B Online Appendix

B.1 Matching in the Large treatment

Let an economy have size N, a multiple of 3. To explain how players are matched into interaction groups in a round just imagine that in the LARGE treatment each island j is home to $N/3$ subjects of type j. Let $0 \leq n \leq N/3$ denote the number of players j who do not travel in a period. Island j can thus host at most n meetings, bilateral or trilateral, among players of different types. Those who travel to island j are randomly assigned to the n home players. Hence, if island j has n players of each type, then there will be n trilateral meetings involving random players; otherwise, because of the random assignment, trilateral meetings may not occur even if the island hosts all three different types. Finally, if there are more visitors of some type than home players, then some of the visitors will remain unmatched, though the short side of the market is fully matched.[18]

B.2 Sessions

Dates of sessions (month-year): BASELINE 3,5,6-2014 and 4-2017; BASELINE-R, 12-2013, 4,5-2014 (neither had a practice block) and 4-2017; REMATCH, 5,6-2014, 4-2017 (2 sessions), 5-2017 (3 sessions); REMATCH-R, 11-2013 (2 sessions, neither had a practice block) and 5-2017 (5 sessions); LARGE, 3,4-2013 (5 sessions), 5,6-2014, 4,5-2017. CHAT, 5-2017 (4 sessions); NO CM, 6-2017 (3 sessions); BARTER, 6-2017 (5 sessions). FIAT, 3-2018 and 5-2018 (3 sessions). Session sizes varied from 6 to 27, depending on subjects' availability on the day of the session. Subjects completed 6 blocks in all sessions but the following: one session of LARGE (group size 18) had 1 block; one session of REMATCH, one of LARGE (group size 18) and two of LARGE (group size 24) had 3 blocks; one session of REMATCH-R and one of LARGE (group size 12) had 4 blocks; one session of LARGE (group size 12) had 5 blocks.

[18] For example, consider a group N=12. If everyone is present on island 3, then four trilateral matches are formed, each including three different specialization types allocated at random. Now suppose six subjects are on island 3: two type 1, one type 2, and three type 3. Here, there may be one trilateral match (types 1,2,3) and one bilateral match (types 1,3), or there can be three bilateral matches (two have types 1,3 and one has types 2,3). If, instead, we had three type 1, two type 2, and one type 3, then there would be only one trilateral match (types 1,2,3) choosing each type 1 with probability 1/3 and each type 2 with probability 1/2.

	Sessions (subjects)	Group size	Economies	Rounds
BASELINE	4 (39)	3	13	55
BASELINE-R	4 (39)	3	13	49
REMATCH	7 (72)	3	7	49
REMATCH-R	7 (69)	3	7	50
LARGE	9 (150)	12,18,24	9	38
CHAT	4 (36)	3	12	53
NO CM	3 (27)	3	9	52
BARTER	5 (45)	3	15	43
FIAT	4 (36)	3	12	53

Table B.1: **Sessions in the experiment**

Notes: *Sessions*: number of sessions conducted (number of subjects in parentheses). *Group size*: size of interaction group in a block. *Economies*: number of economies per session; an economy comprises all counterparts that a player can meet over the course of a session, so the economy corresponds to the group in all treatments except REMATCH and REMATCH-R where the economy comprises multiple groups (between 2 and 9, depending on the session) as groups are randomly re-formed in each block. *Rounds*: average number of rounds in a session (excluding initial unpaid practice block); In seven sessions subjects completed less than 6 blocks (between 3 and 5). In all treatments $u = 12$, $c_1 = 1$, $c_2 = 10$ (except NO CM where $c_2 = 15$) and $c_3 = 15$. In the seven initial LARGE sessions $c_3 = 20$, which was subsequently lowered to 15 for all treatments (to decrease losses due to error). Doing so is theoretically inconsequential since travelling with good 3 is individually irrational as long as $c_3 > u$, and it did not empirically induce different travel with good 3 (see Fig. B.1). Therefore, there was neither a theoretical nor an empirical need to rerun those sessions.

B.3 Proof of existence of DM equilibrium

Let V_{jk} denote the DM equilibrium continuation payoff for player j holding good $k \neq j$, at the start of an odd period. When no confusion arises, we omit the distribution of objects as an argument of V. Consider unilateral, one-time deviations and let $\hat{V}_{jk}$ denote the off-equilibrium continuation payoff.

Player 2: We have

$$V_{23} = \max(-2c_3 + \beta\hat{V}_{23}, \beta \max(V_{21}, \hat{V}_{23}), -2c_3 + \beta\hat{V}_{23}). \tag{1}$$

The first argument is the payoff from deviating by visiting island 1. Player 1 refuses to trade since he is offered a good that he does not consume and is more costly to transport. So player 2 comes back with good 3, pays twice the cost c_3. The third argument is the payoff from deviating by visiting island 3. There is no trade because everyone else is on island 2. Player 2 comes back with good 3 and pays twice the cost c_3. The second argument is the payoff from following the equilibrium travel prescription (stay on island 2) in which case player 2 can either follow the equilibrium trade choice (accept good 1) or deviating by not trading.

$\hat{V}_{23} = V_{23}$ because any one-time deviation by player 2 implies that no-one trades. Hence neither the state of player 2, nor the aggregate state (the distribution of goods) is affected. Equilibrium play resumes from the following period, and the activities in odd and even periods are simply flipped around. This immediately implies that deviating by travelling somewhere is suboptimal, because $\beta \max(V_{21}, V_{23}) > -2c_3 + \beta V_{23}$. Since in DM equilibrium it must be optimal to trade good 3 for good 1 (we will prove this later), then we must also have $V_{21} \geq V_{23}$, which implies

$$V_{23} = \beta V_{21}$$

Now we verify that $V_{21} \geq V_{23}$ is true for our parameters. To see this, note if in DM equilibrium player 2 has good 1, then

$$V_{21} = \max(u - c_1 + \beta V_{23}, \beta \hat{V}_{21}, -2c_1 + \beta \hat{V}_{21})$$

The first argument is the payoff from visiting island 1, which is the equilibrium action leading to trade and consumption. Player 2 travels at cost c_1 and comes back with nothing, starting next period with his production good 3. The third argument is the payoff from deviating by visiting island 3 in which case there is no trade (player 3 also has good 1) so player 2 travels twice at cost c_1 and starts next period with good 1. The second argument is the payoff from deviating by not moving, in which case no one trades and player 2 starts next period with good 1. It follows that the off-equilibrium continuation payoff associated with a one-time deviation is $\hat{V}_{21} = V_{21}$.

Clearly, $\beta V_{21} > -2c_1 + \beta V_{21}$, which means that deviating by travelling to island 3 is even worse than deviating by not travelling. In equilibrium, travelling to island 1 is superior to not travelling if

$$u - c_1 + \beta V_{23} \geq \beta V_{21} \qquad \Rightarrow \qquad V_{21} \leq \frac{u - c_1}{\beta(1 - \beta^2)}. \tag{2}$$

Suppose this is the case; we then have

$$V_{21} = u - c_1 + \beta V_{23} = \frac{u - c_1}{1 - \beta^2} \tag{3}$$

where the last part is obtained by substituting from $V_{23} = \beta V_{21}$ above. Now notice that (2) holds as a strict inequality, i.e., we have

$$V_{21} = \frac{u - c_1}{1 - \beta^2} < \frac{u - c_1}{\beta(1 - \beta^2)}.$$

The intuition is simple: since the future is discounted, it is always best to consume as soon as possible. We thus get

$$V_{23} = \frac{\beta(u - c_1)}{1 - \beta^2}.$$

Player 1: In DM equilibrium player 1 only holds good 2 and consumes on even dates so in an odd period (when players 3 and 2 meet on island 2) we have

$$V_{12} = \beta(u + \beta V_{12}) = \frac{\beta u}{1 - \beta^2}. \tag{4}$$

In equilibrium, deviating by visiting island 3 is suboptimal because in odd periods no one is there, and in even periods player 3 refuses good 2. Hence, player 1 simply suffers the transport cost $2c_2$.

Visiting island 2 is clearly suboptimal in even periods as no one is there (player 2 travels to island 1) so player 1 simply suffers the travel cost $2c_2$.

However, visiting island 2 may be a profitable one-time deviation in odd periods, since players 2 and 3 will both be there and would agree to multilateral exchange leading to consumption. Hence, deviating by going to island 2 is suboptimal for player 1 as long as

$$u - c_2 + \beta V_{12} < \beta(u + \beta V_{12}).$$

On the left-hand side we have the off-equilibrium payoff composed of $u - c_2$ (from consuming today and paying the cost to travel with good 2) plus the continuation payoff βV_{12} because all players revert to play equilibrium from the following round. On the right-hand side we have the equilibrium payoff βu, which is the gain from consuming tomorrow plus the continuation payoff $\beta^2 V_{12}$. Using (4) in the inequality we obtain $u < c_2(1 + \beta)$.

Player 3: In DM equilibrium this always holds good 1. His payoff at the start of an odd period is

$$V_{31} = u - c_1 + \beta^2 V_{31} = \frac{u - c_1}{1 - \beta^2}.$$

Consider a one-time deviation in an odd period. It is suboptimal to avoid travel to island 2 because (i) this implies no consumption and (ii) if deviating by travelling to island 1 leads to trade this also implies a higher transport-cost (generated by travelling back with good 2). Clearly, it is always suboptimal to travel to island 2 and refuse to trave for the consumption good. Now consider a one-time deviation in an even period. Travelling is suboptimal because (i) trade is impossible on island 2 (no one is there) and (ii) trade is impossible on island 1 since players 1 and 2 each consume by bilaterally trading, so have no advantage from deviating.

B.4 Derivation of the variables CM and DM

The variables CM and DM are calculated as follows. Recall that economies and interaction groups do not always correspond. Fix an interaction group, in a block, and consider a round of play. For a three-player interaction group, CM=1 in that round if all three players choose island 2 as their destination, and otherwise CM=0. In the LARGE treatment—where meetings are random—CM reports the *minimum* number of trilateral meetings that can be formed on some island 2 in that round, divided by the maximum number (i.e., the group size divided by three). For instance, if the economy has 18 subjects, 6 trilateral CM meetings are possible. Hence CM=1/6 if only one type 3, and at least one or more types 1 and 2 choose island 2 as their destination in the period. We then average CM across all rounds of a block. If the interaction group corresponds to the economy, then we simply take the average across all blocks of the session. If the interaction group is instead a subset of the economy (treatments with rematching), we take the average across all interaction groups belonging to that economy. The variable DM is calculated similarly: an interaction group of three players coordinates on DM trade in a round either if (i) types 2 & 3 choose island 2, and type 1 does not, or (ii) if types 2 & 1 choose island 1, and type 3 does not. In either of these cases DM=1 in the round, and otherwise it is 0. For a group with more than three players (LARGE treatment), DM is the minimum number of triplets coordinating on DM trade in a round.

B.5 Additional Tables and Figures

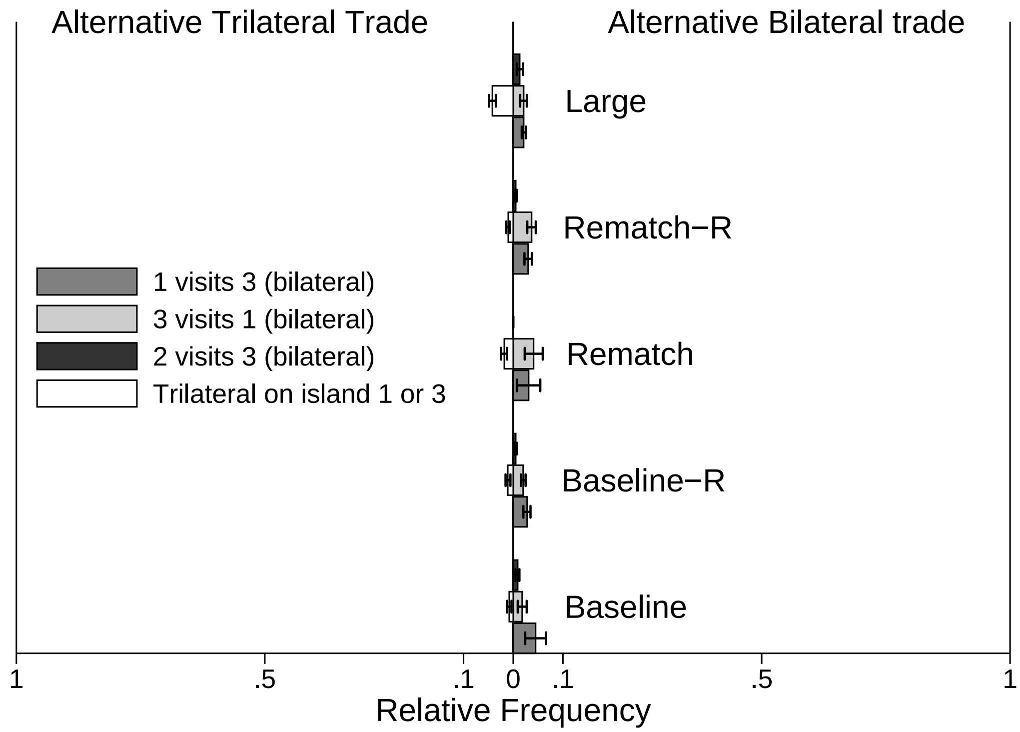

Figure B.1: Alternative Trade Patterns–all blocks

Notes: One obs.=one economy in a session. Each observation is constructed by averaging data across all rounds of play, excluding the initial practice block. Left side: relative frequency of trilateral meetings on island 1 or island 3. Relative frequency of bilateral meetings between type 3 and 1 (on island 1), type 3 and 1 (on island 3), or type 2 and 3 (on island 3) on the right side of the panel. The bars report the mean value, with the whiskers identify the standard error of the mean.

Dep. var.	*CM+DM*	
	Coeff.	S.E.
Treatment		
Baseline-R	-0.141	(0.089)
Rematch	-0.123	(0.120)
Rematch-R	-0.156*	(0.088)
Large	0.064	(0.098)
Learning covariates		
Block	0.039***	(0.008)
Baseline-R × Block	0.031**	(0.015)
Rematch × Block	0.029	(0.024)
Rematch-R × Block	0.011	(0.017)
Large × Block	-0.008	(0.019)
Economy size	0.042**	(0.021)
Constant	0.603***	(0.074)
Controls	Yes	
N	272	
R^2 within	0.230	
R^2 between	0.058	
R^2 overall	0.146	

Table B.2: Convergence to equilibrium: CM + DM meetings in the average round.

Notes: Panel regressions with random effects. One observation = one economy in a block. *CM+DM* = relative frequency of coordination on CM or DM meetings in the average round of a block. *Controls* include standardize measures of block duration, current and previous (set to 9 rounds, in block 1), and gender composition in the economy (self-reported). Robust standard errors (S.E.) adjusted for clustering at the session level. Symbols $***$, $**$, and $*$ indicate significance at the 1%, 5% and 10% level, respectively. There is a significant upward trend in equilibrium play (CM+DM); the Block regressor is positive and statistically significant; for all treatments, the sum Block + treatment × Block is positive and we can reject the null hypothesis that it is zero (Wald tests) with p-values ¡ 0.001 for Baseline-R and Rematch-R, 0.003 for Rematch, and 0.084 for Large.

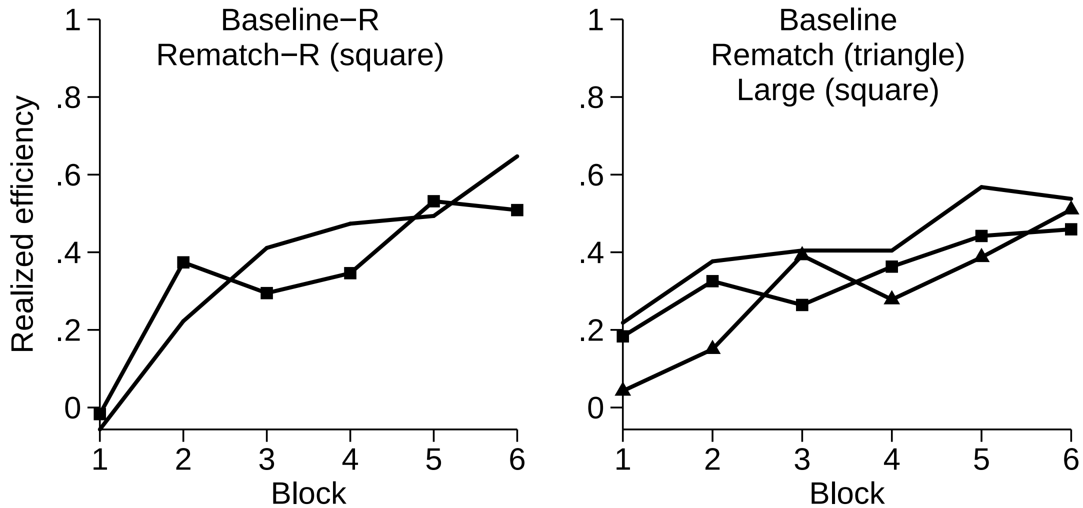

Figure B.2: Realized efficiency in a block

Notes: One observation = one economy in a block.

Dep Var. =1 trade for good 2	Coeff.	S.E.
Chat	0.529***	(0.132)
Block	-0.014	(0.018)
Random termination	0.070	(0.067)
Sex	0.374***	(0.088)
N	789	

Table B.3: Trade of player 2 in a round in Chat vs. Baseline: marginal effects

Notes: Logit regression. One observation = player 2 in one round (data from Chat and Baseline only). Only rounds in which player 2 trades and trilateral exchange is feasible. Dependent variable = 1 if player 2 trades for good 2, and 0 if trades for good 1. *Sex*=1 if male (0 if female). *Random termination* = 1 for rounds 6 and above (0, otherwise). Robust standard errors (S.E.) adjusted for clustering at the session level. Symbols $***$, $**$, and $*$ indicate significance at the 1%, 5% and 10% level, respectively.

Dep Var. =1 if player 1 travels	Coeff.	S.E.
Treatments		
Baseline-R	0.228**	(0.105)
Rematch	-0.066	(0.106)
Rematch-R	0.226**	(0.099)
Block	-0.017	(0.021)
Sex	-0.024	(0.043)
Economy size	-0.013	(0.048)
N	399	

Table B.4: Travel choice of player 1 in period 1 of a block: marginal effects

Notes: One observation = player 1 in the first period of a block. *Sex*=1 if male (0 if female). The coefficients on the dummies *Baseline-R* and *Rematch-R* are statistically similar (Wald test). Robust standard errors (S.E.) adjusted for clustering at the session level. Symbols $***$, $**$, and $*$ indicate significance at the 1%, 5% and 10% level, respectively.

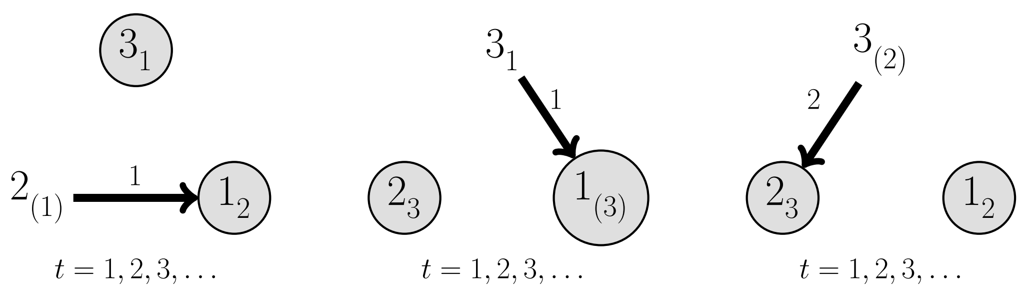

Figure B.3: Three possible ways to diversify and then barter production

Notes: Players in a circle do not travel. The large number denotes the type and island of a player. The small number denotes the player's inventory (in parentheses, if it is not the player's specialization good). The arrow represents the initial direction of travel between islands. The number by an arrow represents the good that is being transported. Left panel: low-cost barter. In each period player 2 produces and barters good 1 on island 1 (player 3 is idle). Center panel: low-cost barter. In each period player 1 produces and barters good 3 with player 3 on island 1 (player 2 is idle). Right panel: high-cost barter. In each period player 3 produces and barters good 2 on island 2 (player 1 is idle).

Dep Var. =1 if:	*Player 1*		*Player 2*		*Player 3*	
	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.
Barter	0.151**	(0.074)	-0.189***	(0.063)	-0.210***	(0.053)
Block	0.062***	(0.009)	0.084***	(0.008)	0.050***	(0.012)
Controls	Yes		Yes	Yes		
N	1143		1143		1143	

Table B.5: Probability of trading in Barter vs. Baseline-R: marginal effects

Notes: Logit regressions. One observation = a player in one round. Only Baseline-R (base level) and Barter treatments. Dependent variable = 1 if the player traded in the round, and 0 otherwise. *Controls* include a dummy for periods 6 and above, and gender (self-reported). Robust standard errors (S.E.) adjusted for clustering at the session level. Symbols $***$, $**$, and $*$ indicate significance at the 1%, 5% and 10% level, respectively. The coefficient on *Barter* is significant in all case, but positive only in the first regression, indicating a shift of trading activity across players, with players 1 becoming more active and the other two players less active than in Baseline-R (base level).

B.6 Instructions for the main treatments

In what follows we report the instructions for the Baseline treatment, and its manipulations regarding rotation, rematching and large groups. The original instructions were in Hebrew, here we report an English translation.

Instructions (Baseline)

This is an experiment on decision making. Please read the instructions carefully. Please turn off your phones and do not talk to others.

There are 24 participants in this session.

The experiment is composed of up to six separate **blocks** (time permitting).

At the start of the experiment you are randomly assigned to a set of three participants. You will interact only with the two other participants in that set for the duration of the experiment.

One of the set members is a fisherman, one is a farmer, and the other is a hunter. At the beginning of the experiment, you will be assigned to one of these three participant **types** and you will retain that type for the duration of the experiment.

Each participant type lives in a different home, and produces and consumes a distinct **good**—fish, bread, or poultry—as illustrated in Table 1.

Table 1

Participant	**produces**	**consumes**
Fisherman	Fish	Poultry
Farmer	Bread	Fish
Hunter	Poultry	Bread

How do you earn money?

The experiment is composed of up to six **blocks (subject to the time constraint)**. You start each block with 200 points and with one unit of your production good. You earn 12 additional points when you obtain your consumption good. For example, a Farmer starts a block with Bread and earns 12 points every time he obtains Fish. You may also lose points for certain actions you take (see below). The more points you earn, the better are your chances to earn money, as explained below.

What happens in a block?

Each block is composed of multiple **rounds**. Every round has two stages.

The travel stage: you can meet other participants from your set in two ways:

- *Travel*: You visit the home of someone else;
- *Stay*: You stay home and someone visits you.

The trading stage: you can **trade** the good you have for another good.

You can trade only if you meet someone. Therefore, you **cannot** trade if:

- you travel but no one stays at the home you visit;
- you stay home but no one visits your home.

What actions can you take in each round?

You start each round at your home with your production good, or with another good which you do not consume. Then, you choose whether to travel or to stay home. You will be asked:

Where would you like to be in this round?

You can choose either to stay home or to visit the home of someone else.

Travelling with a good costs points **for each leg of travel**. The cost depends on which good you travel with, as illustrated in Table 2:

Table 2

Good	Cost
Poultry	1
Fish	10
Bread	15

Before making your choice you can see the goods held by everyone in your set, and they will know what you hold. What goods they hold depends on their previous decisions, except at the beginning of the block when everyone holds their production good.

Once everyone in your set has made a choice, you will see if you have met someone. You may meet zero, one or both of the other participants in your set. Therefore there are three possibilities:

1. If you meet no one: You keep the good you have.

2. If you meet one participant: Each of you will be asked:

Do you want to trade?

You can choose: *Yes* or *No*.

If both of you choose *Yes*, then you exchange goods. Otherwise, you keep what you have.

3. If you meet two participants: There are two cases:

3.1. Two of the participants hold the same good:

You will be asked:

Do you want to trade with someone?

You can choose either to not trade or to trade with a specific type of participant. If you select to trade with someone, then trade takes place only if that participant has also selected to trade with you.

3.2. Each participant holds another good:

You will be asked:

Do you want to trade the good you have for your consumption good?

If everyone in your set chooses *Yes*, then you trade and get your consumption good.

If someone selects *No*, then you will be asked the same question as in 3.1.

Outcome of a round

After everyone in your set has made a choice you will see the outcome of the round. There are two possible outcomes:

1. You hold your consumption good.

   You consume it, earn *12* points, and no longer hold a good.
   If you travelled in the travel stage, then you are deducted that cost of travel according to Table 2. You will begin the next round with your production good in your home.

2. You hold a good different from your consumption good.

   If you travelled in the travel stage, then you are deducted that cost of travel as well as the cost of travelling back home with the good you now hold. You will begin the next round with this good in your home.

Duration of the experiment

Today's session will last 2 hours. Time permitting, you will play 6 blocks.

Each block has a minimum of six rounds. Starting from round six, the computer will choose a number between 1 and 100 and display it on your screen. If the number is 75 or less, then the block will continue for an additional round. If the number is over 75, then the block ends. Therefore, from round six and on, we always expect 3 additional rounds of play, independent of what round we have reached.

The computer determines when the block stops. When the last round of a block is reached, everyone will be notified of this on their computer screen. Blocks start and stop at the same time for every participant in the session.

Monetary payments

All participants who stay for the duration of the experiment (2 hours) will receive at least 50 shekels. In addition, you can earn up to an additional 70 shekels, depending on how many points you earn. Payments will be in cash.

After the last block in the experiment, we will randomly choose your total points from one block (not including the first block – which is a practice block). You will get an extra payment if in that block you ended with more than your initial 200 points. If you ended with less than 200 points, you will only get the 50 shekels for your participation in the experiment.

If you end with more than 200 points, then the extra payment depends on how many additional points you made in the chosen block compared to the maximum points that a participant of your type could have made. The exact formula is:

$$\frac{\text{your total points} - 200}{\text{maximum points you could have earned} - 200} \text{ X } 70$$

Note: Every point you earn beyond your initial 200 points increases your possible cash earnings. Since you will not know in advance which block will be randomly chosen at the end, in each block you can maximize your payoff by accumulating as many points as possible.

Are there any questions before we begin?

Instructions (Rematching-Rotating)

This is an experiment on decision making. Please read the instructions carefully. Please turn off your phones and do not talk to others.

There are 24 participants in this session.

The experiment is composed of up to six separate **blocks** (time permitting).

In each block you are randomly assigned to a set of three participants. You will interact only with the two other participants in that set for the duration of the block. In every block you will be with participants you have not met in previous blocks.

In each block, one of the set members is a fisherman, one is a farmer, and the other is a hunter. At the beginning of each block, you will be assigned to one of these three participant **types**. You will play two blocks as a farmer, two as a fisherman, and two as a hunter.

Each participant type lives in a different home, and produces and consumes a distinct **good**—fish, bread, or poultry—as illustrated in Table 1.

Table 1

Participant	**produces**	**consumes**
Fisherman	Fish	Poultry
Farmer	Bread	Fish
Hunter	Poultry	Bread

How do you earn money?

The experiment is composed of up to six **blocks (subject to the time constraint)**. You start each block with 200 points and with one unit of your production good. You earn 12 additional points when you obtain your consumption good. For example, a Farmer starts a block with Bread and earns 12 points every time he obtains Fish. You may also lose points for certain actions you take (see below). The more points you earn, the more money you earn, as explained below.

What happens in a block?

Each block is composed of multiple **rounds**. Every round has two stages.

<u>The travel stage</u>: you can meet other people from your set in two ways:

- *Travel*: You visit the home of someone else;
- *Stay*: You stay home and someone visits you.

<u>The trading stage</u>: you can **trade** the good you have for another good.

You can trade only if you meet someone. Therefore, you **cannot** trade if:

- you travel but no one stays at the home you visit;
- you stay home but no one visits your home.

What actions can you take in each round?

You start each round at your home with your production good, or with another good which you do not consume. Then, you choose whether to travel or to stay home. You will be asked:

Where would you like to be in this round?

You can choose either to stay home or to visit the home of someone else.

Travelling with a good costs points **for each leg of travel**. The cost depends on which good you travel with, as illustrated in Table 2:

Table 2

Good	Cost
Poultry	1
Fish	10
Bread	15

Before making your choice you can see the goods held by everyone in your set, and they will know what you hold. What goods they hold depends on their previous decisions, except at the beginning of the block when everyone holds their production good.

Once everyone in your set has made a choice, you will see if you have met someone. You may meet zero, one or both of the other participants in your set. Therefore there are three possibilities:

1. If you meet no one: You keep the good you have.

2. If you meet one participant: Each of you will be asked:

Do you want to trade?

You can choose: *Yes* or *No*.

If both of you choose *Yes*, then you exchange goods. Otherwise, you keep what you have.

3. If you meet two participants: There are two cases:

3.1. Two of the participants hold the same good:

You will be asked:

Do you want to trade with someone?

You can choose either to not trade or to trade with a specific type of participant. If you select to trade with someone, then trade takes place only if that participant has also selected to trade with you.

3.2. Each participant holds another good:

You will be asked:

Do you want to trade the good you have for your consumption good?

If everyone in your set chooses *Yes*, then you trade and get your consumption good.

If someone selects *No*, then you will be asked the same question as in 3.1.

Outcome of a round

After everyone in your set has made a choice you will see the outcome of the round. There are two possible outcomes:

1. You hold your consumption good.

   You consume it, earn *12* points, and no longer hold a good.
   If you travelled in the travel stage, then you are deducted that cost of travel according to Table 2. You will begin the next round with your production good in your home.

2. You hold a good different from your consumption good.

   If you travelled in the travel stage, then you are deducted that cost of travel as well as the cost of travelling back home with the good you now hold. You will begin the next round with this good in your home.

Duration of the experiment

Today's session will last 2 hours. Time permitting, you will play 6 blocks.

Each block has a minimum of six rounds. Starting from round six, the computer will choose a number between 1 and 100 and display it on your screen. If the number is 75 or less, then the block will continue for an additional round. If the number is over 75, then the block ends. Therefore, from round six and on, we always expect 3 additional rounds of play, independent of what round we have reached.

The computer determines when the block stops. When the last round of a block is reached, everyone will be notified of this on their computer screen. Blocks start and stop at the same time for every participant in the session.

Monetary payments

All participants who stay for the duration of the experiment (2 hours) will receive at least 50 shekels. In addition, you will earn .1 shekel for every point you have accumulated above the initial 1200 (6 X 200) points. Payments will be in cash.

Are there any questions before we begin?

Instructions (Large)

This is an experiment on decision making. Please read the instructions carefully. Please turn off your phones and do not talk to others.

There are 24 participants in this session.

The experiment is composed of up to six separate **blocks** (time permitting).

Eight of the participants are fishermen, eight are farmers, and eight are hunters. At the beginning of the experiment, you will be assigned to one of these three participant **types** and you will retain that type for the duration of the experiment.

There are 3 separate villages in which participants live: The fishermen live in the Fishermen's village, the farmers live in the Farmers' village, and the hunters live in the hunters' village. Each village has 8 houses, one for each participant of that type.

Each participant type lives in a different home, and produces and consumes a distinct **good**—fish, bread, or poultry—as illustrated in Table 1.

Table 1

Participant	**produces**	**consumes**
Fisherman	Fish	Poultry
Farmer	Bread	Fish
Hunter	Poultry	Bread

How do you earn money?

The experiment is composed of up to six **blocks (subject to the time constraint)**. You start each block with 200 points and with one unit of your production good. You earn 12 additional points when you obtain your consumption good. For example, a Farmer starts a block with Bread and earns 12 points every time he obtains Fish. You may also lose points for certain actions you take (see below). The more points you earn, the better are your chances to earn money, as explained below.

What happens in a block?

Each block is composed of multiple **rounds**. Every round has two stages.

<u>The travel stage</u>: you can meet other people from your set in two ways:

- *Travel*: You visit the home of someone else;
- *Stay*: You stay home and someone visits you.

<u>The trading stage</u>: you can **trade** the good you have for another good.

You can trade only if you meet someone. Therefore, you **cannot** trade if:

- you travel but no one stays at the home you visit;
- you stay home but no one visits your home.

What actions can you take in each round?

You start each round at your home with your production good, or with another good which you do not consume. Then, you choose whether to travel or to stay home. You will be asked:

Where would you like to be in this round?

You can choose either to stay home or to visit another village.

Travelling with a good costs points **for each leg of travel**. The cost depends on which good you travel with, as illustrated in Table 2:

Table 2

Good	**Cost**
Poultry	1
Fish	10
Bread	20

Before making your choice you can see the distribution of goods held by everyone else. What goods they hold depends on their previous decisions, except at the beginning of the block when everyone holds their production good.

Every village has just enough room for all participants. For example, the hunters' village looks like this:

Map 1

House of Hunter 1	House of Hunter 2	House of Hunter 3	House of Hunter 4	House of Hunter 5	House of Hunter 6	House of Hunter 7	House of Hunter 8
room for fisher	room for fisher	room for fisher	room for fisher	room for fisher	room for fisher	room for fisher	room for fisher
room for hunter	**room for hunter**	**room for hunter**	**room for hunter**	**room for hunter**	**room for hunter**	**room for hunter**	**room for hunter**
room for farmer	room for farmer	room for farmer	room for farmer	room for farmer	room for farmer	room for farmer	room for farmer

After every participant has made a choice, each visitor is randomly assigned to one of the houses populated by hosts (those whose owners choose to stay). After these houses are filled with visitors, the remaining visitors are assigned to vacant houses.

The following example of the hunters' village will demonstrate how the meetings are determined. Suppose that three fishermen and six farmers chose to visit the hunters' village, and four hunters chose to be hosts. The situation in the hunters' village will be as follows:

Map 2

House of Hunter 1	House of Hunter 2	House of Hunter 3	House of Hunter 4	House of Hunter 5	House of Hunter 6	House of Hunter 7	House of Hunter 8
fisher	fisher					fisher	
hunter	**hunter**			**hunter**		**hunter**	
farmer	farmer	farmer	farmer	farmer		farmer	

The meetings in which exchange can occur are marked in bold. The number of visiting fishermen is smaller than the number of hosting hunters, so every fisherman gets to meet a hunter. However, the number of farmers who visit the hunters' village is more than the number of hosting hunters so some of the farmers will meet neither a hunter nor a fisherman. In Houses 1, 2, and 7 there is a meeting of three participants, while in House 5 there is a meeting of two participants.

Once everyone has made a choice, you will see if you have met someone. You may meet zero, one or two participants. Therefore there are three possibilities:

1. If you meet no one: You keep the good you have.

2. If you meet one participant: Each of you will be asked:

Do you want to trade?

You can choose: *Yes* or *No*.

If both of you choose *Yes*, then you exchange goods. Otherwise, you keep what you have.

3. If you meet two participants: There are two cases:

3.1. Two of the participants hold the same good:

You will be asked:

Do you want to trade with someone?

You can choose either to not trade or to trade with a specific type of participant. If you select to trade with someone, then trade takes place only if that participant has also selected to trade with you.

3.2. Each participant holds another good:

You will be asked:

Do you want to trade the good you have for your consumption good?

If everyone in your set chooses *Yes*, then you trade and get your consumption good.

If someone selects *No*, then you will be asked the same question as in 3.1.

Outcome of a round

After everyone in your set has made a choice you will see the outcome of the round. There are two possible outcomes:

1. You hold your consumption good.

   You consume it, earn *12* points, and no longer hold a good.
   If you travelled in the travel stage, then you are deducted that cost of travel according to Table 2. You will begin the next round with your production good in your home.

2. You hold a good different from your consumption good.

   If you travelled in the travel stage, then you are deducted that cost of travel as well as the cost of travelling back home with the good you now hold. You will begin the next round with this good in your home.

Duration of the experiment

Today's session will last 2 hours. Time permitting, you will play 6 blocks.

Each block has a minimum of six rounds. Starting from round six, the computer will choose a number between 1 and 100 and display it on your screen. If the number is 75 or less, then the block will continue for an additional round. If the number is over 75, then the block ends. Therefore, from round six and on, we always expect 3 additional rounds of play, independent of what round we have reached.

The computer determines when the block stops. When the last round of a block is reached, everyone will be notified of this on their computer screen. Blocks start and stop at the same time for every participant in the session.

<u>Monetary payments</u>

All participants who stay for the duration of the experiment (2 hours) will receive at least 50 shekels. In addition, you can earn up to an additional 70 shekels, depending on how many points you earn. Payments will be in cash.

After the last block in the experiment, we will randomly choose your total points from one block (not including the first block – which is a practice block). You will get an extra payment if in that block you ended with more than your initial 200 points. If you ended with less than 200 points, you will only get the 50 shekels for your participation in the experiment.

If you end with more than 200 points, then the extra payment depends on how many additional points you made in the chosen block compared to the maximum points that a participant of your type could have made. The exact formula is:

$$\frac{\text{your total points} - 200}{\text{maximum points you could have earned} - 200} \text{ X } 70$$

Note: Every point you earn beyond your initial 200 points increases your possible cash earnings. Since you will not know in advance which block will be randomly chosen at the end, in each block you can maximize your payoff by accumulating as many points as possible.

Are there any questions before we begin?