible child care expenses. Data from the form is available for claimants who filed their Iowa return electronically with their federal electronic return included. For tax year 2012, 91,879 households (including those who did not claim the Iowa CDC) filed electronically included positive child care expenses on Form 2441(see Table 14). The eligible child care expenses for qualifying children totaled $370.1 million. On average, a household paid $4,028 for child care for their qualifying children or $2,650 for each child. Overall, 38.4 percent of households reported child care expenses higher than $3,000 if one child or higher than $6,000 for two or more children, which indicates these families face the maximum expenses cap under the federal tax credit. The highest average eligible expenses per child, $2,924, was reported by taxpayers with AGI of $0 or less, and the second highest average, $2,828, was reported by those income was $45,000 or higher.

In tax year 2011, CDC claim amounts ranged from $1 to $1,575. The majority of claims were $250 or under with 25 percent of claims under $100. Above $200, there was no amount at which more than 10 percent of taxpayers made claims including those amounts that are in response to the maximum eligible expenses for the federal CDC Tax Credit, such as $788 or $1,575 (see Figure 7). Despite Form 2441 data suggesting more than one-third of taxpayers have expenses higher than the maximum expenses limit, credits do not bunch at the maximum claim amounts because of the Iowa and federal rate phase-downs.

C. Early Childhood Development Tax Credit Claimant Characteristics

ECD claimants and claims were concentrated in income groups exceeding $10,000 with 38 percent of claimants reporting AGI between $10,000 to $24,999, making 35 percent of claims, and 47 percent of claimants reporting AGI between $25,000 and $44,999, making 52 percent of claims. Those households whose AGI was lower than $10,000 made up only 14.4 percent of the claims and 14.3 percent of the credit dollars (see Table 15). The income distribution for claimants in tax year 2012 is similar to 2011 (see Table 16). Note that claims are reported here on a household basis; returns filing married separate on the same return are counted as one claimant.

Like CDC's refundability distribution, around one-third of the ECD Tax Credits were refunded in tax year 2010 (see Table 17). For households with income less than $15,000, over 90 percent of the credit was refunded. But different from the CDC, for claimants with income between $40,000 and $44,999, over five percent of ECD claims were refunded, while only two percent of the CDC claims were refunded.

Like the CDC claimants, head of household filers made up the largest share of ECD claimants by filing status (46.7%) and also the largest share of credits claimed (46.5%)

(see Table 18). Unlike for the CDC, married joint filers made up the second largest share of ECD claimants (25.8%) and amount claimed (25.7%). Taxpayers filing married separately on combined returns were only the third largest share of claimants (20.4%) and amount claimed (20.7%). The higher share of married joint filers as ECD claimants likely reflects that one-earner, married households having kids in preschool can claim the ECD but they are not qualified to claim the CDC. In total, unmarried taxpayers made 52.6 percent of the claims and 52.1 percent of total credits claimed.

The majority of ECD claimants had one dependent in the household (75.0%) while households with two dependents made up 11.1 percent of the claimants. Over 200 households claimed the ECD but reported zero dependents between ages 3 and 5 which may reflect a child custody arrangement after divorce. The age of the oldest eligible child of one-third of claimants was four-years-old and another 30 percent had a five–year-old, while claimants with the eldest child as a three-year-old was about 20 percent. The majority of claims were made by households where the taxpayers were between the ages of 26 and 30, both in terms of the number of claims (33.7%) and in terms of the amount of credits claimed (33.3%). Primary taxpayers aged 31-35 had the second largest share of the claims (24.6%) and the amount claimed (25.3%). These households are most likely to have preschool-age children.

In 2011, 1,460 (31.0%) claimants claimed the maximum ECD Tax Credit of $250, which reflects eligible expenses of $1,000 or more, assuming one qualifying child (see Figure 8). A maximum claim of $500 for households with two qualifying children were claimed by 145 (3.1%) households and only 4 (0.1%) claimed $750, a maximum claim for a household with three qualifying children. In total households with likely maximum claims made up 34.1 percent of all claimants. The large share of those claiming the $250 credit likely reflects that not many claimants have more than one qualifying child. This suggests that one-third of claimants incurred at least $1,000 in eligible expenses during the tax year and two-thirds of claimants reported early childhood expenses below $1,000.

D. Claiming Patterns between the Federal CDC, Iowa CDC, and ECD

In tax year 2011, over 100,000 Iowa taxpayers claimed the federal CDC Tax Credit, the Iowa CDC Tax Credit, the ECD Tax Credit, or some combination of two credits.[21] Because the federal CDC Tax Credit is nonrefundable and the Iowa CDC Tax Credit is refundable but limited to households with income below $45,000, it is not surprising that claims for the two credits did not overlap for many taxpayers. In addition, taxpayers who had eligible child care and early childhood development expenses for children ages 3 to 5 are allowed to choose between the CDC and ECD. Thus, it is worthwhile to examine the claiming patterns among the federal CDC, state CDC, and ECD (see Table 19).

The 18,440 households who claimed both the federal and Iowa CDC credits (Group A) were concentrated in income levels between $20,000 and $44,999. The 61,334 households who claimed the federal CDC Tax Credit and did not claim the Iowa CDC Tax Credit, but may have claimed the ECD Tax Credit, (Group B) were concentrated in

[21] Information on federal CDC claims is taken from federal return data provided to IDR by the IRS.

AGI groups between $45,000 and $200,000. These taxpayers were able to claim the federal credit, which is unlimited by income, but not the Iowa credit, which is limited by income. Among those households with income below $45,000 and only claiming the federal CDC Tax Credit, 72.6 percent (789 households) claimed the ECD Tax Credit. Of the 8,294 households who only claimed the Iowa CDC Tax Credit (Group C), 73.5 percent had AGI between $5,000 and $24,999 and received 80.0 percent of the total amount claimed. A likely scenario is that these filers did not have enough federal tax liability to use the nonrefundable CDC, while they were able to claim the refundable Iowa CDC in 2011.

Of the 4,715 ECD claimants, 82.2 percent (3,867 households) did not claim the federal CDC (Group D). This suggests that a majority of ECD claimants did not have enough federal tax liability to claim the nonrefundable federal CDC but were able to claim the Iowa credit because of its refundability, or did not have eligible child care expenses but did have preschool expenses.

Comparing the ECD claimants who also claimed the federal CDC (Group B) with those who did not claim the federal CDC (Group D), only five ECD claimants with AGI of $10,000 or less claimed the federal CDC, which may again reflect that low-income households may lack federal tax liability to claim the federal CDC. In comparison, 17.2 percent of ECD claimants who did not claim the federal CDC had income below $10,000.

Overall, in tax year 2011, the total average credits claimed by all Iowa taxpayers for both the federal and Iowa CDC was $453. These credits comprise only 7.1 percent of the average four-year-old child care cost in Iowa ($6,423) mentioned in Section I. This indicates that the current law CDC Tax Credits, both the federal and the Iowa, only offset a small share of actual child care costs.

E. Claiming Patterns of Iowa CDC, ECD, and Other Tax Credits for Families with Children

Iowa also provides other tax credits for families with children, including the refundable Earned Income Tax Credit (EITC) (equal to 7 percent of the federal EITC in tax year 2011; the credit was raised to 14 percent of the federal EITC in tax year 2013 and 15 percent for tax years 2014 and later), the nonrefundable Dependent Credit (equal to $40 per dependent claimed on the Iowa return, as specified by the Internal Revenue Code), and the nonrefundable Tuition and Textbook Tax Credit (equal to 25 percent of the first $1,000 of tuition and textbooks expenses paid for each child attending Kindergarten through 12th grade in an accredited Iowa school). In tax year 2011, 83.1 percent of Iowa's CDC claimants also claimed a total of $3.7 million in the Iowa EITC and 96.8 percent claimed the Dependent Credit totaling $1.7 million (see Table 20). Only 1.3 percent claimed a total of $0.02 million in TTC, which likely reflects that the majority of CDC claimants did not have eligible expenses for TTC or Iowa tax liability against which to claim the nonrefundable credit. Summing the claims for those three credits with the CDC claims, the CDC claimants received $12.9 million in credits either offsetting Iowa tax liability or refunded to the claimants. Those with income below zero had the highest average credits amounts at $661. Households with income between $40,000 and $44,999 had the lowest average amount at $228.

For ECD claimants, 83.1 percent claimed a total of $0.8 million of EITC (see Table 20). The total amount of Dependent Credit was $0.4 million. Only 1.0 percent claimed the TTC, which indicates that ECD claimants did not have eligible expenses to claim the TTC. Overall, the ECD claimants received $1.9 million from State family credits with an average total claim amount of $407 per household. The highest average amount per household was $490 for taxpayers with income between $15,000 and $19,999 and the lowest average amount per household was $299 for households with income between $40,000 and $44,999.

VI. Analysis of Tax Credit Usage Patterns Over Time

In this section, claimants were tracked over time to examine the persistence of taxpayer claims to the CDC and ECD and factors associated with taxpayers starting or stopping claims to the credits across tax years. This could reveal issues with the current credit structures that limit the ability for taxpayers to make claims and inhibit the credits from fulfilling the goals behind their enactment.

A. Credit Claiming Spells

A credit claiming spell is defined as a period of consecutive tax years during which a taxpayer claimed the tax credit of interest. The length of a spell equals the number of consecutive years the taxpayer claimed the credit. If a household claims the credit for three consecutive years, does not claim the credit in one tax year but claims the credit again the following year, they begin a new spell in that year. A completed spell is defined as a credit claiming spell where the start and the end of the spell are both observed.[22] A longitudinal data set was constructed for each tax credit including taxpayers who filed returns in every tax year during the specified period and reported at least one claim for the tax credit.[23] For the Child and Dependent Care Tax Credit, the longitudinal dataset spans tax years 1996 through 2012. Because the Early Childhood Development was first available in tax year 2006, the dataset for the ECD covers only tax years 2006 through 2012. When calculating spell length for CDC Tax Credit claims, including spells with claims in the first year of the panel (tax year 1996) will likely

[22] For example, between tax years 1996 and 2012, a taxpayer who claimed the CDC during tax years 1997, 1998, 2002, 2003, 2004, 2010, and 2011 would be considered as experiencing three CDC spells or three completed spells: the first spell (or completed spell) lasting two years 1997-1998, the second lasting three years 2002-2004, and the third one lasting two 2010-2011. For a taxpayer over the same period who claimed CDC during tax years 1996, 1997, and 2010 is counted as having two spells, but only one completed one-year spell 2010; the spell covering 1996-1997 is left censored, since it is unknown how many prior consecutive years the taxpayer may have claimed the credit, and is excluded from the analysis of completed spells.

[23] Taxpayer households were identified as being in all tax years between 1996 and 2012, and thus included in the balanced panel, based on the social security number of the primary taxpayer. Attempts were made to match tax records where households switched the designation of primary and secondary taxpayers between tax years.

underestimate the spell length because recipients may have claimed the credit in prior tax years. Similarly, including taxpayers with claims in the last year of the panel (tax year 2012) will also likely underestimate the spell length because some percentage of taxpayers are likely to continue claiming the credit in the following years. Therefore, completed spells are also examined which include spells starting as early as the second year in the panel (tax year 1997) and ending in the second to last year of the panel (tax year 2011). Because the ECD was a new credit in 2006, any spells beginning in that year are by definition first year claims, thus all of those spells are included in the analysis. The longest possible spell is 17 years for the CDC and 7 years for the ECD, with a maximum of 15 years for a completed spell for the CDC and 7 years for the ECD.

Based on the spell length distribution over the past 17 years, it appears that most CDC spells are short (see Table 21). For all CDC spells, 45.6 percent last one year and 24.7 percent last two years for a total of 72.3 percent of spells completed in 2 years or less. Overall, the average CDC spell length is 2.3 years. Only 6.7 percent of CDC spells last longer than five years. Around half of claimants claimed multiple spells. Completed CDC spells demonstrate a similar distribution of length as that of all the spells.

On average, ECD spells lasted 1.2 years (see Table 22). Only 0.2 percent of ECD spells last five years; 84.4 percent of spells last one year and 12.3 percent last two years. Completed ECD spells also indicate that the claiming length of ECD is short. It is not surprising to see the ECD spells are short due to the age limit for qualifying children is between 3 and 5. The only way a household can have an ECD spell longer than three years is to have multiple children qualifying for ECD in consecutive years. Only around 10 percent of claimants claimed multiple ECD spells.

B. One-Time vs. Persistent Claimants

It is natural to ask, is there any significant difference in the characteristics of households who claimed the tax credits for only for a one-year spell and those with longer spells? Tax years 2009-2011 data are examined to address this question. Claimants in all the three tax years 2009 through 2011 (persistent claimants) are compared with households that only claimed the credit in tax year 2010 during the three-year span (one-time claimants) (see Table 23). For both groups of taxpayers, characteristics in 2010 are reported. While 48.4 percent of the persistent CDC claimants filed head of household, 66.3 percent of one-year claimants filed head of household. In contrast, 25.6 percent of persistent claimants filed married joint compared to only 5.8 percent of one-time claimants. Based on filing status, CDC persistent claimants were more likely to be married. Persistent claimants were more likely to have multiple dependents, 43.8 percent, compared to only 32.8 percent of one-year claimants. Surprisingly, CDC persistent claimers had a higher average income than the one-time claimants.

Compared with one-time ECD claimants, persistent ECD claimants are older on average, have more children, and have slightly higher average income (see Table 24). It is notable that the share filing married joint for persistent ECD claimants is 46.6 percent, much higher than the 24.4 percent for one-time claimants. This reflects that couples with one spouse working and one spouse not working would not be eligible for the CDC and thus are more likely to claim the ECD.

C. Entry and Exit of the Credit Claims

Given that the majority of spells for these credits last two years or less, it is also useful to attempt to identify the reasons why taxpayers move in and out of claiming these credits. Taxpayers observed over the three year period, 2009 through 2011, were divided into those that made a claim in 2009 but stopped claiming in 2010 and those that did not make a claim in 2009 and started claiming in 2010. For claimants who started a new CDC spell in tax year 2010, 22.6 percent had experienced a drop in income from above the $45,000 income limit in 2009 to below $45,000 in 2010, which enabled them to meet the income limit requirement for the credit (see Table 25). For the other new claimants, 17.5 percent had an increase in the number of dependents under age 13 and 2.6 percent ended a marriage in 2010, which may explain a new need for child care. Other factors such as moving to an urban county, which may indicate a new employment opportunity or a move to a location with more child care options, or starting work can only account for a negligible share of households after the above three factors. In total, the identified factors can explain 43.7 percent of new CDC claims.[24] The unexplained percentage (56.3 percent) might indicate taxpayers who switched child care and thus had newly eligible child care expenses, which is unobservable in the tax return data. For example, households who switch from having a child cared by a relative at home in 2009 to a child care center in 2010 would be newly eligible.

Next, reasons for stopping a CDC claim spell were considered. For the CDC exit, an income increase above the $45,000 limit (29.8%) dominated the explanations. Other explanations include households who no longer have dependents under age 13 (7.5%), a new marriage (1.7%) and moving out of an urban county (1.1%). In total, the identified reasons can explain why 40.1 percent of taxpayers stopped claiming the CDC.

For the ECD claims, 12.6 percent of new claimants in 2010 reported a drop in income below $45,000 from tax year 2009 (see Table 26). Having a new dependent between ages 3 and 5 explained 27.9 percent of the remaining new claims. Other explanations considered were the end of a marriage (1.2%) and moving into an urban county (0.9%). Overall these four factors account for 42.6 percent of new claim starts.

Nearly one-fifth of taxpayers who stopped claiming ECD in 2010 experienced an increase in income above $45,000. While 22.4 percent no longer had children in the required age range, 1.3 percent of taxpayers starting a new marriage, and 0.9 percent of households moved out of urban counties where preschool options may be more limited. All these factors together can explain 43.6 percent of the ECD exits.

[24] Factors such as the youngest child reaching school age – six years old, and the spouse or the taxpayer starting or stopping work were also examined. But they are not reported because they can only explain a very small percentage of new starts of stops of claiming.

Of course, since the two credits can only be claimed against eligible expenses on qualifying children, tax return data have limited information about when the taxpayer should or should not be eligible for the credits.

D. Interaction Between the Credits

When considering the exit from ECD claims another question arises: when the children grow older than 5 such that they are no longer qualified for the ECD, will households claim the CDC the following tax year or another tax credit such as the Tuition and Textbook Tax Credit? The data provide a clear answer - no. In all households in tax year 2010 who were observed exiting from an ECD claiming spell, only one household claimed the CDC and none claimed the TTC. One possibility is that those taxpayers did not have eligible expenses to claim the other two credits. It is likely that the eligible expenses are so different for these three tax credits that it is not easy for taxpayers to move smoothly across these different tax credits as their children grow older. In particular, for kindergarten children in a public school, the tuition and textbook fees are limited. Iowa's low-income households with children in public elementary school (family income no higher than 130 percent of federal poverty levels) may be qualified for free or reduced-price lunches from Iowa public schools. The schools are required by law to charge no fees for families qualifying for free lunch, and a reduced fee for families qualifying for reduced-price lunch (Rogers and Gullickson, 2012). Therefore, those taxpayers may have no eligible expenses against which to claim the TTC.

VII. Additional State Benefits for Child Care

Besides the Iowa Child and Dependent Care Tax Credit, the State of Iowa provides two other benefits to assist with child care costs. One is a direct subsidy for low-income households, Iowa's Child Care Assistance Program, while the second is an optional tax benefit offered by employers, Dependent Care Flexible Spending Account. This Section discusses the claiming patterns among these three options available for taxpayers.

A. Iowa Child Care Assistance

The State of Iowa provides Child Care Assistance (CCA), also referred to as the State child care subsidy, for income-eligible parents with children. In addition, all parents in the household must meet at least one of the need requirements. Need for child care service includes: attending full time school attendance, as defined by the school, academic or vocational training program (limited to 24 fiscal months); employment of 28 or more hours per week; a child with a case plan that identifies protective child care as a required service; parental medical absence or incapacity (temporary); seeking employment (limited to one 30-consecutive-day period in any 12-month period); or a Family Investment Program (FIP) recipient participating in PROMISE JOBS activities.[25] The family income limits differ by the level of care needs. Currently families must certify eligibility for benefits every six months under current law, but a recent federal law change will lengthen that need for recertification to every 12 months. For most households, the income limits equal 145 percent of the federal poverty level, and thus

[25] See more details at the Child Care Assistance website.

are based on family size; however, households with special needs have higher limits. For instance, in tax year 2013 the monthly income limits for a two-person family were $1,692 for basic care and $2,334 for special care, and limits for a four-person family were $2,562 for basic care and $3,534 for special care.

In fiscal year 2013, the State spent $60.8 million on CCA including $3.0 million administrative costs. Those funds were bolstered by additional $42.3 million federal funds and $6.5 million in administrative costs.

In fiscal year 2013, 48,336 children from 22,851 Iowa families received Child Care Assistance totaling $100.4 million (see Table 27). The average annual family income was $8,495 and the average Child Care Assistance amount received per family was $4,392. The children's average age was 4 and the primary parent's average age was 29. On average, the number of months a family received CCA during the fiscal year was 7 months. The majority of CCA families (78.8%) averaged one adult during the months of benefit receipt. Those single parent families received 78.5 percent of CCA benefits. About 89.2 percent of CCA families had income lower than $20,000. It is noticeable that 17.1 percent of households had zero income and received 25.2 percent of the CCA dollars. When splitting CCA families by the number of qualifying children, it is not surprising to see that compared with families having only one or two qualifying children, those families with more than two qualifying children had older parents, older qualifying children, and longer claiming periods (see Table 28).

Two main differences are noticeable when comparing the characteristics between CDC claimants, in tax year 2011, and Iowa CCA claimants, in fiscal year 2013 (see Tables 14 and 27). First, on average, CCA claimants have much lower income. Their average annual income was $8,495 in fiscal year 2013, but the average AGI for CDC claimants was $25,776 in tax year 2011. Although these two income measurements are not strictly the same, there is still a big gap in family income between these two groups. Second, CCA claimants are slightly younger than CDC claimants. The average age for CDC claimants was 30.8 but for CCA claimants the average age was 29.3; households with parents aged not over 20-year-old made up less than 2 percent of total CDC claimants but 5.9 percent of CCA recipients.

B. Dependent Care Flexible Spending Account

Another tax benefit that assists with child care expenses is the Dependent Care Assistance Program, otherwise known as Flexible Spending Accounts (FSA). If employers choose to offer the FSA, taxpayers can set aside pre-tax income to pay for eligible daycare expenses for children under age 13 or for adult daycare expenses for a disabled spouse or disabled dependent.[26] The excluded income avoids both income and payroll taxes. The maximum tax year deduction is $5,000 (or $2,500 if married and filing separately) per household. If all of these funds are not used, the remaining balance is forfeited. The dependent care expenses, as defined by IRC § 129, must be for "custodial care" and allow the employee and their spouse, if married, to be gainfully employed, looking for work or be a full-time student. Expenses covered by flexible spending accounts reduce dollar for dollar the amount of expenses eligible for the both

[26] More details can be found in 26 U.S.C. §§ 106, 125 (2006).

the federal and Iowa CDC Tax Credits. There is no income limit for use of the FSA, and the tax benefit rises as taxpayers move to higher marginal income tax brackets. For example, a taxpayer making $75,000 in AGI would be subject to a 7.65 percent payroll tax rate, a 25 percent federal marginal income tax rate and an 8.98 percent Iowa marginal income tax rate. Setting aside $5,000 in pretax dollars in a Dependent Care FSA would save the taxpayer over $2,000 in payroll and federal and Iowa individual income taxes (although with deductibility of state income taxes on federal returns and federal tax liability on Iowa income taxes would slightly reduce these savings). Thus the account effectively results in the federal and State government covering two-fifths of the cost of the first $5,000 in child care expenses.

Employers most likely to provide child care assistance are larger, nonprofits, in the finance and professional services sectors, and with more women in their workforces (Matos and Galinsky, 2012). The authors used survey data including 1,126 employers to estimate that 62 percent of employers offered FSA. Of this total, 53 percent of employers with 50 to 99 employees offered FSA, and 84 percent of employers with over 1,000 employees offered FSA.

Usage of Flexible Spending Accounts for Dependent Care is concentrated among professional families because employers must set up these programs (O'Leary and Kornbluh, 2009). Mercer Human Resource Consulting found that employees allocate on average only $3,050 annually to their Dependent Care FSA accounts.

Based on federal individual income tax return data for tax year 2012, among 96,017 Iowa households who filed Form 2441, 25,478 (26.5%) households reported they received dependent care benefits, including FSA benefits, totaling $90.5 million, with an average amount of $3,552 per household (see Table 29).[27] Only 7.6 percent of the dependent care benefits recipients had income below $45,000, which also confirms that FSA is less relevant to low-income households.

C. State Child Care Benefits For Example Households

In general, low-income households with children have little to no federal income tax liability which negates any benefit of the FSA. The combined federal and Iowa CDC Tax Credits are often not beneficial either; again with no federal tax liability to offset with the nonrefundable federal credit, under current Iowa law, taxpayers cannot claim the Iowa CDC Tax Credit either. Therefore, eligible low-income households receive the biggest benefit from Child Care Assistance. For those households with slightly higher income, pushing them above eligibility for CCA, the CDC is likely the next best option. Conversely, middle-income or high-income families usually receive the biggest benefit from the FSA because they face higher marginal tax rates, while Iowa CDC Tax Credit

[27] The dependent care benefits include (according to the Form 2441 Instructions) 1. Amounts the employer paid directly to either the taxpayer or the care provider for the care of the qualifying person(s) while the taxpayer worked; 2. The fair market value of care in a daycare facility provided or sponsored by the employer; and 3. Pre-tax contributions the taxpayer made under a Dependent Care Flexible Spending Account arrangement.

would be zero when income exceeded $45,000 and the federal CDC would be only 20 percent of the expenses limits ($3,000/$6,000).

Unfortunately, Iowa tax return data do not include whether the taxpayer was eligible for or utilized a FSA and also does not include data on who receives Child Care Assistance. Therefore, two example households are discussed to analyze how they would benefit from these three channels of public support for child care costs as income changes.

A few assumptions are used in the two examples for simplification. It is assumed the child or children only need basic care (CCA has higher pay rate ceilings and co-payment fees for special need care) and the child attends a child care center for a full day for 20 days per month during the year (which will result in a total of 240 days in child care usage in a year). It is also assumed that household adjusted gross income at the federal and Iowa levels is the same and is evenly distributed across the months, which matters because CCA eligibility is a function of monthly income. Tax year 2013 federal and Iowa individual income tax rates and income brackets are used. Finally, it is assumed that the households' employer offers an FSA.

The value of the federal and Iowa CDC Tax Credits are combined together to examine the CDC benefit. The benefit of FSA includes the tax liability reduction from federal and Iowa due to the pre-tax $5,000. It is assumed the taxpayers will claim the remaining $1,000 in child care expenses for federal and Iowa CDC when possible.

The first example household is a single mother with one four-year-old child who attends a child care center which offers preschool. The child care costs total $5,500 (see Figure 9). When annual income is less than $14,736, she does not need to pay any copayment fee for CCA and can get $5,500 in CCA benefits to cover the full cost of child care. When her income rises into the range between $14,736 and $20,300, she is required to pay a co-payment fee which rises as household income increases. At $20,300 in income, just below 145 percent of poverty, she is still eligible for $4,204 in CCA benefits. Once income reaches $20,304, she can no longer receive CCA. As a result, she will lose the $4,204 just because of a small increase in her income. This income cliff effect of the child care subsidy has been discussed extensively by other researchers (Bruner et al., 2004, French and Fisher, 2009).

Next, when household income is $20,304 or higher, she could choose to claim the CDC or participate in an FSA to offset some of her child care costs. When income is between $20,304 and $31,100, she will benefit more from the CDC (federal and Iowa) than from FSA. For example, when income equals $30,000, she can receive an $810 federal CDC and $405 Iowa CDC, which is a total benefit of $1,215, assuming her federal tax liability is at least $810. If she uses FSA, the maximum FSA benefits through the decrease in federal and Iowa individual income taxes will total $750 plus an additional $380 in lower payroll taxes.

At household income of $44,999, the taxpayer is eligible for $600 in federal CDC and $180 in Iowa CDC. Once income reaches $45,000, the federal CDC will remain at $600 but the Iowa CDC will drop to $0. Once income rises to push the household into the 15 percent federal tax bracket, the option to exclude $5,000 from taxable income through a flexible spending account results in a $750 federal individual income tax savings and additional Iowa savings of approximately $400 (if she is in 7.92 percent of Iowa marginal rate, excluding $5,000 values at $396 and $449 if she is in 8.98 percent). Once taxable income rises to the 28 percent of federal marginal tax rate, the opportunity to exclude $5,000 of expenses from income will have the value of $1,400 and Iowa savings will be $449 if she is in 8.98 percent Iowa marginal rate. In addition, besides using the FSA to exclude $5,000, for the remaining $500 in child care expenses she can still claim a $100 federal CDC Tax Credit. Besides the individual income tax reduction, FSA also reduces payroll taxes (2013 payroll tax rate at 7.65 percent) by $383.

One notable result of this example is that it shows the income cliff effect of CDC Tax Credits is much smaller than that for the CCA mainly because the federal CDC does not have an income limit and the maximum value of the combined credits is not as high as even the partial CCA benefit. In the above example, the largest income cliff of tax credits happens when income increased from $44,999 to $45,000. The taxpayer loses $180 in total CDC benefits due to $1 increase in income. Comparatively, the over $4,000 loss of CCA seems substantial when the household earns income just above the CCA income limits.

The second household considered is a married couple (both working full time) with two children ages four and nine. The four-year-old attends a child care center with child care costs of $5,500. The nine-year-old also attends a child care center before and after school with an annual cost of $4,500. All the other assumptions remain unchanged from the first example. A similar pattern is seen, as income increases, the household would benefit most from claiming CCA, then move to CDC, and then switch to FSA (see Figure 10).

This household experiences a similar large benefit cliff at income of $ $2,562, when income exceeds 145 percent of poverty for a family of four. At that point, the household loses nearly $9,000 in benefits. At $45,000 in income, the household experiences a second, smaller cliff when the family is no longer eligible to claim the $540 in Iowa CDC.

VIII. Conclusion

Child care cost is a significant cost for many working parents. The Iowa CDC Tax Credit is aimed to help parents with their child care costs. Iowa also provides the ECD Tax Credit with the aim to help households pay for early childhood expenses and to encourage preschool attendance. Because of the structures of the two credits, the beneficiaries of the two tax credits are only households with low income levels.

This evaluation of the CDC and ECD provided a picture of who claims the credits and how much had been claimed. In tax year 2011, $7.5 million in CDC Tax Credits were claimed by nearly 27 thousand households. In tax year 2012, an administrative rule change restricted claims for the lowest-income taxpayers, lowering CDC claims to $4.5 million and claimants to nearly 20 thousand households. ECD claims totaled $0.7 million in tax year 2011 with 4,715 households making claims. In tax year 2012, ECD claims rose to $0.9 million with 5,382 households making claims.

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Iowa's Child and Dependent Care Tax Credit and Early Childhood Development Tax Credit

Tables and Figures

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Table 1. Iowa and U.S. Child Care Costs, Calendar Year 2012

	Iowa	U.S.		
Average Annual Cost for Full-Time Care in a Center:				
Infant	$9,053	$4,863	-	$16,430
Four-year-old child	$7,790	$4,312	-	$12,355
School-age child (before/after-school care)	$4,325	$1,070	-	$11,690
Average Annual Cost for Full-Time Care in a Family Child Care Home:				
Infant	$6,687	$3,930	-	$11,046
Four-year-old child	$6,427	$3,704	-	$10,259
School-age child (before/after-school care)	$4,076	$1,966	-	$10,137
Compare with:				
Average annual tuition and fees for public four-year college (in-state)	$7,830			$8,244
Affordability (cost of full-time child care as percent of median family income):				
Infant in center, percent of income for single parents	37.4%	25.6%	-	90.6%

Source: Child Care in America, 2013. Child Care Aware® of America.

Table 2. History of Federal Child and Dependent Care Tax Deduction, Tax Years 1954-1975

Tax Year	Annual Limitation for 1/2/3+ Children	Child Age Limit	Qualifying Taxpayers	Taxpayers Subject to Phase-out	Starting Point of Phase-out
1954	$600/$600/$600	Under 12	Women or widowers	Married couples	$4,500
1964	$600/$900/$900	Under 13	Extended to married men whose wives were institutionalized or incapacitated	Married couples	$6,000
1972	$2,400/$3,600/$4,800*	Under 15	Removed gender specific eligibility	All taxpayers	$18,000

Source: IRS Form 2441, tax years 1954-1975.
* Monthly amounts were summed to arrive at annual deductions.
Note: Before 1972, for each dollar that taxpayers' AGI exceeded the phasing-out starting point, they received one dollar lower deduction. Effective in 1972, for each dollar that taxpayers' AGI exceeded the phase-out starting point, they received one-half dollar lower deduction.

Table 3. History of Federal and Iowa's Child and Dependent Care Tax Credits, Tax Years 1976-2013

	Federal			Iowa	
Tax Year	**Basic Provision**	**Maximum Eligible Expenses**	**Maximum Credit Amounts**	**Basic Provision**	**Maximum Credit Amounts**
1976	Nonrefundable credit equal to 20% of eligible expenses for taxpayers at all income levels	$2,000/$4,000	$400/$800	NA	NA
1977	No change	No change	No change	5% of federal credit	$100/$200
1982	*Rate of Eligible Expenses, Federal AGI* 30% if $0-$10,000 29% if $10,000-$12,000 28% if $12,000-$14,000 27% if $14,000-$16,000 26% if $16,000-$18,000 25% if $18,000-$20,000 24% if $20,000-$22,000 23% if $22,000-$24,000 22% if $24,000-$26,000 21% if $26,000-$28,000 20% if $28,000 or over	$2,400/$4,800	$720/$1,440	No change	$120/$240
1983	Added to short form 1040A	No change	No change	10% of the federal credit	$240/$480
1986	No change	No change	No change	45% of the federal credit	$324/$648
1988	Required Social Security Number of care provider; Overnight camp expenses were denied as the eligible expenses	No change	No change	No change	No change
1989	Qualifying child age reduced to under 13	No change	No change	No change	No change
1990	No change	No change	No change	Credit made refundable *Rate of Federal CDC, Iowa AGI* 75% if $10,000 or less 65% if $10,000-$19,999 55% if $20,000-$24,999 50% if $25,000-$34,999 40% if $35,000-$39,999 30% if $40,000-$44,999 20% if $45,000-$49,999 10% if $50,000 or more	$540/$1,080
1993	No change	No change	No change	*Rate of Federal CDC, Iowa AGI* 75% if $10,000 or less 65% if $10,000-$19,999 55% if $20,000-$24,999 50% if $25,000-$34,999 40% if $35,000-$39,999 0% if $40,000 or more	No change
2003	*Rate of Eligible Expenses, Federal AGI* 35% if $0-$15,000 34% if $15,000-$17,000 33% if $17,000-$19,000 32% if $19,000-$21,000 31% if $21,000-$23,000 30% if $23,000-$25,000 29% if $25,000-$27,000 28% if $27,000-$29,000 27% if $29,000-$31,000 26% if $31,000-$33,000 25% if $34,000-$35,000 24% if $36,000-$37,000 23% if $38,000-$39,000 22% if $40,000-$41,000 21% if $40,000-$43,000 20% if $43,000 or over	$3,000/$6,000	$1,050/$2,100	No change	$778/$1,575
2006	No change	No change	No change	*Rate of Federal CDC, Iowa AGI* 75% if $10,000 or less 65% if $10,000-$19,999 55% if $20,000-$24,999 50% if $25,000-$34,999 40% if $35,000-$39,999 30% if $40,000-$44,999 0% if $45,000 or more	No change
2010	2003 expansions extended through 2012	No change	No change	No change	No change
2012	No change	No change	No change	Only those who receive federal CDC are eligible to claim Iowa CDC	No change
2013	2003 expansions made permanent	No change	No change	No change	No change

Source: IRS Form 2441 and relevant Iowa Code.

Note: Amounts are for one qualifying child/dependent and two or more qualifying children/dependents.

Table 4. Tax Parameters for the Federal and Iowa Child and Dependent Care Tax Credit, Tax Year 2013

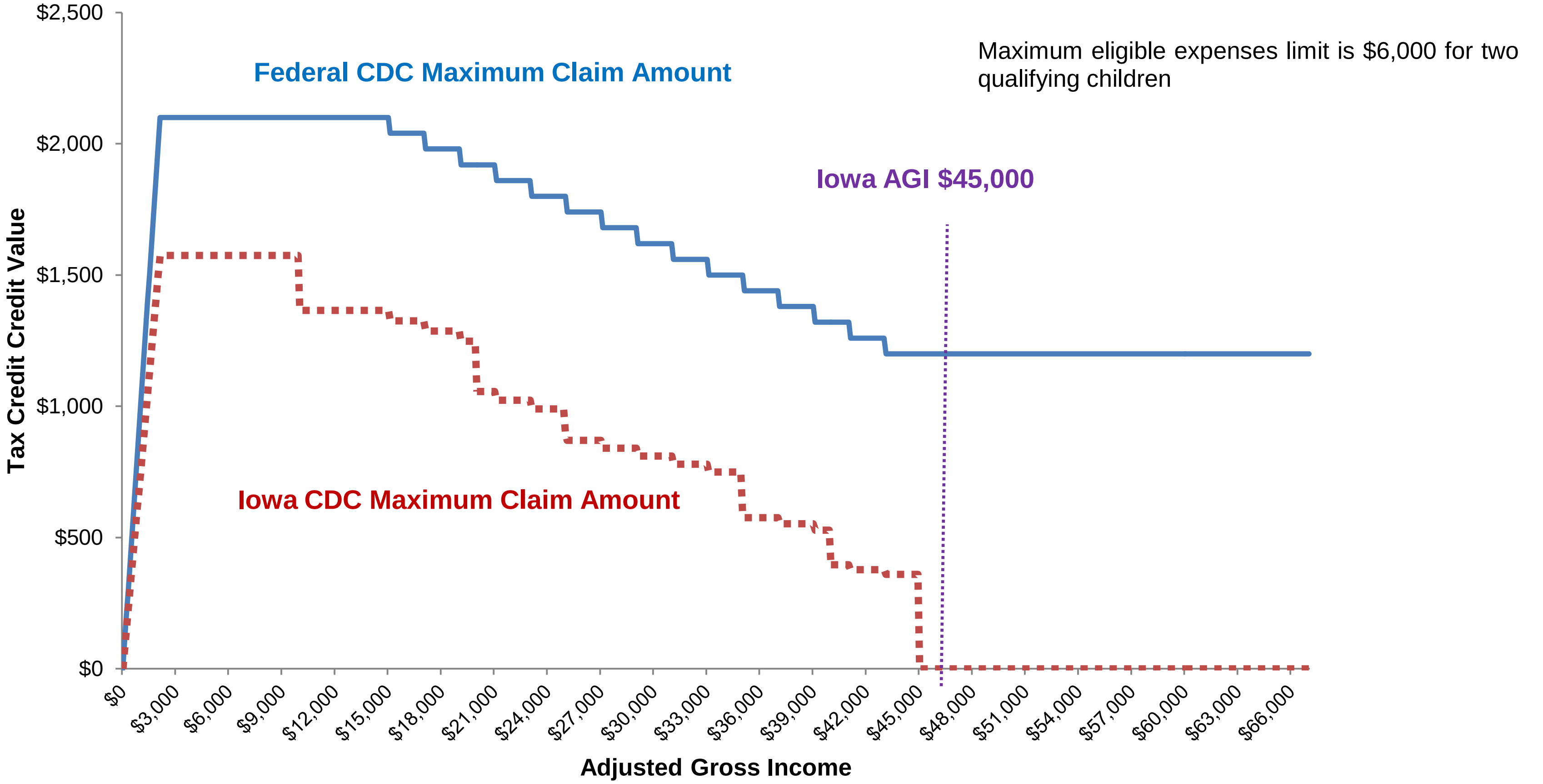
Federal Adjusted Gross Income		Percent of Eligible Expenses Credited	Maximum Claim Amount (1/2+Children)	
Over	**But Not Over**		**1 Child**	**2+ Children**
$0	$15,000	35%	$1,050	$2,100
$15,000	$17,000	34%	$1,020	$2,040
$17,000	$19,000	33%	$990	$1,980
$19,000	$21,000	32%	$960	$1,920
$21,000	$23,000	31%	$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	or Over	20%	$600	$1,200

Iowa Child and Dependent Care Tax Credit

Iowa Adjusted Gross Income		Percentage of the Federal CDC Credit	Maximum Claim Amount (1/2+Children)	
Over	**But Not Over**		**1 Child**	**2+ Children**
NA	$10,000	75%	$788	$1,576
$10,000	$19,999	65%	$683	$1,365
$20,000	$24,999	55%	$528	$1,056
$25,000	$34,999	50%	$435	$870
$35,000	$39,999	40%	$288	$576
$40,000	$44,999	30%	$198	$396
$45,000	or Over	No Credit	$0	$0

Source: IRS Form 2441 and relevant Iowa Code 42.12C.
Note: Federal and Iowa adjusted gross income are assumed to be equal for simplification.

Figure 1. Maximum Claim Amounts of Federal and Iowa's Child and Dependent Tax Credits for a Household with Two Qualifying Children



Source: IRS Form 2441 and Iowa Code 42.12C.
Note: Federal and Iowa AGI are plotted to take the same values for simplification, although these two income measures differ for many taxpayers.

Table 5. State Child and Dependent Care Tax Provisions Across the Country, Tax Year 2012

State	Deduction/Credit	Deduction/Credit Provision	Eligibility Same as Federal CDC Tax Credit?	Age of a Qualifying Child	Refundable/Carry Forward	Maximum Benefit Amount*
Arkansas (Eligible taxpayers can claim both.)	Child Care **Credit**	20% of federal credit "allowed"	Yes	Under 13	No	$210/$420
	Early Childhood Program **Credit**	20% of "allowable" federal credit	Yes, in an "approved" child care facility (approved by the Arkansas Department of Education).	Age 3 until the child is eligible for kindergarten	No	$210/$420
California	Tax **Credit** for Child and Dependent Care Expenses	*Percentage of Federal Credit, Federal AGI* 50% if $40,000 or less 43% if $40,001- $70,000 34% if $70,001- $100,000 0% if $100,001 over	Yes, except that registered domestic partners may also claim the credit. Generally, the credit can only be claimed by joint filers. Exceptions can be applied.	Under 13	No	$525/$1,050
Colorado	Child Care **Credit**	*Percentage of Federal Credit, Federal AGI* 50% if $0-$25,000 30% if $25,001-$35,000 10% if $35,001-$60,000 0% if $60,001 or more	Eligible expenses do not include those for care of disabled dependents who are not also children under 13.	Under 13	Yes	$525/$1,050
Delaware	Child Care **Credit**	50% of "allowable" federal credit	Yes	Under 13	No	$525/$1,050
Georgia	Child and Dependent Care Expense **Credit**	30% of "allowed and claimed" federal credit	Yes	Under 13	No	$315/$630
Hawaii	**Credit** for Child and Dependent Care Expenses	*Percentage of Hawaii Expenses, Hawaii AGI* 25% if $22,000 or less 24% if $22,001-$24,000 23% if $26,001-$28,000 22% if $28,001-$30,000 21% if $30,001-$32,000 19% if $32,001-$34,000 18% if $34,001-$36,000 17% if $36,001-$38,000 16% if $38,001-$40,000 15% if $40,001 or over	Yes, except that expenses are limited to $2,400 for one child or dependent and $4,800 for two or more children or dependents.	Under 13	Yes	$600/$1,200
Idaho	Child or Dependent Care **Deduction**	100% of federal expenses	Yes	Under 13	No	$234/$468

Table 5 (continued). State Child and Dependent Care Tax Provisions Across the Country, Tax Year 2012

State	Deduction/Credit	Deduction/Credit Provision	Eligibility Same as Federal CDC Tax Credit?	Age of a Qualifying Child	Refundable/Carry Forward	Maximum Benefit Amount*
Iowa	Child and Dependent Care Tax **Credit**	<u>*Percentage of Provided Federal Credit, Iowa AGI*</u> 75% if $10,000 or less 65% if $10,001-$19,999 55% if $20,001-$24,999 50% if $25,001-$34,999 40% if $35,001-$39,999 30% if $40,001-$44,999 0% if $45,001 or over	Yes	Under 13	Yes (Taxpayers may also elect to carry forward unused credits to the following year)	$788/$1,575
Kansas	Child and Dependent Care **Credit** (repealed tax year 2013)	25% of the federal income tax or 25% of the federal child and dependent care credit, whichever is smaller. Nonresidents are not qualified.	Yes	Under 13	No	$263/$525
Kentucky	Child and Dependent Care **Credit**	20% of “allowed” federal credit	Yes	Under 13	No	$210/$420
Louisiana (Eligible tax filers may claim all three credits.)	Child Care **Credit**	<u>*Percentage of Federal Credit, Federal AGI*</u> 50% if $25,000 or less 30% if $25,001-$35,000 10% if $35,001-$60,000 10% but <= $25 if $60,001 or over	Yes	Under 13	Yes, only for income below $25,000. (For tax filers with AGI over $25,000, unused credit may be carried forward for up to five years.)	$525/$1,050
	School Readiness Tax **Credit**	<u>*Percentage of LA CCC, Quality of Facility*</u> 200% if a five-star facility 150% if a four-star facility 100% if a three-star facility 50% if a two-star facility 0% if one star or not participating in Quality Start	Yes, at a child care facility rated two stars or higher by the state quality rating system.	Under 6	Yes, only for income below $25,000. (For tax filers with AGI over $25,000 unused credit may be carried forward up to five years.)	$1,050/$2,100/or higher if more than two qualifying children since credit is calculated for each child
	Household Expense **Credit**	A credit for care for “dependents… physically or mentally incapable of self-care” equal to the applicable percentage of expenses allowable for the federal CDC credit.	Yes	Under 13	No (It may be carried forward, but only to the next succeeding tax year.)	$1,050/$2,100

Table 5 (continued). State Child and Dependent Care Tax Provisions Across the Country, Tax Year 2012

State	Deduction/Credit	Deduction/Credit Provision	Eligibility Same as Federal CDC Tax Credit?	Age of a Qualifying Child	Refundable/Carry Forward	Maximum Benefit Amount*
Maine	Dependent Care Tax **Credit**	*Percentage of "Allowable" Federal credit, Quality of Facility* 50% for "quality child care services" (with a Quality Certificate) 25% for all other childcare services	Expenses eligible for the Federal CDC Tax credit, up to $500 except that only expenses for "quality child care services" are eligible for the higher credit amount.	Under 13	Yes only for income below $500.	$525/$1,050
Maryland (Some eligible tax filers may claim both of the deduction and the credit.)	Child and Dependent Care **Deduction**	All filers with eligible child or dependent care expenses may subtract actual expenses up to the legal maximums of $3,000 for one child or $6,000 for two or more children.	All filers with qualifying child or dependent care expenses are eligible for deduction from their taxable income.	Under 13	No	$188/$375
	Child and Dependent Care Tax **Credit**	*Percentage of Federal Credit, Federal AGI* 32.5% if $41,000 or less 29.25% if $41,001-$42,000 26.0% if $42,001-$43,000 22.75% if $43,001-$44,000 19.5% if $44,001-$45,000 16.25% if $45,001-$46,000 13.0% if $46,001-$47,000 9.75% if $47,001-$48,000 6.50% if $48,001-$49,000 3.25% if $49,001-$50,000 0% if $50,001 or more Above income brackets are half if filing status is Married Filing Separately.	Yes	Under 13	No	$341/$683
Massachusetts (Taxpayers can apply either deduction but not both.)	Child Care Expenses **Deduction** for Child under Age 13 or Disabled Dependent or Spouse	The deduction cannot exceed the Massachusetts maximum allowable amount of $4,800 for one qualifying individual and $9,600 for two or more qualifying individuals. The deduction is limited to a maximum of $9,600 regardless of the total number of dependent household members.	Yes	Under 13	No	$254/$509 if tax rate 5.3% or $281/$562 if using optional 5.85% tax rate
	Dependent Member(s) of Household under Age 12, or Dependents Age 65 or Older, or Disabled Dependents **Deduction**	This deduction is $3,600 for a single dependent and $7,200 for two or more dependents. The deduction is limited to a maximum of $7,200 regardless of the total number of dependent household members.	No requirement on eligible expenses; households with either child under the age of twelve and/or with eligible elderly or disabled members.	Under 12	No	$191/$382 if tax rate 5.3% or $211/$422 if using optional 5.85% tax rate

Table 5 (continued). State Child and Dependent Care Tax Provisions Across the Country, Tax Year 2012

State	Deduction/Credit	Deduction/Credit Provision	Eligibility Same as Federal CDC Tax Credit?	Age of a Qualifying Child	Refundable/Carry Forward	Maximum Benefit Amount*
Minnesota	Child and Dependent Care Tax **Credit**	*Percentage of Federal Credit, Minnesota AGI* 100% if $24,300 or less (indexed); 0% if over $37,950 (indexed); The credit is reduced by $18/$36 for every $350 of income between $24,300 and $37,950. Minnesota uses a broad measure of income that includes all income subject to the income tax plus most nontaxable cash income.	Yes, but filers who meet all federal requirements except for the requirement that taxpayer paid someone for child or dependent care may be eligible for the state credit. Such filers must either run a licensed daycare program and care for their own child or adopt a child born during the tax year.	Under 13	Yes	$720/$1,440
Montana	Child and Dependent Care Expense **Deduction**	100% Montana expenses not exceeding $2,400/$3,600/$4,800 (1/2/3+ qualifying individuals) for Montana AGI $18,000 or less; Eligible expenses are reduced by one half of the amount of income over $18,000.	Expenses necessary for gainful employment for in-home and out-of-home care. The expenses are not determined by the federal credit.	Under 15	NA	$144/$180 for two, $240 for three or more
Nebraska	Child/Dependent Care **Credit**	*Percentage of Federal Credit, Federal AGI* 100% if $22,000 or less 90% if $22,001-$23,000 80% if $23,001-$24,000 70% if $24,001-$25,000 60% if $25,001-$26,000 50% if $26,001-$27,000 40% if $27,001-$28,000 30% if $28,001-$29,000 25% if $29,001 or over	Yes	Under 13	Yes only for federal AGI below $29,000.	$1,050/$2,100
New Mexico	New Mexico Child Day Care **Credit**	40% of **eligible expenses** up to $8 per day, per child, with a maximum credit of $1,200 if New Mexico Modified Gross Income (MGI) is less than $30,160. In general, MGI is all income and other compensation taxpayers receive from all sources (regardless of whether that income is taxable by the U.S. Government or the State of New Mexico). Credit amount must be reduced by the portion of the federal credit amount applied against federal tax liability. Filers filing as single or separately must earn less than the annual income of an individual earning twice the federal minimum wage and provide over half the cost of the home in which the qualifying dependents live.	No	Under 15	Yes	$480/$960 for two,$1,200 for three or more

Table 5 (continued). State Child and Dependent Care Tax Provisions Across the Country, Tax Year 2012

State	Deduction/Credit	Deduction/Credit Provision	Eligibility Same as Federal CDC Tax Credit?	Age of a Qualifying Child	Refundable/Carry Forward	Maximum Benefit Amount*
New York	New York State Child and Dependent Care **Credit**	_Percentage of Federal Credit, New York AGI_ 110% if $24,999 or less 110%-100% if $25,000-$39,999 100% if $40,000-$49,999 100%-20% if $50,000-$64,999 20% if $65,000 or over	Yes	Under 13	Fully refundable for full-year residents; Partially refundable for part-year residents; Nonrefundable for nonresidents.	$1,155/$2,310
	New York City Child and Dependent Care **Credit**	As much as 75% of the New York State Child and Dependent Care Credit	Yes, but only full-year or part-year resident of New York City at any time during the tax year **and** the federal adjusted gross income is $30,000 or less.	Under 4	Fully refundable for full-year residents; Partially refundable for part-year residents; Nonrefundable for nonresidents.	$866/$1,732
North Carolina	**Credit** for Child and Dependent Care Expenses	_Rate of Federal Expenses, Federal AGI_ **Head of Household:** 13% age<7 or 9% age 7-12 if $0-$20,000 11.5% age<7 or 8% age 7-12 if $20,001-$32,000 10% age<7 or 7% age 7-12 if $32,001 or over **Joint Return or Surviving Spouse:** 13% age<7 or 9% age 7-12 if $0-$25,000 11.5% age<7 or 8% age 7-12 if $25,001-$40,000 10% age<7 or 7% age 7-12 if $40,001 or over **Single:** 13% age<7 or 9% age 7-12 if $0-$15,000 11.5% age<7 or 8% age 7-12 if $15,001-$24,000 10% age<7 or 7% age 7-12 if $24,001 or over **Married Filing Separately:** 13% age<7 or 9% age 7-12 if $0-$12,500 11.5% age<7 or 8% age 7-12 if $12,501-$20,000 10% age<7 or 7% age 7-12 if $20,001 or over	Yes	Under 12	No	$390/$780

Table 5 (continued). State Child and Dependent Care Tax Provisions Across the Country, Tax Year 2012

State	Deduction/Credit	Deduction/Credit Provision	Eligibility Same as Federal CDC Tax Credit?	Age of a Qualifying Child	Refundable/Carry Forward	Maximum Benefit Amount*
Ohio	Child Care and Dependent Care **Credit**	*Percentage of Federal Credit, Ohio AGI* 100% if $19,999 or less 25% if $20,000-$39,999 0% if $40,000 or more	Yes	Under 13	No	$1,050/$2,100
Oklahoma	Child Care **Credit**	Either 20% of federal CDC credit or 5% of federal Child Tax Credit, but not both. 0% if the federal AGI is greater than $100,000. Based on the federal AGI, except that if Oklahoma AGI is less than federal AGI, the state credit is prorated based on the ratio of Oklahoma AGI to federal AGI.	Yes	Under 13	No	$210/$420
Oregon (Eligible filers may claim both credits.)	Child and Dependent Care **Credit**	*Percentage of Federal Expenses, Federal Taxable Income* 30% if $5,000 or less 15% if $5,001-$10,000 8% if $10,001-$15,000 6% if $15,001-$25,000 5% if $25,001-$35,000 4% if $35,001-$45,000 0% if $45,000 or over	Yes	Under 13	No (The unclaimed portion can be carried forward for the next five years.)	$900/$1,800
	The Working Family Child Care **Credit** (will be repealed on Jan. 2, 2016)	*Percentage of Oregon Expenses, Greater of federal AGI or Oregon AGI* 40% if 200% of federal poverty level or less 36% if 201%-210% 32% if 211%-220% 24% if 221%-230% 16% if 231%-240% 8% if 241%-250% 0% if over 250% Federal poverty level depends on household size and is indexed.	No, Taxpayer must have a minimum amount of earned income, less than the maximum amount of investment income, adjusted gross income that is less than the limits based on taxpayer household size, and qualifying child care expenses.	Under 13	Yes	No dollar limit
Rhode Island	**Credit** for Child and Dependent Care Expenses	25% of federal credit	Yes	Under 13	No	$263/$525

Table 5 (continued). State Child and Dependent Care Tax Provisions Across the Country, Tax Year 2012

State	Deduction/Credit	Deduction/Credit Provision	Eligibility Same as Federal CDC Tax Credit?	Age of a Qualifying Child	Refundable/Carry Forward	Maximum Benefit Amount*
South Carolina	Tax **Credit** for Child and Dependent Care Expenses	7% of federal **expenses**	Yes, except that only expenses that are "directly attributable to items of South Carolina gross income" qualify for the credit.	Under 13	No	$210/$420
Vermont (Eligible filers cannot file for both.)	Child and Dependent Care **Credit**	24% of "allowed" federal credit	Yes	Under 13	No	$252/$504
	Low Income Child & Dependent Care **Credit**	50% of "allowed" federal credit	Yes, except that the expenses must be for services provided in a Vermont "registered home or licensed facility certified by the agency of human services as meeting national accreditation or national credential standards endorsed by the agency."	Under 13	Yes only for filers with income below $30,000 ($40,000 if married filing jointly).	$525/$1,050
Virginia	Child and Dependent Care Expenses **Deduction**	100% federal expenses	Yes	Under 13	No	$173/$345
District of Columbia	Dependent Care **Credit**	32% of "allowed" federal credit	Yes	Under 13	No	$336/$672

Source: States' tax provisions as of August 21, 2013.

Notes: when a State tax provision refers to the state credit as calculated based on a percentage of the "allowable," "allowed," "provided," "claimed," or "eligible" federal credit, the forms and/or instructions help to clarify whether the state credit is based on the amount of federal credit actually received, or if it is based on the amount the tax filer could have received if the federal credit had not been limited by the tax filer's federal tax liability.

Alaska, Florida, New Hampshire (Income tax on dividends and interest income only), Nevada, South Dakota, Tennessee (Income tax on dividends and interest income only), Texas, Washington, and Wyoming have no state income tax. Alaska has a Household and Dependent Care Credit equal to 16 percent of the federal credit. Illinois, Indiana, New Jersey, North Dakota, Utah, Wisconsin, and West Virginia do not have tax deductions or credits for child care.

Table 6. State Preschool Programs Across the Country, Calendar Year 2011

State	State Preschool Program	Total State Program Enrollment	Share of School Districts Offering State Program	Family Income Limit for Participants
Alabama	Alabama's Voluntary Pre-Kindergarten Program	3,906	94% (counties)	None
Alaska	Alaska Pre-Kindergarten Program	211	11%	100% federal poverty level
Arizona	First Things First Pre-Kindergarten Scholarships	3,166	42% (Regional Partnership Councils)	200% federal poverty level
Arkansas	Arkansas Better Chance/Arkansas Better Chance For School Success	20,520	98%	90% of the children must be at or below 200% federal poverty level
California	California State Preschool Program	143,996	97% (counties)	70% state median income
Colorado	Colorado Preschool Program	19,480	96%	185% federal poverty level
Connecticut	Connecticut School Readiness	8,993	38%(towns)	60% of children must be at or below 75% state median income
Delaware	Delaware Early Childhood Assistance Program	843	100% (counties)	90% of children must be at or below 100% federal poverty level
Florida	Florida Voluntary Pre-Kindergarten Program	175,122	100% (counties)	None
Georgia	Georgia's Pre-K Program	82,868	100% (counties)	None
Illinois	Illinois Preschool for All	80,914	100% (counties)	None (at-risk children from lower income households are the first priority, children from lower middle-income families may be served if state funding allows)
Iowa	Iowa Statewide Voluntary Preschool Program	21,123	90%	None
	Iowa Shared Visions	1,810	9%	80% of children must be below 130% federal poverty level
Kansas	Kansas At-Risk Four-Year-Old Children Preschool Program	7,113	62%	130% federal poverty level
	Kansas Pre-K Program	1,480	13%(counties)	185% federal poverty level
Kentucky	Kentucky Preschool Program	21,160	100%	150% federal poverty level
Louisiana	Louisiana 8(G) Student Enhancement Block Grant Program	3,201	96%	None (Priority is given to children from low-income families)
	Cecil J. Picard LA4 Early Childhood Program Access	15,968	89%	185% federal poverty level
	Louisiana Non-Public Schools Early Childhood Development Program	1,252	100% (parishes)	200% federal poverty level
Maine	Maine Public Preschool Program	4,784	47% (public elementary schools)	None
Maryland	Maryland Pre-Kindergarten Program	28,612	100%	185% federal poverty level
Massachusetts	Massachusetts Universal Pre-Kindergarten And Grant 391	13,266	26% (towns, Universal Pre-K) 25% (school districts, Grant 391)	85% state median income (Universal Pre-K); None (Grant 391)

Table 6 (continued). State Preschool Programs Across the Country, Calendar Year 2011

State	State Preschool Program	Total State Program Enrollment	Share of School Districts Offering State Program	Family Income Limit for Participants
Michigan	Michigan Great Start Readiness Program	23,579	80%	75% of children must be at or below 300% federal poverty level
Minnesota	Minnesota Head Start	1,813	100% (counties)	At least 90% of children must be at or below 100% federal poverty level or receiving TANF
Missouri	Missouri Preschool Project	4,103	30%	None
Nebraska	Nebraska Early Childhood Education Program	10,204	75%	185% federal poverty level
Nevada	Nevada State Pre-Kindergarten Education Program	1,288	59%	None
New Jersey	New Jersey Former Abbot And Expansion Districts	43,543	6%	None
	New Jersey Former Early Childhood Program Aid Districts	7,485	16%	None
New Mexico	New Mexico Pre-K	4,591	38%	None
New York	New York Universal Pre-Kindergarten	102,568	65%	None
North Carolina	North Carolina Pre-K	24,836	100% (counties)	80% of children must be at or below 75% state median income
Ohio	Ohio Early Childhood Education	5,700	33%	200% federal poverty level
Oklahoma	Oklahoma Early Childhood Four-Year-Old Program	40,089	99%	None
Oregon	Oregon Head Start Pre-Kindergarten	7,169	100%	80% or 90% must be at or below 100% federal poverty level
Pennsylvania	Pennsylvania Education Accountability Block Grant	915	4%	None
	Pennsylvania Kindergarten For Four-Year-Olds And School Based Pre-K	11,718	18%	None (K4); Determined locally (School Based Pre-K program)
	Pennsylvania Head Start Supplemental Assistance Program	4,889	23%	90% of children must be at or below 100% federal poverty level
	Pennsylvania Pre-K Counts	11,268	80%	300% federal poverty level
Rhode Island	Rhode Island Pre-Kindergarten Program	108	8% (communities)	None
South Carolina	South Carolina Half-Day Child Development Program	23,338	57%	185% federal poverty level
	South Carolina Child Development Education Pilot Program	5,783	43%	185% federal poverty level
Tennessee	Tennessee Voluntary Pre-K	18,609	100%	185% federal poverty level
Texas	Texas Public School Pre-Kindergarten	225,037	85%	185% federal poverty level
Vermont	Vermont Pre-Kindergarten Education Act 62	5,260	87% (communities)	None
	Vermont Early Education Initiative	1,001	67%	185% federal poverty level
Virginia	Virginia Preschool Initiative	16,618	84%	None

Table 6 (continued). State Preschool Programs Across the Country, Calendar Year 2011

State	State Preschool Program	Total State Program Enrollment	Share of School Districts Offering State Program	Family Income Limit for Participants
Washington	Washington Early Childhood Education And Assistance Program	8,391	95%(counties)	90% of children must be at or below 110% federal poverty level
West Virginia	West Virginia Universal Pre-K	15,268	100%	None
Wisconsin	Wisconsin Four-Year-Old Kindergarten	46,914	89%	None
	Wisconsin Head Start Supplement Access	1,097	92% (federal head start granted)	90% of children must be at or below 100% federal poverty level
District of Colombia	D.C. Public Pre-Kindergarten	5,827	100%	None
	D.C. Public Pre-Kindergarten (Charter)	5,382	100%	None

Source: Barnett et. al. (2012).
Note: Ten states (Hawaii, Idaho, Indiana, Mississippi, Montana, New Hampshire, North Dakota, South Dakota, Utah, and Wyoming) did not have State funded pre-kindergarten initiatives in calendar year 2011.

Table 7. National Rankings for State Financial Support for Preschool in Calendar Year 2011, Iowa and Neighboring States

State	Access for 4-Year-Olds Rank	Access for 3-Year-Olds Rank	Resource Rank Based on State Spending	Resource Rank Based on All Reported Spending	Quality Standards Checklist Sum (Maximum of 10)
Iowa	7	17	26	26	6.9
Illinois	17	1	29	34	8
Nebraska	18	4	40	40	6
Minnesota	39	22	5	10	9
Missouri	34	18	33	37	8
South Dakota	--	--	--	--	--
Wisconsin	4	21	30	19	5

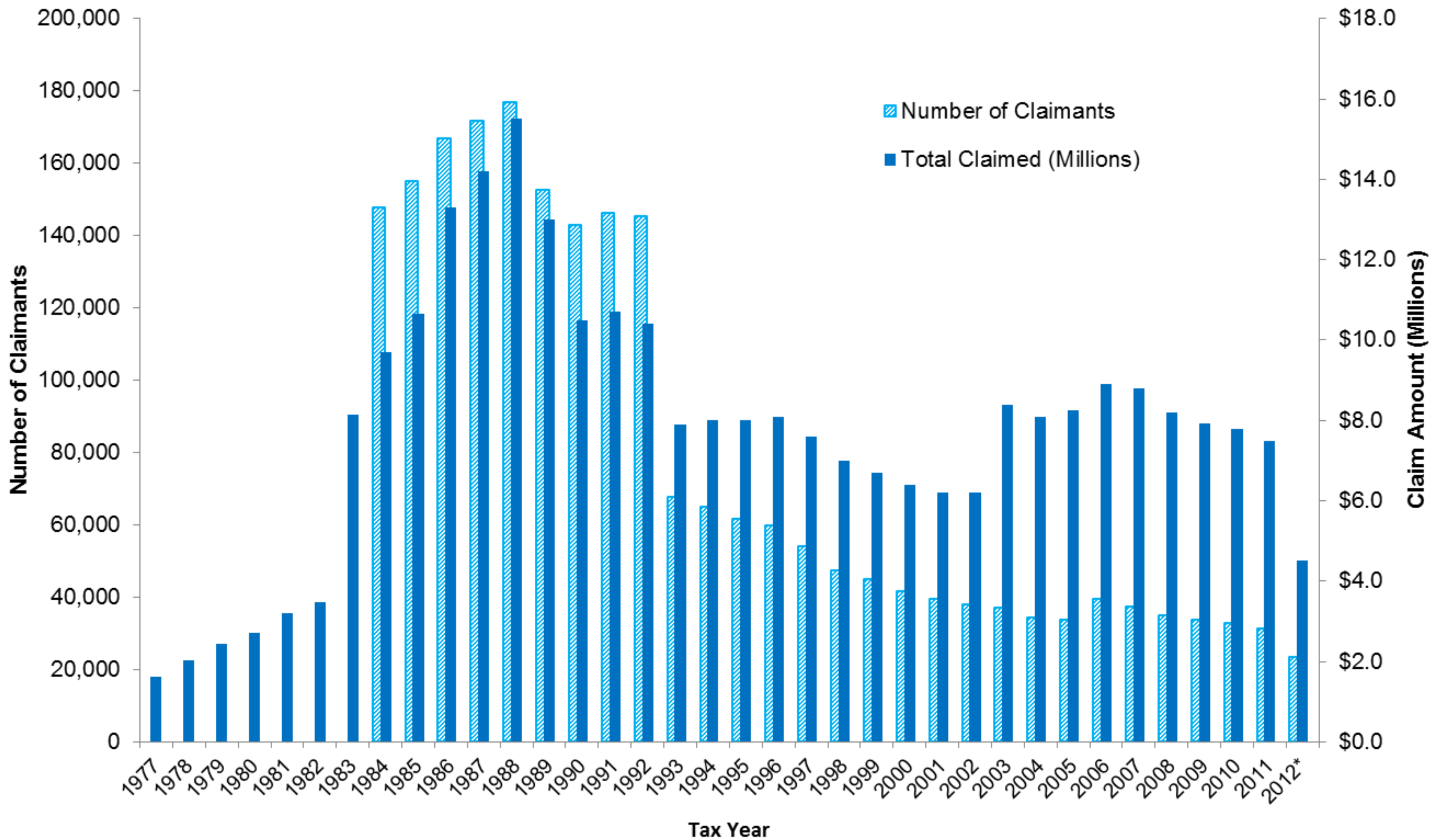
Source: Barnett et. al. (2012).
Note: South Dakota did not have state-funded preschool initiatives in calendar year 2011.

Table 8. Child and Dependent Care Tax Credit Claims, Tax Years 1977-2012

Tax Year	Number of Claimants	Change in Number of Claimants	Total Claimed (Millions)	Change in Total Claimed	Average Claim Amount	Tax Provision Major Change
1977	NA	NA	$1.6	NA	NA	Iowa 5% of the federal CDC
1978	NA	NA	$2.0	25.5%	NA	
1979	NA	NA	$2.4	19.7%	NA	
1980	NA	NA	$2.7	10.9%	NA	
1981	NA	NA	$3.2	18.5%	NA	
1982	NA	NA	$3.5	8.2%	NA	
1983	NA	NA	$8.1	134.4%	NA	Iowa raised to 10% of the federal CDC
1984	147,700	NA	$9.7	19.2%	$66	
1985	155,000	4.9%	$10.7	9.8%	$69	
1986	167,000	7.7%	$13.3	25.0%	$80	Iowa raised s to 45% of the federal CDC
1987	171,700	2.8%	$14.2	6.6%	$83	
1988	176,800	3.0%	$15.5	9.2%	$88	Federal administrative rule change
1989	152,800	-13.6%	$13.0	-16.1%	$85	Federal qualifying children age lowered to 13
1990	142,900	-6.5%	$10.5	-19.2%	$73	Iowa became 75 to 10 percent percentage of federal CDC
1991	146,300	2.4%	$10.7	1.9%	$73	
1992	145,300	-0.7%	$10.4	-2.8%	$72	
1993	67,800	-53.3%	$7.9	-24.0%	$117	Iowa income limit at $40,000
1994	65,100	-4.0%	$8.0	1.3%	$123	
1995	61,800	-5.1%	$8.0	0.0%	$129	
1996	59,752	-3.3%	$8.1	1.3%	$136	
1997	54,127	-9.4%	$7.6	-6.2%	$140	
1998	47,561	-12.1%	$7.0	-7.9%	$147	
1999	45,003	-5.4%	$6.7	-4.3%	$149	
2000	41,553	-7.7%	$6.4	-4.5%	$154	
2001	39,618	-4.7%	$6.2	-3.1%	$156	
2002	38,111	-3.8%	$6.2	0.0%	$163	
2003	37,219	-2.3%	$8.4	35.5%	$226	Federal EGTRRA expansions
2004	34,422	-7.5%	$8.1	-3.6%	$235	
2005	33,917	-1.5%	$8.2	1.7%	$243	
2006	39,440	16.3%	$8.9	8.2%	$226	Iowa income limit raised to $45,000
2007	37,510	-4.9%	$8.8	-1.3%	$235	
2008	34,907	-6.9%	$8.2	-6.7%	$235	
2009	33,776	-3.2%	$7.9	-3.3%	$235	
2010	32,964	-2.4%	$7.8	-1.7%	$237	Federal 2003 expansions extended through 2012
2011	31,429	-4.7%	$7.5	-3.9%	$238	
2012*	23,376	-25.6%	$4.5	-39.9%	$193	Iowa credit was limited by actual received amount of federal credit

Source: Iowa Department of Revenue Individual Income Tax Annual Statistical Reports, tax years 1977-1995. Iowa individual income tax return data, tax years 1996-2012.
* Incomplete tax year.
Notes: Shaded areas indicate there were tax provision changes in that year. Amounts claimed are not adjusted for inflation.
Number of claimants is on an individual taxpayer basis. Married couples filing separately on the same return are counted as two claimants.

Figure 2. Child and Dependent Care Tax Credit Claims, Tax Years 1977-2012



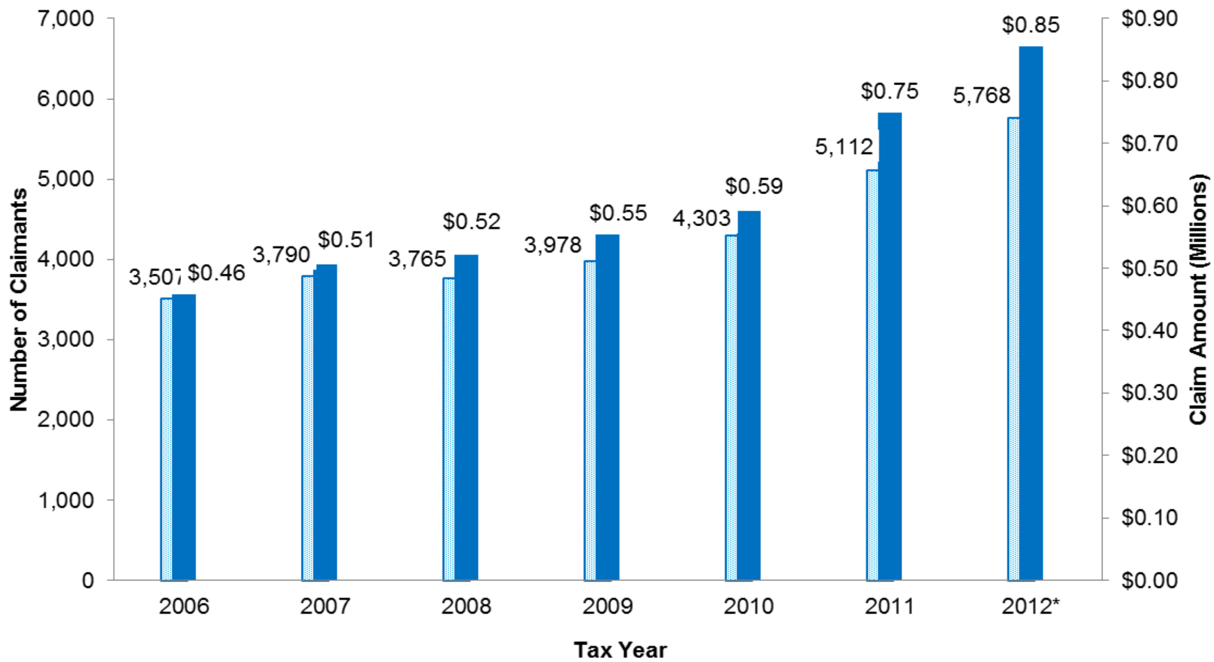
Source: Iowa individual income return data.
* Incomplete tax year.

Table 9. Early Childhood Development Tax Credit Claims, Tax Years 2006-2012

Tax Year	Number of Claimants	Change Rate of Number of Claimants	Total Claimed (Millions)	Change Rate of Total Claimed	Average Claim Amount
2006	3,507	-	$0.46	-	$131
2007	3,790	8.1%	$0.51	10.5%	$134
2008	3,765	-0.7%	$0.52	3.0%	$139
2009	3,978	5.7%	$0.55	6.1%	$139
2010	4,303	8.2%	$0.59	6.9%	$138
2011	5,112	18.8%	$0.75	26.7%	$147
2012*	5,768	12.8%	$0.85	14.0%	$148

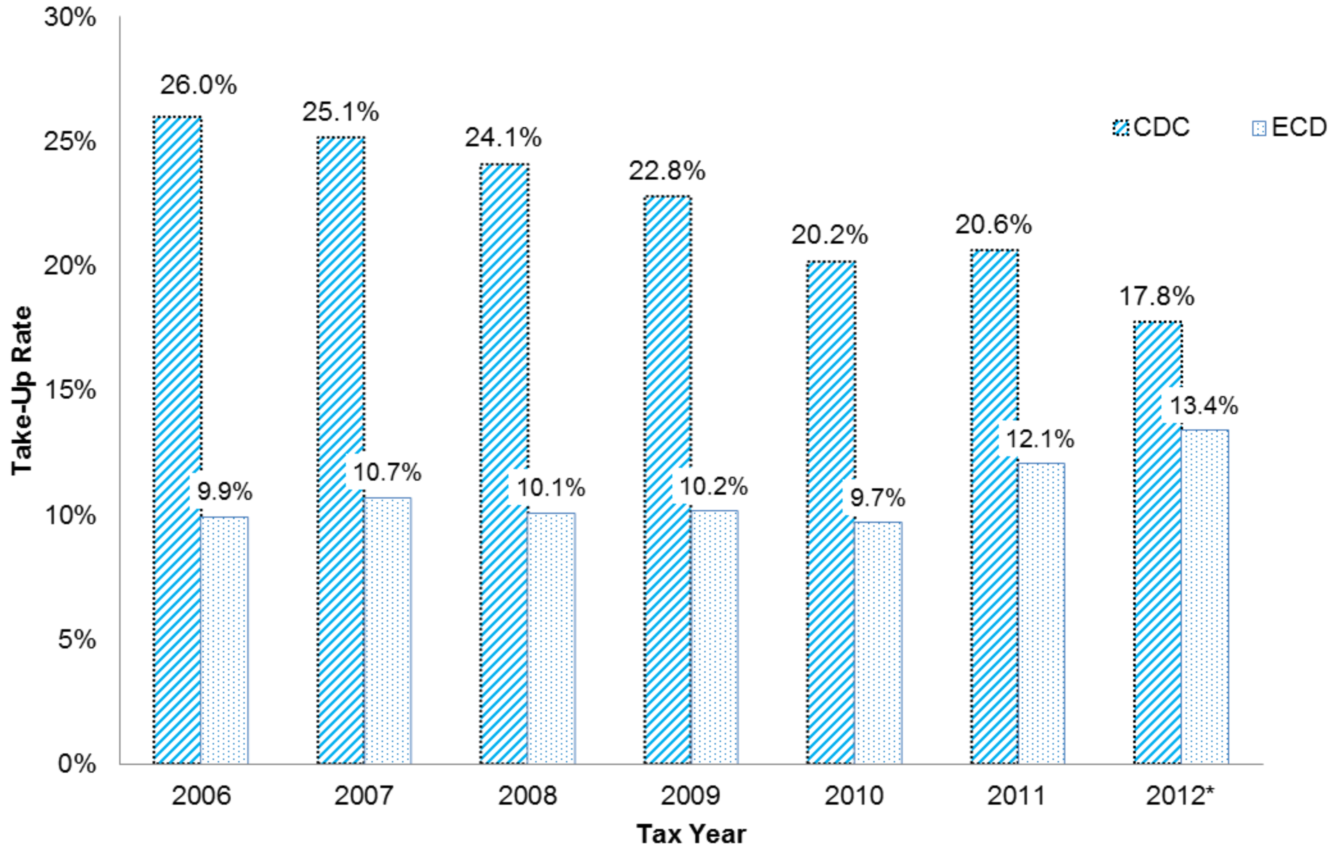
Source: Individual income tax return data.
* Incomplete tax year.
Notes: Number of claimants is on an individual taxpayer basis. Amounts claimed are not adjusted for inflation.
Married couples filing separately on the same return are counted as two claimants.

Figure 3. Early Childhood Development Tax Credit Claims, Tax Years 2006-2012



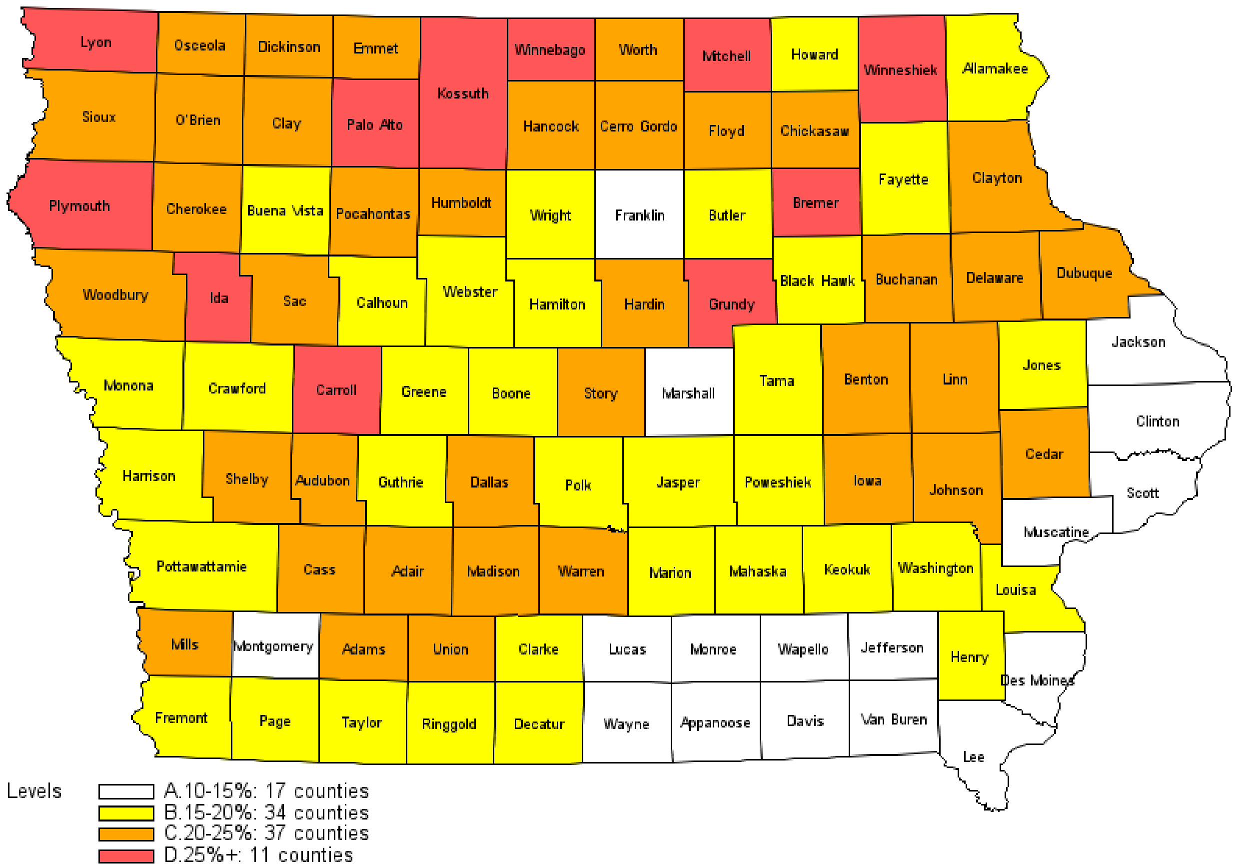
Source: Iowa individual income tax return data.
* Incomplete tax year.

Figure 4. Take-Up Rates of Child and Dependent Care and Early Childhood Development Tax Credits, Tax Years 2006-2012



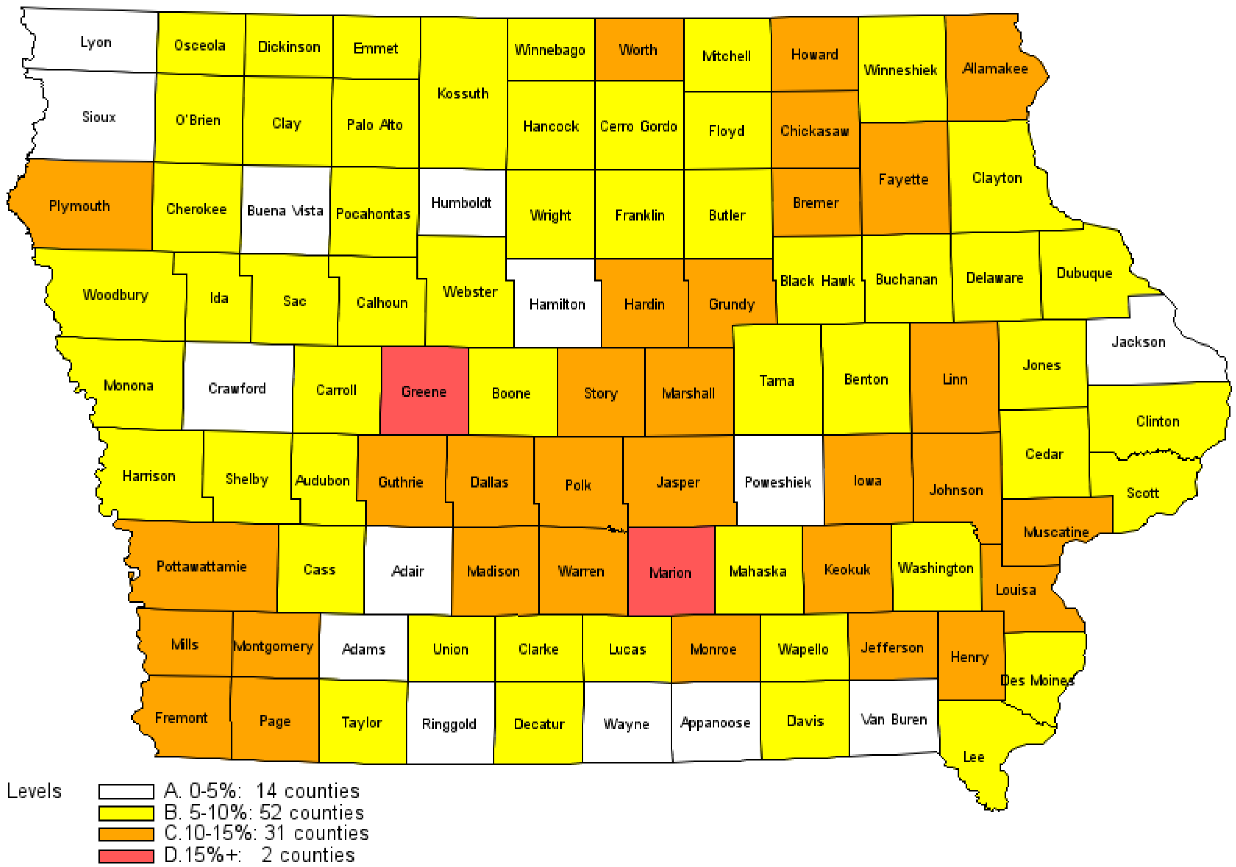
Source: Iowa individual income tax return data.
* Incomplete tax year.
Note: The take-up rate for the credit is calculated as the ratio of the number of claiming households divided by the total number of households who are eligible to claim the credits including having Iowa income lower than $45,000 and dependents under age 13 for the CDC or between ages 3-5 for the ECD, subtracting the number of claimants of the other credit because taxpayers can only claim one of the tax credits in a tax year.

Figure 5. Take-Up Rates of Child and Dependent Care Tax Credit by County, Tax Year 2011



Source: Iowa Individual income tax return data.
Note: The take-up rate for the CDC Tax Credit in a county is calculated as the ratio of the number of CDC claiming households in a county divided by the total number of households who are eligible to claim the credit including having Iowa income lower than $45,000 and dependents under age 13, subtracting the number of ECD claimants because taxpayers can claim only one of the tax credits in a tax year.

Figure 6. Take-Up Rates of Early Childhood Development Tax Credit by County, Tax Year 2011



Source: Iowa Individual income tax return data.
Note: The take-up rate for the ECD Tax Credit in a county is calculated as the ratio of the number of CDC claiming households in a county divided by the total number of households who are eligible to claim the credit including having Iowa income lower than $45,000 and dependents between ages 3-5, subtracting the number of CDC claimants because taxpayers can claim only one of the tax credits in a tax year.

Table 10. Income Distribution of Child and Dependent Care Tax Credit Claimants, Tax Year 2011

Adjusted Gross Income	Number of Households	Distribution of Households	Total Claims	Distribution of Claims	Average Claim
$0 or less	134	0.5%	$64,846	0.9%	$484
$1-$4,999	506	1.9%	$160,956	2.1%	$318
$5,000-$9,999	1,414	5.3%	$491,890	6.6%	$348
$10,000-$14,999	2,297	8.6%	$766,430	10.2%	$334
$15,000-$19,999	3,466	13.0%	$1,236,492	16.5%	$357
$20,000-$24,999	4,139	15.5%	$1,304,032	17.4%	$315
$25,000-$29,999	4,049	15.2%	$1,192,701	15.9%	$295
$30,000-$34,999	3,832	14.3%	$1,106,822	14.8%	$289
$35,000-$39,999	3,500	13.1%	$709,306	9.5%	$203
$40,000-$44,999	3,374	12.6%	$458,678	6.1%	$136
Total	**26,711**	**100.0%**	**$7,492,153**	**100.0%**	**$280**

Source: Iowa individual income tax return data.

Table 11. Income Distribution of Child and Dependent Care Tax Credit Claimants, Tax Year 2012

Adjusted Gross Income	Number of Households	Distribution of Households	Total Claims	Distribution of Claims	Average Claim
$0 or less	76	0.4%	$36,652	0.8%	$482
$1-$4,999	82	0.4%	$21,392	0.5%	$261
$5,000-$9,999	157	0.8%	$50,641	1.1%	$323
$10,000-$14,999	416	2.1%	$102,048	2.3%	$245
$15,000-$19,999	1,898	9.5%	$401,092	8.9%	$211
$20,000-$24,999	3,457	17.4%	$853,052	19.0%	$247
$25,000-$29,999	3,619	18.2%	$957,325	21.3%	$265
$30,000-$34,999	3,513	17.7%	$948,491	21.1%	$270
$35,000-$39,999	3,421	17.2%	$675,372	15.1%	$197
$40,000-$44,999	3,237	16.3%	$438,882	9.8%	$136
Total	**19,876**	**100.0%**	**$4,484,947**	**100.0%**	**$226**

Source: Iowa individual income tax return data.

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Table 12. Refundability Status of Child and Dependent Care Tax Credit Claims, Tax Year 2010

	Fully Nonrefunded			Fully Refunded			Partially Refunded				Total	
Adjusted Gross Income	Count	Amount	Percentage	Count	Amount	Percentage	Count	Amount Nonrefunded	Amount Refunded	Percentage	Nonrefunded Percentage	Refunded Percentage
$14,999 or less	151	21,488	0.5%	4,022	1,385,134	91.9%	273	42,096	84,445	6.1%	4.1%	95.9%
$15,000-$19,999	1,427	$209,325	5.0%	289	$82,240	5.5%	1,943	$392,960	$557,392	45.6%	48.5%	51.5%
$20,000-$24,999	3,324	$865,931	20.7%	108	$17,327	1.1%	943	$347,571	$168,084	24.7%	86.7%	13.3%
$25,000-$29,999	3,691	$1,049,690	25.1%	79	$9,601	0.6%	519	$160,118	$52,872	10.2%	95.1%	4.9%
$30,000-$34,999	3,438	$947,979	22.6%	77	$5,937	0.4%	489	$118,413	$33,139	7.3%	96.5%	3.5%
$35,000-$39,999	3,305	$668,856	16.0%	59	$3,569	0.2%	431	$73,157	$14,504	4.2%	97.6%	2.4%
$40,000-$44,999	3,168	$424,411	10.1%	59	$2,967	0.2%	341	$34,632	$6,514	2.0%	98.0%	2.0%
Total	**18,504**	**$4,187,680**	**100.0%**	**4,693**	**$1,506,775**	**100.0%**	**4,939**	**$1,168,947**	**$916,950**	**100.0%**	**68.8%**	**31.2%**
Share in Total	65.8%	63.3%		16.7%	22.8%		17.6%	17.7%	13.9%			

Source: Iowa individual income tax return data.

Table 13. Demographic Characteristics of Child and Dependent Care Tax Credit Claimants, Tax Year 2011

Characteristics	Number of Households	Distribution of Households	Amount of Claims	Distribution of Claims	Average Claim
Filing Status					
Single	2,168	8.1%	$687,404	9.2%	$317
Married joint	1,593	6.0%	$391,940	5.2%	$246
Married separate on combined returns	4,932	18.5%	$976,466	13.0%	$198
Married separate on separate returns	26	0.1%	$4,280	0.1%	$165
Head of household	17,949	67.2%	$5,413,512	72.3%	$302
Qualifying widow(er)	43	0.2%	$18,551	0.2%	$431
Marital Status					
Unmarried	20,160	75.5%	$6,119,467	81.7%	$304
Married	6,551	24.5%	$1,372,686	18.3%	$210
Number of Dependents Aged Under 13					
Age missing	2,839	10.6%	$682,096	9.1%	$240
0	260	1.0%	$65,053	0.9%	$15
1	14,545	54.5%	$3,877,657	51.8%	$269
2	6,916	25.9%	$2,252,696	30.1%	$362
3	1,845	6.9%	$533,524	7.1%	$345
4	306	1.1%	$81,127	1.1%	$348
Eldest Dependent Aged Under 13					
0-2	5,362	20.1%	$1,530,523	20.4%	$285
3-5	6,969	26.1%	$2,210,022	29.5%	$317
6-12	11,281	42.2%	$3,004,459	40.1%	$266
13 or over (or missing)	3,099	11.6%	$747,149	10.0%	$241
Age of Primary Taxpayer					
20 or under	540	2.0%	$130,561	1.7%	$242
21-25	4,840	18.1%	$1,458,660	19.5%	$301
26-30	7,900	29.6%	$2,348,338	31.3%	$297
31-35	6,362	23.8%	$1,757,779	23.5%	$276
36-40	3,710	13.9%	$985,681	13.2%	$266
41-45	1,969	7.4%	$496,369	6.6%	$252
46-50	889	3.3%	$203,802	2.7%	$229
51-55	314	1.2%	$67,828	0.9%	$216
56-60	131	0.5%	$30,669	0.4%	$234
61-65	38	0.1%	$7,396	0.1%	$195
65 or over	18	0.1%	$5,070	0.1%	$282
Resident Status					
Nonresident	1,267	4.7%	$242,472	3.2%	$191
Resident	25,444	95.3%	$7,249,681	96.8%	$285
Total	**26,711**	**100.0%**	**$7,492,153**	**100.0%**	**$280**

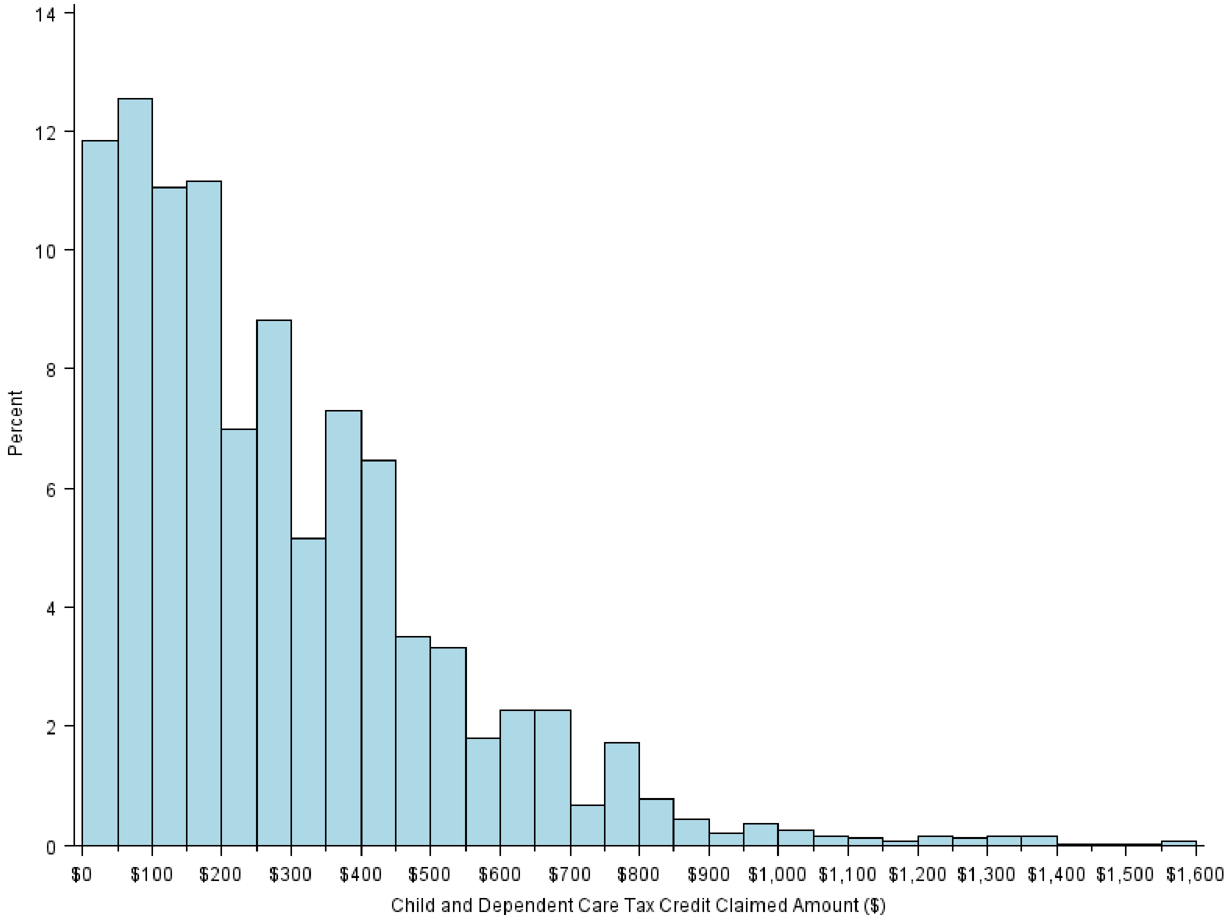
Source: Iowa individual income tax return data.
Note: Child age information is pulled from federal tax return data which contains the birthdates of up to four children. However, not all Iowa returns were able to be matched to a federal return.

Table 14. Child Care Expenses on Federal Form 2441, Tax Year 2012

Adjusted Gross Income	Number of Households	Number of Dependents on Form 2441	Total Federal CDC Credit	Total Eligible Expenses	Average Eligible Expenses Per Household	Average Eligible Expenses Per Dependent	Percentage of Households with Eligible Expenses $3,000/$6,000 or Over
$0 or less	197	289	$81,248	$845,074	$4,290	$2,924	49.7%
$1-$4,999	234	302	$30,491	$429,115	$1,834	$1,421	15.0%
$5,000-$9,999	602	761	$20,132	$922,963	$1,533	$1,213	9.6%
$10,000-$14,999	1,201	1,543	$53,846	$2,125,796	$1,770	$1,378	13.9%
$15,000-$19,999	2,560	3,146	$379,819	$4,896,944	$1,913	$1,557	17.5%
$20,000-$24,999	3,772	4,765	$1,319,499	$8,687,442	$2,303	$1,823	23.2%
$25,000-$29,999	3,826	4,996	$1,786,901	$10,489,286	$2,742	$2,100	30.8%
$30,000-$34,999	3,612	4,838	$1,844,754	$10,810,861	$2,993	$2,235	32.6%
$35,000-$39,999	3,529	4,786	$1,676,360	$10,466,006	$2,966	$2,187	31.6%
$40,000-$44,999	3,409	4,760	$1,543,766	$10,881,041	$3,192	$2,286	31.0%
$45,000 or Over	68,937	109,478	$32,067,720	$309,558,056	$4,490	$2,828	42.1%
Total	**91,879**	**139,664**	**$40,804,536**	**$370,112,584**	**$4,028**	**$2,650**	**38.4%**

Source: IRS Form 2441 data and Iowa individual income tax return data.
Note: The table includes taxpayers who reported positive child care expenses on federal Form 2441 and were matched with their Iowa individual income tax return data, regardless of whether claiming Iowa's CDC or not.

Figure 7. Frequency Distribution of Child and Dependent Care Tax Credit Claims, Tax Year 2011



Source: Individual income tax return data.

Table 15. Income Distribution of Early Childhood Development Tax Credit Claimants, Tax Year 2011

Iowa Adjusted Gross Income	Number of Households	Distribution of Households	Amount of Claims	Distribution of Claims	Average Claim
$0 or less	110	2.3%	$20,614	2.7%	$187
$1-$4,999	210	4.5%	$33,070	4.4%	$157
$5,000-$9,999	359	7.6%	$54,133	7.2%	$151
$10,000-$14,999	526	11.2%	$75,212	10.0%	$143
$15,000-$19,999	630	13.4%	$90,411	12.1%	$144
$20,000-$24,999	625	13.3%	$97,813	13.0%	$157
$25,000-$29,999	581	12.3%	$95,184	12.7%	$164
$30,000-$34,999	567	12.0%	$92,190	12.3%	$163
$35,000-$39,999	545	11.6%	$91,583	12.2%	$168
$40,000-$44,999	562	11.9%	$99,567	13.3%	$177
Total	**4,715**	**100.0%**	**$749,777**	**100.0%**	**$159**

Source: Individual income tax return data.

Table 16. Income Distribution of Early Childhood Development Tax Credit Claimants, Tax Year 2012

Iowa Adjusted Gross Income	Number of Households	Distribution of Households	Amount of Claims	Distribution of Claims	Average Claim
$0 or less	102	1.9%	$20,588	2.4%	$202
$1-$4,999	257	4.8%	$37,738	4.5%	$147
$5,000-$9,999	455	8.5%	$67,776	8.0%	$149
$10,000-$14,999	676	12.6%	$95,931	11.3%	$142
$15,000-$19,999	780	14.5%	$119,571	14.1%	$153
$20,000-$24,999	719	13.4%	$115,057	13.6%	$160
$25,000-$29,999	608	11.3%	$95,560	11.3%	$157
$30,000-$34,999	608	11.3%	$99,069	11.7%	$163
$35,000-$39,999	562	10.4%	$88,334	10.4%	$157
$40,000-$44,999	615	11.4%	$106,073	12.5%	$172
Total	**5,382**	**100.0%**	**$845,697**	**100.0%**	**$157**

Source: Individual income tax return data.

Table 17. Refundability Status of Early Childhood Development Tax Credit Claims, Tax Year 2010

Adjusted Gross Income	Fully Nonrefunded			Fully Refunded			Partially Refunded				Total	
	Count	Amount	Percentage	Count	Amount	Percentage	Count	Amount Nonrefunded	Amount Refunded	Percentage	Nonrefunded Percentage	Refunded Percentage
$14,999 or less	19	$1,891	0.6%	756	$110,802	79.7%	24	3160	2007	4.7%	4.3%	95.7%
$15,000-$19,999	285	$26,352	8.0%	54	$9,022	6.5%	144	$15,476	$14,496	27.4%	64.0%	36.0%
$20,000-$24,999	423	$57,177	17.4%	31	$5,244	3.8%	64	$9,213	$5,235	13.2%	86.4%	13.6%
$25,000-$29,999	359	$50,571	15.4%	26	$5,661	4.1%	85	$10,041	$4,109	13.0%	86.1%	13.9%
$30,000-$34,999	370	$57,145	17.4%	12	$1,465	1.1%	99	$12,512	$5,622	16.6%	90.8%	9.2%
$35,000-$39,999	402	$61,486	18.7%	15	$4,062	2.9%	77	$9,433	$2,488	10.9%	91.5%	8.5%
$40,000-$44,999	442	$73,578	22.4%	17	$2,798	2.0%	86	$13,387	$2,037	14.1%	94.7%	5.3%
Total	**2,300**	**$328,200**	**100.0%**	**911**	**$139,054**	**100.0%**	**579**	**$73,222**	**$35,994**	**100.0%**	**69.6%**	**30.4%**
Share of Total	60.7%	65.2%		24.0%	27.6%		15.3%	14.5%	7.2%			

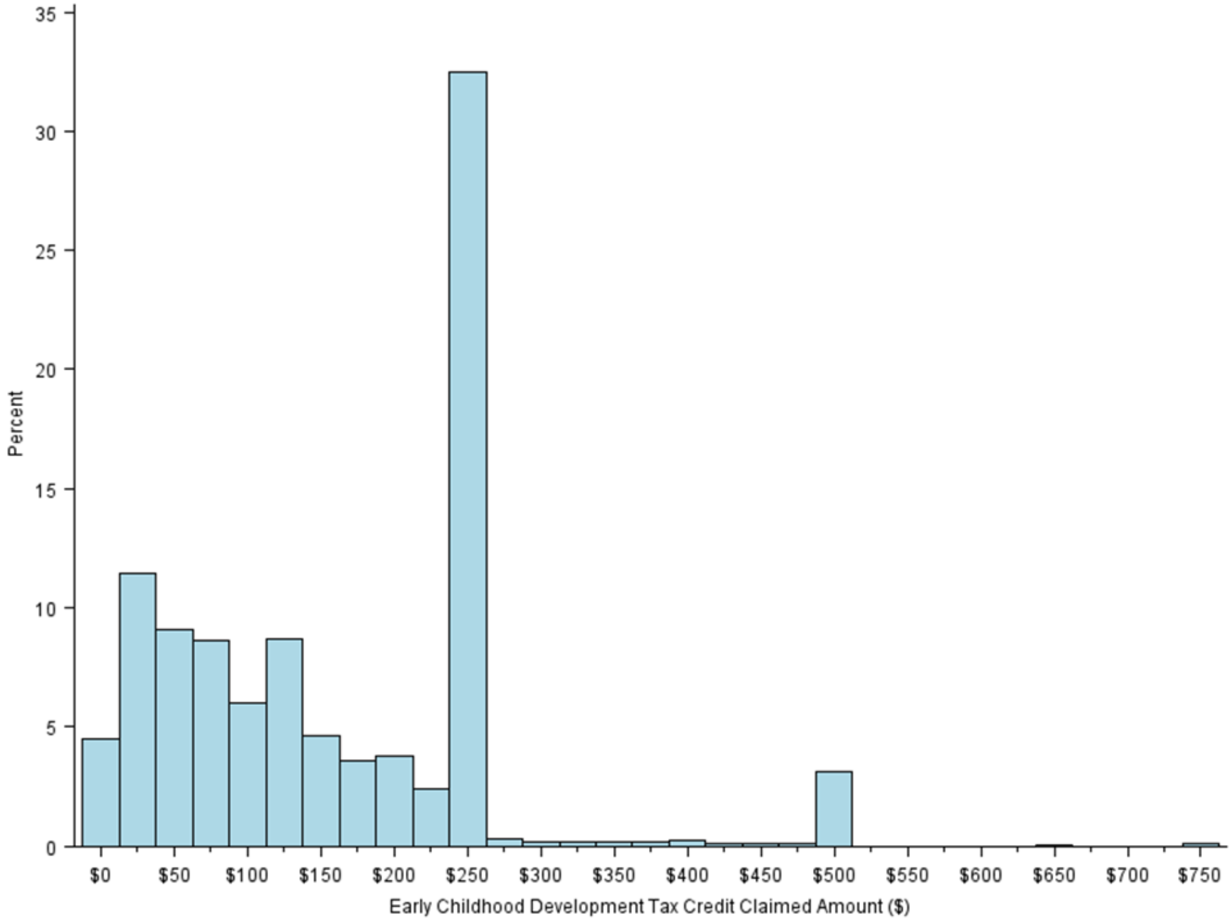
Source: Individual income tax return data.

Table 18. Demographic Characteristics of Early Childhood Development Tax Credit Claimants, Tax Year 2011

Characteristics	Number of Households	Distribution of Households	Amount of Claims	Distribution of Claims	Average Claim
Filing Status					
Single	277	5.9%	$41,690	5.6%	$151
Married joint	1,216	25.8%	$192,464	25.7%	$158
Married separate on combined returns	961	20.4%	$154,861	20.7%	$161
Married separate on separate returns	59	1.3%	$11,682	1.6%	$198
Head of household	2,200	46.7%	$348,756	46.5%	$159
Qualifying widow(er)	2	0.0%	$324	0.0%	$162
Marital Status					
Unmarried	2,236	47.4%	$359,007	47.9%	$161
Married	2,479	52.6%	$390,770	52.1%	$158
Number of Dependents Aged 3-5					
Age missing	421	8.9%	$79,600	10.6%	$189
0	216	4.6%	$24,813	3.3%	$115
1	3,536	75.0%	$523,248	69.8%	$148
2	524	11.1%	$117,930	15.7%	$225
3	18	0.4%	$4,186	0.6%	$233
Age of eldest Children aged between 3-5					
Age missing	421	8.9%	$79,600	10.6%	$189
0	216	4.6%	$24,813	3.3%	$115
3	1,112	23.6%	$168,417	22.5%	$151
4	1,532	32.5%	$239,871	32.0%	$157
5	1,434	30.4%	$237,076	31.6%	$165
Age of Primary Taxpayer					
20 or Under	91	1.9%	$13,955	1.9%	$153
21-25	821	17.4%	$124,626	16.6%	$152
26-30	1,588	33.7%	$249,434	33.3%	$157
31-35	1,161	24.6%	$189,743	25.3%	$163
36-40	571	12.1%	$93,379	12.5%	$164
41-45	273	5.8%	$43,332	5.8%	$159
46-50	110	2.3%	$17,523	2.3%	$159
51-55	60	1.3%	$11,471	1.5%	$191
56-60	23	0.5%	$3,304	0.4%	$144
61-65	11	0.2%	$2,125	0.3%	$193
65 or over	6	0.1%	$885	0.1%	$148
Resident Status					
Nonresident	198	4.2%	$36,254	4.8%	$183
Resident	4,517	95.8%	$713,523	95.2%	$158
Total	**4,715**	**100.0%**	**$749,777**	**100.0%**	**$159**

Source: Individual income tax return data.

Figure 8. Frequency Distribution of Early Childhood Development Tax Credit Claims, Tax Year 2011



Source: Individual income tax return data.
Note: Nearly 31.0 percent taxpayers claimed ECD at the amount of $250.

Table 19. Claiming Patterns of the Federal CDC, Iowa's CDC, and Iowa's ECD, Tax Year 2011

	Group A Claimed Both Federal and Iowa CDC						Group B Claimed Federal CDC But Not Iowa CDC						Group C Claimed Iowa CDC Tax Credit But Not Federal CDC				Group D Claimed ECD but Not Federal CDC			
			Federal CDC		Iowa CDC		Claimed Federal CDC, but Neither Iowa CDC or ECD				Claimed Federal CDC and Iowa ECD									
Iowa Adjusted Gross Income	Number	Percent	Number	Percent	Amount	Percent	Number	Percent	Amount	Percent	Numbe	Amount	Number	Percent	Amount	Percent	Number	Percent	Amount	Percent
$4,999 or less	27	0.1%	$12,915	0.2%	$9,222	0.2%	13	0.0%	$6,642	0.0%	5	$2,040	613	7.4%	$215,373	8.3%	309	8.0%	$50,684	8.7%
$5,000-$9,999	18	0.1%	5,553	0.1%	7,465	0.2%	7	0.0%	2,733	0.0%	0	0	1,398	16.9%	485,105	18.6%	357	9.2%	53,431	9.2%
$10,000-$14,999	183	1.0%	30,999	0.4%	60,496	1.2%	6	0.0%	2,341	0.0%	*	*	2,117	25.5%	705,832	27.1%	523	13.5%	74,212	12.8%
$15,000-$19,999	1,788	9.7%	382,656	4.6%	610,922	12.5%	42	0.1%	11,010	0.0%	63	10,766	1,680	20.3%	626,062	24.0%	560	14.5%	79,654	13.7%
$20,000-$24,999	3,239	17.6%	1,299,168	15.6%	1,036,961	21.2%	36	0.1%	12,931	0.0%	113	28,196	904	10.9%	268,582	10.3%	501	13.0%	75,155	12.9%
$25,000-$29,999	3,483	18.9%	1,746,674	20.9%	1,054,838	21.6%	44	0.1%	22,127	0.1%	127	41,997	572	6.9%	138,489	5.3%	456	11.8%	68,871	11.8%
$30,000-$34,999	3,452	18.7%	1,861,284	22.3%	1,021,595	20.9%	52	0.1%	28,268	0.1%	137	42,949	380	4.6%	84,330	3.2%	424	11.0%	64,411	11.1%
$35,000-$39,999	3,178	17.2%	1,589,326	19.0%	655,148	13.4%	34	0.1%	13,874	0.0%	151	54,864	329	4.0%	54,812	2.1%	375	9.7%	58,766	10.1%
$40,000-$44,999	3,072	16.7%	1,424,021	17.0%	429,858	8.8%	64	0.1%	30,478	0.1%	191	80,195	301	3.6%	28,610	1.1%	362	9.4%	56,323	9.7%
$45,000-$54,999		0.0%					7,083	11.7%	3,272,621	10.9%										
$55,000-$64,999		0.0%					7,885	13.0%	3,909,465	13.1%										
$65,000-$74,999		0.0%					8,466	14.0%	4,415,033	14.8%										
$75,000-$99,999		0.0%					17,638	29.1%	9,203,734	30.8%										
$100,000-$199,999		0.0%					16,918	27.9%	7,959,911	26.6%										
$200,000-$299,999		0.0%					1,539	2.5%	651,175	2.2%										
$300,000-$399,999		0.0%					371	0.6%	166,661	0.6%										
$400,000-$499,999		0.0%					137	0.2%	65,833	0.2%										
$500,000-$999,999		0.0%					170	0.3%	88,354	0.3%										
$1,000,000 or over		0.0%					40	0.1%	24,191	0.1%										
Total	**18,440**	**100.0%**	**8,352,596**	**100.0%**	**4,886,505**	**100.0%**	**60,545**	**100.0%**	**29,887,382**	**100.0%**	**789**	**261,007**	**8,294**	**100.0%**	**2,607,195**	**100.0%**	**3,867**	**100.0%**	**581,507**	**100.0%**

Source: Iowa individual income tax return data.

*Amount is not reported for groups with fewer than five observations due to data confidentiality.

Table 20. Claiming Patterns of the CDC, ECD, and Other Iowa Tax Credits for Family with Children, Tax Year 2011

Iowa Child and Dependent Care Tax Credit Claimants

	Iowa's CDC		Iowa's Earned Income Tax Credit		Dependent Credit		Tuition and Textbook Tax Credit		Total Iowa Tax Credits for Family with Children	
	Count	Amount	Count	Amount	Count	Amount	Count	Amount	Total Amount	Average Amount
$0 or Less	134	$64,846	81	$13,951	129	$9,760	0	$0	$88,557	$661
$1-$4,999	506	$160,956	474	$48,821	480	$29,800	0	$0	$239,577	$473
$5,000-$9,999	1,414	$491,890	1,366	$257,959	1,341	$79,640	0	$0	$829,489	$587
$10,000-$14,999	2,297	$766,430	2,199	$550,119	2,206	$135,200	0	$0	$1,451,749	$632
$15,000-$19,999	3,466	$1,236,492	3,324	$828,831	3,351	$207,720	*	*	$2,273,714	$656
$20,000-$24,999	4,139	$1,304,032	3,984	$803,120	3,991	$250,040	7	$262	$2,357,454	$570
$25,000-$29,999	4,049	$1,192,701	3,861	$578,681	3,902	$257,440	36	$2,008	$2,030,830	$502
$30,000-$34,999	3,832	$1,106,822	3,524	$341,020	3,714	$248,040	58	$3,232	$1,699,114	$443
$35,000-$39,999	3,500	$709,306	2,156	$163,103	3,431	$239,880	106	$6,526	$1,118,815	$320
$40,000-$44,999	3,374	$458,678	1,230	$62,560	3,301	$237,320	137	$9,769	$768,327	$228
Total	**26,711**	**$7,492,153**	**22,199**	**$3,648,165**	**25,846**	**$1,694,840**	**347**	**$22,468**	**$12,857,626**	**$481**
Ratio to number of CDC claimants			83.1%		96.8%		1.3%			

Early Childhood Development Tax Credit Claimants

	ECD		Iowa's Earned Income Tax Credit		Dependent Credit		Tuition and Textbook Tax Credit		Iowa Tax Credits for Family with Chi	
	Count	Amount	Count	Amount	Count	Amount	Count	Amount	Count	Amount
$0 or Less	110	$20,614	63	$10,767	110	$9,760	0	$0	$41,141	$374
$1-$4,999	210	$33,070	188	$18,579	210	$15,640	0	$0	$67,289	$320
$5,000-$9,999	359	$54,133	339	$65,912	359	$25,800	0	$0	$145,845	$406
$10,000-$14,999	526	$75,212	496	$137,288	526	$41,640	0	$0	$254,140	$483
$15,000-$19,999	630	$90,411	574	$166,152	630	$52,240	*	*	$308,933	$490
$20,000-$24,999	625	$97,813	551	$133,165	624	$53,000	5	$182	$284,160	$455
$25,000-$29,999	581	$95,184	518	$99,931	582	$52,240	6	$434	$247,789	$426
$30,000-$34,999	567	$92,190	503	$74,412	567	$54,360	12	$262	$221,224	$390
$35,000-$39,999	545	$91,583	391	$38,452	545	$51,080	10	$657	$181,772	$334
$40,000-$44,999	562	$99,567	297	$16,774	562	$50,840	14	$809	$167,990	$299
Total	**4,715**	**$749,777**	**3,920**	**$761,432**	**4,715**	**$406,600**	**48**	**$2,474**	**$1,920,283**	**$407**
Ratio to number of ECD claimants			83.1%		100%		1.0%			

Source: Individual income tax return data.

* Amount is not reported for groups with fewer than five observations due to data confidentiality.

Table 21. Distribution of Child and Dependent Care Tax Credit Claiming Spells, Tax Years 1996-2012

Spell Length	All Spells	Completed Spells Only
1 Year	45.6%	56.8%
2 Years	24.7%	20.7%
3 Years	12.2%	9.9%
4 Years	6.7%	5.0%
5 Years	4.0%	3.0%
6 Years	2.4%	1.8%
7 Years	1.6%	1.2%
8 Years	1.0%	0.7%
9 Years	0.6%	0.4%
10 Years or Over	1.0%	0.6%
Total Number of Spells	87,551	68,324
Average Length	2.3 years	2.0 years
Share with Multiple Spells	45.5%	53.2%

Source: Iowa individual income tax return data.
Notes: The length of each spell equals the number of consecutive years a taxpayer claims a tax credit. Completed spells exclude any spells with a claim in 1996, the first year in the panel, and any spells with a claim in 2012, the last year in the panel.

Table 22. Distribution of Early Childhood Development Tax Credit Claiming Spells, Tax Years 2006-2012

Spell Length	All Spells	Completed Spells Only
1 Year	84.4%	88.4%
2 Years	12.3%	9.8%
3 Years	2.9%	1.6%
4 Years	0.1%	0.2%
5 Years	0.1%	0.0%
Total Number of Spells	1,427	951
Average Length	1.2 years	1.1 years
Share with Multiple Spells	10.4%	10.1%

Source: Iowa individual income tax return data, tax years 2006-2012.
Note: Completed spells exclude any spells with a claim in 2012, the last year in the panel, but include spells starting in 2006, the first year the tax credit was available.

Table 23. Characteristics of One-Time or Persistent Claimants for Child and Dependent Care Tax Credit, Tax Years 2009-2011

Characteristics in 2010	CDC One-Time Claimants Only Claimed in 2010			CDC Persistent Claimants Claimed Every Year 2009-2011		
	Number	Average	Percentage	Number	Average	Percentage
Number of Households	22,542			76,908		
Adjusted Gross Income		$26,490			$21,496	
$0 or less			0.4%			1.7%
$1-$4,999			1.2%			3.1%
$5,000-$9,999			4.3%			7.9%
$10,000-$14,999			7.9%			12.4%
$15,000-$19,999			12.8%			14.1%
$20,000-$24,999			15.8%			13.9%
$25,000-$29,999			15.5%			13.2%
$30,000-$34,999			14.7%			12.3%
$35,000-$39,999			13.9%			11.0%
$40,000-$44,999			13.4%			10.3%
Wages		$25,761			$21,935	
Percent positive wage			96.9%			92.8%
Investment Income		$168			$397	
Unemployment Compensation		$921			$1,281	
Percent positive unemployment compensation			17.2%			18.8%
By Age of Primary Taxpayer		32.1			35.6	
20 or under			1.5%			1.6%
21-25			17.7%			11.9%
26-30			29.4%			20.4%
31-35			23.3%			21.5%
36-40			14.6%			17.4%
41-45			7.7%			12.2%
46-50			3.7%			7.7%
51 or over			2.1%			7.4%
Filing Status						
Single			7.0%			8.7%
Married joint			5.8%			25.6%
Married separate on combined returns			20.7%			16.1%
Married separate on separate returns			0.1%			1.1%
Head of household			66.3%			48.4%
Qualifying widow(er)			0.1%			0.1%
Percent Married			26.6%			42.8%
Number of Dependents Aged Under 13		1.5			1.6	
1			63.7%			56.2%
2			28.5%			30.1%
3			6.7%			10.9%
4 or over			1.0%			2.8%
Age of the Oldest Qualifying Child		7.5			10.9	
0-2			60.0%			10.4%
3-5			30.3%			16.3%
6-12			8.3%			42.5%
13 or over			1.4%			30.9%
Percent Urban			46.1%			45.7%

Source: Iowa individual income tax return data.
Note: Urban counties are defined as Black Hawk, Dubuque, Johnson, Linn, Polk, Pottawattamie, Scott, Story, and Woodbury.

Table 24. Characteristics of One-Time or Persistent Claimants of Early Childhood Development Tax Credit, Tax Years 2009-2011

Characteristics in 2010	ECD One-Time Claimants Only Claimed in 2010			ECD Persistent Claimants Claimed Every Year 2009-2011		
	Number	Average	Percentage	Number	Average	Percentage
Number of Households	1,797			204		
Adjusted Gross Income		$27,140			$27,847	
$0 or less			0.6%			0.0%
$1-$4,999			1.9%			0.5%
$5,000-$9,999			5.0%			4.9%
$10,000-$14,999			9.9%			5.9%
$15,000-$19,999			12.0%			13.7%
$20,000-$24,999			14.2%			12.7%
$25,000-$29,999			12.3%			17.2%
$30,000-$34,999			12.3%			17.6%
$35,000-$39,999			14.4%			13.7%
$40,000-$44,999			17.4%			13.7%
Wages		$25,167			$25,944	
Percent positive wage			95.9%			93.6%
Investment Income		$168			$397	
Unemployment Compensation		$1,634			$1,613	
Percent positive unemployment compensation			21.1%			16.2%
By Age of Primary Taxpayer		32.0			32.8	
20 or under			0.9%			0.0%
21-25			16.9%			6.9%
26-30			32.7%			33.8%
31-35			23.3%			32.4%
36-40			13.6%			18.1%
41-45			6.8%			4.9%
46-50			3.7%			2.5%
51 or over			2.1%			1.5%
Filing Status						
Single			5.0%			1.0%
Married joint			24.4%			46.6%
Married separate on combined returns			23.9%			27.5%
Married separate on separate returns			1.3%			2.0%
Head of household			45.2%			23.0%
Qualifying widow(er)			0.1%			0.0%
Percent Married			49.6%			76.0%
Number of Dependents Ages Between 3 and 5		1.1			1.3	
1			85.9%			71.4%
2			13.2%			26.9%
3			0.6%			1.6%
4 or over			0.0%			0.0%
Age of the Oldest Qualifying Child		8.2			7.6	
3 or under			17.9%			7.8%
4			17.9%			21.6%
5			17.7%			16.7%
6 or over			46.5%			53.9%
Percent Urban			49.4%			53.9%

Source: Iowa individual income tax return data.

Note: Urban counties are defined as Black Hawk, Dubuque, Johnson, Linn, Polk, Pottawattamie, Scott, Story, and Woodbury.

Table 25. Explanations of Starting or Stopping Claiming the Child and Dependent Care Tax Credit, Tax Years 2009-2011

Start Claiming in 2010		Stop Claiming in 2010	
Factors	**Share Experiencing Exclusive of Other Factors Noted Above**	**Factors**	**Share Experiencing Exclusive of Other Factors Noted Above**
Iowa income falls below $45,000	22.6%	Iowa income rises above $45,000	29.8%
Start having children under age 13	17.5%	No longer have children under age 13	7.5%
End of marriage	2.6%	New Marriage	1.7%
Move into a urban county	0.9%	Move out of an urban county	1.1%
Total above	**43.7%**	**Total above**	**40.1%**
Other	56.3%	Other	59.9%

Source: Iowa individual income tax return data.
Notes: Urban counties are defined as Black Hawk, Dubuque, Johnson, Linn, Polk, Pottawattamie, Scott, Story, and Woodbury.
Factors such as no longer having a child under age 6, and the spouse or the taxpayer starting or stopping work were also examined. But they are not reported because they can only explain a very small part of the starting or stopping of claims.

Table 26. Explanations of Starting or Stopping Claiming the Early Childhood Development Tax Credit, Tax Years 2009-2011

Start Claiming in 2010		Stop Claiming in 2010	
Factors	**Share Experiencing Exclusive of Other Factors Noted Above**	**Factors**	**Share Experiencing Exclusive of Other Factors Noted Above**
Iowa income falls below $45,000	12.6%	Iowa income rises above $45,000	19.1%
Start having children ages 3-5	27.9%	No longer have children ages 3-5	22.4%
End of marriage	1.2%	New marriage	1.3%
Move into a urban county	0.9%	Move out of a urban county	0.9%
Total above	**42.6%**	**Total above**	**43.6%**
Other	57.4%	Other	56.4%

Source: Iowa individual income tax return data.
Note: Urban counties are defined as Black Hawk, Dubuque, Johnson, Linn, Polk, Pottawattamie, Scott, Story, and Woodbury.

Table 27. Characteristics of Child Care Assistance Claimants, Fiscal Year 2013

	Number of Households	Distribution	Total CCA Benefit	Distribution	Average CCA Benefit
By Number of Adults:					
1	17,999	78.8%	$78,803,985	78.5%	$4,378
2 or over	4,852	21.2%	$21,558,607	21.5%	$4,443
By Family Income Level:					
$0 or less	5,763	25.2%	$17,158,029	17.1%	$2,977
$1-$4,999	1,082	4.7%	$4,441,771	4.4%	$4,105
$5,000-$9,999	1,230	5.4%	$5,343,487	5.3%	$4,344
$10,000-$14,999	3,206	14.0%	$13,928,611	13.9%	$4,345
$15,000-$19,999	5,263	23.0%	$24,118,625	24.0%	$4,583
$20,000-$24,999	3,673	16.1%	$19,957,909	19.9%	$5,434
$25,000-$29,999	1,599	7.0%	$9,350,158	9.3%	$5,848
$30,000-$34,999	655	2.9%	$3,953,510	3.9%	$6,036
$35,000-$39,999	230	1.0%	$1,406,003	1.4%	$6,113
$40,000-$44,999	94	0.4%	$388,958	0.4%	$4,138
$45,000 or Over	56	0.2%	$315,532	0.3%	$5,634
By Number of Qualifying Children:					
1	8,246	36.1%	$20,211,087	20.1%	$2,451
2	7,411	32.4%	$32,315,162	32.2%	$4,360
3	4,440	19.4%	$26,472,534	26.4%	$5,962
4 or over	2,754	12.1%	$21,363,810	21.3%	$7,757
By Age of Primary Parent:					
20 or under	1,348	5.9%	$3,413,206	3.4%	$2,532
21-25	6,564	28.7%	$25,579,921	25.5%	$3,897
26-30	6,690	29.3%	$33,168,255	33.0%	$4,958
31-35	4,318	18.9%	$21,184,172	21.1%	$4,906
36-40	1,885	8.2%	$8,485,232	8.5%	$4,501
41-45	930	4.1%	$3,983,895	4.0%	$4,284
46-50	484	2.1%	$1,973,743	2.0%	$4,078
50-55	346	1.5%	$1,451,977	1.4%	$4,196
56-60	188	0.8%	$764,085	0.8%	$4,064
61-65	77	0.3%	$296,527	0.3%	$3,851
66 or over	21	0.1%	$61,578	0.1%	$2,932
By Age of Oldest Child Per Family:					
0-2	5,029	22.0%	$13,666,887	13.6%	$2,718
3-5	7,322	32.0%	$29,852,142	29.7%	$4,077
6-12	10,184	44.6%	$54,692,653	54.5%	$5,370
13 or over	316	1.4%	$2,150,911	2.1%	$6,807
Total	**22,851**	**100.0%**	**$100,362,592**	**100.0%**	**$4,392**

Source: Iowa Department of Human Services.

Table 28. Distribution of Child Care Assistance Claimants by Number of Qualifying Children, Fiscal Year 2013

Categories	Families with One Qualifying Child	Families with Two Qualifying Children	Families with Three Qualifying Children	Families with Over Three Qualifying Children	Total
Average Child Care Assistance (CCA) amount	$2,451	$4,360	$5,962	$7,757	$4,392
Average annual family income	$9,980	$13,507	$16,089	$19,175	$8,495
Average primary adult age	27.3	29.3	30.9	32.4	29.3
Average age of the oldest child	3.2	5.9	7.5	8.6	4.1
Average number of qualifying adult	1.2	1.2	1.3	4.5	1.2
Average number of months received CCA	6.5	7.1	7.3	1.3	7.0
Number of households	8,246	7,411	4,440	2,754	22,851
Percentage	36.1%	32.4%	19.4%	12.1%	100.0%

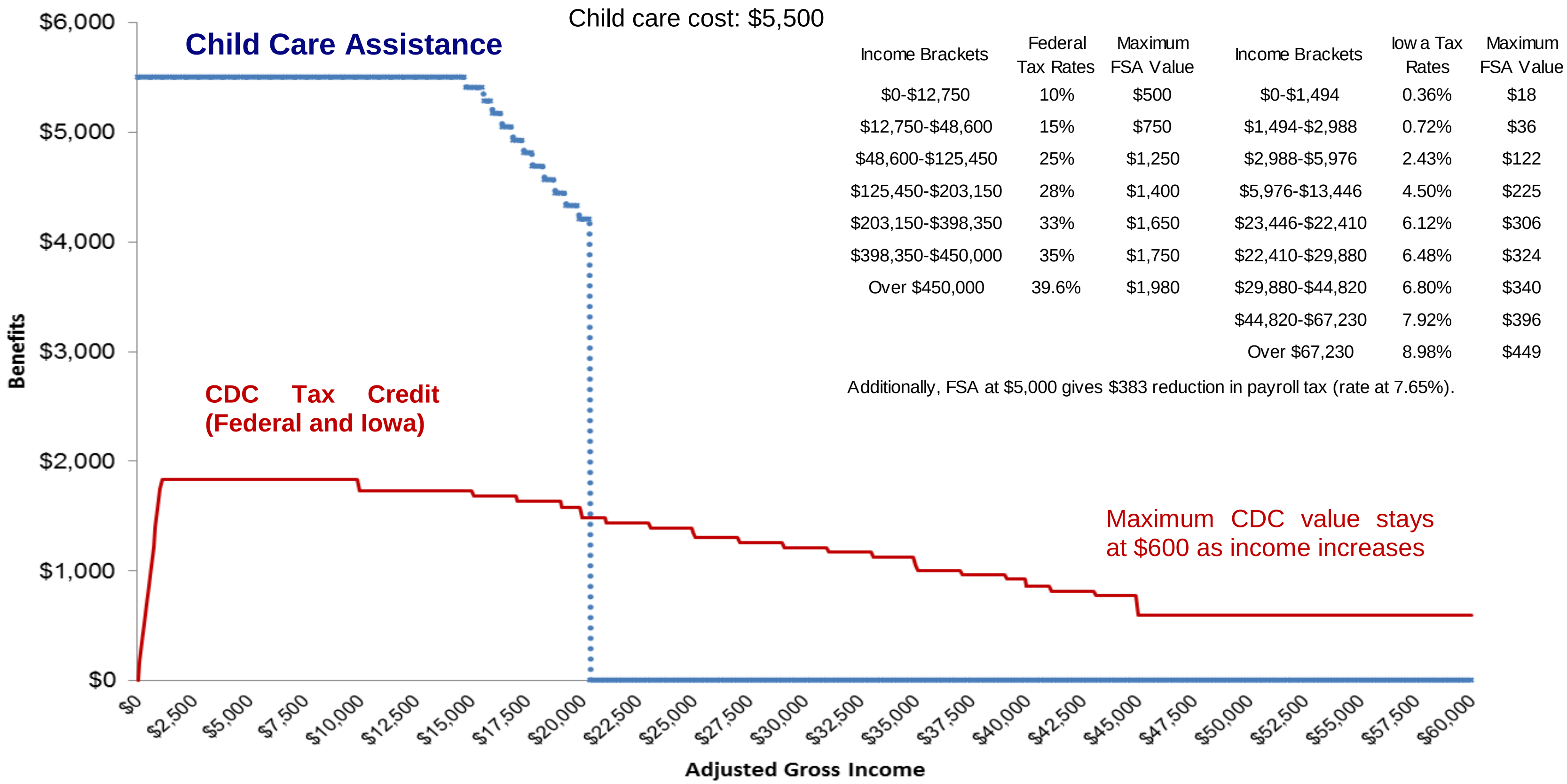
Source: Iowa Department of Human Services.

Table 29. Distribution of Dependent Care Benefits on Federal Form 2441, Tax Year 2012

Adjusted Gross Income	Number of Households	Distribution of Households	Total Dependent Care Benefits	Distribution of Dependent Care Benefit	Average Amount Per Household
$0 or less	46	0.2%	$139,924	0.2%	$3,042
$1-$4,999	18	0.1%	$23,628	0.0%	$1,313
$5,000-$9,999	28	0.1%	$47,585	0.1%	$1,699
$10,000-$14,999	83	0.3%	$134,864	0.1%	$1,625
$15,000-$19,999	143	0.6%	$239,603	0.3%	$1,676
$20,000-$24,999	206	0.8%	$473,796	0.5%	$2,300
$25,000-$29,999	259	1.0%	$635,968	0.7%	$2,455
$30,000-$34,999	328	1.3%	$830,395	0.9%	$2,532
$35,000-$39,999	384	1.5%	$1,096,536	1.2%	$2,856
$40,000-$44,999	449	1.8%	$1,224,007	1.4%	$2,726
$45,000 or Over	23,534	92.4%	$85,641,232	94.6%	$3,639
Total	**25,478**	**100.0%**	**$90,487,538**	**100.0%**	**$3,552**

Source: Federal Form 2441 data matched with Iowa individual tax return data.

Figure 9. Child Care Subsidy Programs for an Example Household: A Single Taxpayer with One Qualifying Child, Tax Year 2013



Income Brackets	Federal Tax Rates	Maximum FSA Value
$0-$12,750	10%	$500
$12,750-$48,600	15%	$750
$48,600-$125,450	25%	$1,250
$125,450-$203,150	28%	$1,400
$203,150-$398,350	33%	$1,650
$398,350-$450,000	35%	$1,750
Over $450,000	39.6%	$1,980

Income Brackets	Iowa Tax Rates	Maximum FSA Value
$0-$1,494	0.36%	$18
$1,494-$2,988	0.72%	$36
$2,988-$5,976	2.43%	$122
$5,976-$13,446	4.50%	$225
$23,446-$22,410	6.12%	$306
$22,410-$29,880	6.48%	$324
$29,880-$44,820	6.80%	$340
$44,820-$67,230	7.92%	$396
Over $67,230	8.98%	$449

Additionally, FSA at $5,000 gives $383 reduction in payroll tax (rate at 7.65%).

Assumptions: A single mother has one child (a four-year-old child with $5,500 annual child care costs). All gross income is earned income from wages. The child only needs basic care (CCA has higher pay rate ceilings and co-payment fees for special need care). The child attends a child care center full time for 20 days per month during a year (240 days in annual child care usage). Federal and Iowa adjusted gross income are the same for simplification. Annual income is evenly distributed across months, which is relevant to CCA.

Figure 10. Child Care Subsidy Programs for an Example Household: A Married Couple with Two Qualifying Children, Tax Year 2013

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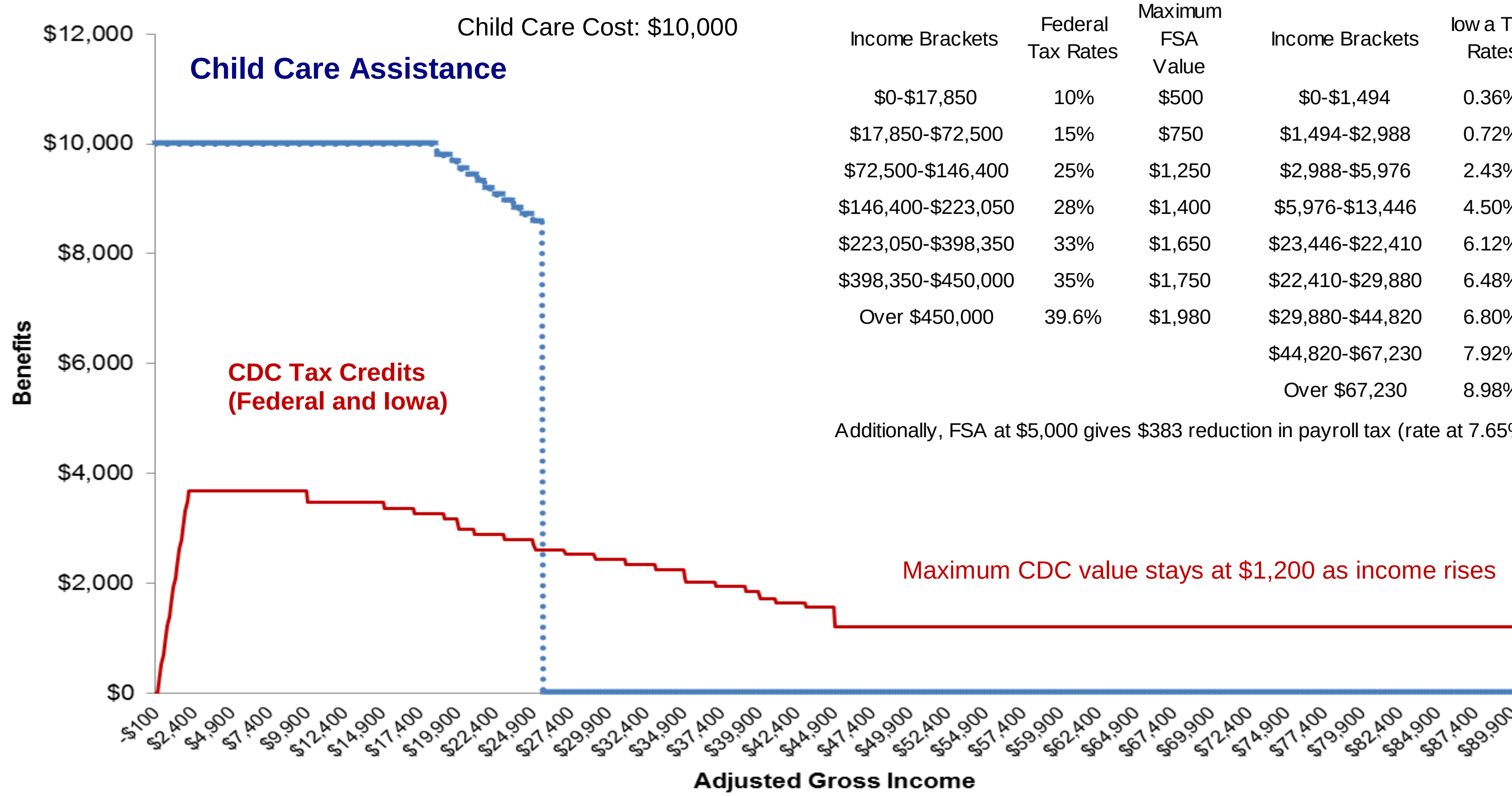

Income Brackets	Federal Tax Rates	Maximum FSA Value	Income Brackets	Iowa Tax Rates	Maximum FSA Value
$0-$17,850	10%	$500	$0-$1,494	0.36%	$18
$17,850-$72,500	15%	$750	$1,494-$2,988	0.72%	$36
$72,500-$146,400	25%	$1,250	$2,988-$5,976	2.43%	$122
$146,400-$223,050	28%	$1,400	$5,976-$13,446	4.50%	$225
$223,050-$398,350	33%	$1,650	$23,446-$22,410	6.12%	$306
$398,350-$450,000	35%	$1,750	$22,410-$29,880	6.48%	$324
Over $450,000	39.6%	$1,980	$29,880-$44,820	6.80%	$340
			$44,820-$67,230	7.92%	$396
			Over $67,230	8.98%	$449

Additionally, FSA at $5,000 gives $383 reduction in payroll tax (rate at 7.65%).

Assumptions: A married couple, both working, has two children (a four-year-old child with $5,500 annual child care costs and $4,500 for a nine-year-old). All gross income is earned income from wages. The children only need basic care (CCA has higher pay rate ceilings and co-payment fee for special need care). The children attend a child care center full time for 20 days per month during a year (240 days in annual child care usage). Federal and Iowa adjusted gross income are the same for simplification. Annual income is evenly distributed across months, which is relevant to CCA.