

# Contract Structure, Risk Sharing & Investment Choice

## Detailed Experimental Instructions, Compilation

### Common Material

**Arrange people in seats according to kendra map.** Good afternoon everyone and thank you joining us. **Repeat informed consent script from invitation meeting. Introduce everyone.** We are conducting a study of how microfinance clients make investments and share risk. Instead of asking you a lot of questions, what we'd like to do is have you play some games with us. The games are simple. You don't need any special skills. They're probably like games you played before. You don't need to know how to read. There are no "right" or "wrong" answers. And you will have a chance to win as much as Rs. 200 for playing. We just want to understand how you make choices. And what sorts of investment you prefer.

Here is how the game works. You will play games where the amount of money you win is based on picking a colored stone. **Display large 100/10 payoff sheet.** One of us will hold a stone in each hand. One stone is white. The other is black. **Show stones.** We will mix the stones up and you will pick a hand. You won't know which stone is in which hand, so the color you get is based on chance.

If you pick the white stone **[show hand with white stone]** you will win the amount shown in white. **Point to example. Ask each participant how much this is. Confirm that everyone knows it's 100.**

If you pick the black stone **[show hand with black stone]**, you will win the amount shown in black. **Point to example. Ask each participant how much this is. Confirm that everyone knows it's 10.**

**Demonstrate the game. Mix up stones. Practice with 2 or 3 people. Ask everyone in room individually how much they win based on which stone is picked. Are there any questions so far? Answer any questions.**

**Experimenters, please hand out a black carom coin and the project choice sheets with the TRIANGLE on top.**

We will give you choices about which game you want to play. Look at the sheet in front of you. It describes eight games. The color on the page tells you how much you win for each color stone. If you play game “F”, how much do you win if you pick the white stone? **Ask everyone in room individually. Confirm that they say 100.** How much for the black? **Ask everyone in room individually. Confirm that they say 10.** Or, you could play game “A”. How much do you win in this game if you pick the black stone? **Ask everyone in room individually. Confirm that they say 40.** And the white stone? **Ask everyone in room individually. Confirm that they say 40.**

You pick which game you want to play by placing a carom coin on your choice. For example, if you wanted to play the first game you would put your black carom coin over the “A”. **Demonstrate.** And if you wanted to play the fifth game, you put your coin over the “E”. **Demonstrate.**

The choice is yours. There are no right or wrong answers. It’s only about which choice you prefer.

We will play several rounds today. You will only be paid in rupees for one of the rounds that you play today. At the end of the day we will put the number for each round you play in this blue bucket. Suppose you play three rounds. We will put the numbers 1, 2, and 3 in the bucket and you will pick a number from the bucket without looking. We will pay you in rupees for what you earned in just that round. For example, suppose Shoba played three rounds. In the first round she earned 100, in the second round she earned 10, and in the third round she earned 40. At the end of the day she will pick a number from the bucket. If she picked number 2, she would be paid Rs. 10. If she picked number 1, how much would she be paid. **Ask everyone in room individually. Confirm that they say 100.** And what if she picked number 3? **Ask everyone in room individually. Confirm that they say 40.**

Remember, you will only be paid in rupees for one of the rounds you play today. Remember, every round counts but you will only be paid in rupees for one of the rounds. At the end of the day, you will be paid individually and privately. No one will see exactly how much you earn.

Are there any questions? **Answer questions.** How many rounds will you be paid for? **Make sure they understand. Play 1 round of TRIANGLE for real.**

Now we will play a new game. **Experimenters, please hand out the white carom coin and with the plus (+) side facing up.**

In this game, you will use a white carom coin to mark your choices. **Show white carom coin.** This white coin is valuable. It is like the loans you take. It allows you to make investments, but in order to get your white coin back you must repay your loan.

When you make your choice, we will take your white coin. After you play the stone matching game. We're going to pay you in chips. **Hold up red and white chips.** The white chips are worth Rs. 5 and the red chips are worth Rs. 20. How much are the white chips worth? How much are the red chips? **Ask everyone in room individually. Confirm that they say 5 and 20.**

<Insert specific treatment description here>

After each round, we will pick a ball from this cage. **Show cage.** If the ball is white [**show white ball**], we will play another round of the same game with the same partner. If you do not have your white coin, you will have to sit out and will score zero for the round. If the ball is red [**show red ball**], this game will stop. Everyone will start with a new white coin and be matched with a new partner. After the red ball is pulled from the cage, you will not play with the same partner again for the remainder of the day. At any time, you can expect the game to last four more rounds but we will play until a red ball appears.

If you have any questions at any time, please raise your hand and one of us will come and assist you.

Now let's play a practice round. Remember, this round doesn't count yet. It's just for practice. **Play practice round.**

Now we pick a ball from the cage. Suppose we pick a white ball from the cage. What happens? **Ask everyone in room individually. Confirm that they say "play again"**. If Shamanthy picked the black stone, could she play again? **Ask everyone in room individually. Confirm that they say "No."** When could she play again? **Ask everyone in room individually. Confirm that they say "When a red ball is picked."**

Are you ready to play for real? **Play real game. Repeat step-specific instructions precisely for each step in each round.**

In subsequent games after the first of any session, the common material is amended as follows:

Now we are going to play a new game with a different partner. If you're seated on the left side of your table [our right] please stand up and pick up your score sheet and your white coin. One of the experimenters will direct you where to go.

<Insert specific treatment description here>

If you have any questions at any time, please raise your hand and one of us will come and assist you.

Now let's play a practice round. Remember, this round doesn't count yet. It's just for practice. **Play practice round.**

Are you ready to play for real? **Play real game. Repeat step-specific instructions precisely for each step in each round.**

## **Financial Contract Treatments**

### **Autarky**

In this game, while you may be seated next to someone, you will play on your own. At the end of each round, you must repay your loan of Rs. 40. You are responsible for repaying your own loan. So to get your white coin back, you must repay your loan. Please do not speak with anyone else or look at anyone's score sheet.

Your earnings for the round will be equal to the total amount of chips that you have after you repay your loan. If you are unable to repay your loan, you will earn zero for the round and will not receive your white coin.

### **Individual liability**

In this game, you will play with a partner. At the end of each round, you must repay your loan of Rs. 40. You are responsible for repaying your own loan. So to get your white coin back, you must repay your own loan.

<Insert monitoring text as appropriate>

After you play the stone matching game and receiving your chips, you can choose to give some of your earnings to your partner. You can discuss these transfers with your partner. You do not have to make any transfers. You are responsible for your loan and can continue playing the game only if you can repay your loan of Rs.40.

If you wish to make any transfers, put any chips you wish to transfer to your partner in the bowl in front of you. Do not hand chips directly to her or place them in her bowl. Only place the chips you wish to transfer in the bowl in front of you.

This is important because we need to keep track in order to pay you the correct amount at the end of the day. We will then collect your loan repayment. Your earnings for the round will be equal to the total amount of chips that you have after any transfers you make to your partner and after you repay your loan. If you

are unable to repay your loan, you will earn zero for the round and will not receive your white coin.

### **Joint liability**

In this game, you will play with a partner. At the end of each round, you must repay your loan of Rs. 40. You and your partner are responsible for each other's loans. So to get your white coin back, you both must repay your loans.

<Insert monitoring text as appropriate>

After you play the stone matching game and receiving your chips, you can choose to give some of your earnings to your partner. You can discuss these transfers with your partner. You do not have to make any transfers. However, you are responsible for both your loan and your partner's loan and will be able to continue playing the game only if both of you can repay your loans of Rs.40.

If you wish to make any transfers, put any chips you wish to transfer to your partner in the bowl in front of you. Do not hand chips directly to her or place them in her bowl. Only place the chips you wish to transfer in the bowl in front of you.

This is important because we need to keep track in order to pay you the correct amount at the end of the day. We will then collect your loan repayment. Your earnings for the round will be equal to the total amount of chips that you have after any transfers you make to your partner and after you repay your loan. If either you or your partner is unable to repay your loan, you will both earn zero for the round and will not receive your white coin.

### **Joint liability with approval**

In this game, you will play with a partner. At the end of each round, you must repay your loan of Rs. 40. You and your partner are responsible for each other's loans. So to get your white coin back, you both must repay your loans.

In addition, you and your partner must agree on each other's' investment choices. After you make your choice, we will ask your partner if she approves

your choice. If she says “yes,” then the game continues as before. If not, then you be assigned choice A, the first choice, and earn Rs. 80 if you pick either the white or black stone.

<Insert monitoring text as appropriate>

After you play the stone matching game and receiving your chips, you can choose to give some of your earnings to your partner. You can discuss these transfers with your partner. You do not have to make any transfers. However, you are responsible for both your loan and your partner’s loan and will be able to continue playing the game only if both of you can repay your loans of Rs.40.

If you wish to make any transfers, put any chips you wish to transfer to your partner in the bowl in front of you. Do not hand chips directly to her or place them in her bowl. Only place the chips you wish to transfer in the bowl in front of you.

This is important because we need to keep track in order to pay you the correct amount at the end of the day. We will then collect your loan repayment. Your earnings for the round will be equal to the total amount of chips that you have after any transfers you make to your partner and after you repay your loan. If either you or your partner is unable to repay your loan, you will both earn zero for the round and will not receive your white coin.

## **Equity**

In this game, you will play with a partner. At the end of each round, you must repay your loan of Rs. 40. You and your partner are responsible for each other’s loans. So to get your white coin back, you both must repay your loans.

In this game, all of your income is split evenly between you and your partner. For example, if you play choice C, and pick the white stone, how much do you earn? **140**. We will then give 70 to you and 70 to your partner. If you partner plays game C and picks the black stone, how much does she earn? **50**. So we would pay her 25 and you 25.

<Insert monitoring text as appropriate>

After you play the stone matching game and receiving your chips, you can choose to give some of your earnings to your partner. You can discuss these transfers with your partner. You do not have to make any transfers. However, you are responsible for both your loan and your partner's loan and will be able to continue playing the game only if both of you can repay your loans of Rs.40.

If you wish to make any transfers, put any chips you wish to transfer to your partner in the bowl in front of you. Do not hand chips directly to her or place them in her bowl. Only place the chips you wish to transfer in the bowl in front of you.

This is important because we need to keep track in order to pay you the correct amount at the end of the day. We will then collect your loan repayment. Your earnings for the round will be equal to the total amount of chips that you have after any transfers you make to your partner and after you repay your loan. If either you or your partner is unable to repay your loan, you will both earn zero for the round and will not receive your white coin.

## **Monitoring Treatments**

### **Perfect monitoring text**

You can discuss your choices with the other person at your table, but do not speak with anyone else.

### **Imperfect monitoring text**

You can discuss your choices with the other person at your table, but do not speak with anyone else. Also, while you may talk with the person at your table, you may not look at her choices or score sheet. The first time you look at your partner's sheet, we will deduct Rs. 20 from your earning. If you peek a second time, we will have to ask you to leave the study.

You may not look at your partner's score sheet or see how much she earns. However, after we play the stone matching game, we will tell you whether your partner made enough to pay her loan back.