

Economic Determinants of Child Maltreatment*

Lindsey Rose Bullinger

Jason M. Lindo

Jessamyn Schaller

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Abstract

This entry examines the economic determinants of child maltreatment. We first discuss potential mechanisms through which economic factors, including income, employment, aggregate economic conditions, welfare receipt, and economic policy, might have causal effects on child abuse and neglect. We then outline the main challenges faced by researchers attempting to identify these causal effects, emphasizing the importance of data limitations and potential confounding factors at both the individual and aggregate levels. We describe the approaches used in the existing literature to address these challenges. Finally, we review the state of the literature on the economic determinants of child maltreatment.

*Lindo is a Professor at Texas A&M University, a Research Associate at NBER, and a Research Fellow at IZA. Schaller is an Assistant Professor at Claremont McKenna College. Bullinger is an Assistant Professor at Georgia Tech. The authors can be contacted at jlindo@econmail.tamu.edu, jschaller@cmc.edu, and lrbullin@gatech.edu.

Definition: The economic determinants of child maltreatment refer to the broad set of economic factors that have causal effects on child abuse and neglect, either directly or indirectly, potentially including income, employment, aggregate economic conditions, welfare receipt, and economic policy.

1 Introduction

Child maltreatment, including physical abuse, sexual abuse, emotional abuse, and neglect, is a prevalent and serious problem. In the United States alone, more than six million children are involved in reports to Child Protective Services (CPS) annually, while countless more are subject to unreported maltreatment (Petersen et al. 2014). Child maltreatment has severe and lasting consequences for victims, injuring physical and mental health and affecting interpersonal relationships, educational achievement, labor force outcomes, and criminal behavior (see, e.g., Gilbert et al. 2009; Berger and Waldfogel 2011; Currie and Tekin 2012). Child maltreatment is costly to society as well, generating productivity losses, increased burdens on criminal justice systems and special education programs, and substantial costs for child welfare services and health care (Gelles and Perlman; Fang et al. 2012; Peterson et al. 2018).

Given the pervasive and damaging nature of the problem, it is not surprising that a substantial literature spanning many disciplines and several decades is devoted to identifying the causes of child maltreatment.¹ Within this literature, a variety of economic factors, including family income, parental employment, macroeconomic conditions, welfare receipt, and material hardship have been identified as predictors of child abuse and neglect (Pelton 1994; Stith et al. 2009; Berger and Waldfogel 2011; Bullinger et al. 2020). Yet, due to data limitations and identification challenges, researchers have only recently begun to make progress isolating the causal effects of

¹ For a summary of this literature, see Petersen et al. (2014).

these factors on maltreatment.

This entry is devoted to the economic determinants of child maltreatment. We begin with etiological theories of child maltreatment from the fields of psychology and economics, outlining potential mechanisms by which different economic factors might be correlated with child abuse and neglect at the individual and aggregate levels. Next, we describe different types of data used in the study of child maltreatment. We then discuss the challenges that maltreatment researchers face in estimating the causal effects of economic conditions, the empirical approaches that researchers have taken to try to overcome these challenges, and the lessons learned from these studies before concluding.

2 Theory and Mechanisms

The most commonly cited etiological models of child maltreatment are the developmental-ecological and ecological-transactional models originating in psychology (Garbarino 1977; Belsky 1980; Cicchetti and Lynch 1993). These models posit that maltreatment results from complex interactions between individual, familial, environmental, and societal risk factors. Among the risk factors for maltreatment in these models, economic variables, such as family income and parental employment status, have garnered particular attention in the literature, both because they are robust, easily measured predictors of maltreatment and because they can be manipulated through policy intervention. However, as ecological models posit that maltreatment results from *interactions* between economic variables and characteristics of individuals, families, and communities, these models do not generate clear predictions about how economic factors should be correlated with maltreatment.²

Economists have approached theoretical modeling of child maltreatment from a

² For example, the effect of a stressful life event such as a reduction in family income on the likelihood of maltreatment may be exacerbated by individual characteristics such as depression while also being mitigated by social support and other buffering factors (National Research Council 1993).

different perspective, seeking to understand child maltreatment within a framework of budget constraints and utility functions. Several empirical investigations of child maltreatment, including those of Paxson and Waldfogel (2002), Berger (2004, 2005), Seiglie (2004), and Lindo et al. (2018) have been motivated by theoretical models of investments in child quality, sometimes in combination with altruistic, cooperative bargaining, and non-cooperative bargaining models used in economic studies of marriage and divorce, family labor supply, and domestic partner violence. There is also overlap between theoretical models of child maltreatment and economic models of criminal behavior.³

In developing a theoretical framework for understanding the oft-observed link between poverty and maltreatment, it is important to distinguish between reasons child maltreatment might be associated with poverty and causal pathways through which economic variables might affect the incidence of abuse and neglect. For example, parental education, community norms with regard to parenting behaviors, parental history of abuse, and innate personality characteristics of parents have all been cited as important factors that could explain some (or potentially all) of the association between poverty and child maltreatment. In thinking about the *causal pathways* through which economic factors may affect child maltreatment, it may be useful to imagine a hypothetical experiment in which a household is randomly selected to receive an intervention such as a cash transfer, an unanticipated job displacement, or a change in aggregate economic conditions, and to consider the effects of this treatment on the likelihood that the children in that household will experience abuse or neglect. With these types of experiments in mind, researchers have identified a number of potential pathways through which these economic “treatments” might influence the likelihood of child abuse and neglect.⁴

³ Berger (2004, 2005) provides a summary of several theoretical economic models relevant to the analysis of child abuse and neglect. To our knowledge, the only study with formal model of child maltreatment is Seiglie (2004), which builds on economic models of investment in child quality.

⁴ In this section we focus on the relationship between economic factors and the likelihood of committing

First, income may have direct effects on the likelihood of maltreatment if parents are constrained in their ability to provide sufficient care for their children (Berger and Waldfogel 2011). This mechanism is particularly relevant to the study of child neglect, which is in part defined as the failure of a caregiver to provide for a child’s basic physical, medical, educational, or emotional needs, and thus is often considered to be “underinvestment” in children within the context of economic models (see, for example, Seiglie 2004).⁵ Changes in the amount and sources of family income may also affect child maltreatment by altering the distribution of bargaining power within households and changing the expected cost of abuse. Building on bargaining models used in economic studies of domestic violence, Berger (2005) posits that, in two-parent households, shifts in the distribution of family income away from the perpetrator of abuse and toward a non-abusing partner can result in a shift in the balance of power within the relationship, which can in turn affect the incidence of maltreatment. Additionally, as in economic models of criminal behavior, income shocks can affect the expected costs of potential perpetrators. Specifically, the perpetrator’s access to income is jeopardized if maltreatment leads to dissolution of a relationship and loss of access to a partner’s income. The removal of a child can also lead to the loss of child-conditioned transfers such as welfare payments and child support.

Economic shocks may also affect rates of child abuse and neglect through their impacts on mental health. At the aggregate level, research has shown that economic downturns are associated with deterioration of population mental health, as measured by the incidence of mental disorders, admissions to mental health facilities, and suicide (Zivin et al. 2011). Job displacement has also been linked to a number of mental health related outcomes, including psychological distress (Mendolia 2014; Cygan-Rehm et al.

maltreatment, rather than the likelihood of being reported, investigated, or punished for abuse. We discuss issues related to reporting and data quality in the next section.

⁵ Weinberg (2001) notes that family income may be directly associated with abuse as well, as it relates to the availability of resources that can be used to elicit desired behavior from children.

2017), depression (Brand et al. 2008; Schaller and Stevens 2015), psychiatric hospitalization (Eliason and Storrie 2010), and suicide (Eliason and Storrie 2009; Browning and Heinesen 2012). Meanwhile at the individual level, a large literature documents a correlation between poverty and mental health in the cross section. However, empirical evidence on the causal effects of individual and family income— independent of effects of job loss—on mental health is inconclusive.⁶

Substance abuse and partnership dissolution may also mediate the relationship between economic shocks and child maltreatment. Substance use and single parenthood are both correlated with socioeconomic status and are also well-known risk factors for child abuse and neglect. Recent evidence from the opioid crisis suggests that poor macroeconomic conditions increase opioid overdose (Hollingsworth et al. 2017) and that opioid abuse increases child maltreatment (Bullinger and Ward 2020). However, the causal links between economic shocks and various forms of substance abuse and partnership dissolution are not well understood.⁷

Forced moves from residences (e.g. foreclosures and evictions) represent significant shocks to financial well-being and may also be a pathway through which economic shocks affect child maltreatment. In addition to the direct consequences of housing insecurity on child maltreatment (especially neglect), losing a home due to financial strain may lead to child maltreatment through these other indirect pathways—mental health, substance abuse, and partner dissolution (Warren and Font 2015)—as forced displacement from homes worsens psychological well-being (Currie and Tekin 2015; Collinson and Reed 2019) and drug-related mortality (Bradford and Bradford 2020). Indeed, several studies have recently shown that foreclosures (Wood et al. 2012; Frioux et al. 2014; Berger et al. 2015),

⁶ Several papers have examined mental health outcomes of lottery winners, with mixed results (e.g., Kuhn et al. 2011; Apouey and Clark 2015; Raschke 2019).

⁷ For example, Deb et al. (2011) identify heterogeneity in the response of drinking behavior to job displacement and the empirical evidence on the effects of aggregate economic downturns on alcohol consumption is mixed (Ruhm and Black 2002; Dávalos et al. 2012). Meanwhile, while layoffs lead to increased divorce rates in survey data (Charles and Stephens 2004; Doiron and Mendolia 2012) aggregate divorce rates are found to decrease in recessions (Schaller 2013).

evictions (Bullinger and Fong 2020), and other forms of housing insecurity (Font and Warren 2013; Marcal 2018) are linked with child maltreatment.

Finally, parental time use is a rarely mentioned mechanism by which economic shocks can affect maltreatment. In particular, involuntary changes in employment and work hours have the potential to affect the incidence of maltreatment through their effects on the amount of time children spend with parents, other family members, childcare providers, and others (Lindo et al. 2018; Schneider et al. 2020). This mechanism may work in different directions depending on the parent who experiences the employment shock and on the type of maltreatment considered (Lindo et al. 2018).⁸

3 Identifying Causal Effects

Identifying the causal effects of economic factors on child maltreatment requires (i) child maltreatment data linked to measures of economic conditions and (ii) empirical strategies that can isolate the effects of economic factors despite the fact that these factors tend to be correlated with other determinants of maltreatment. Both of these issues present challenges for researchers that are difficult to overcome.

3.1 Data

3.1.1 Maltreatment Reports

Child abuse reports have historically been the primary source of data for researchers interested in studying child maltreatment on a large scale. While these data are attractive because they often span large areas and many time periods, a natural concern is that maltreatment report data do not accurately reflect the true incidence of maltreatment.

⁸ A shock that shifts the distribution of childcare from the mother to the father may increase the incidence of abuse since males tend to have more violent tendencies than females. As another example, additional time at home with a parent may reduce the likelihood of child neglect but increase the likelihood of physical, sexual, and emotional abuse.

While there is no doubt that false reports are sometimes made, the consensus view is that statistics tend to understate the true prevalence of child abuse because underreporting is such a serious issue (Waldfoegel 2000; Sedlak et al. 2010). In fact, the Fourth National Incidence Study of Child Abuse and Neglect (NIS-4), which identifies maltreated children outside of the United States Child Protective Services (CPS) system, found that CPS investigated the maltreatment of only 32 percent of children identified in the study as having experienced observable harm from maltreatment. The researchers concluded that underreporting was the primary reason for this low rate of investigation, and that three quarters of the cases would have been investigated if they had been reported to CPS (Sedlak et al. 2010).

Nonetheless, reports are likely to be strongly related to the true incidence of maltreatment and thus may serve as a useful proxy. At minimum, since roughly 70 percent of reports are reported by professionals, including teachers, police officers, lawyers, and social workers (U.S. DHHS 2020), reports serve as a good measure of maltreatment risk.⁹ The key consideration with the use of any proxy variable is the degree to which the measurement error is the same across comparison groups. If a comparison is made across groups or time periods that have the same degree of measurement error, then the percent difference in the proxy will be the same as the percent difference in the variable of interest.

Given that estimating the causal effects of economic factors on child maltreatment will inevitably entail comparisons across groups and/or time periods, this discussion naturally raises the question of whether it is safe to assume that the measurement error in maltreatment reports is the same across groups and across time. When making comparisons across states, we must address the fact that states differ in how they define abuse, who is required to report abuse, and in how they record and respond to reports of abuse. When making comparisons across time, we must

⁹ School entry laws show that teachers play a particularly important role in detecting and reporting child maltreatment (Fitzpatrick et al. 2020).

acknowledge that children’s exposure to potential reporters and individual propensities to report maltreatment may be changing over time and that the rate of reporting may in fact be correlated with economic factors. Moreover, states have periodically changed their official definitions of abuse, reporting expectations, and standards for screening allegations. As such, comparisons of abuse reports across states and time have the potential to reflect differences in measurement error in addition to differences in the incidence of maltreatment. Comparisons across groups defined in other ways will be susceptible to similar issues.

It is also important to note that focusing on substantiated reports does not necessarily improve our ability to make valid comparisons—and could actually make things worse—even in a scenario in which agencies are perfectly able to discern true and false reports. Comparisons of substantiated reports (in percent terms) will do better than comparisons of all reports if and only if the *difference* in the measurement error in substantiated reports across groups is less than the *difference* in the measurement error in overall reports across groups, which may not be the case. Further, if a researcher aims to assess the well-being of children through reports, studies have shown that there is little difference in services and resources needed by children in substantiated and unsubstantiated cases (Drake 1996; Kohl et al. 2009).

The major takeaway from this discussion is that we must take into consideration the process by which maltreatment becomes observable to the researcher. In particular, when estimating the causal effect of an economic factor on observed maltreatment, we must consider the degree to which the effects are driven by actual changes in maltreatment and/or by changes in the rate at which occurrences of maltreatment are detected and reported.

3.1.2 Alternative Sources of Data

Survey data, medical records data, death records data, crime report data, and internet search data have also been used to gain insights into the prevalence of

maltreatment and the way it varies with economic factors. Surveys solicit information on occurrences of maltreatment from one’s childhood or on a year-to-year basis, as in Berger et al. (2017). Medical records can be used to measure maltreatment using diagnosis codes that explicitly indicate maltreatment or by considering outcomes that are expected to be highly correlated with maltreatment (e.g., accidents, shaken-baby syndrome, etc.), as in Wood et al. (2012) and Klevens et al. (2016). Death records can be used to detect the most extreme cases of maltreatment, particularly among infants, as in Bullinger (2020) and Putnam-Hornstein (2011). Similar to administrative reports of maltreatment, data on crimes reported to the police can measure a potentially different subset of maltreatment reports, as used in Carr and Packham (2020). And internet search data can be used to measure the frequency with which people search for phrases that are expected to be highly correlated with maltreatment (e.g., child protective services, dad hit me, etc.), as in Stephens-Davidowitz (2013).

While all of these sources of data have the potential to shed new light on maltreatment in ways that administrative reports data cannot, they are also susceptible to selection bias. Just as economic factors may affect both the incidence of maltreatment and the likelihood that cases of maltreatment are reported to officials, economic factors may affect the likelihood that a person reports being abused in a questionnaire, a healthcare professional’s diagnosis involves maltreatment or that a maltreated child is taken for medical treatment, whether a maltreatment-related death is recorded as such, or a person suspecting or experiencing maltreatment reports it to police or searches the internet for information. Furthermore, each of these data sources captures a particular subset of the true incidence of maltreatment, with individual strengths and limitations that should be considered when embarking on a study involving these data sources. As such, they do not lessen the importance of considering the process by which maltreatment becomes observable to the researcher.

3.1.3 Links to Measures of Economic Conditions

Because of the sensitive nature of the subject, most maltreatment data are only available in the aggregate. Where micro data is available, it often does not include information on families' economic circumstances. As such, it is often only possible to consider links between maltreatment and the economic conditions of an area, which introduces the possibility that estimated relationships may be subject to the ecological fallacy, whereby an observed relationship between economic conditions and maltreatment in the aggregate may not reflect the relationship that exists for individuals. For example, it is possible for local unemployment to increase child maltreatment while a parent being unemployed may have the opposite effect. Nonetheless, while it is important to acknowledge the limitations of what can be learned from estimates based on aggregate data, it is also important to note that there is value to understanding the links between economic conditions and child maltreatment in the aggregate.

With that said, some data on child maltreatment *do* provide information on the economic conditions of the household that the child lives in. It is from these data that we know that maltreated children are more likely to come from economically disadvantaged households. While these data are useful for providing descriptive statistics for observably maltreated children, data that have been selected on the outcome of interest cannot be used estimate causal links in any straightforward manner. Using micro-level data to estimate the degree to which various factors affect the probability of maltreatment requires data on individuals who are *not* maltreated in addition to those who are maltreated. Towards this end, researchers have used survey data including the National Family Violence Survey, the Fragile Families and Child Wellbeing Study, the National Longitudinal Survey of Youth, and by linking data sets with information on economic conditions to child maltreatment report data.

3.2 Empirical Strategies

As discussed above, child maltreatment can be thought of as resulting from

complex interactions between individual, familial, environmental, and societal risk factors. Given the large number of factors that may contribute to maltreatment and the interrelatedness of these factors, identifying the causal effects of economic conditions on maltreatment is difficult. In this section we highlight the approaches that have been used to overcome this challenge.

3.2.1 Estimating the Effects of Household Economic Factors

Acknowledging that household economic conditions are generally *not* random, quantifying their causal effects requires researchers to consider circumstances in which they can measure the effects of random shocks to these conditions. Because it is difficult to identify these circumstances and to collect the maltreatment data necessary to examine these circumstances, only a handful of such studies exist.

Fein and Lee (2003) take this approach in an experimental evaluation of a welfare reform program in Delaware. They compare outcomes for households subject to welfare reform to outcomes for those who were not subject to welfare reform, which was determined by random assignment. They find that the reform increased the incidence of neglect reports but had no significant effect on reports of abuse or foster care placement. This study represents some of the most convincing evidence to date that household economic factors have a causal effect on child maltreatment. However, since Delaware's welfare reform involved changes to benefit levels and work incentives among other factors, this research also underscores the difficulty of teasing out the causal effects of different interrelated economic factors.

Cancian et al. (2013) also evaluate an experiment among welfare recipients to estimate the causal effect of household income on child maltreatment reports. They study the effect of Wisconsin's reform that allowed a full pass through of child support to welfare recipients (as opposed to the government retaining a fraction of child support payments to offset welfare costs). Because the experimental intervention only changed

child support pass through—and no other aspect of child support or welfare receipt—the design allows for a straightforward interpretation of the results: increasing income through this mechanism reduces maltreatment reports. The authors are careful to note, however, that increasing income through other mechanisms may have different effects on maltreatment.

Berger et al. (2017) take a different approach to identifying the causal effect of household economic conditions, exploiting naturally occurring variation in income (as opposed to experimentally manipulated variation) that they argue can be thought of as random. In particular, their strategy uses variation in the generosity of the state and federal Earned Income Tax Credit (EITC) across states and over time. They find that increases in income from the EITC reduces neglect and CPS involvement. While this approach allows for a study that is broader in scope than the aforementioned experiments, a disadvantage of this approach is that changes in EITC rules can affect levels of income, work activity, and the broader social economic climate, which again highlights the challenge in the identification and interpretation of causal effects.

Finally, recent research on the minimum wage using both administrative maltreatment reports and longitudinal survey data shows that higher minimum wages reduce child maltreatment (Raissian and Bullinger 2017; Schneider et al. 2020). However, Schneider et al (2020) suggest that household income is not the primary driver of the effects. Rather, as has been noted as a possibility, mothers tend to reduce their employment and work fewer evening shifts when the minimum wage increases.

3.2.2 Estimating the Effects of Broader Economic Conditions

Another strand of the literature abstracts from the household to consider the effects of changes in local economic conditions on rates of maltreatment in the aggregate. Acknowledging that local economic conditions tend to be correlated with many socioeconomic factors that predict maltreatment, several studies have taken an “area approach” that considers how rates of maltreatment in an area change *over and*

above changes occurring across all areas when its economic conditions change *over and above changes occurring across all areas*. As such, estimates based on this approach are identified using variation across areas in the timing and severity of changing economic conditions. This approach is operationalized via regression models that include time fixed effects to capture changes occurring across all areas at the same time, area fixed effects to capture time-invariant area characteristics, and (sometimes) area-specific trends. The validity of this approach rests on the assumption that unobservable variables related to the outcome variable do not deviate from an area's trend when its economic conditions deviate from trend.

Studies taking this approach vary considerably in their measures of maltreatment, their measures of economic conditions, and the way they define areas. Paxson and Waldfogel (1999, 2002, 2003), Seiglie (2004), Bitler and Zavodny (2002, 2004), and Cherry and Wang (2016) use state-level panel data to estimate the effects of a variety of economic indicators on maltreatment reports, finding mixed results.

State-level analyses may mask important variation in both child maltreatment and macroeconomic conditions that occur within a state, however. To that end, a number of studies have drawn on administrative report data at the county-level within a single state. For example, Lindo et al. (2018), Frioux et al. (2014), and Raissian (2015) use county-level data from California, Pennsylvania, and New York, respectively, also finding mixed results. Wood et al. (2012) focus on hospital admissions for abuse-related injuries and find evidence that local economic downturns significantly increase the incidence of severe physical abuse; however, they do not account for the likely autocorrelation in the error terms within hospitals over time, which would serve to widen their confidence intervals.

A number of studies have also examined measures related to overall economic conditions, including periods of economic recession, mortgage delinquency rates and foreclosures, consumer sentiment, and food assistance program participation (Wood et al. 2012; Brooks-Gunn et al. 2013; Frioux et al. 2014; Berger et al. 2015; Schneider et al. 2017; Morris et al. 2019). This body of work has generally found increased risk of child

maltreatment during macroeconomic downturns.

A more recent line of research has begun to uncover the nuances in the effects of changes in economic conditions on maltreatment. Lindo et al. (2018) and Schenck-Fontaine et al. (2017) both use community-level mass layoffs as an exogenous shock to county-level employment in California and North Carolina, respectively. Lindo et al. (2018) find gender-based differences in the effects of unemployment, such that male employment reduces maltreatment while female employment increases maltreatment. Schneck-Fontaine et al. (2017) find that overall mass layoffs increase the severity of child maltreatment reports, but not the frequency. Using nationwide reports, Schenck-Fontaine and Gassman-Pines (2020) further find that the effects of overall mass layoffs on abuse and neglect are largest in states with low income inequality. Finally, Brown and De Cao (2020) use county-level industry shares and national industry unemployment rates, finding increases in neglect in response to higher unemployment, and that extended unemployment insurance can protect against these effects. These studies document a positive relationship between aggregate unemployment and maltreatment in some form and highlight the care required in interpreting such findings.

3.2.3 Estimating the Effects of Public Policies Connected to Economic Conditions

Finally, a growing strand of recent literature estimates the effects of various public policies thought to affect the causes and consequences of household economic factors (Klevens et al. 2015). These studies generally measure aggregate child maltreatment rates and take the form of a regression model with time and geographic-area fixed effects, where the primary independent variable is a policy lever. For example, paid family leave (Klevens et al. 2016), higher minimum wages (Raissian and Bullinger 2017), the provision of universal childcare (Sandner and Thomsen 2020), Head Start participation (Zhai et al. 2013), and marijuana legalization (Rashid and Waddell 2018) have all been shown to reduce child maltreatment, primarily through reductions in neglect and physical abuse. Ginther and

Johnson-Motoyama (2017) also find that policies restricting access to Temporary Access to Needy Families (TANF) have been linked to greater child maltreatment. Two additional Earned Income Tax Credit (EITC) studies show that a refundable EITC (Klevens et al. 2017) and a more generous federal EITC (Biehl and Hill 2018) contribute to lower rates of abusive head trauma and foster care entry, respectively. Generally, this burgeoning literature shows that more generous economic and social policies reduce child maltreatment. In contrast, evaluating changes in food assistance policy (SNAP) regarding benefit disbursement timing in Illinois, Carr and Packham (2020) find that an influx of benefits due to the policy change *increases* child maltreatment. As previously noted, however, most of these policy changes can affect multiple factors—not just household income—muddying the causal interpretation.

4 Conclusion

Child maltreatment has historically received relatively little attention in the field of economics, despite generating large financial costs for society and significant consequences for the health, human capital accumulation, and eventual labor market outcomes of its victims.¹⁰ In recent years, however, there has been a rapid expansion in economics research related to the economic factors affecting child maltreatment. The increased interest has provided deeper and more nuanced insights into how family income, employment status, local economic conditions, neighborhood poverty, receipt of public assistance, and other economic factors affect child maltreatment.

Nonetheless, credible causal evidence remains a challenge for research on the economic determinants of child maltreatment. In some sense, identifying causal effects in this area requires a perfect storm in which there is random variation in economic

¹⁰ The economics literature on child welfare has historically been centered around foster care, including adoption incentives and the causal effects of foster care (e.g. Doyle 2007a, 2007b, 2008; 2013; Doyle and Peters 2007; Buckles 2013; Cunningham and Finlay 2013; Lindquist and Santavirta 2014; Markowitz et al. 2014; Brehm 2018, 2019; Bald et al. 2019).

conditions, the researcher has access to maltreatment data that allows for comparisons utilizing this random variation, and the researcher can be confident that the way in which maltreatment becomes observed in these data does not vary across the groups of people and/or time periods compared. Moreover, even when this perfect storm occurs such that a causal estimate can be obtained, the interrelatedness of economic factors can make it difficult to interpret such estimates. For example, the causal effect of a parent's job displacement could reflect the effects of income or time use (or other factors).

Despite these challenges, substantial progress has been made in identifying the causal effects of economic factors on child maltreatment through the use of experimental (natural and true) variation and area studies. These studies indicate that changes in economic conditions can have meaningful impacts on maltreatment. However, as noted in Doyle and Aizer (2018), there is still much work to be done in identifying exactly which economic factors matter, the mechanisms through which the effects transpire, and which policies can improve child well-being.

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