Child Support Receipt and the Quality and Stability of Housing

Marah A. Curtis
Emily J. Warren
Institute for Research on Poverty
University of Wisconsin–Madison

June 2014

The research reported in this paper was supported by the Child Support Research Agreement between the Wisconsin Department of Children and Families and the Institute for Research on Poverty. The views expressed here are those of the authors and not necessarily the sponsoring institutions.

Abstract

We use administrative data from Wisconsin merged with Zillow Real Estate Research data on median house values to examine the associations between the regularity of child support receipt on moves and changes in housing values following moves. Our sample consists of 13,329 custodial mothers with new orders from 2002 to 2006. We find, across several measures of regularity and specifications of moves, that regular receipt is negatively associated with any moves and with more than one move a year, holding the value of the child support received constant. In models examining associations between regularity and changes in housing quality after a move, we find that an additional month of child support within 25 percent of the order amount is associated with $890 increase in housing quality. These results, however, should be interpreted cautiously as we cannot guarantee the temporal ordering between observed moves and housing quality.

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BACKGROUND

Consistent receipt of child support payments generally increases the regularity of mothers' total family income (Ha, Cancian and Meyer, 2011). Regularity of monthly income may increase families' ability to make financial plans (Cancian and Meyer, 2006). The ability to depend on a consistent source of monthly income may be important for maintaining housing stability generally but may also have an indirect effect on the quality of the housing families choose to live in. Moving is disruptive, so in the presence of uncertainty about an income stream, families may choose lower-value housing (because it is, on average, also lower-cost housing) that they can maintain stably.

In this study, we examine the relationship between regular child support and housing outcomes. We are interested in whether the receipt of regular child support has the potential to increase the likelihood that children live in higher-quality housing or move less frequently. There is very little research on the relationship between the regularity of child support payments and housing stability or quality. One prior study using Australian data, (Walter, Hewitt, Natalier, Wulff, and Reynolds, 2010) found a positive, significant relationship between the receipt of child support payments above $75 per week and improved housing quality, suggesting that both frequency and amount of payment matter. We found no studies examining this relationship using U.S. data.

On the other hand, we know far more about residential mobility and some of the factors that distinguish upward mobility (good moves) from disruptive mobility (bad moves). Residential mobility is common, with nearly half of the U.S. population moving in a five-year period (Phinney, 2013; Berkner and Faber 2003; Ihrke, Faber, and Koerber, 2011). Low-income households move more frequently than higher-income households, and these moves are less likely to be made voluntarily in order to improve quality of life, such as moving to a more advantageous labor market, or to better quality housing (Crowley, 2003; Hartman and Robinson, 2003). It is also clear that moving more than once a year is associated with poor educational and health outcomes for children (Cunningham, Harwood, and Hall,

2010), and that frequent moves are often a precursor to homelessness among both individuals and families (Kingsley, Jordan, and Traynor, 2012).

DATA AND METHODS

We perform our analyses using an original dataset assembled for this study. We constructed this dataset from Wisconsin administrative records, combined with information from the Zillow Real Estate Research database and the Department of Housing and Urban Development. We utilize the Multi-Sample Person File (MSPF) that merges a number of WI administrative data sources. Data on child support payments come from the Kids Information Data System (KIDS), which contains monthly records of child support payments received by custodial parents. The Client Assistance for Re-employment and Economic Support (CARES) database contains detailed information on participation in public programs like the Supplemental Nutrition Program (SNAP), and Temporary Assistance to Needy Families (TANF). Individual earnings data come from administrative records from the Unemployment Insurance (UI) system, maintained by the Wisconsin state government and accessed through the MSPF files. The strength of these data are the ability to measure the regularity of child support payments monthly and annually, while also having information on earnings and public program participation. These data contain demographic information on custodial parents' age, race and number and ages of children. Data on housing type (owner occupied or rental) are not available in the administrative records, although housing subsidy receipt is captured. We will detail our additional housing quality data sources below.

Our sample consists of 13,329 custodial mothers who established a new child support order in 2002 that was in force for at least 24 months. We exclude cases in which an order was in place for less than 24 months (N=1,112); this is the case when either the mother's youngest child turned 18, or the mother is no longer the payee. We focus on custodial mothers (those with sole or shared physical placement and an order for child support) because: (1) they remain the majority of custodial parents in Wisconsin; (2) prior work on the regularity of payments is based on this population (Ha, Cancian, and Meyer, 2011); and (3) we expect that the housing trajectories of custodial fathers may differ in important

ways. We limit the maximum observation window to 5 years to reduce the likelihood that observed relationships between child support regularity and housing outcomes are confounded by mothers' repartnering. We do not have data to control for changes in marital and cohabitation status over time. Prior work suggests that nearly half of women remarry within 5 years of divorce (Kreider, 2006); and that two-thirds of mothers who are unmarried at the time of a child's birth ended relationships with the child's biological father within 5 years of the birth, with half of these mothers subsequently entering new partnerships (Bzostek, McLanahan, and Carlson, 2012).

We choose to analyze new orders from 2002 to 2006 for two reasons. First, we replicate the regularity measures constructed by Ha, Cancian, and Meyer (2011) using the same WI administrative data from 2000 through 2004, though with different samples. This provides a "check" on our regularity measure construction.[1] Second, we select data before the beginning of the housing downturn accompanying the Great Recession. There are no prior studies using U.S. data to explore the relationship between child support regularity and housing outcomes. Thus, we do not know how these relationships may differ by tenure (which we do not observe), or by features of the housing market such as foreclosure rates that are difficult to obtain at the county level (and which would be needed for a state analysis) both of which changed dramatically during the downturn.

Regularity of Child Support Receipt

We measure child support regularity as the number of months that a custodial mother receives any support and the number of months the custodial mother received support within 25 percent of the order amount. To account for obligors who may make biweekly support payments, if the custodial mother did not receive a payment on an order owed, we calculate the average of that month and the previous

[1]Our regularity measures for 2003 and 2004 are reasonably similar given the differences in our samples. We include mothers whose orders are in place for 24 to 60 months rather than restricting our sample to only those whom we can observe for the full 60 months. Our 2002 measures produce different rates, however we attribute this to the differences in our samples.

month, and the average of that month and the following month. If either of these averages is within 25 percent of the order amount, the month is counted as a month of regular receipt (Ha, Cancian, and Meyer, 2011).

Housing Stability and Quality

We measure housing stability using the number of moves recorded in the administrative data. Moves are recorded when the state receives an update on a custodial parent's location or an order changes, the address is then updated in KIDS. Addresses are also recorded in the CARES data as part of the certification process for SNAP/TANF eligibility. We expect more accuracy in our move variable by using both data sources. We use zip codes from both data sources, and if the zip code changes from the previous observation, we count this as a move. We expect that we are underestimating moves since we cannot observe changes within a given zip code. We cannot observe the precise timing of a move, since a change could have occurred in any month between the observations of different zip codes. We use these data to construct the total number of moves over the study period and as an indicator of having moved more than once a year.

We measure housing quality using an external data source, the Zillow Home Value Index (ZHVI). The ZHVI is a repeated home sales measure that incorporates aspects of the housing market (home, land, prior sales, location, and tax assessments) to produce median home values at a particular tier of the market (top, middle, or bottom) for homes of a particular size (number of bedrooms) and type (single family or condominium). The ZHVI data is collected at the zip code level on a monthly basis. The ZHVI is the only publically available housing value index with data at the zip code level. We do not have, nor know of, any other measures of housing quality that we could append to our Wisconsin administrative data. Measures of housing quality available in the American Community Housing Survey, for example, are based on the features of a sample of housing units in specific metro area. The ZHVI allows us to capture within state changes in housing quality over time. Using the ZHVI as a proxy for housing quality assumes that changes in median area home values reflect changes in public goods such as schools, local

services, parks, and libraries, which are available to renters and owners. We use the bottom-tier ZHVI for a 2-bedroom home, and adjust the index using the Consumer Price Index for All Urban Consumers, to reflect real changes in value over time.[2] As noted above, mobility is a defining feature of American families. We distinguish between "upward" and "downward" changes in quality associated with a move by measuring standard deviation changes in the ZHVI following a move.

As a control variable, we measure housing costs using Fair Market Rents (FMRs) from the Department of Housing and Urban Development (HUD). FMRs are gross rental estimates compiled annually by HUD to set the payment standard for their Housing Choice Voucher program. FMRs have been used in prior work and produce results very similar to more refined measures of housing costs (Curtis, 2011; Curtis, Corman, Noonan, and Reichman, 2013). The advantage of this measure is that it is consistent, reliable and available over time, and reflects costs in each housing market. A disadvantage is that HUD assigns the same FMR to different counties in the same metropolitan area, so variation in costs across counties within a metropolitan area will not be captured. For example, Milwaukee County is part of a metropolitan area that includes both Milwaukee and Waukesha counties. As a result, these two counties share the same FMR, despite the fact that housing costs in these two counties may differ from each other. We appended FMRs for a two-bedroom unit based on custodial mothers' county of residence. We use these measures as an exogenous control for housing costs in our models, but would not use them as an outcome.

Sample: Child support, demographic characteristics and the housing environment

Decisions about moving are complicated and bound up with a host of decisions around family formation, labor market opportunities, childcare options, and affordability. We control for demographic characteristics that prior research show are associated with moving, including mother's race, age, number of children, and the age of her youngest child (Kingsley, Jordan, and Traynor, 2012). Strengths of these

[2]Results obtained using the middle-tier ZHVI produce similar results.

data are the detailed information available on the amount of child support received, earnings and participation in means-tested programs. Controlling for the total amounts of child support custodial mothers receive is particularly important because we want to understand the role of regularity holding payment receipt constant. Our measures of child support regularity, amounts of child support received, and W-2 cash benefits all come from monthly data; we use quarterly measures of mother's earnings, from which we compute a monthly average. We control for whether the mother reports a housing subsidy, the FMR in her county of residence, and whether she resides in an urban county when the new order is established. We include a continuous measure of the length of the order to control for the number of months in which we observe mothers' housing situation. Our indicator of participation in SNAP is meant to serve as a proxy for economic vulnerability; lower-income families are more likely to move, and less likely to be owners.[3] For this reason, we include an indicator for any month of SNAP participation during the study period.

DESCRIPTIVE ANALYSIS

In this section, we describe our sample, and examine patterns of child support regularity and moves over the study period. Since we define housing instability as moving more than once a year, we examine group differences between those who moved more than once a year, and those who moved once per year or less. To contextualize regressions examining the relationship between child support regularity and changes in quality following a move, we examine the average annual percentage change in home values by the number of moves per year, and by the proportion of months in which mothers received child support.

Table 1 examines the child support, demographic characteristics and housing environment of the 13,329 custodial mothers in our sample. All dollar amounts are adjusted to reflect 2012 dollars. At

[3]The decision to move is likely influenced by different considerations for renters and owners. All else equal, renters typically sign a yearly lease, so location decisions may be dependent on the terms of the new lease and the size of any rent increase for the next contracted year. Owners, however, are less mobile due to the fixed costs associated with moving and selling. We cannot observe whether custodial mothers rent or own their residences.

Table 1. Sample: Child Support, Demographic Characteristics and the Housing Environment

Sample Characteristic	Mean or Percentage	Standard Deviation
Child Support		
Monthly Order Amount	$368	$282
Monthly Amount Received	$269	$250
Length of Child Support Order (Months)	50.2	8.6
Demographic Characteristics		
Mother's Age		
15–24	25.8%	
25–34	39.6	
35–44	27.1	
45+	7.5	
Mother's Race		
White	62.5%	
Black	15.3	
Other	22.2	
Number of Biological Children	1.5	0.7
Age of Youngest Child		
0–1	21.0%	
2–5	43.7	
6–10	18.8	
1+	16.5	
SNAP Receipt	51.2%	
Mother's Monthly Income (Earnings and W-2 Assistance)	$1,251	$1,253
Housing Environment		
Receives Housing Subsidy	4.8%	
Fair Market Rent	$717	$114
Urban County	63.8%	
Home Value Index	$104,233	$28,367

N = 13,329

All dollar amounts are in 2012 dollars.

For Mother's Race, of those in the Other category, 37 percent self-identified as Hmong, Asian, or American Indian, and 63 percent identified themselves as of Hispanic ethnicity.

baseline, the mean child support order amount is $368 though it varies markedly with a standard deviation of $282 while the mean amount of monthly child support received is nearly $100 dollars lower at $269 and a standard deviation of $250. About a quarter of our sample is between 15 and 24 years old, while nearly 40 percent are between 25 and 24 years old, and 35 percent are 35 or older. Our sample of mothers is 62 percent white, 15 percent black, and 22 percent other race, of whom 37 percent self-identified as Hmong, Asian, or American Indian; in addition, 63 percent of those in the Other category identified themselves as of Hispanic ethnicity. Nearly two-thirds of mothers have children five years old or younger, with a mean number of children of 1.5. About half of these mothers were receiving SNAP at baseline, while 4.8 percent report having a housing subsidy. As expected, monthly income varies substantially across custodial mothers with a mean of $1,251 and a standard deviation of $1,253, reflecting the diverse economic conditions of all mothers in Wisconsin who established new child support orders in 2002. There is significant variation in the housing value index across the sample with a mean value for an owner occupied single family home in the bottom-tier of the market of $104,233, a standard deviation of $28,367, a minimum value of $41,900 (in Milwaukee) and a maximum of value of $179,200 (in Verona).[4] The mean FMR, our proxy for housing costs, is $717 with a standard deviation of $114. Housing costs within Wisconsin, across counties varies substantially from $544 in Marinette County to $1092 in St. Croix County for a 2 bedroom apartment. A majority, 64 percent of mothers, live in an urban county.

Turning our attention to the number of months mothers report receiving any child support and support within 25 percent of the order amount, Table 2 presents the proportions receiving support across the number of months of receipt for 2002 through 2006. In general, as expected, the proportions of mothers receiving any support are higher than those who receive within 25 percent of the order amount. Across all years, 13 percent of mothers did not receive any support while between 14 to 20 percent did not receive support within 25 percent of the order amount. Across both measures and all years, between 9

[4]The housing value index is determined at the zip code level. There are 21 zip codes in Milwaukee; the minimum value in our data is for zip code 53206. There are 20 zip codes in Verona; the maximum value in our data is for zip code 53593.

Table 2. Months Receiving Child Support by Two Definitions of Regularity

	2002	2003	2004	2005	2006
Months Receiving Any Support					
No Months	13%	13%	13%	13%	13%
1–3 Months	12	11	10	10	9
4–9 Months	31	23	23	21	21
10–12 Months	44	53	54	56	57
Months Receiving Support Within 25 Percent of Order Amount					
No Months	14%	19%	20%	20%	19%
1–3 Months	12	15	14	12	13
4–9 Months	31	29	29	27	26
10–12 Months	43	37	37	41	42
N	13,329	13,329	12,363	12,094	11,755

to 15 percent of mothers received support in only 1 to 3 months while between 21 and 31 percent received support between 4 and 9 months. Finally, when examining the proportion of mothers who receive support between 10 and 12 months, between 44 and 57 percent report receiving any support and between 37 and 43 percent report receiving support within 25 percent of the order amount.

In Table 3, we explore the number of moves per year in the SNAP and non-SNAP sample; we do this because prior research suggests that economic disadvantage is positively associated with more moving and with moving more than once per year. Across both samples, we see that both groups become more stable over time, though the SNAP sample is significantly more likely than the non-SNAP sample to move in every year, and to move multiple times per year. Between 14 and 22 percent of the SNAP sample reported moving once in any year, compared to between 0.3 to 2.5 percent for the non-SNAP sample. Frequent moving, from twice to five times in a year is equally rare for the non-SNAP sample (0.1 to 0.3 percent) compared to 2.9 to 5.4 percent for the SNAP sample.

In Table 4, we compare mothers who moved more than once per year (frequent movers) to those who moved once or not at all (stable movers). We examine group differences across order amounts, amount of child support received, regularity of receipt, program participation, housing quality, housing costs, and demographic characteristics. Compared to stable movers, frequent movers had lower mean order amounts ($241 compared to $382), amounts received ($139 compared to $301) and months of receipt within 25 percent of their order amount (24 months compared to 31 months). Mothers who moved more than once a year were also younger, had fewer though younger children, and were more likely to receive housing subsidies and SNAP. A larger proportion of black mothers are represented among frequent movers (29 percent) than among stable movers (14 percent), while 63 percent of stable movers are white compared to 58 percent of frequent movers. Mothers identified as a race other than white or black constitute 23 percent of the stable movers, compared to 13 percent of the frequent movers. As expected, mothers who moved more than once a year also had significantly lower monthly earnings ($631 compared to $1,281), were more likely to live in an urban county, lived in an area where the housing

Table 3. Number of Moves, By Year and SNAP Participation*

	2002		2003		2004		2005		2006	
	Non-SNAP (N=6531)	SNAP (N=6798)	Non-SNAP (N=6,531)	SNAP (N=6,798)	Non-SNAP (N=7,641)	SNAP (N=4,722)	Non-SNAP (N=7,569)	SNAP (N=4,525)	Non-SNAP (N=7,405)	SNAP (N=4,350)
No Moves	97.2%	71.7%	97.4%	78.7%	98.3%	79.4%	98.8%	79.2%	99.6%	82.9%
1 Move	2.5	21.9	2.3	15.9	1.5	16.1	1.1	16.4	0.3	14.2
2–5 Moves	0.3	6.4	0.3	5.4	0.2	4.5	0.1	4.4	0.1	2.9
Total N	13,329		13,329		12,363		12,094		11,755	

*SNAP and non-SNAP groups are statistically different from each other within years for each move category at p<.05.

Table 4. Demographic Characteristics at Baseline, By Mobility Status

	Mean (Standard Deviation) or Percentage		
	Frequent Movers (moved > 1 per year)	Stable Movers (moved 1 or < per year)	Group Differences
Monthly Child Support Order Amount	$241 ($135)	$382 ($297)	***
Monthly Amount Received	$139 ($183)	$301 ($290)	***
Number of Months Received Within 25 Percent of Order Amount	24.1 (17.0)	31.7 (16.8)	***
Length Of Child Support Order (Months)	50.3 (7.9)	50.2 (8.64)	
Mother's Age	25.1 (6.2)	31.2 (8.6)	***
Mother's Race			
White	57.9%	63.0%	***
Black	29.0	13.8	***
Other	13.1	23.2	*
Number Of Biological Children	1.3 (0.7)	1.5 (0.7)	***
Age Of Youngest Child			
0-1	36.9%	19.2	***
2-5	50.7	43.0	***
6-10	7.8	20.0	***
11+	4.6	17.8	***
Receives Housing Subsidy	6.9%	4.6%	**
Receives SNAP	95.7%	46.4%	***
Mother's Monthly Income (Earnings And W-2 Assistance)	$631 ($672)	$1,281 ($866)	***
Fair Market Rent	$715 ($115)	$737 ($107)	***
Urban County	65.9%	44.5%	***
Home Value Index	$101,951 ($23,716)	$106,705 ($25,567)	**
	N=1,302	N=12,027	

* p<.05; ** p< .01; *** p<.001.
For Mother's Race, of those in the Other category, 37 percent self-identified as Hmong, Asian, or American Indian, and 63 percent identified themselves as of Hispanic ethnicity.

values were lower ($101,951 compared to $106,705) and faced higher housing costs ($737 compared to $715). There were no significant differences across groups by the length of the child support order.

Finally, Table 5 shows housing value changes by move status and the regularity of child support receipt. Housing value changes are the result of housing market factors that cause appreciation or depreciation based on a host of factors that determine market prices.[5] Changes in the home value index following a move provide some descriptive information about the quality of the housing market into which mothers choose to relocate given income constraints. We examine average annual changes in the index for non-movers, those who had one move, and those who moved more than once per year. On average, those who did not move in a given year experienced a 13 percent increase in the value of owner-occupied housing in their zip code, those who had one move experienced a 6 percent increase in value, and those who moved more than once per year experienced an 8 percent decrease in value. Next, we consider the proportion of months in which the custodial mother received child support within 25 percent of the amount owed and changes in the housing value index. Across all groups, we see a consistent pattern of housing value increases; the higher the proportion of months a parent receives child support, the larger the percent increase in the value of housing in her area.

MULTIVARIATE MODELS

First, we present a series of pooled ordinary least squares (OLS) regression models to examine the associations between child support regularity and number of moves controlling for the amount of support received, mother's age, race, number of biological children and age of youngest child, earnings, housing subsidy receipt, SNAP receipt, FMRs, residence in an urban county, and length of the child support order. All pooled models use robust standard errors. Preliminary analysis did not reveal significant time trends in either the regularity of support or the number of moves. We use these pooled regressions to ensure that our model yields sensible results, and to test our two different measures of

[5]Estimating changes in housing values is beyond the scope of this analysis.

Table 5. Average Annual Percentage Change in Home Values by Moves and Child Support Regularity

	Percentage Change in Home Value Index	
	Mean	Standard Deviation
Average Number of Moves Per Year		
No Moves	+13%	11%
One Move	+6	5
More Than One Move Per Year	-8	9
Proportion of Months Received Within 25 Percent of Child Support Owed		
0–25%	+6%o	5%
26–50%	+9	8
51–75%	+11	9
76–100%	+14	13

regularity. Table 6 presents the beta coefficients on the number of moves for the model testing any amount of child support received (column 1) and for the model testing child support received within 25 percent of the order amount (column 2). Coefficients for both measures of regularity and all covariates in both models are very similar, so we will focus on the results in column 2. All else equal, an additional month of child support within 25 percent of the order amount would be expected to decrease the number of moves by 0.10, while an additional $50 a month in child support would be expected to decrease the number of moves by 0.004. Mothers who are older, or who are caring for children older than age one, are expected to move less than younger mothers or mothers caring for infants, respectively. Black mothers, those who have received SNAP, and those who live in an urban county are all expected to move more than their counterpart white mothers, non-SNAP recipients or those who live in a rural county. For example, SNAP receipt is predicted to increase moves by the number of moves by 0.770, or three-quarters of a move. Finally, controls for the length of order, housing subsidy and mother's earnings have the expected signs, while the year indicators account for housing market changes over time. For example, a $100 increase in the FMR is expected to increase the number of moves by 0.02, while having a housing subsidy is expected to decrease the number of moves by 0.13.

Our next analysis focuses on the associations between the regularity of support and moving more than once in a given year. In Table 7, we present odds ratios from a logistic regression estimating whether the mother moved more than once a year in 2004. We focus on results from 2004, but results from other years are substantively similar. We restrict the sample to mothers receiving at least $900 of annual child support. These models measure child support regularity with monthly categories (1 to 3, 4 to 9 and 10 to 12), to capture how the number of months of receiving support within 25 percent of the order amount is associated with moving more than once a year, all else equal. We hypothesize that the regularity of support, holding the amount received constant, will have an independent association with instability. As noted previously, there is limited research on child support amounts or regularity and housing stability, but the one Australian study on the topic finds that weekly payments of more than $75 or $3,600 annually are associated with improved housing quality (Walter et al., 2010). This study is informative, though child

Table 6. Estimated Effects of Child Support Regularity on Total Number of Moves, Pooled Model

	Number of Moves			
	Received Any Amount of Child Support		Received Child Support Within 25 Percent of Order Amount	
	B	Standard Error	B	Standard Error
Child Support Regularity	-.092**	.027	-.104**	.018
Amount of Child Support Received ($50)	-.011***	.000	-.004***	.000
Mother's Age	-.032***	.003	-.031***	.002
Mothers Race				
White	Omitted		Omitted	
Black	.331***	.050	.330***	.050
Other	.016	.058	.014	.058
Number of Biological Children	.009	.022	.008	.022
Age of Youngest Child				
0–1	Omitted		Omitted	
2–5	-.095*	.044	-.094*	.044
6–10	-.218***	.060	-.216***	.060
11+	-.149**	.080	-.147**	.079
Receives Housing Subsidy	-.138**	.067	-.137**	.067
Receives SNAP	.772***	.025	.770***	.025
Mother's Income (Earnings + W2)	-.004***	.004	-.005***	.004
Fair Market Rent ($100)	.020*	.020	.020*	.020
Geographic Location				
Rural County	Omitted		Omitted	
Urban County	.121***	.047	.122***	.047
Length of Order	-.007***	.002	-.007***	.002
Year = 2002	-.064**	.019	-.067**	.019
Year = 2003	-.103***	.011	-.104***	.011
Year = 2004	-.078***	.008	-.080***	.008
Year = 2005	-.047***	.006	-.047***	.006
Year = 2006	Omitted		Omitted	

N=799,740 person-month observations
* p<.05; ** p< .01; *** p<.001.
For Mother's Race, of those in the Other category, 37 percent self-identified as Hmong, Asian, or American Indian, and 63 percent identified themselves as of Hispanic ethnicity.

Table 7. The Effects of Receiving Child Support Within 25 Percent of Order Amount on Moving

	More Than One Move Per Year	
	Odds Ratio	Standard Error
Child Support Regularity		
Received Child Support 1-3 Months	Omitted	
Received Child Support 4-9 Months	.884*	.355
Received Child Support 10-12 Months	.902*	.260
Annual Amount of Child Support Received		
$900–$1,999 in Child Support	Omitted	
$2,000–$4,999	.925	.181
$5,000–$14,999	.709**	.221
Moved in Previous Year	1.68***	.153
Mother's Age	.951**	.016
Mother's Race		
White	Omitted	
Black	.890	.216
Other	.834	.227
Number of Biological Children	.991	.105
Age of Youngest Child	.962	.030
Receives Housing Subsidy	.402**	.170
Receives SNAP	4.04***	.863
Mother's Income (Earnings + W2)	.991*	.011
Fair Market Rent ($100)	.981	.091
Geographic Location		
Rural County	Omitted	
Urban County	1.30**	.310
Length of Order	.989	.107

N=11,995

* p<.05; ** p< .01; *** p<.001.

For Mother's Race, of those in the Other category, 37 percent self-identified as Hmong, Asian, or American Indian, and 63 percent identified themselves as of Hispanic ethnicity.

support regularity and support amount are not evaluated separately so it is not clear whether the association with improved housing quality is due to the support amount or to the predictability of weekly receipt which allows parents to plan housing expenditures. It is also worth noting that housing quality and stability are not synonymous, and that decisions about whether one can maintain stable housing may be distinct from decisions about the quality of that housing. Our approach allows us to disentangle regularity from the amount received, which may be particularly important for policy because efforts to increase regularity can be separate from approaches that seek to increase the total amount of child support custodial parents receive. To measure the annual amount of support received, we categorize support as $900 to 1,999, $2,000 to 4,999 and $5,000 to 14,999.[6] We also conduct sensitivity tests using a number of different support categories, which produce similar results. We include all covariates noted in Table 6, along with a control for whether the mother moved in the previous year. Results indicate that receiving child support within 25 percent of the order amount for 4 to 12 months is associated with a 12–10 percent reduction in the odds that a mother will move more than once, compared to receiving support in 1 to 3 months, all else equal. In terms of the amount of receipt, mothers who received between $5,000 and $14,999 in annual support have a 30 percent reduction in the odds that they will move more than once, compared to those receiving between $900 and $1,999. This suggests that payments equivalent to $104 or more weekly are associated with housing stability; a similar result for housing quality was found by Walter, et al (2010). As expected, controlling for prior moves is important. If a mother reports moving in the prior year, the odds of moving more than once in the current year are increased by 68 percent. The pattern of the relationship between housing subsidies and instability is similar to our findings in the pooled model examining the number of moves; housing subsidies reduced the odds of multiple yearly moves by 60 percent. Mothers who received SNAP have dramatically increased odds, four times the likelihood than mothers who did not receive SNAP, of moving more than once a year. Participation in

[6]We tested the model with the following four different support categories: (1) $900 to $4,999, $5,000 to $9,999 and $10,000 to $14,999; (2) $900 to $3,999, $4,000 to $8,999, 9,000 to $12,999 and $13,000 or more; and (3) 15 categories in $1,000 increments ($900 to $999, $1,000 to $1,099, $1,100 to $1,199, etc.)

SNAP, as we expected, is a proxy for disadvantage, which is strongly associated with residential instability for custodial mothers. Mothers living in an urban county have 30 percent increased odds of moving more than once in a year.

Our final analysis examines movers, and estimates the relationship between the monthly receipt of child support within 25 percent of the order amount, and the change in the quality of housing following a move.[7] Housing quality is measured in units of standard deviation, approximately equal to $10,000. We use the pooled data in an OLS regression including the full set of covariates, and year fixed effects. Using standard deviation changes in the ZHVI allow us to capture both positive and negative changes in quality depending on the sign and magnitude of the coefficient. In Table 8, we present coefficients from this model. All else equal, an additional month of child support within 25 percent of the order amount would be expected to increase housing quality by 0.089 of a standard deviation. This is equivalent to an expected increase in $890 of housing value for movers in (0.089*$10,000). The coefficients for mothers who are black and other races are rather large and negative, suggesting that being non-white is associated with a decrease in housing quality following a move of between 0.77 and 0.19 standard deviations, or between $7,700 and $1,900 in home values. Consistent with prior analyses, all else equal, receiving SNAP is associated with a decrease in housing quality following a move of 0.12 standard deviations ($1,200), while moving more than once per year is associated with a decrease in housing quality of 0.04 standard deviations, or $400 in home value.

SUMMARY AND CONCLUSIONS

Given the potentially destabilizing effect of housing instability for children, the relationship between income support and increased stability is an important concern. Despite the lack of research on this topic, it is reasonable to suspect that regular child support may help to prevent residential instability.

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[7]The timing of our move variable is measured with error. These results should be interpreted cautiously because we cannot ensure that the actual move occurred in the month we assign, and, therefore, the ZHVI we assign is also measured with timing error. It would be most precise to say we are capturing the SD change in housing quality around an observed move.

Table 8. Estimated Effects of Child Support Regularity on Housing Quality Following a Move, Pooled Model

	Housing Quality Change Following A Move	
	B	SE
Received Child Support Within 25 Percent of Order Amount	.089*	.037
Amount of Child Support Received ($50)	.005**	.000
Mother's Age	-.001	.004
Mothers Race		
White	Omitted	
Black	-.771***	.070
Other	-.189**	.084
Number of Biological Children	-.032	.052
Age of Youngest Child	-.020*	.010
Receives SNAP	-.123***	.034
Mother's Income (Earnings + W2)	.005**	.024
Geographic Location		
Rural County	Omitted	
Urban County	.140***	.037
Moved More Than Once Per Year	-.040*	.049
Order Length	.002	.116
Year = 2002	-.921***	.116
Year = 2003	-.735***	.108
Year = 2004	-.517***	.107
Year = 2005	-.339***	.113
Year = 2006	Omitted	

N=390,180 person-month observations.
* p<.05; ** p< .01; *** p<.001.
For Mother's Race, of those in the Other category, 37 percent self-identified as Hmong, Asian, or American Indian, and 63 percent identified themselves as of Hispanic ethnicity.

If custodial mothers are able to rely on the regular receipt of child support payments, and if the support received is enough to make a substantial contribution to the family's budget, this income source may help mothers to obtain higher-quality housing. Further, such regular support may help mothers to remain in that home over time, and thus avoid the disruptive experience of moving. Our results provide evidence supporting this hypothesis, as we find that even controlling for the total amount child support received, increased regularity in child support payment is associated with decreased housing instability. In addition, we find that increased child support regularity is associated with living in a higher-quality home following a move, holding constant several other factors that influence both moving and the segment of the housing market that low-income custodial mothers may have access to.

We also find evidence of a relationship between child support regularity and upward mobility as indicated by moving to a neighborhood with higher housing values. Our finding that an additional month of child support within 25 percent of the order amount is associated with a $890 increase in housing value may be substantively meaningful. Increasing child support regularity within 25 percent of the order amount by several months has the potential to open higher-cost housing markets to custodial mothers. It is not surprising that the only measure of home values we could locate at the zip code level are provided by Zillow, a real estate service provider in the business of compiling timely information on the housing market to aid in real estate sales. Housing values in given neighborhoods are meant to reflect information about not only the amenities in a house, but also the quality of schools, libraries and other public services that owners consider when making location decisions. Nonetheless, this finding should be interpreted cautiously for three reasons. First, our moving measure likely does not adequately capture temporal ordering; second, housing values of owner-occupied homes are an imperfect proxy for overall neighborhood housing quality; and third, we only capture moves across zip codes. Because within-zip code moves are not represented in these data, we are likely underestimating both the occurrence of moves and the relationship between regularity and mobility. Despite these limitations, our results hold up to various sensitivity tests, and consistently suggest a positive association between child support regularity and housing stability and quality. Thus, our results contribute to the policy discussion regarding the

importance of the regularity, as well as the total amount, of child support payments. The results also suggest that housing stability and quality are outcomes deserving of further attention in the study of child support policy.

References

Berkner B. and Faber C. S. (2003). "Geographical Mobility: 1995 to 2000." Washington, D.C.: U.S. Census Bureau.

Bzostek, S. H., McLanahan, S. S., and Carlson, M. J. (2012). "Mothers' Repartnering after a Nonmarital Birth." *Social Forces* 90 (3): 817–841.

Cancian, Maria, and Daniel R. Meyer. (2006). "Child Support and the Economy." 338–65 in *Working and Poor: How Economic and Policy Changes Are Affecting Low-Wage Workers*, edited by Rebecca M. Blank, Sheldon H. Danziger, and Robert F. Schoeni. New York: Russell Sage.

Crowley, S. (2003). "The Affordable Housing Crisis: Residential Mobility of Poor Families and School Mobility of Poor Children." *Journal of Negro Education*, 72: (1), 22–38.

Cunningham, M., Harwood, R., and Hall, S. (2010). "Residential Instability and the McKinney-Vento Homeless Children and Education Program: What We Know, Plus Gaps in Research." Washington, D.C.: Urban Institute.

Curtis, M. A. (2011). The Impact of Housing Subsidies and Prices on Mothers' Living Arrangements: Evidence from the Census. *Housing Studies* 26(5), 747–765.

Curtis, M. A., Corman, H., Noonan, K., and Reichman, N. E. (2013). Life Shocks and Homelessness. *Demography*, *50*(6), 2227–2253.

Ha, Y., Cancian, M., and Meyer, D. R. (2011). The Regularity of Child Support and its Contribution to the Regularity of Income. *Social Service Review*, *85*(3), 401–419.

Hartman, C., and Robinson, D. (2003). Evictions: The Hidden Housing Problem. *Housing Policy Debate*, *14*(4), 461–501.

Ihrke, D. K., Faber, C. S., and Koerber, W. K. "Geographical Mobility: 2008 to 2009." Washington, D.C.: U.S. Census Bureau.

Kingsley, G. T., Jordan, A., and Traynor, W. (2012). Addressing Residential Instability: Options for Cities and Community Initiatives. *Cityscape*, 161–184.

Kreider, R. M. (2006, August). Remarriage in the United States. In *Poster presented at the annual meeting of the American Sociological Association, Montreal*.

Phinney, R. (2013). Exploring Residential Mobility among Low-Income Families. *Social Service Review*, *87*(4), 780–815.

Walter, M., Hewitt, B., Natalier, K., Wulff, M., and Reynolds, M. (2010). The Implications of Child Support for Housing after Relationship Dissolution. *Journal of Family Studies*, 16(1), 77–87.