# Agency in Household Decision-Making: Lab-in-the-field Experiments and Cash Transfers in Rural Nigeria

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### Outline

Background and Motivation

2 What We Did

What We Found

### Motivation

- Women's Agency: Intrinsically important
  - Also, has instrumental value: when financial decisions are made by women in poor HHs ⇒ savings and loan repayment ↑ (De Aghion and Murdoch, 2004)
  - Children outcomes, such as education and nutrition ↑ (Thomas, 1994; Hoddinott and Haddad, 1995; Duflo, 2003).
- However, involvement of women in HH decision-making is severely limited in many low-income contexts (Duflo, 2012; WDR, 2012)
  - There is, therefore, a demand for policy interventions to empower women in low-income settings
- Question: What are the 'longer-term' impacts of a female-targeted Unconditional Cash Transfer (UCT) program on experimental measures of agency in household decision-making?

# Cash Transfer Programs and Agency

- Cash transfer programs, in particular, unconditional cash transfers (UCTs) receiving renewed attention
  - as a potential tool for poverty alleviation in developing countries
- Recent evidence on UCTs
  - large short and medium-term effects on consumption and asset accumulation among other household outcomes (Haushofer and Shapiro 2016, Blattman et al. 2013).
- But limited evidence (and even less experimental evidence) on any potential impact on women's agency in HH decision-making
  - particularly in the 'longer run', when the immediate (and direct) income effect of the cash transfer is likely to have diminished
- Why impact possible?
  - ▶ May lead to gaining experiences with exercising agency (e.g., by deciding how to spend the cash transfer money) ⇒ can increase involvement in HH decision-making in the longer term
  - If credit/capital constrained, UCT recipients may become more involved with income generating activity

### Cash Transfer Programs and Agency

- Only a few studies that look into the effect of a cash transfer on experimental measures of female 'empowerment'
- Almas et al. (2018) find: female recipients of a long-term CCT exhibit a lower willingness to pay (WTP) to receive a windfall themselves instead of their spouses receiving it
  - i.e., female CCT recipients less likely to give up on a bigger pie for their household just because their husbands were receiving it
- Make the case that this is evidence for an improved intra-household bargaining power for the CCT-receiving women
- However, do not provide any direct evidence on the impact of receiving a cash transfer on women's improved agency in HH decision-making
- Also, difficult to rule out other channels at work: fairness norms, aversion to taxation by family/'rotten kins' (Jakiela and Ozier, 2016)

### Context - Rural Nigeria

- Rural Kebbi, north-west Nigeria
- Historically, women have experienced very low decision-making power and severely restricted mobility
- DHS Nigeria, 2013 asks about womens' involvement in three types of household decisions: their own health care, making major household purchases, and visits to family or relatives
  - ▶ less than 2% of married women in Kebbi report to have participated in all three decisions
  - more than 90% of married women in Kebbi participated in none of these three decisions
- Public health literature (e.g., Wall, 1998) identifies areas in Kebbi as some of the worst in the world for maternal health outcomes

### Cash Transfer Intervention

- Carried out as a Randomized Control Trial by Catholic Relief Services
- Implemented in two Local Government Authorities (LGAs) in the state of Kebbi
- Household level randomization on eligible households
  - extremely vulnerable based on a Progress Out of Poverty Index (PPI) assessment
  - public lottery: 1,269 treatment HHs; 1,270 control HHs
- 15-month-long unconditional cash transfer (UCT) program
  - payment of 75,000 Nigerian Naira (~ USD 693 PPP) over a period of fifteen months
- Adult female recipients from a household

### Lab-in-the-field Experiments

- Carried out lab experiments in the field on the UCT IE sample
  - only married couples invited
  - we targeted villages that had a school nearby
  - 13 months after the UCT program ended
- Lab-experimental sample consisted of
  - ▶ 503 HHs total: 252 UCT-receiving HHs and 251 control households
  - 38 experimental sessions
  - 22 different sites
  - subjects from 27 villages attended

### Measures from Lab-in-the-field Experiments

- Primary measure: Executive agency (ability to make decisions independently) (Fafchamps, et. al. 2018)
  - ▶ do women defer decision-making to spouse? (Islam et. al., 2018)
    - ★ vary cost of deferring/exerting agency
  - do women revise decisions after receiving spousal communication?
- Experimental design offers "Secret"/"No Secret" conditions randomized at the session level
  - to vary whether decisions (such as deferring and revision) are observed by spouse
  - can distinguish: latent demand for agency (when not observed by spouse) Vs. actual exercising of agency (when observed by spouse)

### Measures from Lab-in-the-field Experiments

- Secondary measure: Consultative agency (extent of being consulted in household decisions; allows individuals to inform the decision maker about their preferences) (Fafchamps, et. al. 2018)
  - how close a subject's communication choice (to spouse) is compared to her original preference
  - do spouses choose to consult with subject's communication choice before being asked to make an allocation decision again?

### **Decision Rounds**

- Husbands and wives placed in separate rooms
- Received separate show-up fees; however, only one decision of all the
  decisions that a subject and his/her spouse made could be chosen
  through a lottery as final pay-off for their household
  - to avoid coordination games
- 'Round 1'/'Round Allocation': individual preference elicitation
  - decision involved dividing an experimental endowment (usually, 2,500 NGN) across different binary choices
  - male items vs. female items, male only items vs. items commonly used by households, female only items vs. items commonly used by households, money allocation between self vs. spouse
  - always Secret, i.e. plausible deniability
- "Secret" vs. "No-secret" experimental treatment for rest of the rounds randomized at the session level

### Experimental Decision Rounds

Husbands and wives are taken to different rooms

#### Individual Preference Elicitation (round: allocation):

For each decision in the (binary) mix for (private good consumption composition, private good-th public good composition as well as distribution of an unearned income between husband and wife) individual preferences are elicited privately. The specific decisions to be made are:

- Female vs. Male items (1)
- Male items vs. HH public goods (2)
- Female items vs. HH public goods (3)
- Money Allocation husband vs. wife (4)

#### Secret Treatment:

All decisions, including the following rounds, will be kept private from spouse.

Participants will have plausible deniability in their odecision-making by the selection of either one of their own decisions or their spouse's decisions or a randomly chosen allocation (from all possible allocations) to be chosen as final pay-off for their household. This random allocation will be termed as the "secret-keeping" choice.

#### No-Secret Treatment:

Any decision made after (round: **allocation**) can be potentially observed by spouse. Any final pay-0f can still be a random allocation/"secret-keeping" choice. However, if any of the following rounds are chosen, the actual decision by a participant will be disclosed to the spouse

Deferring of Decision-making to spouse (round: defer):

For each decision domain in {1, 2, 3, 4} participant is asked to make one of two choices after being told that "Your spouse has made a similar allocation decision in the next room":

• "Would you like to use the choice you made earlier as the final decision for this round? OR

•Would you like to change your choice to your spouse's choice as the final decision for this round?"

### **Decision Rounds**

Suggestion/Communication Decision (round: communication):

For each decision domain in (2, 3, 4) participant is asked: "Recall the decision that you made earlier with []. Your spouse is going to making a similar decision again in another room. We are going to pass on information about what you choose to your spouse before he/she makes her decision. What would you like this to be? You made the following allocation earlier: ...

#### Consultation Decision (Round: consult):

"Remember the decision that you made about {2, 3, 4} earlier. Your spouse has also been asked to make the same decision in the other room. You can choose to either: (a) still use the choice you made earlier or

(b) see your spouse's choice before making the choice again

Revision Decision (implemented regardless of the decision above) (Round: revision):

Remember the decision that you made about {2, 3, 4}. You will now be shown the decision you made earlier and a decision that your spouse has made. You can choose your earlier decision, your spouse's decision or something else. Please make the decision again"

#### Decision on Immediate Consumption (round: lab-consumption):

"You will now be offered to consume within the session, a food and a drink item from several options. At any point of this round, you can refuse to taste or consume the items you are being offered.

We have two types of drinks available for you, i.e., Coke and Fanta, with the same market price. We also have two types of cookies available for you, all valued locally at the same price.

- · You must drink and eat these items here. You cannot take them outside.
- · Which food and drink do you want to consume?
- · Which food and drink do you want your spouse to consume?

We have also asked your spouse to select a food and drink for you to consume. You can choose to either: (a) use the choice you made earlier or (b) change your choice to your spouse's choice.

For some sessions, we used half the amount for choice (a)

# Adult Male Items



### Adult Female Items



# HH Public Goods



# Pictures



# Potential Measures of Agency - Control HHs

Experimental Measures of Agency	Female Means	Male Means
(1) Defer to Sp.: Own Immed. Consump. Decision	0.750	0.181
(2) Defer to Sp.: HH. Consump. & Alloc. Decision	0.706	0.221
(3) Revision (after Sp.'s Communication) ≠ Orig. Preference	0.703	0.137
(4) Revision (after Sp.'s Communication) = Sp.'s Communication	0.576	0.155
(5) Communication to Sp. ≠ Orig. Preference	0.245	0.091
(6) Would Like to See Spouse's Communication	0.537	0.200

Notes: In this table, the computed means of different experimental measures of agency across several decision domains are reported separately for males and females. Only 'pure control' households which were randomly selected to not receive the UCT or any other service in the study area were used for the calculations.

Variables in Rows (1)-(4) denote measures for executive agency, while those in Rows (5)-(6) are measures for consultative agency.

### Investigation and Hypotheses

- Investigation A: Does being a recipient of a UCT change preference, i.e., the allocation amount,  $A_{ig}$ , in the first round?
- Hypothesis 1: In the longer-term, UCT-receiving women, compared to non- recipients, are less likely to *defer* decision-making to their spouse. This is in the absence of any spousal communication.
  - ▶ Investigation B: Is there a different rate of *deferring* of decision-making by women, when observed by their spouse and does it vary by UCT status?
- Hypothesis 2: In the longer-term, UCT-receiving women, compared to non- recipients, are less likely to revise original decision after receiving communication from spouse.
  - Investigation C: Is there a different rate of revising of decision-making by women, when observed by their spouse and does it vary by UCT status?

### **Estimating Equations**

 Econometrically, we can look into the reduced form effects of the UCT and "No-Secret Condition" with the following equation:

$$y_{isv} = eta_0 + eta_1 \mathsf{UCT}_{iv} + eta_2 \mathsf{NoSecret}_{is} + eta_3 \mathsf{UCT}_{iv} imes \mathsf{NoSecret}_{is} + eta_v + eta_{1isv}$$
 (1)

- where  $y_{isv}$  is the outcome variable of interest (e.g., deferring of decision-making to spouse) for household i, in experimental session s, in village v
- $\varphi_{v}$  is village fixed effects
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Table 9: Reduced Form Effects of *No-Secret* Experimental Treatment and UCT Status on Preferences (<u>Female</u> Sample)

	(1) Female (vs. Male Items)	(2) Female (vs. Everyone Items)	(3) Everyone's (vs. Male Items)	(4) Allocation - Self (vs. Spouse)
1. No Secret	-44.445 (44.159)	2.813 (57.160)	-51.246 (55.937)	16.016 (61.373)
UCT=1	$15.548 \\ (54.152)$	$22.745 \\ (41.461)$	30.504 $(41.211)$	51.522 (61.904)
1. No Secret $\times$ UCT=1	103.238 (79.304)	-11.862 (66.612)	38.701 (65.750)	35.274 (80.035)
(Secret + Non-UCT) Mean	1434.583	1330.252	1422.917	1255.833
Secret Mean	1444.510	1341.732	1439.020	1282.745
Non-UCT Mean	1409.761	1332.400	1396.215	1264.542
Number of households	503	502	503	503
Number of sessions	38	38	38	38
Number of villages	27	27	27	27

<sup>\*</sup> for p<0.10, \*\* for p<.05 and \*\*\* for p<.01

Notes: The outcome variable in each of Col.1-4 is a decision that involves dividing an endowment of 2,500 Nigerian Naira (NGN) across one of two options; for example, the outcome var. in Col. 1 denotes how much is allocated for female items out of 2,500 NGN, instead of male items, which gets the rest. These decisions are carried out in the very beginning of the experimental session in the preference elicitation round (or round: Allocation) under complete privacy and plausible deniability.

In Secret condition, for any round of decision-making, spouses cannot observe participant's decisions within the experiment, i.e., participants have plausible deniability in their decision-making by the potential selection of either one of their own decisions or their spouse's decisions or a randomly chosen allocation (from all possible outcomes) as final pay-off for their household. However, in the No-Secret condition, spouses can observe participants' decisions for most of the rounds, i.e., if any round after the first round, i.e., round: Allocation, is selected as final pay-off for the household, the actual decision by a participant will be disclosed to his/her spouse.

Table 10: Reduced Form Effects of *No-Secret* Experimental Treatment and UCT Status on Deferring of Decision-Making to Spouse when Deferring is *Costless* (Female Sample)

	(1) Mean of Deferring (HH	(2) Mean of Deferring	(3) Defer: Juice/Cookie Type
	Cons.+ Alloc.) Decis.	HH Cons. Decis.	for Immed. Consump.
1. No Secret	0.003	-0.001	0.060
	(0.063)	(0.067)	(0.088)
UCT=1	-0.134***	-0.125**	-0.086
	(0.045)	(0.051)	(0.080)
1. No Secret $\times$ UCT=1	0.108	0.095	-0.005
	(0.069)	(0.074)	(0.109)
(UCT=1) +			
$(1.\text{No Secret} \times \text{UCT}=1)$	-0.026	-0.030	-0.092
	(0.052)	(0.053)	(0.073)
p-value	0.616	0.579	0.222
(Secret + Non-UCT) Mean	0.670	0.671	0.658
Secret Mean	0.599	0.605	0.616
Non-UCT Mean	0.672	0.671	0.685
Number of households	503	503	337
Number of sessions	38	38	25
Number of villages	27	27	17

<sup>\*</sup> for p<0.10, \*\* for p<.05 and \*\*\* for p<.01

Notes: Deferring of decision-making to spouse is costless when participants decide between own earlier choice or spouse's choice (i.e., they defer decision-making) and both these choices were made with the same endowment amount, which, in this case, is 2,500 NGN. Deferring or not deferring, thus, does not leave anything on the table. The specific question on deferring decision-making to spouse was: "Recall the decision that you made earlier which involved [...]. Your spouse has also been asked to make the same decision in the other room. You can choose to either: use the choice you made earlier OR change your choice to your spouse's choice."

For Col.(1) the outcome variable is the mean of the binary variables of deferring across four decisions: (a) female vs. male items (b) female vs. everyone's items (c) male vs. everyone's items (d) money allocation between self and spouse. For Col.(2), the outcome variable is the mean of the binary variables of deferring across the three household consumption decisions listed above, i.e., (a) female vs. male items, (b) and (c).

For Col.(3), the outcome variable is the decision to defer the choice of juice flavor and cookie type (for own immediate consumption within the lab session) to one's spouse. Note that the number of observations for Col.(3) is less because we only report results for sessions in which the cost of deferring this decision-making was zero, i.e., participants choose between (full amount of) own earlier choice or (full amount of) spouse's choice of cookies and drinks for own immediate consumption. In the remaining sessions, a cost is imposed for choosing own earlier choice, i.e., participants choose between (half the amount) of own earlier choice or (full amount of) spouse's choice of cookies and drinks for own immediate consumption.

Table 11: Reduced Form Effects of *No-Secret* Experimental Treatment and UCT Status on Deferring of Decision-Making to Spouse when Deferring is *Costless* (Female Sample)

	(1)	(2)	(3)	(4)
	Defer: Female or Male Items	Defer: Female or Everyone Items	Defer: Male or Everyone Items	Defer: Money Alloc. Self or Spouse
1. No Secret	-0.002 $(0.075)$	0.028 $(0.082)$	-0.034 $(0.073)$	0.015 $(0.066)$
UCT=1	-0.143** (0.063)	-0.093 $(0.065)$	-0.161*** (0.056)	$-0.157^{***}$ $(0.047)$
1. No Secret $\times$ UCT=1	0.092 $(0.084)$	0.027 $(0.087)$	$0.173^*$ $(0.095)$	0.146* (0.085)
(UCT=1) +				
$(1.\text{No Secret} \times \text{UCT}=1)$	-0.051	-0.065	0.012	-0.011
	(0.056)	(0.058)	(0.075)	(0.070)
p-value	0.371	0.270	0.872	0.873
(Secret + Non-UCT) Mean	0.673	0.650	0.700	0.667
Secret Mean	0.596	0.600	0.616	0.584
Non-UCT Mean	0.673	0.665	0.681	0.673
Number of households	450	503	503	503
Number of sessions	34	38	38	38
Number of villages	24	27	27	27

<sup>\*</sup> for p<0.10, \*\* for p<.05 and \*\*\* for p<.01

*Notes:* Deferring of decision-making to spouse is *costless* when participants decide between own earlier choice or spouse's choice (i.e., they defer decision-making) and both these choices were made with the same endowment amount. Deferring or not deferring, in this case, does not leave anything on the table.

The specific question on deferring decision-making to spouse was: "Recall the decision that you made earlier which involved [...]. Your spouse has also been asked to make the same decision in the other room. You can choose to either: use the choice you made earlier OR change your choice to your spouse's choice."

In Secret condition, for any round of decision-making, spouses cannot observe participant's decisions within the experiment, i.e., participants have plausible deniability in their decision-making by the potential selection of either one of their own decisions or their spouse's decisions or a randomly chosen allocation (from all possible outcomes) as final pay-off for their household. However, in the No-Secret condition, spouses can observe participants' decisions for most of the rounds, i.e., if any round after the first round, i.e., round: Allocation, is selected as final pay-off for the household, the actual decision by a participant will be disclosed to his/her spouse. All regressions include village fixed effects. SEs are clustered at the level of experimental session.

Table 12: (Immed. Consumption Efficiency) Effect on Deferring the Choice of Immediate Consumption of Food and Drink to Spouse when Cost of Deferring is Decreased (Female Sample)

	(1)	(2)	(3)
	Def.: Own Choice (Full)	Def.: Own Choice (Half)	Def.: Own or Sp.'s Choice
	Sp.'s Choice (Full)	Sp.'s Choice (Full)	All Sess.: $(1)+(2)$
1. No Secret	0.060	-0.039	0.029
	(0.088)	(0.053)	(0.068)
UCT=1	-0.086	-0.149**	-0.108*
	(0.080)	(0.061)	(0.057)
1. No Secret $\times$ UCT=1	-0.005	0.134	0.028
	(0.109)	(0.108)	(0.082)
(UCT=1) +			
$(1.\text{No Secret} \times \text{UCT}=1)$	-0.092	-0.015	-0.080
	(0.073)	(0.090)	(0.058)
p-value	0.222	0.870	0.177
(Secret + Non-UCT) Mean	0.658	0.951	0.758
Secret Mean	0.616	0.868	0.706
Non-UCT Mean	0.685	0.930	0.769
Number of households	337	166	503
Number of sessions	25	13	38
Number of villages	17	10	27

<sup>\*</sup> for p<0.10, \*\* for p<.05 and \*\*\* for p<.01

Notes: Participants were asked to choose from 2 different types of cookies and 2 different kinds of drinks to consume within the lab session. The outcome variable in Col.(1)-(3) is the decision to defer the choice of juice flavor and cookie type (for own immediate consumption) to one's spouse, i.e., spouse's choice is selected instead of own choice.

The outcome variable in Col.(1) is the basic variable for deferring decision-making to spouse, i.e., when cost of deferring is zero. Here, participants choose between the full amount, i.e., 2 cookies and 1 glass of juice, of own earlier choice or full amount of spouse's choice.

In Col.(2), a cost is imposed for choosing one's own earlier choice, i.e., the cost of deferring is *decreased*. Here, Participants choose between *half* the amount, i.e., 1 cookie and  $\frac{1}{2}$  glass of juice, of own earlier choice or the full amount of spouse's choice, i.e., 2 cookies and 1 glass of juice. Col.(3) pools all the observations across the different costs of deferring, i.e., those in Col.(1) and Col.(2).

Table 13: (Consumption Efficiency) Effects on Deferring of Decision-making on *HH Consumption Mix of Male v. Female items* to Spouse when Cost of Deferring is *Decreased* (Female Sample)

	(1) Own Ch:2,500N or Sp's Ch:2,500N	(2) Own Ch:1,800N or Sp's Ch:2,500N	(3) Own Ch:2,100N or Sp's Ch:2,500N	(4) Own Ch:1,800/2,100N or Sp's Ch:2,500N
1. No Secret	-0.002 (0.075)	0.015 (0.164)	-0.007 (0.071)	-0.004 (0.065)
UCT=1	-0.143** (0.063)	-0.190 (0.199)	-0.132*** (0.042)	-0.141*** (0.045)
1. No Secret $\times$ UCT=1	0.092 $(0.084)$	0.279 $(0.253)$	0.088 $(0.075)$	0.112 $(0.074)$
(UCT=1) +				
$(1.\text{No Secret} \times \text{UCT}=1)$	-0.051	0.089	-0.044	-0.030
	(0.056)	(0.158)	(0.063)	(0.060)
p-value	0.371	0.612	0.486	0.625
(Secret + Non-UCT) Mean	0.673	0.800	0.740	0.750
Secret Mean	0.596	0.714	0.665	0.672
Non-UCT Mean	0.673	0.806	0.740	0.751
Number of households	450	55	312	367
Number of sessions	34	4	24	28
Number of villages	24	3	19	22

<sup>\*</sup> for p<0.10, \*\* for p<.05 and \*\*\* for p<.01

*Notes:* The outcome variable in Col.(1)-(4) is the decision to defer the choice of allocating an endowment across male and female specific items, commonly used by adult household members in the study area.

The outcome variable in Col.(1) is the basic variable for deferring decision-making to spouse, i.e., when cost of deferring is zero. Here, participants decide between own earlier choice or spouse's choice (i.e., they defer decision-making) and both these choices were made with the same endowment amount of 2,500 NGN. Deferring or not deferring, in this case, does not leave anything on the table.

In Col.(2) and Col.(3), a cost is imposed for choosing one's own choice, instead of spouse's choice, i.e., the cost of deferring is *decreased*. Participants choose between an own earlier choice made with a smaller endowment (1,800 NGN or 2,100 NGN) amount and spouse's choice made with a larger endowment (2,500 NGN).

Col.(4) pools the observations in Col.(2) and Col.(3).

Table 14: (Allocative Efficiency) Effects on Deferring of *Money Allocation Decision* to Spouse when Cost of Deferring is *Decreased* (Female Sample)

	(1) Own Ch:2,500N or Sp's Ch:2,500N	(2) Own Ch:1,800N or Sp's Ch:2,500N	(3) Own Ch:2,100N or Sp's Ch:2,500N	(4) Own Ch:1,800/2,100N or Sp's Ch:2,500N
1. No Secret	0.015 (0.066)	0.145 (0.175)	-0.058 (0.064)	-0.008 (0.064)
UCT=1	-0.157*** (0.047)	-0.280 $(0.242)$	-0.163*** (0.029)	$-0.176^{***}$ $(0.053)$
1. No Secret $\times$ UCT=1	0.146* (0.085)	0.393 $(0.241)$	$0.161^{**} $ $(0.071)$	0.194** (0.075)
(UCT=1) +				
$(1.\text{No Secret} \times \text{UCT}=1)$	-0.011	0.113	-0.002	0.018
	(0.070)	(0.016)	(0.065)	(0.054)
p-value	0.873	0.005	0.974	0.742
(Secret + Non-UCT) Mean	0.667	0.733	0.760	0.754
Secret Mean	0.584	0.607	0.667	0.655
Non-UCT Mean	0.673	0.806	0.732	0.750
Number of households	503	55	204	259
Number of sessions	38	4	16	20
Number of villages	27	3	12	15

<sup>\*</sup> for p<0.10, \*\* for p<.05 and \*\*\* for p<.01

*Notes:* The outcome variable in Col.(1)-(4) is the decision to defer the choice of allocating an endowment across self and one's spouse.

The outcome variable in Col.(1) is the basic variable for deferring decision-making to spouse, i.e., when cost of deferring is zero. Here, participants decide between own earlier choice or spouse's choice (i.e., they defer decision-making) and both these choices were made with the same endowment amount of 2,500 NGN. Deferring or not deferring, in this case, does not leave anything on the table.

In Col.(2) and Col.(3), a cost is imposed for choosing one's own choice instead of spouse's choice (i.e., the cost of deferring is *decreased*). Participants choose between an own earlier choice made with a smaller endowment (1,800 NGN or 2,100 NGN) amount and spouse's choice made with a larger endowment (2,500 NGN). Col.(4) pools the observations in Col.(2) and Col.(3).

Table 15: Reduced Form Effects of *No-Secret* Experimental Treatment and UCT Status on Decision to Change/Revise (Dummy Var.) earlier Allocation after Observing Communication from Spouse (<u>Female</u> Sample)

	(1)	(2)
	Revise: From Own	Revise: To Spouse's
	Orig. Alloc.	Communication
1. No Secret	-0.000	0.020
	(0.048)	(0.056)
UCT=1	-0.116**	0.002
	(0.046)	(0.048)
1. No Secret $\times$ UCT=1	0.089	0.041
	(0.060)	(0.060)
(UCT=1) +		
$(1.\text{No Secret} \times \text{UCT}=1)$	-0.027	0.043
	(0.038)	(0.035)
p-value	0.482	0.233
(Secret + Non-UCT) Mean	0.708	0.550
Secret Mean	0.645	0.547
Non-UCT Mean	0.710	0.566
Number of households	394	394
Number of sessions	30	30
Number of villages	23	23

<sup>\*</sup> for p<0.10, \*\* for p<.05 and \*\*\* for p<.01

Notes: The specific question on revising was: "Recall the decision that you made earlier about [...]. You made the following allocation: [...]. Your spouse has made a choice in another room which is: [...]. You can decide to choose your original decision or your spouse's decision as the final decision for this round or you can make a different decision all together. How would you like to allocate the money between the two options?"

The outcome variables in Col.(1)-(3), is coded as 1 if the revised allocation amount is different than the allocation amount in the preference elicitation round carried out in the beginning, i.e., in (round: *Allocation*); otherwise, it is 0. The outcome variable in Col.(4) is the mean of the variables in Col.(1)-(3).

In Secret condition, for any round of decision-making, spouses cannot observe participant's decisions within the experiment, i.e., participants have plausible deniability in their decision-making by the potential selection of either one of their own decisions or their spouse's decisions or a randomly chosen allocation (from all possible outcomes) as final pay-off for their household. However, in the No-Secret condition, spouses can observe participants' decisions for most of the rounds, i.e., if any round after the first round, i.e., round: Allocation, is selected as final pay-off for the household, the actual decision by a participant will be disclosed to his/her spouse.

### Conclusion

- UCT- receiving women appear to exercise higher levels of agency in household and (own) immediate consumption decisions
- However, this appears to take place only in the "Secret" condition where they have plausible deniability regarding their decisions
- The effect persists across different decision domains and across different costs of exercising agency
- Overall, it appears that the UCT induced a latent demand for agency
- Results: Transformative effect of the UCT not observed; however, given the societal context, probably expected