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## Access to Formal Banking and Household Finances: Experimental Evidence from India

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Experimental Evidence from India**

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## ABSTRACT

**Keywords:**

financial inclusion  
savings  
banking  
microfinance  
field experiment  
India

**JEL:**

C93  
D14  
G21  
O16  
O12

Access to formal banking is spreading across the world. Obtaining a bank account may transform how people manage their finances, and affect their savings and consumption. We report from a field experiment that randomly provides access to a bank account to a representative sample of villagers in rural India. The treated keep relatively important savings on their account, but reduce their other savings by a similar amount. Their household's overall savings and expenditures do not change. We identify several barriers that may constraint total savings.

## 1. INTRODUCTION

Providing access to financial services has become a priority of the international community, and is an explicit target of the United Nations first Sustainable Development Goal “*End poverty*”. According to the latest estimates, only 54 percent of adults living in developing economies have a bank account (Asli et al. 2015). In India, providing bank accounts is a primary objective of the current government who is investing in the *Pradhan Mantri Jan Dhan Yojana*<sup>1</sup> scheme (PMJDY). From the recipient’s viewpoint, bank accounts provide safer savings possibilities and increase control over one’s savings and consumption.

It is however not obvious that people will automatically take up and start using bank accounts once those are made available. Even when the accounts are free, people may incur non-monetary costs (going to the bank and interacting with the banker) or the bank may not be sufficiently well-known and trusted.

We set up a randomized field experiment to document how obtaining a bank account affects the account holders’ savings and consumption. In collaboration with 17 newly set up local bankers in rural Chhattisgarh, India, we randomly sampled 204 unbanked villagers and offered a bank account to half of them.

In addition to establishing the causal effects of obtaining a bank account, our design is characterized by a strong focus on the quality of the data collected. To obtain accurate measures of the subjects’ finances (savings in different forms, incomes and expenditures), we implement weekly surveys with detailed data collection of the households’ activities. The weekly surveys allow us to minimize recall bias and obtain measures of incomes, expenditures and savings that are as precise as possible. They also allowed us to implement instantaneous dynamic consistency checks and improve the measurement process.

We estimate the impact of obtaining a bank account on account savings, on other savings (such as in informal savings groups), and on the household’s revenues and expenditures.

The treated villagers use their accounts. After six months, they have an average balance of Rs. 318. However, they also save less with informal savings groups and in other financial assets. As a result, the bank accounts do not increase the overall savings levels but provoked a shift away from traditional methods towards formal savings. The households’ expenditures and earnings are neither affected by the treatment.

This paper directly contributes to the emerging empirical literature about the effects of formal banking on household finances. To the best of our knowledge, two published papers only report the effects of randomly providing access to bank accounts on savings. The first one uses a sample made of female market vendors and male taxi drivers in Kenya (Dupas and Robinson 2013a). They find that treated women actively use the account, save more and eventually increase their investments and consumption. Their treatment did not significantly affect the male taxi drivers. In the second paper, (Prina 2015) provided bank accounts to female household heads in Nepal. Treated women use the account actively, but the author doesn’t find any significant effect on their overall savings.

In contrast to these papers, we randomly sampled unbanked households in rural India. As a result, we believe that our estimates are representative of a broader population. Our main finding – increase in account savings but not in total savings – is consistent with (Prina 2015). However, unlike (Dupas and Robinson 2013a), our treatment impact is similar for men and women.<sup>2</sup>

Another contribution of our study is to test directly for mechanisms that may explain why total savings do not increase. In an extensive review, (Karlan, Ratan, and Zinman 2014) emphasize several barriers that constraint savings in low-income households: (i) transaction costs (pecuniary and non-pecuniary), (ii) the lack of trust in financial institutions, (iii) financial illiteracy, (iv) social constraints (sharing norms), and (v) behavioral biases. Providing low cost bank accounts at the doorstep eliminates (or at least greatly reduces) transaction costs. To investigate the role of trust, we compare the treatment effects of villagers who reported a different baseline trust in banks in general. The impacts do not

1 In English: The National Mission for Financial Inclusion.

2 In (Dupas and Robinson 2013a), all men are taxi driver and all women are market vender. It is therefore not possible to tell whether their effects are gender specific or occupation specific.

differ, which suggests that trust in banks in general is not a major barrier to savings.<sup>3</sup> We also provide evidence that sharing norms do not constitute a major barrier in our sample. We further argue that financial illiteracy cannot explain our findings: that barrier would be inconsistent with the observed increase in account savings. Finally, regarding the behavioral biases discussed in (Karlan, Ratan, and Zinman 2014), we show that the treatment impact on account savings is much higher for the group of subject that exhibit a larger impatience level at baseline, but not for the group that exhibited time-inconsistent preferences.

The subjects in our sample however report other, more important barriers to savings. At baseline, in addition to the *lack of self-control* and their *low level of incomes*, they largely point to *irregularities in revenues* and *indebtedness* (with the obligation to pay off old debts first) as major constraints to their savings capacity. These could also explain why total savings do not increase.

Other studies are also directly relevant to this paper. First of all, there are several other unpublished projects that measure the impact of access to formal accounts on savings. The most recent and relevant research comprises three similar experiments in Chile, Malawi and Uganda (Dupas et al. 2016). Their treatment consists in covering opening and maintenance fees of basic savings accounts. As in our case, they select rural households living in the catchment area of existing banks, and select only households that do not yet have an account with a financial institution. They also find the treated save more on the bank account, but total savings barely increase. While we observe that the accounts are used by the majority, they observe a low usage rate. A similar pattern – increase in account savings but not in total savings – is also reported by (Kast and Pomeranz 2014) who provide bank accounts, self-help group support or higher interest rates to Chilean business owners. These patterns stand in contrast to two other studies: assistance to open bank accounts, coupled with the coverage of opening fees induced an increase in the total savings of Mexican migrants in the U.S.A (Chin et al. 2015); and savings accounts increased the total savings of treated households in Kenya (Dupas, Keats, and Robinson 2015).

Our paper also fits in a broader research agenda testing what explains bank account savings in low-income countries. A financial literacy education program had modest effects on account take-up in Indonesia (Cole, Sampson, and Zia 2011). But financial incentives (take-up subsidies) have had important positive effects on account use in the same study (Cole, Sampson, and Zia 2011). Financial incentives also increased take-up, but not savings, in the Philippines (Karlan and Zinman 2014). They led to long-term increased incomes and assets in Kenya (Schaner 2016). Others have found that commitment products can be very effective at raising account savings (Ashraf, Karlan, and Yin 2006b; Dupas and Robinson 2013b; Ashraf et al. 2015). Deposit collection services have also shown positive impacts in the Philippines (Ashraf, Karlan, and Yin 2006a) and in Sri Lanka (Callen et al. 2014). (Karlan et al. 2016) report no effect on account savings of reminders that mention savings goals and financial incentives in Bolivia, Peru and the Philippines. Finally, recent papers are showing potentially important effects of direct deposits in India (Somville and Vandewalle 2015b) but not in Malawi (Brune et al. 2015; Brune et al. 2016).

We describe the context of the study in the next Section, and the design in Section 3. The baseline data is described in Section 4. We present the results in Section 5 and discuss the interpretation and the potential mechanisms in Section 6. We then conclude.

3 (Mehrotra, Somville, and Vandewalle 2016) provide an extensive discussion of the role of trust in bankers in this context. The authors put forward that limited trust in one's own banker may constraint account usage.

## 2. CONTEXT OF THE STUDY

Financial inclusion is progressing rapidly in India. Account ownership increased from 35 to 53 percent between 2011 and 2014 (Asli et al. 2015). The earlier increases can be attributed to the Reserve Bank of India's efforts in implementing the Business Correspondent model (BC). The model further expanded when the new Prime Minister announced the National Mission for Financial Inclusion (PJMMD) in August 2014. As of 24<sup>th</sup> August 2016, more than 2 393 000 new accounts have been opened as part of PJMMD.<sup>4</sup>

The BC model is based on recommendations of the 2004 Khan Commission for financial inclusion. It allows the banks to contract BCs to provide financial and banking services on their behalf (Reserve Bank of India 2005; Reserve Bank of India 2008). In the region of our survey, Axis bank appointed Basix Sub-K as a BC. Basix Sub-K – which is our main partner – is one of the pioneers in the BC model. Its main responsibilities are to select one person per village to become the banker, to train him, and to provide the necessary equipment: a mobile phone, a finger print recognition device and a receipt machine, interconnected through Bluetooth. Basix Sub-K also supports and pays the BCSA, and provides a customer service for the clients.

The customers can perform standard transactions on the account: deposits, withdrawals, money transfers, and balance inquiries. Balance inquiries withdrawals and money transfers require a signature through the finger print recognition device. The customer is charged an enrollment fee of Rs 25, and the transactions are free.<sup>5</sup>

## 3. EXPERIMENTAL DESIGN

The experiment was conducted in Chhattisgarh, an east-central state of India. We selected 17 villages in collaboration with Basix Sub-K according to two criteria:

- We selected villages where the new local banker is the only source of formal banking services. Villages with a cooperative, rural or commercial bank branch were therefore excluded.
- We needed a cluster of villages that are sufficiently close to allow the research team and interviewers to cover the area in a reasonable amount of time.

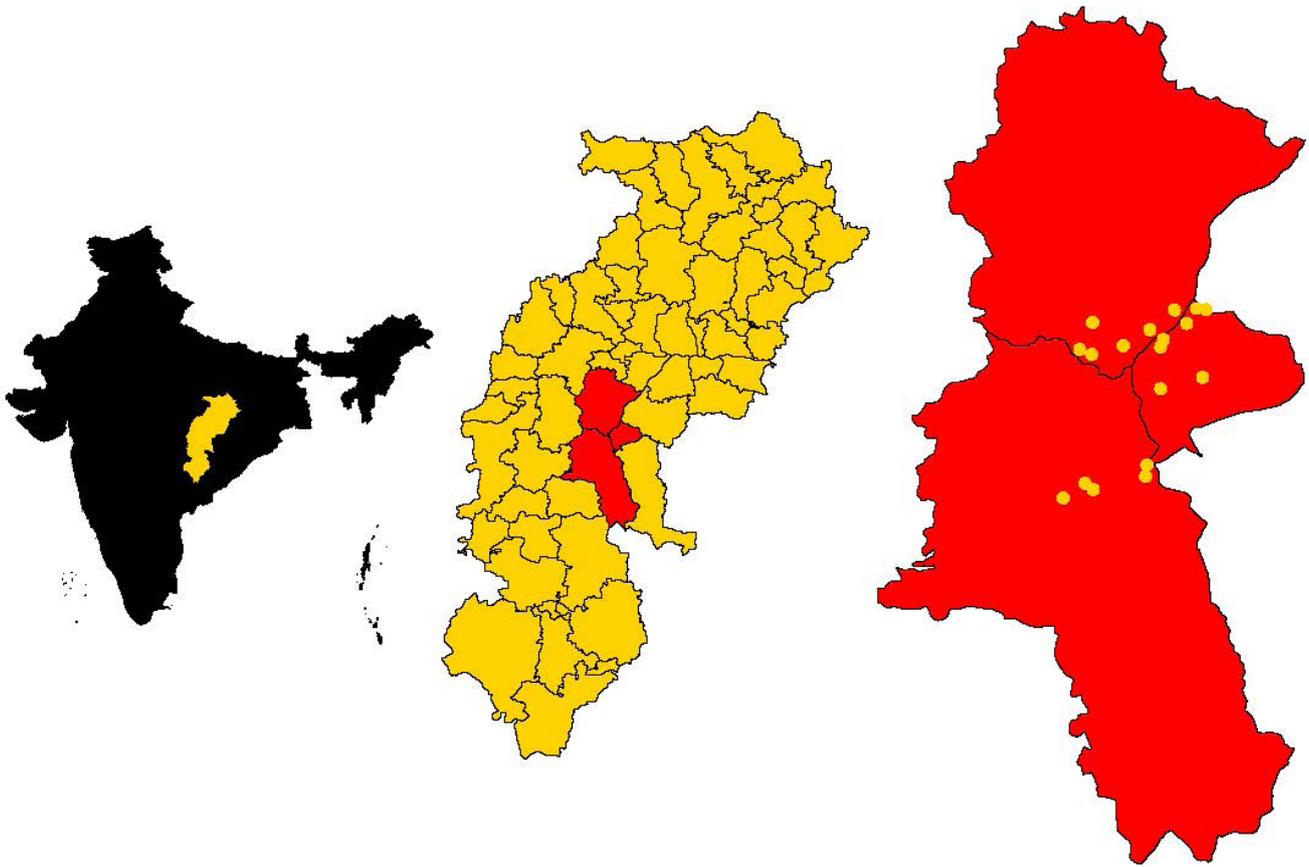
The selected villages are located in three bordering districts: five in the Magarload block of the district Dhamtari, seven in the Rajim block of the district Gariyabandh, and six in the Abhanpur block of the district Raipur. The villages are on average 20.5 km away from one another. Figure 1 shows the geographical positions of the study sites.

Our sample consists of villagers without accounts at baseline. In each village, we first compared the voter lists with the bank's customer lists to identify villagers without accounts. We then draw a random sample of 12 people. To be included in the final sample, the villager had to (i) be the head of the household or the head's spouse, (ii) not plan to leave the village in the coming weeks, and (iii) belong to a household in which nobody has a formal bank account. The sample was stratified by gender, with six men and six women from each village.

We did a baseline survey in the Fall of 2013 and the randomization immediately after. The randomization was blocked by village and by gender: in each village, three men and three women were randomly allocated to the treated group, and the remaining three men and three women to the control group. Overall, we have 204 subjects: 102 in each group. The bank accounts of the treated were open in the beginning of 2014. Basix Sub-K took care of the paperwork and the associated costs. We also organized a practical information session for all the (treated) participants in the study to show them how to deposit and withdraw money, and how the fingerprint recognition tool protects their account.

<sup>4</sup> Updated statistics are available from the PJMMD website: <http://pmjdy.gov.in>.

<sup>5</sup> However, the bank experimented with (very low) charges on withdrawals after the start of our experiment. Customers were charged Rs 2 per withdrawal if their average quarterly balance (AQB) was less than Rs 200, and Rs 1 per withdrawal if the AQB was between Rs 200 and Rs 500. Withdrawals were free if the AQB was above Rs 500. These charges were abandoned on July 1, 2014 and from the endline survey we learn that customers did not realize their temporary existence.



**Figure 1:**  
Locations of the study sites

From February till May, and July till August 2014, we held weekly interviews with all the participants to gather detailed information about their finances. The weekly interviews were always done on the same day of the week, in the same location. Because they took a substantial amount of time (on average, respondents needed about three hours to come, wait their turn, be interviewed and go back home), the participants received Rs 150 in a closed envelope at the end of each interview.

During each weekly interview, we collected detailed information about all the incomes and expenditures of the household members in the past week. The incomes include the sales of crops, of livestock, of forest products, the rentals of assets (land, machinery, animals, goods, ...), wages, income from self-employment, remittances, public and private transfers received, loan taken and repayments of loan given. The expenditures include payments of insurance premiums, reimbursement of loans, loans given, expenditures due to a shock (illness, accident, ...), investments and purchase of agricultural or business inputs, transfers given and renting in assets (land, machinery, animals, goods, ...). In addition we used a list of 195 consumption items, and recorded, item by item, the amounts purchased by the household in the past week. Finally, we ask the households to report every week their different asset holdings. Repeating the survey weekly allowed us to program a dynamic data collection tool with extensive consistency checks based on the previous values recorded.<sup>6</sup> We believe that this process greatly improved the quality of the data collected and minimized measurement errors.

We registered a pre-analysis plan with the American Economic Association's registry for randomized control trials (Somville and Vandewalle 2015a). To further enrich the paper, we also present data and analyses that were not pre-specified. In Appendix A3 we discuss the deviations from the plan.

<sup>6</sup> Historical values were not shown to the enumerators, but in case of large changes from week to week, they would receive alarm messages urging them to double check the values with the respondents and to record the explanation if the new value is correct.

## 4. BASELINE DATA

In the baseline survey, we measured self-reported savings of different forms. We asked in particular about financial savings in informal groups (SHGs) and other financial savings (such as money owed by the agricultural cooperative or the post office). These are the main variables that we use in the analysis. We provide summary statistics in Table 1. The total financial savings are equal to Rs. 469 on average with important variation between households (the standard deviation is Rs. 1470). The financial savings come primarily from self-help groups. People also have other financial savings, the largest being amounts that are owed by an agricultural cooperative (sales of crops that have not yet been collected by the respondent). Some people also have holdings with other financial institutions (usually post offices who are in charge of disbursing public transfers, when the transfers have not yet been collected), those are included in “other financial savings”<sup>7</sup>

	<b>All sample mean (s.d.)</b>	<b>Treated mean (s.d.)</b>	<b>Control mean (s.d.)</b>
Saving groups (baseline)	287 (1398)	242 (1507)	334 (1282)
Other financial savings (baseline)	182 (486)	193 (601)	170 (332)
Total financial savings (baseline)	469 (1470)	435 (1604)	504 (1324)
Observation	201	102	99

**Table 1:**  
Savings and expenditures  
at baseline

None of the differences in means between treatment and control are statistically significant ( $\alpha=5\%$ ).

The majority of the people say that their savings are not sufficient. As we show in Table 2, when asked if they think that they are saving enough, 81% of the people disagree. We then asked them to identify what factors limited their savings. We report the answers in the same table. Redistributive pressures are not seen as an important factor at all. On the other hand, almost all agree that “a lack of self-control”, “indebtedness”, “low incomes” and “irregular incomes” are major barriers to saving. In addition, 18% of the people say that they lack a safe way to save and 12% say that their savings are limited because they lack access to banks.

<sup>7</sup> All the variables used in the following Tables are defined in Appendix A1.

**Table 2:**  
Reported barriers to  
savings at baseline

	All sample mean (s.d.)	Treated mean (s.d.)	Control mean (s.d.)
Saves sufficiently (% Yes)	19 (39)	20 (40)	18 (39)
<i>What limits your capacity to save (% yes)?</i>			
Redistributive pressures (%)	3 (17)	2.9 (17)	3 (17)
Lack of self-control (%)	86 (35)	90 (30)	81 (40)
Paying off debts first (%)	91 (29)	95* (22)	86* (35)
Nothing to save / low income (%)	95 (22)	97 (17)	93 (26)
Revenues are too irregular (%)	90 (30)	89 (31)	91 (29)
No safe saving tool (%)	18 (39)	20 (40)	17 (38)
Lack of banks (%)	12 (33)	13 (34)	12 (33)
Observations	201	102	99

\*Statistically significant difference in means between treatment and control ( $\alpha=5\%$ ).

In Table 3, we provide further descriptions of the sample. The variables in the table are those that were identified as covariates in the pre-analysis plan. By design, half the respondents are women. They almost all come from Scheduled Castes/Tribes (SC/ST) and Other Backward Castes (OBC). Less than half of them are literate (can read and write), 88% are married and they are 46 years old on average. Their main occupation is being self-employed or wage laborers in the agricultural sector. They own around 1 acre of land on average and 55% lives in a *katcha* house (made of mud). One in seven respondent is member of an informal savings group (self-help group or neighborhood group) and the respondents have on average one “other account” (mostly, post office accounts to receive public benefits or account with the agricultural cooperative that buys their crops). 85% said that they decide how much to save, 68% trust banks in general, 44% are impatient<sup>8</sup> and they live on average 300 meters away from the banker.

<sup>8</sup> A binary variable equal to one if the respondent answered “today” to the question “Would you prefer to receive 100 Rs. today or 125 Rs. in one week?”, and answered “in one week” to the question “Would you prefer to receive 100 Rs. in one week or 200 Rs. in two weeks?”.

	All sample mean (s.d.)	Treated mean (s.d.)	Control mean (s.d.)
Treatment	51 (50)	100 (0)	0 (0)
Woman (%)	50 (50)	50 (50)	49 (50)
Caste category: ST (%)	16 (37)	18 (38)	15 (36)
Caste category: SC (%)	16 (37)	16 (37)	16 (37)
Caste category: OBC (%)	67 (47)	67 (47)	68 (47)
Caste category: FC (%)	.5 (7.1)	0 (0)	1 (10)
Literate (%)	41 (49)	44 (50)	37 (49)
Married (%)	88 (33)	89 (31)	86 (35)
Age	46 (14)	45 (13)	46 (14)
Wage labor in agriculture (%)	31 (46)	27 (45)	34 (48)
Wage labor outside agriculture (%)	14 (35)	13 (34)	15 (36)
Self-employed in agriculture (%)	44 (50)	48 (50)	40 (49)
Self-employed outside agriculture (%)	1 (10)	2 (14)	0 (0)
Land (acres)	1.1 (1.6)	1.2 (1.8)	.95 (1.3)
Dwelling type: katcha (%)	55 (50)	52 (50)	59 (50)
Accounts held (#)	1.1 (.59)	1 (.58)	1.1 (.6)
Savings groups (#)	14 (.35)	14 (.35)	15 (.36)
Takes savings decision at home (%)	85 (36)	84 (37)	86 (35)
Trusts the BCSA and banks (%)	68 (47)	67 (47)	70 (46)
Impatient (%)	44 (50)	42 (50)	45 (50)
Distance to the BCSA (km)	.3 (.21)	.33* (.23)	.27* (.17)
Observations	201	102	99

**Table 3:**  
Summary statistics and  
balance check

\*Statistically significant difference in means between treatment and control ( $\alpha=5\%$ ).

## 5. RESULTS

We now turn to the treatment impacts. We first discuss the attrition, and show that it is limited and not correlated with the treatment. Then we describe how the treated use the account. Finally we show how the account savings and other savings of the treated and control evolve. We first describe the treatment effects on the savings of the respondent, and then on the savings and consumption of the respondent's household.

### 5.1 Attrition

The baseline sample consists of 204 individuals in 17 villages. Three subjects could not be reached after the baseline and have therefore never been interviewed post-treatment. This corresponds to an attrition rate of 1.47 percent. There is no statistically significant effect of the treatment on attrition, at the 95 percent level of significance.

On average, people were interviewed 13.38 times after the treatment. The means are 13.27 in the control group and 13.48 in the treated group. Again the difference between both groups is not statistically significant. The final sample consists of a total of 2689 observations of 201 individuals over 17 weeks.

### 5.2 Account use

Over 17 weeks, the treated made 3 deposits and 0.3 withdrawals on average. We find that 36% of the treated never made a deposit, another third made between one and three deposits, and the last third made between four and 14 deposits. Only one in four subjects made at least one withdrawal, and we do not observe more than two withdrawals per subject.

Overall, the treated deposited Rs. 443 and withdrew Rs. 118 on average. Conditional on making at least one deposit or withdrawal, the average deposit is Rs. 695, and the average withdrawal is Rs 464. These statistics are summarized in Table 4.

**Table 4:**  
Account use  
in the treated group

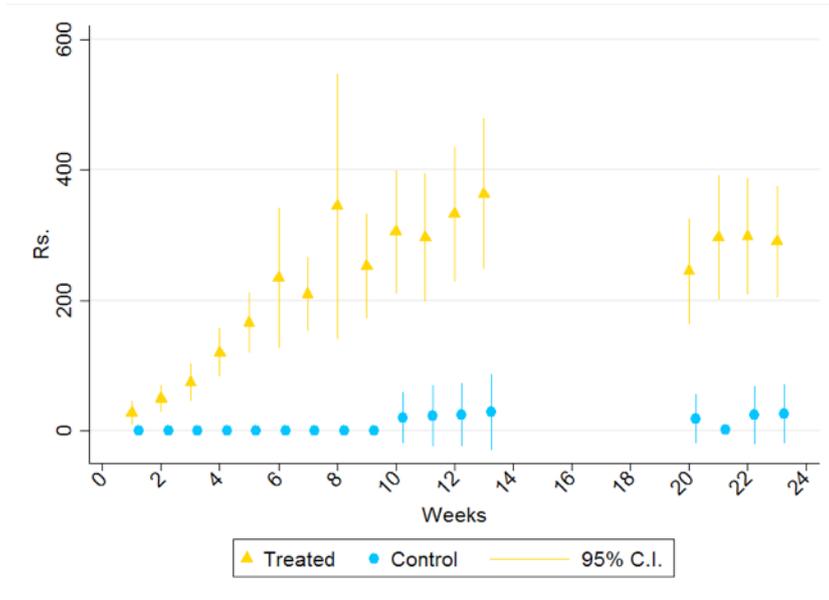
	Deposits	Number of deposits	Proportion of positive deposits	Deposits (if positive)
<b>Mean</b>	443	3.11	64%	695
<b>Std. Dev.</b>	701	3.79	48%	773
<b>Observations</b>	102	102	102	65
	Withdrawals	Number of withdrawals	Proportion of positive withdrawals	Withdrawals (if positive)
<b>Mean</b>	118	0.30	25%	464
<b>Std. Dev.</b>	260	0.56	44%	326
<b>Observations</b>	102	102	102	26

### 5.3 Treatment impacts on the individual savings

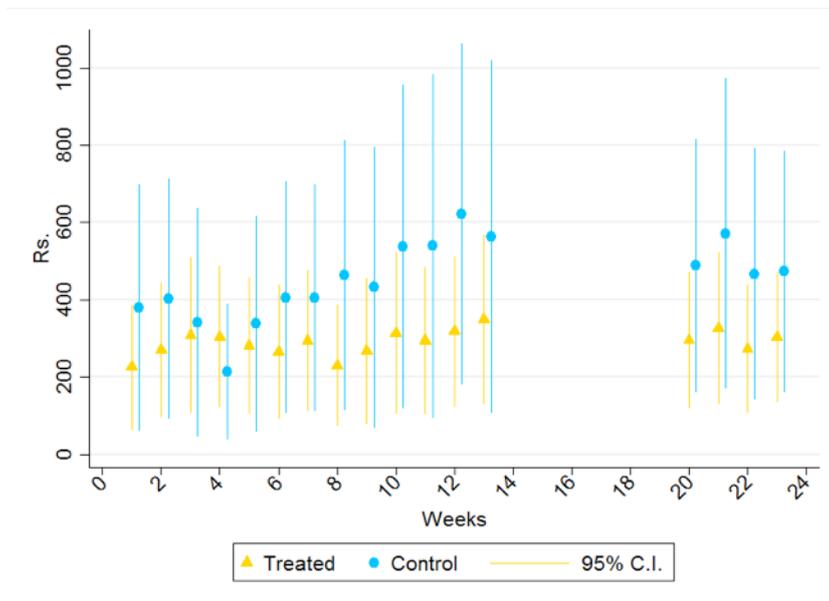
In the following Figures, we display the mean values, with confidence intervals, by week, of our main variables of interest: account savings, informal group savings and total financial savings. Week 1 corresponds to the first weekly interview.

Figure 2 shows a clear increase in account balance in the treated group compared to the control. The average account balance of the treated increases until week 9, and then remains stable around Rs. 300. On the other hand, the control group systematically saves more with informal groups (but the difference is not statistically significant). We also see that some members of the control group opened a bank account by themselves. In Figure 3 and Figure 4, we do not see any strong differences between both groups in group savings, nor in total financial savings.<sup>9</sup>

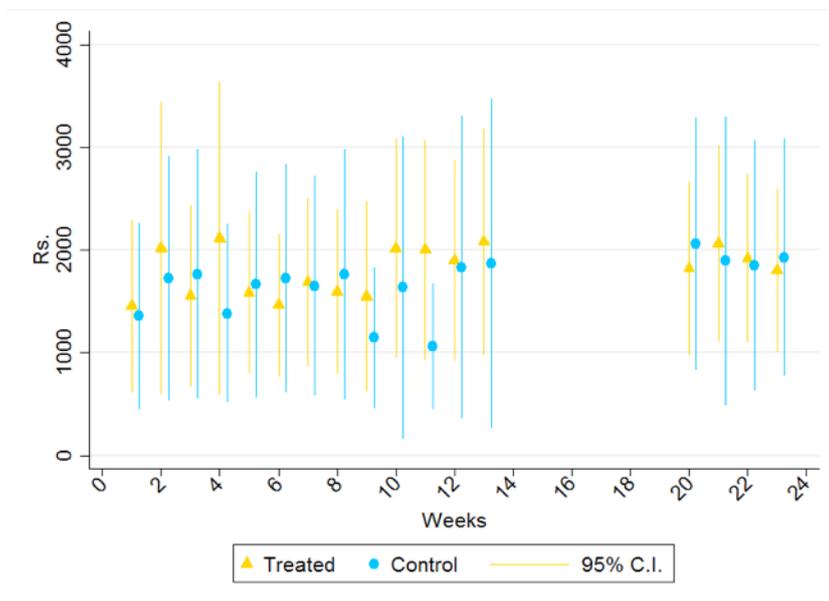
<sup>9</sup> Note the increase in total financial savings between the baseline (Table 1) and the first week post-treatment. This is due to a few individuals selling their crops to cooperatives after the baseline.



**Figure 2:**  
Bank account savings



**Figure 3:**  
Informal group savings



**Figure 4:**  
All financial savings

Next, we estimate the treatment impact. We use data from the weekly interviews, and have a total of 2689 observations from 201 different respondents. We calculate a pooled panel estimator, with time and village fixed effects. The standard errors are clustered at the individual level. Formally, we estimate the following equation:

$$Y_{i,t} = \alpha + \beta * Treatment_i + \gamma * Time_t + \delta * Village_i + \epsilon_{it}$$

Where  $Y_{i,t}$  is the outcome for individual  $i$  at time  $t$ , is equal to one if  $i$  is treated and zero otherwise,  $Time_t$  and  $Village_i$  indicate time and village fixed effects. Results with additional covariates defined in the pre-analysis plan, and estimates based on the final – instead of the weekly – values of the savings are shown in Appendix A2.

In Table 5 we display the impact of the treatment on the subject's savings. We measure separately the impact (1) on the bank account, (2) on informal group savings, (3) on other financial savings and (4) on the sum of those three items. We find that those who received a bank account keep Rs. 208 more than the control on the account, on average, per week. On the other hand, and in accordance with the graphical assessment above, we do not find significant impacts neither on other savings, nor on total savings.

**Table 5:**  
Treatment impacts on individual savings.

	(1) Bank account balance	(2) Informal savings groups balance	(3) Other financial savings	(4) Total financial savings ((1)+(2)+(3))
<b>Treated</b>	207.78*** (26.32)	-146.09 (159.32)	11.62 (586.03)	73.32 (629.64)
<b>Mean in control</b>	9.1	439	1229	1677
<b>Observations</b>	2689	2689	2689	2689
<b>R2</b>	0.26	0.12	0.04	0.05

All models include banker/village and time fixed effects. Standard errors are clustered at the individual level and given in parenthesis. \*\*\* significant at 1 percent, \*\* significant at 5 percent, \* significant at 10 percent.

#### 5.4 Treatment impacts on the household savings and consumption

The individuals studied do not live on their own, but are members of households. Because household members generally share their incomes, consumption and savings, it is plausible that providing access to a bank account to one household member, influences savings and expenditure patterns by other members. In the following tables, we measure the treatment impacts on savings and expenditures at the household level. In Table 6, the dependent variables correspond to those of Table 5, but measured at the household level. We find a positive impact on account savings (significant at 10%), but do not observe a significant impact on total household savings.

	(1) Household - Bank account balance	(2) Household - Informal savings groups balance	(3) Household - Other financial savings	(4) Household - Total financial savings ((1)+(2)+(3))
<b>Treated</b>	130.19* (77.22)	-65.70 (267.59)	-244.23 (863.12)	-179.75 (934.59)
<b>Mean in control</b>	87	872	2234	3193
<b>Observations</b>	2689	2689	2689	2689
<b>R2</b>	0.13	0.09	0.06	0.05

**Table 6:**  
Treatment impact on  
household savings.

All models include banker/village and time fixed effects. Standard errors are clustered at the individual level and given in parenthesis. \*\*\* significant at 1 percent, \*\* significant at 5 percent, \* significant at 10 percent.

An alternative way to measure savings is calculating total household income and total household expenditures per week, and differentiating both. In this manner, we do not only capture the financial savings included in Table 6, but we capture all the savings of that week. Note that we measure the treatment impact on *the level (stock)* of savings in Table 6, but the treatment impact on *the change in levels (flow)* in Table 7. The treatment impact, in column (1) of Table 7 is negative but not significant. In the same table, we also report the impact on household consumption. We decompose consumption into three categories: frequent consumption<sup>10</sup>, temptation goods<sup>11</sup> and non-frequent consumption. The impact estimates on consumption are small and not statistically significant.

	(1) Revenues - expenditures	(2) Frequent consumption	(3) Temptation goods	(4) Non-frequent consumption
<b>Treated</b>	-289.78 (264.34)	36.24 (26.10)	0.94 (8.75)	-2.31 (145.22)
<b>Mean in control</b>	408	323	73	505
<b>Observations</b>	2689	2689	2689	2689
<b>R2</b>	0.03	0.06	0.05	0.02

**Table 7:**  
Treatment impact on  
household expenditures  
and (incomes-  
expenditures).

Table 7 confirms the finding that total household savings are not influenced by the bank account. In addition, it shows that the consumption does not change. Bank accounts are thought to provide a better control over one's finances, and they could therefore affect the composition of consumption even if they don't affect the levels. In particular, one hypothesis would be that bank account allows people to reduce their consumption of temptation goods. We do not observe this in our experiment.

In the weekly surveys, we also ask households about their savings in other, real, assets such as jewelry, grains, cash or livestock. We do not find any significant impact on those measures either. The estimates are displayed in Appendix A2.

<sup>10</sup> Frequent consumption is the sum of expenditures on goods that are bought frequently by the average household, i.e. at least once every three weeks.

<sup>11</sup> Under temptation goods we include goods that are not survival necessities (Banerjee and Mullainathan 2010). In line with the literature, we include pan, alcohol, tobacco, and drinks and snacks from the market, as well as hair oil, lotion and perfumes.

## 6. INTERPRETATION OF THE RESULTS AND DISCUSSION OF THE MECHANISMS

As we discussed in the introduction, the economic literature has emphasized five main barriers to increasing savings of the poor: (i) transaction costs (pecuniary and non-pecuniary), (ii) the lack of trust in financial institutions, (iii) financial illiteracy, (iv) social constraints (sharing norms), and (v) behavioral biases (Karlan, Ratan, and Zinman 2014).

Our intervention – providing *no frills* bank accounts at the doorstep – eliminates (or at least greatly reduces) the transaction costs. The use of the accounts implies very limited costs and the banker is located centrally in the village, on average 300 meters away from the households. This reduction in transaction costs can therefore explain the rise in account savings, but it is not sufficient to increase total savings.

To further test the importance of the transaction costs and other barriers, in explaining the results we decompose the treatment impact on account savings by different baseline characteristics of the households. We estimate the same equation as before, but we add to the model the baseline variable and the interaction between that variable and the treatment indicator. The results are shown in Table 8.

In column (5) of Table 8, we see that the treatment impact is similar for those living closer or further away from the banker.<sup>12</sup> Because distance and time are the main non-pecuniary transaction costs of using this account, this finding reinforces our claim that the transaction costs may not be the most important barrier to savings.

To investigate the role of trust, we compare the treatment effects on the subjects with and without a high baseline reported trust in the bank. We do not find a difference in impacts, which suggests that trust in the bank is not a major barrier to savings.<sup>13</sup> The estimate is in column (3) of Table 8.

We also show that the treatment impact on account savings is much higher for the group of subject that exhibit a larger impatience level at baseline (column (4) of Table 8).<sup>14</sup> This is consistent with the behavioral biases discussed in (Karlan, Ratan, and Zinman 2014). However, we do not find that “time-inconsistent” people are differently affected by the treatment (column (6) of Table 8). We therefore provide mixed evidence on the importance of time preferences.

Because (Dupas and Robinson 2013a) find important effects of providing a bank account to women but not men, we also test the treatment impact by gender (column (1) of Table 8). In this population, the treatment impact does not differ significantly by gender of the recipient. To further investigate the role of different people within a household, we asked at baseline if the respondent is “in charge of the household savings”. When we interact that indicator variable with the treatment, we find significant and important differences: the treatment impact is twice as large for those people who are not in charge of their household savings (Rs. 350 vs Rs 178). The treatment impact on the total (individual and household) savings is however also undistinguishable from zero for that group.

<sup>12</sup> Higher distance to the bank is an indicator equal to 1 if the distance between the banker and an individual’s home is greater than the median distance.

<sup>13</sup> See (Mehrotra, Somville, and Vandewalle 2016) for an extensive discussion of the role of trust in the bank and its bankers in this context. We there emphasize that it is instead the trust in a particular banker that can constraint account savings.

<sup>14</sup> Impatient is a binary variable equal to one if the respondent answered “today” to the question “Would you prefer to receive 100 Rs. today or 125 Rs. in one week?”, and answered “in one week” to the question “Would you prefer to receive 100 Rs. in one week or 200 Rs. in two weeks?”.

	(1) X = woman	(2) X= decides savings	(3) X= trusts banks	(4) X= impatient	(5) X = higher distance to the bank	(6) X = time inconsistent preferences
<b>Treated</b>	168.10*** (37.95)	350.45*** (69.61)	179.41*** (40.14)	259.32*** (36.25)	219.99*** (37.68)	207.75*** (28.94)
<b>Treated*X</b>	77.79 (49.60)	-172.13** (73.47)	44.01 (53.80)	-122.62** (56.48)	-21.97 (54.14)	4.24 (66.29)
<b>X</b>	4.97 (21.63)	38.25 (43.46)	9.16 (30.03)	12.03 (25.70)	-1.14 (26.25)	-46.75 (44.47)
<b>Mean in control</b>	9.1	9.1	9.1	9.1	9.1	9.1
<b>Observations</b>	2689	2689	2689	2689	2689	2689
<b>R2</b>	0.27	0.27	0.26	0.27	0.26	0.26
<b>(Treated+Treated*X=0)</b>	0.00	0.00	0.00	0.00	0.00	0.00

All models include banker/village and time fixed effects. Standard errors are clustered at the individual level and given in parenthesis. \*\*\* significant at 1 percent, \*\* significant at 5 percent, \* significant at 10 percent.

**Table 8:**  
Heterogenous impacts on account savings.

We also argue that financial illiteracy cannot explain our findings: that barrier would be inconsistent with the observed increase in account savings.

Finally, by inspecting the monetary transfers between households, we provide evidence that sharing norms do not constitute a major barrier in our sample. In Table 9, we report the treatment impact on the amounts received or given by the households. We see first that the amounts are relatively small: the households give on average Rs. 35 per week, and receive around Rs. 20 per week. These numbers are too small compared to the current levels of savings and they cannot plausibly explain why people do not save more. In addition, there is no treatment effect on the money received and given. redistributive pressures therefore cannot not explain the treatment impact on account savings (the treated would have saved more on their account, which is less liquid and less visible than other forms of savings, and allows to evade sharing).

	(1) Received - Given b/se	(2) Received b/se	(3) Given b/se
<b>Treated</b>	-2.59 (12.39)	-2.16 (6.86)	0.43 (10.99)
<b>Mean in control</b>	-14	21	35
<b>Observations</b>	2689	2689	2689
<b>R2</b>	0.02	0.02	0.02

**Table 9:**  
Impact on money given and received.

All models include banker/village and time fixed effect. Standard errors are clustered at the individual level and given in parenthesis. \*\*\* significant at 1 percent, \*\* significant at 5 percent, \* significant at 10 percent.

The subjects in our sample emphasize other barriers to savings. At baseline, in addition to the *lack of self-control* and their *low level of incomes*, they massively point to *irregularities in revenues* and *indebtedness* (with the obligation to pay off old debts first) as major constraints to their savings capacity. In Table 10, we estimate the treatment impact on the same questions, asked again in the endline survey. As expected, all the previously identified barriers remain, except the “lack of banks” that significantly goes down in the treated group (and reaches 0% in that group).

**Table 10:**  
Impact on reported  
barriers to savings.

	(1) Redistributive pressures	(2) Lack of self-control	(3) Paying off debts first	(4) Nothing to save	(5) Revenues are too irregular	(6) No safe saving tool	(7) Lack of banks
<b>Treated</b>	0.02 (0.01)	-0.01 (0.06)	-0.01 (0.04)	-0.09 (0.06)	0.03 (0.05)	0.03 (0.04)	-0.04** (0.02)
<b>Mean in control</b>	0	.77	.94	.83	.8	.053	.042
<b>Observations</b>	195	195	195	195	195	195	195
<b>R2</b>	0.08	0.08	0.07	0.07	0.13	0.08	0.23

All models include banker/village fixed effects. Standard errors are in parenthesis. \*\*\* significant at 1 percent, \*\* significant at 5 percent, \* significant at 10 percent.

The persistence of the other barriers could in fact explain why total savings do not increase.

## 7. CONCLUSION

We have used a random sample of unbanked households in rural India. Half of the respondent were randomly selected to receive a bank account (treated) and the other half wasn't (control). We find that access to a bank account significantly increases account savings, but that other savings decrease by a similar amount and the total individual savings do not change. We neither see impacts on the household's savings and consumption.

Despite their lack of effect on total savings, bank accounts should nonetheless increase welfare if they are safer, cheaper and provide more flexibility than the informal savings that they replace. The fact that the treated change the way they save and start saving in the bank instead of by other means also indicate that the provision of accounts is beneficial.

Finally, most participants in this experiment (81%) expressed that their savings were not sufficient. But just facilitating access to bank accounts is not enough to allow them to save more. As we have discussed, other barriers to savings still remain. We have documented the importance of behavioral factors (patience) that are already well-known in the literature. In addition, we have emphasized the potential importance of new barriers, irregularity of incomes and high indebtedness in particular, that deserve further scrutiny.



## REFERENCES

- Ashraf, Nava, Diego Aycinena, Claudia A. Martinez, and Dean Yang. 2015. "Savings in Transnational Households: A Field Experiment Among Migrants from El Salvador." *Review of Economics and Statistics* 97 (2): 332–51.
- Ashraf, Nava, Dean Karlan, and Wesley Yin. 2006a. "Deposit Collectors." *Advances in Economic Analysis & Policy* 6 (2).
- . 2006b. "Tying Odysseus to the Mast: Evidence from a Commitment Savings Product in the Philippines." *Quarterly Journal of Economics* 121 (2): 635–72.
- Asli, Demirgüç-Kunt, Klapper Leora, Singer Dorothe, and van Oudheusden Peter. 2015. "The Global Findex Database 2014: Measuring Financial Inclusion around the World." *The World Bank Policy Research Working Paper*, no. 7255.
- Banerjee, A, and S Mullainathan. 2010. "The Shape of Temptation: Implications for the Economic Lives of the Poor."
- Brune, Lasse, Xavier Giné, Jessica Goldberg, and Dean Yang. 2015. "Savings Defaults and Payment Delays for Cash Transfers: Field Experimental Evidence from Malawi." *Mimeo*.
- . 2016. "Facilitating Savings for Agriculture: Field Experimental Evidence from Malawi." *Economic Development and Cultural Change* 64 (2). The University of Chicago Press: 187–220.
- Callen, Michael, Suresh De Mel, Craig McIntosh, and Christopher Woodruff. 2014. "What Are the Headwaters of Formal Savings? Experimental Evidence from Sri Lanka." *NBER Working Paper No. 20736*.
- Chin, Aimee, Nathaniel Wilcox, David Autor, Abhijit Banerjee, Steve Craig, Esther Duflo, Chihui Juhn, et al. 2015. "Impact of Bank Accounts on Migrant Savings and Remittances: Evidence from a Field Experiment."
- Cole, Shawn, Thomas Sampson, and Bilal Zia. 2011. "Prices or Knowledge? What Drives Demand for Financial Services in Emerging Markets?" *The Journal of Finance* 66 (6). Blackwell Publishing Inc: 1933–67. doi:10.1111/j.1540-6261.2011.01696.x.
- Dupas, Pascaline, Dean Karlan, Jonathan Robinson, and Diego Ubfal. 2016. "Banking the Unbanked? Evidence from Three Countries." *NBER Working Paper 22463* (July).
- Dupas, Pascaline, Anthony Keats, and Jonathan Robinson. 2015. "The Effect of Savings Accounts on Interpersonal Financial Relationships: Evidence from a Field Experiment in Rural Kenya." Cambridge, MA. doi:10.3386/w21339.
- Dupas, Pascaline, and Jonathan Robinson. 2013a. "Savings Constraints and Microenterprise Development: Evidence from a Field Experiment in Kenya." *American Economic Journal: Applied Economics* 5 (1): 163–92.
- . 2013b. "Why Don't the Poor Save More? Evidence from Health Savings Experiments." *American Economic Review* 103 (4): 1138–71. doi:10.1257/aer.103.4.1138.
- Karlan, Dean, Margaret McConnell, Sendhil Mullainathan, and Jonathan Zinman. 2016. "Getting to the Top of Mind: How Reminders Increase Saving." *Management Science* 62 (12). INFORMS: 3393–3411. doi:10.1287/mnsc.2015.2296.
- Karlan, Dean, Aishwarya Lakshmi Ratan, and Jonathan Zinman. 2014. "Savings by and for the Poor: A Research Review and Agenda." *Review of Income and Wealth* 60 (1): 36–78. doi:10.1111/roiw.12101.
- Karlan, Dean, and Jonathan Zinman. 2014. "Price and Control Elasticities of Demand for Savings."
- Kast, Felipe, and Dina Pomeranz. 2014. "Saving More to Borrow Less: Experimental Evidence from Access to Formal Savings Accounts in {C}hile." *Harvard Business School Working Paper 14-001*.
- Mehrotra, R., V. Somville, and L. Vandewalle. 2016. "Increasing Trust in the Bank to Enhance Savings: Experimental Evidence from India." *Working Paper - Chr. Michelsen Institute 2016* (1).
- Prina, Silvia. 2015. "Banking the Poor via Savings Accounts: Evidence from a Field Experiment." *Journal of Development Economics* 115 (July): 16–31. doi:10.1016/j.jdeveco.2015.01.004.
- Reserve Bank of India. 2005. "Financial Inclusion by Extension of Banking Services - Use of Business Facilitators and Correspondents." RBI.
- . 2008. "RBI (2008). Financial Inclusion by Extension of Banking Services - Use of Business Correspondents (BCs). RBI / ."
- Schaner, Simone. 2016. "The Persistent Power of Behavioral Change: Long-Run Impacts of Temporary Savings Subsidies for the Poor." Cambridge, MA. doi:10.3386/w22534.
- Somville, Vincent, and Lore Vandewalle. 2015a. "Saving, by Default - Statu Quo Bias in Financial Inclusion Programs." *AEA RCT Registry*.
- . 2015b. "Saving by Default: {Evidence} from a Field Experiment in Rural {India}." *IHEID Working Paper 01-2015*.



## APPENDIX

### A1. Definition of the variables used in the analysis

The main outcomes used in the analysis are:

1	Bank account balance	The balance on the respondent's bank account
2	Informal savings groups balance	The total savings of the respondent in informal groups: Self-help groups (SHG) or neighborhood groups.
3	Other financial savings	The sum of money owed to the respondents by other institutions: agricultural cooperatives, post offices, other financial institutions.
4	Total financial savings	The sum of variables 1, 2 and 3.
5	Cash at home	The sum of all the cash in possession of the household
6	All revenues	The sum of all the household revenues in a week: sale of crop, sale of livestock, sale of forest products, rentals of assets (land, machinery, animals, goods, ...), wages, income from self-employment, remittances, public and private transfers received, loan taken and repayments of loan given.
7	All expenditures	The sum of all the household revenues in a week: payment of insurance, reimbursement of loans, loan given, expenditures due to a shock (illness, accident, ...), investments and purchase of agricultural or business inputs, transfers given, consumption, renting in assets (land, machinery, animals, goods, ...).
8	Revenues minus expenditures	The difference between, 6 and 7: a measure of the amount saved in a week.
9	Frequent consumption	The sum of expenditures on goods that are bought frequently by the average household, i.e. at least once every three weeks. This includes: grains and cereals, pulses and lentils, milk products, edible oil, vegetables, fruits, sugar, salt, and spices, fuels light, soap, and washing powder.
10	Temptation goods	The sum of expenditures on pan, alcohol, tobacco, drinks and snacks from the market, hair oil, lotion and perfumes.
11	Non-frequent consumption	The sum of expenditures on durable goods, education, services, rent, water charges, house repair, clothes, footwear, bedding, kitchen utensils, and furniture.W

In the analysis of the heterogeneous effects, we also use the following variables:

12	Woman	A binary variable equal to one if the respondent is a woman and to zero otherwise.
13	Decides savings	A binary variable equal to one if the respondent is reported at baseline as in charge of the household savings.
14	Trust banks	A binary variable equal to one if the respondent reported at baseline a high level of trust in the banks and in the local banker.
15	Impatient	A binary variable equal to one if the respondent answered "today" to the question "Would you prefer to receive 100 Rs. today or 125 Rs. in one week?", and answered "in one week" to the question "Would you prefer to receive 100 Rs. in one week or 200 Rs. in two weeks?".
16	Higher distance	A binary variable equal to one if the distance between the respondent's house and the local banker is greater than the median distance.
17	Time inconsistent	A binary variable equal to one if the respondent answered that he would prefer to receive: <ul style="list-style-type: none"> <li>• 100 Rs. today rather than 125 Rs. in one week, but 125 Rs. in two weeks rather than 100 Rs. in one week, or</li> <li>• 100 Rs. today rather than 150 Rs. in one week, but 150 Rs. in two weeks rather than 100 Rs. in one week, or</li> <li>• 100 Rs. today rather than 175 Rs. in one week, but 175 Rs. in two weeks rather than 100 Rs. in one week, or</li> <li>• 100 Rs. today rather than 200 Rs. in one week, but 200 Rs. in two weeks rather than 100 Rs. in one week</li> </ul>

## A2. Additional tables

In this section, we show additional Tables that were specified in our pre-analysis plan. Table 11, Table 12 and Table 13 correspond to Table 5, Table 6 and Table 7, but we have added in the model the covariates that were pre-specified. Those correspond to the baseline variables of Table 3. Overall, the treatment estimates are very similar and our conclusions do not change.

In Table 14, we estimate the treatment impact on the household savings in grains, jewelry, livestock and cash. We do not observe any significant impact.

Finally, Table 15, Table 16 and Table 17 correspond to Table 5, Table 6 and Table 7, but the treatment impact is estimated on the last value observed and not on all weeks. Again the findings are very consistent and do not affect our conclusions.

**Table 11:**  
Impact on individual savings, with covariates.

	(1) Bank account balance	(2) Informal savings groups balance	(3) Other financial savings	(4) Total financial savings ((1)+(2)+(3))
<b>Treated</b>	228.40*** (28.02)	-254.47 (154.14)	149.82 (553.39)	123.75 (598.99)
<b>Mean in control</b>	9.1	439	1229	1677
<b>Observations</b>	2689	2689	2689	2689
<b>R2</b>	0.30	0.51	0.16	0.18

All models include banker/village and time fixed effects, and the following baseline characteristics: the respondent's gender, caste category, literacy, marital status, age, occupation, land owned, dwelling type, accounts held, membership of savings groups, and distance to the BCSA. It also includes dummies indicating whether the respondent takes savings decisions in the household, trusts both the BCSA and banks, and is impatient. Standard errors are clustered at the individual level and given in parenthesis. \*\*\* significant at 1 percent, \*\* significant at 5 percent, \* significant at 10 percent.

**Table 12:**  
Impact on households savings, with covariates.

	(1) Household - Bank account balance	(2) Household - Informal savings groups balance	(3) Household - Other financial savings	(4) Household - Total financial savings ((1)+(2)+(3))
<b>Treated</b>	168.33*** (62.33)	-192.22 (235.84)	-142.92 (839.19)	-166.81 (908.31)
<b>Mean in control</b>	87	872	2234	3193
<b>Observations</b>	2689	2689	2689	2689
<b>R2</b>	0.21	0.39	0.16	0.18

All models include banker/village and time fixed effects, and the following baseline characteristics: the respondent's gender, caste category, literacy, marital status, age, occupation, land owned, dwelling type, accounts held, membership of savings groups, and distance to the BCSA. It also includes dummies indicating whether the respondent takes savings decisions in the household, trusts both the BCSA and banks, and is impatient. Standard errors are clustered at the individual level and given in parenthesis. \*\*\* significant at 1 percent, \*\* significant at 5 percent, \* significant at 10 percent.

	(1) Revenues - expenditures	(2) Frequent consumption	(3) Temptation goods	(4) Non-frequent consumption
<b>Treated</b>	-363.09 (273.64)	28.61 (23.61)	-4.27 (9.05)	-98.79 (161.71)
<b>Mean in control</b>	8966	944	2165	1758
<b>Observations</b>	2689	2689	2689	2689
<b>R2</b>	0.41	0.12	0.08	0.07

**Table 13:** Treatment impact on household expenditures and (incomes-expenditures), with covariates

All models include banker/village and time fixed effects, and the following baseline characteristics: the respondent's gender, caste category, literacy, marital status, age, occupation, land owned, dwelling type, accounts held, membership of savings groups, and distance to the BCSA. It also includes dummies indicating whether the respondent takes savings decisions in the household, trusts both the BCSA and banks, and is impatient. Standard errors are clustered at the individual level and given in parenthesis. \*\*\* significant at 1 percent, \*\* significant at 5 percent, \* significant at 10 percent.

	(1) Grain	(2) Jewelry	(3) Livestock	(4) Cash
<b>Treated</b>	6.45 (326.42)	1868.41 (1647.50)	1042.92 (2277.14)	-186.90 (208.21)
<b>Mean in control</b>	936	8032	8966	944
<b>Observations</b>	2689	2689	2689	2689
<b>R2</b>	0.20	0.45	0.41	0.12

**Table 14:** Treatment impact on grains, jewelry, livestock and cash holdings, with covariates.

All models include banker/village and time fixed effects, and the following baseline characteristics: the respondent's gender, caste category, literacy, marital status, age, occupation, land owned, dwelling type, accounts held, membership of savings groups, and distance to the BCSA. It also includes dummies indicating whether the respondent takes savings decisions in the household, trusts both the BCSA and banks, and is impatient. Standard errors are clustered at the individual level and given in parenthesis. \*\*\* significant at 1 percent, \*\* significant at 5 percent, \* significant at 10 percent.

**Table 15:**  
Treatment impacts on individual savings in the last interview. Holdings, with covariates. (incomes-expenditures), with covariates

	(1) Bank account balance	(2) Informal savings groups balance	(3) Other financial savings	(4) Total financial savings ((1)+(2)+(3))
<b>Treated</b>	264.81*** (43.18)	-107.38 (170.92)	-221.32 (600.47)	-63.89 (656.45)
<b>Mean in control</b>	24	440	1356	1820
<b>Observations</b>	201	201	201	201
<b>R2</b>	0.37	0.09	0.07	0.08

All models include banker/village and time fixed effects, and the following baseline characteristics: the respondent's gender, caste category, literacy, marital status, age, occupation, land owned, dwelling type, accounts held, membership of savings groups, and distance to the BCSA. It also includes dummies indicating whether the respondent takes savings decisions in the household, trusts both the BCSA and banks, and is impatient. Standard errors are clustered at the individual level and given in parenthesis. \*\*\* significant at 1 percent, \*\* significant at 5 percent, \* significant at 10 percent.

**Table 16:**  
Treatment impacts on household savings in the last interview.

	(1) Household - Bank account balance	(2) Household - Informal savings groups balance	(3) Household - Other financial savings	(4) Household - Total financial savings ((1)+(2)+(3))
<b>Treated</b>	185.60** (88.12)	-3.07 (321.28)	-297.98 (845.69)	-115.45 (941.56)
<b>Mean in control</b>	106	982	2318	3406
<b>Observations</b>	201	201	201	201
<b>R2</b>	0.19	0.10	0.06	0.06

All models include banker/village and time fixed effects. Standard errors are clustered at the individual level and given in parenthesis. \*\*\* significant at 1 percent, \*\* significant at 5 percent, \* significant at 10 percent.

**Table 17:**  
Treatment impact on household expenditures and (incomes-expenditures) in the last interview

	(1) Revenues - expenditures	(2) Frequent consumption	(3) Temptation goods	(4) Non-frequent consumption
<b>Treated</b>	-3778.45 (3546.24)	548.34 (389.77)	25.03 (123.55)	-47.38 (1993.71)
<b>Mean in control</b>	5410	4292	962	6706
<b>Observations</b>	201	201	201	201
<b>R2</b>	0.13	0.24	0.17	0.08

All models include banker/village and time fixed effects. Standard errors are clustered at the individual level and given in parenthesis. \*\*\* significant at 1 percent, \*\* significant at 5 percent, \* significant at 10 percent.

### A3. Pre-analysis plan

We registered a pre-analysis plan with the American Economic Association. It has the identification number AEARCTR-0000387 and can be consulted on [www.socialscienceregistry.org](http://www.socialscienceregistry.org) (Somville and Vandewalle 2015a). The plan includes two treatments: offering a bank account and direct deposits on the bank account. This paper discusses only the first treatment (offering a bank account). The second treatment (direct deposits on the bank account) is analyzed in (Somville and Vandewalle 2015b).

Some analysis is included in the current paper but was not specified in the pre-analysis plan. That is the case of Table 1,

Table 2, Table 4, columns (5) and (6) of Table 8, Table 9 and Table 10.

All eventual other results from the pre-analysis plan will be made available upon request.

Access to formal banking is spreading across the world. Obtaining a bank account may transform how people manage their finances, and affect their savings and consumption. We report from a field experiment that randomly provides access to a bank account to a representative sample of villagers in rural India. The treated keep relatively important savings on their account, but reduce their other savings by a similar amount. Their household's overall savings and expenditures do not change. We identify several barriers that may constraint total savings.

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