

Cash Transfers and Household Demography: Preliminary Evidence from Kenya

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Cash Transfers and Intended Impacts

- The program: Provide a social protection system through regular and predictable cash transfers to families living with OVCs in order to encourage fostering and retention of OVCs within their families and communities, and to promote their human capital development. (Ward et al. 2010)
- Why do cash transfers matter?
- Concern with externalities...
 - Gender, preferences ...
 - Program design and childbearing
 - Household structure

Theory on Cash Transfers and Demographic Outcomes

- Fertility in sub-Saharan African context
 - Declining fertility
 - Role of HIV/AIDS (individual and community effects)
- Impact of cash transfers on child demand
 - Income effects
 - Children as normal goods
 - Income and risk
 - Income effects among the poorest poor
 - Children as insurance / old-age security

Theory on Cash Transfers and Demographic Outcomes

- Income could overcome income-related migration constraints
 - Safety first / Market imperfections
 - Enterprise investment or migration resource?
- Home production versus market
 - Elderly may be more desired?

Theory on Cash Transfers and Demographic Outcomes

- Empirical Evidence: From CCTs
 - Transfers and Childbearing
 - Transfers and Household Structure
 - Transfers and Migration

Our Plan

- Do cash transfers raise childbearing?
- Do cash transfers create other systematic compositional changes in households?
 - Fostering, adoption
 - Migration
 - Marriage

Data

- Kenya and Mozambique
- Advantages:
 - Experimental design with random assignment
 - Pre and Post treatment rounds
 - Questionnaires collect important household data
- Disadvantages
 - No fertility / migration questions
 - Roster becomes main tool. Inference is indirect
 - Difficulty in linking new household members
 - Limited production module

Methods: Treatment

- Biggest issue is definition of treatment effects
 - We use A vs. B
 - We use A vs. B with reported receipt of treatment
- Issue Carolyn mentioned on panel: we repeated on panel and results mostly consistent except for slight decline in significance for women

Methods: Fertility Analysis

- Diff-Diff estimates of number of young children between rounds
 - Various age intervals
 - Differentiation by kinship ties
- Single Diff estimates of new children added to roster in round 2
- Examinations on all households and with limits for women of reproductive age
- Focus on eligibles

Methods: Household Composition

- Diff-Diff estimates of number of adults at different ages
 - Various age intervals
- In second round, information available on purpose of departure /arrival of members

Results 1: Childbearing

Round 2 logistic on reported newborns

	All Households		Households with WRA	
	ITT	Treatment	ITT	Treatment
Urban	0.118	-0.022	0.267	0.117
Head Age	-0.060**	-0.058**	-0.071**	-0.076**
Head Age Sq.	0	0.000^	0.000^	0.001*
Head Educ. Level 2	-0.171	-0.008	-0.06	0.176
Head Educ. Level 3	0.077	-0.052	0.161	-0.036
Head Educ. Level 4	-0.106	-0.273	-0.094	-0.268
Head Educ. Level 5	-0.285	-0.373	-0.038	-0.103
Head Educ. Level 6	-0.289	-0.49	-0.193	-0.468
Treatment	-0.054	0.033	-0.224	-0.135
Constant	0.409	0.215	0.747	0.653
No. of cases	2004	1089	1664	867

^ p<0.10, * p<0.05, ** p<0.01

Controls for Head Age, Head Age Squared, Head Education Level and Urban

Results 2: Childbearing DD Regression on Children

	Number of Children		Number OVCs		Number Non-OVCs	
	ITT	Treatment	ITT	Treatment	ITT	Treatment
Time	0.105	0.15	0.169*	0.203**	-0.063	-0.053
Treatment	0.017	-0.02	0.138	0.163	-0.121	-0.183
Time x Treatment	-0.044	-0.093	-0.044	-0.085	0	-0.009
No. of cases	4476	3706	4476	3706	4476	3706

^ p<0.10, * p<0.05, ** p<0.01

Controls included for Head Age, Head Age Squared, Head Education Level and Urban

Results 3: Childbearing

OLS / Logistic for Children on Roster

Intent to Treat Analyses on
Number of Children in Roster at Each Round

	Children <=1		Children <=2		Children <=3	
	Number of Children	Any Children	Number of Children	Any Children	Number of Children	Any Children
Time	-0.001	-0.013	-0.01	-0.03	-0.009	-0.015
Treatment	0.002	-0.009	-0.011	-0.077	-0.004	-0.058
Time X Treatment	0.002	0.033	-0.003	0.007	0.015	0.035
No. of cases	4476	3706	4476	3706	4476	3706

^ p<0.10, * p<0.05, ** p<0.01

Controls included for Head Age, Head Age Squared, Head Education Level and Urban

Results 4: Childbearing

OLS / Logistic for Children by Kinship

Kinship Relationship Type

	Adopted/Fostered		Nuclear Kin		Extended Kin	
	Number of Children	Any Children	Number of Children	Any Children	Number of Children	Any Children
Time	0.007	-0.198	0.334**	0.381**	-0.143	0.384**
Treatment	0.009	0.136	0.309*	0.250^	-0.311	0.619**
Time X Treatment	-0.036	-0.42	-0.160^	-0.132	0.001	-0.069
No. of cases	4476	4476	4476	4476	4476	4601

^ p<0.10, * p<0.05, ** p<0.01

Controls included for Head Age, Head Age Squared, Head Education Level and Urban

Results 5: Household composition

Poisson Regression to Estimate
Person Counts in Age Groups

	Age 12-17	Ages 18-34	Ages 35-54	Ages 55+
Time	0.051	0.242**	0.067	-0.314**
Treatment	-0.003	-0.056	-0.073	0.119
Time x Treatment	0.004	-0.119*	-0.095	0.245**
No. of cases	3706	3706	3706	3706

^ p<0.10, * p<0.05, ** p<0.01

Controls included for Head Age, Head Age Squared, Head Education Level and Urban

Results 6: Household composition

Logistic Regression to Estimate Presence of Male and Female Working Age Adults

	Females 18-34	Males 18-34
Time	0.895**	0.105
Treatment	0.125	0.097
Time x Treatment	-0.312*	0.116
No. of cases	3706	3706

^ p<0.10, * p<0.05, ** p<0.01

Controls included for Head Age, Head Age Squared, Head Education Level and Urban

Results 7: Household composition

Logistic Regression to Estimate Presence of Male and Female Elderly

	Females 55+	Males 55+
Time	-0.052	0.07
Treatment	0.084	0.101
Time x Treatment	0.166*	0.045
No. of cases	3706	3706

^ p<0.10, * p<0.05, ** p<0.01

Controls included for Head Age, Head Age Squared, Head Education Level and Urban

Discussion

- Fertility non-effects seem very consistent
 - Neither income nor security benefits of program appear to alter childbearing
 - Nor do they have effects on various other related indicators
- Household composition however does change
 - Shift outwards of young working age persons (parents?)
 - This shift is primarily women
 - Shift inwards of older persons
 - This shift is also women

Next Steps

- Identify treatment and intent to treat more clearly
- Identify eligibility; conditionality group
- Attrition.
- Determine variation in date treatment began
 - If no variation ignorable
 - Otherwise, use for exposure control
 - Can be at households or community level

Next Steps

- Are household joiners and goers for same hh?
 - Are household goers not working?
 - Are household joiners coming for childcare?
- Explore gender and household structure more closely