

USING LOTTERIES TO ENCOURAGE SAVING: APPENDIX*

Justin Abraham[†], Merve Akbas[‡], Dan Ariely[§], and Channing Jang[¶]

March 2020

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

[†]Department of Economics. University of California, San Diego. jabraham@ucsd.edu.

[‡]Department of Economics. Duke University. merve.akbas@duke.edu.

[§]Fuqua School of Business. Duke University. dan@danariely.com.

[¶]The Busara Center for Behavioral Economics. channing.jang@busaracenter.org.

Contents

A	Experimental Materials	3
A.1	Consent form	3
A.2	Savings account	3
A.2.1	Account instructions (Control)	3
A.2.2	Account instructions (Lottery)	4
A.2.3	Account instructions (Regret)	5
A.2.4	SMS reminders (Control)	8
A.2.5	SMS reminders (Lottery)	8
A.2.6	SMS reminders (Regret)	8
A.2.7	Lottery administration (for treatment groups)	8
A.2.8	Other	8
A.3	Laboratory instructions	9
A.3.1	Coin toss task	9
A.3.2	Titration task	9
A.3.3	Lottery task	9
A.3.4	Canadian Problem Gambling Index	10
B	Summary Statistics	11
B.1	Balance checks	11
B.2	Sample attrition	14
C	Treatment Effects	16
C.1	Average treatment effects	16
C.2	Covariate-adjusted treatment effects	21
C.3	Average treatment effects with randomization inference	25
C.4	Heterogeneous treatment effects	30
D	Panel Regression	39
E	Baseline Correlates	42
F	Visualization	44
F.1	Main treatment effects by risk aversion	44
F.2	Savings behavior over project period	45
F.3	Panel treatment effects	49

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 (Lottery)

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 (Regret)

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.

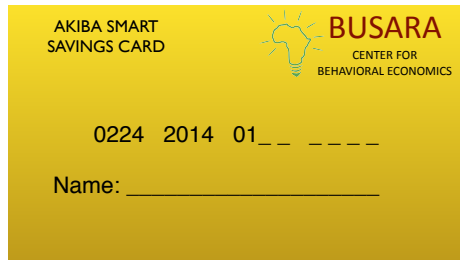
REMEMBER: YOU CAN REDEEM YOUR PRIZE ONLY IF YOU SAVED THAT DAY.

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

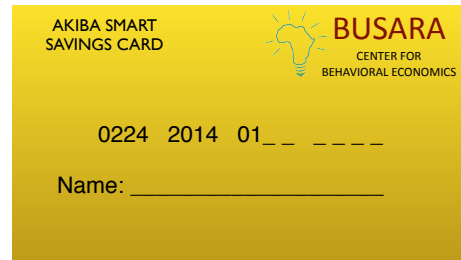
 **BUSARA**
CENTER FOR
BEHAVIORAL ECONOMICS

0224 2014 01__ - - - -

Name: _____

(a) Front

AKIBA SMART
SAVINGS CARD

 **BUSARA**
CENTER FOR
BEHAVIORAL ECONOMICS

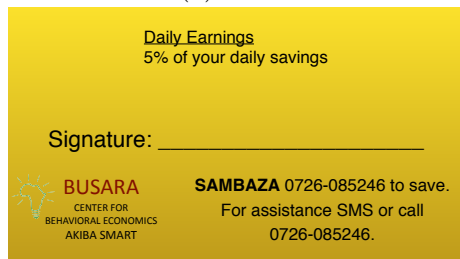
0224 2014 01__ - - - -

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 (Lottery)

- 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 (Regret)

- 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) No Feedback - Control	(2) PLS - Control	(3) No Feedback - PLS	(4) Control mean (SD)	(5) Obs.
Female	0.07 (0.07)	0.10 (0.07)	0.03 (0.07)	0.52 (0.50)	311
Age	0.78 (1.39)	0.72 (1.34)	-0.05 (1.35)	30.75 (9.83)	311
Completed std. 8	-0.02 (0.02)	-0.02 (0.02)	0.00 (0.02)	0.99 (0.10)	311
Married/co-habiting	0.10 (0.07)	0.09 (0.07)	-0.01 (0.07)	0.42 (0.50)	311
No. of children	0.23 (0.24)	0.24 (0.25)	0.01 (0.25)	1.75 (1.70)	311
Currently saves	0.05 (0.07)	-0.10 (0.07)	-0.15** (0.07)	0.56 (0.50)	311
Total savings last month	-17.81 (11.88)	-7.04 (12.55)	10.77 (9.23)	58.82 (106.26)	311
Monthly income	-3.68 (17.63)	-0.59 (16.85)	3.09 (15.46)	112.05 (137.13)	311
Employment status	0.05 (0.07)	-0.03 (0.07)	-0.08 (0.07)	0.50 (0.50)	311
Coefficient of relative risk aversion	0.08 (0.18)	-0.03 (0.17)	-0.12 (0.18)	1.16 (1.27)	311
Locus of control	0.48 (1.40)	-0.83 (1.46)	-1.31 (1.37)	69.81 (10.78)	311
Standardized CPGI	-0.11 (0.13)	-0.22* (0.12)	-0.11 (0.12)	-0.00 (1.00)	311
Exp. discount factor	-0.05* (0.03)	-0.01 (0.03)	0.04 (0.03)	0.33 (0.20)	311
Joint test p -value	0.44	0.72	0.42		

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) No Feedback - Control	(2) PLS - Control	(3) No Feedback - PLS	(4) Control mean (SD)	(5) Obs.
Female	0.05 (0.07)	0.09 (0.07)	0.04 (0.07)	0.53 (0.50)	284
Age	-0.18 (1.48)	0.24 (1.43)	0.42 (1.42)	31.37 (10.11)	284
Completed std. 8	-0.02 (0.02)	0.00 (0.01)	0.02 (0.02)	0.99 (0.10)	284
Married/co-habiting	0.08 (0.07)	0.07 (0.07)	-0.01 (0.07)	0.44 (0.50)	284
No. of children	-0.01 (0.25)	0.10 (0.26)	0.11 (0.25)	1.88 (1.73)	284
Currently saves	0.05 (0.07)	-0.05 (0.07)	-0.09 (0.07)	0.54 (0.50)	284
Total savings last month	-18.63 (12.01)	-4.82 (12.88)	13.81 (9.78)	58.75 (100.77)	284
Monthly income	-9.42 (18.93)	-5.24 (17.87)	4.18 (16.18)	117.77 (140.31)	284
Employment status	0.05 (0.07)	-0.05 (0.07)	-0.09 (0.07)	0.51 (0.50)	284
Coefficient of relative risk aversion	0.16 (0.19)	-0.01 (0.18)	-0.17 (0.19)	1.13 (1.25)	284
Locus of control	0.69 (1.50)	-0.95 (1.56)	-1.63 (1.45)	69.79 (11.05)	284
Standardized CPGI	-0.12 (0.13)	-0.20 (0.13)	-0.09 (0.12)	-0.02 (0.97)	284
Exp. discount factor	-0.06** (0.03)	-0.02 (0.03)	0.04 (0.03)	0.33 (0.20)	284
Joint test p -value	0.52	0.94	0.64		

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
No Feedback	0.03 (0.04)
PLS	0.03 (0.04)
Constant	0.90*** (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) Completed - attrited	(2) Mean (SD) of completed	(3) Obs.
Female	-0.02 (0.10)	0.58 (0.49)	311
Age	1.62 (1.69)	31.39 (9.79)	303
Completed std. 8	0.06 (0.05)	0.98 (0.13)	311
Married/co-habiting	0.04 (0.10)	0.49 (0.50)	307
No. of children	0.06 (0.36)	1.91 (1.75)	311
Currently saves	-0.05 (0.10)	0.54 (0.50)	311
Total savings last month	3.68 (19.87)	50.91 (80.23)	311
Monthly income	25.66 (20.91)	112.86 (121.67)	311
Employment status	0.10 (0.10)	0.51 (0.50)	311
Coefficient of relative risk aversion	-0.01 (0.26)	1.18 (1.30)	311
Locus of control	0.07 (1.59)	69.70 (10.38)	311
Standardized CPGI	-0.19 (0.23)	-0.13 (0.89)	311
Exp. discount factor	-0.06* (0.04)	0.30 (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.

C. Treatment Effects

C.1 Average treatment effects

Table 8: Treatment effects – Mobile savings

	Effect estimates			Sample	
	(1) No Feedback	(2) PLS	(3) PLS- No Feedback	(4) Control Mean (SD)	(5) Obs.
Made at least one deposit	0.04 (0.04)	0.02 (0.05)	-0.02 (0.04)	0.87 (0.34)	311
No. of deposits among users	4.45* (2.69)	6.16** (2.61)	1.72 (3.01)	15.76 (15.15)	275
No. of days saved	3.93* (2.05)	4.94** (2.08)	1.01 (2.32)	11.78 (12.93)	311
Total deposit amount	-0.79 (3.34)	-1.60 (2.91)	-0.81 (2.88)	14.87 (24.48)	311
Total withdrawal amount	0.53 (0.94)	1.63** (0.74)	1.10 (1.02)	1.07 (4.53)	311

Notes: Columns 1–3 report OLS estimates of the treatment effect. Standard errors are in parentheses. Columns 4–5 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 9: Treatment effects – Mobile savings (before 30 days)

	Effect estimates			Sample	
	(1) No Feedback	(2) PLS	(3) PLS- No Feedback	(4) Control Mean (SD)	(5) Obs.
Total no. of deposits (before 30 days)	2.56* (1.40)	3.08** (1.35)	0.51 (1.53)	8.48 (8.74)	311
No. of days saved (before 30 days)	1.94* (1.16)	2.56** (1.15)	0.62 (1.26)	7.42 (7.61)	311
Daily avg. no. of deposits (before 30 days)	0.09* (0.05)	0.10** (0.05)	0.02 (0.05)	0.28 (0.29)	311
Total deposit amount (before 30 days)	-1.17 (2.07)	-1.65 (1.85)	-0.48 (1.46)	8.99 (17.18)	311

Notes: Columns 1–3 report OLS estimates of the treatment effect. Standard errors are in parentheses. Columns 4–5 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 10: Treatment effects – Mobile savings (after 30 days)

	Effect estimates			Sample	
	(1)	(2)	(3)	(4)	(5)
	No Feedback	PLS	PLS- No Feedback	Control Mean (SD)	Obs.
Total no. of deposits (after 30 days)	2.02 (1.26)	2.63** (1.25)	0.61 (1.44)	5.18 (7.56)	311
No. of days saved (after 30 days)	1.99* (1.02)	2.38** (1.05)	0.39 (1.18)	4.36 (6.36)	311
Daily avg. no. of deposits (after 30 days)	0.07 (0.04)	0.09** (0.04)	0.02 (0.05)	0.17 (0.25)	311
Total deposit amount (after 30 days)	0.38 (1.68)	0.05 (1.47)	-0.33 (1.58)	5.88 (11.43)	311

Notes: Columns 1–3 report OLS estimates of the treatment effect. Standard errors are in parentheses. Columns 4–5 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 11: Treatment effects – Mobile savings by period

	Effect estimates			Sample	
	(1)	(2)	(3)	(4)	(5)
	No Feedback	PLS	PLS- No Feedback	Control Mean (SD)	Obs.
No. of deposits made	0.08* (0.04)	0.09** (0.04)	0.02 (0.05)	0.23 (0.51)	18636
Made a deposit	0.07* (0.03)	0.08** (0.03)	0.02 (0.04)	0.20 (0.40)	18660
Amount deposited	-0.01 (0.06)	-0.03 (0.05)	-0.01 (0.05)	0.25 (1.03)	18636
Amount withdrew	0.01 (0.02)	0.03** (0.01)	0.02 (0.02)	0.02 (0.60)	18636

Notes: Columns 1–3 report OLS estimates of the treatment effect. Standard errors are in parentheses. Columns 4–5 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 12: Treatment effects – Savings outside the project

	Effect estimates			Sample	
	(1)	(2)	(3)	(4)	(5)
	No Feedback	PLS	PLS- No Feedback	Control Mean (SD)	Obs.
Total savings last month	18.45 (25.16)	-17.87 (14.64)	-36.32 (24.06)	80.31 (112.74)	284
M-Pesa savings last month	-5.42 (6.34)	-6.71 (5.49)	-1.29 (5.30)	20.42 (44.67)	284
ROSCA savings last month	1.48 (6.76)	7.37 (6.79)	5.89 (7.33)	22.24 (42.18)	283
Saves with a ROSCA	-0.02 (0.07)	0.14** (0.07)	0.16** (0.07)	0.54 (0.50)	284

Notes: Columns 1–3 report OLS estimates of the treatment effect. Standard errors are in parentheses. Columns 4–5 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 13: Treatment effects – Gambling

	Effect estimates			Sample	
	(1)	(2)	(3)	(4)	(5)
	No Feedback	PLS	PLS- No Feedback	Control Mean (SD)	Obs.
Gamble more	0.06 (0.05)	0.15*** (0.06)	0.08 (0.06)	0.12 (0.32)	284
Gamble less	-0.02 (0.05)	0.04 (0.06)	0.06 (0.05)	0.16 (0.37)	284
More tempted to gamble	0.09 (0.07)	0.05 (0.07)	-0.04 (0.07)	0.47 (0.50)	284
Less tempted to gamble	-0.01 (0.03)	0.03 (0.04)	0.04 (0.04)	0.06 (0.25)	284

Notes: Columns 1–3 report OLS estimates of the treatment effect. Standard errors are in parentheses. Columns 4–5 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 14: Treatment effects – Akiba Smart

	Effect estimates			Sample	
	(1)	(2)	(3)	(4)	(5)
	No Feedback	PLS	PLS- No Feedback	Control Mean (SD)	Obs.
How much do you trust Akiba Smart?	0.03 (0.14)	-0.07 (0.18)	-0.10 (0.18)	0.00 (1.00)	284
What is your confidence in Akiba Smart?	0.11 (0.13)	0.07 (0.14)	-0.04 (0.13)	0.00 (1.00)	284
Did you tell friends and famiy about AKIBA?	-0.08 (0.06)	-0.04 (0.06)	0.04 (0.06)	0.83 (0.38)	284
Continue saving with AKIBA	-0.05 (0.05)	-0.01 (0.04)	0.04 (0.05)	0.91 (0.28)	283

Notes: Columns 1–3 report OLS estimates of the treatment effect. Standard errors are in parentheses. Columns 4–5 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 15: Treatment effects – Expenditure

	Effect estimates			Sample	
	(1)	(2)	(3)	(4)	(5)
	No Feedback	PLS	PLS- No Feedback	Control Mean (SD)	Obs.
Spent balance on food	0.04 (0.07)	-0.08 (0.06)	-0.12* (0.06)	0.28 (0.45)	284
Spent balance on school	0.29 (0.24)	0.17 (0.27)	-0.13 (0.32)	0.24 (1.11)	284
Spent balance on business	0.13 (0.08)	0.08* (0.04)	-0.04 (0.09)	0.06 (0.25)	284
Spent balance on durable goods	-0.00 (0.03)	-0.03 (0.03)	-0.03 (0.03)	0.05 (0.23)	284
Spent balance on repaying loans	0.04 (0.05)	-0.00 (0.04)	-0.04 (0.05)	0.11 (0.31)	284
Saved balance	0.04 (0.04)	0.05 (0.04)	0.01 (0.05)	0.07 (0.26)	284

Notes: Columns 1–3 report OLS estimates of the treatment effect. Standard errors are in parentheses. Columns 4–5 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 16: Treatment effects – Self-perceptions

	Effect estimates			Sample	
	(1)	(2)	(3)	(4)	(5)
	No Feedback	PLS	PLS- No Feedback	Control Mean (SD)	Obs.
Do you see yourself as a saver?	-0.20 (0.15)	-0.09 (0.14)	0.11 (0.15)	-0.00 (1.00)	284
Are you in general a lucky person?	4.77*** (0.20)	4.97*** (0.18)	0.20 (0.23)	-0.00 (1.00)	284
Do you feel you saved enough?	0.19 (0.15)	-0.09 (0.15)	-0.28* (0.15)	0.00 (1.00)	284
How did you feel not saving?	-0.02 (0.16)	0.06 (0.15)	0.08 (0.16)	-0.00 (1.00)	284

Notes: Columns 1–3 report OLS estimates of the treatment effect. Standard errors are in parentheses. Columns 4–5 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 17: Treatment effects – Hypothetical treatment assignment

	Effect estimates			Sample	
	(1)	(2)	(3)	(4)	(5)
	No Feedback	PLS	PLS- No Feedback	Control Mean (SD)	Obs.
Select control group	-0.13* (0.07)	-0.08 (0.07)	0.05 (0.07)	0.41 (0.50)	284
Select No Feedback group	0.02 (0.07)	-0.11 (0.07)	-0.13* (0.07)	0.55 (0.50)	284
Select PLS group	0.12*** (0.04)	0.19*** (0.05)	0.07 (0.06)	0.03 (0.18)	284
Perceived effect of PLS without feedback	-0.67 (4.86)	-2.36 (3.44)	-1.69 (4.55)	2.27 (26.53)	283
Perceived effect of PLS	-3.71 (7.07)	0.58 (4.49)	4.29 (6.56)	-3.90 (35.85)	283

Notes: Columns 1–3 report OLS estimates of the treatment effect. Standard errors are in parentheses. Columns 4–5 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.2 Covariate-adjusted treatment effects

Table 18: Covariate-adjusted treatment effects – Mobile savings

	No controls			With controls			Sample	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	No Feedback	PLS	PLS- No Feedback	No Feedback	PLS	PLS- No Feedback	Control Mean (SD)	Obs.
Made at least one deposit	0.04 (0.04)	0.02 (0.05)	-0.02 (0.04)	0.04 (0.05)	0.02 (0.05)	-0.02 (0.04)	0.87 (0.34)	311
No. of deposits among users	4.45* (2.69)	6.16** (2.61)	1.72 (3.01)	4.61 (2.85)	5.22** (2.58)	0.61 (3.07)	15.76 (15.15)	275
No. of days saved	3.93* (2.05)	4.94** (2.08)	1.01 (2.32)	3.56* (2.06)	4.19** (2.05)	0.63 (2.26)	11.78 (12.93)	311
Total deposit amount	-0.79 (3.34)	-1.60 (2.91)	-0.81 (2.88)	-0.32 (3.15)	-1.46 (2.73)	-1.14 (2.86)	14.87 (24.48)	311
Total withdrawal amount	0.53 (0.94)	1.63** (0.74)	1.10 (1.02)	0.31 (0.85)	1.62** (0.77)	1.31 (0.94)	1.07 (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 19: Covariate-adjusted treatment effects – Mobile savings (before 30 days)

	No controls			With controls			Sample	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	No Feedback	PLS	PLS- No Feedback	No Feedback	PLS	PLS- No Feedback	Control Mean (SD)	Obs.
Total no. of deposits (before 30 days)	2.56* (1.40)	3.08** (1.35)	0.51 (1.53)	2.46* (1.43)	2.56* (1.34)	0.10 (1.53)	8.48 (8.74)	311
No. of days saved (before 30 days)	1.94* (1.16)	2.56** (1.15)	0.62 (1.26)	1.67 (1.15)	2.18* (1.15)	0.51 (1.24)	7.42 (7.61)	311
Daily avg. no. of deposits (before 30 days)	0.09* (0.05)	0.10** (0.05)	0.02 (0.05)	0.08* (0.05)	0.09* (0.04)	0.00 (0.05)	0.28 (0.29)	311
Total deposit amount (before 30 days)	-1.17 (2.07)	-1.65 (1.85)	-0.48 (1.46)	-1.02 (1.84)	-1.52 (1.69)	-0.50 (1.36)	8.99 (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 20: Covariate-adjusted treatment effects – Mobile savings (after 30 days)

	No controls			With controls			Sample	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	No Feedback	PLS	PLS- No Feedback	No Feedback	PLS	PLS- No Feedback	Control Mean (SD)	Obs.
Total no. of deposits (after 30 days)	2.02 (1.26)	2.63** (1.25)	0.61 (1.44)	2.07 (1.34)	2.20* (1.23)	0.13 (1.47)	5.18 (7.56)	311
No. of days saved (after 30 days)	1.99* (1.02)	2.38** (1.05)	0.39 (1.18)	1.88* (1.03)	2.01** (1.02)	0.12 (1.14)	4.36 (6.36)	311
Daily avg. no. of deposits (after 30 days)	0.07 (0.04)	0.09** (0.04)	0.02 (0.05)	0.07 (0.04)	0.07* (0.04)	0.00 (0.05)	0.17 (0.25)	311
Total deposit amount (after 30 days)	0.38 (1.68)	0.05 (1.47)	-0.33 (1.58)	0.70 (1.70)	0.06 (1.40)	-0.64 (1.67)	5.88 (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 21: Covariate-adjusted treatment effects – Savings outside the project

	No controls			With controls			Sample	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	No Feedback	PLS	PLS- No Feedback	No Feedback	PLS	PLS- No Feedback	Control Mean (SD)	Obs.
Total savings last month	18.45 (25.16)	-17.87 (14.64)	-36.32 (24.06)	16.75 (23.25)	-12.44 (14.86)	-29.19 (22.10)	80.31 (112.74)	284
M-Pesa savings last month	-5.42 (6.34)	-6.71 (5.49)	-1.29 (5.30)	-5.47 (6.06)	-6.19 (5.38)	-0.73 (5.27)	20.42 (44.67)	284
ROSCA savings last month	1.48 (6.76)	7.37 (6.79)	5.89 (7.33)	2.84 (6.26)	7.85 (6.35)	5.01 (6.85)	22.24 (42.18)	283
Saves with a ROSCA	-0.02 (0.07)	0.14** (0.07)	0.16** (0.07)	-0.01 (0.07)	0.14** (0.06)	0.15** (0.07)	0.54 (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 22: Covariate-adjusted treatment effects – Gambling

	No controls			With controls			Sample	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	No Feedback	PLS	PLS- No Feedback	No Feedback	PLS	PLS- No Feedback	Control Mean (SD)	Obs.
Gamble more	0.06 (0.05)	0.15*** (0.06)	0.08 (0.06)	0.06 (0.05)	0.16*** (0.05)	0.10* (0.06)	0.12 (0.32)	284
Gamble less	-0.02 (0.05)	0.04 (0.06)	0.06 (0.05)	-0.02 (0.05)	0.03 (0.06)	0.05 (0.06)	0.16 (0.37)	284
More tempted to gamble	0.09 (0.07)	0.05 (0.07)	-0.04 (0.07)	0.05 (0.07)	0.03 (0.07)	-0.02 (0.07)	0.47 (0.50)	284
Less tempted to gamble	-0.01 (0.03)	0.03 (0.04)	0.04 (0.04)	-0.00 (0.03)	0.04 (0.04)	0.04 (0.04)	0.06 (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 23: Covariate-adjusted treatment effects – Akiba Smart

	No controls			With controls			Sample	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	No Feedback	PLS	PLS- No Feedback	No Feedback	PLS	PLS- No Feedback	Control Mean (SD)	Obs.
How much do you trust Akiba Smart?	0.03 (0.14)	-0.07 (0.18)	-0.10 (0.18)	0.08 (0.14)	0.05 (0.16)	-0.03 (0.15)	0.00 (1.00)	284
What is your confidence in Akiba Smart?	0.11 (0.13)	0.07 (0.14)	-0.04 (0.13)	0.16 (0.13)	0.18 (0.12)	0.02 (0.12)	0.00 (1.00)	284
Did you tell friends and famiy about AKIBA?	-0.08 (0.06)	-0.04 (0.06)	0.04 (0.06)	-0.05 (0.06)	-0.04 (0.06)	0.01 (0.06)	0.83 (0.38)	284
Continue saving with AKIBA	-0.05 (0.05)	-0.01 (0.04)	0.04 (0.05)	-0.04 (0.05)	-0.01 (0.04)	0.03 (0.05)	0.91 (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 24: Covariate-adjusted treatment effects – Expenditure

	No controls			With controls			Sample	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	No Feedback	PLS	PLS- No Feedback	No Feedback	PLS	PLS- No Feedback	Control Mean (SD)	Obs.
Spent balance on food	0.04 (0.07)	-0.08 (0.06)	-0.12* (0.06)	0.05 (0.06)	-0.06 (0.06)	-0.11* (0.06)	0.28 (0.45)	284
Spent balance on school	0.29 (0.24)	0.17 (0.27)	-0.13 (0.32)	0.39 (0.25)	0.17 (0.26)	-0.23 (0.34)	0.24 (1.11)	284
Spent balance on business	0.13 (0.08)	0.08* (0.04)	-0.04 (0.09)	0.14 (0.08)	0.09** (0.04)	-0.04 (0.09)	0.06 (0.25)	284
Spent balance on durable goods	-0.00 (0.03)	-0.03 (0.03)	-0.03 (0.03)	-0.01 (0.03)	-0.03 (0.03)	-0.02 (0.03)	0.05 (0.23)	284
Spent balance on repaying loans	0.04 (0.05)	-0.00 (0.04)	-0.04 (0.05)	0.04 (0.05)	-0.00 (0.05)	-0.04 (0.05)	0.11 (0.31)	284
Saved balance	0.04 (0.04)	0.05 (0.04)	0.01 (0.05)	0.04 (0.04)	0.04 (0.04)	0.00 (0.05)	0.07 (0.26)	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 25: Covariate-adjusted treatment effects – Self-perceptions

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

Table 26: Covariate-adjusted treatment effects – Hypothetical treatment assignment

	No controls			With controls			Sample	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	No Feedback	PLS	PLS- No Feedback	No Feedback	PLS	PLS- No Feedback	Control Mean (SD)	Obs.
Select control group	-0.13*	-0.08	0.05	-0.10	-0.03	0.07	0.41	284
	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.50)	
Select No Feedback group	0.02	-0.11	-0.13*	-0.01	-0.17**	-0.16**	0.55	284
	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.50)	
Select PLS group	0.12***	0.19***	0.07	0.11***	0.20***	0.09	0.03	284
	(0.04)	(0.05)	(0.06)	(0.04)	(0.05)	(0.05)	(0.18)	
Perceived effect of PLS without feedback	-0.67	-2.36	-1.69	-1.22	-3.52	-2.30	2.27	283
	(4.86)	(3.44)	(4.55)	(4.42)	(3.51)	(4.05)	(26.53)	
Perceived effect of PLS	-3.71	0.58	4.29	-4.66	-2.65	2.01	-3.90	283
	(7.07)	(4.49)	(6.56)	(6.78)	(4.63)	(6.10)	(35.85)	

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 Average treatment effects with randomization inference

Table 27: Treatment effects with randomization inference – Mobile savings

	Effect estimates			Sample	
	(1)	(2)	(3)	(4)	(5)
	No Feedback	PLS	PLS- No Feedback	Control Mean (SD)	Obs.
Total no. of deposits	4.59 (2.53)	5.71** (2.46)	-1.13 (.)	13.66 (15.08)	311
No. of days saved	3.93* (2.06)	4.94** (2.09)	-1.01 (.)	11.78 (12.93)	311
Total deposit amount	-0.79 (3.35)	-1.60 (2.92)	0.81 (.)	14.87 (24.48)	311
Total withdrawal amount	0.53 (0.95)	1.63** (0.74)	-1.10 (.)	1.07 (4.53)	311

Notes: Columns 1–3 report OLS estimates of the treatment effect. Standard errors are in parentheses and were calculated under permutation of the treatment assignment. Columns 4–5 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 28: Treatment effects with randomization inference – Mobile savings (before 30 days)

	Effect estimates			Sample	
	(1)	(2)	(3)	(4)	(5)
	No Feedback	PLS	PLS- No Feedback	Control Mean (SD)	Obs.
Total no. of deposits (before 30 days)	2.56* (1.40)	3.08*** (1.36)	-0.51 (.)	8.48 (8.74)	311
No. of days saved (before 30 days)	1.94 (1.17)	2.56* (1.16)	-0.62 (.)	7.42 (7.61)	311
Daily avg. no. of deposits (before 30 days)	0.09 (0.05)	0.10** (0.05)	-0.02 (.)	0.28 (0.29)	311
Total deposit amount (before 30 days)	-1.17 (2.07)	-1.65 (1.86)	0.48 (.)	8.99 (17.18)	311

Notes: Columns 1–3 report OLS estimates of the treatment effect. Standard errors are in parentheses and were calculated under permutation of the treatment assignment. Columns 4–5 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 29: Treatment effects with randomization inference – Mobile savings (after 30 days)

	Effect estimates			Sample	
	(1) No Feedback	(2) PLS	(3) PLS- No Feedback	(4) Control Mean (SD)	(5) Obs.
Total no. of deposits (after 30 days)	2.02 (1.27)	2.63** (1.26)	-0.61 (.)	5.18 (7.56)	311
No. of days saved (after 30 days)	1.99** (1.02)	2.38** (1.05)	-0.39 (.)	4.36 (6.36)	311
Daily avg. no. of deposits (after 30 days)	0.07 (0.04)	0.09** (0.04)	-0.02 (.)	0.17 (0.25)	311
Total deposit amount (after 30 days)	0.38 (1.68)	0.05 (1.48)	0.33 (.)	5.88 (11.43)	311

Notes: Columns 1–3 report OLS estimates of the treatment effect. Standard errors are in parentheses and were calculated under permutation of the treatment assignment. Columns 4–5 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 30: Treatment effects with randomization inference – Mobile savings by period

	Effect estimates			Sample	
	(1) No Feedback	(2) PLS	(3) PLS- No Feedback	(4) Control Mean (SD)	(5) Obs.
No. of deposits made	0.08*** (0.04)	0.09*** (0.04)	-0.02* (.)	0.23 (0.51)	18636
Made a deposit	0.07*** (0.03)	0.08*** (0.03)	-0.02*** (.)	0.20 (0.40)	18660
Amount deposited	-0.01 (0.06)	-0.03* (0.05)	0.01 (.)	0.25 (1.03)	18636
Amount withdrew	0.01 (0.02)	0.03* (0.01)	-0.02 (.)	0.02 (0.60)	18636

Notes: Columns 1–3 report OLS estimates of the treatment effect. Standard errors are in parentheses and were calculated under permutation of the treatment assignment. Columns 4–5 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 31: Treatment effects with randomization inference – Savings outside the project

	Effect estimates			Sample	
	(1)	(2)	(3)	(4)	(5)
	No Feedback	PLS	PLS- No Feedback	Control Mean (SD)	Obs.
Total savings last month	18.45 (25.24)	-17.87 (14.70)	36.32** (.)	80.31 (112.74)	284
M-Pesa savings last month	-5.42 (6.36)	-6.71 (5.51)	1.29 (.)	20.42 (44.67)	284
ROSCA savings last month	1.48 (6.78)	7.37 (6.82)	-5.89 (.)	22.24 (42.18)	283
Saves with a ROSCA	-0.02 (0.07)	0.14* (0.07)	-0.16** (.)	0.54 (0.50)	284

Notes: Columns 1–3 report OLS estimates of the treatment effect. Standard errors are in parentheses and were calculated under permutation of the treatment assignment. Columns 4–5 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 32: Treatment effects with randomization inference – Gambling

	Effect estimates			Sample	
	(1)	(2)	(3)	(4)	(5)
	No Feedback	PLS	PLS- No Feedback	Control Mean (SD)	Obs.
Gamble more	0.06 (0.05)	0.15*** (0.06)	-0.08 (.)	0.12 (0.32)	284
Gamble less	-0.02 (0.05)	0.04 (0.06)	-0.06 (.)	0.16 (0.37)	284
More tempted to gamble	0.09 (0.07)	0.05 (0.07)	0.04 (.)	0.47 (0.50)	284
Less tempted to gamble	-0.01 (0.03)	0.03 (0.04)	-0.04 (.)	0.06 (0.25)	284

Notes: Columns 1–3 report OLS estimates of the treatment effect. Standard errors are in parentheses and were calculated under permutation of the treatment assignment. Columns 4–5 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 33: Treatment effects with randomization inference – Akiba Smart

	Effect estimates			Sample	
	(1)	(2)	(3)	(4)	(5)
	No Feedback	PLS	PLS- No Feedback	Control Mean (SD)	Obs.
How much do you trust Akiba Smart?	0.03 (0.14)	-0.07 (0.18)	0.10 (.)	0.00 (1.00)	284
What is your confidence in Akiba Smart?	0.11 (0.13)	0.07 (0.14)	0.04 (.)	0.00 (1.00)	284
Did you tell friends and famiy about AKIBA?	-0.08 (0.06)	-0.04 (0.06)	-0.04 (.)	0.83 (0.38)	284
Continue saving with AKIBA	-0.05 (0.05)	-0.01 (0.04)	-0.04 (.)	0.91 (0.28)	283

Notes: Columns 1–3 report OLS estimates of the treatment effect. Standard errors are in parentheses and were calculated under permutation of the treatment assignment. Columns 4–5 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 34: Treatment effects with randomization inference – Expenditure

	Effect estimates			Sample	
	(1)	(2)	(3)	(4)	(5)
	No Feedback	PLS	PLS- No Feedback	Control Mean (SD)	Obs.
Spent balance on food	0.04 (0.07)	-0.08 (0.06)	0.12* (.)	0.28 (0.45)	284
Spent balance on school	0.29 (0.24)	0.17 (0.27)	0.13 (.)	0.24 (1.11)	284
Spent balance on business	0.13** (0.08)	0.08 (0.04)	0.04 (.)	0.06 (0.25)	284
Spent balance on durable goods	-0.00 (0.03)	-0.03 (0.03)	0.03 (.)	0.05 (0.23)	284
Spent balance on repaying loans	0.04 (0.05)	-0.00 (0.04)	0.04 (.)	0.11 (0.31)	284
Saved balance	0.04 (0.04)	0.05 (0.04)	-0.01 (.)	0.07 (0.26)	284

Notes: Columns 1–3 report OLS estimates of the treatment effect. Standard errors are in parentheses and were calculated under permutation of the treatment assignment. Columns 4–5 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 35: Treatment effects with randomization inference – Self-perceptions

	Effect estimates			Sample	
	(1)	(2)	(3)	(4)	(5)
	No Feedback	PLS	PLS- No Feedback	Control Mean (SD)	Obs.
Do you see yourself as a saver?	-0.20 (0.15)	-0.09 (0.14)	-0.11 (.)	-0.00 (1.00)	284
Are you in general a lucky person?	4.77*** (0.20)	4.97*** (0.18)	-0.20 (.)	-0.00 (1.00)	284
Do you feel you saved enough?	0.19 (0.15)	-0.09 (0.15)	0.28* (.)	0.00 (1.00)	284
How did you feel not saving?	-0.02 (0.16)	0.06 (0.15)	-0.08 (.)	-0.00 (1.00)	284

Notes: Columns 1–3 report OLS estimates of the treatment effect. Standard errors are in parentheses and were calculated under permutation of the treatment assignment. Columns 4–5 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 36: Treatment effects with randomization inference – Hypothetical treatment assignment

	Effect estimates			Sample	
	(1)	(2)	(3)	(4)	(5)
	No Feedback	PLS	PLS- No Feedback	Control Mean (SD)	Obs.
Select control group	-0.13* (0.07)	-0.08 (0.07)	-0.05 (.)	0.41 (0.50)	284
Select No Feedback group	0.02 (0.07)	-0.11 (0.07)	0.13** (.)	0.55 (0.50)	284
Select PLS group	0.12** (0.04)	0.19*** (0.05)	-0.07 (.)	0.03 (0.18)	284
Perceived effect of PLS without feedback	-0.67 (4.88)	-2.36 (3.46)	1.69 (.)	2.27 (26.53)	283
Perceived effect of PLS	-3.71 (7.10)	0.58 (4.51)	-4.29 (.)	-3.90 (35.85)	283

Notes: Columns 1–3 report OLS estimates of the treatment effect. Standard errors are in parentheses and were calculated under permutation of the treatment assignment. Columns 4–5 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.4 Heterogeneous treatment effects

Table 37: Heterogeneous effects – Primary outcomes by female

	(1) Total no. of deposits	(2) Total deposit amount	(3) Saves with a ROSCA	(4) Gamble more
No Feedback	4.62 (3.71)	3.20 (6.67)	0.05 (0.11)	0.16* (0.08)
No Feedback × Female	0.07 (5.06)	-6.28 (7.28)	-0.12 (0.15)	-0.17 (0.11)
PLS	0.33 (3.57)	-4.94 (5.29)	0.05 (0.11)	0.19** (0.09)
PLS × Female	8.84* (4.84)	5.99 (6.13)	0.13 (0.14)	-0.07 (0.12)
Female	-1.15 (2.98)	-3.99 (4.90)	0.12 (0.10)	0.05 (0.07)
Constant	14.26*** (2.26)	16.96*** (4.28)	0.48*** (0.08)	0.09** (0.04)
Adjusted R^2	0.015	0.006	0.029	0.016
Control mean	13.66	14.87	0.54	0.12
No Feedback p -value	0.17	0.29	0.46	0.85
PLS p -value	0.01	0.73	0.04	0.13
Observations	311	311	284	284

Notes: This table reports OLS estimates of the treatment effect and its interaction with baseline. 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 below 30 y.o.

	(1) Total no. of deposits	(2) Total deposit amount	(3) Saves with a ROSCA	(4) Gamble more
No Feedback	6.20 (4.09)	3.15 (4.15)	-0.15 (0.10)	0.03 (0.09)
No Feedback \times Below 30 y.o.	-3.80 (5.14)	-7.47 (6.62)	0.24* (0.14)	0.06 (0.10)
PLS	5.52 (3.79)	0.20 (3.00)	0.09 (0.09)	0.13 (0.09)
PLS \times Below 30 y.o.	-0.64 (4.99)	-3.22 (5.73)	0.07 (0.14)	0.03 (0.11)
Below 30 y.o.	-2.91 (3.08)	3.32 (4.57)	-0.35*** (0.10)	-0.14** (0.07)
Constant	15.07*** (2.50)	12.91*** (2.08)	0.72*** (0.07)	0.19*** (0.06)
Adjusted R^2	0.015	-0.011	0.075	0.029
Control mean	13.66	14.87	0.54	0.12
No Feedback p -value	0.44	0.40	0.38	0.12
PLS p -value	0.13	0.54	0.13	0.02
Observations	303	303	276	276

Notes: This table reports OLS estimates of the treatment effect and its interaction with baseline. 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 completed std. 8

	(1) Total no. of deposits	(2) Total deposit amount	(3) Saves with a ROSCA	(4) Gamble more
No Feedback	14.33 (14.29)	4.63 (4.82)	0.33 (0.28)	-0.00 (.)
No Feedback \times Completed std. 8	-9.84 (14.52)	-5.31 (5.91)	-0.35 (0.28)	0.07 (0.05)
PLS	4.67 (7.15)	5.84 (6.09)	-0.00 (.)	-0.00 (.)
PLS \times Completed std. 8	1.27 (7.57)	-7.39 (6.77)	0.14** (0.07)	0.15** (0.06)
Completed std. 8	9.75*** (1.49)	13.45*** (2.42)	0.55*** (0.05)	0.12*** (0.03)
Constant	4.00 (.)	1.54*** (0.00)	0.00 (.)	0.00 (.)
Adjusted R^2	0.005	-0.012	0.016	0.010
Control mean	13.66	14.87	0.54	0.12
No Feedback p -value	0.08	0.84	0.83	0.21
PLS p -value	0.02	0.60	0.04	0.01
Observations	311	311	284	284

Notes: This table reports OLS estimates of the treatment effect and its interaction with baseline. 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 completed formal 4

	(1) Total no. of deposits	(2) Total deposit amount	(3) Saves with a ROSCA	(4) Gamble more
No Feedback	2.73 (3.41)	-0.58 (4.97)	-0.06 (0.10)	0.02 (0.08)
No Feedback \times Completed formal 4	3.64 (5.09)	-0.50 (6.86)	0.11 (0.15)	0.08 (0.10)
PLS	8.30** (3.78)	1.06 (3.92)	0.16* (0.10)	0.15* (0.09)
PLS \times Completed formal 4	-4.20 (5.05)	-4.76 (5.94)	-0.00 (0.14)	0.01 (0.11)
Completed formal 4	-1.23 (2.99)	0.96 (4.88)	-0.14 (0.10)	-0.09 (0.06)
Constant	14.23*** (1.87)	14.42*** (2.96)	0.61*** (0.07)	0.16*** (0.05)
Adjusted R^2	0.010	-0.013	0.018	0.013
Control mean	13.66	14.87	0.54	0.12
No Feedback p -value	0.09	0.82	0.67	0.11
PLS p -value	0.22	0.41	0.11	0.02
Observations	311	311	284	284

Notes: This table reports OLS estimates of the treatment effect and its interaction with baseline. 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 41: Heterogeneous effects – Primary outcomes by married/co-habiting

	(1) Total no. of deposits	(2) Total deposit amount	(3) Saves with a ROSCA	(4) Gamble more
No Feedback	5.19 (3.58)	-2.32 (4.80)	-0.09 (0.10)	0.05 (0.08)
No Feedback \times Married/co-habiting	-1.60 (5.24)	3.30 (6.69)	0.14 (0.15)	0.05 (0.10)
PLS	7.78** (3.40)	-3.61 (4.16)	0.09 (0.10)	0.06 (0.08)
PLS \times Married/co-habiting	-4.60 (5.06)	4.20 (5.78)	0.10 (0.14)	0.18 (0.11)
Married/co-habiting	3.57 (3.10)	-2.09 (4.67)	-0.02 (0.11)	-0.08 (0.07)
Constant	12.18*** (1.76)	15.89*** (3.55)	0.56*** (0.07)	0.15*** (0.05)
Adjusted R^2	0.005	-0.014	0.011	0.015
Control mean	13.66	14.87	0.54	0.12
No Feedback p -value	0.35	0.83	0.66	0.17
PLS p -value	0.40	0.88	0.06	0.00
Observations	307	307	280	280

Notes: This table reports OLS estimates of the treatment effect and its interaction with baseline. 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 42: Heterogeneous effects – Primary outcomes by has children

	(1) Total no. of deposits	(2) Total deposit amount	(3) Saves with a ROSCA	(4) Gamble more
No Feedback	0.24 (3.72)	-12.87* (7.16)	0.31** (0.13)	0.20** (0.08)
No Feedback \times Has children	5.67 (4.86)	16.33** (8.01)	-0.44*** (0.16)	-0.19* (0.10)
PLS	3.85 (4.49)	-8.70 (7.76)	0.19 (0.13)	0.12* (0.07)
PLS \times Has children	2.49 (5.37)	9.78 (8.22)	-0.06 (0.15)	0.04 (0.10)
Has children	1.57 (3.28)	-8.46 (7.18)	0.45*** (0.10)	0.16*** (0.04)
Constant	12.52*** (2.78)	20.99*** (6.91)	0.21** (0.08)	0.00 (.)
Adjusted R^2	0.014	0.003	0.097	0.033
Control mean	13.66	14.87	0.54	0.12
No Feedback p -value	0.06	0.34	0.12	0.82
PLS p -value	0.03	0.69	0.09	0.03
Observations	311	311	284	284

Notes: This table reports OLS estimates of the treatment effect and its interaction with baseline. 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 43: Heterogeneous effects – Primary outcomes by currently saves

	(1) Total no. of deposits	(2) Total deposit amount	(3) Saves with a ROSCA	(4) Gamble more
No Feedback	8.07** (4.07)	2.05 (4.49)	-0.00 (0.11)	0.06 (0.07)
No Feedback \times Currently saves	-6.16 (5.23)	-5.25 (6.57)	-0.03 (0.15)	-0.00 (0.10)
PLS	8.26** (3.23)	3.42 (3.77)	0.24** (0.10)	0.18** (0.07)
PLS \times Currently saves	-4.32 (4.87)	-9.25 (5.64)	-0.19 (0.14)	-0.06 (0.11)
Currently saves	5.62** (2.82)	7.44 (4.56)	0.14 (0.10)	0.09 (0.06)
Constant	10.50*** (1.79)	10.69*** (2.73)	0.47*** (0.08)	0.07* (0.04)
Adjusted R^2	0.009	-0.004	0.015	0.015
Control mean	13.66	14.87	0.54	0.12
No Feedback p -value	0.56	0.51	0.71	0.45
PLS p -value	0.28	0.17	0.60	0.15
Observations	311	311	284	284

Notes: This table reports OLS estimates of the treatment effect and its interaction with baseline. 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 44: Heterogeneous effects – Primary outcomes by above median monthly inc.

	(1) Total no. of deposits	(2) Total deposit amount	(3) Saves with a ROSCA	(4) Gamble more
No Feedback	4.17 (3.22)	-0.81 (2.76)	0.09 (0.10)	0.10 (0.07)
No Feedback × Above median monthly inc.	0.59 (5.11)	-0.85 (6.86)	-0.23 (0.14)	-0.09 (0.10)
PLS	5.99* (3.43)	-0.12 (3.05)	0.24** (0.10)	0.09 (0.07)
PLS × Above median monthly inc.	-0.97 (4.97)	-4.36 (5.99)	-0.23* (0.14)	0.09 (0.11)
Above median monthly inc.	2.62 (3.01)	9.22* (5.01)	0.30*** (0.10)	0.08 (0.07)
Constant	12.48*** (1.85)	10.74*** (2.25)	0.40*** (0.07)	0.08** (0.04)
Adjusted R^2	0.006	0.016	0.039	0.026
Control mean	13.66	14.87	0.54	0.12
No Feedback p -value	0.23	0.79	0.17	0.85
PLS p -value	0.16	0.39	0.89	0.04
Observations	311	311	284	284

Notes: This table reports OLS estimates of the treatment effect and its interaction with baseline. 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 45: Heterogeneous effects – Primary outcomes by employment status

	(1) Total no. of deposits	(2) Total deposit amount	(3) Saves with a ROSCA	(4) Gamble more
No Feedback	4.67 (3.69)	-1.66 (3.74)	-0.03 (0.10)	0.17** (0.07)
No Feedback × Employment status	-0.56 (5.11)	1.04 (6.51)	0.01 (0.14)	-0.21** (0.10)
PLS	9.02*** (3.28)	1.18 (3.69)	0.31*** (0.10)	0.17*** (0.07)
PLS × Employment status	-6.82 (4.91)	-5.57 (5.89)	-0.34** (0.14)	-0.04 (0.11)
Employment status	4.53 (2.93)	6.42 (4.77)	0.30*** (0.10)	0.14** (0.06)
Constant	11.42*** (1.76)	11.69*** (3.10)	0.39*** (0.07)	0.04 (0.03)
Adjusted R^2	0.011	0.002	0.066	0.026
Control mean	13.66	14.87	0.54	0.12
No Feedback p -value	0.25	0.91	0.77	0.63
PLS p -value	0.55	0.34	0.77	0.15
Observations	311	311	284	284

Notes: This table reports OLS estimates of the treatment effect and its interaction with baseline. 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 46: Heterogeneous effects – Primary outcomes by self-employment

	(1) Total no. of deposits	(2) Total deposit amount	(3) Saves with a ROSCA	(4) Gamble more
No Feedback	4.59 (3.42)	-3.04 (3.93)	0.03 (0.10)	0.11* (0.07)
No Feedback \times Self-employment	5.74 (7.02)	6.12 (6.14)	-0.22 (0.18)	0.08 (0.17)
PLS	6.95** (3.07)	-1.40 (3.88)	0.27*** (0.09)	0.14** (0.07)
PLS \times Self-employment	8.24 (7.03)	8.32 (6.38)	-0.41** (0.16)	0.06 (0.16)
Self-employment	-0.41 (3.48)	-2.75 (4.25)	0.49*** (0.11)	0.04 (0.09)
Constant	12.41*** (1.85)	13.92*** (3.36)	0.39*** (0.07)	0.08** (0.04)
Adjusted R^2	0.029	-0.012	0.088	0.014
Control mean	13.66	14.87	0.54	0.12
No Feedback p -value	0.09	0.51	0.21	0.21
PLS p -value	0.02	0.17	0.33	0.17
Observations	231	231	209	209

Notes: This table reports OLS estimates of the treatment effect and its interaction with baseline. 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 47: Heterogeneous effects – Primary outcomes by has dependant

	(1) Total no. of deposits	(2) Total deposit amount	(3) Saves with a ROSCA	(4) Gamble more
No Feedback	0.80 (4.02)	-0.31 (6.32)	0.09 (0.14)	0.14 (0.09)
No Feedback \times Has dependant	4.27 (4.96)	-0.85 (7.37)	-0.14 (0.16)	-0.10 (0.11)
PLS	1.21 (4.65)	-3.07 (6.40)	0.35** (0.15)	0.06 (0.06)
PLS \times Has dependant	5.30 (5.42)	1.60 (7.18)	-0.24 (0.17)	0.11 (0.09)
Has dependant	3.04 (3.16)	5.43 (6.20)	0.50*** (0.10)	0.14*** (0.04)
Constant	11.20*** (2.66)	10.48* (5.61)	0.12 (0.08)	0.00 (.)
Adjusted R^2	0.018	-0.006	0.090	0.033
Control mean	13.66	14.87	0.54	0.12
No Feedback p -value	0.08	0.76	0.54	0.46
PLS p -value	0.02	0.65	0.17	0.01
Observations	311	311	284	284

Notes: This table reports OLS estimates of the treatment effect and its interaction with baseline. 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 48: Heterogeneous effects – Primary outcomes by subject is a dependant

	(1) Total no. of deposits	(2) Total deposit amount	(3) Saves with a ROSCA	(4) Gamble more
No Feedback	6.01* (3.12)	-0.07 (4.36)	-0.04 (0.08)	0.03 (0.06)
No Feedback × Subject is a dependant	-4.80 (5.19)	-1.01 (5.22)	0.15 (0.16)	0.15 (0.10)
PLS	3.84 (2.83)	-4.20 (3.60)	0.03 (0.08)	0.12* (0.07)
PLS × Subject is a dependant	7.54 (5.67)	11.08** (5.32)	0.45*** (0.15)	0.09 (0.11)
Subject is a dependant	-1.45 (3.39)	-8.23** (3.77)	-0.32*** (0.11)	-0.15*** (0.04)
Constant	13.99*** (1.71)	16.75*** (3.01)	0.62*** (0.06)	0.15*** (0.04)
Adjusted R^2	0.016	0.006	0.041	0.017
Control mean	13.66	14.87	0.54	0.12
No Feedback p -value	0.77	0.71	0.41	0.02
PLS p -value	0.02	0.08	0.00	0.01
Observations	311	311	284	284

Notes: This table reports OLS estimates of the treatment effect and its interaction with baseline. 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 49: Heterogeneous effects – Primary outcomes by risk averse

	(1) Total no. of deposits	(2) Total deposit amount	(3) Saves with a ROSCA	(4) Gamble more
No Feedback	7.87** (3.63)	-0.13 (4.91)	-0.10 (0.10)	0.08 (0.08)
No Feedback × Risk averse	-7.63 (4.92)	-1.99 (6.58)	0.18 (0.15)	-0.05 (0.10)
PLS	7.83** (3.50)	-3.09 (4.14)	0.13 (0.10)	0.15* (0.08)
PLS × Risk averse	-4.62 (4.89)	3.09 (5.87)	0.02 (0.14)	-0.01 (0.11)
Risk averse	0.50 (2.97)	-3.87 (4.76)	0.01 (0.10)	-0.05 (0.07)
Constant	13.42*** (1.99)	16.71*** (3.50)	0.54*** (0.07)	0.14*** (0.05)
Adjusted R^2	0.017	-0.007	0.016	0.015
Control mean	13.66	14.87	0.54	0.12
No Feedback p -value	0.94	0.63	0.41	0.65
PLS p -value	0.35	1.00	0.14	0.07
Observations	311	311	284	284

Notes: This table reports OLS estimates of the treatment effect and its interaction with baseline. 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 50: Heterogeneous effects – Primary outcomes by above median loc

	(1) Total no. of deposits	(2) Total deposit amount	(3) Saves with a ROSCA	(4) Gamble more
No Feedback	4.19 (3.10)	-1.59 (4.42)	-0.08 (0.09)	0.01 (0.07)
No Feedback \times Above median LOC	1.03 (5.37)	2.07 (6.79)	0.16 (0.15)	0.12 (0.11)
PLS	6.14* (3.15)	-1.86 (3.74)	0.20** (0.09)	0.12 (0.07)
PLS \times Above median LOC	-1.11 (5.07)	0.65 (6.05)	-0.14 (0.15)	0.07 (0.11)
Above median LOC	-0.72 (3.03)	-0.96 (4.85)	0.04 (0.11)	-0.06 (0.06)
Constant	13.94*** (1.89)	15.25*** (3.15)	0.53*** (0.07)	0.14*** (0.05)
Adjusted R^2	0.002	-0.015	0.021	0.010
Control mean	13.66	14.87	0.54	0.12
No Feedback p -value	0.24	0.92	0.48	0.10
PLS p -value	0.21	0.80	0.64	0.03
Observations	311	311	284	284

Notes: This table reports OLS estimates of the treatment effect and its interaction with baseline. 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 51: Heterogeneous effects – Primary outcomes by above median i. point

	(1) Total no. of deposits	(2) Total deposit amount	(3) Saves with a ROSCA	(4) Gamble more
No Feedback	3.06 (3.10)	-8.41 (5.14)	0.02 (0.10)	0.08 (0.07)
No Feedback \times Above median i. point	3.71 (5.23)	16.03** (6.95)	-0.07 (0.15)	-0.03 (0.10)
PLS	9.75*** (3.47)	-4.02 (5.07)	0.24** (0.10)	0.19** (0.08)
PLS \times Above median i. point	-7.98 (4.88)	4.62 (5.88)	-0.20 (0.14)	-0.09 (0.11)
Above median i. point	0.63 (2.95)	-8.85* (4.82)	0.08 (0.10)	0.02 (0.07)
Constant	13.33*** (1.97)	19.42*** (4.51)	0.50*** (0.07)	0.11** (0.05)
Adjusted R^2	0.018	0.010	0.011	0.010
Control mean	13.66	14.87	0.54	0.12
No Feedback p -value	0.11	0.10	0.66	0.55
PLS p -value	0.61	0.84	0.70	0.22
Observations	311	311	284	284

Notes: This table reports OLS estimates of the treatment effect and its interaction with baseline. 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 52: Heterogeneous effects – Primary outcomes by above median cpgi

	(1) Total no. of deposits	(2) Total deposit amount	(3) Saves with a ROSCA	(4) Gamble more
No Feedback	2.53 (3.29)	-1.40 (3.45)	-0.09 (0.10)	-0.01 (0.07)
No Feedback × Above median CPGI	4.38 (5.22)	1.69 (7.00)	0.16 (0.15)	0.16 (0.11)
PLS	6.17* (3.59)	0.79 (3.44)	0.13 (0.10)	0.11 (0.08)
PLS × Above median CPGI	-1.79 (4.79)	-5.46 (5.89)	0.03 (0.14)	0.07 (0.12)
Above median CPGI	-2.88 (2.93)	2.49 (4.86)	0.00 (0.10)	-0.06 (0.07)
Constant	15.06*** (2.27)	13.66*** (2.55)	0.54*** (0.07)	0.15*** (0.05)
Adjusted R^2	0.009	-0.010	0.013	0.014
Control mean	13.66	14.87	0.54	0.12
No Feedback p -value	0.09	0.96	0.48	0.06
PLS p -value	0.17	0.33	0.13	0.03
Observations	311	311	284	284

Notes: This table reports OLS estimates of the treatment effect and its interaction with baseline. 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.

D. Panel Regression

Table 53: Regression of deposits on treatment and lottery results

	Made a deposit
Winning ticket	0.02** (0.01)
Adjusted R^2	0.081
Control mean	0.20
Period 1 effect	
Observations	4473

Notes: This table reports estimates of 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 $t = 1$. The unit of observation is individual-by-period. 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 54: Treatment effects on deposits with a linear time trend

	Made a deposit
Lottery	0.07* (0.04)
Regret	0.09** (0.04)
Period	-0.00*** (0.00)
Lottery \times Period	-0.00 (0.00)
Regret \times Period	-0.00 (0.00)
Constant	0.31*** (0.03)
Adjusted R^2	0.031
Observations	18660

Notes: This table reports a regression of having saved at period t on treatment indicators and a linear time trend. The unit of observation is individual-by-period. 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 55: Time-varying treatment effects on deposits

	Made a deposit
Lottery	0.10 (0.07)
Regret	0.12* (0.07)
Constant	0.60*** (0.05)
Adjusted R^2	0.049
No Feedback joint p -value	0.02
PLS joint p -value	0.01
Observations	18660

Notes: This table reports a regression of having saved at period t on treatment indicators interacted with period indicator variables. The unit of observation is individual-by-period. Standard errors are in parentheses and clustered at the individual level. * denotes significance at 10 pct., ** at 5 pct., and *** at 1 pct. level.

E. Baseline Correlates

Table 56: Baseline correlates of number of deposits made

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Avg. indiff. point	0.00 (0.00)							
Geo. discount factor		0.00 (0.00)						
Exp. discount factor			2.13 (6.83)					
Hyp. discount factor				0.50 (1.62)				
Dept. from stationarity					-1.60 (3.09)			
Decreasing impatience						-2.03 (6.10)		
Coefficient of relative risk aversion							-0.14 (1.04)	
Locus of control								-0.28 (1.43)
Constant	11.14*** (2.44)	11.30*** (1.39)	11.08*** (2.40)	11.26*** (1.96)	11.31*** (1.51)	11.33*** (1.73)	11.94*** (1.68)	11.78*** (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 57: Baseline correlates of amount deposited

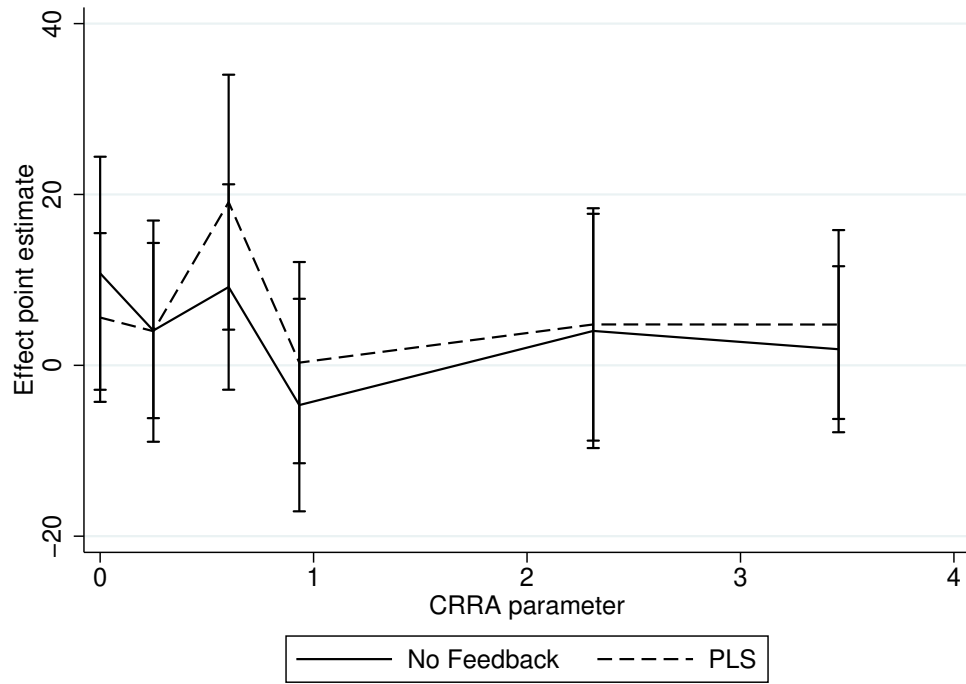
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Avg. indiff. point	-0.02** (0.01)							
Geo. discount factor		-0.00 (0.00)						
Exp. discount factor			-18.98* (10.66)					
Hyp. discount factor				-4.85* (2.55)				
Dept. from stationarity					2.31 (5.56)			
Decreasing impatience						9.42 (9.92)		
Coefficient of relative risk aversion							-0.47 (2.04)	
Locus of control								-1.19 (2.73)
Constant	22.85*** (5.85)	16.03*** (3.06)	21.11*** (5.26)	19.96*** (4.59)	15.56*** (3.11)	16.96*** (3.66)	15.41*** (3.22)	14.87*** (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.

F. Visualization

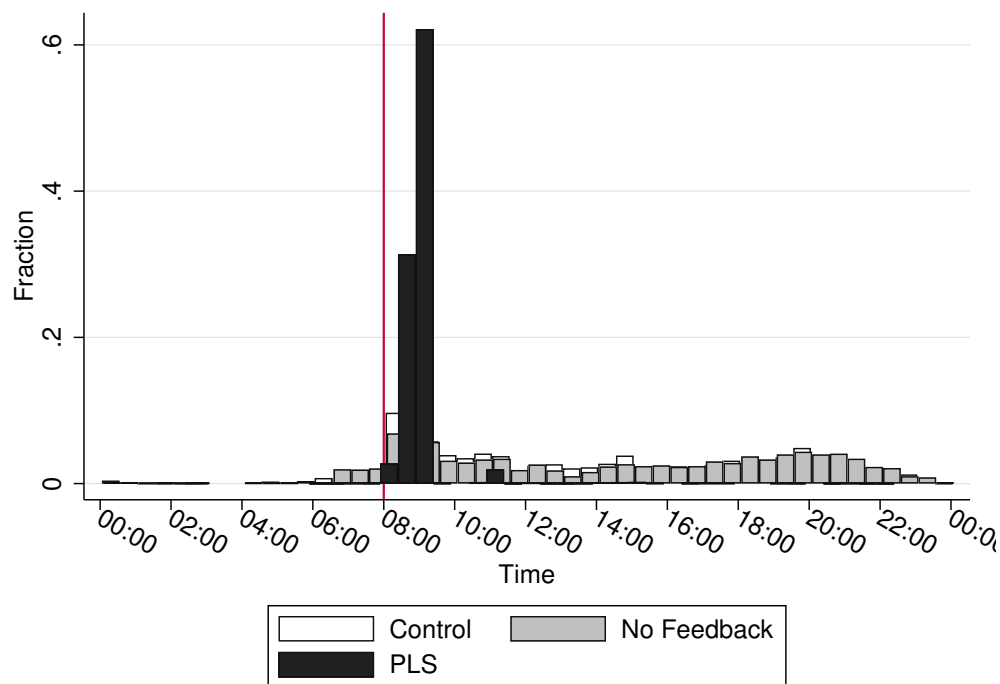
F.1 Main treatment effects by risk aversion

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



F.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

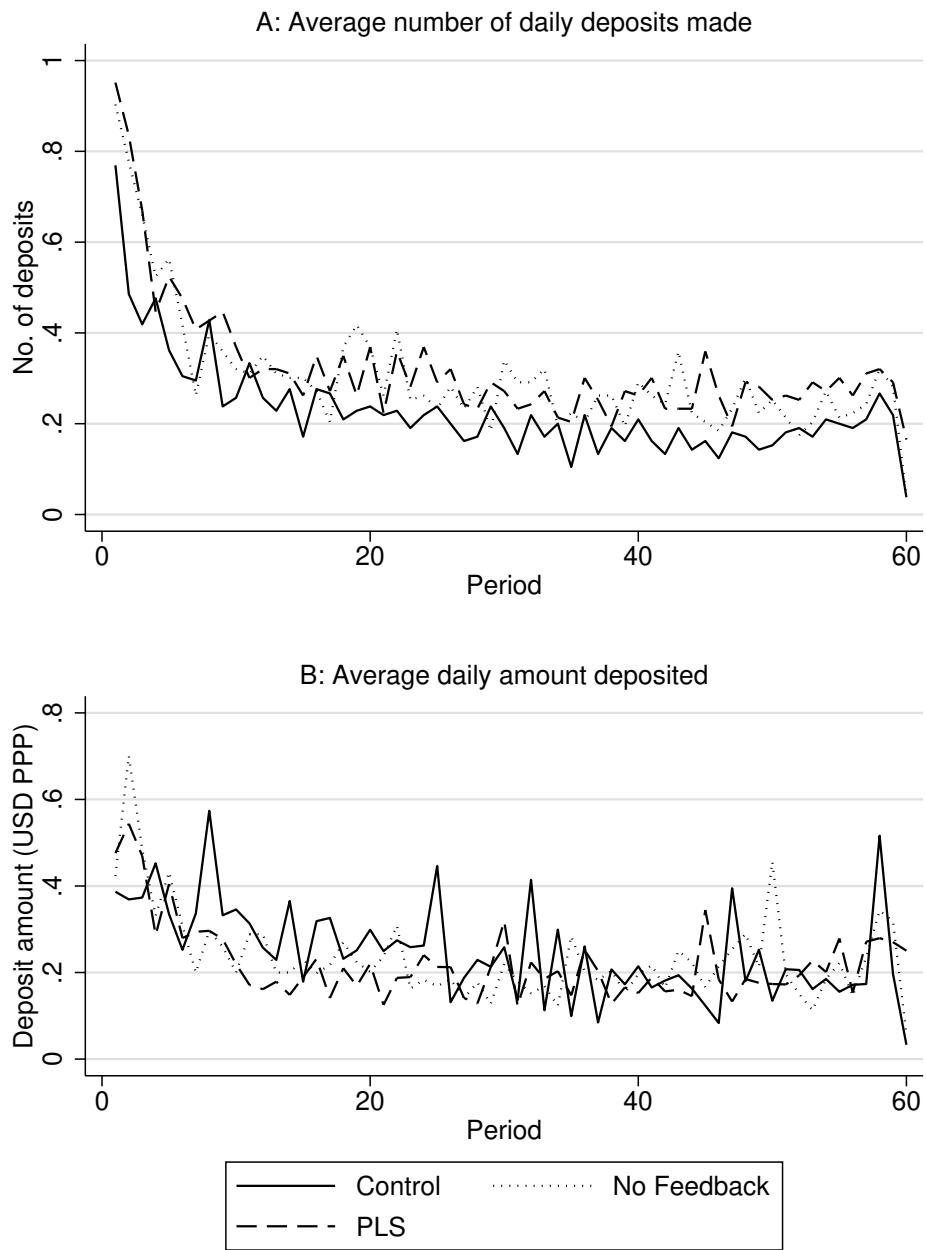


Figure 5: Cumulative number of deposits

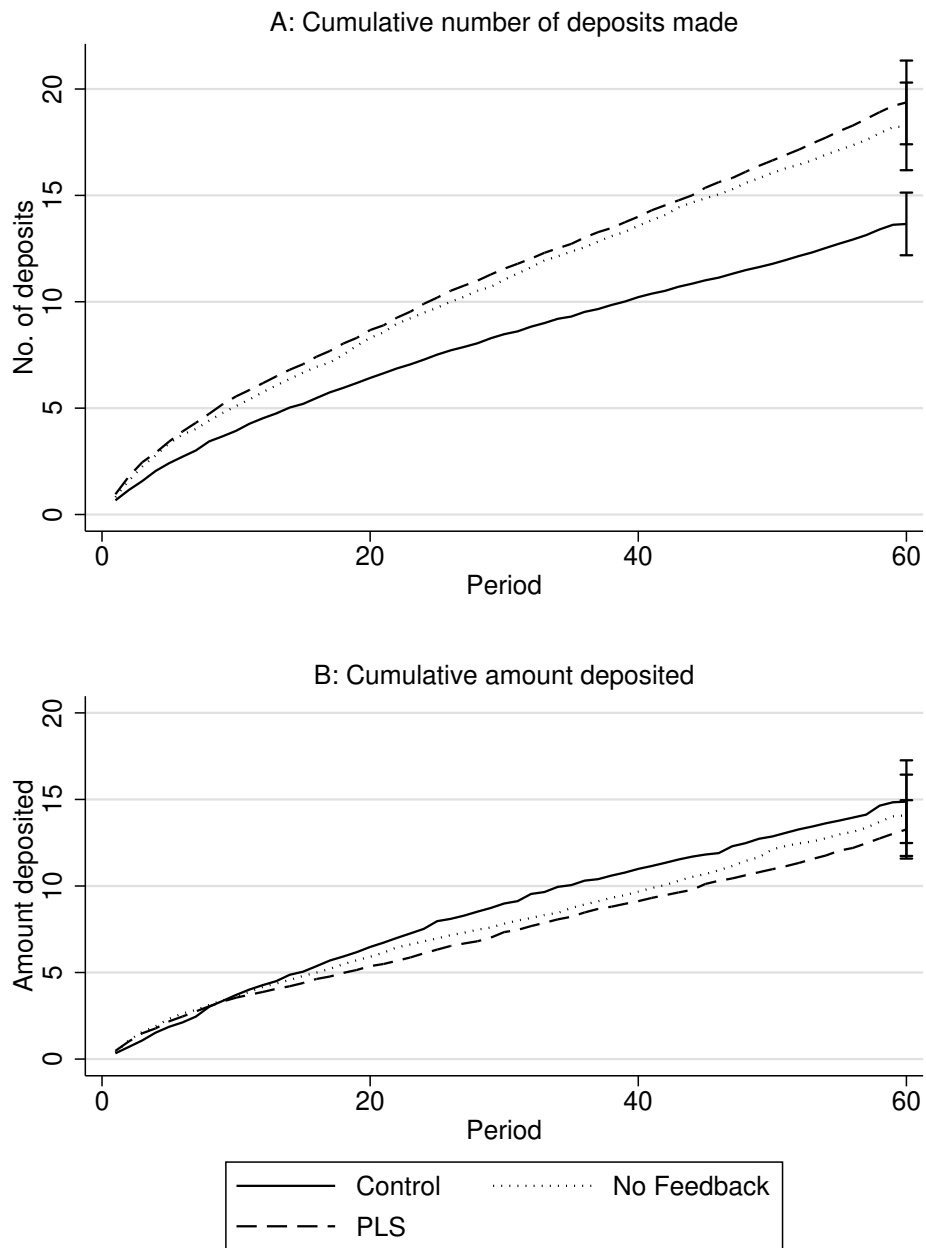
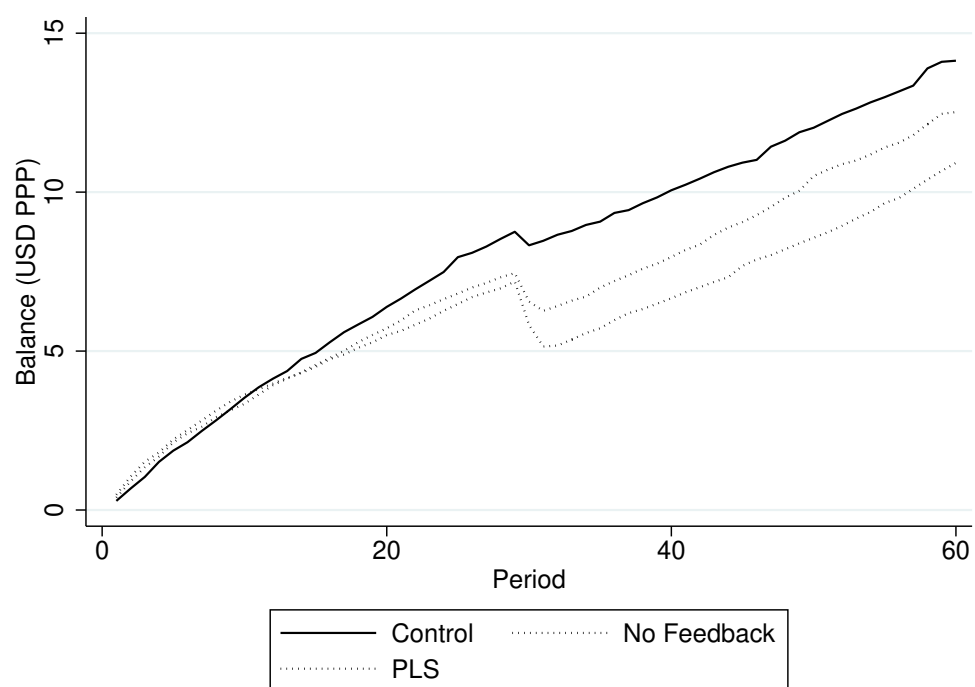


Figure 6: Daily balance averaged over all participants



F.3 Panel treatment effects

Figure 7: Effects over time – Number of deposits

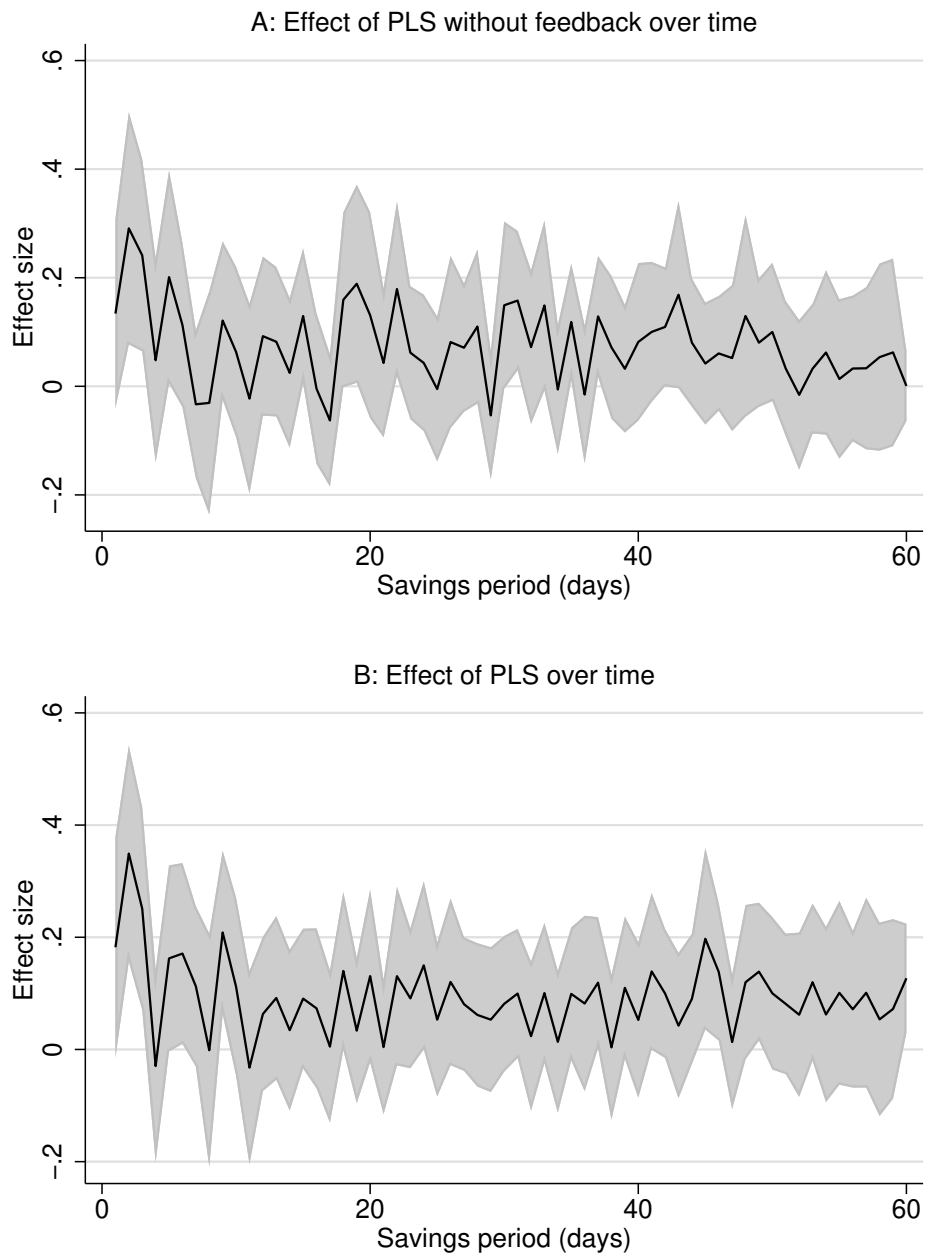


Figure 8: Effects over time – Amount deposited

