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Restructuring the Eligibility Policies of the Child Care and Development Fund to Address Benefit Cliffs and Affordability: Florida as a Case Study

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Primary issue:

Affordable childcare is a struggle for most working families in the United States. Subsidized childcare provides financial support for some low-income parents so they can work or enroll in training and obtain a higher-paying occupation. However, in many instances, the federal eligibility limits hit before families can independently pay for the full cost of childcare without sacrificing other basic household expenses. To help parents receiving subsidized childcare advance in their careers, changes to policy and funding can address affordability of childcare and eliminate the benefits cliff to support economic mobility.

Key findings:

Based on case study analysis in Florida, the authors describe childcare affordability challenges. The current federal eligibility limit is not consistent with the amount of earnings needed for families to absorb the full cost of childcare without forgoing other basic household expenses. Cost of living and wage variation means that affordability challenges differ across communities. Extending subsidy eligibility to a measure of economic self-sufficiency that is based on the minimum household budget needed to cover expenses independently would address the affordability challenges. Gradually increasing parental contributions to the cost of childcare in alignment with increased earnings can eliminate the benefits cliff. There is an associated cost to government to implement these changes, which could be offset by a longer-term return on investment in the form of reduced public benefits and increased tax contributions by working families.

Takeaways for practice:

Understanding the potential gaps between the established eligibility limit for subsidized childcare and minimum household budget needed to afford childcare independently without sacrificing other basic household expenses can inform community, state, and federal funding and policy considerations. More flexible federal regulations could enable states to extend eligibility in areas with higher living costs to better support childcare affordability and pathways to economic self-sufficiency. States can develop strategies for mitigating the benefits cliff by creating an off-ramp that features a graduated phaseout of subsidy when families can afford childcare costs independently. Federal, state, and community resources can potentially be allocated to bridge the existing funding gaps.

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Restructuring the Eligibility Policies of the Child Care and Development Fund to Address Benefit Cliffs and Affordability: Florida as a Case Study

Abstract:

This paper explores how the current eligibility policies of the federal Child Care and Development Fund (CCDF) create benefits cliffs that act as barriers to economic self-sufficiency. By examining Florida data and policies, the authors demonstrate how the program's existing co-payment schedule affects the same hypothetical family living in two contrasting Florida counties: one with state median living costs and one with high living costs. The authors find that the CCDF income eligibility exit threshold is too low, particularly in high-cost counties. That occurs because the exit threshold is based on the state median income, as opposed to more local measures that better approximate and reflect local cost of living. The authors propose and calculate the additional family and government costs of two alternative CCDF phase-out designs, which would remove the CCDF benefits cliffs. Both proposed alternatives feature smooth phase-out schedules that align the subsidies with the local cost of childcare, thereby reducing barriers to economic mobility unintentionally created by government policies.

JEL classification: I38, J08, J13, J24

Key words: childcare, benefits cliffs, human capital, skills, provision and effects of welfare programs, effective marginal tax rates

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Affordable high-quality childcare is a struggle for most parents in the United States. We estimate that only 44 percent of U.S. families with children under the age of 13 can afford the full price of childcare without having to sacrifice other basic needs such as housing, food, health care, and transportation.¹ Although the U.S. government has many programs intended to support working families with young children, design and funding constraints can significantly limit their reach and effectiveness. In this paper, we focus on the largest childcare subsidy program in the United States: the Child Care and Development Fund, or CCDF (Office of Child Care, 2019). CCDF, also known as the Child Care and Development Block Grant, is administered by the Office of Child Care at the U.S. Department of Health and Human Services (HHS) and provides block grants to states, which are used to subsidize the childcare expenses of eligible working families with children under age 13 so they can work or attend a job training or educational program. We focus on two design features of the current CCDF design, which we argue can reduce the incentives for seeking greater income, decreasing economic mobility.

The first design feature is the lack of a smooth co-payment schedule toward the exit eligibility threshold. For families that are currently receiving a CCDF voucher, eligibility is defined by states and ends once their income passes a certain threshold—usually 85 percent of state median income (SMI), the highest allowable threshold per federal regulations. For families close to this threshold, a modest wage increase can push earnings above it, with the value of the lost subsidy often being greater than the increase in earnings. This is known as a benefits cliff. The size of the benefits cliff depends on the value of the subsidy near the income eligibility threshold. States ultimately determine how the value of the subsidy phases out as income increases. CCDF requires a family co-pay contribution toward the cost of childcare, and states establish the subsidy value and the family co-payment schedule. Thus, while CCDF is a federal program, states have some ability to mitigate the cliff effect. Many states' co-payment schedules, however, do not feature a smooth subsidy phase-out schedule all the way to the exit eligibility threshold, and thus it creates a large benefits cliff. This is the case in Florida.

The second design feature is the level of the exit eligibility threshold. Arguably, a benefits cliff may not present an insurmountable barrier if it is phased out at a level commensurate with the amount needed to pay all expenses (including childcare). However, we find that across all of Florida, only 3 percent of the population live in counties where a family with two adults and two young children can afford the full cost of childcare at the CCDF eligibility threshold without forgoing other basic needs. Furthermore, these cliffs are

¹ We find this number by applying the University of Washington Self-Sufficiency Standard to the 2018 American Community Survey (ACS). We aggregate the Self-Sufficiency Standard data to metro and nonmetro geographic level and merge to all households in the ACS by state, metro/nonmetro, number of adults, and number of kids. We then compare the income level of the household to the Self-Sufficiency Standard to determine what share of households with children under 13 can afford the full set of basic expenses approximated by the standard.

exacerbated in high-cost areas. For a family composed of two adults and two young children, the size of the cliff at the eligibility threshold can be as high as \$16,000. The average estimated disparity between the 85 percent SMI eligibility threshold and the amount of additional income needed to afford all expenses is \$11,000 across all counties in Florida for such families.

In this paper, we examine the design of CCDF as currently established in Florida. According to the U.S. Health and Human Services Department, two key objectives of the CCDF co-payment schedule are: 1) subsidy rates that reflect families' abilities to pay regardless of the number of children in care or the price charged by the provider; and 2) to minimize the benefits cliff effect by establishing a gradual subsidy phaseout schedule (National Center on Subsidy Innovation and Accountability, 2018). Our analysis demonstrates the challenges of meeting these objectives within the current design of the program. Specifically, we demonstrate how geographic variation in childcare costs can create different-sized cliffs and how CCDF families living in counties with high overall living costs face disproportionately large barriers to economic mobility relative to lower-cost counties.

This paper proceeds as follows. Section I provides background on the consequences of unaffordable childcare as well as an overview of the CCDF program and its limitations. Section II examines how the existing CCDF phaseout schedule differentially affects families in different areas of Florida by presenting two contrasting counties: one with median living costs and one with high living costs. Two proposed alternative structures of the CCDF subsidy are presented in Section III. The first alternative keeps the co-pay schedule as it is and expands the eligibility thresholds to the point at which families can afford unsubsidized childcare without having to forgo other basic needs.² The second alternative is an entirely different co-pay schedule, which increases gradually with income and phases out at the point when a family is able to afford childcare without sacrificing other basic needs. In Section IV, we examine the implications of both alternative structures on the costs to individual families as well as to the government and discuss the trade-offs associated with each alternative. Section V provides concluding context and considerations.

² To estimate childcare costs, we use data from the University of Washington's Self-Sufficiency Standard. The standard's measure of childcare costs assumes market rate costs (at the 75th percentile). Costs vary by age of child and county of residency.

Section I: Background

Childcare affordability

To better understand financial constraints for families with young children, we begin by estimating the share of the population in the United States that could potentially afford a basic set of expenses. We use the University of Washington’s Self-Sufficiency Standard (“the standard”) to determine what constitutes a basic set of expenses and to determine the amount of those expenses in every county in the United States.³ We then use county-level data from the 2018 American Community Survey (ACS) and compare total reported income from all sources (including reported receipt of government assistance) to a basic set of expenses provided by the standard for all families in the ACS. We estimate that only 44 percent of U.S. families with children under 13 years old could potentially afford the full price of center-based childcare without having to sacrifice their budget for other basic needs such as housing, food, health care, and transportation.⁴ Indeed, childcare makes up a significant share of a typical family’s budget. Among all families in the ACS that potentially need childcare, the median estimated share of a self-sufficiency budget allocated toward childcare is 17 percent. For comparison, the median estimated share of the budget spent on housing—often the largest basic expense—is 19 percent.⁵ For families that do not have the income necessary to meet a self-sufficiency budget, the relative expense of childcare is much higher. Alternatively, these families would have to switch to a different (possibly lower quality) form of childcare.

Negative social and economic consequences of unaffordable childcare

A lack of access to quality, affordable childcare can negatively affect economic growth by limiting the labor force participation of parents and challenging career advancement opportunities (Danziger et al., 2014). Challenges with childcare affordability can ultimately force parents who want to work to stay home with their children, work fewer hours, or turn

³ The up-to-date University of Washington Self-Sufficiency Standard is available only for 28 states. For the remaining states, we use data from the Cost-of-Living Database (Ilin and Terry, 2021), which closely matches the standard’s methodology.

⁴ We assume that the family potentially needs childcare if both parents are working and the family has at least one child under the age of 13.

⁵ Calculations are based on the 2019 American Community Survey and the University of Washington Self-Sufficiency Standard. Housing includes HUD’s measure of fair market rent and utilities for the area. The Department of Health and Human Services considers childcare affordable if no more than 7 percent of a family’s budget is allocated toward it (Child Care and Development Fund [CCDF] Program, 2016). Note, this figure does not depend on the level of income of the family, which we argue in this analysis is an important consideration.

down higher-paying jobs in order to remain eligible for childcare assistance from the government.⁶ If parents avoid taking higher-paying jobs in order to keep government assistance, this can result in a net loss to the taxpayers in the long run, in the form of hundreds of thousands of foregone employment taxes and greater government assistance payments (Altig, et al., 2020, revised 2021). According to analysis by the Council of Economic Advisers, as of 2016 there were 3.8 million nondisabled, working-age parents with children under age 6 outside the labor force, and another 6.6 million such parents with children under age 13 working part-time (Council of Economic Advisers, 2019). Therefore, making childcare more affordable could help up to 10.4 million parents choose to enter the labor force or increase their work hours. That would reflect a 6.5 percent increase in the 2016 U.S. labor force.⁷

For many parents who decide to have children and stay in the labor market, the inability to afford quality childcare can have negative effects on children's development. Families may need to reduce their living standard to afford childcare and continue to work or avoid taking a higher-paying job so they do not lose government assistance. If they must sacrifice adequate housing and health care, this can adversely affect parents as well as children and lead to financial and psychological stress. For example, Dahl and Lochner (2012) find a positive effect of family's income on child development. They estimate that a \$1,000 increase in annual income raises combined math and reading scores of children by 6 percent of a standard deviation of a normalized mean score. Duncan, Morris, and Rodrigues (2011) find similar results. Their estimates show that a \$1,000 increase in annual income increases young children's achievement by 5 to 6 percent of a standard deviation.

Alternatively, parents might choose lower-quality childcare that is more affordable. However, quality childcare matters for the healthy development of children at early ages. Neuroscientists and developmental psychologists have established that the first five years of a child's life are critical for the development of language and cognition as well as executive functioning skills. For example, Gialamas et al. (2014) found that low-quality childcare can adversely affect children's task attentiveness and emotional regulation. A study of early childcare conducted by the National Institute of Child Health and Human Development (NICHD) found that higher-quality childcare is associated with positive outcomes such as better mother-child relationship, fewer reports of problem behaviors, higher cognitive performance, and higher language skills (NICHD, 2005). The NICHD study measured quality childcare in many ways, including adult-to-child ratios, group sizes, training of staff, and day-to-day interactions and activities between children and staff.

⁶ Morrissey (2017) provides a detailed review of the literature on the relationship between childcare and parents' labor market behavior.

⁷ As of December 2016, the U.S. labor force was approximately 159 million people (FRED, accessed February 18, 2021).

Thus, it is not surprising that investments in early childhood development are known to have positive returns on investments. For example, Grunewald and Rolnick (2003) estimated the real internal rate of return (a useful metric for comparing public with private investment) of a 1960s Perry School program, which provided two-and-one-half-hour classroom sessions for three- to four-year-old children and an hour-and-a-half home visits on weekday afternoons, to be 16 percent. These benefits were realized in the form of fewer crimes and class disruptions, decrease in welfare payments, and higher earnings for program participants (Grunewald and Rolnick, 2003). In particular, investment in early childhood development has been found by many to yield much higher returns compared to interventions implemented later (Cunha and Heckman, 2007; Heckman, 2006; and Konstantopoulos, 2011).

Government childcare assistance through the CCDF

Federal and state governments directly subsidize the cost of childcare for low-income working parents through the Child Care and Development Fund. The current program design, however, has features that arguably limit its effectiveness. We refer to “effectiveness” as the extent to which an activity achieves its intended objectives, independent of costs (Salamon, 2002). In this analysis, we specifically focus on the co-payment schedule of CCDF. Other design features of CCDF not included in this analysis are: 1) definitions of countable income and 2) the block grant nature of the program. We choose to focus on the co-payment schedule because this element of the program design has the potential to affect the economic mobility of program participants. As mentioned in the introduction, two key objectives of the CCDF co-payment schedule that we focus on are: 1) that subsidy rates reflect families’ ability to pay and 2) to minimize the benefits cliff effect (National Center on Subsidy Innovation and Accountability, 2018).

The Child Care and Development Fund, also known as the Child Care and Development Block Grant, is administered by the Office of Child Care at the U.S. Department of Health and Human Services (HHS). It provides block grants to states, which are used to subsidize the childcare expenses of eligible working families with children under age 13 so they can work or attend a job training or educational program. In addition to providing funding for childcare services, funds are also used to improve the overall quality and supply of childcare for families in general. In 2018, CCDF served 1.3 million children and 813,200 families. In the state of Florida, these numbers are 99,100 and 70,500, respectively (Office of Child Care, 2019). The program is administered by states, territories, and tribes with funding and support from the HHS Administration for Children and Families’ Office of Child Care.

Not all eligible families receive subsidies because of limited CCDF funds. Fewer than one in six qualified households receive childcare support (Chien, 2015). Among those families that obtain CCDF vouchers, the program’s effectiveness is limited by eligibility thresholds and

phaseout schedules, which do not always allow for a smooth financial transition from the program. As a block grant, the program allows states certain discretion over CCDF rules. This includes the authority to establish initial income eligibility thresholds, continuous income eligibility thresholds, and co-pay schedules, provided they are within certain parameters. CCDF has two income eligibility thresholds: initial eligibility (at entry) and exit eligibility (at redetermination). Federal regulations require that states keep the income eligibility threshold at or below 85 percent of the state median income (SMI) for a family of a given size for either threshold.⁸ States can choose to set a different threshold for initial eligibility and exit eligibility, or they can choose the same threshold for both. A state that chooses to set the initial eligibility threshold below the exit eligibility threshold must provide a graduated phaseout co-pay schedule between the two thresholds. For states that have a phaseout co-pay schedule, most states implement one of the following three types of phaseout co-pay schedules: 1) co-pay as a share of income, where the share of income increases as income increases; 2) co-pay as a share of expense, where the share of expense increases with increases in income; and 3) fixed co-pay levels for different income brackets, with co-pay levels being higher for upper-income brackets. In Florida—which is the focus of the paper—the CCDF program design features two separate eligibility thresholds. The initial enrollment (“entry”) threshold is 150 percent of the federal poverty level (FPL) and the exit eligibility threshold is 85 percent of the SMI. Florida’s co-payment schedule design is the third type described above: fixed co-pays for different income brackets.

Commonly, the co-pay schedule for CCDF is not established with a smooth transition toward the eligibility threshold. Instead, co-pays tend to remain relatively low and then escalate considerably at 85 percent of SMI when families must absorb the full cost of childcare. This design keeps family contributions low when earnings are lower, but families can still experience significant financial hardship at the upper eligibility limit. If ineligibility for a continued subsidy is a result of a modest income increase, the result can be a loss to net family resources, also known as a benefits cliff. The gradual phaseout of subsidies is an attempt to meet the dual objectives of CCDF—to minimize the benefits cliff while keeping payments affordable. However, this design results instead in the cliff being pushed to a higher income level. If the income level at which CCDF is lost is insufficient for a family to afford the full cost of childcare, families that experience a benefits cliff may have to make financial sacrifices to basic household expenses to absorb childcare spending fully and continue to work. In some cases, this financial dilemma may result in some families “parking” their income below the

⁸ Chien, Minton, and Giannarelli (2017) simulate the effect of a 200 percent federal poverty level eligibility threshold and estimate increases in mother’s employment and the number of children aged birth to three who receive subsidies.

eligibility threshold to keep their childcare subsidy.⁹ Given the high cost of childcare and challenges to pay for it independently, instead of helping low-income working families on a path to self-sufficiency, CCDF subsidies can effectively trap them below the 85 percent SMI threshold.

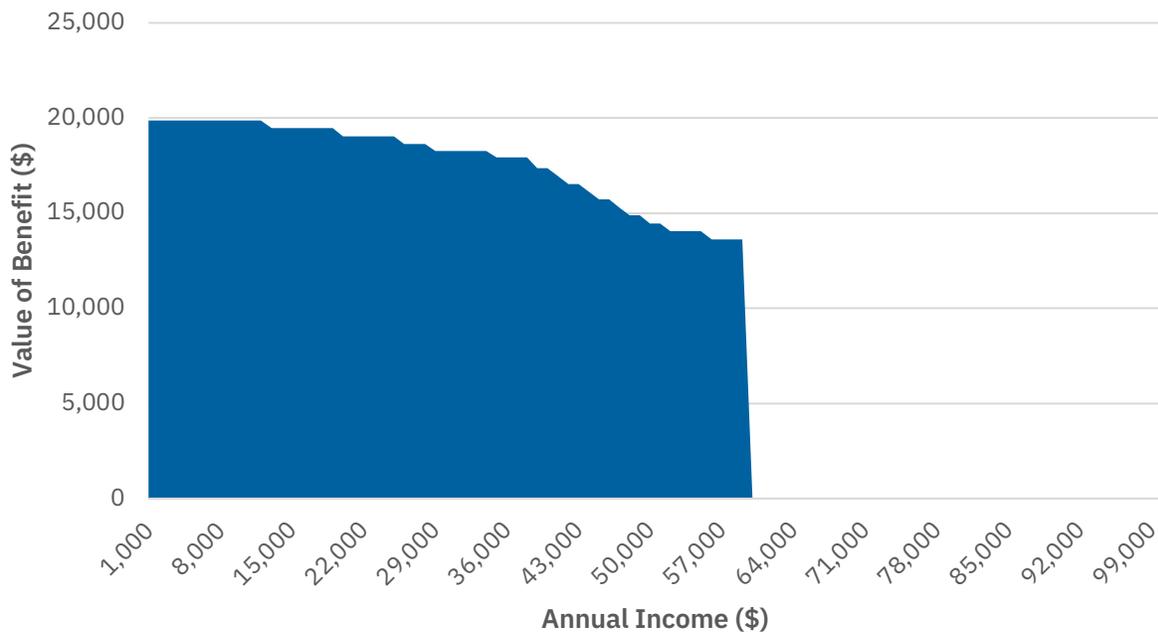
An example from Florida

In Florida, the CCDF structure is as follows. Florida has a fixed co-pay level for each of 17 different income brackets, and the co-pay levels gradually increase with higher-income brackets. The highest-income bracket ends at 85 percent of SMI. The resulting value of the CCDF subsidy is obtained by subtracting private market costs from the amount of the co-pay. The total amount of the co-pay additionally depends on the number of children under 13 a family has and whether the child(ren) need full-time or part-time care. To demonstrate how CCDF subsidies help families of different income levels, Figure 1 shows the value of the CCDF subsidy for a hypothetical two-parent household with two children living in Palm Beach County, Florida. We chose to analyze the case of two adults and two children because it is the most common family type among families with children in the United States.¹⁰ The ages two and three are chosen because the costs are a middle ground between more expensive infant care and less expensive after-school care for older children.

⁹ Romich (2006) studied 60 households over three years in the New Hope Ethnographic Study and found no instances of individuals turning down raises or promotions to avoid benefits losses. However, Roll and East (2014) surveyed 332 families utilizing the CCDF program in four Colorado counties and found that 33 percent of survey respondents have turned down a raise, not taken a new job, not worked additional hours, not gotten married, or not turned in their redetermination paper in order to keep their childcare subsidies. For a review of the literature that studies the effects of public assistance programs on labor supply, see Moffit (2002).

¹⁰ Among families with children, the most common family type is two adults and two children (25 percent). The second most common family type is two adults and one child (20 percent). The third most common type is two adults and three children (12 percent). See Appendix A for further details.

Figure 1: CCDF Subsidy by Employment Income



Note: Assumes family of two adults and two children, aged two and three living in Palm Beach County, Florida.

Source: Policy Rules Database (Ilin and Terry, 2021)

As Figure 1 shows, the value of CCDF declines as wages increase because the co-pay increases with higher levels of income. This hypothetical family loses childcare assistance completely when their income exceeds \$59,580, the eligibility threshold (85 percent of 2019 SMI) for a family of four in Florida in 2020.¹¹ The estimated value of the voucher starts at nearly \$20,000 and declines to \$13,360 right before the income eligibility threshold is reached. Thus, if the family’s income were \$59,000 and they received a \$1,000 wage increase, the family would experience a net financial loss of \$13,630, corresponding to a 19 percent decline in their total financial resources including income and CCDF.¹² The loss of the CCDF subsidy is the largest financial loss associated with reaching eligibility limits for any government assistance program (see Appendix B).

¹¹ The 2020 CCDF program rules in Florida used SMI from 2019 to determine income eligibility.

¹² See Appendix B for a chart that includes other government assistance programs, such as SNAP. The value of the CCDF program is approximated by the 75th percentile of a state-wide market rate survey of childcare providers in the county minus the co-pay for that income level.

A look at the CCDF income eligibility threshold

According to the final rule of CCDF, if states choose to set their continuous income eligibility limits below 85 percent of SMI, they should choose a “level sufficient for the family to reasonably afford quality childcare without assistance, based on the typical household budget of a low-income family. This approach promotes continuity of care for children while allowing for wage growth for families to move on a path toward economic stability” (CCDF Final Rule, 2016). Although this directive is specifically about states that do not set continuous income eligibility at 85 percent SMI, this statement implies that 85 percent of SMI adequately captures families’ ability to pay the full cost of childcare in the United States without any assistance and without forgoing other basic needs. A key question for this analysis is whether 85 percent of SMI is a realistic threshold.

One way to evaluate this question is to compare 85 percent of SMI to the cost of living in each state. In this paper, we use the University of Washington Self-Sufficiency Standard (the “standard”) as a proxy for the cost of living in an area. The standard is a budget-based measure of the real cost of living and an alternative to the official poverty measure. It determines the amount of income required for working families to meet basic needs at a minimally adequate level, taking into account family composition, ages of children, and geographic differences in costs. The standard defines the amount of income necessary to meet basic needs (including taxes) without public assistance, nonprofit or informal assistance (such as free babysitting by a relative or friend, or food provided by churches or local food banks). The standard includes the costs of childcare, food, housing, health insurance, other expenses such as clothing, taxes (net of tax credits), and employment-related transportation.

Figure 2 shows the CCDF income eligibility threshold (85 percent of SMI) compared to the average standard for a family of four in each state of the United States and the District of Columbia as well as a 45-degree line.¹³ Points on the chart that are below the 45-degree line represent states where the standard is higher than 85 percent of SMI. In areas where the standard is higher than the 85 percent of SMI, the CCDF threshold is not a good proxy for the ability of families to pay for childcare without government assistance, as in Florida (the orange dot). In total, in about half of states (25 out of 50 states and the District of Columbia) there is a shortfall between the CCDF threshold and the standard. If families are living below the standard and do not qualify for CCDF, they would have to rely on other means of support, reduce expenses as noted above, or face a trade-off between labor market participation and quality childcare.

¹³ The standard is available at the county level; population weights are used to obtain the state average.

Figure 2: Relationship between Exit Eligibility Threshold and the Standard



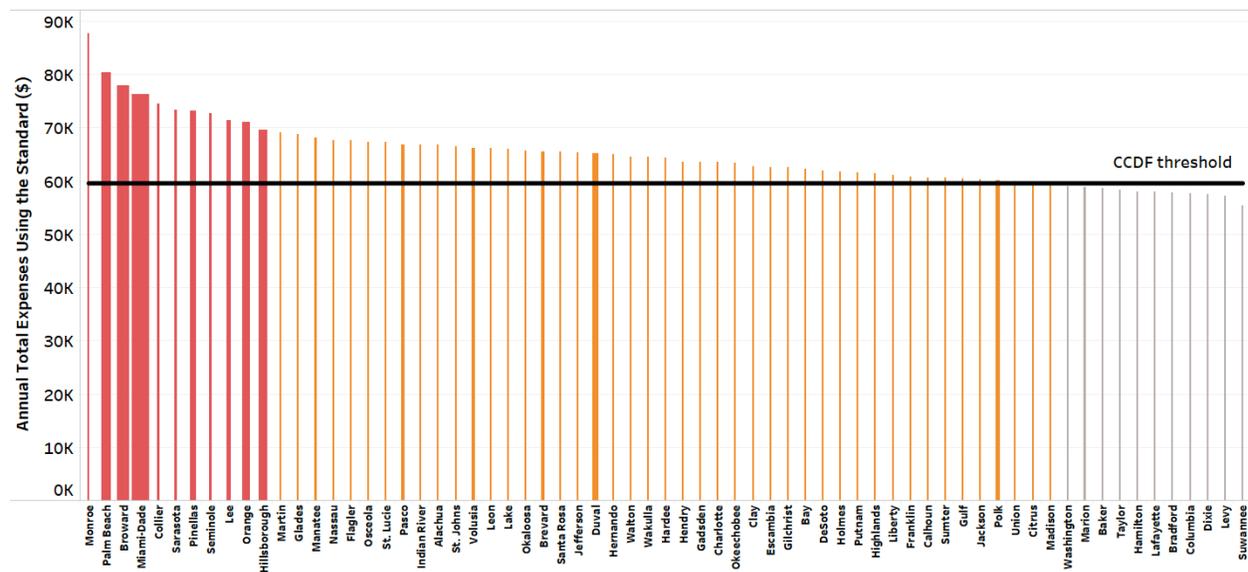
Note: The orange dot is Florida. A map of this data is shown in Appendix C.
 Sources: University of Washington, U.S. Census Bureau, and authors' calculations

Even within a state, there can be a significant variation in income and living costs that inhibit the ability of CCDF to meet the needs of low-income working families. For example, there is significant variation in the standard across counties in Florida. The standard for the most expensive county—Monroe—is \$87,743. In contrast, in the least expensive county—Suwanee—the standard is \$55,371.

Figure 3 shows a horizontal line indicating the CCDF cutoff for a family with two adults and two young children in Florida (\$59,580) compared to the standard for each county. As the chart shows, in most counties the CCDF threshold is too low, according to this measure. The average two-adult and two-young-children family faces an annual financing gap of nearly \$11,000, and there is significant heterogeneity in cost of living across the state. Only 11 counties have a standard below the CCDF threshold. The county with the largest gap between the CCDF threshold and the standard is Monroe (\$28,000). Further, the state's population is

concentrated in the counties where the standard is above the threshold. Ninety-seven percent of the state’s population live in counties where the amount of income needed for self-sufficiency is above the eligibility threshold for this family type. Fifty-seven percent of the population live in counties where the standard for this family type is at least \$10,000 higher than the CCDF threshold (as indicated by the red bars), and 40 percent of the population live in counties where the standard is less than \$10,000 higher than the CCDF threshold (indicated by the orange bars).

Figure 3: CCDF Threshold and the Standard by Florida Counties



Note: Assumes family of two adults and two children, aged two and three. The width of the bar represents the population size of the county, where larger width bars correspond to relatively higher county populations. Counties marked in red have a standard that is at least \$10,000 higher than 85 percent SMI, counties in orange have a standard that is less than \$10,000 higher than the standard, and counties in gray have a standard that is less than 85 percent of SMI.

Sources: University of Washington, U.S. Census Bureau, and authors’ calculations

The inadequacy of using SMI as a proxy for the affordability of childcare across and within states is the focus of Section III of this paper where we discuss alternatives to the existing eligibility threshold for CCDF. These alternatives factor in local costs of living as opposed to using the statewide income threshold alone.

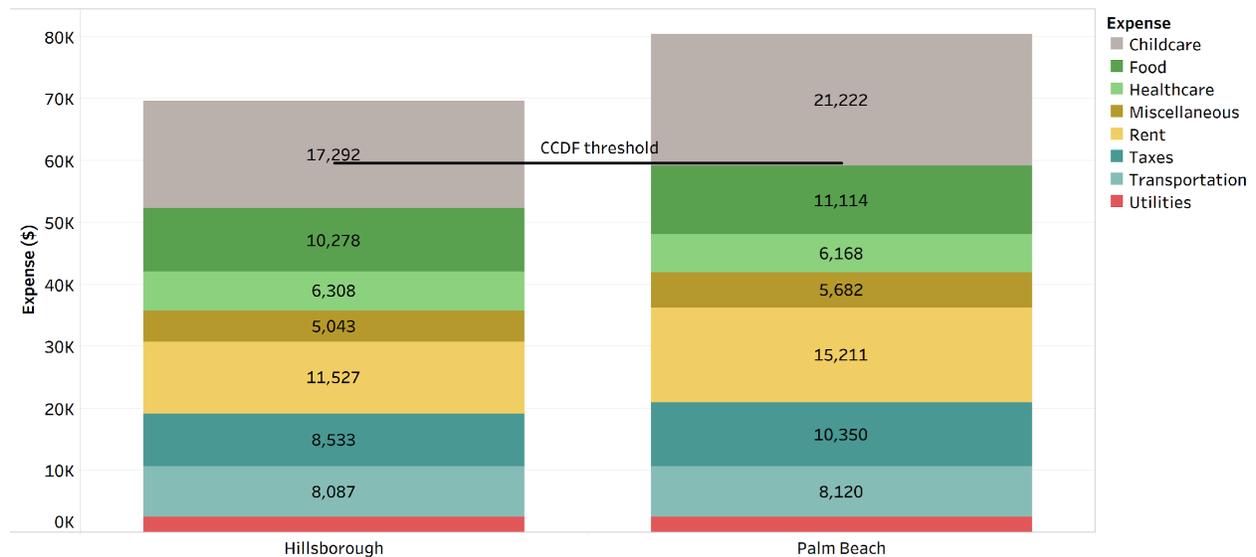
Section II: CCDF in Florida

Case study of two Florida counties

Two counties in the state of Florida were selected to illustrate the limitations of CCDF eligibility thresholds and test the alternatives for a family of two adults and two children. We compare Hillsborough County, which includes all of Tampa city limits and the surrounding area, and Palm Beach County, which includes multiple cities north of Fort Lauderdale and south of Jacksonville. We chose Hillsborough County because the median wage and cost of living are similar to the statewide median and we choose Palm Beach County because it has the second highest living costs in the state, which allow us to demonstrate the extent to which the variation in cost of living across the state can create difficulties for CCDF participants. Palm Beach was chosen over Monroe (the most expensive county) due to the latter's low population, which creates greater potential for measurement error in expense and income data.

Figure 4 shows the expenses that comprise the standard for a family of four in these two counties. In Hillsborough County, the standard is \$69,600, which is similar to the population weighted average of the state, \$70,400. This amount is \$10,000 above the 85 percent SMI exit threshold for CCDF. This implies that, for the average cost of living county in the state of Florida, the current CCDF exit threshold does not permit a smooth transition to self-sufficiency. Families that lose CCDF in Hillsborough County may not be able to afford quality childcare without making cuts elsewhere in the budget. This issue is even more pronounced in high-cost counties. For example, Palm Beach County has one of the highest costs of living in the state and therefore one of the largest gaps between the CCDF income eligibility threshold and the standard for a family of four. The same family living in Palm Beach would need to make \$80,400 to achieve the standard. It would be difficult for the family to pay childcare costs for two young children without major sacrifices to other necessities or a large amount of other government support (on the order of \$21,000 per year). However, if the family were earning income at or above the CCDF threshold of \$59,580, they would not qualify for most of the public assistance programs such as Supplemental Nutrition Assistance Program (SNAP), Earned Income Tax Credit (EITC), and Medicaid (see Appendix B for details).

Figure 4: The Standard and Its Composition in Hillsborough and Palm Beach Counties



Note: Assumes family of two adults and two children, aged two and three. The cost of living in Hillsborough County is similar to the average cost of living across the entire state of Florida.

Sources: University of Washington, U.S. Census Bureau, and authors' calculations

Thus, setting CCDF income eligibility limit at the 85 percent of SMI imposes significant financial constraint on many families, particularly those in high-cost counties.

Co-pay structure

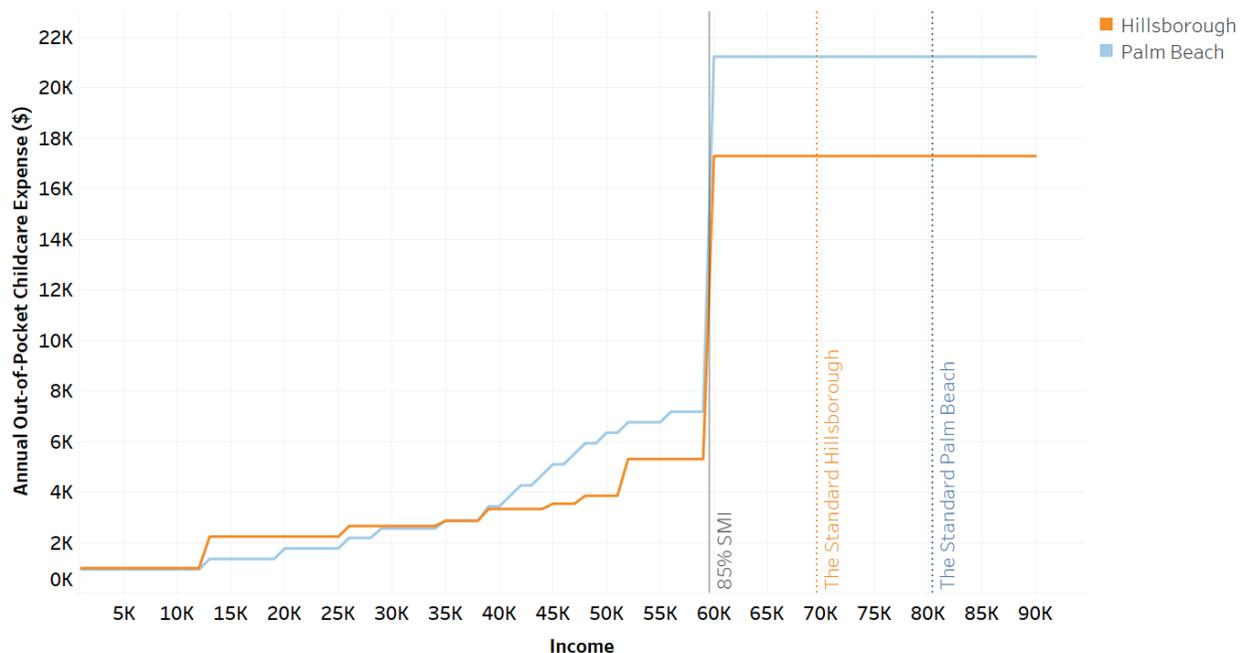
As shown in Figure 4, total childcare costs for two children aged two and three is roughly \$17,300 in Hillsborough County and \$21,200 in Palm Beach County. Families receiving CCDF assistance pay only a portion of this cost, as determined by the co-pay schedule.

Figure 5 illustrates the existing co-pay structure in both counties. It shows how annual out-of-pocket childcare costs increase gradually with income up to the point where the CCDF subsidy is lost entirely.¹⁴ At 85 percent of SMI, a family is no longer eligible for CCDF and must pay the full cost of childcare. Due to the large difference between the size of the final co-pay and the full cost of childcare, the financial loss to the family whose income crosses the eligibility threshold is substantial. Families whose income exceeds 85 percent SMI by \$1 face a benefits cliff amounting to \$13,000 in Hillsborough and \$16,000 in Palm Beach. Therefore, the family might choose not to advance in their career to keep their income deliberately below

¹⁴ To calculate the annual out-of-pocket childcare costs when receiving CCDF subsidies, we make assumptions about the number of days the child needs full-time and part-time care over the course of the year. We assume that both children need full-time care for 260 workdays per year (365 days minus weekends and holidays).

the threshold to avoid this large financial loss. This creates a dilemma for working parents who must choose between long-term career and financial success and the immediate needs and best interests of their children.

Figure 5: Existing CCDF Co-Pay Schedule in Hillsborough and Palm Beach Counties



Note: Assumes family of two adults and two children, aged two and three.
 Sources: University of Washington, Policy Rules Database, and authors’ calculations

Section III: Alternative Co-Pay Schedules

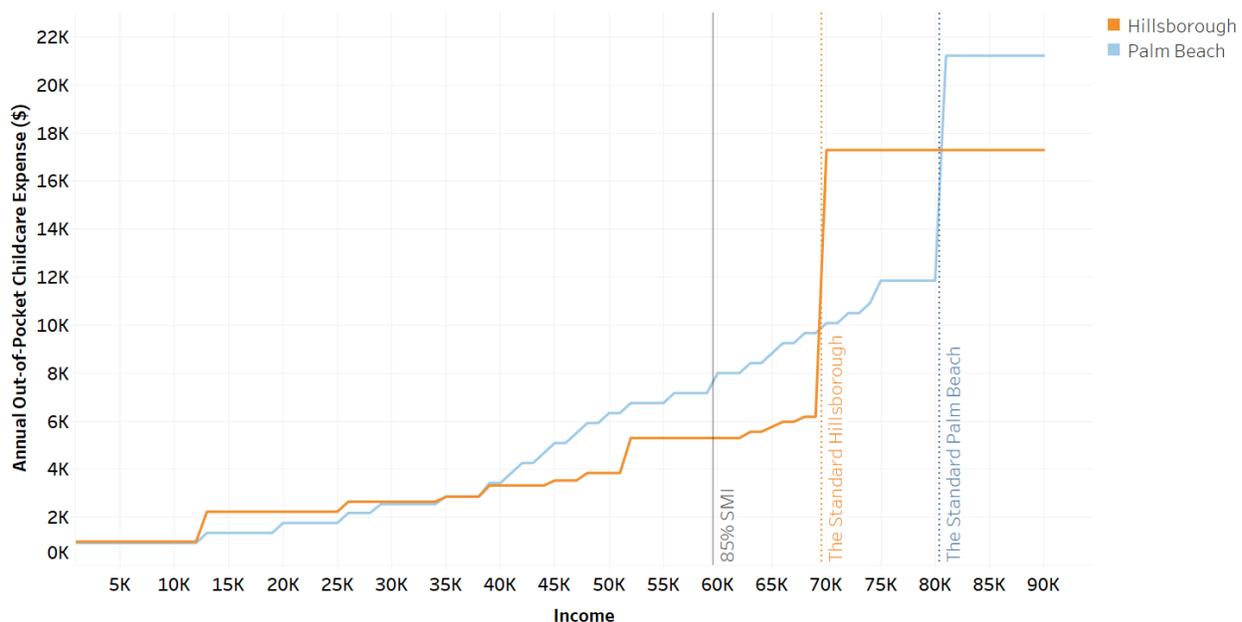
As we discussed previously, two problems with the existing CCDF design are: 1) families’ inability to afford unsubsidized childcare without the need to forgo other basic needs, especially in high-cost areas (affordability problem); and 2) the abrupt loss of subsidy at the eligibility threshold that results in a significant loss of household’s financial resources (benefits cliff). In this section, we demonstrate two alternatives to the existing CCDF co-pay schedule and exit eligibility threshold that address these problems. The first alternative addresses the affordability issue. The second alternative addresses both the affordability and the benefits cliff issues. We intentionally do not demonstrate a solution, addressing only the benefits cliff problem because such a solution implies using the current exit eligibility threshold, and thus would create a sharp increase in co-pays for households currently near the exit eligibility threshold relative to the current co-pay schedule.

Option 1: Addressing Affordability: The Extended Co-Pay Schedule

The first option extends the eligibility for the CCDF subsidy above 85 percent of SMI and allows families to continue receiving the subsidy as long as their income is below the standard for their family size. The co-pay schedule for families whose eligibility is extended is determined by linearly extrapolating the current co-pay schedule to the new standard-based eligibility threshold. The current co-pay schedule is determined separately by each county in Florida, but all have the following structure. As income increases, a family's co-pay also increases. All counties have 17 income brackets (with the same range of income across all counties) for determining the co-pay. However, the co-pay level for each income bracket varies by county. For example, the highest full-time co-pay for daily care is \$10.20 in Hillsborough and \$14.60 in Palm Beach. To extend the current structure of 17 income brackets to the new eligibility limit would require adding a different number of additional income brackets depending on the county. In Palm Beach County, this would effectively add nine additional co-pay levels. In Hillsborough County, where the standard is closer to the current threshold of 85 percent of SMI, only four additional co-pay levels would be needed.

Figure 6 illustrates how this option works if implemented in Palm Beach and Hillsborough counties. In both counties, the new eligibility threshold is higher than 85 percent of SMI. The threshold is higher in Palm Beach County, which has a relatively higher cost of living. Setting adjusted CCDF eligibility thresholds at the standard implies that families' income at the threshold allows them to afford the full price of childcare without needing to sacrifice other basic needs. It addresses the first problem with the existing CCDF co-pay schedule.

Figure 6: Illustrating Option 1, Extended Current Co-Pay



Note: Assumes family of two adults and two children, aged two and three.

Sources: University of Washington, Policy Rules Database, and authors' calculations

However, this extended co-pay schedule still results in a benefits cliff at the threshold because there is not a smooth transition between the co-pay and the full amount of childcare at the adjusted CCDF threshold. Even at the standard, the family faces a benefits cliff. The size of the cliff in Hillsborough County at the revised eligibility threshold is \$12,651 compared to \$13,314 with the current co-pay schedule. In Palm Beach County, the size of the cliff would change to \$12,330 compared to \$15,840. Thus, with this design, families still face an incentive to keep their income below the exit income eligibility threshold.

Option 2: Addressing Affordability and the Benefits Cliff: The Alternative Co-Pay Schedule

A second option is to eliminate the benefits cliff by changing the co-payment so it's an increasing fraction of the full unsubsidized childcare costs, in addition to extending benefits to families with income below the standard. In this model, the higher the family income, the higher the share of childcare costs they would pay. Families would assume the full costs of childcare once they reach the standard eligibility threshold. This is done by making the share of the full childcare cost paid by the family to be a continuous function of income that is equal to one at the threshold. Like option 1, the eligibility threshold is set at the value of the standard to provide greater assurances that the family can afford to pay the full cost of childcare without sacrificing other basic needs. In combination, these changes would allow for a smooth

transition toward paying the full cost of childcare.¹⁵ Mathematically, the structure of the alternative co-pay takes the following form:

$$\text{copay}_{fc} = \left(\frac{\text{Income}}{\text{The standard}_{fc}} \right)^k \times \text{Total Childcare Costs}_{fc} \quad (1)$$

where *Income* is the total countable family's income, *The standard_{fc}* is the value of the standard, and *Total Childcare Costs_{fc}* are the total unsubsidized costs of childcare that a family would have to pay.¹⁶ Both the value of the standard and the total unsubsidized costs of childcare vary by family type *f* (age and number of children) and by county of residence *c*. By design, when a family's income reaches the income eligibility threshold (at the standard), the family's co-pay is equal to the total childcare costs. The adjustable parameter *k*—discussed in the next section—will determine the shape of the co-pay schedule. A higher value of *k* will coincide with a lower co-pay schedule for all families. However, the higher the *k*-value, the more quickly the co-pay increases as income approaches the eligibility threshold.

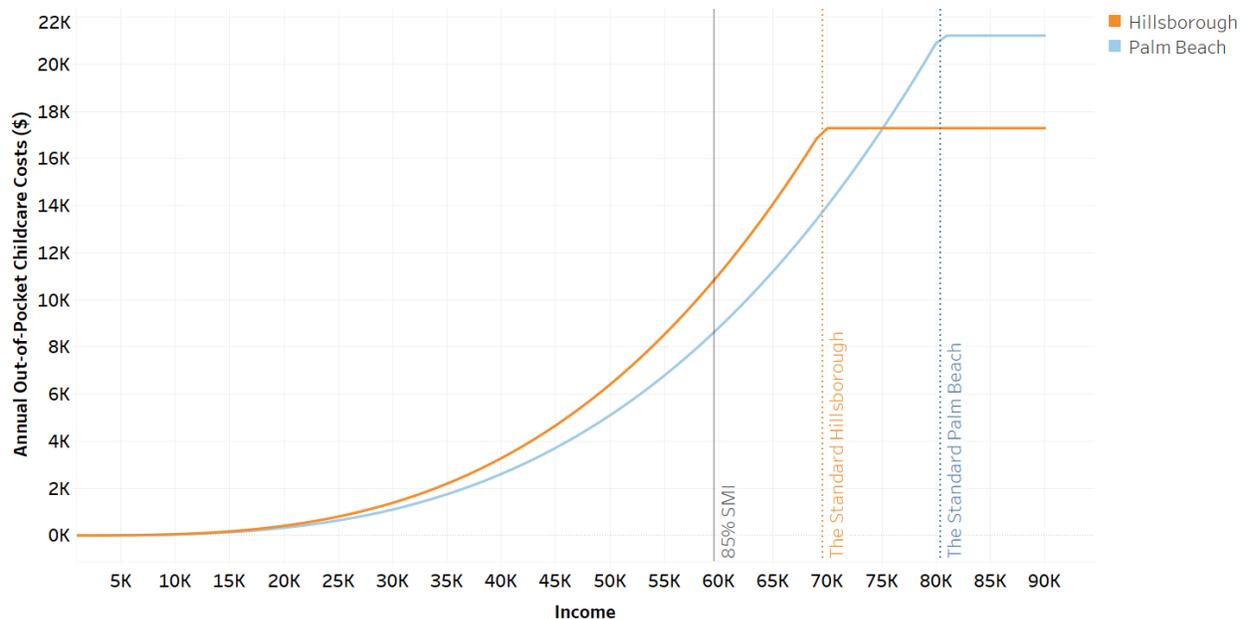
Figure 7 demonstrates the alternative co-pay if implemented in Palm Beach and Hillsborough counties. As in Figure 6, in both counties, the new eligibility threshold is higher than 85 percent of SMI and the threshold is higher in Palm Beach County, which has a

¹⁵ Some states have a similar co-pay strategy. For example, in Idaho, co-payments are based on the price of care, with families in different income ranges paying different percentages of the price. Although the Idaho co-pay schedule eliminates the CCDF benefits cliff, it does not address the problem of affordability of childcare for families at the threshold and higher (Minton and Durham, 2013).

¹⁶ According to Florida's Child Care and Development Fund Plan for FFY 2019–21, the definition of countable income for determining eligibility in Florida is “combined gross income, whether earned or unearned, that is derived from any source by all family or household members who are 18 years of age or older who are currently residing together in the same dwelling unit. The term does not include income earned by a currently enrolled high school student who, since attaining the age of 18 years, or a student with a disability who, since attaining the age of 22 years, has not terminated school enrollment or received a high school diploma, high school equivalency diploma, special diploma or certificate of high school completion. Income does not include income earned by a teen parent residing in the same residence as a separate family, nor does income include food stamps, adoption subsidies, foster care payments, documented child support and alimony payments paid out of the home, federal nutrition programs, federal tax credits, state/territory tax credits, housing allotments, LIHEAP or energy assistance, military housing or other allotment/bonuses, federal housing assistance payments issued directly to a landlord or the associated utilities expense, scholarships, education loans, grants, income from work study, disaster relief or other forms of temporary assistance of families in a natural disaster areas, income of foster parents and court ordered relative and non-relative caregivers, independent living grant, lump sum settlement, money borrowed with an established repayment plan, one time only gifts, sale of personal assets, VISTA payments, Supplemental Security Income (excluded for children only)” (Office of Early Learning, 2019).

relatively higher cost of living. Additionally, a smooth co-pay schedule ensures that there are no benefits cliff at the eligibility threshold.

Figure 7: Illustrating Option 2, Extended Alternative Co-Pay



Note: Family of two adults and two children, aged two and three. The *k*-parameter is set to 3.
Sources: University of Washington, Policy Rules Database, and authors’ calculations

We make a couple of additional observations. Computing this eligibility threshold by family type and county will require some different steps from the previously discussed method. This new eligibility threshold and corresponding total co-pay will vary by county since the costs of living (and the standard) vary within a state. Second, the new eligibility threshold will vary depending on the family composition: number of adults, number of children, and ages of children, because these characteristics of the family affect the total living costs and total childcare costs. The current eligibility threshold only varies by SMI and family size. These costs could be approximated using the same source we used, the standard. Alternatively, sources such as the United Way’s ALICE threshold, the Atlanta Fed’s Cost-of-Living Database, or other cost of living measures that consider detailed basic expenses at fine geographic levels such as county or metropolitan area can be used.¹⁷

Further, in some cases, the resulting alternative eligibility threshold will be below that of the existing 85 percent of SMI eligibility threshold. Families that live in areas with lower living costs may have a lower standard. Given that the standard reflects the minimum income

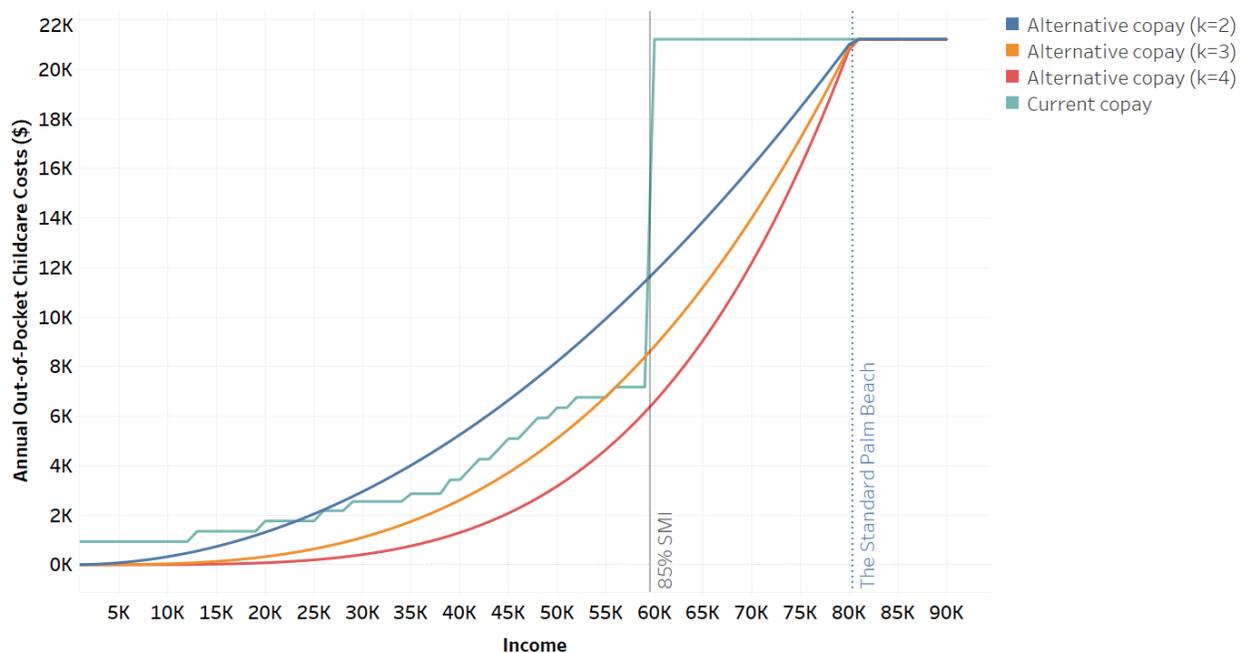
¹⁷ The United Way’s ALICE data is available at <https://www.unitedforalice.org/> and the Atlanta Fed’s Cost of Living Database is available at <https://www.atlantafed.org/economic-mobility-and-resilience/advancing-careers-for-low-income-families/policy-rules-database.aspx>.

needed to cover basic household expenses and support economic self-sufficiency, we suggest that the alternate eligibility threshold be either the standard or 85 percent of SMI, whichever is greater. This ensures that in the short term, no family that is already on the program would be forced out of it.

The choice of the *k*-parameter

In equation 1, parameter *k* determines how gradually co-pay changes with increase in income. To illustrate how different *k*-parameters affect families' out-of-pocket expenses relative to the original co-pay schedule, let's consider the family of four living in Palm Beach County. Figure 8 plots the original co-pay and alternative co-pay schedules for three different values of *k*-parameter (*k*=2,3,4). For *k*=4, in comparison to the extended co-pay, the alternative co-pay makes almost all families better off. The out-of-pocket expenses for families with income below 85 percent of SMI is less than their current out-of-pocket expenses. For *k*=3, families with income below \$40,000 are better off while families with income above \$40,000 would pay higher co-pays. Finally, when *k*=2, almost all families except very low income below \$15,000 face higher out-of-pocket expenses.

Figure 8: Alternating *K*-Parameter—Costs to Families at Different Income Levels in Palm Beach County



Note: Family of two adults and two children aged two and three.

Sources: University of Washington, Policy Rules Database, and authors' calculations

The choice of k-parameter additionally affects the total government spending on subsidies to participating families. Families that start paying higher co-pays relative to the current co-pay schedule reduce government costs while families that start paying lower co-pays increase government costs. The sum of the differences in co-pays across all families ultimately determines the change in government spending for this program. Next, we discuss the implications of the choice of the k-parameter to the total government spending.

Section IV: Alternative Co-Pay Schedules and Costs Implications

CCDF is jointly financed by federal and state governments and consists of three funding streams: mandatory, matching, and discretionary funds. In FY 2018, the total CCDF allocation across all U.S. states was \$10.2 billion (Office of Child Care, 2018).¹⁸ Of this, \$6.9 billion was directly spent on subsidies. In Florida, direct spending was \$422 million in FY 2018 (Office of Child Care, 2020). The block-grant nature of the CCDF subsidy and the current level of funding is insufficient to pay for all who are eligible. Thus, this funding design significantly limits participation among the eligible population. In 2012, only an estimated 15 percent of the estimated 14.2 million children who were eligible for CCDF received subsidies (Chien, 2015). Given that CCDF funds are limited by the amount of the block grant, it is important to provide estimates of how each of the proposed alternatives will affect public spending and the number of families served by the subsidy. Implicitly, the additional cost imposed by our proposed changes to the CCDF program would need to be financed somehow, such as by federal, state, or community funding, or by philanthropic dollars. If the amount of spending on the program does not increase to pay for the proposed changes, these changes would reprioritize funding for those currently enrolled in the CCDF program. Funding would be reprioritized because these proposed changes permit families to stay on CCDF at higher incomes. Thus, the changes would reduce the availability for those coming into the program at lower-income levels compared to the current design.

In the next section, we evaluate the effect of each of the proposed CCDF co-pay structures on the costs to the government as well as to the individual families. This allows us to discuss how alternative CCDF co-pay schedules will have differential effects on families at different parts of the income distribution.

¹⁸ The total spending is the sum of federal and state spending (state mandatory allocation, state share matching funds, and federal-only funds).

Comparing original, extended, and alternative co-pays

Methodology

We estimate government spending and average costs to participating Florida families for each income bracket in the following steps. First, we calculate unsubsidized childcare costs for all Florida households in the 2018 American Community Survey (ACS) using the standard. The total cost of childcare for each family is determined by taking the number of children in the family and multiplying by the age-specific cost of childcare provided in the standard.¹⁹ Second, for each Florida family in the ACS we calculate the total family co-pay under CCDF rules. Third, we compute the average childcare costs and average co-pay per family in each income bracket. Fourth, we multiply the average childcare costs for families in each of 17 existing income brackets and a proposed new one by the number of families served, using administrative data provided by the Florida Department of Education Office of Early Learning. This gives us the total unsubsidized childcare costs by income bracket.

To understand potentially how many participating families would be affected by extending the income eligibility limits (and thus, what the costs to the government would be), we need to know how many newly eligible families with income between 85 percent of SMI and the new income threshold would likely take up CCDF. To calculate this number, we extrapolate the CCDF take-up rate to the additional 18th income bracket (between 85 percent of SMI and the standard) by using the same take-up rate as the 17th income bracket, or 6 percent.

It is important to note that the proposed alternative affects only the exit eligibility threshold for CCDF. As we noted previously, there are two eligibility thresholds in Florida: initial eligibility and exit eligibility. The initial enrollment (“entry”) threshold remains at 150 percent of FPL, which is below the exit threshold of 85 percent of SMI. Thus, to obtain an estimate for how many families would potentially fall into the 18th income group we cannot rely on population estimates—families must advance to the next income group from a lower-income group. Therefore, we make an assumption for how many families move to income bracket 18 from lower-income brackets. Because we do not know how many families currently on CCDF would potentially increase their income to be within income bracket 18, we provide a range of cost estimates to the government based on different assumptions of how many families would move to income bracket 18. The lower bound of the range assumes that all 1,544 families from income bracket 17 (with income between 230 percent of FPL and 85

¹⁹ We assume that families do not need the center-based summer care for their children and rely on alternate sources for childcare.

percent of SMI) advance to the next income bracket. The upper bound of the range assumes that all families from income brackets 15 to 17 (3,798 families) progress to income bracket 18. These estimates can be interpreted as an upward bound that, if accurate, would take time to realize.²⁰

Results

Table 1 shows the results of the extrapolation exercise and the costs implications for three different co-pay schedules: the current co-pay schedule, the extended co-pay schedule, and the alternative co-pay schedule where the k-parameter in equation 1 is set to 3. We choose to show the k=3 scenario, because as will be discussed later, of the three k-parameters considered, this parameter choice minimizes costs to the government without significantly affecting families' budgets. The table features 18 total income groups: the first 17 groups have income below the current exit eligibility threshold and the 18th income group includes the hypothetical newly eligible families whose income increases from below 85 percent SMI to between 85 percent of SMI and the standard. For each income bracket, the table shows the estimated number of families receiving a CCDF subsidy, the average annual co-pays for three different co-pay alternatives, and the direct costs of the subsidy to the government.²¹

By design, the extended co-pay model does not change the family's portion of childcare costs except for those in income bracket 18. In contrast, the alternative co-pay (k=3) changes the co-pay schedule for all income groups. Families in income brackets 1 to 14 pay less, while families in income brackets 15 to 17 pay more compared to the original co-pay schedule. Families in income bracket 18 are now covered by the subsidy and thus will pay less.

Under both the extended co-pay schedule and the alternative co-pay (k=3) the costs to the government are estimated to increase. With the extended co-pay, depending on the assumption of the new number of families served, costs are estimated to increase between \$4.4 million to \$10.6 million (1.0 percent to 2.1 percent) due to an increase in the number of eligible families. For the alternative co-pay schedule with k=3, the program costs would increase by \$37.0 million to \$40.4 million (7.2 percent to -7.8 percent). This reflects a

²⁰ Families that move from income bracket 17 to 18 would experience an average income increase of 6 percent. Families that move from income bracket 15 to 18 would experience an average income increase of 18 percent. In calculating the additional costs imposed, we assume that all those who moved to income bracket 18 from these lower brackets are replaced by families on wait lists and that CCDF participants move to higher-income thresholds such that the initial distribution of CCDF participants for all income groups below income bracket 18 is retained.

²¹ To determine the income group specific co-pay amount we use the average co-pay amount for the income group across all counties in the state (recall that each county has their own unique co-pay amounts but the same income categories).

combination of a decrease in program costs on families that face higher co-pays and an increase in program costs on those families that face lower co-pays relative to the original co-pay schedule.

Table 1: Effect on the Average Costs to Families and Total Direct Costs to the Government: Simulated FY 2020

Income Bracket	Description	Number of Families Receiving CCDF*	Average Annual Costs to Families			Total Annual Direct Government Costs		
			Current Co-pay	Extended Co-pay	Alternative Co-pay (k=3)	Current Co-pay	Extended Co-pay	Alternative Co-pay (k=3)
1	0 to 50% of FPL	20,690	401	401	17	161,943,536	161,943,536	169,544,581
2	50% to 75% of FPL	9,902	584	584	93	69,914,777	69,914,777	74,899,142
3	75% to 100% of FPL	13,482	768	768	252	85,549,814	85,549,814	92,270,179
4	100% to 116.67% of FPL	9,629	947	947	396	55,331,359	55,331,359	60,540,802
5	116.67% to 133.34% of FPL	8,861	1,155	1,155	629	46,589,501	46,589,501	50,971,399
6	133.34% to 150% of FPL	7,495	1,329	1,329	982	38,844,602	38,844,602	41,483,415
7	150% to 155.83% of FPL	2,065	1,509	1,509	1,188	9,364,602	9,364,602	9,992,556
8	155.83% to 161.66% of FPL	1,843	1,513	1,513	1,181	7,190,507	7,190,507	7,819,229
9	161.66% to 167.49% of FPL	1,630	1,910	1,910	1,535	7,090,185	7,090,185	7,732,616
10	167.49% to 173.32% of FPL	1,375	2,045	2,045	1,694	5,924,145	5,924,145	6,447,189
11	173.32% to 179.15% of FPL	1,174	2,168	2,168	1,834	4,484,670	4,484,670	4,929,439
12	179.15% to 185% of FPL	1,228	2,728	2,728	2,194	5,149,942	5,149,942	5,744,796
13	185% to 192.5% of FPL	1,164	2,326	2,326	2,101	3,638,720	3,638,720	3,988,385

14	192.5% to 200% of FPL	1,166	2,769	2,769	2,538	3,973,795	3,973,795	4,304,754
15	200% to 215% of FPL	1,319	2,927	2,927	3,000	3,874,765	3,874,765	3,930,828
16	215% to 230% of FPL	935	2,841	2,841	3,298	2,431,341	2,431,341	2,215,610
17	230% of FPL to 85% SMI	1,544	3,281	3,281	4,138	4,364,372	4,364,372	3,309,378
18	85% SMI to the standard	0*	NA	5,190	6,596	NA	4,428,885 to 10,548,705	2,493,596 to 5,948,755
Total		85,502				515,660,634	Range: 520,089,519 to 526,209,339	Range: 552,617,892 to 556,073,051

Sources: 2018 American Community Survey, Florida Department of Education Office of Early Learning, and authors' calculations

*The number of families receiving CCDF in income group 18 is 0 for the current co-pay schedule. Under the extended and alternative co-pay schedules, this would increase to a range of 1,544 to 3,798.

Calibrating the alternative co-pay schedule

As discussed in Section III, the k-parameter of the alternative extended co-pay schedule in equation 1 can be adjusted to alter effects on the total government spending and costs to individual families.

Table 2 shows the average costs to the family at each income level and the total government spending under each alternative: the current co-pay and three alternative co-pays (k=2, k=3, and k=4). As the table demonstrates, k=2 results in savings to the government. The estimated total cost of the program relative to the current co-pay schedule is estimated to decline by a range of \$3.2 million to \$5.6 million. It comes at a trade-off. With k=2, all eligible families that fall into income brackets four or higher (corresponding to income above 100 percent of FPL and below 85 percent of SMI) would pay higher co-pays. In contrast, if k=4, then families at almost all income levels pay lower out-of-pocket expenses compared to the current co-pay schedule. For example, a family in the 150 percent to 155.83 percent of FPL (income bracket 7) currently pays, on average, \$1,509 per year in co-pays. If it were k=2 instead, their average annual co-pay would increase to \$2,063, but with k=4 the average co-pay would decrease to \$688 per year. However, k=4 is the most expensive alternative; the total government costs are estimated to be \$56.8 million to \$61.2 million larger than the current co-pay, which equates to 11.0 percent and 11.9 percent increase in spending, respectively.

Table 2: Adjusting K-Parameter—Average Costs to Individual Families and Total Costs to the Government: Simulated FY 2020

Income Bracket	Description	Average Annual Costs to the Family				Total Annual Direct Government Costs			
		Current Co-pay	k=2	k=3	k=4	Current Co-pay	k=2	k=3	k=4
1	0 to 50% of FPL	401	116	17	3	161,943,536	167,614,450	169,544,581	169,817,233
2	50% to 75% of FPL	584	394	93	22	69,914,777	71,817,319	74,899,142	75,625,988
3	75% to 100% of FPL	768	768	252	84	85,549,814	85,539,349	92,270,179	94,464,293
4	100% to 116.67% of FPL	947	1,016	396	156	55,331,359	54,764,844	60,540,802	62,773,598
5	116.67% to 133.34% of FPL	1,155	1,385	629	288	46,589,501	44,909,769	50,971,399	53,688,291
6	133.34% to 150% of FPL	1,329	1,872	982	519	38,844,602	35,370,300	41,483,415	44,626,925
7	150% to 155.83% of FPL	1,509	2,063	1,188	688	9,364,602	8,312,942	9,992,556	10,940,262
8	155.83% to 161.66% of FPL	1,513	1,969	1,181	714	7,190,507	6,526,456	7,819,229	8,575,112
9	161.66% to 167.49% of FPL	1,910	2,503	1,535	947	7,090,185	6,333,212	7,732,616	8,571,614
10	167.49% to 173.32% of FPL	2,045	2,683	1,694	1,076	5,924,145	5,216,702	6,447,189	7,204,394
11	173.32% to 179.15% of FPL	2,168	2,804	1,834	1,208	4,484,670	3,925,238	4,929,439	5,570,239
12	179.15% to 185% of FPL	2,728	3,313	2,194	1,461	5,149,942	4,578,012	5,744,796	6,499,100
13	185% to 192.5% of FPL	2,326	2,952	2,101	1,505	3,638,720	3,111,056	3,988,385	4,594,332
14	192.5% to 200% of FPL	2,769	3,486	2,538	1,861	3,973,795	3,319,740	4,304,754	5,000,819
15	200% to 215% of FPL	2,927	3,858	3,000	2,348	3,874,765	2,936,680	3,930,828	4,676,607
16	215% to 230% of FPL	2,841	3,950	3,298	2,774	2,431,341	1,648,289	2,215,610	2,667,058
17	230% of FPL to 85% SMI	3,281	4,813	4,138	3,585	4,364,372	2,340,552	3,309,378	4,105,083
18	85% SMI to the standard	NA	7,167	6,596	6,092	NA	1,762,878 to 4,205,664	2,493,596 to 5,948,755	3,142,000 to 7,495,409
Total						515,660,634	Range: 510,027,788 to 512,470,574	Range: 552,617,892 to 556,073,051	Range: 572,542,948 to 576,896,357

Sources: 2018 American Community Survey, Florida Department of Education Office of Early Learning, and authors' calculations

Section V: Discussion and Conclusion

High-quality childcare is unaffordable for more than half of parents in the United States. Government subsidizes the cost of childcare for working parents directly through the Child Care and Development Fund. However, the continuing eligibility requirements of the CCDF subsidy program pose challenges to economic self-sufficiency. The termination of a subsidy often occurs before families can afford the full cost of childcare, placing families in precarious financial situations. This can become a disincentive for career advancement, which runs contrary to the purpose of the program. This disincentive can result in families having to choose between high-quality childcare and employment. In response, a working adult may opt out of the labor force, choose not to advance credentials that would lead to higher-wage positions, or turn down promotions because it is not in their family's financial or practical best interest to do so. The problem of finding affordable childcare has only been exacerbated by the recent COVID-19 pandemic. Government-mandated business shutdowns and social distancing measures led to a huge negative supply shock of childcare providers in the country, and the loss of revenues will likely result in many childcare facilities closing their doors permanently.

In this paper, we illustrate two problems with the CCDF program using the case study of Florida—affordability and the benefits cliff. The CCDF program rules allow the exit income threshold to be set at no higher than 85 percent of SMI. In this analysis, we argue that this threshold is too low for most families and that it should instead be set according to families' ability to afford a set of basic expenses. We find that only 3 percent of Florida's population live in counties where a family with two adults and two young children can afford the full cost of childcare at 85 percent of SMI without sacrificing other basic needs. Furthermore, the distance between the current eligibility threshold and the amount needed to afford a basic set of expenses varies extensively by county. The average estimated disparity between the 85 percent SMI eligibility threshold and the amount of additional income needed to afford all expenses is \$11,000 across all counties for such families; the maximum difference for an individual county is \$28,000. These numbers reinforce the need for states to be able to adjust eligibility thresholds according to the cost of living in different areas.

The second problem we address is the benefits cliff. The CCDF program in Florida lacks a smooth phaseout schedule, which creates benefits cliffs for some families. For example, a family of four with two young children that crosses the income eligibility threshold stands to lose \$16,000 in Palm Beach County, one of the most expensive counties in Florida, due to an abrupt loss of the subsidy.

To address these issues, we propose two alternatives co-pay schedules for the CCDF program in Florida. Our first proposed alternative addresses the affordability issue by extending the eligibility threshold to the level of income at which a family can afford paying for childcare without decreasing the basic standard of living. The costs for a basic standard of living vary at the county level. In the rare case that the alternative threshold is below the current threshold, we suggest maintaining the current threshold so that no families are made worse off. The first proposed alternative extrapolates the current co-pay schedule of the CCDF program in Florida to this new eligibility threshold. This extends eligibility to those near the current income limit without affecting any other families in the program. We estimate that between 1,544 and 3,798 additional families could be helped under this alternative. The upward bound on the estimated annual additional cost of this change is between \$4.4 million to \$10.6 million (1.0 percent to 2.1 percent).

The second proposed alternative addresses both the affordability problem and the cliffs effect problem. It features a co-pay schedule that is different from the current co-pay schedule across the entire income distribution and features a smooth subsidy phaseout schedule. This eliminates the CCDF benefits cliff entirely. In our model, parameter k controls the degree with which co-pay increases with income. We show how parameter k can be calibrated to minimize direct costs to the government. Although costs to the government can be decreased by setting parameter k to 2, we suggest setting the phaseout k -parameter to 3. This parameter choice would leave almost all families better off at relatively low additional costs to the government.

The additional costs incurred by either alternative are not without significant potential reward. Studies have found that investments in childhood development significantly increase cognitive development and earnings potential as adults. Thus, such investments will likely result in better long-term outcomes for these children. Moreover, smoothing the CCDF benefits cliff can potentially increase the economic mobility of low- or moderate-income families for whom childcare is unaffordable. Increased income among parents and increasing income among low-income children as adults would create long-run returns to the government in the form of reduced government assistance, higher income tax, and higher sales taxes.

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Appendix A: Most Common Family Types

Appendix Table 1: 10 Most Common Family Types among Families with Children in the United States and Florida

Family Type	Share of U.S. Families with Children	Share of Florida Families with Children
2 adults, 2 children	25.0%	23.2%
2 adults, 1 child	23.7%	25.6%
2 adults, 3 children	10.2%	8.8%
1 adult, 1 child	9.0%	10.1%
3 adults, 1 child	6.6%	7.5%
1 adult, 2 children	5.8%	6.0%
3 adults, 2 children	3.7%	4.1%
2 adults, 4 children	3.2%	2.4%
1 adult, 3 children	2.3%	2.3%
4 adults, 1 child	2.1%	2.6%

Source: 2019 American Community Survey

Appendix B: Eligibility for Major Public Assistance Programs and Tax Credits

In this appendix we first discuss all public assistance programs for which the hypothetical family with two adults and two children would be eligible in Palm Beach County, Florida, at different income levels. We then isolate childcare-related programs and discuss how they can come together to help families afford quality childcare. The graphs here do not include living costs, however. Despite the assistance from the government, families can still face financial hardship depending on their overall expenses.

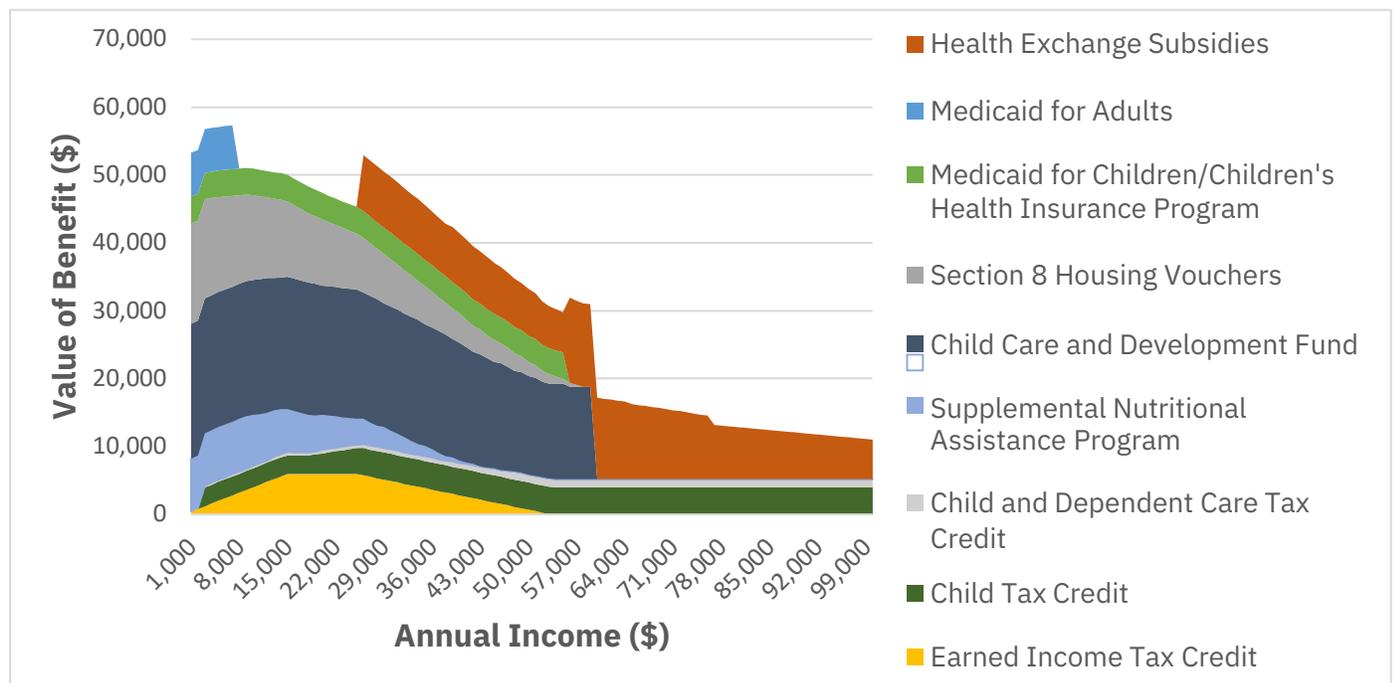
All major public assistance programs and tax credits

Appendix Figure 1 shows what public assistance programs and tax credits a family with two adults and two children can receive at different income levels and how the value of assistance changes with income. At a very low-income level, a family is eligible for the subsidized health insurance through Medicaid, housing assistance through the Housing Choice Voucher (Section 8), food assistance through SNAP, energy assistance through the Low-Income Energy Assistance Program (LIHEAP), and childcare assistance through the CCDF subsidy.

All public assistance programs phase out when income increases. Florida is a state that did not expand Medicaid eligibility under the 2014 Affordable Care Act. Therefore, parents lose access to Medicaid once their income reaches \$8,032 (32 percent of the federal poverty level for the family of four) and they fall in the so-called Medicaid coverage gap. Parents gain subsidized health insurance through the Marketplace (ACA subsidies) once their income reaches \$26,200 (100 percent of the federal poverty level for the family of four).

A number of federal tax credits are available for the family. The Earned Income Tax Credit is refundable, meaning that families can claim it even if they do not pay federal income tax. A small portion of the Child Tax Credit is refundable and therefore available for low-income families. However, in order to claim full credit, families must have a federal tax liability that exceeds the size of the credit. Child and Dependent Care Tax Credit (CDCTC) allows families to deduct certain childcare-related expenses while calculating their tax liabilities. However, federal CDCTC is nonrefundable credit and therefore not available for low-income families that do not have federal tax liabilities.

Appendix Figure 1: Public Assistance Programs and Tax Credits by Employment Income



Note: Family of four in Palm Beach County, Florida, with children aged two and three.
 Source: Policy Rules Database (Ilin and Terry, 2021)

At the eligibility threshold for CCDF (85 percent of SMI), families are ineligible for most major public assistance programs (Housing Voucher, SNAP, Medicaid for adults and children) and for EITC. Families are still eligible for the ACA subsidy and can claim the Child Tax Credit and Child and Dependent Care Tax Credit.

Childcare-related public assistance programs and tax credits

Appendix Figure 2 isolates public assistance programs and tax credits that are targeted specifically for working families that need childcare for their children.

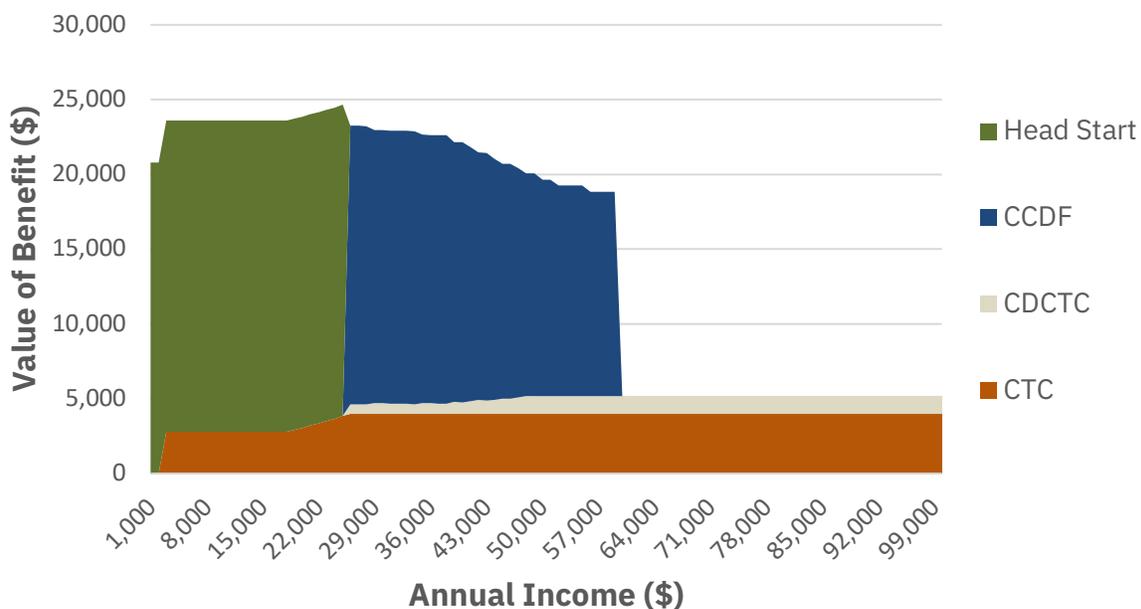
Tax Credits

The two federal tax credits aimed specifically at families with children are the Child Tax Credit (CTC) and Child and Dependent Care Tax Credit (CDCTC). Prior to the recently passed American Rescue Plan Act of 2021 (APRA), the federal CTC eligibility rules were the following. Up to \$2,000 per child under age 17 can be claimed for up to two children; if the credit

exceeded taxes owed, families still may receive up to \$1,400 per child as a refund. Income had to be above \$25,000 and below \$280,000 for single parents and \$480,000 for married couples, after which the tax credit began to phase out by 5 percent. These 2020 rules are depicted in the graph below. Families with working adults may be able to get back some of the money they spent on childcare expenses by claiming CDCTC. The credit is 20–35 percent of qualified expenses, and the exact percentage depends on the adjusted gross income. The maximum amount of qualified expenses a family can claim is \$3,000 for one qualifying child and \$6,000 for two or more.

A limitation of the CDCTC is that it is nonrefundable. Thus, it is only available to families who owe taxes. Therefore, while the CDCTC provides a higher tax credit to lower-income taxpayers, many low-income taxpayers do not have tax liabilities and therefore receive little or none of the tax credit. Both tax credits also exist in slightly different forms in many states that have state income tax. A strength of the CDCTC is that, unlike CCDF subsidies, tax credits are part of the tax code and thus are available to all who qualify.

Appendix Figure 2: Head Start, CCDF Subsidy, and Tax Credits by Employment Income



Note: Family of four in Palm Beach County, Florida, with children aged two and three. Rules are as of 2020.

Source: Policy Rules Database (Ilin & Terry, 2021)

Appendix Figure 2 also shows how the value of tax credits changes as income increases. First, families with income below \$2,500 are ineligible for CTC. Second, because

only \$1,400 out of the \$2,000 maximum per child is refundable, the value of the CTC gets larger as income increases up until it reaches \$2,000 per child (\$4,000 in total for the hypothetical family shown). The CDCTC is not refundable at all. Therefore, the gray area on Appendix Figure 2 appears at the point when the family begins to pay federal income tax, at approximately \$30,000. The share of qualifying care expenses for the CDCTC declines with income gains, which results in a small change in the value of CDCTC with income gains for this family.

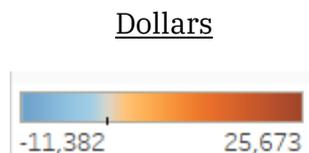
Head Start

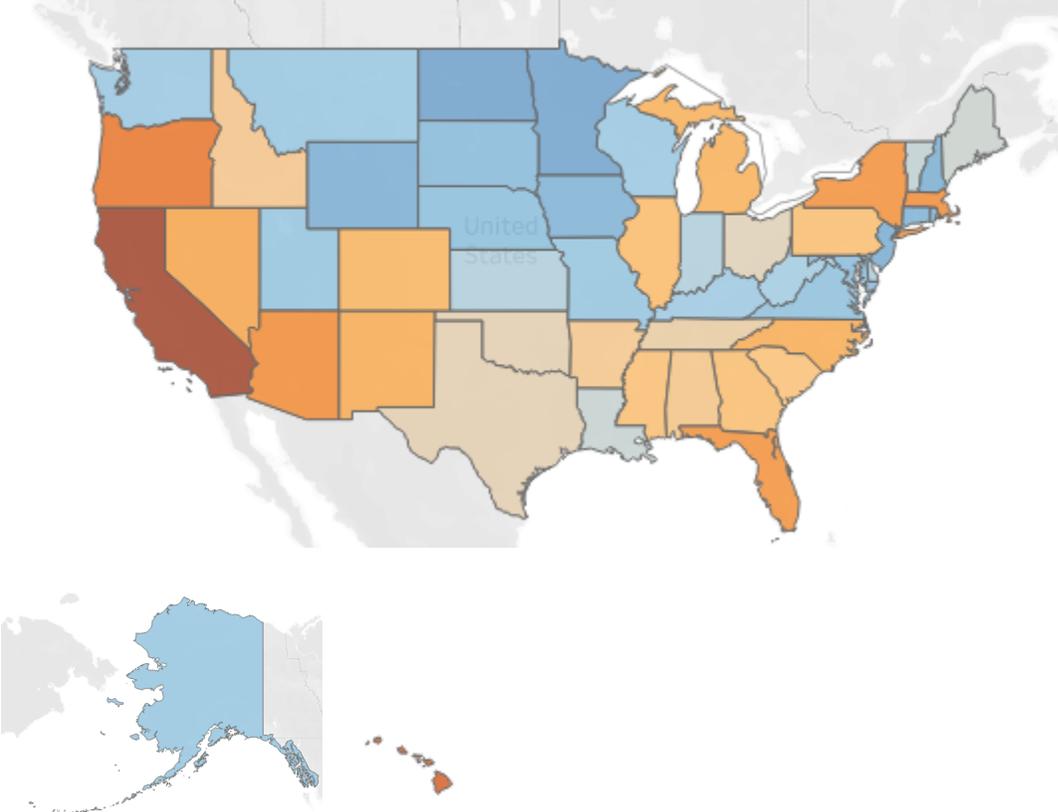
In addition to the CCDF subsidies, Head Start is another federal program that helps working parents who need childcare. Head Start is a program administered by the U.S. Department of Health and Human Services and provides free early childhood education to low-income children and families. Families must have income below 100 percent of the federal poverty level in order to qualify for the program. Head Start (and Early Head Start) are available for children under the age of five. Appendix Figure 2 shows the value of Head Start for our hypothetical family with two children aged two and three if their income is below the eligibility threshold. If the family is above the threshold for Head Start, the chart shows the value of the CCDF subsidies. Compared to Head Start, which is a free program, parents must pay a co-pay if they participate in the CCDF subsidy. Therefore, the total value of a subsidy declines when the family switches from the Head Start to CCDF program.

Appendix C: SMI Versus the Standard across the United States

Appendix Figure 3 shows the average standard minus the exit eligibility threshold of 85 percent SMI for a family of two adults and two children aged two and three across the United States. In North Dakota, the standard is \$11,382 lower on average than 85 percent of SMI whereas in California, the average standard is \$25,673 higher than 85 percent of SMI.

Appendix Figure 3: The Standard Minus 85 Percent SMI





Sources: University of Washington, U.S. Census Bureau, and authors' calculations