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Making parents pay: The unintended consequences of charging parents for foster care



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ABSTRACT

Most families in the child protective services system also interact with the child support enforcement system. This study exploits a natural experiment in Wisconsin, created by the state's large regional variation in child support referral policy, to estimate a potentially important effect of child support enforcement on the duration of out-of-home foster care placement. The effect we examine is whether requiring parents to pay support to offset the costs of foster care delays children's reunification with a parent or other permanent placement. We find evidence of this unintended effect, which is important not only because longer foster care spells are expensive for taxpayers, but also because extended placements in foster care may have consequences for child well-being. Our results highlight the potential importance of cross-systems analysis and the potential consequences when the policies and fundamental objectives of public systems are inconsistently coordinated. We discuss the implications of our findings for child support and child protective services policy.

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1. Introduction

The child protective services (CPS) system can be seen as a safety net of last resort. While removing children from their parents' care is an extreme intervention, recent estimates suggest that, in the U.S., 6% of all children and 12% of black children will have experienced out-of-home care by the time they reach age 18 (Wildeman & Emanuel, 2014), with estimated costs exceeding \$10 billion annually (Scarcella, Bess, Hecht Zielewski, Warner, & Geen, 2004). Most children and families with CPS involvement also interact with other social service systems that can have very different goals and models of administration and financing. Of particular interest for this analysis is the potential for most families receiving CPS to also interact with the child support system, either as previous participants in child support, or as potential targets for child support enforcement when children are removed from the home. Though the overlap between CPS and child support is common and known in practice, there has been very limited research analyzing the interactions between these two systems and the implications for dually served families. As we will show, the two systems' policies and fundamental objectives are not consistently coordinated, which leads to substantial unintended negative consequences both for the families involved and taxpayers.

The scope of the child support enforcement system is generally limited to establishing and enforcing nonresident parents' financial obligations to their children. In contrast, the CPS system is responsible for

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assuring child safety, permanency, and well-being, so its scope and responsibilities extend well beyond financial resources. The scarcity of studies of CPS-child support interactions may reflect important differences in the policies and goals of these programs or a limited recognition of the potential importance of their interaction, but research in this area has also been hampered by the limited availability of relevant survey data and technical challenges associated with the analysis of administrative data from separately managed systems. This paper begins to address these limitations. We use a newly developed data set, which merges administrative data from several state programs, and exploit a natural experiment in Wisconsin created by unintended large regional variation in child support referral policies, to estimate a potentially important effect of child support enforcement on the duration of out-of-home (or substitute) care placements. We assess whether requiring parents to pay child support to offset the costs of foster care delays children's permanent placement, whether through reunification with a parent, adoption, or guardianship. We find evidence of this unintended effect. If requiring parents to pay support results in a longer foster care spell because it decreases economic resources needed for

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¹ Permanency or permanent placement is defined by the CPS system as reunification with a parent (either the parent(s) from whom they were removed, or another parent), adoption, or guardianship (a permanent caretaker). The term permanency is used by the CPS system to refer to the intention of the placement, not its actual outcome. Children in permanent placements may be subsequently removed from the placement again. In the present paper, we expand on the administrative definition of permanency by limiting it to those children who achieve permanency and who are not removed again for at least six months.

achieving the conditions of reunification, then this policy may be fiscally counterproductive, especially in light of low levels of collection² and the additional costs of child support enforcement (Chellew, Noves, & Selekman, 2012). This question has consequential implications for child support and CPS policy, and illustrates the importance of crosssystem policy analysis.

2. Policy context and research question

The CPS system is designed to serve children at risk of maltreatment. In 2012, approximately 6 million children in the U.S. were reported to CPS, and more than 460,000 children were living in an out-of-home placement as a result of CPS involvement (U.S. Department of Health and Human Services, 2013). Most children enter foster care due to neglect, rather than abuse (Sedlak et al., 2010), with low income an important risk factor (Yang, 2012). CPS agencies are accountable for ensuring child safety and promoting well-being, either at home or in an out-ofhome placement. While many children placed out-of-home are reunified with their parents quickly, 28% of children remain in foster care for two or more years (U.S. Department of Health and Human Services, 2013). Safely and quickly reunifying families is an important priority, to reduce both disruption to children and the public costs of foster care.

Children with CPS involvement are likely to also be involved with the child support system. Two distinct factors account for the high probability of families receiving CPS also participating in the child support system. First, children living in single-parent families are overrepresented in the CPS system (Sedlak & Broadhurst, 1996; Sedlak et al., 2010), and, since these children live apart from one of their parents, they are usually eligible for child support. Second, federal and state policies call for parents whose children are placed in foster care to be referred to child support enforcement so that parents may be ordered to offset some of the costs of that care. Federal policy also calls for child support previously directed from nonresident to resident parents to be redirected to the state, and, for those that do not have orders, that new orders be established for both pre-placement resident and nonresident parents to cover the costs of foster care.³

One of the goals of the child support enforcement system is to support and enforce nonresident parents' contributions to their children's financial well-being. For children living with one parent, support typically is due from the nonresident to the resident parent and is intended to directly benefit the child. Child support can play a particularly critical role in the income packages of low-income single-parent families (Pirog & Ziol-Guest, 2006; Sorensen & Hill, 2004), and some evidence suggests that increased child support may reduce the risk of child welfare involvement (Cancian, Yang, & Slack, 2013). Historically, the government has often retained child support payments from low-income families receiving cash assistance to offset welfare costs, but in recent years policies have changed to allow more child support to be passed through to resident parents receiving assistance-making welfare and child support complements, rather than substitutes (Cancian, Meyer, & Caspar, 2008; Chellew et al., 2012).⁴ The change in policy to prioritize economic support to families over cost-recovery for government has not been extended to children in foster care, however. Federal guidance and state policies generally call for child support orders to offset government costs, rather than directly benefit children, when children are placed out of home (Chellew et al., 2012).

Given the continued use of child support to offset placement costs, we are led to ask the following: How often do redirections of previous support and referrals for new child support occur, and to what effect? We are particularly interested in whether charging child support to pre-placement resident parents, especially single mothers, extends the time children spend separated from their families of origin.⁵ Both economic theory and the literature on foster care suggest that the potential effects of child support enforcement on families that have children in a foster placement vary depending on who is making a payment and where the payment is directed. Consider the most common situation, in which the mother is the pre-placement resident parent. When children are removed from this mother's home, an order for child support from the mother, designed to offset the costs of foster care, will reduce the economic resources available to her. To the extent that poverty or other resource limitations contributed to the initial placement, reducing resources by ordering child support payments may increase barriers to reunification and permanency. For example, mothers may have more difficulty correcting deficient housing situations; in addition, the stress associated with increased financial pressure may worsen any psychological or behavioral barriers to reunification (we review related literature below). The redirection of support initially ordered from the father to the mother may have a similar effect, though perhaps to a lesser degree if child support payments were irregular, or if the mother's participation in welfare led to only a partial pass-through of the father's payments. On the other hand, if the pre-placement nonresident father does not have a pre-existing child support order and placement results in a new order for child support from him, then that new order may benefit the mother after reunification and the potential for additional resources may facilitate economic stability and therefore speed reunification and permanency. Finally, in addition to these indirect effects on permanency through economic stability, a direct motivation for these parents to work towards more rapid permanency may result from the negative economic incentive that comes from charging parents for the costs of care. All of these theoretical conjectures direct us to examine this question empirically.

Our goals in this paper are, first, to document the patterns of child support orders and payments for families with children placed in foster care, and then to examine the relationship between orders and placement outcomes. We consider the frequency of orders and payments from nonresident parents to resident parents prior to placement and while the children are in foster care. We also consider new child support orders and payments—for both nonresident parents and pre-placement resident parents—that are established to offset the costs of foster care. Finally, we evaluate the hypothesis that establishing or increasing a child support order to offset costs may delay reunification and increase time children live apart from their parents.

3. Prior literature

Despite the overlap in populations served, there is remarkably little research on the interaction of the child support and CPS systems. The few existing studies document the relationship between child support receipt and the risk of subsequent CPS involvement. The second National Incidence Study of Child Abuse and Neglect (NIS), completed in the late 1980s, included a report on the relationship between nonpayment of child support and the occurrence of child maltreatment (Westat, 1992). The NIS analysis is dated, and was limited to comparisons of the child support received by three samples of substantiated CPS cases, relative to all child support cases. A more recent analysis (Cancian et al., 2013), documented contact with the CPS system

 $^{^{2}\,}$ Estimates from Wisconsin suggest that collections account for between 0.5% (in Milwaukee County, the largest child welfare system in Wisconsin) and 4.0% (in other counties) of direct provider payments. Estimates of the proportion collected are lower if administrative costs are included (Chellew et al., 2012).

For a discussion of policy related to referral of families with children in out-of-home

placement to child support enforcement, see Chellew et al. (2012).

⁴ There is substantial variation in pass-through amounts across states (Vinson & Turetsky, 2009), with Wisconsin among the most generous.

 $^{^{\, 5}}$ The redirection of child support has been the focus of recent federal interest, as discussed in Resident Fathers and the Child Welfare System, the lead article by Vicki Turetsky (2009), Commissioner of the U.S. Office of Child Support Enforcement.

among a cohort of single mothers, comparing rates for those receiving different amounts of child support. While both studies suggest that families receiving lower amounts of child support are at greater risk of CPS involvement, neither of these studies is able to address the causal relationship; many factors associated with nonreceipt of child support are also associated with CPS involvement. In contrast, Cancian et al. (2013), drawing from a random assignment experiment in Wisconsin that resulted in differential child support receipt, provide evidence that higher child support income reduces CPS involvement among families who have received cash welfare.

While not addressing child support per se, a related literature considers the relationship between income, especially cash welfare, and child maltreatment or CPS involvement. As noted above, neglect, rather than abuse, is the most prevalent form of child maltreatment, and a range of economic factors have been shown to be important predictors of CPS involvement due to neglect (Slack et al., 2011). Needell, Cuccaro-Alamin, Brookhart, and Lee (1999) used merged administrative records from California to consider the subsequent CPS involvement of children in families receiving welfare in the early 1990s. They found that within five years of entering the Aid to Families with Dependent Children (AFDC) program, about a quarter of children had been referred to CPS, and 3% had been placed in foster care. Children from single-parent homes (who are generally demographically eligible for child support) were overrepresented among those reported and, especially, among those with a foster care placement. Considering two samples of families applying for cash welfare before and after the welfare reform of 1997 in Wisconsin, Courtney, Dworsky, Piliavin, and Zinn (2005) show that welfare applicants are increasingly overrepresented in the CPS system. In a companion study, Dworsky, Courtney, and Zinn (2007) analyzed CPS involvement among post-reform applicants, and found higher rates of CPS involvement for families with younger children and a history of welfare receipt. A number of authors have found that reductions in welfare payments are associated with a higher risk of CPS involvement. Shook (1999) using data from Illinois, found that reductions in welfare benefits, in the absence of increases in earnings, were associated with CPS involvement, though Slack, Lee, and Berger (2007) note that it is difficult to give the association a causal interpretation. In two papers, Paxson and Waldfogel (2002, 2003) used state and time variation and found a large negative relationship between welfare benefit generosity and foster care caseloads at the state level. In an experimental study, using data from Delaware's welfare reform, Fein and Lee (2003) find only small impacts on child neglect, and no impacts on foster care placements.

While no previous study of which we are aware addresses the role of child support in foster care spell lengths, Courtney (1994) considers a number of risk factors in his early study of time to reunification among children in foster care in California. He finds that children from lower-income families make a slower transition home. Wells and Guo (2006) found that those with lower overall average incomes (including both cash assistance and earnings) were reunified more slowly. They also found that mothers who experienced a substantial decline in welfare benefits after their children were placed in foster care experienced delays in reunification in contrast to post-welfare reform mothers with less decline in welfare benefits after the foster care placement.

In sum, while there is very limited research directly considering the interactions between the child support and CPS systems, related research suggests important relationships between economic resources and CPS involvement and outcomes. Poor families are more likely to be involved with the CPS system, and to experience longer separations once their children are placed in foster care. Reductions in welfare income have been tied to both CPS involvement and longer out-of-home placements. These studies suggest that if child support orders to offset the costs of foster care placements are enforced, the reduction in income might be expected to contribute to longer foster care placements. We consider these issues below, documenting the likelihood that parents are charged support, and estimating the effect on the length of foster care placements. In particular, we use administrative data from Wisconsin and aim to

identify the causal effect using the county-level variation in the probability of an order to pay child support as an instrument.

4. Data

We use administrative data from Wisconsin's CPS system, as reported in the Wisconsin Statewide Automated Child Welfare Information System (WiSACWIS), to identify families with children who are removed from parental care and placed out of home. The sample drawn from WiSACWIS is merged with Wisconsin child support system (KIDS) data. Other information, including unemployment insurance records and demographic characteristics, are drawn from the Wisconsin Multi-System Person File (MSPF). We focus our primary analysis on mothers in Wisconsin who were living with all their children, but not with any of the children's identified father(s), and who had a child removed and placed in foster care in a two-year period between July of 2004 and June of 2006.8 We then follow the placement experience for all the mothers' children for four years after the initial removal, and monitor any re-removals within six months for children achieving permanency in those four years. We restrict our sample to mothers with at least one child age 14 or less at the time of removal, who therefore have at least one minor child for the full four years of our analysis (N = 3032). In the great majority of families (92.5%; N = 2804) all the placed children transition to permanency (reunification, adoption, or guardianship) within 48 months. These 2804 mothers have had 10,476 children with 5671 separately identified fathers. We use data from the KIDS system to measure child support orders and payments made by mothers to offset the costs of foster care, by fathers to offset the costs of foster care, or by fathers to the mothers.¹⁰

We analyze the first observed spell of foster care that starts after June 2004 (when reliable data for this analysis begin). We count a mother as entering a spell when any child is removed from her care (that is, when she transitions to having at least one child in an foster care placement), and we count her as exiting the spell when all her known children achieve permanency (that is, when she transitions back to having no children in a temporary placement, even if some children have been adopted or are in another permanent placement other than reunification with the mother). We focus on the spell with any children in a temporary placement out of the home because this is the period during which federal and state policy recommend a child support order to offset the costs of foster care. As discussed below, we test the sensitivity of our results to alternative sample construction.

⁶ The Wisconsin Multi-System Person File (MSPF) is a merged administrative data set created by the Institute for Research on Poverty in collaboration with the Department of Children and Families and other Wisconsin State agencies. The MSPF includes comprehensive participation information for a number of programs serving families in the state of Wisconsin, and is designed to support research to improve programs, including this project. Construction of the MSFP was supported by resources from the State of Wisconsin and the U.S. Department of Health and Human Services. For a detailed discussion of the MSPF, technical issues, and data security, see Brown (2012).

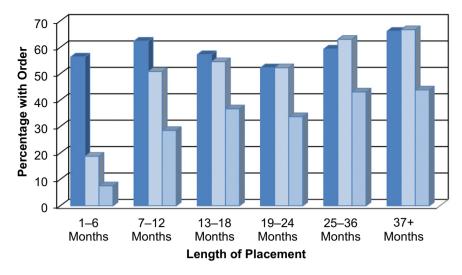
Onderstanding family structure, particularly whether the mother and/or the father are living with the children at the time of initial placement (that is, whether they are resident or nonresident parents), is important to our analysis. We aim to distinguish families in which all the mother's children were living with her, and not with their father, at the start of the spell, and to exclude families in which all or some of the children were living with their father, or in which any of the mother's children were living elsewhere. We further restrict the sample to those with at least one father identified in our administrative data. Given the complexities of child support orders in cases where custody of children is shared or split between parents, we limit our analysis sample to mothers who should be eligible for child support for all their children. As noted in the discussion of sensitivity tests, our results are robust to including a larger sample not limited by living arrangements.

⁸ July of 2004 is selected for the beginning of the sample window because of concerns regarding the comprehensiveness of WiSACWIS data prior to that date. June of 2006 is selected to allow us to follow children for at least four years after removal (plus an additional six months after any permanency) while avoiding any right censoring of the data.

⁹ Fewer than 100 fathers have children with more than one of the mothers in our sample.

sample.

10 Further details of the data used for this paper are available in Cancian, Cook, Seki, & Wimer (2012).



■ From father to mother <a>Image: By father to offset OHP <a>Image: By mother to offset OHP

Fig. 1. Share of parents with child support orders: variation by length of out-of-home placement (OHP).

5. Methods

We begin by documenting how families who have children placed in foster care are treated by the child support system, both before they have children in foster care and during the period of placement. We compare child support orders and payments at several points: (1) in the month prior to the start of the foster care spell, (2) at any time during the spell, and (3) in the final month of the placement. We document child support owed and paid by the nonresident father(s) of the mother's child(ren), and whether that support is owed and paid to the mother or to the government to offset placement costs, but we focus in particular on child support orders and payments from the pre-placement resident mother to the government to offset costs. In the case of nonresident fathers, orders to pay support to offset the costs of foster care may be the result of existing orders being redirected from the resident mother to the government.¹¹ In the case of pre-placement resident mothers, orders to pay child support to offset the costs of foster care are typically new. We analyze how these orders and payments vary by child support history (i.e., whether there are pre-placement orders), as well as by economic status (i.e., father's earnings, mother's earnings) and demographic characteristics (i.e., father's age, mother's age, mother's race, whether the mother has children with more than one father).

We then consider evidence for the causal effect of these child support enforcement actions on the duration of foster care placement because the policy implications of any relationship depend critically on the direction of causality. The identification of these causal effects is challenging, since referrals from the CPS system to the child support system may depend on characteristics that are also associated with later placement outcomes. As shown in Fig. 1, the simple descriptive results suggest a positive relationship between orders and spell length. Almost half our sample (49%) is observed to have a placement spell of six months or less; only 15% have a spell lasting two years or longer. Pew cases with spells of six months or less

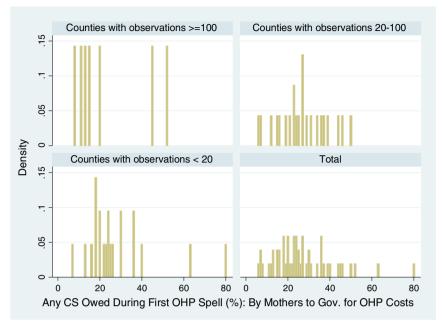
have orders to offset costs (19% for fathers, 8% for mothers), but such orders are more common for those with longer spells, rising to over 60% of fathers and 40% of mothers with spells of two years or more. Parents whose children are in foster care for a longer period are more likely to be ordered to pay support to offset the costs of that care. ¹³ This positive correlation between the order and placement spell could reflect that the child support order increased the barriers to reunification. Alternatively, it could be that the order is the result of the longer period in foster care. In particular, if the longer placement was anticipated based on the reasons for removal, expected placement length may have motivated the referral and pursuit of an order. Moreover, the longer placement provides more time for the administrative steps required for an order to be established.

To identify the causal effect of orders on placement duration, we use an instrumental variable (IV) approach. We estimate time to reunification—that is, the length of the spell starting when the first child is removed from the mother's care and ending when all the children are reunified. We use the county-level probability of an order to pay child support to offset placement costs as an instrument-since this probability affects the likelihood that the mother will have an order, but is arguably otherwise independent of case characteristics that influence the time to reunification (evidence for this independence is presented below). There is substantial variation across counties in the proportion of mothers ordered to pay support to offset the costs of care (see Fig. 2). We use this variation to identify mothers who are more likely to be ordered to pay support to offset costs, and analyze differences in time to reunification, essentially comparing mothers in low- and high-probability counties. This analysis provides an estimate of the Local Average Treatment Effect of child support referral policy (at the county level), independent of the specific characteristics of the individual case and family. This is a standard approach for estimating the causal effects of those who are potentially affected by the referral policy; however, the results cannot be extended to those who will never be affected by the policy variations (Imbens & Angrist, 1994). Also, the implications of the results for other states should be carefully considered, since the study uses only the across-county variation within

Determining the beneficiary of child support payments is complex. If the family has multiple children, and only one of them is removed to an out-of-home placement, only a portion of the existing child support order may be redirected from the mother. Another complication results from the high proportion (over 60%) of mothers in our sample who have had children with multiple fathers. In these instances, one (or more) of a father's children may be in substitute care, resulting in a redirection of child support, while another father's children remain with the mother, who continues to receive child support on behalf of her resident children.

¹² Recall that our sample excludes about 7.5% of mothers with children removed from their care and not achieving permanency within 48 months: this largely accounts for the low (relative to national estimates) proportion of cases with long spells.

¹³ We might also expect significant declines in orders, or the amount of orders, for fathers to provide support to mothers, when children are in substitute care longer. However, as shown in Fig. 1, there is no consistent pattern between length of placement and the likelihood of an order from the father(s) to the mother during placement. This is somewhat surprising, and reflects in part a delay in redirecting orders, as well as that many mothers retain custody of some of their children, even while other children are placed out of home. We also find they are more likely to make a payment towards those costs, and in the case of mothers. make larger average payments (not shown).



Notes: CS = child support. OHP = out-of-home placement. Gov. = government.

Fig. 2. Histograms of child support orders to offset costs of foster care: variation by county and its size. Notes: CS = child support. OHP = out-of-home placement. Gov. = government.

Wisconsin. Throughout the analysis, we use Generalized Method of Moments (GMM) for the estimation method in our main specification.¹⁴ For estimation, we use the first-stage robust F-statistics as a test of weak instruments for just identified specifications.

An analysis based on the Wisconsin experience allows us to exploit the specific institutional context in that state, which provides a natural experiment and a relevant instrument (i.e., county-level child support order rates). Wisconsin has a state-supervised, county-operated child welfare program, wherein policies are set by the state but there is substantial variation in interpretation and implementation across counties. All counties use the same CPS electronic case management system, which requires that three questions be answered in order for the case to be referred to the child support system. The fact that CPS caseworkers exercise significant discretion when answering these questions provides a source of exogeneity that can be utilized in the IV analysis. This variation appears to be motivated primarily by agency financial practices, rather than case characteristics, and by the lack of communication between local child support and CPS departments (as observed in the review of local agency practices by Chellew et al., 2012;—especially pp. 8–10—and Howard, Noyes, & Cancian, 2013). The identification of the parameter of interest comes from the following: when we compare two families with the same circumstances, except that one lives in a county that is more likely to refer a CPS child to the child support system and the other is in a county that is less likely to make such a referral, the difference in time to reunification between these two families identifies the effect of a child support order.

While evidence from the reviews of local practice cited above indicates that these county-level measures are uncorrelated with the characteristics of individual cases, one potential concern is that child support order establishment rates are correlated with other aspects of CPS practice, which in turn affect the timing of reunification. For example, a more "punitive" orientation in a county could contribute to both more child support orders and slower reunification. While there is not enough within-county over-time variation in child support policy to include county fixed effects, we do address this concern by including a measure

of county CPS practice—the percentage of CPS reports that are substantiated.

6. Results

6.1. Child support orders and payments before and during a foster care placement

Involvement in the child support system is likely to be consequential for CPS outcomes only if a substantial portion of families in the CPS system are also participants in the child support system. While the majority of children in foster care are from single-parent homes, there has been limited systematic analysis of the extent of participation in the formal child support system. To address this gap we begin with a sample that includes mothers who are initially observed to live with all their known children, and not with the child(ren)'s father(s). For these families, policy would generally provide for legally established fathers¹⁵ to have an order to pay child support to the mother prior to placement. As shown in the first column of Table 1, 52% of mothers were owed support in the month prior to placement; that is to say, a father of at least one of their children had been ordered to pay child support for that child. When support was owed it was substantial, primarily because 61% of these mothers had orders with multiple partners: the mean amount for those with an order was \$408 per month. 16

When the children are placed in care and the placement is expected to be long-term, any existing child support owed by the father of those children should be automatically redirected to offset costs associated

¹⁴ The Generalized Method of Moments provides an estimation framework that utilizes the orthogonality of the error term and the instrument variable. This estimator does not impose a distributional assumption, so we highlight the GMM results only (Greene, 2003, p. 555). Sensitivity analysis is conducted using other estimators.

¹⁵ While our sample is restricted to mothers with at least one identified father in our data, not all these fathers are considered a legally established father in the child support system (i.e., they were identified as the father in other administrative data systems). Two-thirds of the mothers in our sample have children with at least one father legally identified through paternity establishment. About 60% of these mothers have a child support order prior to out-of-home placement, higher than the 52% for the sample as a whole. Note, however, that paternity establishment is unnecessary and irrelevant for children who were born to married parents—a status we cannot consistently observe in our data.

¹⁶ In the month before placement few fathers (5%) or mothers (3%) owe support to offset substitute care costs. Those few cases are presumably for a placement prior to the current observed spell.

Table 1Child support orders before and during foster care placements.

	By fathers to mother	By fathers to govt. for foster care costs	By mothers to govt. for foster care costs
Any support owed (%)			
In month prior to foster care	52	5	3
During any month of foster care	58	38	22
In month prior to permanency	34	22	11
Months w/support ordered during foster care (%,cond'l on any)			
During foster care	73	76	64
Mean support owed			
In month prior to foster care	\$214	\$11	\$5
	(305)	(66)	(37)
During foster care (over all months)	\$160	\$69	\$26
	(274)	(133)	(69)
In month prior to permanency	\$135	\$54	\$20
	(268)	(140)	(74)
Mean support owed if positive			
In month prior to foster care	\$408	\$221	\$188
	(313)	(204)	(120)
During foster care (in months with order)	\$330	\$232	\$176
	(296)	(169)	(110)
In month prior to permanency	\$391	\$246	\$189
	(329)	(206)	(135)

Note: N = 2804. Sample: Mothers in Wisconsin with (1) no children in foster care in June 2004; (2) at least one child entering foster care between July 2004 and June 2006; (3) all children transitioning to permanency (reunification, adoption, guardianship, or other) within 48 months; (4) all mother's children live with her, and not with their father, at start of the foster care spell; and (5) mother has at least one child with an identified father in IRP Multi-Sample Person File (MSPF) data (though it may not be a legally established paternity). The numbers in parentheses are standard deviations in dollars.

with foster care.¹⁷ The second row of Table 1 shows the percentage with an order to pay support after the placement spell has started. Over the full placement spell, the percentage of fathers owing support to the mother rises slightly to 58%.^{18,19} Conversely, orders to offset foster care costs rise dramatically for fathers, from 5% in the month prior to placement to 38% during the full placement spell. The percentage of mothers owing support for foster care also rises steeply, from 3% prior to placement to 22% at any time during the full placement.

The second panel of Table 1 shows the stability of orders over the placement spell. Among the 58% of mothers owed support by a father at some point during placement, support was owed an average of 73% of the months in the placement period. Thus, child support orders are generally not fully redirected; mothers continue to have a current order for fathers to pay support even during a placement spell when at least some of their children are in foster care. However, the order amounts are reduced as discussed below.

If all the father's children are placed out of home, all current child support paid may be redirected; if only some of the father's children are placed, only the placed children's proportionate share of the child support order should be redirected. In addition, fathers who do not have an order to pay support at the time of placement may have an order initiated after placement. A number of different factors may motivate the referral. Orders may be pursued in order to recover the costs of substitute care, to improve the long-term economic stability of the mother's household to facilitate reunification, because of a general commitment to enforcing parental financial support, or some combination of these reasons.

The final panels of Table 1 show the mean dollar amounts of child support orders for all cases and for those with orders (that is, excluding those with no order, and averaging only across months with an order). Considering the first row in the final panel we see the decline in the order amount owed to mothers during placement (from \$408 to \$330).²⁰ This reflects at least two factors: (1) reductions in orders when at least some of the children are in a foster care placement, and (2) relatively small amounts owed in new orders established during placement.

These changes in orders and order amounts result in substantial impacts on the resources available to mothers whose children have been placed in foster care. Reflecting on the figures in Table 1, we can gauge the potential change in total resources associated with changes in child support orders. Averaging over all mothers—not just those with related orders—we see that the mean support owed from fathers to mothers fell from \$214 before placement to an average of \$160 during placement. The mean support owed by mothers to offset the costs of foster care grew from \$5 to an average of \$26 per month during placement and the stability of this order is high (64%). The decline in support ordered from fathers to mothers, and the burden of support ordered from mothers to reimburse the government, may constitute a substantial decline in potential resources, given the high rates of poverty for these families.

While Table 1 reports on changes in potential resources as reflected in child support orders, Table 2 shows changes in actual resources as manifested by child support paid, again distinguishing the periods before and during placement. The first row shows that in 25% of cases there were payments from the father(s) to the mother in the month prior to the start of the observed spell. This represents about half of the 52% of mothers who were owed support. Few parents owed support to offset placement costs in the month before the placement, but about half of those with an order paid something. During placement, about 57% of fathers with orders made payments. For orders to offset foster care costs, payment rates are even higher: 77% of mothers with orders made payments.²¹ Fathers follow the same pattern as mothers for offsetting substitution care costs. Payments remain substantial, with

¹⁷ Child support owed by the nonresident parent(s) will generally be automatically redirected. A computerized interface between the administrative data systems of the child welfare and child support systems alerts child support workers of the change in the child's (children's) living situation, so that payments may be immediately redirected (Chellew et al., 2012).

¹⁸ Note that the relatively high rate of orders from fathers to mothers during out-of-home placement reflects in part orders during the first months of the placement. For example, for the 476 mothers who experience a 7- to 12- month spell of their child(ren) being placed out of home, the percentage with an order at some time during the placement falls from 51% (considering all months) to 46% if we exclude the first month following placement, and to 42% if we exclude the first two months following placement. This indicates that, for a fair number of cases, there are lags in referring the family to child support and redirecting an existing order.

¹⁹ This in part reflects the instability of orders, which results in higher proportions with orders when measured over a period longer than a single month. To account for this effect, we also examine orders only in the month prior to permanency—the final full month of the spell (the third row of the first panel in Table 1). In the month prior to permanency the proportion with orders from fathers to mothers has fallen substantially from 58% to 34%. Similar patterns are shown for the orders to mothers and fathers to offset substitute costs (i.e., probabilities in the month prior to permanency are lower than the full placement spell).

²⁰ All dollar amounts are in 2010 dollars using the December 2010 CPI-U.

²¹ Payments for those with orders not shown in table. The relatively high payment rates may in part reflect distribution rules. During episodes of out-of-home placement, payments are applied to offset the costs of placement before they are applied to child support owed to the family.

Table 2Child support payments before and during foster care placements.

	Paid by fathers to mother	Paid by fathers to govt. for foster care costs	Paid by mothers to govt. for foster care costs
Any support paid			
In month prior to foster care	25	2	1
During any month of foster care	33	28	17
In month prior to permanency	17	13	7
Months w/support ordered during foster care (%,cond'l on any)			
During foster care	63	53	40
Mean support paid			
In month prior to foster care	\$106	\$5	\$2
During foster care (over all months)	\$79	\$36	\$14
In month prior to permanency	\$65	\$31	\$14
Mean support paid if positive			
In month prior to foster care	\$422	\$203	\$169
During foster care (in months with order)	\$331	\$226	\$226
In month prior to permanency	\$380	\$248	\$221

Note: N = 2804. Sample: Mothers in Wisconsin with (1) no children in foster care in June 2004; (2) at least one child entering foster care between July 2004 and June 2006; (3) all children transitioning to permanency (reunification, adoption, guardianship, or other) within 48 months; (4) all mother's children live with her, and not with their father, at start of the foster care spell; and (5) mother has at least one child with an identified father in IRP Multi-Sample Person File (MSPF) data (though it may not be a legally established paternity).

mean support paid during placement of \$331 from fathers to mothers, and \$226 each from fathers and mothers to offset the costs of foster care.

Again, we can see the impact the child support system has in determining the resources available to families with children in foster care. Overall, these results suggest that about half the mothers are owed current child support from their child(ren)'s father(s), and about half of those with orders receive a payment. The proportion with an order rises somewhat, and the proportion with a payment rises more substantially, when we compare the month prior to placement to the full spell. But these changes in child support owed and paid by the father(s) to the mother are modest relative to the dramatic increase in child support owed and paid by each of the parents to offset the costs of foster care. Payments to offset the costs of foster care are fairly modest when averaged over all mothers. But for families making payments, the amounts are substantial, especially given the low incomes of most families with children placed out of home.

6.2. Factors associated with child support orders and payments

We have documented the considerable level of participation in child support by families involved with CPS, and the substantial variation in the likelihood of child support orders and payments before and during foster care placement. In this section we consider factors associated with child support orders and payments for these families, focusing on variation by child support history and economic and demographic characteristics of the family. Because there is a substantial literature considering the characteristics associated with child support orders and payments from nonresident to resident parents (Sorensen & Hill, 2004; Ha, Cancian, Meyer, & Han, 2008), we focus our attention on patterns of orders and payments to offset placement costs. As discussed above, when children enter foster care, child support orders may be newly established or modified. However, we expect to find substantial consistency over time in the proportion of mothers with orders, as shown in the second panel of Table 3.²² We also observe a difference

in the probability of payments to offset foster care costs from mothers by their pre-placement child support order status. 23

The remaining panels of Table 3 show variation in orders and payments by parents' economic and demographic characteristics. We show results for fathers' earnings, 24 and mothers' earnings, 25 race, and ethnicity, and whether the mother has had children with more than one father. For both mothers and fathers earnings information comes from Unemployment Insurance wage records for the year prior to placement.

For orders and payments from fathers to mothers during placement, we see that both are generally more likely when the father has higher earnings, though the relationship is not monotonic, and the probability of an order and a payment to the mother falls slightly for the highest category. As expected given child support guidelines (in which orders are to be based on the noncustodial parent's income), order and payment amounts to the mother also tend to rise with father's earnings. In contrast, there is little consistent relationship between father's earnings and the probability of an order to pay support to offset costs of foster care, and a remarkably weak relationship between father's earnings and the amount of the order to offset costs. That is, we find little evidence of a relationship between orders to offset placement costs and father's ability to pay, Actual payments to offset costs are somewhat more likely in cases in which the father has higher earnings, though the relationship is not consistent. Similarly, there is no consistent relationship between mother's earnings and the likelihood that either parent owed or paid support to offset costs. Considering white, black, and Hispanic mothers (the three largest racial and ethnic groups), we see that Hispanics are least likely to be owed support from a father during placement (49%, relative to 60% and 59% for white and black mothers, respectively), and black and Hispanic mothers were less likely than white mothers to have support paid (26% and 28%, respectively, compared to 37%). Black mothers are least likely to have owed or

²² About half of all mothers were owed support by a father prior to placement, and of these, virtually all (99%) continue to be owed support and half (51%) have support owed by fathers to offset the costs of placement at some time during placement. In contrast, among mothers who were not owed support prior to placement, only 13% are ordered support during placement, and in only 23% of cases are orders established for the father to offset the costs of placement. In addition to being more likely to continue to have an order, mothers with a history of a child support order are likely to have somewhat higher average order amounts—\$342 rather than \$226 owed by the father to the mother, and \$239 rather than \$214 owed by the father to offset substitute care costs. Mothers with a preplacement order are also substantially more likely to receive a child support payment from fathers, though compliance (payment conditional on an order) is actually higher for those with new orders (i.e., 52% for those with a history of a child support orders and 61% for those with new orders). Payments from father(s) to offset the costs of care were also more common in cases with pre-placement orders (38%) than without (17%).

²³ Nineteen percent of those with a pre-placement order, relative to 15% of those without, made a payment to offset costs. Again, as we saw with order amounts, we find somewhat higher payments from fathers to mothers for those with pre-placement orders, but no consistent difference in the amount of child support paid by either parent to offset costs.

²⁴ When there is more than one father, we consider the earnings of the highest-earning father, and compare this to amounts owed and paid across all fathers. It is important to note that there are no reported earnings for the father(s) in the year prior to placement in 52% of the cases. On the other hand, among those with earnings, a substantial portion earned over \$25,000 (17% of all fathers, and 36% of those with earnings).

²⁵ As with fathers, most mothers had no recorded earnings (59%), or very low earnings, in the year prior to placement. Only 13% of mothers had earnings over \$10,000.

Table 3Child support orders and payments during foster care placements by CS history and parents' characteristics.

			Any support owed (%)			Mean support owed if positive			Any support paid (%)			Mean support paid if positive		
	N	% of sample	By fathers to mother	By fathers to govt. for foster care costs	By mothers to govt. for foster care costs	By fathers to mother	By fathers to govt. for foster care costs	By mothers to govt. for foster care costs	fathers to	Paid by fathers to govt. for foster care costs	Paid by mothers to govt. for foster care costs	Paid by fathers to mother	Paid by fathers to govt. for foster care costs	Paid by mothers to govt. for foster care costs
All mothers By child support order history	2804	100%	58	38	22	\$330	\$232	\$176	33	28	17	\$331	\$226	\$226
Mother owed before foster care ^a	1471	52%	99	51	24	\$342	\$239	\$175	52	38	19	\$377	\$226	\$202
Mother not owed before foster care By earnings of	1333	48%	13	23	20	\$226	\$214	\$178	13	17	15	\$391	\$308	\$249
highest-earning father in year before foster care														
No earnings	1445	52%	51	35	23	\$305	\$230	\$177	27	24	17	\$317	\$230	\$226
\$1 to \$2500	260	9%	57	43	22	\$250	\$194	\$166	29	28	17	\$272	\$163	\$208
\$2501 to \$5000	122	4%	70	40	21	\$234	\$192	\$158	31	28	18	\$269	\$173	\$202
\$5001 to \$10,000	153	5%	63	44	22	\$270	\$209	\$165	46	37	14	\$270	\$187	\$212
\$10,001 to \$25,000	348	12%	69	43	20	\$333	\$220	\$178	47	34	16	\$305	\$207	\$299
\$25,001 to high By earnings of mother in year before foster care	476	17%	66	36	20	\$468	\$290	\$185	40	31	17	\$441	\$288	\$199
No earnings	1647	59%	54	37	20	\$309	\$237	\$170	30	26	15	\$316	\$228	\$214
\$1 to \$2500	477	17%	60	39	26	\$303	\$225	\$170	35	30	19	\$302	\$204	\$170
\$2501 to \$5000	152	5%	65	36	22	\$287	\$214	\$162	39	27	22	\$333	\$183	\$251
\$5001 to \$10,000	154	5%	68	41	24	\$352	\$210	\$168	40	32	19	\$419	\$234	\$196
\$10,001 to \$25,000	260	9%	68	42	20	\$415	\$245	\$197	39	32	19	\$368	\$257	\$340
\$25,001 to high By mother's race/ethnicity	114	4%	68	35	21	\$494	\$207	\$281	34	27	18	\$417	\$246	\$345
None or missing	13	0%	8	8		\$457	\$339		8	8		\$182	\$240	
White	1683	60%	60	39	25	\$361	\$241	\$179	37	32	21	\$345	\$246	\$211
Black	658	23%	59	39	14	\$240	\$181	\$162	26	21	9	\$237	\$136	\$382
Hispanic	268	10%	49	31	21	\$358	\$255	\$183	28	20	16	\$417	\$218	\$196
Asian	8	0%	38	13	13	\$361	\$355	\$151	13	13	13	\$456	\$328	\$134
Multiple By number of	174	6%	52	36	24	\$319	\$316	\$173	33	26	15	\$341	\$268	\$137
men with whom mother has children														
One father	963	34%	42	28	20	\$306	\$241	\$191	24	23	16	\$337	\$234	\$210
2 fathers	1089	39%	63	40	23	\$326	\$222	\$164	34	29	18	\$319	\$231	\$208
3+ fathers	752	27%	72	46	21	\$352	\$236	\$179	44	32	16	\$340	\$211	\$276

Note: N = 2853. Sample: Mothers in Wisconsin with (1) no children in foster care in June 2004; (2) at least one child entering foster care between July 2004 and June 2008; (3) all children transitioning to permanency (reunification, adoption, guardianship, or other) within 48 months; (4) all mother's children live with her, and not with their father, at start of the foster care spell; and (5) mother has at least one child with an identified father in IRP Multi-Sample Person File (MSPF) data (though it may not be a legally established paternity).

paid support to offset costs,²⁶ the fathers of white mothers' children are somewhat more likely to have owed and substantially more likely to have paid support to offset foster care placement costs. Mothers who have had children with multiple fathers are more likely to have been owed and paid support from at least one father, and to have at least one

mothers' orders or payments to offset costs.

6.3. The relationship between child support orders and payments and

father who owed and paid child support to offset placement costs, but

there is no consistent relationship between the number of fathers and

We now turn to the key question motivating this analysis: Is there a relationship between the child support orders and payments during placement and the length of the observed placement spell? Specifically, we examine whether the establishment of an order for a mother to pay

^{6.3.} The relationship between child support orders and payments and placement duration

The relatively low level of orders to offset substitute care costs among black mothers in part reflects regional policy differences. As discussed further below, there is substantial variation across counties in the proportion of cases with orders. Milwaukee County, which includes a large share of Wisconsin cases involving black mothers, has relatively low levels of orders to offset placement costs.

Table 4The relationship between child support orders and placement duration. GMM estimates predicting log time to reunification.

Independent variable	Coefficient	Marginal effects				
		Evaluated at mean value (21.0 months)	Evaluated at median value (11.0 months)			
Child support ordered \$ (from mother for foster care)	0.00604*** (0.00113)	12.7 (\$100 increase)	6.6 (\$100 increase)			
Mother is black (relative to White)	0.343*** (0.0615)	8.6	4.5			
Mother is Hispanic	0.0739 (0.0814)	1.6	0.8			
Mother is other race/ethn	0.0332 (0.0928)	0.7	0.4			
Mother's age	-0.00726(0.00555)	-0.2 (1 year older)	-0.1 (1 year older)			
Oldest father's age	0.0140*** (0.00369)	0.3 (1 year older)	0.2 (1 year older)			
Oldest child's age	$-0.0449^{***}(0.00698)$	-1.1 (1 year older)	-0.6 (1 year older)			
Number of siblings	0.0265* (0.0138)	0.6 (1 more sibling)	0.3 (1 more sibling)			
2 fathers (relative to one)	-0.00889(0.0565)	-0.2	-0.1			
3 + fathers	0.118 (0.0734)	2.6	1.4			
Earnings of highest-earning father <5 K (but >0)	0.175** (0.0744)	4.0	2.1			
Earnings of highest-earning father 5–10 K	-0.0419(0.106)	-0.9	-0.5			
Earnings of highest-earning father 10–25 K	0.125 (0.0769)	2.8	1.5			
Earnings of highest-earning father > 25 K	0.115 (0.0712)	2.6	1.3			
Earnings of mother <3 K (but >0)	$-0.140^{**}(0.0676)$	-2.7	-1.4			
Earnings of mother 3–10 K	-0.331***(0.0782)	-5.9	-3.1			
Earnings of mother > 10 K	$-0.220^{***}(0.0751)$	-4.1	-2.2			
Substantiation rate in the county	0.00317 (0.00422)	0.1 (1% increase in substantiation rate)	0.0 (1% increase in substantiation rate)			
Constant	2.107*** (0.144)					
Observations	2921					
R-squared	0.129					
df_m	18					

Notes: Robust standard errors in parentheses.

The original sample of 3032 mothers is reduced to 2921 because we exclude mothers living in counties with fewer than 10 cases (for which we do not estimate a probability of referral to child support). The sample includes cases with time to permanency longer than 48 months. The first column shows the estimated coefficients of the second stage of IV estimation. The second column shows the marginal effect evaluated at the mean placement months, the third is evaluated at the median placement months. All earnings are as reported to the Wisconsin Unemployment Insurance system.

child support to offset the costs of foster care delays (or accelerates) the time to reunification. Table 4 shows the results of our IV model, which utilizes county-level variation in child support referrals.²⁷ The results show that child support order amounts are positively associated with length of time to reunification (p < 0.01). These estimates support a causal interpretation of the positive relationship between orders to offset costs and time to reunification; they suggest that ordering mothers to pay support to offset the costs of foster care delays reunification. The point estimates indicate a very large marginal effect; a \$100 increase in the monthly child support order amount is predicted to increase the months to reunification by 6.6 months (evaluated at the median time-to-reunification value, which is 11 months). Estimates of time to permanency (including reunification, adoption, and guardianship) yield very similar results. Given the lack of other research in this area we cannot make direct comparisons to other estimates. However, Wells and Guo (2006) also find a large effect of the loss of welfare income on reunification, with children of mothers who lost a significant amount of income from cash assistance more than twice as likely to remain out of home a year after placement (87% vs. 41%).

The remaining results are largely consistent with expectations, though, again, the lack of research on this topic means we cannot compare our results with prior analyses. Relative to white mothers, black mothers have longer spells with an estimated difference of 4.5 months evaluated at median time-to- reunification value (p < 0.01). This may be the result of differences in outcomes directly associated with race, or due to other correlated circumstances (e.g., neighborhood resources or reasons for initial placement) not captured by our relatively sparse set of control variables. There is no discernible difference in the times to reunification for white and Hispanic mothers. There is no significant relationship between mother's age and time to reunification, though older fathers are associated with longer spells. Older children are associated with shorter spells, while having a greater number of

children is associated with longer spells. As expected, mothers with higher earnings prior to the initial placement have shorter spells, with earnings of up to \$3000 in the prior year associated with an estimated 1.4 months decrease in months to reunification (evaluated at median time-to-reunification value, p < 0.1), and earnings of \$3000 to \$10,000 or over \$10,000 associated with 3.1 and 2.2 months decrease, respectively (evaluated at median time-to-reunification value, p < 0.01). In contrast, fathers' earnings do not exhibit any consistent pattern.

7. Sensitivity tests

In our base model we estimate the relationship between a mother's predicted order to pay to offset the costs of foster care and the time to reunification, using GMM to estimate an instrumental variable model with county rates of such orders as our instrument. We also estimate a set of alternative specifications as sensitivity tests and find that our main conclusion—that orders to offset costs are associated with longer spells of foster care—is robust across these specifications. The sensitivity tests consider both different subsamples and alternative estimation strategies—comparing GMM with two-stage least squares (2SLS) and limited-information maximum likelihood (LIML) estimates.²⁸

^{***} p < 0.01.

^{**} p < 0.05.

^{*} p < 0.1.

²⁷ The first stage robust F-test statistic is 144.486 without clustering and 138.565 with clustering at county level, indicating the instrument (county-level variation in the proportion of mothers ordered to pay support to offset the costs of care) is not weak.

²⁸ In our base model we estimate mother's order to offset the costs of substitute care, using county order probabilities as an instrument. As we discuss below, orders for mothers to offset costs are potentially important—beyond the observed costs due to support actually collected—because they serve as a tax on earnings (as well as leading to tax intercepts, and potential additional enforcement actions). However, if our primary concern is the direct loss of income due to orders to offset costs, it may be more appropriate to consider both mothers' orders to pay, and mothers' loss of income due to fathers' child support being redirected from mothers to the government to offset costs of care. As an alternative specification, we estimate a county-level instrumental variable based on the average child support that mother and father(s) owed to offset foster care cost during the out-of-home placement periods, assuming that father(s)' order amounts represent the resources that father(s) would otherwise be ordered to pay to mothers. The results are consistent with our base estimates; a \$100 increase in the monthly child support order amount is predicted to increase the months to reunification or other permanency by 5.6 months (evaluated at the median time-to-permanency value, which is 11 months).

Considering alternative samples, our findings of a causal relationship between child support orders and length of time until reunification also hold when we limit our sample to cases with only younger children, and when we exclude Milwaukee County (the state's single largest urban county) cases from our sample. Finally, our base sample includes only cases for which we can determine that the mother had all her children living with her at the time of the initial foster care placement. We find qualitatively similar results, indicating a positive and significant relationship between redirected child support and time in foster care placement, for a more inclusive sample not limited by living arrangements.

When we estimate our base model using 2SLS and LIML, our main results are consistent across specifications and the point estimates are remarkably stable. For example, a \$100 increase in mother's order is estimated to increase the spell length by 6.6 months (evaluated at the median time-to-permanency value, which is 11 months) regardless of the estimation methods; only standard errors vary. ²⁹ A \$100 increase in the sum of mother's order and the redirection of father's support is estimated to increase the spell length by 5.1 months (2SLS) and 6.7 months (LIML), respectively, evaluated at the median time-to- reunification value of 11 months.

8. Conclusions: limitations and implications for policy

Parents whose children have been removed from their custody may be ordered to pay child support to offset the costs of foster care. These payments are intended to be a source of revenue for states and counties with very limited resources to meet human services needs, and they are consistent with the principle that parents should provide for their children financially, even when they are not able to provide custodial care. However, there are concerns that requiring child support from preplacement resident parents, or redirecting existing child support orders, may lengthen the time their children spend in foster care by reducing the economic resources available to help them achieve the conditions of reunification.

Notwithstanding the potential importance of these payments and concerns about potential unintended consequences, there has been remarkably little empirical analysis of the relationship between child support and CPS and the potential effects on family well-being and government costs. This paper begins to fill that gap, providing one of the first systematic analyses of a statewide sample of families served by the two systems. We find that a majority of families with CPS involvement have child support orders before placement, and a substantial minority of nonresident fathers and pre-placement resident mothers are ordered to pay support to offset costs associated with foster care placement. Considering cases in our primary sample of motheronly families, in 38% of cases a nonresident father was ordered to pay such support, and 28% made a payment averaging \$226 per month in months with a payment. Mothers were ordered to pay support to offset foster care costs in 22% of cases, and made a payment in 17% of cases, averaging \$226 per month in months with a payment. We found remarkably little association between parents' earnings and the probability of an order or the amount ordered to offset public costs, suggesting that the system may not be particularly sensitive to parents' ability to pay. This stands in marked contrast to normal child support practice, which usually bases child support orders on the payer's income.

Our central question of interest is whether establishing a child support order affects time in foster care. We find evidence of a positive relationship—cases in which orders are imposed are more likely to have longer spells. Our multivariate analysis exploiting county policy variation provides support for a causal interpretation, with a \$100 increase in child support orders leading to a 6.6 month delay in reunification (measured at the mean). These results are robust to alternative

specifications, including a focus only on mothers' orders, or on both mothers' orders and the redirection of fathers' support.

These results provide important new evidence of the potential unintended consequences of designing child support to recover government costs—in this case for foster care. Though we provide what we believe are the first estimates of the effect of child support orders on the length of foster care placement, our approach is limited and there are many related questions requiring further research. Our study exploits a natural experiment that arises from county policy variation in a single state. It requires administrative data—which has advantages for this study, but also limitations—and cannot necessarily be generalized to other states. Both national and Wisconsin rates of foster care placement have been declining. Wisconsin's recent placement rate has been modestly below national averages, in part due to relatively large declines (U.S. Department of Health and Human Services, Administration for Children and Families, 2014; Child Trends, 2011); results might be expected to differ for states with higher placement rates. In addition, we do not address potential heterogeneity by type of case (e.g., abuse or neglect), or by family characteristics (e.g., other characteristics such as race, child's or parents' age); a better understanding of these differences would inform more targeted policy reforms.

The findings reported here have implications for child support and child welfare policy. They also illustrate the importance of considering the unintended consequences of policies, especially those related to multiple systems with different underlying objectives and procedures. Removing children from the custody of their parents is one of the most forceful actions that government can take to intervene in a family, and maintaining children in foster care is potentially very costly. Recent research provides mixed evidence regarding the impacts on child wellbeing and subsequent outcomes of foster care placement, and duration of time out of home (Doyle, 2007; Berger, Bruch, Johnson, James, & Rubin, 2009; Fallesen, 2013; Font & Maguire-Jack, 2013). The financial costs of care largely motivate efforts to have parents offset the costs by paying child support. However, our results suggest these efforts may prove to be misguided; related estimates suggest that consequent delays in permanency mean that charging parents child support that goes to offset government costs may ultimately increase total public costs (Chellew et al., 2012). Policies requiring that parents pay to offset the costs of foster care should be considered in the light of their consequences for reunification. States may want to contemplate policies that delay the imposition of child support orders until later in the CPS process, create clear standards for any such referral decisions, and allow for the re-assessment of such referrals. While the objectives, financing, and targeting of child support enforcement and CPS efforts are quite different, many families are dually served. Cross-system interactions must be more carefully considered in order to avoid unintended negative consequences for the vulnerable children whose lives are shaped by both systems.

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 $^{^{29}}$ Coefficients are all 0.00604 for GMM, 2SLS, and LIML. Standard errors are 0.00113, 0.00118, and 0.00118, respectively, for GMM, 2SLS, and LIML.

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References

- Berger, L. M., Bruch, S. K., Johnson, E. I., James, S., & Rubin, D. (2009). Estimating the 'impact' of out-of-home placement on child well-being: Approaching the problem of selection bias. *Child Development*, 8, 1856–1876.
- Brown, P. A. (2012). Technical report on lessons learned in the development of the Institute for Research on Poverty's multi-sample person file (MSPF) data system. Madison, Wisconsin: Institute for Research on Poverty, University of Wisconsin–Madison.
- Cancian, M., Cook, S., Seki, M., & Wimer, L. (2012). Child support enforcement after family reunification. Report to the Wisconsin Bureau of Child Support, Department of Children and Families. Madison, Wisconsin: Institute for Research on Poverty, University of Wisconsin–Madison.
- Cancian, M., Meyer, D. R., & Caspar, E. (2008). Welfare and child support: Complements, not substitutes. *Journal of Policy Analysis and Management*, 27, 354–375.
- Cancian, M., Yang, M. Y., & Slack, K. (2013). The effect of child support income on the risk of child maltreatment. Social Service Review, 87, 417–437.
- Chellew, C., Noyes, J., & Selekman, R. (2012). Child support referral for families served by the child welfare system: A review of policy and practice. Report to the Wisconsin Department of Children and Families. Madison, Wisconsin: Institute for Research on Poverty, University of Wisconsin–Madison.
- Courtney, M. E. (1994). Factors associated with the reunification of foster children with their families. *Social Service Review*, 68, 81–108.
- Courtney, M. E., Dworsky, A., Piliavin, I., & Zinn, A. (2005). Involvement of TANF applicant families with child welfare services. *Social Service Review*, 79, 119–157.
- Doyle, J. J., Jr. (2007). Child protection and child outcomes: Measuring the effects of foster care. American Economic Review, 97, 1583–1610.
- Dworsky, A., Courtney, M. E., & Zinn, A. (2007). Child, parent, and family predictors of child welfare services involvement among TANF applicant families. *Children and Youth Services Review*, 29, 802–820.
- Fallesen, P. (2013). Time well spent: The duration of foster care and early adult labor market, educational and health outcomes. *Journal of Adolescence*, 36, 1003–1022.
- Fein, D. J., & Lee, W. S. (2003). The impacts of welfare reform on child maltreatment in Delaware. *Children and Youth Services Review*, 25, 83–111.
- Font, S., & Maguire-Jack, K. (2013). Academic engagement and performance: Estimating the impact of out-of-home care for maltreated children. *Children and Youth Services Review*, 35, 856–864.
- Greene, W. (2003). Econometric analysis (5th ed.). New Jersey: Prentice Hall.
- Ha, Y., Cancian, M., Meyer, D. R., & Han, E. (2008). Factors associated with nonpayment of child support. Report to the Wisconsin Department of Workforce Development. Madison, Wisconsin: Institute for Research on Poverty, University of Wisconsin–Madison.
- Howard, L., Noyes, J. L., & Cancian, M. (2013). The child support referral process for out-of-home placements: Potential modifications to current policy. Report to the Wisconsin Department of Children and Families. Madison, Wisconsin: Institute for Research on Poverty, University of Wisconsin-Madison.

- Imbens, G. W., & Angrist, J. D. (1994). Identification and estimation of local average treatment effects. *Econometrica*, 62(2), 467–475.
- Needell, B., Cuccaro-Alamin, S., Brookhart, A., & Lee, S. (1999). Transitions from AFDC to child welfare in California. *Children and Youth Services Review*, 21(9), 815–841.
- Paxson, C., & Waldfogel, J. (2002). Work, welfare, and child maltreatment. *Journal of Labor Economics*. 20, 435–474.
- Paxson, C., & Waldfogel, J. (2003). Welfare reforms, family resources, and child maltreatment. *Journal of Policy Analysis and Management*, 22, 85–113.
- Pirog, M. A., & Ziol-Guest, K. M. (2006). Child support enforcement: Programs and policies, impacts and questions. *Journal of Policy Analysis and Management*, 25, 943–990.
- Scarcella, C. A., Bess, R., Hecht Zielewski, E., Warner, L., & Geen, R. (2004). The cost of protecting vulnerable children IV: How child welfare funding fared during the recession [research report]. Retrieved from Urban Institute website: http://www.urban. org/UploadedPDF/411115_VulnerableChildrenIV.pdf
- Sedlak, A. J., & Broadhurst, D. D. (1996). Executive summary of the national incidence study of child abuse and neglect. Washington, D.C.: U.S. Department of Health and Human Services, National Center on Child Abuse and Neglect.
- Sedlak, A. J., Mettenburg, J., Basena, M., Petta, I., McPherson, K., Greene, A., & Li, S. (2010). Fourth national incidence study of child abuse and neglect (NIS-4): Report to congress. Washington, D.C.: U.S. Department of Health and Human Services, Administration for Children and Families.
- Shook, K. (1999). Does the loss of welfare income increase the risk of involvement with the child welfare system? *Children and Youth Services Review*, 21, 781–814.
- Slack, K., Berger, L. M., DuMont, K., Yang, M. -Y., Kim, B., Ehrhard-Dietzel, S., & Holl, J. L. (2011). Risk and protective factors for child neglect during early childhood: A cross-study comparison. *Children and Youth Services Review*, 33, 1354–1363.
- Slack, K., Lee, B. J., & Berger, L. M. (2007). Do welfare sanctions increase child protection system involvement? A cautious answer. Social Service Review, 81, 207–228.
- Sorensen, E., & Hill, A. (2004). Single mothers and their child-support receipt: How well is child-support enforcement doing? The Journal of Human Resources, 39, 135–154.
- Child Trends. (2011). Foster care data snapshot [Fact sheet]. Retrieved from http://www.childtrends.org/wp-content/uploads/2011/05/Child_Trends_2011_05_31_DS_FosterCare1.pdf.
- Turetsky, V. (2009). Making the child support-child welfare connection work for kids. QIC news. Retrieved from http://site.americanhumane.org/fatherhooddocs/ Summer09final.pdf.
- U.S. Department of Health and Human Services (2013). *The adoption and foster care analysis and reporting system (AFCARS) report, FY 2012.* Washington, D.C.: Administration for Children and Families.
- U.S. Department of Health and Human Services, Administration for Children and Families. (2014). Child welfare outcomes report data. Retrieved from http://cwoutcomes.acf. hhs.gov/data/overview.
- Vinson, M., & Turetsky, V. (2009). State child support pass-through policies [Chart]. Center for Law and Social Policy (CLASP). Retrieved from http://www.clasp.org/resources-and-publications/publication-1/PassThroughFinal061209.pdf.
- Wells, K., & Guo, S. (2006). Welfare reform and child welfare outcomes: A multiple-cohort study. Children and Youth Services Review, 28, 941–960.
- Westat (1992). Study of national incidence and prevalence of child abuse and neglect: Non-payment of child support in maltreating families NIS-2 [technical report]. Rockville, MD: Westat. Inc.
- Wildeman, C., & Emanuel, N. (2014). Cumulative risks of foster care placement by age 18 for U.S. children, 2000–2011. *PLoS ONE*, 9(3), e92785.
- Yang, M. Y. (2012). The effect of material hardship on child protective service involvement [doctoral dissertation]. University of Wisconsin–Madison.