

# THE ROLE OF REGRET IN PRIZE-LINKED SAVINGS: SUPPLEMENTARY MATERIALS\*

Justin Abraham<sup>†</sup>, Merve Akbas<sup>‡</sup>, Dan Ariely<sup>§</sup>, and Channing Jang<sup>¶</sup>

September 2022

---

\*For online publication only. Files for replication are available at <https://github.com/princetonbpl/akiba-lottery-pub>.

<sup>†</sup>University of California, San Diego. [jabraham@ucsd.edu](mailto:jabraham@ucsd.edu).

<sup>‡</sup>[merveakbas@gmail.com](mailto:merveakbas@gmail.com).

<sup>§</sup>Duke University. [dan@danariely.com](mailto:dan@danariely.com).

<sup>¶</sup>The Busara Center for Behavioral Economics. [channing.jang@busaracenter.org](mailto:channing.jang@busaracenter.org).

## Contents

|          |   |           |
|----------|---|-----------|
| <b>A</b> | <b>Experimental Materials</b>                             | <b>5</b>  |
| A.1      | Consent form . . . . .                                    | 5         |
| A.2      | Savings account . . . . .                                 | 5         |
| A.2.1    | Account instructions (Control) . . . . .                  | 5         |
| A.2.2    | Account instructions (PLS no feedback) . . . . .          | 6         |
| A.2.3    | Account instructions (PLS with feedback) . . . . .        | 7         |
| A.2.4    | SMS reminders (Control) . . . . .                         | 10        |
| A.2.5    | SMS reminders (PLS no feedback) . . . . .                 | 10        |
| A.2.6    | SMS reminders (PLS with feedback) . . . . .               | 10        |
| A.2.7    | Lottery administration (for treatment groups) . . . . .   | 10        |
| A.2.8    | Other . . . . .   | 10        |
| A.3      | Laboratory instructions . . . . .                         | 11        |
| A.3.1    | Coin toss task . . . . .                                  | 11        |
| A.3.2    | Titration task . . . . .                                  | 11        |
| A.3.3    | Lottery task . . . . .                                    | 11        |
| A.3.4    | Canadian Problem Gambling Index . . . . .                 | 12        |
| <b>B</b> | <b>Summary Statistics</b>                                 | <b>13</b> |
| B.1      | Balance checks . . . . .                                  | 13        |
| B.2      | Sample attrition . . . . .                                | 16        |
| B.3      | Normalized differences . . . . .                          | 18        |
| <b>C</b> | <b>Treatment Effects</b>                                  | <b>19</b> |
| C.1      | Average treatment effects with FWER adjustments . . . . . | 19        |
| C.2      | Covariate-adjusted treatment effects . . . . .            | 25        |
| C.3      | Heterogeneous treatment effects . . . . .                 | 29        |
| C.4      | Regressions at the participant-period level . . . . .     | 38        |
| C.5      | Logistic regression . . . . .                             | 40        |
| <b>D</b> | <b>Baseline Correlates of Savings</b>                     | <b>42</b> |
| <b>E</b> | <b>Data Visualization</b>                                 | <b>44</b> |
| E.1      | Main treatment effects by risk aversion . . . . .         | 44        |
| E.2      | Savings behavior over project period . . . . .            | 45        |
| E.3      | Panel treatment effects . . . . .                         | 50        |

## List of Tables

|    |  |    |
|----|--|----|
| 1  | Baseline balance by treatment group . . . . .                                    | 13 |
| 2  | Baseline balance by treatment group for endline sample . . . . .                 | 14 |
| 3  | Self-selection by treatment group . . . . .                                      | 15 |
| 4  | Observed and expected lottery results . . . . .                                  | 15 |
| 5  | Treatment group by participation at endline . . . . .                            | 16 |
| 6  | Attrition by treatment group . . . . .   | 16 |
| 7  | Baseline balance by attrition status . . . . .                                   | 17 |
| 8  | Normalized differences by treatment group . . . . .                              | 18 |
| 9  | Treatment effects – Mobile savings . . . . .                                     | 19 |
| 10 | Treatment effects – Mobile savings (before 30 days) . . . . .                    | 20 |
| 11 | Treatment effects – Mobile savings (after 30 days) . . . . .                     | 20 |
| 12 | Treatment effects – Savings outside the project . . . . .                        | 21 |
| 13 | Treatment effects – Gambling . . . . .   | 22 |
| 14 | Treatment effects – Akiba Smart . . . . .  | 22 |
| 15 | Treatment effects – Expenditure . . . . .  | 23 |
| 16 | Treatment effects – Self-perceptions . . . . .                                   | 24 |
| 17 | Covariate-adjusted treatment effects – Mobile savings . . . . .                  | 25 |
| 18 | Covariate-adjusted treatment effects – Mobile savings (before 30 days) . . . . . | 25 |
| 19 | Covariate-adjusted treatment effects – Mobile savings (after 30 days) . . . . .  | 26 |
| 20 | Covariate-adjusted treatment effects – Savings outside the project               | 26 |
| 21 | Covariate-adjusted treatment effects – Gambling . . . . .                        | 26 |
| 22 | Covariate-adjusted treatment effects – Akiba Smart . . . . .                     | 27 |
| 23 | Covariate-adjusted treatment effects – Expenditure . . . . .                     | 27 |
| 24 | Covariate-adjusted treatment effects – Self-perceptions . . . . .                | 28 |
| 25 | Heterogeneous effects – Primary outcomes by female . . . . .                     | 29 |
| 26 | Heterogeneous effects – Primary outcomes by below 30 y.o. . . . .                | 30 |
| 27 | Heterogeneous effects – Primary outcomes by completed primary school . . . . .   | 30 |
| 28 | Heterogeneous effects – Primary outcomes by completed secondary school . . . . . | 31 |
| 29 | Heterogeneous effects – Primary outcomes by married/co-habiting                  | 31 |
| 30 | Heterogeneous effects – Primary outcomes by has children . . . . .               | 32 |
| 31 | Heterogeneous effects – Primary outcomes by prior savings usage                  | 32 |
| 32 | Heterogeneous effects – Primary outcomes by above median monthly inc. . . . .    | 33 |
| 33 | Heterogeneous effects – Primary outcomes by employment status                    | 33 |
| 34 | Heterogeneous effects – Primary outcomes by self-employment . . . . .            | 34 |
| 35 | Heterogeneous effects – Primary outcomes by has dependant . . . . .              | 34 |

|    |  |    |
|----|--|----|
| 36 | Heterogeneous effects – Primary outcomes by subject is a dependant                     | 35 |
| 37 | Heterogeneous effects – Primary outcomes by risk aversion . . . .                      | 35 |
| 38 | Heterogeneous effects – Primary outcomes by above median locus<br>of control . . . . . | 36 |
| 39 | Heterogeneous effects – Primary outcomes by above median indiff.<br>point . . . . .    | 36 |
| 40 | Heterogeneous effects – Primary outcomes by above median CPGI                          | 37 |
| 41 | Regression of deposits on lottery results . . . . .                                    | 38 |
| 42 | Regression of deposits on treatment in the first period . . . . .                      | 39 |
| 43 | Ordered logit – Gambling behavior and temptation . . . . .                             | 40 |
| 44 | Multinomial logit – Hypothetical treatment selection . . . . .                         | 41 |
| 45 | Baseline correlates of number of deposits made . . . . .                               | 42 |
| 46 | Baseline correlates of amount deposited . . . . .                                      | 43 |

## List of Figures

|    |  |    |
|----|--|----|
| 1  | Savings ID cards . . . . .   | 9  |
| 2  | Treatment effect by risk aversion – Total deposits made . . . . .                    | 44 |
| 3  | Timing of deposits . . . . .   | 46 |
| 4  | Number of daily deposits . . . . .   | 47 |
| 5  | Cumulative number of deposits . . . . .  | 48 |
| 6  | Daily balance averaged over all participants . . . . .                               | 49 |
| 7  | Treatment effects over time – Number of deposits . . . . .                           | 51 |
| 8  | Treatment effects over time – Amount deposited . . . . .                             | 52 |
| 9  | Autoregression of daily savings by treatment group – Number of<br>deposits . . . . . | 53 |
| 10 | Autoregression of daily savings by treatment group – Amount<br>deposited . . . . .   | 54 |

## **A. Experimental Materials**

### **A.1 Consent form**

You are asked to participate in research project conducted by researchers at Duke University, Dan Ariely (dan@danariely.com) and Seher Merve Akbas (merve.akbas@duke.edu). The purpose of this project is (1) to understand how people make decisions about money, (2) how people make risky decisions, (3) how people decide to save money.

During the study in the laboratory, you will be presented a number of decisions involving money. Your payment will depend on your decisions and specific rules about it will be explained to you before you start.

Your participation in this project is completely voluntary and you are free to withdraw from it at any time. During the project, all the information about you will be analyzed anonymously and reported by groups.

Do you have any questions that you would like to ask now?

For any future questions or concerns about the project, please contact the researcher Seher Merve Akbas via e-mail (merve.akbas@duke.edu) or phone (+1919-328-0080) or Dan Ariely via e-mail (dan@danariely.com) or the project associate, James Vancel (email: jvancel@poverty-action.org) (Phone: +254725066428), or the project manager, Joseph Njoroge (jmuiruri@poverty-action.org) (Phone: +254722900068).

I have read this information, and would like to participate

Name:       Date:

### **A.2 Savings account**

#### *A.2.1 Account instructions (Control)*

Here, we are introducing you AKIBA SMART, which will allow you to save money for a period of four weeks (28 days). Now I will explain how AKIBA SMART works. Using AKIBA SMART, you can save money by sending airtime (via Sambaza) to 0726-085246. The net worth of the airtime you send will be the amount you save. For example, if you send Airtime worth 20KSh it means you saved 20Ksh. This way, you won't pay any MPESA fees to save.

AKIBA SMART helps you save in two ways:

1. Every day, AKIBA SMART will add 5% of your daily savings to your account.

For example, if you saved 20KSH, you will receive 1 KSH extra. The more you save each day, the more money you will accumulate yourself. Furthermore, the more you save, the more you will receive extra from AKIBA SMART.

2. You will be able to keep your money in a safe place for 28 days, and at the end of 28 days, you will receive all your savings, with the extra money you received from AKIBA SMART back via MPESA (you won't receive Airtime).

As a promotion, you are automatically enrolled in AKIBA SMART today. You will receive your ID cards now and you can start saving immediately. [We will try out how it works here. As part of our promotion, we will give you some money to save today to learn how it works. This money is yours and you will receive it at the end of 28 days.]

Do you have any questions?

#### *A.2.2 Account instructions (PLS no feedback)*

Here, we are introducing you AKIBA SMART, which will allow you to save money for a period of four weeks (28 days). Now I will explain how AKIBA SMART works. Using AKIBA SMART, you can save money by sending airtime (via Sambaza) to 0726-085246. The net worth of the airtime you send will be the amount you save. For example, if you send Airtime worth 20KSh it means you saved 20Ksh. This way, you won't pay any MPESA fees to save.

AKIBA SMART helps you save in two ways:

1. Every day, if you save, you will receive your Lottery Ticket in an SMS and you will enter a lottery. The next day, you will be notified by SMS whether you won, and how much money you won. If you win, the prize will be added to your account. If you don't win, you will still keep your savings. This will continue every day for 28 days. The more you save each day, the more money you will accumulate yourself. Furthermore, the more you save, the bigger the prizes!!!

2. You will be able to keep your money in a safe place for 28 days, and at the end of 28 days you will receive all your savings, with the prizes you won back via MPESA (you won't receive Airtime).

The lottery works as follows:

Each day, if you save, you will receive a lottery ticket as SMS. The lottery ticket includes 4 numbers between 1 and 10. If the FIRST OR SECOND number in your lottery ticket match the first or second number in the winning ticket, you win Prize 1: 10% of what you saved that day! For example, if you saved 20KSH

that day, you win 2 KSH extra. If the FIRST AND SECOND numbers in your lottery ticket match the first and second numbers in the winning ticket, you win Prize 2: 100% of what you saved that day! For example, if you saved 20KSH that day, you win 20 KSH extra. If the ALL NUMBERS in your lottery ticket match all numbers in the winning ticket in the same order, you win Prize 3: 200 times what you saved that day! For example, if you saved 20KSH that day, you win 4000 KSH extra.

As a promotion, you are automatically enrolled in AKIBA SMART today. You will receive your ID cards now and you can start saving immediately. [We will try out how it works here. As part of our promotion, we will give you some money to save today to learn how it works. This money is yours and you will receive it at the end of 28 days.]

Do you have any questions?

#### *A.2.3 Account instructions (PLS with feedback)*

Here, we are introducing you AKIBA SMART, which will allow you to save money for a period of four weeks (28 days). Now I will explain how AKIBA SMART works. Using AKIBA SMART, you can save money by sending airtime (via Sambaza) to 0726-085246. The net worth of the airtime you send will be the amount you save. For example, if you send Airtime worth 20KSh it means you saved 20Ksh. This way, you won't pay any MPESA fees to save.

AKIBA SMART helps you save in two ways:

1. Every day, you will receive your Lottery Ticket in an SMS and you will enter a lottery. The next day, you will be notified by SMS whether you won, and how much money you won. If you win, your prize will be added to your account ONLY IF YOU SAVED that day, if you did not save, you will give up your prize. If you don't win, you will still keep your savings. This will continue every day for 28 days. The more you save each day, the more money you will accumulate yourself. Furthermore, the more you save, the bigger the prizes!!!
2. You will be able to keep your money in a safe place for 28 days, and at the end of 28 days you will receive all your savings, with the prizes you won back via MPESA (you won't receive Airtime).

The lottery works as follows:

Each day, you will receive a lottery ticket as SMS. The lottery ticket includes 4 numbers between 1 and 10. If the FIRST OR SECOND number in your lottery

ticket match the first or second number in the winning ticket, you win Prize 1: 10% of what you saved that day! For example, if you saved 20KSH that day, you win 2 KSH extra. If the FIRST AND SECOND numbers in your lottery ticket match the first and second numbers in the winning ticket, you win Prize 2: 100% of what you saved that day! For example, if you saved 20KSH that day, you win 20 KSH extra. If the ALL NUMBERS in your lottery ticket match all numbers in the winning ticket in the same order, you win Prize 3: 200times what you saved that day! For example, if you saved 20KSH that day, you win 4000 KSH extra.

REMEMBER: YOU CAN REDEEM YOUR PRIZE ONLY IF YOU SAVED THAT DAY.


As a promotion, you are automatically enrolled in AKIBA SMART today. You will receive your ID cards now and you can start saving immediately. [We will try out how it works here. As part of our promotion, we will give you some money to save today to learn how it works. This money is yours and you will receive it at the end of 28 days.]

Do you have any questions?



Figure 1: Savings ID cards

AKIBA SMART  
SAVINGS CARD


 **BUSARA**  
CENTER FOR  
BEHAVIORAL ECONOMICS

0224 2014 01\_\_ - - - -

Name: \_\_\_\_\_

(a) Front

AKIBA SMART  
SAVINGS CARD

 **BUSARA**  
CENTER FOR  
BEHAVIORAL ECONOMICS


0224 2014 01\_\_ - - - -

Name: \_\_\_\_\_

(b) Front

Daily Earnings  
5% of your daily savings

Signature: \_\_\_\_\_

 **BUSARA**  
CENTER FOR  
BEHAVIORAL ECONOMICS  
AKIBA SMART

**SAMBAZA** 0726-085246 to save.  
For assistance SMS or call  
0726-085246.

(c) Back (Control)

Daily Prizes  
Prize 1: 10% of your daily savings  
Prize 2: 100% of your daily savings  
Prize 3: 200 times your daily savings

Signature: \_\_\_\_\_

 **BUSARA**  
CENTER FOR  
BEHAVIORAL ECONOMICS  
AKIBA SMART

**SAMBAZA** 0726-085246 to save.  
For assistance SMS or call  
0726-085246.

(d) Back (Lottery)

#### *A.2.4 SMS reminders (Control)*

- Reminder: “Name, remember to save XX or more today to earn 5% daily interest. Sambaza \*140\*XX\*Phone to save”
- Upon receipt of airtime: “You saved XX. You earned 5% interest! QQ was deposited into your account. Your balance is ZZ.”

#### *A.2.5 SMS reminders (PLS no feedback)*

- Reminder: “Name, remember to buy your ticket today (this week) by saving XX. Sambaza \*140\*XX\*Phone to save”
- Upon receipt of airtime: “You saved XX. You purchased your ticket. Your lucky numbers are AA-BB. Your balance is ZZ.”

#### *A.2.6 SMS reminders (PLS with feedback)*

- Reminder: “Name, your lucky numbers today (this week) are AA-BB. Keep them by saving XX. Sambaza \*140\*XX\*Phone to save”
- Upon receipt of airtime: “You saved XX. You purchased your ticket. Your lucky numbers are AA-BB. Your balance is ZZ.”

#### *A.2.7 Lottery administration (for treatment groups)*

- Winning numbers: “Yesterday’s (last week’s) lucky numbers were CC-DD. Winners receive PPP Ksh. Save today (this week) to play again!”
- Winners: “Your lucky numbers were AA-BB. Congratulations! You won PPP Ksh! Win again today (this week) by saving.”
- Losers: “Your lucky numbers were AA-BB. You did not win. Try again today (this week) by saving.”
- Losers in regret group: “Your lucky numbers were AA-BB. You would have won, but you did not save enough to buy your ticket! Don’t miss you again, save to play.”

#### *A.2.8 Other*

- Upon receipt of an incoming SMS: “Your balance is ZZ. Save YY to buy your ticket (reach your match) OR You have reached your goal today (this week). Save more, Sambaza \*140\*XX\*Phone.”
- Upon receipt of airtime from unknown number: “This number is not known in the system. What is your standard phone number (10-digits)?”

- If reply is not understood (return airtime via Sambaza): “This is not a valid response. We are returning your airtime. Please save using your phone only. Call Phone for help.”

### A.3 Laboratory instructions

#### A.3.1 Coin toss task

For the next task your payoff will depend on a coin flip. You will win money if it is a heads or if it is a tails. You must decide which payoffs for heads and tails you prefer. The exact amount of money you will win will depend on which side the coin landed on. On the next screen you will see 6 different values for heads and tails. You make a SINGLE decision on which coin you prefer and remember that you can only flip one of the coins and only once. There are no right or wrong answers, only your preference.

#### A.3.2 Titration task

On the following screen you will find a series of questions. In each question, you are asked to choose between Option A and Option B. If you choose Option A, you will get a smaller amount but sooner. If you choose Option B, you will get a larger amount but later. Please choose the option you prefer. There are no right or wrong answers. After you make all your choices, the computer will randomly pick one of the questions and your payment will be determined by the option you chose in that question. Remember that the computer will pick only one question and any question could be picked. Therefore it is in your interest to answer each question as if it is the only question you are answering.

#### A.3.3 Lottery task

In this game, FIRST the computer will randomly chose 4 numbers, each between 0 and 9, to create a lottery ticket for you. For example, your lottery ticket could be: 5067 Then the computer will randomly choose 4 numbers again, each between 0 and 9, to create the winning lottery ticket. For example the winning ticket could be 5645 The lottery prizes are as follows:

PRIZE 1 (5KSH): If the FIRST OR SECOND number of your lottery ticket match the first OR second number of the winning ticket, your ticket will win prize 1.

PRIZE 2 (50KSH): If the FIRST AND SECOND number of your lottery ticket match the first AND second number of the winning ticket in the same order, your ticket will win prize 2.

PRIZE 3 (5000KSH): If ALL NUMBERS of your ticket match all numbers of the winning ticket in the same order, your ticket will win prize 3.

#### *A.3.4 Canadian Problem Gambling Index*

In the last 12 months how often have you [or have for item 7]? 0 = Never, 1 = Sometimes, 2 = Most of the time, 3 = Almost always

1. Bet more than you could really afford to lose?
2. Needed to gamble with larger amounts of money to get the same feeling of excitement?
3. Gone back another day to try and win back the money you lost?
4. Borrowed money or sold anything to get money to gamble?
5. Felt that you might have a problem with gambling?
6. Felt that gambling has caused you health problems, including stress and anxiety?
7. People criticized your betting or told you that you have a gambling problem, whether or not you thought it was true?
8. Felt your gambling has caused financial problems for you or your household?

In the past month, how often have you done the following? 0 = Never, 1 = 1-4 times, 2 = Daily, 3 = multiple times per day

1. Bet money on a sporting event
2. Played the lottery (Charity Sweepstakes)
3. Played cards or another game for money (billards, checkers, etc)
4. In the past month, how often have you gambled in all activities?
5. Participated in an SMS promotion (Safaricom "Bonyeza Ushinde" "Tetememsha" or other)

## B. Summary Statistics

### B.1 Balance checks

Table 1: Baseline balance by treatment group

|                                       | (1)<br>PLS-N –<br>Control | (2)<br>PLS-F –<br>Control | (3)<br>PLS-F –<br>PLS-N | (4)<br>Control mean<br>(SD) | (5)<br>Obs. |
|---------------------------------------|---------------------------|---------------------------|-------------------------|-----------------------------|-------------|
| Female                                | 0.07<br>(0.07)            | 0.10<br>(0.07)            | 0.03<br>(0.07)          | 0.52<br>(0.50)              | 311         |
| Age                                   | 0.78<br>(1.39)            | 0.72<br>(1.34)            | -0.05<br>(1.35)         | 30.75<br>(9.83)             | 311         |
| Completed primary school              | -0.02<br>(0.02)           | -0.02<br>(0.02)           | 0.00<br>(0.02)          | 0.99<br>(0.10)              | 311         |
| Married/co-habiting                   | 0.10<br>(0.07)            | 0.09<br>(0.07)            | -0.01<br>(0.07)         | 0.42<br>(0.50)              | 311         |
| No. of children                       | 0.23<br>(0.24)            | 0.24<br>(0.25)            | 0.01<br>(0.25)          | 1.75<br>(1.70)              | 311         |
| Prior savings usage                   | 0.05<br>(0.07)            | -0.10<br>(0.07)           | -0.15**<br>(0.07)       | 0.56<br>(0.50)              | 311         |
| Saves with a ROSCA                    | -0.01<br>(0.07)           | 0.08<br>(0.07)            | 0.09<br>(0.07)          | 0.58<br>(0.50)              | 311         |
| Total savings last month              | -17.81<br>(11.88)         | -7.04<br>(12.55)          | 10.77<br>(9.23)         | 58.82<br>(106.26)           | 311         |
| Monthly income                        | -3.68<br>(17.63)          | -0.59<br>(16.85)          | 3.09<br>(15.46)         | 112.05<br>(137.13)          | 311         |
| Employment status                     | 0.05<br>(0.07)            | -0.03<br>(0.07)           | -0.08<br>(0.07)         | 0.50<br>(0.50)              | 311         |
| Coefficient of relative risk aversion | 0.08<br>(0.18)            | -0.03<br>(0.17)           | -0.12<br>(0.18)         | 1.16<br>(1.27)              | 311         |
| Locus of control                      | 0.48<br>(1.40)            | -0.83<br>(1.46)           | -1.31<br>(1.37)         | 69.81<br>(10.78)            | 311         |
| Standardized CPGI                     | -0.11<br>(0.13)           | -0.22*<br>(0.12)          | -0.11<br>(0.12)         | -0.00<br>(1.00)             | 311         |
| Exp. discount factor                  | -0.05*<br>(0.03)          | -0.01<br>(0.03)           | 0.04<br>(0.03)          | 0.33<br>(0.20)              | 311         |
| Joint test $p$ -value                 | 0.48                      | 0.65                      | 0.36                    |                             |             |

*Notes:* The first three columns report the difference of means across treatment groups with standard errors in parentheses. Column 4 reports the mean of the control group with SD in parentheses. The bottom row reports the  $p$ -value of a joint test of significance for each hypothesis. \* denotes significance at 10 pct., \*\* at 5 pct., and \*\*\* at 1 pct. level.

Table 2: Baseline balance by treatment group for endline sample

|                                       | (1)<br>PLS-N –<br>Control | (2)<br>PLS-F –<br>Control | (3)<br>PLS-F –<br>PLS-N | (4)<br>Control mean<br>(SD) | (5)<br>Obs. |
|---------------------------------------|---------------------------|---------------------------|-------------------------|-----------------------------|-------------|
| Female                                | 0.05<br>(0.07)            | 0.09<br>(0.07)            | 0.04<br>(0.07)          | 0.53<br>(0.50)              | 284         |
| Age                                   | -0.18<br>(1.48)           | 0.24<br>(1.43)            | 0.42<br>(1.42)          | 31.37<br>(10.11)            | 284         |
| Completed primary school              | -0.02<br>(0.02)           | 0.00<br>(0.01)            | 0.02<br>(0.02)          | 0.99<br>(0.10)              | 284         |
| Married/co-habiting                   | 0.08<br>(0.07)            | 0.07<br>(0.07)            | -0.01<br>(0.07)         | 0.44<br>(0.50)              | 284         |
| No. of children                       | -0.01<br>(0.25)           | 0.10<br>(0.26)            | 0.11<br>(0.25)          | 1.88<br>(1.73)              | 284         |
| Prior savings usage                   | 0.05<br>(0.07)            | -0.05<br>(0.07)           | -0.09<br>(0.07)         | 0.54<br>(0.50)              | 284         |
| Saves with a ROSCA                    | -0.05<br>(0.07)           | 0.07<br>(0.07)            | 0.12<br>(0.07)          | 0.60<br>(0.49)              | 284         |
| Total savings last month              | -18.63<br>(12.01)         | -4.82<br>(12.88)          | 13.81<br>(9.78)         | 58.75<br>(100.77)           | 284         |
| Monthly income                        | -9.42<br>(18.93)          | -5.24<br>(17.87)          | 4.18<br>(16.18)         | 117.77<br>(140.31)          | 284         |
| Employment status                     | 0.05<br>(0.07)            | -0.05<br>(0.07)           | -0.09<br>(0.07)         | 0.51<br>(0.50)              | 284         |
| Coefficient of relative risk aversion | 0.16<br>(0.19)            | -0.01<br>(0.18)           | -0.17<br>(0.19)         | 1.13<br>(1.25)              | 284         |
| Locus of control                      | 0.69<br>(1.50)            | -0.95<br>(1.56)           | -1.63<br>(1.45)         | 69.79<br>(11.05)            | 284         |
| Standardized CPGI                     | -0.12<br>(0.13)           | -0.20<br>(0.13)           | -0.09<br>(0.12)         | -0.02<br>(0.97)             | 284         |
| Exp. discount factor                  | -0.06**<br>(0.03)         | -0.02<br>(0.03)           | 0.04<br>(0.03)          | 0.33<br>(0.20)              | 284         |
| Joint test $p$ -value                 | 0.54                      | 0.92                      | 0.57                    |                             |             |

Notes: These results are restricted to the sample of participants who completed the endline survey. The first three columns report the difference of means across treatment groups with SEs in parentheses. Column 4 reports the mean of the control group with SD in parentheses. The bottom row reports the  $p$ -value of a joint test of significance for each hypothesis. \* denotes significance at 10 pct., \*\* at 5 pct., and \*\*\* at 1 pct. level.

Table 3: Self-selection by treatment group

|          | Self-selection into treatment groups |         |        |       |
|----------|--------------------------------------|---------|--------|-------|
|          | Interest                             | Lottery | Regret | Total |
| Interest | 39                                   | 52      | 3      | 94    |
| Lottery  | 27                                   | 54      | 14     | 95    |
| Regret   | 32                                   | 42      | 21     | 95    |
| Total    | 98                                   | 148     | 38     | 284   |

*Notes:* This table reports the number of participants self-selecting into the treatment conditions after completing the study, disaggregated by original treatment assignment.

Table 4: Observed and expected lottery results

|                | Freq. | Pct. observed | Pct. expected |
|----------------|-------|---------------|---------------|
| No match       | 7065  | 81.49         | 62.43         |
| One match      | 1518  | 17.51         | 22.22         |
| Two matches    | 86    | 0.99          | 1.23          |
| Complete match | 1     | 0.01          | 0.00          |

*Notes:* The first column tabulates the frequency of observed lottery ticket matches. The second and third columns report the observed and expected probabilities, respectively, of each type of lottery match. A lottery ticket was a random sequence of four numbers between 1 and 9, inclusive. Prizes were awarded according to how well a participant's lottery numbers matched the winning numbers. If the first or second numbers matched, a 10% match of savings was awarded. If *both* the first and second numbers matched, a 100% match of savings was awarded. If all numbers matched, a prize of 200 times the daily savings was awarded.

## B.2 Sample attrition

Table 5: Treatment group by participation at endline

|         | Participation at endline |           |       |
|---------|--------------------------|-----------|-------|
|         | Attrited                 | Completed | Total |
| Control | 11                       | 94        | 105   |
| Lottery | 8                        | 95        | 103   |
| Regret  | 8                        | 95        | 103   |
| Total   | 27                       | 284       | 311   |

*Notes:* This table reports the number of observations in the endline survey by treatment group. Columns 1 and 2 reports the number of participants who completed the baseline survey but not endline and those who completed both surveys, respectively.

Table 6: Attrition by treatment group

|                    | Completed endline |
|--------------------|-------------------|
| PLS-N              | 0.03<br>(0.04)    |
| PLS-F              | 0.03<br>(0.04)    |
| Constant           | 0.90***<br>(0.03) |
| Adjusted $R^2$     | -0.004            |
| Difference p-value | 1.00              |
| Joint p-value      | 0.75              |
| Observations       | 311               |

*Notes:* This table reports a regression of selection on each of the treatment arms. Standard errors are in parentheses. \* denotes significance at 10 pct., \*\* at 5 pct., and \*\*\* at 1 pct. level.



Table 7: Baseline balance by attrition status

|                                       | (1)<br>Completed –<br>attrited | (2)<br>Mean (SD)<br>of completed | (3)<br>Obs. |
|---------------------------------------|--------------------------------|----------------------------------|-------------|
| Female                                | -0.02<br>(0.10)                | 0.58<br>(0.49)                   | 311         |
| Age                                   | 1.62<br>(1.69)                 | 31.39<br>(9.79)                  | 303         |
| Completed primary school              | 0.06<br>(0.05)                 | 0.98<br>(0.13)                   | 311         |
| Married/co-habiting                   | 0.04<br>(0.10)                 | 0.49<br>(0.50)                   | 307         |
| No. of children                       | 0.06<br>(0.36)                 | 1.91<br>(1.75)                   | 311         |
| Prior savings usage                   | -0.05<br>(0.10)                | 0.54<br>(0.50)                   | 311         |
| Saves with a ROSCA                    | -0.03<br>(0.10)                | 0.60<br>(0.49)                   | 311         |
| Total savings last month              | 3.68<br>(19.87)                | 50.91<br>(80.23)                 | 311         |
| Monthly income                        | 25.66<br>(20.91)               | 112.86<br>(121.67)               | 311         |
| Employment status                     | 0.10<br>(0.10)                 | 0.51<br>(0.50)                   | 311         |
| Coefficient of relative risk aversion | -0.01<br>(0.26)                | 1.18<br>(1.30)                   | 311         |
| Locus of control                      | 0.07<br>(1.59)                 | 69.70<br>(10.38)                 | 311         |
| Standardized CPGI                     | -0.19<br>(0.23)                | -0.13<br>(0.89)                  | 311         |
| Exp. discount factor                  | -0.06*<br>(0.04)               | 0.30<br>(0.20)                   | 311         |

Notes: Column 1 reports the difference of means between participants who completed endline and those who attrited. Standard errors are in parentheses. Column 2 reports the mean among participants at endline with SD in parentheses. \* denotes significance at 10 pct., \*\* at 5 pct., and \*\*\* at 1 pct. level.

### B.3 Normalized differences

Table 8: Normalized differences by treatment group

|                                       | (1)<br>PLS-N –<br>Control | (2)<br>PLS-F –<br>Control | (3)<br>PLS-F –<br>PLS-N |
|---------------------------------------|---------------------------|---------------------------|-------------------------|
| Female                                | 0.102                     | 0.213                     | 0.110                   |
| Age                                   | 0.062                     | 0.072                     | 0.008                   |
| Completed primary school              | -0.084                    | -0.143                    | -0.062                  |
| Married/co-habiting                   | 0.179                     | 0.149                     | -0.030                  |
| No. of children                       | 0.108                     | 0.122                     | 0.017                   |
| Prior savings usage                   | 0.126                     | -0.189                    | -0.316                  |
| Saves with a ROSCA                    | -0.017                    | 0.157                     | 0.174                   |
| Total savings last month              | -0.187                    | -0.075                    | 0.140                   |
| Monthly income                        | -0.017                    | -0.034                    | -0.018                  |
| Employment status                     | 0.080                     | -0.050                    | -0.130                  |
| Coefficient of relative risk aversion | 0.059                     | -0.045                    | -0.103                  |
| Locus of control                      | 0.049                     | -0.108                    | -0.166                  |
| Standardized CPGI                     | -0.088                    | -0.254                    | -0.164                  |
| Exp. discount factor                  | -0.216                    | -0.022                    | 0.188                   |

*Notes:* This table reports normalized differences between treatment groups for each row variable. The normalized difference is the difference in group means scaled by the square root of the average of the within-group variances and is a scale-invariant way of comparing the distribution of variables across treatment groups (Imbens and Rubin, 2015).

## C. Treatment Effects

### C.1 Average treatment effects with FWER adjustments

Table 9: Treatment effects – Mobile savings

|                         | Effect estimates            |                             |                           | Sample               |      |
|-------------------------|-----------------------------|-----------------------------|---------------------------|----------------------|------|
|                         | (1)                         | (2)                         | (3)                       | (4)                  | (5)  |
|                         | PLS-N                       | PLS-F                       | PLS-F –<br>PLS-N          | Control Mean<br>(SD) | Obs. |
| Total no. of deposits   | 4.59*<br>(2.52)<br>[0.20]   | 5.71**<br>(2.45)<br>[0.06*] | 1.13<br>(2.84)<br>[0.95]  | 13.66<br>(15.08)     | 311  |
| No. of days saved       | 3.93*<br>(2.05)<br>[0.17]   | 4.94**<br>(2.08)<br>[0.06*] | 1.01<br>(2.32)<br>[0.95]  | 11.78<br>(12.93)     | 311  |
| Max. savings streak     | 1.80**<br>(0.76)<br>[0.07*] | 1.84**<br>(0.73)<br>[0.05*] | 0.04<br>(0.89)<br>[0.97]  | 3.37<br>(4.08)       | 311  |
| Total deposit amount    | -0.79<br>(3.34)<br>[0.83]   | -1.60<br>(2.91)<br>[0.59]   | -0.81<br>(2.88)<br>[0.95] | 14.87<br>(24.48)     | 311  |
| Total withdrawal amount | 0.53<br>(0.94)<br>[0.83]    | 1.63**<br>(0.74)<br>[0.06*] | 1.10<br>(1.02)<br>[0.66]  | 1.07<br>(4.53)       | 311  |

*Notes:* Columns 1–3 report OLS estimates of the treatment effect. Standard errors are in parentheses and FWER adjusted  $p$ -values are in brackets. Observations are at the individual level. \* denotes significance at 10 pct., \*\* at 5 pct., and \*\*\* at 1 pct. level. Stars on the coefficient estimates reflect unadjusted  $p$ -values.

Table 10: Treatment effects – Mobile savings (before 30 days)

|   | Effect estimates          |                             |                           | Sample               |      |
|---|---------------------------|-----------------------------|---------------------------|----------------------|------|
|   | (1)                       | (2)                         | (3)                       | (4)                  | (5)  |
|   | PLS-N                     | PLS-F                       | PLS-F –<br>PLS-N          | Control Mean<br>(SD) | Obs. |
| Total no. of deposits (before 30 days)      | 2.56*<br>(1.40)<br>[0.15] | 3.08**<br>(1.35)<br>[0.05*] | 0.51<br>(1.53)<br>[0.91]  | 8.48<br>(8.74)       | 311  |
| No. of days saved (before 30 days)          | 1.94*<br>(1.16)<br>[0.18] | 2.56**<br>(1.15)<br>[0.05*] | 0.62<br>(1.26)<br>[0.86]  | 7.42<br>(7.61)       | 311  |
| Daily avg. no. of deposits (before 30 days) | 0.09*<br>(0.05)<br>[0.15] | 0.10**<br>(0.05)<br>[0.05*] | 0.02<br>(0.05)<br>[0.91]  | 0.28<br>(0.29)       | 311  |
| Total deposit amount (before 30 days)       | -1.17<br>(2.07)<br>[0.59] | -1.65<br>(1.85)<br>[0.40]   | -0.48<br>(1.46)<br>[0.91] | 8.99<br>(17.18)      | 311  |

Notes: Columns 1–3 report OLS estimates of the treatment effect. Standard errors are in parentheses and FWER adjusted  $p$ -values are in brackets. Observations are at the individual level. \* denotes significance at 10 pct., \*\* at 5 pct., and \*\*\* at 1 pct. level. Stars on the coefficient estimates reflect unadjusted  $p$ -values.

Table 11: Treatment effects – Mobile savings (after 30 days)

|  | Effect estimates          |                             |                           | Sample               |      |
|--|---------------------------|-----------------------------|---------------------------|----------------------|------|
|  | (1)                       | (2)                         | (3)                       | (4)                  | (5)  |
|  | PLS-N                     | PLS-F                       | PLS-F –<br>PLS-N          | Control Mean<br>(SD) | Obs. |
| Total no. of deposits (after 30 days)      | 2.02<br>(1.26)<br>[0.19]  | 2.63**<br>(1.25)<br>[0.07*] | 0.61<br>(1.44)<br>[0.91]  | 5.18<br>(7.56)       | 311  |
| No. of days saved (after 30 days)          | 1.99*<br>(1.02)<br>[0.11] | 2.38**<br>(1.05)<br>[0.06*] | 0.39<br>(1.18)<br>[0.92]  | 4.36<br>(6.36)       | 311  |
| Daily avg. no. of deposits (after 30 days) | 0.07<br>(0.04)<br>[0.19]  | 0.09**<br>(0.04)<br>[0.07*] | 0.02<br>(0.05)<br>[0.91]  | 0.17<br>(0.25)       | 311  |
| Total deposit amount (after 30 days)       | 0.38<br>(1.68)<br>[0.83]  | 0.05<br>(1.47)<br>[0.97]    | -0.33<br>(1.58)<br>[0.92] | 5.88<br>(11.43)      | 311  |

Notes: Columns 1–3 report OLS estimates of the treatment effect. Standard errors are in parentheses and FWER adjusted  $p$ -values are in brackets. Observations are at the individual level. \* denotes significance at 10 pct., \*\* at 5 pct., and \*\*\* at 1 pct. level. Stars on the coefficient estimates reflect unadjusted  $p$ -values.

Table 12: Treatment effects – Savings outside the project

|                           | Effect estimates           |                             |                             | Sample                      |             |
|---------------------------|----------------------------|-----------------------------|-----------------------------|-----------------------------|-------------|
|                           | (1)<br>PLS-N               | (2)<br>PLS-F                | (3)<br>PLS-F –<br>PLS-N     | (4)<br>Control Mean<br>(SD) | (5)<br>Obs. |
| Total savings last month  | 18.45<br>(25.16)<br>[0.86] | -17.87<br>(14.64)<br>[0.53] | -36.32<br>(24.06)<br>[0.36] | 80.31<br>(112.74)           | 284         |
| M-Pesa savings last month | -5.42<br>(6.34)<br>[0.86]  | -6.71<br>(5.49)<br>[0.53]   | -1.29<br>(5.30)<br>[0.82]   | 20.42<br>(44.67)            | 284         |
| ROSCA savings last month  | 1.48<br>(6.76)<br>[0.97]   | 7.37<br>(6.79)<br>[0.53]    | 5.89<br>(7.33)<br>[0.69]    | 22.24<br>(42.18)            | 283         |
| Saves with a ROSCA        | -0.02<br>(0.07)<br>[0.97]  | 0.14**<br>(0.07)<br>[0.17]  | 0.16**<br>(0.07)<br>[0.10]  | 0.54<br>(0.50)              | 284         |

*Notes:* Columns 1–3 report OLS estimates of the treatment effect. Standard errors are in parentheses and FWER adjusted  $p$ -values are in brackets. Observations are at the individual level. \* denotes significance at 10 pct., \*\* at 5 pct., and \*\*\* at 1 pct. level. Stars on the coefficient estimates reflect unadjusted  $p$ -values.

Table 13: Treatment effects – Gambling

|                        | Effect estimates          |                              |                           | Sample               |      |
|------------------------|---------------------------|------------------------------|---------------------------|----------------------|------|
|                        | (1)                       | (2)                          | (3)                       | (4)                  | (5)  |
|                        | PLS-N                     | PLS-F                        | PLS-F –<br>PLS-N          | Control Mean<br>(SD) | Obs. |
| Gamble more            | 0.06<br>(0.05)<br>[0.61]  | 0.15***<br>(0.06)<br>[0.05*] | 0.08<br>(0.06)<br>[0.49]  | 0.12<br>(0.32)       | 284  |
| Gamble less            | -0.02<br>(0.05)<br>[0.88] | 0.04<br>(0.06)<br>[0.80]     | 0.06<br>(0.05)<br>[0.56]  | 0.16<br>(0.37)       | 284  |
| More tempted to gamble | 0.09<br>(0.07)<br>[0.61]  | 0.05<br>(0.07)<br>[0.80]     | -0.04<br>(0.07)<br>[0.56] | 0.47<br>(0.50)       | 284  |
| Less tempted to gamble | -0.01<br>(0.03)<br>[0.88] | 0.03<br>(0.04)<br>[0.80]     | 0.04<br>(0.04)<br>[0.56]  | 0.06<br>(0.25)       | 284  |

Notes: Columns 1–3 report OLS estimates of the treatment effect. Standard errors are in parentheses and FWER adjusted  $p$ -values are in brackets. Observations are at the individual level. \* denotes significance at 10 pct., \*\* at 5 pct., and \*\*\* at 1 pct. level. Stars on the coefficient estimates reflect unadjusted  $p$ -values.

Table 14: Treatment effects – Akiba Smart

|   | Effect estimates          |                           |                           | Sample               |      |
|---|---------------------------|---------------------------|---------------------------|----------------------|------|
|   | (1)                       | (2)                       | (3)                       | (4)                  | (5)  |
|   | PLS-N                     | PLS-F                     | PLS-F –<br>PLS-N          | Control Mean<br>(SD) | Obs. |
| How much do you trust Akiba Smart?          | 0.03<br>(0.14)<br>[0.85]  | -0.07<br>(0.18)<br>[0.94] | -0.10<br>(0.18)<br>[0.84] | 0.00<br>(1.00)       | 284  |
| What is your confidence in Akiba Smart?     | 0.11<br>(0.13)<br>[0.64]  | 0.07<br>(0.14)<br>[0.94]  | -0.04<br>(0.13)<br>[0.84] | 0.00<br>(1.00)       | 284  |
| Did you tell friends and famiy about AKIBA? | -0.08<br>(0.06)<br>[0.52] | -0.04<br>(0.06)<br>[0.92] | 0.04<br>(0.06)<br>[0.84]  | 0.83<br>(0.38)       | 284  |
| Continue saving with AKIBA                  | -0.05<br>(0.05)<br>[0.62] | -0.01<br>(0.04)<br>[0.94] | 0.04<br>(0.05)<br>[0.82]  | 0.91<br>(0.28)       | 283  |

Notes: Columns 1–3 report OLS estimates of the treatment effect. Standard errors are in parentheses and FWER adjusted  $p$ -values are in brackets. Observations are at the individual level. \* denotes significance at 10 pct., \*\* at 5 pct., and \*\*\* at 1 pct. level. Stars on the coefficient estimates reflect unadjusted  $p$ -values.

Table 15: Treatment effects – Expenditure

|                           | Effect estimates            |                            |                            | Sample               |      |
|---------------------------|-----------------------------|----------------------------|----------------------------|----------------------|------|
|                           | (1)                         | (2)                        | (3)                        | (4)                  | (5)  |
|                           | PLS-N                       | PLS-F                      | PLS-F –<br>PLS-N           | Control Mean<br>(SD) | Obs. |
| Airtime                   | -0.33**<br>(0.15)<br>[0.35] | -0.13<br>(0.19)<br>[0.99]  | 0.20*<br>(0.12)<br>[0.75]  | 0.35<br>(1.47)       | 284  |
| Business-related          | 0.08*<br>(0.04)<br>[0.67]   | 0.10**<br>(0.05)<br>[0.36] | 0.02<br>(0.05)<br>[1.00]   | 0.06<br>(0.25)       | 284  |
| Durable goods             | -0.06<br>(0.04)<br>[0.84]   | -0.01<br>(0.05)<br>[1.00]  | 0.05<br>(0.04)<br>[0.91]   | 0.13<br>(0.34)       | 284  |
| Loan repayment            | -0.01<br>(0.04)<br>[0.98]   | -0.02<br>(0.04)<br>[1.00]  | -0.01<br>(0.04)<br>[1.00]  | 0.09<br>(0.28)       | 284  |
| Food                      | 0.04<br>(0.07)<br>[0.98]    | -0.08<br>(0.06)<br>[0.91]  | -0.12*<br>(0.06)<br>[0.67] | 0.28<br>(0.45)       | 284  |
| Rent and housing payments | -0.03<br>(0.04)<br>[0.98]   | -0.00<br>(0.04)<br>[1.00]  | 0.03<br>(0.04)<br>[0.99]   | 0.11<br>(0.31)       | 284  |
| Health-related            | -0.02<br>(0.02)<br>[0.97]   | -0.03*<br>(0.02)<br>[0.76] | -0.01<br>(0.01)<br>[0.97]  | 0.03<br>(0.18)       | 284  |
| Other non-durables        | 0.01<br>(0.02)<br>[0.98]    | 0.03<br>(0.02)<br>[0.89]   | 0.02<br>(0.03)<br>[0.99]   | 0.01<br>(0.10)       | 284  |
| Saved balance             | 0.04<br>(0.04)<br>[0.97]    | 0.06<br>(0.04)<br>[0.89]   | 0.02<br>(0.05)<br>[1.00]   | 0.07<br>(0.26)       | 284  |
| School-related            | 0.08<br>(0.05)<br>[0.84]    | 0.02<br>(0.05)<br>[1.00]   | -0.06<br>(0.05)<br>[0.92]  | 0.12<br>(0.32)       | 284  |
| Transfers                 | 0.02<br>(0.03)<br>[0.98]    | -0.00<br>(0.02)<br>[1.00]  | -0.02<br>(0.03)<br>[0.99]  | 0.02<br>(0.15)       | 284  |
| Travel                    | -0.00<br>(0.02)<br>[1.00]   | -0.00<br>(0.02)<br>[1.00]  | 0.00<br>(0.02)<br>[1.00]   | 0.02<br>(0.15)       | 284  |
| Did not save              | -0.02<br>(0.04)<br>[0.98]   | -0.01<br>(0.04)<br>[1.00]  | 0.01<br>(0.04)<br>[1.00]   | 0.10<br>(0.30)       | 284  |

Notes: Columns 1–3 report OLS estimates of the treatment effect. Standard errors are in parentheses and FWER adjusted  $p$ -values are in brackets. Observations are at the individual level. \* denotes significance at 10 pct., \*\* at 5 pct., and \*\*\* at 1 pct. level. Stars on the coefficient estimates reflect unadjusted  $p$ -values.

Table 16: Treatment effects – Self-perceptions

|                                    | Effect estimates               |                                |                            | Sample                      |             |
|------------------------------------|--------------------------------|--------------------------------|----------------------------|-----------------------------|-------------|
|                                    | (1)<br>PLS-N                   | (2)<br>PLS-F                   | (3)<br>PLS-F –<br>PLS-N    | (4)<br>Control Mean<br>(SD) | (5)<br>Obs. |
| Do you see yourself as a saver?    | -0.20<br>(0.15)<br>[0.48]      | -0.09<br>(0.14)<br>[0.91]      | 0.11<br>(0.15)<br>[0.77]   | -0.00<br>(1.00)             | 284         |
| Are you in general a lucky person? | 4.77***<br>(0.20)<br>[0.00***] | 4.97***<br>(0.18)<br>[0.00***] | 0.20<br>(0.23)<br>[0.77]   | -0.00<br>(1.00)             | 284         |
| Do you feel you saved enough?      | 0.19<br>(0.15)<br>[0.48]       | -0.09<br>(0.15)<br>[0.91]      | -0.28*<br>(0.15)<br>[0.23] | 0.00<br>(1.00)              | 284         |
| How did you feel not saving?       | -0.02<br>(0.16)<br>[0.88]      | 0.06<br>(0.15)<br>[0.91]       | 0.08<br>(0.16)<br>[0.77]   | -0.00<br>(1.00)             | 284         |

Notes: Columns 1–3 report OLS estimates of the treatment effect. Standard errors are in parentheses and FWER adjusted  $p$ -values are in brackets. Observations are at the individual level. \* denotes significance at 10 pct., \*\* at 5 pct., and \*\*\* at 1 pct. level. Stars on the coefficient estimates reflect unadjusted  $p$ -values.



## C.2 Covariate-adjusted treatment effects

Table 17: Covariate-adjusted treatment effects – Mobile savings

|                         | No controls      |                  |                  | With controls    |                  |                  | Sample               |      |
|-------------------------|------------------|------------------|------------------|------------------|------------------|------------------|----------------------|------|
|                         | (1)              | (2)              | (3)              | (4)              | (5)              | (6)              | (7)                  | (8)  |
|                         | PLS-N            | PLS-F            | PLS-F –<br>PLS-N | PLS-N            | PLS-F            | PLS-F –<br>PLS-N | Control Mean<br>(SD) | Obs. |
| Total no. of deposits   | 4.59*<br>(2.52)  | 5.71**<br>(2.45) | 1.13<br>(2.84)   | 4.53*<br>(2.64)  | 4.76**<br>(2.42) | 0.23<br>(2.86)   | 13.66<br>(15.08)     | 311  |
| No. of days saved       | 3.93*<br>(2.05)  | 4.94**<br>(2.08) | 1.01<br>(2.32)   | 3.56*<br>(2.06)  | 4.19**<br>(2.05) | 0.63<br>(2.26)   | 11.78<br>(12.93)     | 311  |
| Max. savings streak     | 1.80**<br>(0.76) | 1.84**<br>(0.73) | 0.04<br>(0.89)   | 1.56**<br>(0.74) | 1.57**<br>(0.72) | 0.01<br>(0.83)   | 3.37<br>(4.08)       | 311  |
| Total deposit amount    | -0.79<br>(3.34)  | -1.60<br>(2.91)  | -0.81<br>(2.88)  | -0.32<br>(3.15)  | -1.46<br>(2.73)  | -1.14<br>(2.86)  | 14.87<br>(24.48)     | 311  |
| Total withdrawal amount | 0.53<br>(0.94)   | 1.63**<br>(0.74) | 1.10<br>(1.02)   | 0.31<br>(0.85)   | 1.62**<br>(0.77) | 1.31<br>(0.94)   | 1.07<br>(4.53)       | 311  |

Notes: Columns 1–3 report OLS estimates of the treatment effect. Columns 4–6 report estimates with covariate adjustment. Standard errors are in parentheses. Columns 7–8 report the mean and SD of the control group and the number observations, respectively. Observations are at the individual level. \* denotes significance at 10 pct., \*\* at 5 pct., and \*\*\* at 1 pct. level.

Table 18: Covariate-adjusted treatment effects – Mobile savings (before 30 days)

|   | No controls     |                  |                  | With controls   |                 |                  | Sample               |      |
|---|-----------------|------------------|------------------|-----------------|-----------------|------------------|----------------------|------|
|   | (1)             | (2)              | (3)              | (4)             | (5)             | (6)              | (7)                  | (8)  |
|   | PLS-N           | PLS-F            | PLS-F –<br>PLS-N | PLS-N           | PLS-F           | PLS-F –<br>PLS-N | Control Mean<br>(SD) | Obs. |
| Total no. of deposits (before 30 days)      | 2.56*<br>(1.40) | 3.08**<br>(1.35) | 0.51<br>(1.53)   | 2.46*<br>(1.43) | 2.56*<br>(1.34) | 0.10<br>(1.53)   | 8.48<br>(8.74)       | 311  |
| No. of days saved (before 30 days)          | 1.94*<br>(1.16) | 2.56**<br>(1.15) | 0.62<br>(1.26)   | 1.67<br>(1.15)  | 2.18*<br>(1.15) | 0.51<br>(1.24)   | 7.42<br>(7.61)       | 311  |
| Daily avg. no. of deposits (before 30 days) | 0.09*<br>(0.05) | 0.10**<br>(0.05) | 0.02<br>(0.05)   | 0.08*<br>(0.05) | 0.09*<br>(0.04) | 0.00<br>(0.05)   | 0.28<br>(0.29)       | 311  |
| Total deposit amount (before 30 days)       | -1.17<br>(2.07) | -1.65<br>(1.85)  | -0.48<br>(1.46)  | -1.02<br>(1.84) | -1.52<br>(1.69) | -0.50<br>(1.36)  | 8.99<br>(17.18)      | 311  |

Notes: Columns 1–3 report OLS estimates of the treatment effect. Columns 4–6 report estimates with covariate adjustment. Standard errors are in parentheses. Columns 7–8 report the mean and SD of the control group and the number observations, respectively. Observations are at the individual level. \* denotes significance at 10 pct., \*\* at 5 pct., and \*\*\* at 1 pct. level.

Table 19: Covariate-adjusted treatment effects – Mobile savings (after 30 days)

|  | No controls     |                  |                  | With controls   |                  |                  | Sample               |      |
|--|-----------------|------------------|------------------|-----------------|------------------|------------------|----------------------|------|
|  | (1)             | (2)              | (3)              | (4)             | (5)              | (6)              | (7)                  | (8)  |
|  | PLS-N           | PLS-F            | PLS-F –<br>PLS-N | PLS-N           | PLS-F            | PLS-F –<br>PLS-N | Control Mean<br>(SD) | Obs. |
| Total no. of deposits (after 30 days)      | 2.02<br>(1.26)  | 2.63**<br>(1.25) | 0.61<br>(1.44)   | 2.07<br>(1.34)  | 2.20*<br>(1.23)  | 0.13<br>(1.47)   | 5.18<br>(7.56)       | 311  |
| No. of days saved (after 30 days)          | 1.99*<br>(1.02) | 2.38**<br>(1.05) | 0.39<br>(1.18)   | 1.88*<br>(1.03) | 2.01**<br>(1.02) | 0.12<br>(1.14)   | 4.36<br>(6.36)       | 311  |
| Daily avg. no. of deposits (after 30 days) | 0.07<br>(0.04)  | 0.09**<br>(0.04) | 0.02<br>(0.05)   | 0.07<br>(0.04)  | 0.07*<br>(0.04)  | 0.00<br>(0.05)   | 0.17<br>(0.25)       | 311  |
| Total deposit amount (after 30 days)       | 0.38<br>(1.68)  | 0.05<br>(1.47)   | -0.33<br>(1.58)  | 0.70<br>(1.70)  | 0.06<br>(1.40)   | -0.64<br>(1.67)  | 5.88<br>(11.43)      | 311  |

Notes: Columns 1–3 report OLS estimates of the treatment effect. Columns 4–6 report estimates with covariate adjustment. Standard errors are in parentheses. Columns 7–8 report the mean and SD of the control group and the number observations, respectively. Observations are at the individual level. \* denotes significance at 10 pct., \*\* at 5 pct., and \*\*\* at 1 pct. level.

Table 20: Covariate-adjusted treatment effects – Savings outside the project

|                           | No controls      |                   |                   | With controls    |                   |                   | Sample               |      |
|---------------------------|------------------|-------------------|-------------------|------------------|-------------------|-------------------|----------------------|------|
|                           | (1)              | (2)               | (3)               | (4)              | (5)               | (6)               | (7)                  | (8)  |
|                           | PLS-N            | PLS-F             | PLS-F –<br>PLS-N  | PLS-N            | PLS-F             | PLS-F –<br>PLS-N  | Control Mean<br>(SD) | Obs. |
| Total savings last month  | 18.45<br>(25.16) | -17.87<br>(14.64) | -36.32<br>(24.06) | 16.75<br>(23.25) | -12.44<br>(14.86) | -29.19<br>(22.10) | 80.31<br>(112.74)    | 284  |
| M-Pesa savings last month | -5.42<br>(6.34)  | -6.71<br>(5.49)   | -1.29<br>(5.30)   | -5.47<br>(6.06)  | -6.19<br>(5.38)   | -0.73<br>(5.27)   | 20.42<br>(44.67)     | 284  |
| ROSCA savings last month  | 1.48<br>(6.76)   | 7.37<br>(6.79)    | 5.89<br>(7.33)    | 2.84<br>(6.26)   | 7.85<br>(6.35)    | 5.01<br>(6.85)    | 22.24<br>(42.18)     | 283  |
| Saves with a ROSCA        | -0.02<br>(0.07)  | 0.14**<br>(0.07)  | 0.16**<br>(0.07)  | -0.01<br>(0.07)  | 0.14**<br>(0.06)  | 0.15**<br>(0.07)  | 0.54<br>(0.50)       | 284  |

Notes: Columns 1–3 report OLS estimates of the treatment effect. Columns 4–6 report estimates with covariate adjustment. Standard errors are in parentheses. Columns 7–8 report the mean and SD of the control group and the number observations, respectively. Observations are at the individual level. \* denotes significance at 10 pct., \*\* at 5 pct., and \*\*\* at 1 pct. level.

Table 21: Covariate-adjusted treatment effects – Gambling

|                        | No controls     |                   |                  | With controls   |                   |                  | Sample               |      |
|------------------------|-----------------|-------------------|------------------|-----------------|-------------------|------------------|----------------------|------|
|                        | (1)             | (2)               | (3)              | (4)             | (5)               | (6)              | (7)                  | (8)  |
|                        | PLS-N           | PLS-F             | PLS-F –<br>PLS-N | PLS-N           | PLS-F             | PLS-F –<br>PLS-N | Control Mean<br>(SD) | Obs. |
| Gamble more            | 0.06<br>(0.05)  | 0.15***<br>(0.06) | 0.08<br>(0.06)   | 0.06<br>(0.05)  | 0.16***<br>(0.05) | 0.10*<br>(0.06)  | 0.12<br>(0.32)       | 284  |
| Gamble less            | -0.02<br>(0.05) | 0.04<br>(0.06)    | 0.06<br>(0.05)   | -0.02<br>(0.05) | 0.03<br>(0.06)    | 0.05<br>(0.06)   | 0.16<br>(0.37)       | 284  |
| More tempted to gamble | 0.09<br>(0.07)  | 0.05<br>(0.07)    | -0.04<br>(0.07)  | 0.05<br>(0.07)  | 0.03<br>(0.07)    | -0.02<br>(0.07)  | 0.47<br>(0.50)       | 284  |
| Less tempted to gamble | -0.01<br>(0.03) | 0.03<br>(0.04)    | 0.04<br>(0.04)   | -0.00<br>(0.03) | 0.04<br>(0.04)    | 0.04<br>(0.04)   | 0.06<br>(0.25)       | 284  |

Notes: Columns 1–3 report OLS estimates of the treatment effect. Columns 4–6 report estimates with covariate adjustment. Standard errors are in parentheses. Columns 7–8 report the mean and SD of the control group and the number observations, respectively. Observations are at the individual level. \* denotes significance at 10 pct., \*\* at 5 pct., and \*\*\* at 1 pct. level.

Table 22: Covariate-adjusted treatment effects – Akiba Smart

|   | No controls     |                 |                  | With controls   |                 |                  | Sample               |      |
|---|-----------------|-----------------|------------------|-----------------|-----------------|------------------|----------------------|------|
|   | (1)             | (2)             | (3)              | (4)             | (5)             | (6)              | (7)                  | (8)  |
|   | PLS-N           | PLS-F           | PLS-F –<br>PLS-N | PLS-N           | PLS-F           | PLS-F –<br>PLS-N | Control Mean<br>(SD) | Obs. |
| How much do you trust Akiba Smart?          | 0.03<br>(0.14)  | -0.07<br>(0.18) | -0.10<br>(0.18)  | 0.08<br>(0.14)  | 0.05<br>(0.16)  | -0.03<br>(0.15)  | 0.00<br>(1.00)       | 284  |
| What is your confidence in Akiba Smart?     | 0.11<br>(0.13)  | 0.07<br>(0.14)  | -0.04<br>(0.13)  | 0.16<br>(0.13)  | 0.18<br>(0.12)  | 0.02<br>(0.12)   | 0.00<br>(1.00)       | 284  |
| Did you tell friends and famiy about AKIBA? | -0.08<br>(0.06) | -0.04<br>(0.06) | 0.04<br>(0.06)   | -0.05<br>(0.06) | -0.04<br>(0.06) | 0.01<br>(0.06)   | 0.83<br>(0.38)       | 284  |
| Continue saving with AKIBA                  | -0.05<br>(0.05) | -0.01<br>(0.04) | 0.04<br>(0.05)   | -0.04<br>(0.05) | -0.01<br>(0.04) | 0.03<br>(0.05)   | 0.91<br>(0.28)       | 283  |

Notes: Columns 1–3 report OLS estimates of the treatment effect. Columns 4–6 report estimates with covariate adjustment. Standard errors are in parentheses. Columns 7–8 report the mean and SD of the control group and the number observations, respectively. Observations are at the individual level. \* denotes significance at 10 pct., \*\* at 5 pct., and \*\*\* at 1 pct. level.

Table 23: Covariate-adjusted treatment effects – Expenditure

|                           | No controls       |                  |                  | With controls     |                   |                  | Sample               |      |
|---------------------------|-------------------|------------------|------------------|-------------------|-------------------|------------------|----------------------|------|
|                           | (1)               | (2)              | (3)              | (4)               | (5)               | (6)              | (7)                  | (8)  |
|                           | PLS-N             | PLS-F            | PLS-F –<br>PLS-N | PLS-N             | PLS-F             | PLS-F –<br>PLS-N | Control Mean<br>(SD) | Obs. |
| Airtime                   | -0.33**<br>(0.15) | -0.13<br>(0.19)  | 0.20*<br>(0.12)  | -0.24**<br>(0.12) | -0.02<br>(0.18)   | 0.22*<br>(0.13)  | 0.35<br>(1.47)       | 284  |
| Business-related          | 0.08*<br>(0.04)   | 0.10**<br>(0.05) | 0.02<br>(0.05)   | 0.10**<br>(0.04)  | 0.12***<br>(0.04) | 0.02<br>(0.05)   | 0.06<br>(0.25)       | 284  |
| Durable goods             | -0.06<br>(0.04)   | -0.01<br>(0.05)  | 0.05<br>(0.04)   | -0.07*<br>(0.04)  | -0.01<br>(0.05)   | 0.07*<br>(0.04)  | 0.13<br>(0.34)       | 284  |
| Loan repayment            | -0.01<br>(0.04)   | -0.02<br>(0.04)  | -0.01<br>(0.04)  | -0.03<br>(0.04)   | -0.04<br>(0.04)   | -0.01<br>(0.04)  | 0.09<br>(0.28)       | 284  |
| Food                      | 0.04<br>(0.07)    | -0.08<br>(0.06)  | -0.12*<br>(0.06) | 0.05<br>(0.06)    | -0.06<br>(0.06)   | -0.11*<br>(0.06) | 0.28<br>(0.45)       | 284  |
| Rent and housing payments | -0.03<br>(0.04)   | -0.00<br>(0.04)  | 0.03<br>(0.04)   | -0.03<br>(0.04)   | 0.01<br>(0.05)    | 0.04<br>(0.04)   | 0.11<br>(0.31)       | 284  |
| Health-related            | -0.02<br>(0.02)   | -0.03*<br>(0.02) | -0.01<br>(0.01)  | -0.02<br>(0.02)   | -0.03*<br>(0.02)  | -0.01<br>(0.01)  | 0.03<br>(0.18)       | 284  |
| Other non-durables        | 0.01<br>(0.02)    | 0.03<br>(0.02)   | 0.02<br>(0.03)   | 0.00<br>(0.01)    | 0.04<br>(0.02)    | 0.03<br>(0.02)   | 0.01<br>(0.10)       | 284  |
| Saved balance             | 0.04<br>(0.04)    | 0.06<br>(0.04)   | 0.02<br>(0.05)   | 0.04<br>(0.04)    | 0.05<br>(0.04)    | 0.01<br>(0.05)   | 0.07<br>(0.26)       | 284  |
| School-related            | 0.08<br>(0.05)    | 0.02<br>(0.05)   | -0.06<br>(0.05)  | 0.09*<br>(0.05)   | -0.01<br>(0.05)   | -0.09*<br>(0.05) | 0.12<br>(0.32)       | 284  |
| Transfers                 | 0.02<br>(0.03)    | -0.00<br>(0.02)  | -0.02<br>(0.03)  | 0.02<br>(0.03)    | -0.00<br>(0.02)   | -0.03<br>(0.03)  | 0.02<br>(0.15)       | 284  |
| Travel                    | -0.00<br>(0.02)   | -0.00<br>(0.02)  | 0.00<br>(0.02)   | 0.01<br>(0.02)    | 0.01<br>(0.02)    | 0.00<br>(0.02)   | 0.02<br>(0.15)       | 284  |
| Did not save              | -0.02<br>(0.04)   | -0.01<br>(0.04)  | 0.01<br>(0.04)   | -0.03<br>(0.04)   | 0.00<br>(0.04)    | 0.03<br>(0.04)   | 0.10<br>(0.30)       | 284  |

Notes: Columns 1–3 report OLS estimates of the treatment effect. Columns 4–6 report estimates with covariate adjustment. Standard errors are in parentheses. Columns 7–8 report the mean and SD of the control group and the number observations, respectively. Observations are at the individual level. \* denotes significance at 10 pct., \*\* at 5 pct., and \*\*\* at 1 pct. level.

Table 24: Covariate-adjusted treatment effects – Self-perceptions

|                                    | No controls       |                   |                  | With controls     |                   |                   | Sample               |      |
|------------------------------------|-------------------|-------------------|------------------|-------------------|-------------------|-------------------|----------------------|------|
|                                    | (1)               | (2)               | (3)              | (4)               | (5)               | (6)               | (7)                  | (8)  |
|                                    | PLS-N             | PLS-F             | PLS-F –<br>PLS-N | PLS-N             | PLS-F             | PLS-F –<br>PLS-N  | Control Mean<br>(SD) | Obs. |
| Do you see yourself as a saver?    | -0.20<br>(0.15)   | -0.09<br>(0.14)   | 0.11<br>(0.15)   | -0.23<br>(0.15)   | -0.06<br>(0.14)   | 0.17<br>(0.15)    | -0.00<br>(1.00)      | 284  |
| Are you in general a lucky person? | 4.77***<br>(0.20) | 4.97***<br>(0.18) | 0.20<br>(0.23)   | 4.86***<br>(0.19) | 4.95***<br>(0.18) | 0.08<br>(0.22)    | -0.00<br>(1.00)      | 284  |
| Do you feel you saved enough?      | 0.19<br>(0.15)    | -0.09<br>(0.15)   | -0.28*<br>(0.15) | 0.20<br>(0.15)    | -0.11<br>(0.15)   | -0.31**<br>(0.15) | 0.00<br>(1.00)       | 284  |
| How did you feel not saving?       | -0.02<br>(0.16)   | 0.06<br>(0.15)    | 0.08<br>(0.16)   | -0.06<br>(0.16)   | 0.06<br>(0.16)    | 0.12<br>(0.17)    | -0.00<br>(1.00)      | 284  |

Notes: Columns 1–3 report OLS estimates of the treatment effect. Columns 4–6 report estimates with covariate adjustment. Standard errors are in parentheses. Columns 7–8 report the mean and SD of the control group and the number observations, respectively. Observations are at the individual level. \* denotes significance at 10 pct., \*\* at 5 pct., and \*\*\* at 1 pct. level.

### C.3 Heterogeneous treatment effects

Table 25: Heterogeneous effects – Primary outcomes by female

|                   | (1)                   | (2)                  | (3)                      | (4)              |
|-------------------|-----------------------|----------------------|--------------------------|------------------|
|                   | Total no. of deposits | Total deposit amount | Total savings last month | Gamble more      |
| PLS-N             | 4.62<br>(3.71)        | 3.20<br>(6.67)       | 88.08*<br>(51.67)        | 0.16*<br>(0.08)  |
| PLS-N ×<br>Female | 0.07<br>(5.06)        | -6.28<br>(7.28)      | -120.84**<br>(55.74)     | -0.17<br>(0.11)  |
| PLS-F             | 0.33<br>(3.57)        | -4.94<br>(5.29)      | -0.93<br>(23.83)         | 0.19**<br>(0.09) |
| PLS-F ×<br>Female | 8.84*<br>(4.84)       | 5.99<br>(6.13)       | -28.26<br>(31.19)        | -0.07<br>(0.12)  |
| Female            | -1.15<br>(2.98)       | -3.99<br>(4.90)      | 6.92<br>(22.91)          | 0.05<br>(0.07)   |
| Constant          | 14.26***<br>(2.26)    | 16.96***<br>(4.28)   | 76.63***<br>(13.68)      | 0.09**<br>(0.04) |
| Adjusted $R^2$    | 0.015                 | 0.006                | 0.041                    | 0.016            |
| Control mean      | 13.66                 | 14.87                | 80.31                    | 0.12             |
| PLS-N $p$ -value  | 0.17                  | 0.29                 | 0.12                     | 0.85             |
| PLS-F $p$ -value  | 0.01                  | 0.73                 | 0.15                     | 0.13             |
| Observations      | 311                   | 311                  | 284                      | 284              |

Notes: This table reports OLS estimates of the treatment effect and its interaction with the baseline variable. Standard errors are in parentheses. \* denotes significance at 10 pct., \*\* at 5 pct., and \*\*\* at 1 pct. level. We also report the  $p$ -values for joint tests on the direct treatment effect conditional on the baseline covariate = 1.

Table 26: Heterogeneous effects – Primary outcomes by below 30 y.o.

|                                 | (1)<br>Total no. of deposits | (2)<br>Total deposit amount | (3)<br>Total savings last month | (4)<br>Gamble more |
|---------------------------------|------------------------------|-----------------------------|---------------------------------|--------------------|
| PLS-N                           | 6.20<br>(4.09)               | 3.15<br>(4.15)              | -4.13<br>(27.69)                | 0.03<br>(0.09)     |
| PLS-N $\times$<br>Below 30 y.o. | -3.80<br>(5.14)              | -7.47<br>(6.62)             | 50.48<br>(52.97)                | 0.06<br>(0.10)     |
| PLS-F                           | 5.52<br>(3.79)               | 0.20<br>(3.00)              | -28.11<br>(21.69)               | 0.13<br>(0.09)     |
| PLS-F $\times$<br>Below 30 y.o. | -0.64<br>(4.99)              | -3.22<br>(5.73)             | 21.61<br>(30.86)                | 0.03<br>(0.11)     |
| Below 30 y.o.                   | -2.91<br>(3.08)              | 3.32<br>(4.57)              | -16.07<br>(24.47)               | -0.14**<br>(0.07)  |
| Constant                        | 15.07***<br>(2.50)           | 12.91***<br>(2.08)          | 88.38***<br>(20.06)             | 0.19***<br>(0.06)  |
| Adjusted $R^2$                  | 0.015                        | -0.011                      | -0.002                          | 0.029              |
| Control mean                    | 13.66                        | 14.87                       | 80.31                           | 0.12               |
| PLS-N $p$ -value                | 0.44                         | 0.40                        | 0.31                            | 0.12               |
| PLS-F $p$ -value                | 0.13                         | 0.54                        | 0.77                            | 0.02               |
| Observations                    | 303                          | 303                         | 276                             | 276                |

Notes: This table reports OLS estimates of the treatment effect and its interaction with the baseline variable. Standard errors are in parentheses. \* denotes significance at 10 pct., \*\* at 5 pct., and \*\*\* at 1 pct. level. We also report the  $p$ -values for joint tests on the direct treatment effect conditional on the baseline covariate = 1.

Table 27: Heterogeneous effects – Primary outcomes by completed primary school

|  | (1)<br>Total no. of deposits | (2)<br>Total deposit amount | (3)<br>Total savings last month | (4)<br>Gamble more |
|--|------------------------------|-----------------------------|---------------------------------|--------------------|
| PLS-N                                      | 14.33<br>(14.29)             | 4.63<br>(4.82)              | 118.43<br>(100.47)              | -0.00<br>(.)       |
| PLS-N $\times$<br>Completed primary school | -9.84<br>(14.52)             | -5.31<br>(5.91)             | -102.06<br>(103.75)             | 0.07<br>(0.05)     |
| PLS-F                                      | 4.67<br>(7.15)               | 5.84<br>(6.09)              | 231.72<br>(.)                   | -0.00<br>(.)       |
| PLS-F $\times$<br>Completed primary school | 1.27<br>(7.57)               | -7.39<br>(6.77)             | -252.25***<br>(14.77)           | 0.15**<br>(0.06)   |
| Completed primary school                   | 9.75***<br>(1.49)            | 13.45***<br>(2.42)          | 55.15***<br>(11.80)             | 0.12***<br>(0.03)  |
| Constant                                   | 4.00<br>(.)                  | 1.54***<br>(0.00)           | 25.75<br>(.)                    | 0.00<br>(.)        |
| Adjusted $R^2$                             | 0.005                        | -0.012                      | -0.001                          | 0.010              |
| Control mean                               | 13.66                        | 14.87                       | 80.31                           | 0.12               |
| PLS-N $p$ -value                           | 0.08                         | 0.84                        | 0.53                            | 0.21               |
| PLS-F $p$ -value                           | 0.02                         | 0.60                        | 0.17                            | 0.01               |
| Observations                               | 311                          | 311                         | 284                             | 284                |

Notes: This table reports OLS estimates of the treatment effect and its interaction with the baseline variable. Standard errors are in parentheses. \* denotes significance at 10 pct., \*\* at 5 pct., and \*\*\* at 1 pct. level. We also report the  $p$ -values for joint tests on the direct treatment effect conditional on the baseline covariate = 1.

Table 28: Heterogeneous effects – Primary outcomes by completed secondary school

|                                       | (1)<br>Total no. of deposits | (2)<br>Total deposit amount | (3)<br>Total savings last month | (4)<br>Gamble more |
|---------------------------------------|------------------------------|-----------------------------|---------------------------------|--------------------|
| PLS-N                                 | 2.73<br>(3.41)               | -0.58<br>(4.97)             | -20.96<br>(26.61)               | 0.02<br>(0.08)     |
| PLS-N ×<br>Completed secondary school | 3.64<br>(5.09)               | -0.50<br>(6.86)             | 75.77<br>(48.46)                | 0.08<br>(0.10)     |
| PLS-F                                 | 8.30**<br>(3.78)             | 1.06<br>(3.92)              | -25.45<br>(21.11)               | 0.15*<br>(0.09)    |
| PLS-F ×<br>Completed secondary school | -4.20<br>(5.05)              | -4.76<br>(5.94)             | 16.44<br>(28.66)                | 0.01<br>(0.11)     |
| Completed secondary school            | -1.23<br>(2.99)              | 0.96<br>(4.88)              | -16.01<br>(22.82)               | -0.09<br>(0.06)    |
| Constant                              | 14.23***<br>(1.87)           | 14.42***<br>(2.96)          | 87.64***<br>(17.82)             | 0.16***<br>(0.05)  |
| Adjusted $R^2$                        | 0.010                        | -0.013                      | 0.006                           | 0.013              |
| Control mean                          | 13.66                        | 14.87                       | 80.31                           | 0.12               |
| PLS-N $p$ -value                      | 0.09                         | 0.82                        | 0.18                            | 0.11               |
| PLS-F $p$ -value                      | 0.22                         | 0.41                        | 0.64                            | 0.02               |
| Observations                          | 311                          | 311                         | 284                             | 284                |

Notes: This table reports OLS estimates of the treatment effect and its interaction with the baseline variable. Standard errors are in parentheses. \* denotes significance at 10 pct., \*\* at 5 pct., and \*\*\* at 1 pct. level. We also report the  $p$ -values for joint tests on the direct treatment effect conditional on the baseline covariate = 1.

Table 29: Heterogeneous effects – Primary outcomes by married/co-habiting

|                                | (1)<br>Total no. of deposits | (2)<br>Total deposit amount | (3)<br>Total savings last month | (4)<br>Gamble more |
|--------------------------------|------------------------------|-----------------------------|---------------------------------|--------------------|
| PLS-N                          | 5.19<br>(3.58)               | -2.32<br>(4.80)             | -17.16<br>(21.83)               | 0.05<br>(0.08)     |
| PLS-N ×<br>Married/co-habiting | -1.60<br>(5.24)              | 3.30<br>(6.69)              | 73.22<br>(49.86)                | 0.05<br>(0.10)     |
| PLS-F                          | 7.78**<br>(3.40)             | -3.61<br>(4.16)             | -25.02<br>(20.21)               | 0.06<br>(0.08)     |
| PLS-F ×<br>Married/co-habiting | -4.60<br>(5.06)              | 4.20<br>(5.78)              | 15.66<br>(29.14)                | 0.18<br>(0.11)     |
| Married/co-habiting            | 3.57<br>(3.10)               | -2.09<br>(4.67)             | -12.66<br>(22.87)               | -0.08<br>(0.07)    |
| Constant                       | 12.18***<br>(1.76)           | 15.89***<br>(3.55)          | 86.59***<br>(17.70)             | 0.15***<br>(0.05)  |
| Adjusted $R^2$                 | 0.005                        | -0.014                      | 0.006                           | 0.015              |
| Control mean                   | 13.66                        | 14.87                       | 80.31                           | 0.12               |
| PLS-N $p$ -value               | 0.35                         | 0.83                        | 0.21                            | 0.17               |
| PLS-F $p$ -value               | 0.40                         | 0.88                        | 0.66                            | 0.00               |
| Observations                   | 307                          | 307                         | 280                             | 280                |

Notes: This table reports OLS estimates of the treatment effect and its interaction with the baseline variable. Standard errors are in parentheses. \* denotes significance at 10 pct., \*\* at 5 pct., and \*\*\* at 1 pct. level. We also report the  $p$ -values for joint tests on the direct treatment effect conditional on the baseline covariate = 1.

Table 30: Heterogeneous effects – Primary outcomes by has children

|                         | (1)<br>Total no. of deposits | (2)<br>Total deposit amount | (3)<br>Total savings last month | (4)<br>Gamble more |
|-------------------------|------------------------------|-----------------------------|---------------------------------|--------------------|
| PLS-N                   | 0.24<br>(3.72)               | -12.87*<br>(7.16)           | 6.21<br>(25.65)                 | 0.20**<br>(0.08)   |
| PLS-N ×<br>Has children | 5.67<br>(4.86)               | 16.33**<br>(8.01)           | 16.72<br>(41.89)                | -0.19*<br>(0.10)   |
| PLS-F                   | 3.85<br>(4.49)               | -8.70<br>(7.76)             | 12.89<br>(33.04)                | 0.12*<br>(0.07)    |
| PLS-F ×<br>Has children | 2.49<br>(5.37)               | 9.78<br>(8.22)              | -41.64<br>(36.72)               | 0.04<br>(0.10)     |
| Has children            | 1.57<br>(3.28)               | -8.46<br>(7.18)             | 10.52<br>(22.97)                | 0.16***<br>(0.04)  |
| Constant                | 12.52***<br>(2.78)           | 20.99***<br>(6.91)          | 72.48***<br>(17.87)             | 0.00<br>(.)        |
| Adjusted $R^2$          | 0.014                        | 0.003                       | -0.003                          | 0.033              |
| Control mean            | 13.66                        | 14.87                       | 80.31                           | 0.12               |
| PLS-N $p$ -value        | 0.06                         | 0.34                        | 0.49                            | 0.82               |
| PLS-F $p$ -value        | 0.03                         | 0.69                        | 0.07                            | 0.03               |
| Observations            | 311                          | 311                         | 284                             | 284                |

Notes: This table reports OLS estimates of the treatment effect and its interaction with the baseline variable. Standard errors are in parentheses. \* denotes significance at 10 pct., \*\* at 5 pct., and \*\*\* at 1 pct. level. We also report the  $p$ -values for joint tests on the direct treatment effect conditional on the baseline covariate = 1.

Table 31: Heterogeneous effects – Primary outcomes by prior savings usage

|                                | (1)<br>Total no. of deposits | (2)<br>Total deposit amount | (3)<br>Total savings last month | (4)<br>Gamble more |
|--------------------------------|------------------------------|-----------------------------|---------------------------------|--------------------|
| PLS-N                          | 8.07**<br>(4.07)             | 2.05<br>(4.49)              | 18.11<br>(21.87)                | 0.06<br>(0.07)     |
| PLS-N ×<br>Prior savings usage | -6.16<br>(5.23)              | -5.25<br>(6.57)             | -4.59<br>(45.62)                | -0.00<br>(0.10)    |
| PLS-F                          | 8.26**<br>(3.23)             | 3.42<br>(3.77)              | 17.34<br>(18.59)                | 0.18**<br>(0.07)   |
| PLS-F ×<br>Prior savings usage | -4.32<br>(4.87)              | -9.25<br>(5.64)             | -64.92**<br>(27.93)             | -0.06<br>(0.11)    |
| Prior savings usage            | 5.62**<br>(2.82)             | 7.44<br>(4.56)              | 64.75***<br>(21.37)             | 0.09<br>(0.06)     |
| Constant                       | 10.50***<br>(1.79)           | 10.69***<br>(2.73)          | 45.18***<br>(10.33)             | 0.07*<br>(0.04)    |
| Adjusted $R^2$                 | 0.009                        | -0.004                      | 0.020                           | 0.015              |
| Control mean                   | 13.66                        | 14.87                       | 80.31                           | 0.12               |
| PLS-N $p$ -value               | 0.56                         | 0.51                        | 0.74                            | 0.45               |
| PLS-F $p$ -value               | 0.28                         | 0.17                        | 0.02                            | 0.15               |
| Observations                   | 311                          | 311                         | 284                             | 284                |

Notes: This table reports OLS estimates of the treatment effect and its interaction with the baseline variable. Standard errors are in parentheses. \* denotes significance at 10 pct., \*\* at 5 pct., and \*\*\* at 1 pct. level. We also report the  $p$ -values for joint tests on the direct treatment effect conditional on the baseline covariate = 1.



Table 32: Heterogeneous effects – Primary outcomes by above median monthly inc.

|                                      | (1)<br>Total no. of deposits | (2)<br>Total deposit amount | (3)<br>Total savings last month | (4)<br>Gamble more |
|--------------------------------------|------------------------------|-----------------------------|---------------------------------|--------------------|
| PLS-N                                | 4.17<br>(3.22)               | -0.81<br>(2.76)             | 8.98<br>(19.81)                 | 0.10<br>(0.07)     |
| PLS-N ×<br>Above median monthly inc. | 0.59<br>(5.11)               | -0.85<br>(6.86)             | 17.27<br>(50.79)                | -0.09<br>(0.10)    |
| PLS-F                                | 5.99*<br>(3.43)              | -0.12<br>(3.05)             | 3.07<br>(13.31)                 | 0.09<br>(0.07)     |
| PLS-F ×<br>Above median monthly inc. | -0.97<br>(4.97)              | -4.36<br>(5.99)             | -48.55*<br>(28.81)              | 0.09<br>(0.11)     |
| Above median monthly inc.            | 2.62<br>(3.01)               | 9.22*<br>(5.01)             | 68.35***<br>(23.22)             | 0.08<br>(0.07)     |
| Constant                             | 12.48***<br>(1.85)           | 10.74***<br>(2.25)          | 48.32***<br>(9.60)              | 0.08**<br>(0.04)   |
| Adjusted $R^2$                       | 0.006                        | 0.016                       | 0.038                           | 0.026              |
| Control mean                         | 13.66                        | 14.87                       | 80.31                           | 0.12               |
| PLS-N $p$ -value                     | 0.23                         | 0.79                        | 0.58                            | 0.85               |
| PLS-F $p$ -value                     | 0.16                         | 0.39                        | 0.08                            | 0.04               |
| Observations                         | 311                          | 311                         | 284                             | 284                |

Notes: This table reports OLS estimates of the treatment effect and its interaction with the baseline variable. Standard errors are in parentheses. \* denotes significance at 10 pct., \*\* at 5 pct., and \*\*\* at 1 pct. level. We also report the  $p$ -values for joint tests on the direct treatment effect conditional on the baseline covariate = 1.

Table 33: Heterogeneous effects – Primary outcomes by employment status

|                              | (1)<br>Total no. of deposits | (2)<br>Total deposit amount | (3)<br>Total savings last month | (4)<br>Gamble more |
|------------------------------|------------------------------|-----------------------------|---------------------------------|--------------------|
| PLS-N                        | 4.67<br>(3.69)               | -1.66<br>(3.74)             | 9.98<br>(21.44)                 | 0.17**<br>(0.07)   |
| PLS-N ×<br>Employment status | -0.56<br>(5.11)              | 1.04<br>(6.51)              | 11.41<br>(47.25)                | -0.21**<br>(0.10)  |
| PLS-F                        | 9.02***<br>(3.28)            | 1.18<br>(3.69)              | -6.57<br>(15.10)                | 0.17***<br>(0.07)  |
| PLS-F ×<br>Employment status | -6.82<br>(4.91)              | -5.57<br>(5.89)             | -19.84<br>(29.42)               | -0.04<br>(0.11)    |
| Employment status            | 4.53<br>(2.93)               | 6.42<br>(4.77)              | 44.39*<br>(22.73)               | 0.14**<br>(0.06)   |
| Constant                     | 11.42***<br>(1.76)           | 11.69***<br>(3.10)          | 57.65***<br>(12.55)             | 0.04<br>(0.03)     |
| Adjusted $R^2$               | 0.011                        | 0.002                       | 0.013                           | 0.026              |
| Control mean                 | 13.66                        | 14.87                       | 80.31                           | 0.12               |
| PLS-N $p$ -value             | 0.25                         | 0.91                        | 0.61                            | 0.63               |
| PLS-F $p$ -value             | 0.55                         | 0.34                        | 0.30                            | 0.15               |
| Observations                 | 311                          | 311                         | 284                             | 284                |

Notes: This table reports OLS estimates of the treatment effect and its interaction with the baseline variable. Standard errors are in parentheses. \* denotes significance at 10 pct., \*\* at 5 pct., and \*\*\* at 1 pct. level. We also report the  $p$ -values for joint tests on the direct treatment effect conditional on the baseline covariate = 1.

Table 34: Heterogeneous effects – Primary outcomes by self-employment

|                            | (1)<br>Total no. of deposits | (2)<br>Total deposit amount | (3)<br>Total savings last month | (4)<br>Gamble more |
|----------------------------|------------------------------|-----------------------------|---------------------------------|--------------------|
| PLS-N                      | 4.59<br>(3.42)               | -3.04<br>(3.93)             | 7.21<br>(20.02)                 | 0.11*<br>(0.07)    |
| PLS-N ×<br>Self-employment | 5.74<br>(7.02)               | 6.12<br>(6.14)              | 28.01<br>(72.06)                | 0.08<br>(0.17)     |
| PLS-F                      | 6.95**<br>(3.07)             | -1.40<br>(3.88)             | -3.28<br>(18.36)                | 0.14**<br>(0.07)   |
| PLS-F ×<br>Self-employment | 8.24<br>(7.03)               | 8.32<br>(6.38)              | -13.54<br>(43.45)               | 0.06<br>(0.16)     |
| Self-employment            | -0.41<br>(3.48)              | -2.75<br>(4.25)             | 34.94<br>(38.29)                | 0.04<br>(0.09)     |
| Constant                   | 12.41***<br>(1.85)           | 13.92***<br>(3.36)          | 66.99***<br>(12.79)             | 0.08**<br>(0.04)   |
| Adjusted $R^2$             | 0.029                        | -0.012                      | 0.004                           | 0.014              |
| Control mean               | 13.66                        | 14.87                       | 80.31                           | 0.12               |
| PLS-N $p$ -value           | 0.09                         | 0.51                        | 0.61                            | 0.21               |
| PLS-F $p$ -value           | 0.02                         | 0.17                        | 0.67                            | 0.17               |
| Observations               | 231                          | 231                         | 209                             | 209                |

Notes: This table reports OLS estimates of the treatment effect and its interaction with the baseline variable. Standard errors are in parentheses. \* denotes significance at 10 pct., \*\* at 5 pct., and \*\*\* at 1 pct. level. We also report the  $p$ -values for joint tests on the direct treatment effect conditional on the baseline covariate = 1.

Table 35: Heterogeneous effects – Primary outcomes by has dependant

|                          | (1)<br>Total no. of deposits | (2)<br>Total deposit amount | (3)<br>Total savings last month | (4)<br>Gamble more |
|--------------------------|------------------------------|-----------------------------|---------------------------------|--------------------|
| PLS-N                    | 0.80<br>(4.02)               | -0.31<br>(6.32)             | -2.73<br>(35.43)                | 0.14<br>(0.09)     |
| PLS-N ×<br>Has dependant | 4.27<br>(4.96)               | -0.85<br>(7.37)             | 24.42<br>(45.85)                | -0.10<br>(0.11)    |
| PLS-F                    | 1.21<br>(4.65)               | -3.07<br>(6.40)             | -6.47<br>(30.55)                | 0.06<br>(0.06)     |
| PLS-F ×<br>Has dependant | 5.30<br>(5.42)               | 1.60<br>(7.18)              | -13.72<br>(34.81)               | 0.11<br>(0.09)     |
| Has dependant            | 3.04<br>(3.16)               | 5.43<br>(6.20)              | 15.37<br>(28.78)                | 0.14***<br>(0.04)  |
| Constant                 | 11.20***<br>(2.66)           | 10.48*<br>(5.61)            | 67.56***<br>(25.65)             | 0.00<br>(.)        |
| Adjusted $R^2$           | 0.018                        | -0.006                      | -0.005                          | 0.033              |
| Control mean             | 13.66                        | 14.87                       | 80.31                           | 0.12               |
| PLS-N $p$ -value         | 0.08                         | 0.76                        | 0.46                            | 0.46               |
| PLS-F $p$ -value         | 0.02                         | 0.65                        | 0.23                            | 0.01               |
| Observations             | 311                          | 311                         | 284                             | 284                |

Notes: This table reports OLS estimates of the treatment effect and its interaction with the baseline variable. Standard errors are in parentheses. \* denotes significance at 10 pct., \*\* at 5 pct., and \*\*\* at 1 pct. level. We also report the  $p$ -values for joint tests on the direct treatment effect conditional on the baseline covariate = 1.

Table 36: Heterogeneous effects – Primary outcomes by subject is a dependant

|                                   | (1)<br>Total no. of deposits | (2)<br>Total deposit amount | (3)<br>Total savings last month | (4)<br>Gamble more |
|-----------------------------------|------------------------------|-----------------------------|---------------------------------|--------------------|
| PLS-N                             | 6.01*<br>(3.12)              | -0.07<br>(4.36)             | 28.78<br>(34.05)                | 0.03<br>(0.06)     |
| PLS-N ×<br>Subject is a dependant | -4.80<br>(5.19)              | -1.01<br>(5.22)             | -29.15<br>(43.97)               | 0.15<br>(0.10)     |
| PLS-F                             | 3.84<br>(2.83)               | -4.20<br>(3.60)             | -20.66<br>(18.04)               | 0.12*<br>(0.07)    |
| PLS-F ×<br>Subject is a dependant | 7.54<br>(5.67)               | 11.08**<br>(5.32)           | 11.27<br>(28.99)                | 0.09<br>(0.11)     |
| Subject is a dependant            | -1.45<br>(3.39)              | -8.23**<br>(3.77)           | -23.74<br>(23.89)               | -0.15***<br>(0.04) |
| Constant                          | 13.99***<br>(1.71)           | 16.75***<br>(3.01)          | 86.12***<br>(14.09)             | 0.15***<br>(0.04)  |
| Adjusted $R^2$                    | 0.016                        | 0.006                       | 0.003                           | 0.017              |
| Control mean                      | 13.66                        | 14.87                       | 80.31                           | 0.12               |
| PLS-N $p$ -value                  | 0.77                         | 0.71                        | 0.99                            | 0.02               |
| PLS-F $p$ -value                  | 0.02                         | 0.08                        | 0.68                            | 0.01               |
| Observations                      | 311                          | 311                         | 284                             | 284                |

Notes: This table reports OLS estimates of the treatment effect and its interaction with the baseline variable. Standard errors are in parentheses. \* denotes significance at 10 pct., \*\* at 5 pct., and \*\*\* at 1 pct. level. We also report the  $p$ -values for joint tests on the direct treatment effect conditional on the baseline covariate = 1.

Table 37: Heterogeneous effects – Primary outcomes by risk aversion

|                          | (1)<br>Total no. of deposits | (2)<br>Total deposit amount | (3)<br>Total savings last month | (4)<br>Gamble more |
|--------------------------|------------------------------|-----------------------------|---------------------------------|--------------------|
| PLS-N                    | 7.87**<br>(3.63)             | -0.13<br>(4.91)             | 27.17<br>(39.93)                | 0.08<br>(0.08)     |
| PLS-N ×<br>Risk aversion | -7.63<br>(4.92)              | -1.99<br>(6.58)             | -20.64<br>(47.53)               | -0.05<br>(0.10)    |
| PLS-F                    | 7.83**<br>(3.50)             | -3.09<br>(4.14)             | -31.67*<br>(16.33)              | 0.15*<br>(0.08)    |
| PLS-F ×<br>Risk aversion | -4.62<br>(4.89)              | 3.09<br>(5.87)              | 30.31<br>(30.43)                | -0.01<br>(0.11)    |
| Risk aversion            | 0.50<br>(2.97)               | -3.87<br>(4.76)             | -5.01<br>(23.73)                | -0.05<br>(0.07)    |
| Constant                 | 13.42***<br>(1.99)           | 16.71***<br>(3.50)          | 82.66***<br>(14.36)             | 0.14***<br>(0.05)  |
| Adjusted $R^2$           | 0.017                        | -0.007                      | -0.003                          | 0.015              |
| Control mean             | 13.66                        | 14.87                       | 80.31                           | 0.12               |
| PLS-N $p$ -value         | 0.94                         | 0.63                        | 0.80                            | 0.65               |
| PLS-F $p$ -value         | 0.35                         | 1.00                        | 0.96                            | 0.07               |
| Observations             | 311                          | 311                         | 284                             | 284                |

Notes: This table reports OLS estimates of the treatment effect and its interaction with a dummy variable classifying participants as more risk averse than the median participant in the sample. Standard errors are in parentheses. \* denotes significance at 10 pct., \*\* at 5 pct., and \*\*\* at 1 pct. level. We also report the  $p$ -values for joint tests on the direct treatment effect conditional on the baseline covariate = 1.

Table 38: Heterogeneous effects – Primary outcomes by above median locus of control

|   | (1)<br>Total no. of deposits | (2)<br>Total deposit amount | (3)<br>Total savings last month | (4)<br>Gamble more |
|---|------------------------------|-----------------------------|---------------------------------|--------------------|
| PLS-N   | 4.19<br>(3.10)               | -1.59<br>(4.42)             | 13.63<br>(37.75)                | 0.01<br>(0.07)     |
| PLS-N $\times$<br>Above median locus of control | 1.03<br>(5.37)               | 2.07<br>(6.79)              | 12.02<br>(46.36)                | 0.12<br>(0.11)     |
| PLS-F   | 6.14*<br>(3.15)              | -1.86<br>(3.74)             | -33.91<br>(21.16)               | 0.12<br>(0.07)     |
| PLS-F $\times$<br>Above median locus of control | -1.11<br>(5.07)              | 0.65<br>(6.05)              | 40.84<br>(27.79)                | 0.07<br>(0.11)     |
| Above median locus of control                   | -0.72<br>(3.03)              | -0.96<br>(4.85)             | -32.57<br>(22.16)               | -0.06<br>(0.06)    |
| Constant  | 13.94***<br>(1.89)           | 15.25***<br>(3.15)          | 93.13***<br>(16.49)             | 0.14***<br>(0.05)  |
| Adjusted $R^2$                                  | 0.002                        | -0.015                      | -0.003                          | 0.010              |
| Control mean                                    | 13.66                        | 14.87                       | 80.31                           | 0.12               |
| PLS-N $p$ -value                                | 0.24                         | 0.92                        | 0.34                            | 0.10               |
| PLS-F $p$ -value                                | 0.21                         | 0.80                        | 0.70                            | 0.03               |
| Observations                                    | 311                          | 311                         | 284                             | 284                |

Notes: This table reports OLS estimates of the treatment effect and its interaction with the baseline variable. Standard errors are in parentheses. \* denotes significance at 10 pct., \*\* at 5 pct., and \*\*\* at 1 pct. level. We also report the  $p$ -values for joint tests on the direct treatment effect conditional on the baseline covariate = 1.

Table 39: Heterogeneous effects – Primary outcomes by above median indiff. point

|  | (1)<br>Total no. of deposits | (2)<br>Total deposit amount | (3)<br>Total savings last month | (4)<br>Gamble more |
|--|------------------------------|-----------------------------|---------------------------------|--------------------|
| PLS-N  | 3.06<br>(3.10)               | -8.41<br>(5.14)             | 49.44<br>(40.23)                | 0.08<br>(0.07)     |
| PLS-N $\times$<br>Above median indiff. point | 3.71<br>(5.23)               | 16.03**<br>(6.95)           | -68.81<br>(46.77)               | -0.03<br>(0.10)    |
| PLS-F  | 9.75***<br>(3.47)            | -4.02<br>(5.07)             | -1.54<br>(20.80)                | 0.19**<br>(0.08)   |
| PLS-F $\times$<br>Above median indiff. point | -7.98<br>(4.88)              | 4.62<br>(5.88)              | -33.21<br>(29.09)               | -0.09<br>(0.11)    |
| Above median indiff. point                   | 0.63<br>(2.95)               | -8.85*<br>(4.82)            | 16.42<br>(23.20)                | 0.02<br>(0.07)     |
| Constant                                     | 13.33***<br>(1.97)           | 19.42***<br>(4.51)          | 71.93***<br>(14.42)             | 0.11**<br>(0.05)   |
| Adjusted $R^2$                               | 0.018                        | 0.010                       | 0.004                           | 0.010              |
| Control mean                                 | 13.66                        | 14.87                       | 80.31                           | 0.12               |
| PLS-N $p$ -value                             | 0.11                         | 0.10                        | 0.42                            | 0.55               |
| PLS-F $p$ -value                             | 0.61                         | 0.84                        | 0.09                            | 0.22               |
| Observations                                 | 311                          | 311                         | 284                             | 284                |

Notes: This table reports OLS estimates of the treatment effect and its interaction with a dummy variable indicating an average indifference point between sooner and later monetary payments that falls above the sample median (corresponding to milder discounting). Standard errors are in parentheses. \* denotes significance at 10 pct., \*\* at 5 pct., and \*\*\* at 1 pct. level. We also report the  $p$ -values for joint tests on the direct treatment effect conditional on the baseline covariate = 1.

Table 40: Heterogeneous effects – Primary outcomes by above median CPGI

|                              | (1)<br>Total no. of deposits | (2)<br>Total deposit amount | (3)<br>Total savings last month | (4)<br>Gamble more |
|------------------------------|------------------------------|-----------------------------|---------------------------------|--------------------|
| PLS-N                        | 2.53<br>(3.29)               | -1.40<br>(3.45)             | -27.34<br>(23.42)               | -0.01<br>(0.07)    |
| PLS-N ×<br>Above median CPGI | 4.38<br>(5.22)               | 1.69<br>(7.00)              | 101.28*<br>(54.22)              | 0.16<br>(0.11)     |
| PLS-F                        | 6.17*<br>(3.59)              | 0.79<br>(3.44)              | -39.82*<br>(21.10)              | 0.11<br>(0.08)     |
| PLS-F ×<br>Above median CPGI | -1.79<br>(4.79)              | -5.46<br>(5.89)             | 50.89<br>(30.90)                | 0.07<br>(0.12)     |
| Above median CPGI            | -2.88<br>(2.93)              | 2.49<br>(4.86)              | -21.30<br>(23.07)               | -0.06<br>(0.07)    |
| Constant                     | 15.06***<br>(2.27)           | 13.66***<br>(2.55)          | 90.73***<br>(19.39)             | 0.15***<br>(0.05)  |
| Adjusted $R^2$               | 0.009                        | -0.010                      | 0.020                           | 0.014              |
| Control mean                 | 13.66                        | 14.87                       | 80.31                           | 0.12               |
| PLS-N $p$ -value             | 0.09                         | 0.96                        | 0.13                            | 0.06               |
| PLS-F $p$ -value             | 0.17                         | 0.33                        | 0.62                            | 0.03               |
| Observations                 | 311                          | 311                         | 284                             | 284                |

Notes: This table reports OLS estimates of the treatment effect and its interaction with a dummy variable indicating a score in the CPGI that falls above the sample median (corresponding to more severe problem gambling). Standard errors are in parentheses. \* denotes significance at 10 pct., \*\* at 5 pct., and \*\*\* at 1 pct. level. We also report the  $p$ -values for joint tests on the direct treatment effect conditional on the baseline covariate = 1.

#### C.4 Regressions at the participant-period level

Table 41: Regression of deposits on lottery results

|                  | Made a deposit   | Made a deposit    |
|------------------|------------------|-------------------|
| Winning ticket   | 0.02**<br>(0.01) | 0.15***<br>(0.02) |
| L.Made a deposit |                  | 0.47***<br>(0.02) |
| Adjusted $R^2$   | 0.081            | 0.267             |
| Control mean     | 0.20             |                   |
| Daily PLS effect |                  |                   |
| Observations     | 4473             | 12154             |

*Notes:* Column 1 reports on a regression of having saved at period  $t$  on winning the lottery at  $t$  conditional on being in the PLS group and not having saved at  $t - 1$ . Column 2 reports coefficients from a regression including both savers and non-savers with having saved in the previous period as a control variable. The unit of observation is individual-by-period. The regression includes period fixed effects. Standard errors are in parentheses and clustered at the individual level. \* denotes significance at 10 pct., \*\* at 5 pct., and \*\*\* at 1 pct. level.

Table 42: Regression of deposits on treatment in the first period

|                            | No. of deposits made |
|----------------------------|----------------------|
| PLS-N                      | 0.15*<br>(0.09)      |
| PLS-F                      | 0.28***<br>(0.10)    |
| Adjusted $R^2$             | 0.021                |
| PLS-F vs. PLS-N $p$ -value | 0.186                |
| Control mean               | 0.67                 |
| Observations               | 311                  |

*Notes:* This table reports on a regression of the number of deposits made in period 1 on each of the PLS treatments. The unit of observation is the individual. Standard errors are in parentheses and clustered at the individual level. \* denotes significance at 10 pct., \*\* at 5 pct., and \*\*\* at 1 pct. level.

## C.5 Logistic regression

Table 43: Ordered logit – Gambling behavior and temptation

|                        | Log odds        |                 |                  | Sample |
|------------------------|-----------------|-----------------|------------------|--------|
|                        | (1)             | (2)             | (3)              | (4)    |
|                        | PLS-N           | PLS-F           | PLS-F –<br>PLS-N | Obs.   |
| Self-reported gambling | 0.28<br>(0.27)  | 0.38<br>(0.32)  | 0.09<br>(0.32)   | 284    |
| Temptation to gamble   | -0.25<br>(0.28) | -0.35<br>(0.29) | -0.10<br>(0.28)  | 284    |

*Notes:* This table reports estimates from a ordered logit regression of the categorial response on treatment assignment. Each row corresponds to an outcome variable. Columns 1-2 reports the treatment effect in log-odds compared to the control group. Column 3 reports the difference between the two PLS treatments. Standard errors are in parentheses. Column 4 reports the number of observations in the analytic sample. Observations are at the individual level. Standard errors are clustered at the individual level. \* denotes significance at 10 pct., \*\* at 5 pct., and \*\*\* at 1 pct. level.



Table 44: Multinomial logit – Hypothetical treatment selection

|                    | Relative risk ratio |                   |                   |                  | Sample |
|--------------------|---------------------|-------------------|-------------------|------------------|--------|
|                    | (1)                 | (2)               | (3)               | (4)              | (5)    |
|                    | Constant            | PLS-N             | PLS-F             | PLS-F –<br>PLS-N | Obs.   |
| Select PLS-N group | 1.33<br>(0.28)      | 1.50<br>(0.48)    | 0.98<br>(0.31)    | 0.66<br>(0.22)   | 284    |
| Select PLS-F group | 0.08***<br>(0.05)   | 6.74***<br>(4.62) | 8.53***<br>(5.66) | 1.27<br>(0.55)   | 284    |

*Notes:* This table reports estimates from a multinomial logit regression of the categorical response on treatment assignment. Each row corresponds to a response category with the baseline value as Select control group. Column 1 reports the constant term corresponding to the mean of the control group. Columns 2–3 reports the treatment effect in relative risk ratios compared to the control group. Column 4 reports the difference between the two PLS treatments. Standard errors are in parentheses. Column 5 reports the number of observations in the analytic sample. Observations are at the individual level. \* denotes significance at 10 pct., \*\* at 5 pct., and \*\*\* at 1 pct. level.

## D. Baseline Correlates of Savings

Table 45: Baseline correlates of number of deposits made

|                                       | (1)                | (2)                | (3)                | (4)                | (5)                | (6)                | (7)                | (8)                |
|---------------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Avg. indiff. point                    | 0.00<br>(0.00)     |                    |                    |                    |                    |                    |                    |                    |
| Geo. discount factor                  |                    | 0.00<br>(0.00)     |                    |                    |                    |                    |                    |                    |
| Exp. discount factor                  |                    |                    | 2.13<br>(6.83)     |                    |                    |                    |                    |                    |
| Hyp. discount factor                  |                    |                    |                    | 0.50<br>(1.62)     |                    |                    |                    |                    |
| Dept. from stationarity               |                    |                    |                    |                    | -1.60<br>(3.09)    |                    |                    |                    |
| Decreasing impatience                 |                    |                    |                    |                    |                    | -2.03<br>(6.10)    |                    |                    |
| Coefficient of relative risk aversion |                    |                    |                    |                    |                    |                    | -0.14<br>(1.04)    |                    |
| Locus of control                      |                    |                    |                    |                    |                    |                    |                    | -0.28<br>(1.43)    |
| Constant                              | 11.14***<br>(2.44) | 11.30***<br>(1.39) | 11.08***<br>(2.40) | 11.26***<br>(1.96) | 11.31***<br>(1.51) | 11.33***<br>(1.73) | 11.94***<br>(1.68) | 11.78***<br>(1.27) |
| Adjusted R2                           | -0.01              | -0.01              | -0.01              | -0.01              | -0.01              | -0.01              | -0.01              | -0.01              |
| F-statistic                           | 0.08               | .                  | 0.10               | 0.10               | 0.27               | 0.11               | 0.02               | 0.04               |
| Observations                          | 105                | 105                | 105                | 105                | 105                | 105                | 105                | 105                |

Notes: This table reports estimates of 8 univariate regressions of number of deposits made on preference parameters estimated in the lab. Standard errors are clustered at the participant level and reported in parentheses. \* denotes significance at 10 pct., \*\* at 5 pct., and \*\*\* at 1 pct. level.

Table 46: Baseline correlates of amount deposited

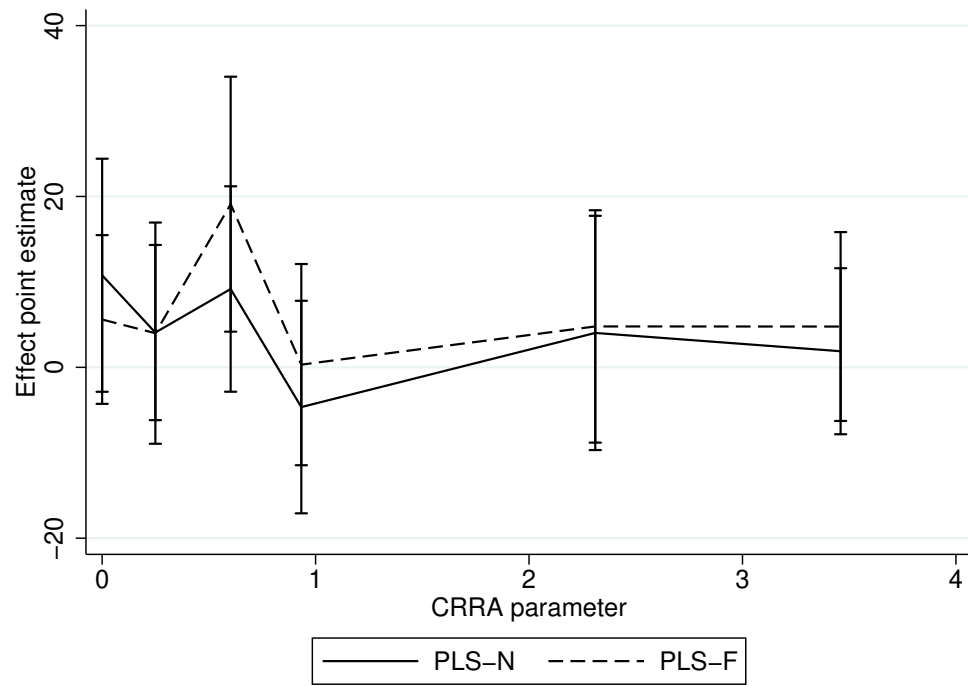
|                                       | (1)                | (2)                | (3)                | (4)                | (5)                | (6)                | (7)                | (8)                |
|---------------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Avg. indiff. point                    | -0.02**<br>(0.01)  |                    |                    |                    |                    |                    |                    |                    |
| Geo. discount factor                  |                    | -0.00<br>(0.00)    |                    |                    |                    |                    |                    |                    |
| Exp. discount factor                  |                    |                    | -18.98*<br>(10.66) |                    |                    |                    |                    |                    |
| Hyp. discount factor                  |                    |                    |                    | -4.85*<br>(2.55)   |                    |                    |                    |                    |
| Dept. from stationarity               |                    |                    |                    |                    | 2.31<br>(5.56)     |                    |                    |                    |
| Decreasing impatience                 |                    |                    |                    |                    |                    | 9.42<br>(9.92)     |                    |                    |
| Coefficient of relative risk aversion |                    |                    |                    |                    |                    |                    | -0.47<br>(2.04)    |                    |
| Locus of control                      |                    |                    |                    |                    |                    |                    |                    | -1.19<br>(2.73)    |
| Constant                              | 22.85***<br>(5.85) | 16.03***<br>(3.06) | 21.11***<br>(5.26) | 19.96***<br>(4.59) | 15.56***<br>(3.11) | 16.96***<br>(3.66) | 15.41***<br>(3.22) | 14.87***<br>(2.40) |
| Adjusted R2                           | 0.03               | -0.00              | 0.01               | 0.02               | -0.01              | -0.00              | -0.01              | -0.01              |
| F-statistic                           | 4.07               | .                  | 3.17               | 3.61               | 0.17               | 0.90               | 0.05               | 0.19               |
| Observations                          | 105                | 105                | 105                | 105                | 105                | 105                | 105                | 105                |

Notes: This table reports estimates of 8 univariate regressions of amount deposited on preference parameters estimated in the lab. Standard errors are clustered at the participant level and reported in parentheses. \* denotes significance at 10 pct., \*\* at 5 pct., and \*\*\* at 1 pct. level.

## E. Data Visualization

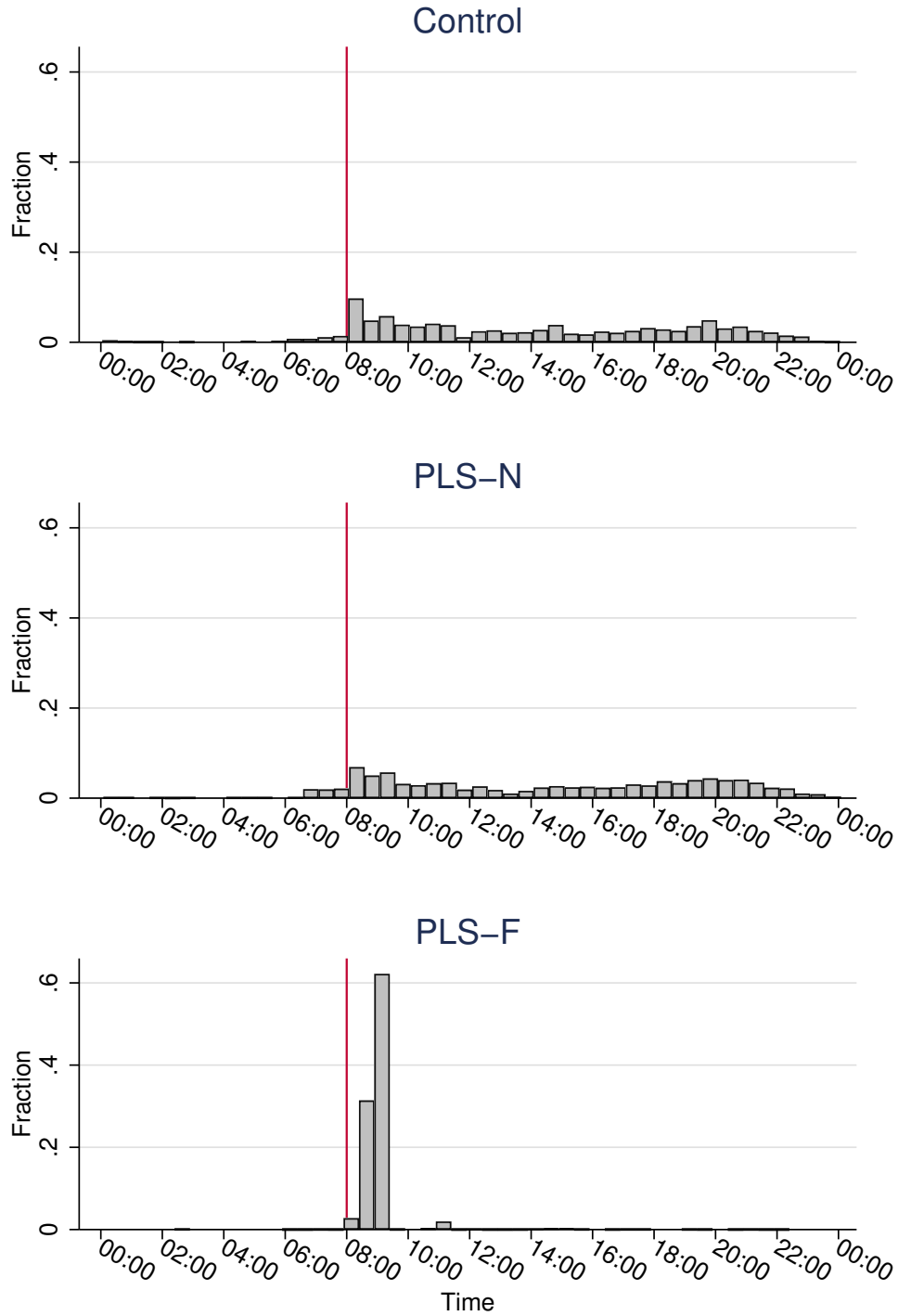
### E.1 Main treatment effects by risk aversion

Figure 2: Treatment effect by risk aversion – Total deposits made



## **E.2 Savings behavior over project period**

Figure 3: Timing of deposits



Notes: This figure plots the empirical distribution of timing of all deposits over the project period. Each bin spans 30 minutes with a height equal to the fraction of all deposits within each treatment group. Participants received the first SMS at 8:00 that summarized how much the participant saved the previous day, how much the participant earned through a matching contribution or winnings, and their total balance. An hour later, participants received a second SMS encouraging them to save that day. Participants in REGRET received a new lottery ticket with the second message.

Figure 4: Number of daily deposits

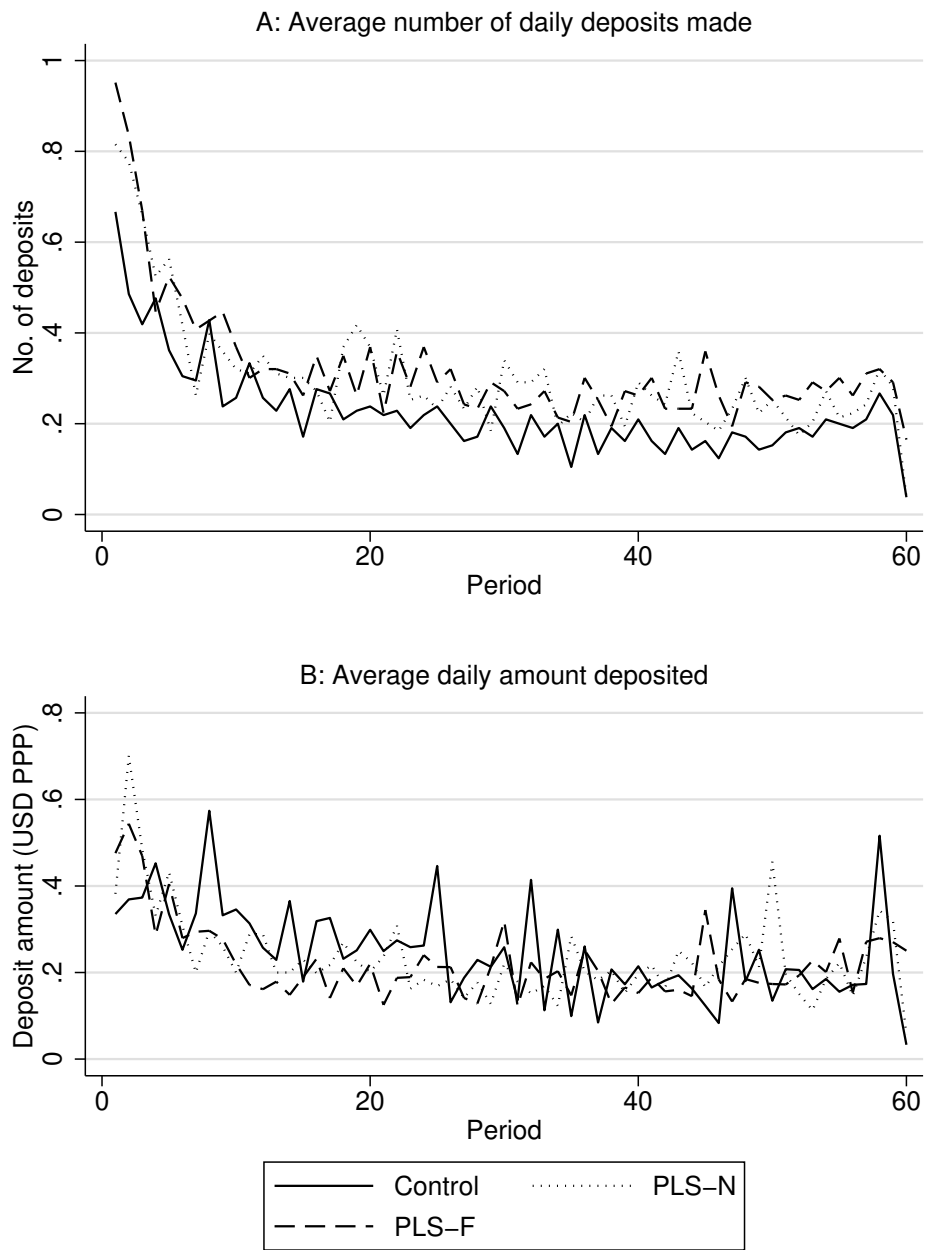


Figure 5: Cumulative number of deposits

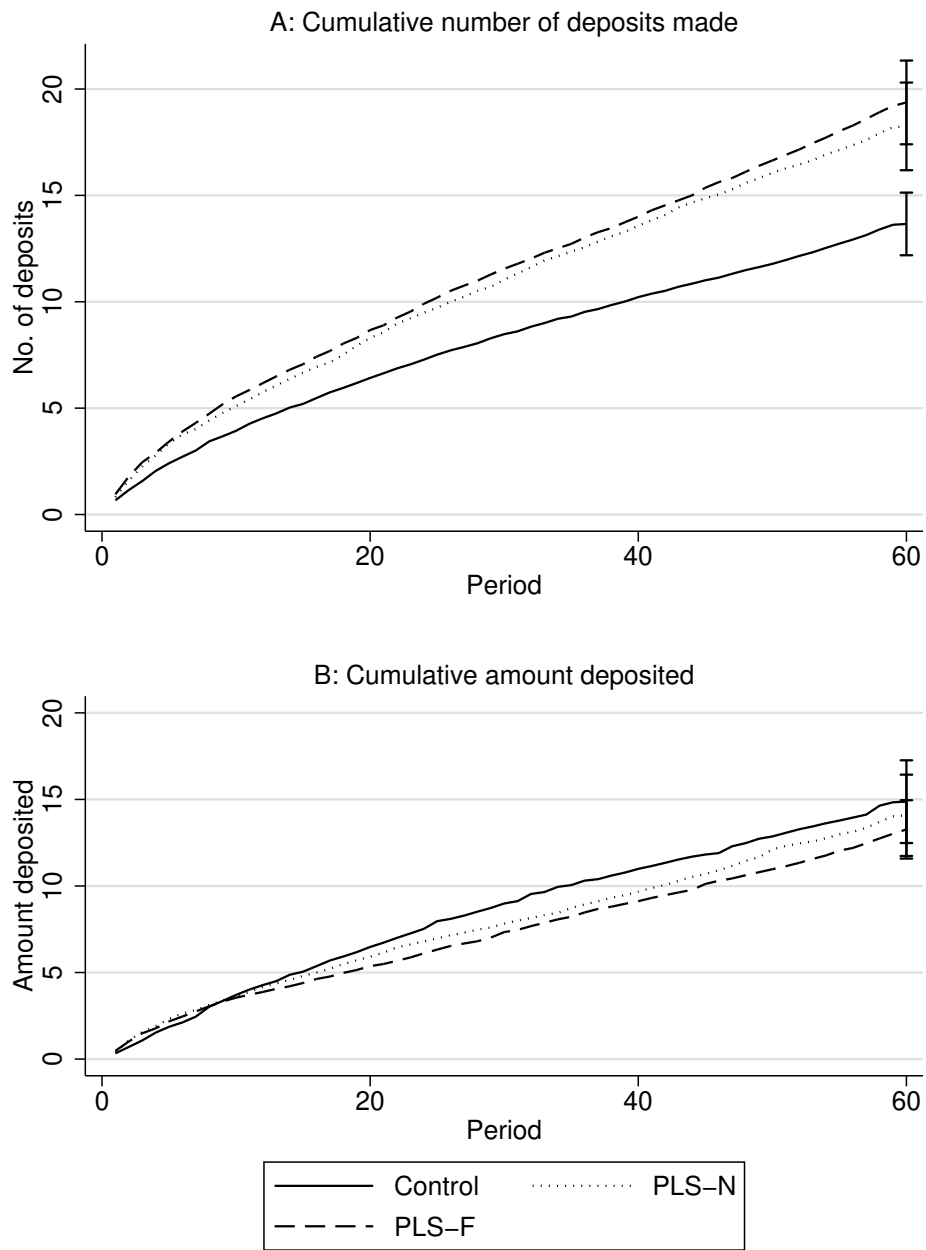
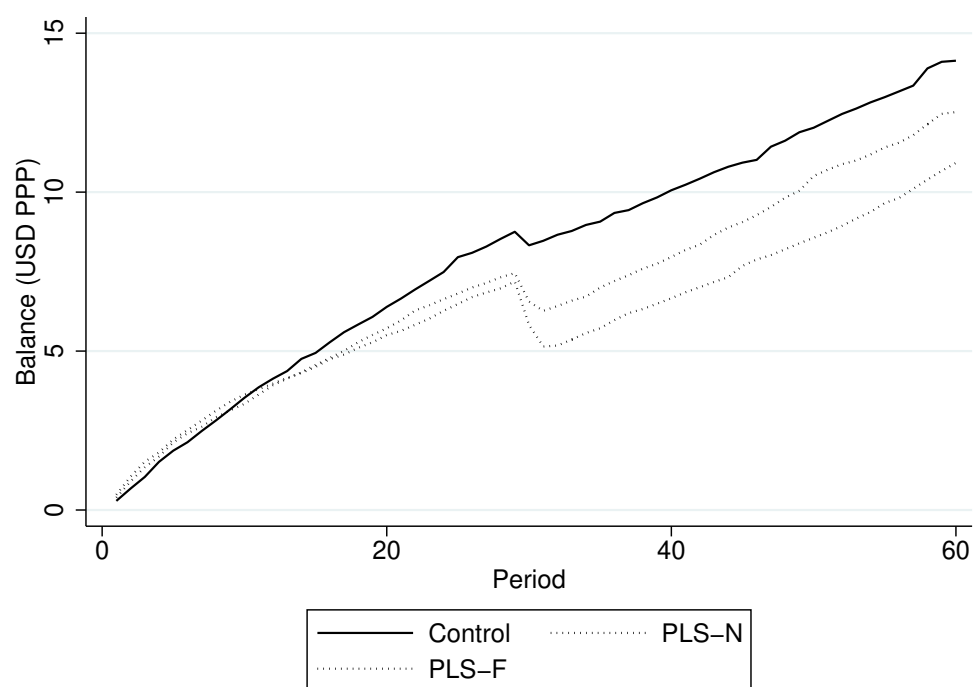




Figure 6: Daily balance averaged over all participants



### **E.3 Panel treatment effects**

Figure 7: Treatment effects over time – Number of deposits

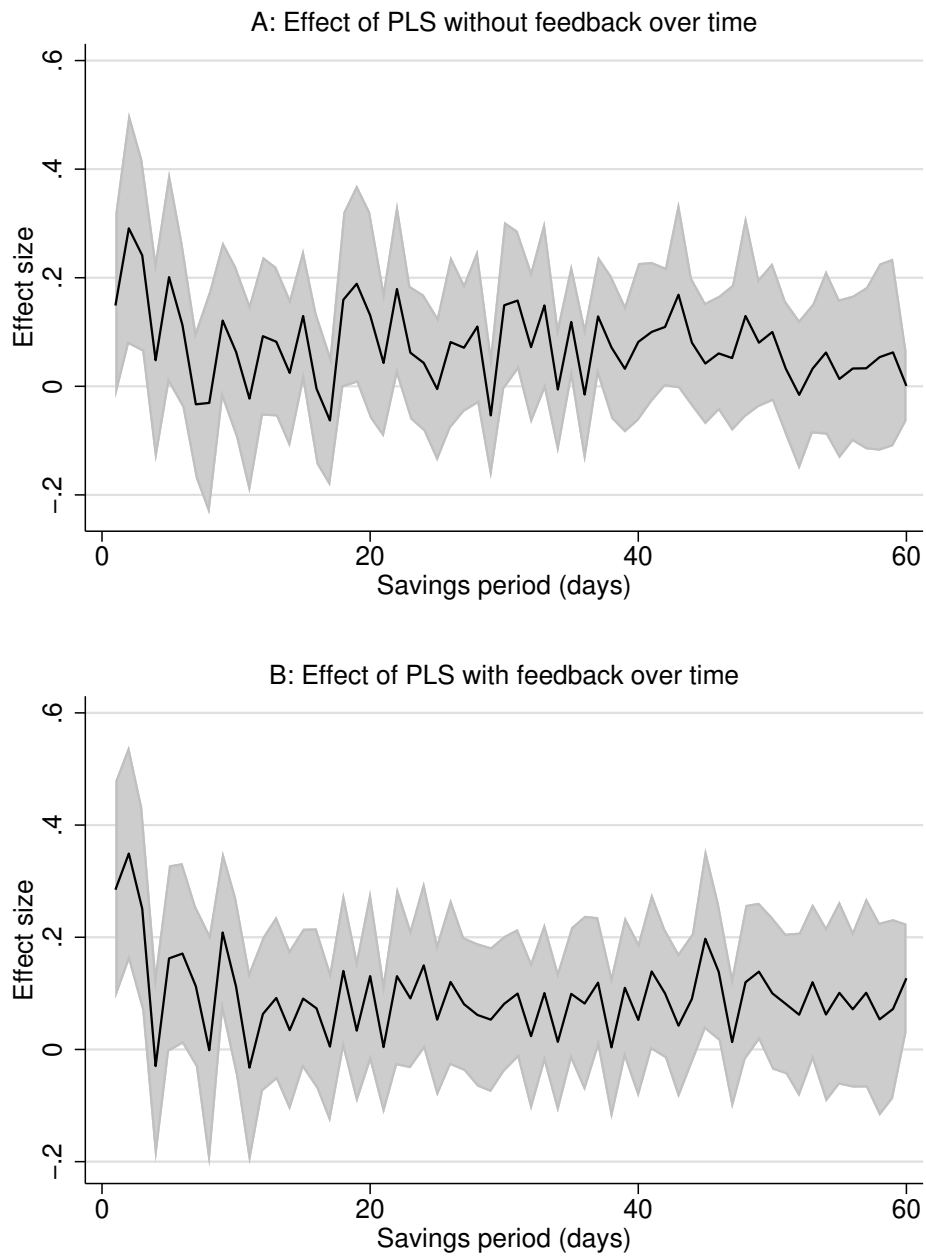


Figure 8: Treatment effects over time – Amount deposited

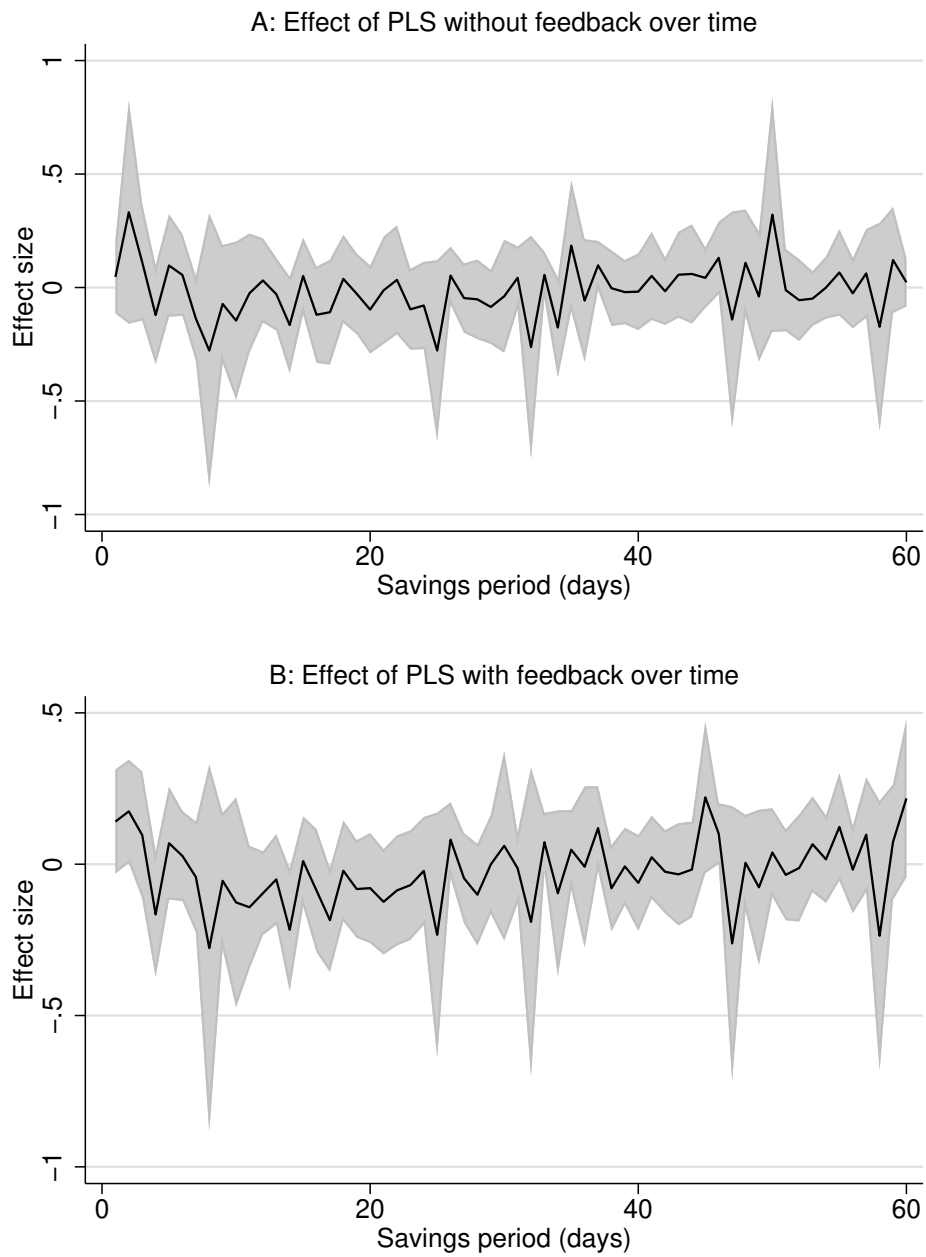


Figure 9: Autoregression of daily savings by treatment group – Number of deposits

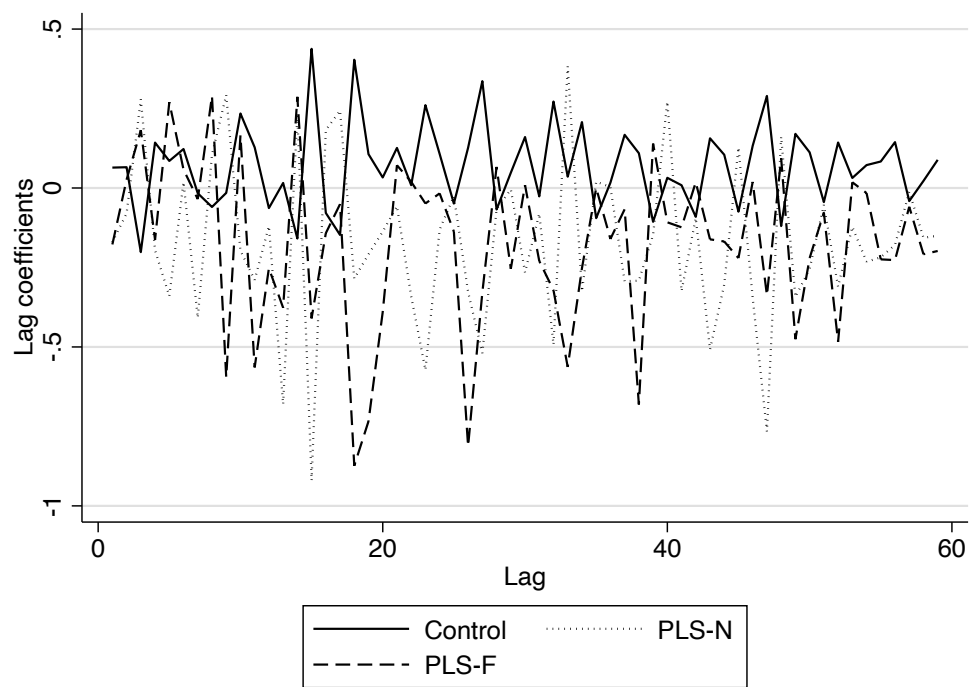


Figure 10: Autoregression of daily savings by treatment group – Amount deposited

