"Who's the Boss at Home after Receiving Conditional Cash Transfers?"

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Session Title: Exploiting Experiments and Quasi-Experiments to Identify Gender Related

Outcomes.

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Who's the Boss at Home after Receiving Conditional Cash Transfers?[*]

Female empowerment has been greatly debated in the public policy agenda and extensively studied in academia. The fact that the World Development Report of 2012 is entirely devoted to the subject is an example of its importance in the policy agenda. In academia, the questioning by theorists regarding the income pooling model has led to an interesting discussion with evidence suggesting that indeed individual preferences within the households differ significantly (Browning and Chiappori 1998 and Udry 1996). Empirical evidence also point to the same direction. Several studies find that women and men take different investment decisions regarding children's health, education, labor market participation and food consumption (Thomas 1994 and Duflo 2003, among others).

This paper studies if Conditional Cash Transfer programs (CCT), understood as exogenous income shocks periodically received by a beneficiary mother, affect female empowerment. CCT programs can increase women's bargaining power through three complementary channels. The first one is the direct transfer of money that increases women's financial resources, a characteristic positively related with bargaining power (Anderson and Eswaran 2007, among others). The second channel refers to the fact that the program generally improves social networks by inviting women to participate in education and health related group conferences. These meetings may enhance community support and help exchange experiences that could also modify women's behavior. Finally, the program induces mothers to interact with health care professionals who provide them with basic children's health and nutritional information, increasing their knowledge and allowing them to take informed decisions at home. Despite these

positive channels, CCTs may have no effect or even a negative one on women's power. Such a case could emerge if for example, the transfer is diluted within the household or if men's involvement in the household's decision making increases in order to maintain control over the transfer payments (Duryea and Schargrodsky 2008). Another possible situation could be women suffering from domestic violence as a mechanism used by male partners seeking to maintain control over household decisions or budget (Bobonis, Castro and Gonzalez-Brenes 2009). Additionally, there could be a reduction in labor force participation or longer unemployment spells of females receiving CCTs which would reduce their contribution to the household's income. Thus, the impact of CCT on women's empowerment remains an empirical question, one which this paper seeks to address.

Despite the fact that CCT programs have been increasingly implemented in the developing world, where female empowerment remains a big issue, there is scarce evidence on the economic literature regarding this aspect. The only exception is the study by Adato et al. (2000) which evaluates the effect of PROGRESA on women's status and intra-household relationships. However, given that the information on women's empowerment is not available in the baseline survey, the authors can only estimate how the effect of the program has changed overtime and not the impact of the program itself. Therefore, this paper contributes to the literature by studying the effect of CCT's on household female empowerment, using the case of *Familias en Acción* (FeA), a CCT program in Colombia. Specifically, we measure women's empowerment through direct questions made to beneficiary mothers regarding who is in charge of taking certain decisions in their households. With this information we compare decision taking before and after the implementation of the program.

I.   Data and Methodology

Familias en Acción is a CCT program, inspired on PROGRESA, which started in Colombia in the year 2001. Its main objective is to provide nutrition and education subsidies to children belonging to the poorest families in the country. Throughout the study period, the program gave a direct cash transfer of 7.5 and 15 dollars per month to all beneficiary mothers with kids in primary and secondary school respectively. In order to receive the transfer, children should meet the condition of attending a minimum of 80% of the school days. This program also provided a grant of 25 dollars per household with children under the age of seven, conditional on attending routine medical appointments.

Even though the program was not randomly assigned, the government made an effort to collect the necessary information to evaluate its impact. To do so, 57 and 65 stratified treatment and control municipalities were chosen in order to be as similar as possible. Within them, households were randomly chosen to answer a standard multi-topic longitudinal household survey. The survey includes questions on demographics, household structure, education, health, consumption, employment, anthropometry, housing, shocks, and community education and health facilities. In this paper we use information from the baseline survey and the first follow up. The baseline measurement was carried out between June and October 2002, and the first follow-up survey revisited the same households between July and December 2003. Given the important efforts made in the collecting of the data, attrition only accounts for nearly 6%.[1]

In total, we have information on 6,345 married or cohabiting women that answered the household decision questionnaire at baseline and first follow-up surveys. Of this sample 3,515 (55.4%) reside in treatment municipalities. At baseline, women have an average age of 38,

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[1] For greater detail on the program, its implementation, the data collection process, and the survey please refer to Attanasio, Fitzsimmons, and Gomez (2005) and Attanasio, Battistin, and Mesnard (2009).

approximately 3.4 years of education and almost 35% of them work for pay. With respect to the husband, the average age is 43, 93% of them participate in the labor market, and they have on average half a year less of education compared to females. Finally, regarding household composition, we find that almost every household has one member between the ages of 0 and 6; one member between the ages of 7 and12 and one member between 13 and 17, with an average transfer of 30 dollars per month.

We follow the literature on women's empowerment by using as outcome variable questions regarding who in the household is responsible for taking certain decisions (some examples include Adato et al. 2000; Anderson and Eswaran 2007; and Ashraf, Karlan, and Yin 2010). Specifically the surveys ask: who decides when to take a child to the doctor if sick; who decides if the child goes to school if they don't want to; who decides whether or not to buy children's clothes and shoes; who decides how much is spent on food; and finally who decides if certain extra spending is done (e.g. fix something in the household or buy appliances). For each decision there were four main possible answers: father decides alone, mother decides alone, joint decision between mother and father and finally other members in the household decide. According to the baseline data, decisions regarding the doctor are normally made jointly (54%) or by the woman (36%), while the father or other members in the household have very little say (8% and 1% respectively). Regarding school, decisions are again taken mainly by the woman (44%) or jointly (43%) and in very few cases the responsible one is either the father or other member of the household (10% and 2% respectively). The man is more frequently the sole decision taker in comparison to the women concerning children's clothes and shoes (25% vs. 23%), food consumption (40% vs. 22%) and extra spending (37% vs. 13%). For these three questions, joint decisions are reported in 48%, 34% and 44% respectively.

Given the structure of our variable of interest we estimate the impact of FeA on women's empowerment through two different methodologies. We first present results using a multinomial logit model allowing us to use the different answers available for each decision in the survey. We also estimate a Linear Probability panel model with women's fixed effects. Due to the quasi experimental structure of the data one could estimate the impact of the program using a simple difference in difference model, conditional on household and municipality characteristics where the natural treatment variable is a dummy equal to one for beneficiary mothers. Nonetheless, we address differences in the quasi-experimental design by going three steps forward. First, we present estimation results after running a Propensity Score including similar controls as used previously by Attanasio, Fitzsimmons, and Gomez (2005) and restricting our sample to women who fall within the common support. Second, in a similar way to Aizer (2011), we enhance our treatment variable by checking whether the relative amount of the transfer with respect to women's income is the driving mechanism. The use of the latter treatment provides very similar results. Finally, it should be mentioned that due to political pressure the program started before the baseline survey was completed in almost half of the treatment municipalities. Hence, there are actually two types of treatment groups: i) those that received the first payment before the baseline survey and, ii) those that did not receive payments before the baseline survey. Robustness checks confirm that using women residing only in municipalities without payment before the baseline survey, and their corresponding controls, also give very similar results.[2]

II.   Results and Conclusions

Familias en Acción has not empowered beneficiary women in any of the five dimensions evaluated. On the contrary, for schooling and extra spending decisions, after the implementation

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[2] The results of all these robustness checks are available upon request.

of the program the beneficiary mother has a lower probability of being the sole decision taker compared to the father, as presented in Table 1. For schooling the probability of taking a joint decision also decreases. Results using a Linear Probability Model including mother fixed effects are consistent with these findings as presented in column 4 of the same Table. The coefficients from these last models imply a reduction of 3 percentage points in the both specifications. This accounts for a reduction in 3 percent and 23 percent in the rate of schooling and extra spending decisions taken by the mother respectively.

Table 1: Multinomial Logit and OLS Fixed Effects Regression.

	Mlogit Results			OLS Fixed Effects
	School decision			
	Mother decides	Both decide	Others decide	Mother or both decide[a]
Received FeA*First follow-up dummy	-0.434***	-0.475***	-0.509	-0.029**
	[0.158]	[0.158]	[0.347]	[0.014]
	Extra spending decision			
Received FeA*First follow-up dummy	-0.252*	0.027	-0.165	-0.034**
	[0.143]	[0.099]	[0.263]	[0.015]
Observations	8,161	8,161	8,161	8,161

Source: Sinergia, DNP.

[a]In the case of extra spending the dependent variable is equal to one if the mother is the sole decision taker. All regresions include as control variables: estimated propensity score, dummy variable for having recieved FeA, dummy variable of first follow up, Woman's age, Husband's/Head age, Husband's/Head years of education, Woman's years of education, Woman's works, Husband's/Head works, Education ratio (Husband's/Head over woman's), Household members between ages 0-6, Household members between ages 7-12, Household members between ages 13-17.

Robust standard errors in brackets (*** $p<0.01$, ** $p<0.05$, * $p<0.1$).

We further analyzed whether this negative impact found in schooling decision is homogenous among all women or if it depends on their age and level of education. To do so, we do two separate exercises. First, we interact our variable of interest with five excluding age categories and find that older women (between 38 and 49 years) are the ones that lose power in terms of schooling decisions after receiving the transfer. Second, we do the interaction with three excluding education categories finding that non-educated women are the ones who are negatively

affected by the program. We do not find consistent heterogeneous effects for the case of extra spending decisions.

An interesting question that emerges is why women lose power in these decisions. For schooling, one reason that might appear as possible explanation is that the condition of school attendance is binding. Hence, men could now view the schooling decision as a source of extra money for the household and decide to take control over it. If this is the case this negative effect should be expected to be only present in households with children between 7 and 18 years old that are effectively receiving the education subsidy. Households with children below 7 years old would be receiving only the nutrition subsidy and hence this negative effect should not be observed. To explore this possibility we run our regressions dividing the sample in two groups: households with and without children above seven years. As shown in Table 2, the effect is coming precisely from households where there are children above seven. As expected, when we run the same separate regressions for extra spending decision, which should not have a differential effect according to children's age, we find a negative and significant effect for both groups under the multinomial logit methodology as shown in Table 2.

Table 2: Complementary Multinomial Logit and OLS Fixed Effects Regressions.

	Mlogit Results			OLS Fixed Effects	Obs.
	School decision				
	Mother decides	Both decide	Others decide	Mother or both decide[a]	
Received FeA*First follow-up dummy (children<7)	0.290	-0.027	1.092	-0.019	852
	[0.479]	[0.466]	[0.710]	[0.053]	
Received FeA*First follow-up dummy (children≥7)	-0.744***	-0.889***	-1.551***	-0.040*	3,284
	[0.260]	[0.261]	[0.554]	[0.022]	
	Extra spending decision				
Received FeA*First follow-up dummy (children<7)	-1.164**	-0.100	0.552	-0.056	854
	[0.550]	[0.300]	[0.958]	[0.036]	
Received FeA*First follow-up dummy (children≥7)	-0.372*	0.048	-0.385	-0.051**	3,281
	[0.217]	[0.159]	[0.382]	[0.024]	

Source: Sinergia, DNP.
[a]In the case of extra spending decision the dependent variable is equal to one if the mother is the sole decision taker.
All regresions include as control variables the same as reported in Table1.
Robust standard errors in brackets (*** $p<0.01$, ** $p<0.05$, * $p<0.1$).

Although no other study in the literature answers this paper´s specific question, some interesting comparisons can be made regarding the costs and benefits CCT bring to women's status. In a very similar context, Adato et al. (2000) find that there is a very small increase over time in women's empowerment regarding the use of extra income after the implementation of PROGRESA. Although our results go in the opposite direction, given their data limitation, one should be cautious when interpreting their estimates as a causal impact of PROGRESA. The lack of positive results of the impact of CCTs on women's empowerment found in this paper is similar to the results by Bobonis, Castro and Gonzalez-Brenes (2009) concerning women's exposure to domestic violence.

Finally, we should note that several papers in the literature have found changes in household consumption for those benefited by CCT programs (Attanasio, Battistin, and Mesnard 2009, Attanasio and Lechene 2002, Schady and Rosero 2006, among others). Many of these papers

suggest that one possible channel that may be driving these results is changes in women's bargaining power within the household after receiving CCTs. Our results, especially those related with no changes in the empowerment of women regarding who takes food purchase decisions, provide robust evidence suggesting that this might not be the channel at work.

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