Reducing the Number of Children Entering Foster Care: Effects of State Earned Income Tax Credits

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Abstract

Foster care caseloads, an indicator of child maltreatment, are increasing. Children living in poverty are significantly more likely to be reported to the child welfare system and are overrepresented in foster care. Thus, it is critical to identify prevention strategies that can stem the flow of foster care entries, particularly among populations at higher risk. We used variations in the adoption and refund status of state-level Earned Income Tax Credit (EITC), a socioeconomic policy intended to reduce poverty, to examine their effect on foster care entry rates. Fixed-effects models, accounting for year- and state-fixed effects, demonstrated that a refundable EITC was associated with an 11% decrease in foster care entries compared to states without a state-level EITC after controlling for child poverty rate, racial/ethnic composition, education, and unemployment. Policies that strengthen economic supports for families may prevent child maltreatment and reduce foster care entries and associated costs.

Keywords

foster care; policy; child welfare; economics

Child maltreatment is a serious public health problem that affects millions of children around the world (Hillis et al., 2016). In the United States, approximately 676,000 children under the age of 18 (9.1 per 1,000) experienced maltreatment in 2016, according to official reports by Child Protective Services (CPS; U.S. Department of Health and Human Services, Administration for Children and Families, & Children's Bureau, 2018). And, estimates using data collected from children and parents indicate that one in four children experience maltreatment in their life time (Finkelhor et al., 2013). While child maltreatment is prevalent across all sociodemographic groups, some populations are more vulnerable because of the

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structural and social conditions that influence how children and families interact with each other and their environments. For example, children living in families with a low socioeconomic status (SES) in the United States have rates of maltreatment that are 5 times higher than those of children living in families with a higher SES (Sedlak et al., 2010). Child maltreatment is often associated with short-term health consequences such as broken bones, bruises, and mental health issues (e.g., posttraumatic stress disorder, anxiety, and depressive symptoms); however, the science of brain development, childhood adversity, and toxic stress demonstrate strong associations between maltreatment and longer term health consequences including changes in the physiological development of the nervous, endocrine, and immune systems, physical and mental health problems, engagement in risky health behaviors, limited life opportunities, and premature death (Brown et al., 2009; Felitti et al., 1998; Merrick et al., 2017; Metzler et al., 2017; Shonkoff, 2016). These findings underscore the importance of preventing child maltreatment before it occurs.

Entry into foster care is often indicative of child abuse or neglect, as well as other conditions that compromise child safety (e.g., parental substance use) that rose to the need for removing children from their parents (U.S. Department of Health and Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau, 2019). After years of steady decline in foster care caseloads, foster care entries have been on the rise since 2012 (Child Welfare Information Gateway, 2018). Some recent research suggests that the rise in foster care caseloads can, in part, be attributed to the growing opioid crisis (Radel et al., 2018). Similar to child maltreatment cases, many children entering foster care come from low-income families (Gypen et al., 2017), which highlights the critical need for prevention strategies to address the conditions in which lower income families are living. Aside from the consequences to child well-being, the costs to the child welfare system are substantial, with public investment in child welfare services totaling approximately US$30 billion in federal, state, and local funds to protect and promote the well-being of children and youth who are at risk of, or have been victims of, maltreatment, including foster care costs (Child Trends, 2018). Further, after youth age out of the system, foster care alumni struggle with education, employment, housing, mental health problems, and substance abuse (Child Welfare Information Gateway, 2018).

Policies can be powerful tools in shaping the conditions for families raising children, with potential for broader reach than efforts solely focused on individual families and children (Putnam & Galea, 2008). Socioeconomic policies, like the Earned Income Tax Credit (EITC), that strengthen economic security may improve parents' ability to meet children's basic needs (Fortson et al., 2016). Increasing household income may also reduce parental stress and engagement in coping strategies that compromise children's safety (i.e., substance abuse), thereby reducing the risk of child abuse and neglect and other adversity that may warrant children's removal from the home (Waldfogel, 2004). The federal EITC was introduced in 1975 to provide income support to low-income workers, particularly for those with children (Hungerford & Thiess, 2013). The federal credit is refundable, such that if the tax filer owes less taxes than the amount of credit, the tax liability is reduced to zero, and the filer receives the difference as a cash refund (Internal Revenue Service, 2018). It has been effective at increasing employment, especially among single parents, and reducing poverty among the working poor (Herbst, 2010). Twenty-nine states, the District of Columbia, and

Puerto Rico have also enacted state-level EITCs, which vary in generosity and whether or not they are refundable (Williams & Waxman, 2018).

Research has linked the EITC to reduced maternal stress and mental health problems (Evans & Garthwaite, 2014), as well as improvements in the home environment, and fewer behavioral problems and injuries among children (Averett & Wang, 2016). Additionally, the EITC has been linked to reductions in CPS involvement and child neglect (Berger et al., 2017), as well as pediatric abusive head trauma, a leading cause of fatal child abuse among young children (Klevens et al., 2017). Further, recent research links the 2009 expansion of the federal EITC to reductions in foster care entry rates in states that have a state-level EITC (Biehl & Hill, 2018). However, refund status of state-level EITCs was not considered. To fill this gap, the current study examines the association between nonrefundable and refundable state-level EITCs and the number of children entering foster care. We hypothesized that states with refundable EITCs would have fewer children entering foster care, given the potential for refunds to increase household income more than the credit alone.

Method

Data

Data were obtained to understand the impact of state-level EITCs on foster care entries. The independent variable consisted of a three-level state EITC policy variable generated from prior work (Klevens et al., 2017). Puerto Rico did not enact their EITC until 2018 and, thus, was not included in analyses. States without an EITC were coded 0, states with a nonrefundable EITC (i.e., tax liability is reduced by the amount of the credit up to US$0.00, and filer does not receive the value of any credit which exceeds the amount of taxes owed) as 1, and states with a refundable EITC (i.e., if tax liability is less than credit, tax filer receives cash refund) as 2. Across time, states varied on the level of EITC that was enacted. As such, total observations (e.g., the number of states summed over time) are reported for each level of the policy in Table 1. State-level foster care entry rates (number of children entering foster care per 1,000 children under 18 years per state), provided by the Adoption and Foster Care Analysis and Reporting System (AFCARS) for 2000–2016, and as reported by the Kids Count Data Center (Child Trends, 2018), comprised the outcome of interest. Covariates, including state-level child poverty rate, percentage of non-Hispanic White population, percentage of the population between 25 and 65 years who graduated high school, and states' annual unemployment rate, were compiled from the U.S. Census Bureau (2017) and the U.S. Bureau of Labor Statistics (2016) for each year from 2000 to 2016. The final study data set consisted of annual numbers from each state for a total of 867 observations from 50 states and the District of Columbia during 2000–2016.

Statistical Analysis

At the beginning of the study period (2000), 39 states did not have a state-level EITC, 3 states had a nonrefundable EITC, and 9 states had a refundable EITC (Klevens et al., 2017). Because states can change their EITC policy over time, states may move from the no EITC to the nonrefundable EITC to the refundable EITC column depending on the year. For example, in 2016, 25 states did not have a state-level EITC, 4 states had a nonrefundable

EITC, and 22 states had a refundable EITC (Klevens et al., 2017). Information regarding EITC transition patterns by state have been documented elsewhere (see http:// www.taxcreditsforworkersandfamilies.org/; Klevens et al., 2017). We exploited variations in refund status and timing of states' adoption of EITCs to examine their effect on state foster care entry rates. The model specified below uses the policy variation both across and within states (refundable and nonrefundable policy variable changes over time, within and across states), while controlling for year- and state-fixed effects:

$$\text{Foster Care Entries}_{st} = \alpha + \beta_1 \text{RefundableEITC}_{st} + \beta_2 \text{NonRefundableEITC}_{st} + \theta X_{st} + \gamma \text{State}_s + \varphi \text{Year}_t + \varepsilon_{st}$$

where X_{st} includes child poverty, race/ethnicity, education, and unemployment controls, and State$_s$ and Year$_t$ represent state-and year-fixed effects.

Because the outcome was a count variable and underdispersed, a generalized Poisson regression model with year and state as fixed effects was conducted to determine whether state-level EITCs are related to the rate of children entering foster care. The outcome was converted to per 100,000 children per state's child population for ease of interpretation. The state-fixed effect controlled for time-invariant state-specific factors that potentially affect foster care entries. The year-fixed effect controlled for temporal shocks common to all states that may affect foster care entries. Standard errors were clustered at the state level. The models controlled for demographic covariates listed above. All statistical analyses were conducted using Stata SE Version 15.

Results

Demographic characteristics were generally the same across the policy groups with some exceptions (see Table 1 for summary statistics). For example, the nonrefundable EITC group had a higher percentage of non-Hispanic Whites, and mean foster care entries were similar for the no EITC and nonrefundable EITC states but slightly less for refundable EITC states. These variations were controlled for in the models. Generalized fixed-effects Poisson regression models indicated that having a refundable EITC was associated with an 11% decrease in foster care entries compared to states without a state-level EITC (incidence rate ratio = 0.89, 95% CI [0.79, 0.99]; Table 2). This translates to a reduction of nearly 50 children (relative to the average number of foster care entries of non-EITC states: 450/100,000 children) entering foster care per 100,000 children per state on average (calculated using AFCARS data 2000–2016 as reported in Kids Count Data Center). In other words, based on 2017 data, if states without any EITC adopted a refundable EITC, our analyses suggest that 668 fewer children might enter foster care per state per year on average, given a population of approximately 1.35 million children on average per state without EITCs (U.S. Census Bureau, Population Division, 2017). The estimate did not change after controlling for socioeconomic factors, which were not statistically significant in these models. We did not find a significant effect for nonrefundable EITCs on foster care entries.

Discussion

Foster care entries are indicative of child maltreatment (U.S. Department of Health and Human Services et al., 2019), a critical public health issue. The number of children in foster care has increased over the past several years, which can be partially attributed to the opioid crisis (Orsi et al., 2018; Radel et al., 2018). Because policies have the potential for broad public health impact (Putnam & Galea, 2008), it is critical to identify those that can improve the conditions in which families are raising children and support children's safety and stability. As hypothesized, our results suggest that refundable state-level EITCs are related to fewer children entering foster care and may be an effective strategy for preventing child abuse and neglect cases that rise to the need for removing the child from their home. Our findings did not detect significant impacts on foster care entries for states with nonrefundable, state-level EITCs; however, limitations to the study (e.g., limited statistical power due to the distribution of the non-EITC refundable condition, other state-level contemporary policies) may have contributed to these results. Further, fixed effects models may not capture variation over time in state EITC policies such as increases in generosity. Regardless, the findings highlight the importance of the EITC, and that a refundable state EITC may be a potential strategy to reduce foster care entry, which is a key indicator of child maltreatment.

Sending children into foster care is costly. For example, the National Council for Adoption estimated the total cost of foster care per child per year at US$25,782 in fiscal year 2010 (costs include expenditure at federal and state levels for administrative and maintenance costs through Title IV-E; Child Trends, 2018; Zill, 2011). Adjusting this amount for 2017 dollars to US$28,982 per child per year, and assuming, as discussed above, a state without an EITC that adopted a refundable EITC could reduce foster care entries by 668 children per year on average, a state could potentially avoid a projected US$19,330,994 per year on average associated with providing that foster care. The Center for Budget and Policy Priorities estimated the fiscal year 2020 costs of implementing a refundable EITC for tax year 2018 for states without one ranging from US$4 million in Wyoming to US$361 million in Texas; across 27 states without an EITC, the average cost of a refundable EITC is estimated at US$68 million (Williams & Waxman, 2019). Based simply on net financial savings alone, the EITC is not cost saving for foster care services. However, because a variety of other valuable and important benefits accrue to society and individuals from reducing foster care, a narrow, financial-only perspective is inappropriate for evaluating whether or not to continue to expand these policies. A broader cost-benefit analysis study, which is beyond the scope of this article, would include a variety of other benefits and would likely yield large net positive benefits. Thus, investing in prevention strategies that provide economic supports to families may be a promising option for preventing child maltreatment, subsequent foster care entries, and projected costs associated with foster care to the child welfare system.

Policies that address economic conditions like the EITC may impact foster care entries through several pathways. The EITC is intended to strengthen families' financial security, which may reduce stress and improve parents' capacity to engage in nurturing parenting behaviors (Berger et al., 2017; Evans & Garthwaite, 2014). Additionally, better economic

conditions may reduce the adoption of negative coping behaviors that endanger children's safety (e.g., drug and alcohol abuse), and indeed, rising drug mortality rates have been linked to child maltreatment rates (Orsi et al., 2018). Future research linking socioeconomic policies including the EITC to intermediate outcomes like substance misuse as well as other outcomes like child abuse and neglect and foster care is needed to elucidate pathways. The results from the current study are consistent with strategies outlined in the Centers for Disease Control and Prevention's Preventing Child Abuse and Neglect Technical Package (Fortson et al., 2016) and contribute to this evidence base by supporting the role of family economic supports in preventing child maltreatment.

Funding

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Table 1.

Summary Statistics for Variables of Interest From 2000 Through 2016.

Variable	No EITC	Nonrefundable EITC	Refundable EITC
Foster care entries per 1,000 children, mean (*SD*)[a]	4.50 (1.79)	4.45 (2.29)	4.21 (1.61)
Non-Hispanic White[b]	73.88%	80.35%	73.67%
Child poverty[b]	19.16%	17.43%	17.79%
Unemployment[c]	5.76%	5.29%	6.04%
High school graduation (25–65 years)[b]	88.07%	89.84%	89.88%
Number of observations	524	74	269

Note. The number of observations (or states) can vary across study period because states can change their EITC policy over time, and thus states may move from the no EITC to the nonrefundable EITC to the refundable EITC column depending on the year. EITC = Earned Income Tax Credit.

[a]Child Trends (2018).

[b]U.S. Census Bureau, Population Division (2017).

[c]U.S. Bureau of Labor Statistics (2016).

Table 2.

Generalized Poisson Regression Analysis of Effects of EITC on Foster Care Entries From 2000 to 2016.

Variable	Rate of Foster Care Entry[a]	
	Unadjusted Incidence Rate Ratio[b]	Adjusted Incidence Rate Ratio[b]
Nonrefundable EITC	0.92 [0.79, 1.07]	0.91 [0.78, 1.05]
Refundable EITC	0.89[*] [0.79, 0.99]	0.89[*] [0.79, 0.99]
Non-Hispanic White[c]		1.00 [0.96, 1.03][d]
Child poverty[c]		1.01 [1.00, 1.03][d]
Unemployment[e]		0.99 [0.96, 1.01][d]
High school graduate (25–65 years)[c]		1.03 [1.00, 1.06][d]
Number of observations	867	867

Note. Models are adjusted for demographic variables. The no EITC group is the referent group. EITC = Earned Income Tax Credit.

[a]Child Trends (2018).

[b]Exponentiated coefficients; 95% confidence intervals in brackets.

[c]U.S. Census Bureau, Population Division (2017).

[d]The IRR reflects one percent increase in each covariate.

[e]U.S. Bureau of Labor Statistics. (2016).

[*]$p < .05$.