

## FOR ONLINE PUBLICATION APPENDIX: LFE Protocol<sup>1</sup>

### Cheap talk and coordination in the lab and the field: Collective commercialization in Senegal

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#### Baseline Coordination Game (BCG)

- 1) Please be reminded that you will be paid 2000 FCFA for showing up here today. This can be considered a payment for your transportation costs.
- 2) However, in addition, as mentioned before, depending on the decisions that you make, you will be able to earn additional money today.
- 3) You just completed a pre-questionnaire in which you were asked several questions. Each of you will now receive an envelope with 12000 FCFA<sup>2</sup> as payment for having completed this pre-questionnaire. During today's session, you will be able to use this money to earn additional money based on your decisions. However, you may also lose money depending on how you make decisions. So, please pay close attention.
- 4) Each of you has 6 chips (show chips)<sup>5</sup>.
- 5) You can decide to keep these chips individually or put them together with other people in this room.
- 6) So, the following table summarizes your options:

Option	Chips held individually	Chips held with other people
A	0	6
B	1	5
C	2	4
D	3	3
E	4	2
F	5	1
G	6	0

- 7) *Are there any questions at this stage?*
- 8) Each of the chips that you keep individually will have a value of 2000 FCFA<sup>3</sup>, regardless of what other people in the room do.
  - a. So, suppose you choose the last option and keep all chips individually. If at the end of the session, this round is selected for payment, you will get to keep the 12000 FCFA we just gave you as payment for the questionnaire.
- 9) On the other hand, the value of each of the chips you put together with other people depends on what the other people do:
  - a. If all of you together do not have more than  $XX^4$  chips, the value of the chip is:
    - i. 500 FCFA<sup>5</sup> all of the time
  - b. If all of you together have more than  $XX$  chips, the value of the chip is:
    - i. 2500 FCFA<sup>6</sup> half of the time and
    - ii. 1500 FCFA half of the time.

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<sup>1</sup> Also see the graphic shown in the paper.

<sup>2</sup> This is what we refer to as  $V$  in the paper.

<sup>3</sup> This is what we refer to as  $M$  in the paper.

<sup>4</sup> This is what we refer to as  $T$  in the paper.

<sup>5</sup> This is what we refer to as  $L$  in the paper.

<sup>6</sup> This amount corresponds to  $H$  in the paper. However, this example is a BCG with external uncertainty, since  $H$  is also dependent on chance. The BCG with no external uncertainty would just have one value for  $H$ ; whereas, this protocol allows for  $H$  to be less than  $M$  with 50% chance.

To have a better sense of why the payoff may vary in this situation, think of what happens when you plant. You do not know what quantity you will harvest, due to for instance rainfall. But, you first have make certain (for example, by applying fertilizer) that if it rains, you have the best possible harvest.

To know which situation we are in at the end of the day, we will put two pieces of paper in a box (one with one stick drawn on it, and the other with four). One of you will come to the front of the room and choose one of the pieces of paper at random. If the first one is chosen, then the payoff will be 1500 FCFA. If the second one is chosen, then the payoff will be 2500 FCFA. So you do not know the exact payoff (1500 or 2500) when you make your decisions.

- c. So, suppose you choose the second option and put all chips with the other people. If at the end of the session, this round is selected for payment, how much of the 12000 FCFA you get to keep depends on what other people do AND on chance.
  - i. For example, if other people also put all their chips such that you have more than XX chips together AND you have good luck, you not only get to keep the 12000 FCFA, but we will pay you an additional 3000 FCFA for your decision. Why? Because the chips together are worth 15000 FCFA.
  - ii. On the other hand, if other people also put their chips such that you have more than XX chips together BUT you have bad luck, we will take away 3000 FCFA to leave you with 9000 FCFA for this decision. Why? Because the chips together are worth 9000 FCFA.
  - iii. Alternatively, if other people put too few chips such that you have less than XX chips together, we will take away 9000 FCFA to leave you with 3000 FCFA. Why? Because the chips together are worth 3000 FCFA.

**10) Are there any questions at this time?**

11) So, in short:

- a. Chips that are held individually have a certain value of 2000 FCFA per chip, whereas,
- b. The value of chips that are put together with other people depends on two things:
  - i. If together all of you have more or less than XX chips and
  - ii. Luck
    - 1. If all of you together have more than XX chips and you have good luck, each chip is worth 2500 FCFA
    - 2. If all of you together have more than XX chips but you have bad luck, each chip is worth 1500 FCFA
    - 3. If all of you together have less than XX chips, each chip is worth 500 FCFA.

12) So, depending on the option that is chosen, your earnings will vary as follows:

13)

Option	Earnings for chips held individually	Earnings for chips held with other people		
		If total is above XX and each chip gives 2500	If total is above XX and each chip gives 1500	If total is below XX: each chip gives 500
A	0	15000	9000	3000
B	2000	12500	7500	2500
C	4000	10000	6000	2000
D	6000	7500	4500	1500
E	8000	5000	3000	1000
F	10000	2500	1500	500
G	12000	0	0	0

- 14) So, the question we are going to ask you is the following: Which of these options do you prefer? That is, how many chips will you keep individually and how many will you put with the other people in the room?
- 15) Any chips that you would like to keep individually will stay in the yellow paper and any chips that you want to put with the other people will go on the table.
  - a. So, for example, if you would like to choose option G, you will leave all chips on the yellow paper.
  - b. If you would like to choose option A and put all chips with the other people, you will put all chips on the table and leave none on the yellow paper.
  - c. If you would like to keep four chips individually, you leave four on the paper and put two on the table.

**16) Are there any questions at this stage?**

- 17) Remember that:
  - a. Your decision is private. Dividers will be used so that you make your decision in a way that no one else can see.
  - b. You will play several rounds of decisions and one of them will be chosen at random for payment at the end of today's session. So, please consider your decision carefully.

**Communication Coordination Game (CCG)**

- 1) Suppose that before you make your actual decision on how much to keep individually and how much to put together with the other people, we ask everyone—including you—to indicate what you plan to do first.
- 2) This is not your actual decision; it is your intention.
- 3) In other words, we will ask you to indicate as before—on the yellow paper and the table—how much you plan to keep individually and how much you plan to put together with others.
- 4) We will come by and record people's plans.
- 5) We will then come to the board and indicate in random order what people in the room plan to do.
- 6) We will not mention people by name nor by their seat number; however, you will know that SOMEONE in the room plans to keep this much individually and put the rest with other people.
- 7) We will do this for each person in the room. Again, we will not indicate people by name or by seat number.
- 8) Once we do that, we will see how much people plan to keep individually and how much they plan to put together with others.

**9) Is this clear? Are there any questions at this stage?**

- 10) Once we do that, we will ask you to make your ACTUAL decision.
- 11) Notice that the first decision is not your ACTUAL decision—it is what you plan to do.
- 12) When you are asked to make your ACTUAL decision, you are allowed to change your decision based on what you know others plan to do. But, keep in mind that they can change their decisions to.
- 13) With this being said, you do not have to change your decision. Your actual decision can be the same as what you plan to do, but it can also be different. The same applies to other people in the room.

**14) Is this clear? Are there any questions at this stage?**

- 15) Ask people to make their plans.
- 16) Go by and record.

- 17) Place the answers on board in the following random order (skip numbers as needed depending on group size  $N$ ): 7,3,1,19,12,10,11,6,8,16,2,20,15,5,18,9,17,14,4,13.
- 18) So, the number of chips that all of you will put together IF people's ACTUAL decisions are the same as their planned decisions will be: ...
- 19) Accordingly, the earnings per chip that you put together with the other people will be: ... (recall that this will also depend on chance if greater than XX).

**20) *Is this clear? Are there any questions at this stage?***

21) You can now make your actual decision.

22) Remember that:

- a. You and other people can change your decisions. Your actual decision can be the same as your planned decision, but it does not have to be.
- b. Your decision is private. Dividers will be used so that you make your decision in a way that no one else can see.
- c. One of the rounds you play will be chosen at random for payment at the end of today's session. So, please consider your decision carefully.