

**Economic Well-Being of Divorced Mothers with Varying Child Placement Arrangements in
Wisconsin: Contributions of Child Support and Other Income Sources**

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INTRODUCTION

The negative economic impacts of divorce on mothers are well documented. Mothers, on average, experience larger drops in their standard of living post-divorce than do fathers, and divorced women as a group are much worse-off economically than are divorced men (see, e.g., Bartfeld, 2000; Bianchi, Subaiya, and Kahn, 1999; Bradbury and Katz, 2002; Gadalla, 2008; Gadalla, 2009). Traditionally, children have lived with the mother following divorce and the costs associated with children are one of the factors contributing to the differences in post-divorce outcomes between mothers and fathers. At the same time, child support from nonresident fathers has been found to play a nontrivial role in improving mothers' and children's post-divorce economic well-being (Bartfeld, 1997; 2000).

Most of the research on post-divorce economic well-being of parents and children has focused on families in which the children live with the mother, which historically has been the most common arrangement. Indeed, while economic well-being of divorced mothers and children is frequently discussed synonymously, there has been extremely limited attention to economic well-being of either mothers or children in the case of other placement arrangements. Whereas the focus on mothers with sole placement made sense when that situation encompassed the vast majority of divorce cases, this is no longer the reality. There has been a pronounced shift away from sole mother placement, with a concurrent rise in shared placement (see, e.g. Bartfeld, 2011; Brown and Cook, 2011); a comprehensive and up-to-date understanding of the economic impacts of divorce requires consideration of a broader range of post-divorce arrangements.

This report examines the economic well-being of divorced mothers in Wisconsin in the mid-2000s. Our analysis includes mothers in placement arrangements spanning sole mother placement, shared placement, and father placement. We examine mothers' economic well-being both before and during the first two years after divorce; explore differences according to child placement arrangements; examine the role of various income sources; and estimate the potential change in mothers' post-divorce economic well-being when child support is paid in accordance with existing support guidelines. Before turning to

our analyses, we provide a brief overview of trends in child placement in Wisconsin, and of the potential implications of those trends for mothers' post-divorce outcomes.

BACKGROUND: CHANGING CHILD PLACEMENT OUTCOMES AND POTENTIAL ECONOMIC IMPLICATIONS

In Wisconsin, shared placement was authorized by the legislature in 1977 (Melli and Brown, 2008). Legislation in 1999 established a presumption that courts order joint legal custody (distinct from joint placement) and likewise a requirement that placement schedules provide meaningful periods of time with each parent, and that such schedules seek to maximize the time with each parent subject to a range of considerations (Melli and Brown, 2008). While this did not include the explicit equal-placement presumption sought by some, and has not been interpreted by the courts as requiring equal placement, it nonetheless provided legislative language strongly in support of shared-placement arrangements.

Shared placement is relevant to economic well-being not only in influencing where children live, but also in influencing how parental support obligations are assessed. The state has formally considered shared placement in its child support guidelines since 1987, at which time shared placement was defined, for child support purposes, as at least 30 percent of nights with each parent. Between 1987 and 2003, there were several changes in the specific formula for calculating child support in the event of shared placement. The most significant policy change was in January 2004, when the threshold was lowered to 25 percent, and the specifics of the calculation changed such that a sizable "cliff effect" was introduced—that is, a sudden versus gradual change in the guidelines-based child support obligation upon crossing the threshold into shared placement (Brown and Cancian, 2007). In light of the direct financial trade-off between time and child support under the shared-placement guidelines, and, particularly, the sizable increase in this trade-off under the newest policy regime, placement outcomes are clearly central to an understanding of the economic outcomes of divorce.

Trends in child placement appear to have been more carefully documented in Wisconsin than anywhere else in the country. The most recent evidence on shared placement in Wisconsin is found in Brown and Cook's (2011) report, the latest in an ongoing series of studies that have been tracking

placement outcomes in the state. Among cases coming to court in 2007, almost half of the 98 percent of divorce cases in which an order assigned placement to one or both parents had a shared-placement order—45.4 percent. This included nearly one-third (30.5 percent) with equal-shared placement, 13.0 percent with mother-primary shared placement (51 to 75 percent of time with the mother), and 1.9 percent with father-primary shared placement (51 to 75 percent of time with the father). Fewer than half of cases (45.6 percent) had traditional sole-mother placement, whereas 7.0 percent had sole-father placement, and the remaining 1.9 percent had split placement (i.e., placement that differed among children). These placement patterns represent a profound shift over a relatively short period of time. Overall rates of shared placement in divorce cases in Wisconsin more than tripled between the 1990 to 1993 period and the 2007 outcomes reported above, increasing from 14.2 percent to 45.4 percent of divorces over the 17-year span (Cook and Brown, 2005; Brown and Cook, 2011). The largest growth has been in equal shared placement, which increased fivefold, from 5.7 percent to 30.5 percent; there was much smaller growth in mother-primary shared placement (increasing from 7.6 percent to 13.0 percent), and little change in father-primary shared placement, which remained very uncommon over the period.

Numerous Wisconsin studies have pointed to parents' socioeconomic status as an important determinant of shared placement, with such arrangements more common among higher-income parents (Cancian and Meyer, 1998; Cook and Brown, 2005; Brown and Cancian, 2007; Brown and Cook, 2011; Melli and Brown, 2008). The most recent evidence suggests that the relationship has strengthened sharply over a relatively short period (Brown and Cook, 2011). For a detailed discussion of these trends, see Bartfeld (2011).

Shared placement has important implications for mothers' post-divorce economic well-being, in terms of costs incurred and potential child support received. (There are also potential indirect effects of shared placement in terms of impacts on employment and earnings, which we do not consider here). There are both fixed costs (such as housing) and variable costs (such as food) associated with a child living in the home, and only the variable portion is reduced with shared versus sole placement. Placement arrangements also can be expected to affect child support payments and receipts. As discussed previously,

almost all states explicitly address shared child placement in their child support guidelines (Brown and Brito, 2007). In Wisconsin there are stark reductions in support obligations when placement crosses the shared-placement threshold. There are competing financial impacts, then, of shared placement: mothers will have lower direct expenses if the children live part-time rather than full-time in the home, but they can also expect lower child support receipts. In past work, we found that mothers with shared placement fared somewhat worse economically than they would have under the traditional mother sole placement arrangement, although the differences were modest and depended on assumptions about how costs were shared between homes under varying time sharing arrangements. We found that equal shared placement was more detrimental to mothers than mother primary shared placement, and under certain assumptions we found a slight improvement in economic well-being under mother primary shared placement relative to sole mother placement.

The current study examines post-divorce economic well-being among mothers spanning a range of child placement outcomes, including sole mother placement, shared placement, and father placement. As such, it provides a comprehensive look at post-divorce economic well-being that reflects the range of living and parenting arrangements experienced by mothers in the current policy context. In contrast to our past work, our focus here is on describing economic well-being under a range of current placement arrangements; we do not attempt to predict economic well-being under alternative placement scenarios. As in our past work, we highlight some of the conceptual challenges in assessing economic well-being when children formally share time between two homes.

DATA AND METHODS

Data and Sample

Our sample consists of parents drawn from divorce cases in Cohorts 24 and 25 of the Wisconsin Court Record Database, coming to court between July 2003-June 2005. The sample is limited to parents with at least one child born as of the time the case initially came to court (the petition date), and for whom 2 full years of income data (described below) following the divorce are available. It is further limited to

cases with unambiguous placement arrangements and excludes a small number of cases in which placement differs among children.

The Court Record Database includes detailed information on physical placement arrangements at the time of the final divorce judgment. Almost all of the parents in these cohorts came to court for a final divorce judgment after the January 2004 change in the Wisconsin administrative guidelines, which changed both the threshold and the formula for calculating child support in shared placement cases. The threshold of time defining shared placement was lowered, and thus a larger percentage of divorce cases are now affected than in the past. Our focus on cases that entered the system after the guidelines changed ensures the outcomes are as relevant as possible to the current policy context. In addition to the court record data, we draw on several other datasets for our analyses: KIDS data are used to determine child support and maintenance payments and receipts; CARES data are used to calculate public assistance benefits, including cash benefits from W-2 and the value of FoodShare received; and wage records from Unemployment Insurance data are used to determine quarterly earnings for jobs in Wisconsin.

Our final sample includes 1,354 couples. We further classify the cases according to placement arrangements, differentiating between sole mother placement, shared placement, and sole father placement. Within the shared placement group, we further classify cases as either mother primary, equal shared, or father primary. Shared placement cases are defined as those in which the final judgment specifies that the child spends at least 25 percent of time with each parent.

Methods

Our analyses address the following questions:

- What are the economic circumstances of the sample in the year leading up to the divorce petition? Our measures of economic well-being are described below.
- What are the economic circumstances of mothers' households during the first two years following the final divorce judgment?
- What role do various income components—including wages, private transfers (child support and maintenance), FoodShare, and W-2—play in mothers' post-divorce incomes?

- How do pre-petition economic circumstances differ among families that end up in different placement arrangements?
- How does post-divorce economic well-being vary among mothers with different placement arrangements?
- And finally, how would economic well-being differ if child support were ordered and paid in full accordance with existing guidelines, based on the actual placement arrangements and parents' observed wages?

We consider several different measures of economic well-being:

Total Income: We use an expanded definition of income that includes earnings as reported in the Unemployment Insurance wage record data; cash assistance from W-2; the dollar value of FoodShare; and net private transfers (receipts minus payments). Here private transfers include child support as well as maintenance and family support associated with the current divorce; to the extent possible we also include support payments and receipts associated with other children, although we only know of those if they stem from a child support case in Wisconsin and are paid through the courts. All incomes are adjusted to 2008 dollars using the Consumer Price Index.

Income-to-Poverty Ratio (Two Different Measures): To construct the income-to-poverty ratio, we divide the total income of each parent by the poverty line corresponding to that parent's household size, for the appropriate year. In the case of parents with sole placement, determining the household size and thus the appropriate poverty line is straightforward. In the case of shared placement—where children by definition live in each of their parents' separate homes—determining the household size and the appropriate poverty line is less clear. Following our past work in this area (Bartfeld, Brown, and Ahn, 2009), we consider two alternative ways of defining household size in such cases. The first counts shared placement children as members of both mothers' and fathers' households, since both households are likely to have substantial fixed costs even though the children do not live in either home full time. The second definition counts shared placement children in proportion to their time in each household, based on the court order, such that a child with equal shared placement would count as a .5 member of each household.

We consider two different income-to-poverty ratios, reflecting the two different household sizes (one with children allocated to each household, one with children allocated in proportion to their time in each household). In the latter case, where household sizes are not always whole numbers, we impute the appropriate poverty line proportionally to the household size. For instance, for a household with 1.5 members (such as a parent and 1 child with equal shared placement), we impute a poverty line midway between the 1-person and 2-person line.

The first measure assumes all child-related costs are fixed, and thus, that the cost of a child is constant as long as the child lives at least 25 percent of the time in the household. This assumes, then, substantial duplication of costs in shared placement cases. The second measure assumes all child-related costs are proportional to time in the household, and thus no duplication of costs in shared placement cases. We view these as upper and lower bounds on the costs of children. A reasonable assumption is that some child-related costs are fixed and do not depend on the specific share of time in the home, whereas other costs are proportional to time in the home, such that the “true” measure of economic well-being lies between the two measures that we report.

Limitations. Our measures of well-being—regardless of the poverty threshold used—are imperfect. With regard to household size and composition, we do not have a household roster. We assume that the mother’s household consists of herself, any children that are not also children of the other parent in the case, and the children associated with the current divorce case as per the terms of court-ordered placement arrangements. We include children in the household through the quarter in which they turn 18. With regards to the presence of children outside of the marriage, we do not know whether these children live in the mother’s home, but count them as such under the assumption that she likely incurs some costs for them regardless of where they live. Approximately 10 percent of mothers have children outside the marriage, as far we can ascertain from the available data. Thus, such children have very little impact on our measures of household size and economic well-being. We have no information about other adults who may be in the household, including those who live there due to cohabitation or remarriage. And, we have no information about income associated with other adults, or income from any sources other than those

explicitly listed above. We also do not consider the fact that actual living arrangements of children may vary from those in the order. Because of these limitations, our measures of economic well-being are best understood as the level of economic well-being achievable by the mothers for themselves and their court-ordered resident children following divorce, on the basis of their personal incomes from earnings, child support and maintenance, FoodShare, and W-2.

As noted, we do not have a comprehensive record of income sources. The most important missing sources of income include earnings from outside of Wisconsin; self-employed earnings; unemployment compensation; and investment income. This is relevant both to the calculation of mothers' incomes and to the estimation of potential support based on child support guidelines. In the case of mothers' post-divorce incomes, these missing income sources mean we are underestimating income and thus economic well-being. While missing income is potentially relevant for all mothers, we are particularly concerned about missing information when there is no record of any earnings or FoodShare receipt over the course of a year, as these are the mothers with the highest likelihood of living or earning out-of-state. We present limited sensitivity analyses that exclude those mothers from our sample—although in doing so, we likely 'overcorrect' by excluding some mothers who, in fact, are 'true' non-earners.

The possibility of out-of-state and/or self-employment earnings is also relevant to our estimation of potential child support. Our calculation of potential support assumes fathers with no observed wages for the year would owe no support, based on the guidelines. In reality, orders are rarely set to zero even when there are no earnings, with courts having leeway to impute potential earnings; further, at least some of the zero earners likely have earnings out of state or from self-employment. Thus, we present alternative estimates of the potential role of child support using a restricted sample limited to fathers with positive observed earnings during the post-divorce year. This is the subset of fathers for whom we are most confident in our ability to assess potential child support.

RESULTS

Household Economic Well-Being Before Divorce

We begin by looking at household incomes prior to the divorce, as this provides a benchmark for our primary focus on post-divorce economic outcomes. During the year prior to filing the divorce petition, parents' combined incomes averaged \$59,883 (Table 1). Median household income was \$52,365, with 25 percent of households having incomes below \$28,774 and 25 percent having incomes above \$78,236. The mean income-to-poverty ratio was 2.86; the median ratio was 2.48. An estimated 19 percent of households were poor in the year leading up to the divorce, while 39 percent had income at least three times the poverty line. As with all our income estimates, we note that these are underestimates of household income and well-being in that they exclude certain income sources, as previously discussed.

Table 1. Mothers' Pre-Divorce Economic Well-Being

N	1,354
Household Income	
Mean	\$59,883
Median	\$52,365
Bottom quartile	\$28,774
Top quartile	\$78,236
Income-to-Poverty Ratio	
Mean	2.86
Median	2.48
Percent poor	19
Percent 1-3 times poverty	42
Percent > 3 times poverty	39
Share of Household Income	
Mother	\$22,485 (37.5%)
Father	\$37,469 (62.5%)
Percent with Any Earnings	
Mother	83%
Father	84%

Pre-divorce circumstances provide some hints as to what to expect for mothers after divorce. Overall, a smaller share of pre-divorce household income was attributable to mothers than fathers, with mothers' income averaging \$22,485 (37.5 percent of combined income) as compared to \$37,469 for

fathers (62.5 percent of combined income). Note that parents' income sources here also include net child support paid or received on their behalf (from children outside the current marriage), as well as W-2 and FoodShare for which they are listed as recipients. On the basis of pre-divorce income, then, mothers appear to be particularly vulnerable heading into divorce. Nonetheless, mothers and fathers were equally likely to have at least some earnings in the year leading up to the divorce petition (83 percent of mothers and 84 percent of fathers).

Mothers' Economic Well-Being After Divorce

Our primary focus is on mothers' post-divorce economic outcomes. Here, we examine mothers' economic well-being during the first two years following the final divorce judgment. Mean household incomes during the first two years were \$30,798 and \$30,627—just over half of pre-divorce levels (Table 2). Median incomes were lower, at \$26,923 and \$26,625. During the first year following divorce, the bottom 25 percent of mothers had incomes below \$12,335, whereas only 25 percent had incomes above \$41,445; the numbers were quite similar in the subsequent year, with a small decline in the income level of the bottom quartile and small increase in the income of the top quartile.

Mothers' mean incomes post-divorce were roughly 36 percent higher than their own mean incomes prior to the divorce; at the same time, this represents a drop by almost half in their household incomes. (As described earlier, we only measure mothers' personal incomes in the post-divorce period, and have no information on income of any other adults with whom they may live). During the first post-divorce year, mothers' earnings averaged \$24,620; net private transfers (child support and maintenance) averaged \$6,082; FoodShare benefits averaged \$519; and W-2 cash benefits averaged only \$51. There was relatively little change in the second year, with earnings increasing to \$25,085 and net private transfers falling to \$5,556.

Because the income changes relative to the pre-divorce period occur in tandem with declines in household size, comparisons of total incomes from pre-divorce to post-divorce are of limited value in gauging changes in economic circumstances. For a better understanding of economic well-being, then, we

Table 2. Mothers' Post-Divorce Economic Well-Being

	Year 1	Year 2
N	1,354	1,354
Income		
Mean	\$30,798	\$30,627
Median	\$26,922	\$26,625
Bottom quartile	\$12,335	\$11,644
Top quartile	\$41,445	\$42,060
Income Components (mean)		
Wages	\$24,620	\$25,085
Child support / maintenance	\$6,082	\$5,556
FoodShare	\$519	\$492
W2	\$51	\$48
Income-to-Poverty Ratio (fixed cost)		
Mean	1.85	1.85
Median	1.56	1.56
Percent poor	33	34
Percent 1-3 times poverty	51	48
Percent >3 times poverty	16	18
Income-to-Poverty Ratio (proportional cost)		
Mean	1.99	1.99
Median	1.67	1.67
Percent poor	32	32
Percent 1-3 times poverty	49	47
Percent >3 times poverty	19	21

focus on income-to-poverty ratios, which adjust for household size and allow for more meaningful comparisons between the two periods.

Describing income-to-poverty ratios is more complicated than pre-divorce because calculation of such ratios is not straightforward in the case of mothers with shared placement arrangements. As previously described, we provide two estimates: one assumes costs of children are fully duplicated in shared-placement cases, whereas the other assumes they are divided in proportion to time in the home. We refer to these as fixed-cost and proportional-cost estimates, and view these as providing upper and lower bounds of true costs. Note that the estimates only differ for the subset of mothers with shared placement; in the case of sole placement, we always count children as living fully with the designated parent.

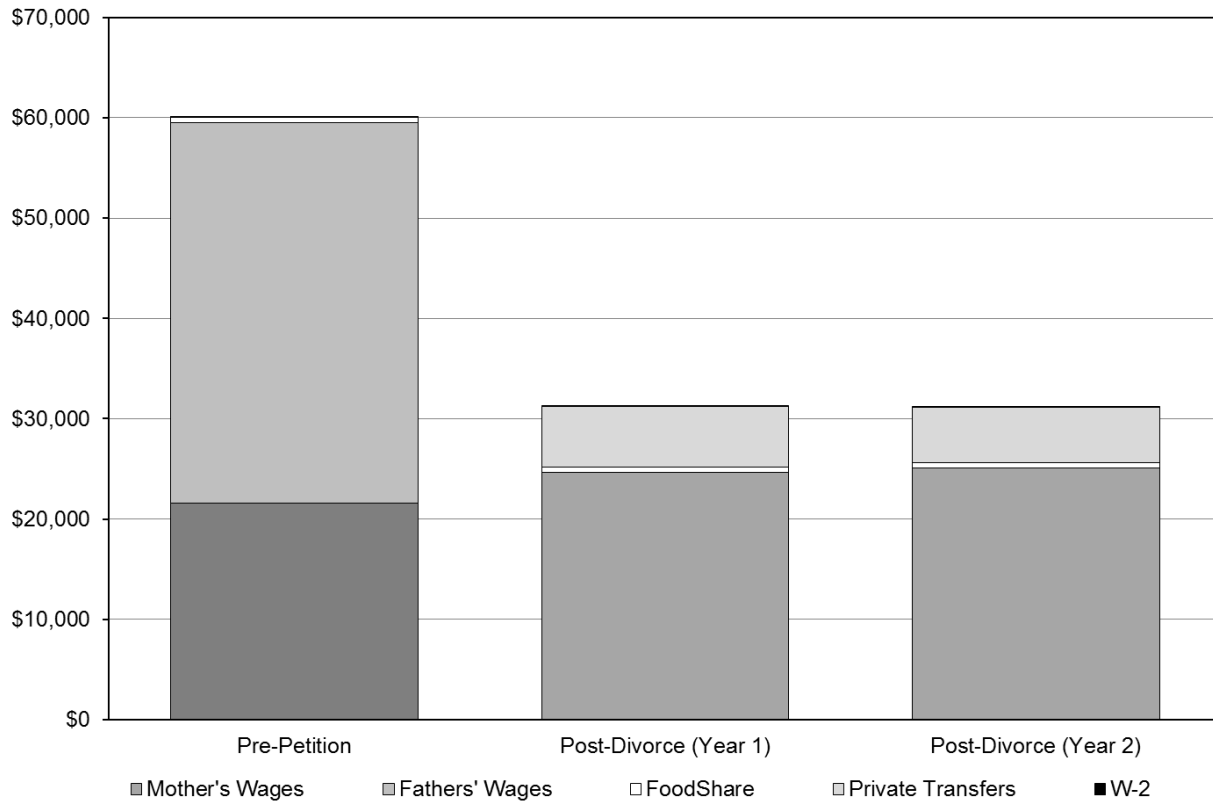
Mothers' income-to-poverty ratios averaged 1.85 to 1.99 during the first post-divorce year, depending which measure is used, with no change in the second year. Median ratios were lower, ranging from 1.56 to 1.67 in both years. Whether focusing on means or medians, there was drop of approximately one-third in needs-adjusted income relative to the pre-divorce period. Not surprisingly, poverty rates were considerably higher than in the pre-divorce period, with estimated poverty rates ranging from 32 to 34 percent each year, as compared to 19 percent prior to divorce. Conversely, the share of mothers in the higher-income group—above three times the poverty line—was between 16 and 19 percent in the first year and between 18 and 21 percent in the second year—a decline by half or more compared to the rate of 39 percent prior to divorce. In short, mothers as a group fared substantially worse during the first 2 years after divorce than they did in the year preceding their divorce petition, even after adjusting for changes in household size.

A comparison of income components before and after divorce is informative. As shown in Figure 1, mothers lost an average of \$37,895 in their ex-husband's earnings the year after divorce; only a small share of this was recouped through increases in their own earnings (mean increase of \$3,016) and increases in private transfers (mean increase of \$6,058), with virtually no change in the amount of FoodShare or cash assistance from W-2, both of which continued to play extremely limited roles. The increase in earnings reflects higher amounts earned among employed mothers, rather than an increase in rates of employment relative to the pre-divorce year; the share of mothers with earnings, 83 percent, was virtually unchanged before and after divorce (not shown).

Child Placement and Mothers' Economic Well-Being

Mothers' post-divorce economic circumstances are expected to vary according to placement arrangements for several reasons. First, as has been shown in previous analyses of the WCRD, placement outcomes vary according to parents' pre-divorce income, with shared placement arrangements much more common among parents with relatively higher incomes. Second, the potential child support varies according to placement arrangements: in the case of shared placement, the child support formulas result in

Figure 1
Income Composition before and after Divorce



substantially lower orders given the assumption that direct costs are shared between households, suggesting that child support will do less to offset income loss for mothers with shared versus sole placement; third, the level of need varies by placement arrangements, if we assume (as with our proportional-needs poverty thresholds, but not with our fixed-needs thresholds) that direct expenses are lower when children spend less time in the home; and finally, placement outcomes may be associated with different earnings opportunities and decisions, as the potential and/or preferred tradeoffs between time at work and home may differ when children spend less versus more time in the home.

We begin by looking at pre-divorce incomes of parents who subsequently obtain various child placement outcomes. Table 3 provides summary data on pre-divorce incomes of households that can be unambiguously classified as either sole mother placement, shared placement with mother primary, shared

Table 3. Pre-Divorce Economic Well-Being of Mothers According to Subsequent Child Placement Outcomes

	Placement Type				
	Sole Mother	Shared			Sole Father
		Mother Primary	Equal	Father Primary	
N	671	179	359	19	69
Household Income (mean)	\$51,047	\$65,121	\$74,078	\$61,515	\$51,803
Mother earnings					
Mean	\$19,559	\$20,918	\$27,044	\$13,887	\$16,821
% with any	81	78	85	89	76
Father earnings					
Mean	\$31,426	\$44,331	\$46,635	\$46,396	\$35,306
% with any	80	87	87	89	81
Income-to-poverty					
Mean	2.47	3.07	3.56	2.72	2.41
% poor	23	13	14	16	23
% 1-3 times poverty	45	45	34	47	48
% >3 times poverty	31	42	52	37	29

placement with equal time, shared placement with father primary, and sole father placement. We exclude cases with more complex arrangements or in which the specific time allocation is not clear.

Consistent with prior analyses of the WCRD, there were notable income differences across placement groups. Both the total household income and the separate incomes of mothers and fathers seem important with regard to children's placement arrangements. In general, pre-divorce incomes were lowest among parents who subsequently obtain either sole mother or sole father placement arrangements; incomes were higher among parents who obtain shared placement arrangements; and among the subset with shared placement, pre-divorce incomes were highest among those who end up with equal placement. Consistent with this pattern, the highest pre-divorce poverty rates—23 percent—were among the parents who subsequently received either sole father or sole mother placement, with substantially lower rates among the shared placement groups (13 to 16 percent). Looking only at mothers' own earnings, those earnings were lowest among the sole father placement group; moderately higher among the mother sole placement and shared mother-primary placement groups; and highest among the mothers who received equal shared placement. Differences among fathers were more pronounced: fathers' earnings were lowest among those for whom the mother received sole placement; a little higher among those who themselves

received sole placement; and substantially higher among those with shared placement. Thus, the fathers with the greatest potential for paying child support (based on higher earnings) were most likely to have shared placement arrangements—which translate into lower support obligations.

We turn now to differences in mothers’ post-divorce economic well-being among placement groups. Table 4 summarizes post-divorce economic well-being, including total income, income-to-poverty ratios, and poverty rates. Because there is little change over the two years, we focus here on outcomes during the initial post-divorce year only. Further, because of the extremely limited number of cases with father primary shared placement (n=19), we do not look separately at mothers’ outcomes for that group.

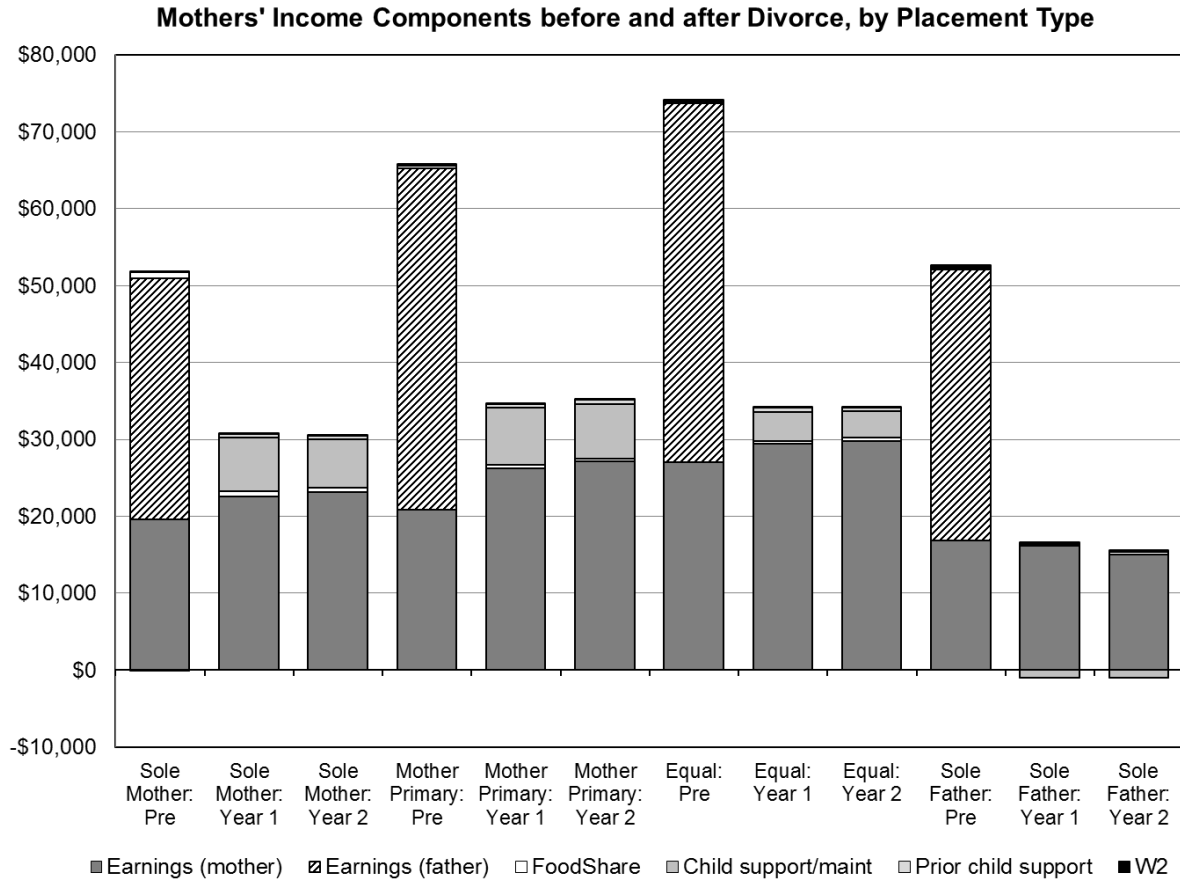
Table 4. Mothers’ Economic Wellbeing During First Year Following Divorce, by Child Placement

	Placement Type			
	Sole Mother	Shared		Sole Father
Mother Primary		Equal		
N	671	179	359	69
Income				
Mean	\$30,499	\$34,496	\$34,213	\$15,491
Median	\$26,919	\$32,857	\$28,721	\$10,429
Income-to-Poverty Ratio (fixed)				
Mean	1.80	1.97	2.02	1.33
% poor	34	30	30	54
% 1–3 times poverty	52	49	53	38
% >3 times poverty	14	21	17	9
Income-to-Poverty Ratio (proportional)				
Mean	1.80	2.23	2.37	1.33
% poor	34	25	26	54
% 1–3 times poverty	52	49	47	38
% >3 times poverty	14	26	27	9

Incomes were dramatically lower among mothers whose children lived entirely with the father following divorce (that is, the sole father placement group). Among these mothers, mean income was \$15,491, less than half the income in any of the other placement groups. This is consistent with the low pre-divorce incomes of these mothers and with the lack of potential child support due to children living with the father. The mothers in the remaining placement groups, including sole mother placement, mother

primary placement, and equal placement, had mean incomes in the \$30,000–\$35,000 range, specifically a mean of \$30,499 for mothers with sole placement and means of \$34,496 and \$34,213 for the shared placement groups. Looking at median incomes, the pattern is broadly similar but the values are lower. The pattern persists when looking at income-to-poverty ratios, which adjust for household size: Ratios were lowest for mothers whose children were placed with the father (a mean of 1.33 in the first year), followed by mothers with sole placement (a mean of 1.80). The income-to-poverty ratios for the mothers with shared placement depend on which measure is used: for mothers with primary shared placement, the ratio fell to between 1.97 and 2.23, depending on the assumptions about child costs with shared placement households; ratios were similar but slightly higher for mothers with equal shared placement, falling to between 2.02 and 2.37. As evidenced by the range in needs-adjusted income across the two measures, the assumptions about how costs are allocated in shared placement situations have a sizable impact on mothers' estimated economic outcomes, with differences more pronounced for mothers with equal shared as compared to mother primary shared placement.

The lower incomes and income-to-poverty ratios translate into substantially higher poverty rates relative to the pre-divorce period, for all of the placement groups—though the increase in poverty is higher for some groups than others. Consistent with the differences in income-to-poverty ratios among placement groups, the highest poverty rate (54 percent) was found among mothers who did not have placement of their children. The next highest rate was found among the mothers with sole placement (34 percent), while rates were somewhat lower—25 to 30 percent depending on which poverty thresholds were used—among both of the shared placement groups. Whereas the mothers with shared placement had lower poverty rates than the mothers with sole placement, they nonetheless experienced a much larger proportional increase in poverty compared to the pre-divorce period. Likewise, mothers with shared placement experienced a larger relative decline in mean income-to-poverty ratios than did mothers with sole placement, even as their absolute level of economic well-being remained higher.



An examination of income components before and after divorce sheds light on these patterns (Figure 2). For all placement groups, fathers’ earnings made up the largest share of pre-divorce household income. With no other changes, simply taking away fathers’ earnings would cause mothers’ incomes to fall by 60 to 67 percent in the post-divorce period. With the exception of the sole father placement groups, the income drop arising from the loss of fathers’ earnings was compensated at least in part by increases in mothers’ own earnings as well as transfers from the father in the form of child support and maintenance—though total incomes remained substantially below pre-divorce levels for all groups. Proportionally, the sole mother placement group made up the largest share of lost income, in part because their child support receipts were somewhat higher but also because the lost income from fathers’ earnings was less than among the shared placement groups due to pre-divorce differences in fathers’ earnings as described above. On the other hand, the equal shared placement group recouped the smallest share of lost income

(with the exception of the sole father placement group) both because the lost income was higher than for the other groups and because the child support receipts were lower. The mother primary group fell in between: mothers' own earnings increased more than the other groups, and they received roughly as much child support as the mothers with sole placement, but that support replaced a lower share of their ex-partner's earnings—a basic feature of the shared placement guideline. The net result is that post-divorce incomes were, on average, much more similar among the mother placement and shared placement groups than they were prior to the divorce.

FoodShare and Mothers' Post-Divorce Incomes

The examination of mothers' income components, as shown in the previous section, suggests a very limited role for FoodShare relative to mothers' overall income package. Indeed, FoodShare and W-2 benefits combined constitute less than one-tenth the value of private transfers. Nonetheless, FoodShare plays a more substantive role for the subset of mothers who receive it. As shown in Table 5, more than one-fifth of the mothers (22 percent) received FoodShare during the first post-divorce year. This differed somewhat among placement groups: 27 percent of the mothers with sole placement received FoodShare, as did 21 percent of those with shared primary placement and 16 percent of those with equal placement. . The average amount received, among the subset receiving any, was \$2,279, or 15 percent of total income, with fairly similar receipt amounts across the placement groups. Among mothers in the father-placement group, the FoodShare amount was lower (\$1,544), but it constituted a larger share of total income (22 percent), illustrative of the challenging financial circumstances of this group. The role of FoodShare changes little from the first to the second post-divorce year. Overall, results suggest that FoodShare plays an important role in economic well-being for a sizable minority of mothers, and its importance is greater among mothers with greater placement responsibilities for the children.

Table 5. Role of FoodShare as Part of Divorced Mothers' Income Package

	All	Sole Mother	Shared	
			Mother Primary	Equal
N				
Any FoodShare Post-Divorce (year 1)	22%	27%	21%	16%
Any FoodShare Post-Divorce (year 2)	21%	24%	19%	18%
Among Mothers with FoodShare in First Year Post-Divorce:				
Amount (mean)	\$2,279	\$2,393	\$2,149	\$2,303
Percent of income	15%	14%	13%	16%

Sensitivity Analyses: The Role of Zero Earnings

Our results regarding mothers' economic well-being are particularly sensitive to the problem of incomplete income information. Our primary sample understates both pre- and post-divorce economic well-being, to an unknown degree, in that at least some income is not captured. Here, we provide sensitivity analyses that exclude certain zero-earnings cases from the sample. Our objective is to highlight the implications of treating those who appear to be zero earners as 'true' zeros by excluding a subset of those earners who could most plausibly be 'false zeros' by virtue of living or working out of state. Specifically, we exclude mothers who have neither earnings records nor FoodShare receipt during the year, as these are mothers for whom the data provide no concrete evidence of living or working in Wisconsin during the year. We emphasize that there is no reason to assume these mothers are out-of-state or falsely classified as zero earners, but merely that we have no evidence to the contrary. At least some of the excluded cases are likely 'true' zero earners; thus our restricted sample likely excludes some of the lowest-income mothers, while also excluding some who may have higher incomes, albeit of an unknown amount.

Table 6 provides summary information about pre- and post-divorce economic well-being for both the full and restricted samples. Compared to the full sample, the mothers in the restricted sample have higher incomes and lower poverty rates both before and after divorce—and this holds for all placement subgroups. This is, of course, not surprising, as dropping a subset of the zero-earnings cases has the effect

Table 6. Sensitivity Analysis of Economic Wellbeing among Divorced Mothers, Using Full and Restricted Samples

	All	Sole Mother	Shared		
			Mother Primary	Equal	Sole Father
N					
Full sample	1,354	671	179	359	69
Restricted sample	1,192	586	161	321	57
Pre-Divorce Income (mean)					
Full sample	\$59,883	\$51,047	\$65,121	\$74,078	\$51,803
Restricted sample	\$61,030	\$51,437	\$67,200	\$75,358	\$55,314
Pre-Divorce Inc:Pov (mean)					
Full sample	2.86	2.47	3.07	3.56	2.41
Restricted sample	2.93	2.50	3.18	3.63	2.59
Pre-Divorce Pov Rate (%)					
Full sample	19	23	13	14	23
Restricted sample	16	21	9	10	11
Post-Divorce Income (mean)					
Full sample	\$30,798	\$30,499	\$34,496	\$34,213	\$15,491
Restricted sample	\$33,590	\$33,241	\$37,254	\$36,755	\$18,635
Post-Divorce Inc:Pov (fixed-cost; mean)					
Full sample	1.87	1.80	1.97	2.02	1.33
Restricted sample	2.02	1.97	2.13	2.18	1.59
Post-Divorce Pov Rate (fixed-cost; %)					
Full sample	34	34	30	30	54
Restricted sample	26	26	23	23	44

of removing some of the lowest-income mothers—those whose measured income is limited to private transfer receipts, if any—from the analysis. While the estimates of economic well-being—measured either as income, income-to-poverty ratio, or poverty rate—do vary substantially based on whether we use the full or restricted sample, the same patterns hold in both samples. Both samples reveal that mothers’ own income (excluding her spouse) increases following divorce, yet not enough to offset the loss of her spouse’s income, resulting in a substantial decrease in income-to-poverty ratio and an increase in poverty rate following divorce, even though the extent of poverty (before and after) differs between samples. Both samples reveal a leveling in economic well-being across placement groups following divorce, with far less variation in income and poverty rates than they exhibited in the pre-divorce period. And, both samples reveal the same ordering of economic well-being across placement groups, with shared-placement mothers continuing to fare moderately better than sole-placement mothers and substantially better than mothers for whom children are placed with the father.

Actual and Potential Child Support Impacts

The results with regard to income composition indicate that child support plays a relatively modest role in compensating for lost incomes, though by no means a trivial one. We explore whether child support could potentially play a greater role, by computing guidelines-based child support orders for children in sole mother, shared mother primary, or equal shared placement arrangements.

Table 7 shows the average amounts currently received in child support associated with the recent divorce, as well as the average amount calculated based on the child support guidelines. Note that the actual support shown here is lower than shown in earlier results [e.g. Table 2], as this analysis is limited specifically to child support on behalf of the current divorce, whereas the previous figures are more comprehensive in that they also include child support unrelated to this divorce, as well as maintenance receipts. Note, too, that the gap between actual and guidelines-based support has two potential components which we do not differentiate here—orders that differ from guidelines, and payments that differ from orders. As indicated in the table, on average, the vast majority of guidelines-based support is already collected, with the exception of the equal shared placement group. Full adherence to guidelines would increase the child support in sole mother placement cases by \$855 in the first year; for mother primary shared placement it would increase support to mothers by only \$309; and in equal shared placement cases it would increase support by \$1,204. Proportionally, the foregone support is dramatically higher in equal shared placement cases, but in terms of dollar amounts the averages are quite low relative to income for any of the custody arrangements. As such, collecting support in accordance with guidelines would have little further impact on mothers' average economic well-being. Furthermore, it would have relatively little impact on poverty rates, reducing poverty rates by a predicted 1 percentage point for all groups, or up to 3 percentage points for the shared placement groups when using the proportional-cost measure.¹

¹While the current report does not address fathers' economic wellbeing, preliminary analyses suggest that full adherence with guidelines would likewise have little impact on poverty rates among fathers.

Table 7. Current and Potential Role of Child Support as Income Source for Divorced Mothers

	Sole Mother	Shared	
		Mother Primary	Equal
Full Sample			
N	671	179	359
Current Support	5,266	5,449	1,630
Guidelines Support	6,121	5,757	2,834
Current Income:Pov (fixed-cost, proportional-cost; mean)	1.80	1.97, 2.23	2.02, 2.37
Guidelines Income:Pov(fixed-cost, proportional-cost; mean)	1.84	1.98, 2.24	2.08, 2.45
Current Poverty Rate (fixed-cost, proportional-cost; %)	34	30, 25	30, 26
Guidelines Poverty Rate (fixed-cost, proportional-cost; %)	33	29, 22	27, 24
Father Earnings>0			
N	486	148	299
Current Support	5,924	5,892	1,696
Guidelines Support	8,287	7,371	4,211
Current Income:Pov (fixed-cost, proportional-cost; mean)	1.86	2.03, 2.30	2.05, 2.40
Guidelines Income:Pov (fixed-cost, proportional-cost; mean)	1.99	2.10, 2.29	2.19, 2.57
Current Poverty Rate (fixed-cost, proportional-cost; %)	30	28, 23	24, 21
Guidelines Poverty Rate (fixed-cost, proportional-cost; %)	27	25, 18	21, 17

Excluding the cases with no observed earnings for fathers provides a somewhat different picture. When the zero-earning fathers are omitted, the mean gap between actual and potential support increases for all placement groups. In the case of mothers with sole placement, the mean child support gap is an estimated \$2,363; among mothers with primary shared placement, the mean gap is an estimated \$1,479; and among mothers with equal shared placement, the mean gap is an estimated \$2,515. When we exclude the fathers for whom we are most likely underestimating potential support, it appears that child support has greater unmet potential, including a somewhat larger potential impact on mothers' poverty rates—particularly in shared placement cases.

CONCLUSIONS

This report has examined the short-term economic outcomes of divorce for a recent cohort of divorced mothers in Wisconsin. We are particularly interested in how economic well-being changes from the pre- to post-divorce periods, how economic well-being varies among mothers with different placement arrangements for their children, and whether child support has the potential to play a greater role if transferred in accordance with existing guidelines.

We find that pre-divorce income patterns in the year leading up to filing for divorce create particular vulnerabilities for mothers relative to their husbands. While mothers are as likely as fathers to have earned income prior to the divorce, the low amount of their own income—in absolute terms and as a share of total household income—means that they face a high likelihood of economic hardship if they are unable to secure substantial additional income in the post-divorce period. Consistent with these vulnerabilities, we find that divorced mothers as a group experience substantial declines in economic well-being from the pre-divorce to post-divorce periods, which translate into low absolute levels of economic well-being that persist for the two years of our analysis. This is true whether our metric is total income, needs-adjusted income, or poverty rates.

We find substantial pre-existing differences in incomes—overall and in the separate incomes of mothers and fathers—of parents who subsequently obtain different placement outcomes. Broadly speaking, total incomes are lowest among households that ultimately obtain sole placement arrangements (usually sole mother, but in a more limited number of cases sole father). This pattern is most strongly driven by fathers' portion of pre-divorce earnings: fathers with higher incomes, and thus greatest potential for paying support, are most likely to obtain shared placement arrangements that are expected to translate into lower support obligations. This has clear implications for mothers' ability to recoup lost income in the form of child support following marital dissolution.

Pre-divorce differences in economic well-being among placement groups carry over into the post-divorce period—with mothers with shared placement still better off post-divorce than those with sole placement. But the differences become much less pronounced, and mothers with shared placement—

especially equal share placement—experience the greatest relative losses in well-being. In absolute terms, the mothers in the shared placement groups had the most to lose economically, in that their ex-husbands had the highest earnings; yet these mothers, particularly those with equal shared placement, recouped a smaller percentage of their ex-husband’s earnings in support. Among the more notable findings to emerge from this report, then, is that widespread use of shared placement—particularly its use among higher-income households and especially higher-income fathers—appears to reduce the capacity of those mothers whose economic well-being was most influenced by the fathers’ earnings in the pre-divorce period to recoup as much of that lost income in the form of child support following marital dissolution. The implications of this for their resulting economic well-being depends in part on how costs are actually apportioned when children live in two homes, but in general, the relative drop in economic well-being appears greater among mothers with shared placement—especially those with equal shared placement. At the same time, the overall level of economic well-being remains higher among mothers with shared placement relative to other groups—a reflection of their own higher earnings. Shared placement, then, strengthens the extent to which mothers’ own earnings capacity dictates their post-divorce economic well-being.

Our estimates of mothers’ economic well-being are strongly influenced by the assumptions we make about lack of earnings records. Our primary analyses treat zero-earnings as ‘true’ zeros; when we exclude mothers with no earnings or food stamp receipt—on the assumption that they could plausibly be living and/or earning out-of-state—estimated economic well-being increases considerably. However, the same general patterns persist, in terms of declines in economic well-being relative to the pre-divorce period, as well as the relative economic standing of the various placement groups.

Finally, we find evidence that child support could potentially play a somewhat greater role in increasing mothers’ economic well-being were it ordered and paid in full accordance with existing guidelines, though the potential effects for mothers’ well-being do appear relatively modest. In both absolute and relative terms the gap between potential and actual support appears largest for parents with equal shared placement. However, our estimates regarding the potential for more support are strongly

dependent on assumptions about fathers' incomes, so we recommend our estimates be considered with caution.

There remain important questions that still limit our understanding of the implications of child placement arrangements for mothers' post-divorce economic well-being. We know little about how costs are truly apportioned when children live in two homes, yet this is central to an accurate understanding of mothers' economic well-being under shared placement scenarios. And, we know little of how placement arrangements may ultimately alter mothers' own earnings or repartnering, yet those earnings and partnering patterns are ultimately critical to their economic well-being. Both of these are promising avenues for future research.

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