

# Understanding the Role of Family Mechanisms in Non-Resident Father Families on Child Food Insecurity

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# Childhood Hunger & Mother-Headed Families

- № 16.7 mill. children lived in a food insecure household in 2011.
- №8.6 million children lived in a household in which the children were food insecure.
- \*845,000 children lived in a household with very low food security among children in the household.
- Food insecurity rates for households with children:
  - Female-headed families: 36.8%
  - Married-couple families: 13.9%



# Childhood Hunger & Mother-Headed Families

- More than one-quarter of all children currently live with only one parent (most often their mother) (U.S. Census Bureau, 2012).
- More than half of all U.S. children will spend time growing up outside of a two-parent family (Kennedy and Bumpass, 2008).
- ▶ Previous research has identified factors related to food insecurity:
  - Lower household income and asset levels
  - Lower parental education
  - Being in a household headed by a single parent
- Research has also found that female-headed homes may be at particularly high risk for food insecurity, even after controlling for some of these factors (Ribar & Hamrick, 2003; Rose, 1999; Winship & Jencks, 2002).



### Nonresident Fathers' Involvement

- Social policy over the last several decades has focused on increasing nonresident fathers' financial involvement in their children's lives.
- Three main types of father involvement (Argys et al., 2006; Garasky et al., 2006)
  - Cash support via the formal child support system or provided informally
  - Non-cash (in-kind) contributions of items like food,
    clothes, or other items directly to the mother or child
  - Social involvement, reflecting the frequency and duration of time spent with children.



### Nonresident Fathers' Involvement

- Patterns and packages of involvement and contributions vary substantially across families.
  - Garasky et al. (2010) found that the domains of father involvement were positively related and highly intertwined. Relationships were strongest between inkind support and visitation (social contact).
  - Many fathers maintain consistently high (~40%) or consistently low (~30%) levels of contact as their children age. A substantial minority (~25%) decrease contact over time (Cheadle et al., 2010).



### Research Questions

#### This study:

- Does nonresident father involvement have a direct impact on child food security?
- Do these effects differ in magnitude and possibly direction by type of father involvement?
- Does the presence of a stepfather have an effect on child food security?



#### Data

- Panel Study of Income Dynamics-Child Development Supplement (PSID-CDS)
  - Nationally representative sample
  - CDS children ages 0-12 in 1997; 3 waves ('97, '02-'03, '07-'08)
  - USDA's Food Security Module and component Child Food Security Scale, an established measure of food insecurity.
  - Income, family structure and household composition data from contemporaneous PSID interview waves.
  - Together, the data provide detailed information on child characteristics, family structure, and relevant covariates



### **Current Study Sample**

- ► PSID-CDS, N=573
  - Children age 0-12 years who participated in CDS-I
  - live with their biological mother
  - have a living nonresident father
  - 86 children with re-married mothers and a stepfather present



### Children's Food Security Scale

# 8 child-referenced questions from the USDA/FNS Food Security Module:

- 1. "We relied on only a few kinds of low-cost food to feed our children because we were running out of money to buy food." Was that often, sometimes, or never true for you in the last 12 months?
- 2. "We couldn't feed our children a balanced meal, because we couldn't afford that." Was that often, sometimes, or never true for you in the last 12 months?
- 3. "The children were not eating enough because we just couldn't afford enough food." Was that often, sometimes, or never true for you in the last 12 months?
- 4. In the last 12 months, did you ever cut the size of any of the children's meals because there wasn't enough money for food? (Yes/No)
- 5. In the last 12 months, were the children ever hungry but you just couldn't afford more food? (Yes/No)
- 6. In the last 12 months, did any of the children ever skip a meal because there wasn't enough money for food? (Yes/No)
- 7. (If yes to Question 6) How often did this happen— almost every month, some months but not every month, or in only 1 or 2 months?
- 8. In the last 12 months did any of the children ever not eat for a whole day because there wasn't enough money for food? (Yes/No)



### Measures: Food Insecurity

### Based on the Children's Food Security Scale:

- Binary indicator
   – affirmative response to 2 or more questions – coded to "food insecure"
- Continuous measure— number of affirmative responses
  - Range 0-8

| Food Insecurity           |                    |  |  |
|---------------------------|--------------------|--|--|
| Binary Indicator          | 0.11               |  |  |
| <b>Continuous Measure</b> | 0.40 <i>(0.92)</i> |  |  |



### Measures: Father Involvement

- Total amount of cash support received from nonresident father in past year (\$)
- Contact Father saw child at least once per month in the past year
- Whether father provided any in-kind (non-cash support) in past year (yes/no)
  - PSID-CDS presents, paid for camp, vacation, medical costs, medical insurance, or other items?

| Father Involvement                         |             |  |  |
|--|-------------|--|--|
| Total Child Support (\$) 2504.90 (8115.11) |             |  |  |
| Any In-Kind Support                        | <b>57</b> % |  |  |
| Frequeny of Contact                        | 47%         |  |  |



## **Study Sample Characteristics**

| Means or Proportions (SD)               |         |           |
|---|---------|-----------|
| Household Characteristics               |         |           |
| HH income net of Child Support          | 3177.56 | (3310.36) |
| Total Adults in Family Unit             | 1.30    | (0.52)    |
| Father's Characteristics                |         |           |
| Re-Married                              | 0.22    |           |
| Has other children                      | 0.29    |           |
| Mother's Characteristics                |         |           |
| Re-Married                              | 0.11    |           |
| Age 17-24                               | 0.13    |           |
| Age 24-29                               | 0.23    |           |
| Age over 30                             | 0.64    |           |
| White                                   | 0.28    |           |
| Black                                   | 0.65    |           |
| Hispanic                                | 0.04    |           |
| Other Race                              | 0.03    |           |
| Less than High School                   | 0.30    |           |
| High School/GED                         | 0.36    |           |
| More than High School                   | 0.34    |           |
| Total number of children born to mother | 4.15    | (11.37)   |
| Child's Characteristics                 |         |           |
| White                                   | 0.25    |           |
| Black                                   | 0.65    |           |
| Hispanic                                | 0.04    |           |
| Other Race                              | 0.06    |           |
| Age                                     | 6.9     | (3.43)    |
| Child is Male                           | 0.52    |           |



### Statistical Methods

### Empirical approach includes:

- Logistic regressions for binary measure of child food insecurity
- Zero-inflated Poisson (ZIP) regressions for continuous measure of child food insecurity
  - Model (1) Base Model (logistic and ZIP) with father involvement measures and income
  - Model (2) Base Model + demographic characteristics of mother and child + household characteristics
  - Model (3) Restricts (2) to children whose mothers are not re-married



| Results: Zero-Inflated Models                    |             |            |           |  |
|--|-------------|------------|-----------|--|
|  | (1)         | (1) (2)    |           |  |
|  |             |            |           |  |
| Child Support \$                                 | -0.0229**   | -0.0254**  | -0.0284*  |  |
|  | (0.0103)    | (0.0120)   | (0.0163)  |  |
| In-Kind Support                                  | -0.0735     | -0.154     | -0.152    |  |
|  | (0.0849)    | (0.111)    | (0.112)   |  |
| Child Visit Frequency                            | -0.0665     | -0.0149    | -0.0504   |  |
|  | (0.0880)    | (0.0972)   | (0.116)   |  |
| Total Income net of Child Supprt \$              | -0.00429*** | -0.00442** | -0.00455  |  |
|  | (0.00142)   | (0.00197)  | (0.00299) |  |
| Mother is Re-marrried                            |             | -0.457*    |           |  |
|  |             | (0.235)    |           |  |
| Number of Observations                           | 573         | 573        | 487       |  |
| Marginal effects; Standard errors in parentheses |             |            |           |  |
| ** p<.05, *** p<.01                              |             |            |           |  |



| Results: Logit Models                            |            |            |            |  |  |
|--|------------|------------|------------|--|--|
|  | (1)        | (2)        | (3)        |  |  |
|  |            |            |            |  |  |
| ChildSupport \$                                  | -0.00756*  | -0.00628*  | -0.00736*  |  |  |
|  | (0.00386)  | (0.00334)  | (0.00404)  |  |  |
| In-Kind Support                                  | -0.00587   | -0.0128    | -0.0111    |  |  |
|  | (0.0333)   | (0.0323)   | (0.0355)   |  |  |
| Child Visit Frequency                            | -0.0357    | -0.0326    | -0.0414    |  |  |
|  | (0.0348)   | (0.0341)   | (0.0367)   |  |  |
| Total Income net of Child Supprt \$              | -0.00116** | -0.00111** | -0.00122*  |  |  |
|  | (0.000471) | (0.000473) | (0.000658) |  |  |
| Mother is Re-marrried                            |            | -0.0479    |            |  |  |
|  |            | (0.0496)   |            |  |  |
| Number of Observations                           | 573        | 573        | 487        |  |  |
| Marginal effects; Standard errors in parentheses |            |            |            |  |  |
| ** p<.05, *** p<.01                              |            |            |            |  |  |



### Conclusions

- We consider the results preliminary.
- These preliminary findings suggest that efforts to include nonresident fathers in the lives of their children may have a positive impact on efforts to reduce childhood hunger.
- Income not a significant predictor of childhood food insecurity among the sample of mothers that are not re-married.



### Conclusions

- Analyses suggest that nonresident father involvement is associated with increased child food security.
- Child-Support dollars provided by non-resident fathers are effective in reducing childhood hunger.
- In-kind support and child visit frequency not significantly associated with food insecurity.
- Re-married mother's have a positive impact on reducing child food insecurity.

