

Mental Accounting and Cash Transfers: Experimental Evidence from a Humanitarian Setting*

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Abstract

Can mental accounting help economically disadvantaged people accumulate capital and grow their income? We conducted a field experiment with 861 refugee households in Uganda, who received unconditional cash transfers over seven months. Treatment households could divide their monthly transfers among four labeled envelopes (*Education, Health, Investments, Other*), while control households received cash in a single, unlabeled envelope. Demand for the labeled envelopes was high: 93% of treatment households opted in, and 37% were still using them a year after the program ended. Compared to the control group, treatment households significantly increased investments, particularly in lumpy assets, leading to higher income and savings one year after the end of the intervention. Effects were larger among households that kept using the envelopes, who also reported improved budgeting, planning, and spending discipline.

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1 Introduction

Cash transfers (CTs) are a popular social protection policy in developing countries due to their flexibility, scalability, and respect for individual autonomy (Bastagli et al., 2016; Crosta et al., 2024). A central aim of many CT programs is to promote recipients’ self-reliance. However, evidence shows that recipients often struggle to accumulate assets or invest in high-return opportunities unless transfers are provided as large lump sums (Haushofer and Shapiro, 2016) or sustained over multiple years (Gertler et al., 2012; Banerjee et al., 2023). One potential explanation lies in the commitment challenges faced by recipients, which may stem from self-control problems (Banerjee and Mullainathan, 2010; Bernheim et al., 2015), social pressures (Carranza et al., 2025), and being exposed to unexpected shocks (John, 2020). Relatedly, a high demand for commitment devices has been documented among various different settings in developing countries (Ashraf et al., 2006; Dupas and Robinson, 2013; Kaur et al., 2015).

Commitment challenges are likely to be exacerbated in humanitarian settings. In addition to their heightened vulnerability, refugees are more likely to experience mental health problems (Pozuelo et al., 2023), which can worsen self-control problems (Kim and Park, 2015). Ercolano and Woolfenden (2021) document that refugees in Uganda who received cash transfers planned for future expenses but failed to save adequately. They also report direct demand for commitment devices, noting that “[some refugee households suggested] it might make sense for organizations to pay school fees directly to prevent [them] from being tempted.” As stated by Banerjee et al. (2023) “even the most destitute households often look for ways to accumulate sums of money large enough to make larger, lumpier purchases. Designing [cash] schemes in ways that respond to this need could make them a more compelling strategy for addressing extreme poverty over time.”

In this paper, we ask whether a simple soft-commitment device that leverages mental accounting can increase the effectiveness of cash transfers. To investigate this, we conducted a field experiment with 861 refugee households in Uganda’s Rhino Camp and Imvepi refugee settlements. All participants were beneficiaries of a seven-month unconditional cash transfer program, receiving \$25.46 PPP per household member per month. The intervention we designed consisted of a small change in the way the cash was disbursed. Instead of receiving their monthly cash transfer in one unlabeled envelope (the status quo), households in the treatment group were offered the opportunity to receive their cash transfers across four envelopes labeled *Education*, *Health*,

Investments, and *Other*. Designated cash accounts can help households adhere to their planned spending patterns while still retaining access to the full amount in case of adverse shocks, thereby serving as a soft-commitment device (Thaler and Shefrin, 1981). This distinguishes them from hard commitment devices, such as lockboxes or locked savings accounts, which restrict access to funds altogether.

The first key insight from our field experiment stems from the high demand for the soft-commitment device: 93% of treatment households chose to divide their cash transfers among the four labeled envelopes.¹ Of these households, 84% stated that the four labeled envelopes would help them improve their financial discipline, savings, and to resist purchasing temptation goods. This is in line with the theory of change we pre-specified, which posited that the four labeled envelopes would act as a soft-commitment device and help address commitment challenges.

In the year after the cash transfer program ended, households in the treatment group invested 26% more in income-generating activities compared to the control group, driven by larger lumpy investments. These investments led to an 18% increase in monthly income, and a 22% increase in savings. The larger investments were financed primarily through the households' own savings, supplemented by loans taken out during the cash transfer program: both savings and loans were 70% higher immediately after the cash transfer program ended compared to households in the control group. One year later, these loans had been repaid. Interestingly, we do not find significant effects of the intervention on education or health expenditures, which may suggest that the need for or effectiveness of a commitment device was lower in these domains, at least during the period of this study.

We also observe that usage of the soft-commitment device remained high: one year after the cash transfer program concluded, 37% of the households that opted-in were still using the labeled envelopes. We refer to these households as *Persistent* users. Compared to households that stopped using the labeled envelopes after the end of the cash transfer program, the *Persistent* users have larger outstanding loans at baseline (suggesting greater financial strain), were younger, expressed a stronger desire for higher future income and were also more likely to report at baseline that the partitioning and labeling of the money would help them with budgeting, planning, and

¹The take up was higher than the typical uptake of commitment devices in low-income settings (for an overview, see Table 1 of Schilbach (2019)). A possible explanation may be that the commitment device we offered was arguably softer than others evaluated, such as lockboxes or blocked savings accounts (Ashraf et al., 2006; Dupas and Robinson, 2013; Carranza et al., 2025).

spending discipline. At endline, *Persistent* users had saved and invested more than *Non-Persistent* users, suggesting that the soft commitment device was particularly effective among these households.

Beyond assessing the effectiveness of the soft commitment device, we were also interested in whether its impact would differ depending on whether recipients could decide how to distribute the money in each of the four envelopes, or received a suggested default allocation per envelope based on calculations done by humanitarian NGOs. This question is important not only for policy, but also for research, as [Prelec and Herrnstein \(1991\)](#) distinguishes between behavior-governing rules set by “agents who have [ones] interests in mind” (as applies to humanitarian NGOs in the case of refugees) and those set by “ourselves as we see the need for them”. To investigate whether the way in which allocations are made affects outcomes, we randomly assigned the treatment group into two sub-groups: one in which households could freely decide their allocation across the four envelopes (Mental Accounting - hereafter **MA**), and another where households were first presented with a default allocation recommended by the Uganda Cash Working Group (a consortium of humanitarian NGOs), which they could either accept or adjust (Mental Accounting with Default - hereafter **MAD**). While the default provided guidance on budgeting, it was not tailored to each household’s specific needs. Interestingly, uptake of the default was high at 96%, and allocations across the four envelope categories differed significantly between the two sub-treatments.

One year after the cash transfer ended, **MAD** households had made larger investments, financed through loans and savings, but only **MA** households experienced positive effects on income and savings. This difference seems to be driven by differences in investment patterns: **MAD** households focused on livestock and agriculture, while **MA** households diversified into enterprises. Interestingly, the proportion of *Persistent* households was higher in **MA**, suggesting that having the choice to allocate money autonomously facilitated the long-term adoption of the soft commitment device.

This paper contributes to several strands of literature. First, it adds to the emerging field of behavioral development economics by addressing a behavioral constraint to saving and investing among the poor ([Kremer et al., 2019](#)). While previous studies have examined the impact of role models and aspirational workshops ([Bernard and Taffesse, 2014](#); [Orkin et al., 2024](#)), planning interventions ([Augenblick et al., 2024](#)), defaults ([Banerjee et al., 2025](#)), pharmacotherapy ([Angelucci and Bennett, 2024](#)), or cognitive behavioral therapy ([Blattman et al., 2017](#)), our paper proposes a different

approach based on mental accounting. Compared to other studies that have used commitment devices to promote savings, such as savings groups (Karlan et al., 2017), separate savings accounts (Ashraf et al., 2006; Brune et al., 2017, 2021; Carranza et al., 2025), and lockboxes (Dupas and Robinson, 2013; Aggarwal et al., 2023), the commitment device we study is softer, cheaper and therefore more scalable.

Second, our paper contributes to the literature on mental accounting (Thaler and Shefrin, 1981; Thaler, 1985; Heath and Soll, 1996; Thaler and Benartzi, 2004). A related study by Soman and Cheema (2011) provided Indian workers with the opportunity to set aside a portion of their weekly income for their children’s education by storing it in a labeled envelope, leading to higher savings for education. By offering multiple labeled envelopes — rather than a single one as in Soman and Cheema (2011) — we can study trade-offs between different mental accounts. Furthermore, by distinguishing between treatment arms with and without a default, we contribute to the discussion on self-chosen versus externally recommended mental accounts (Prelec and Herrnstein, 1991). Finally, to the best of our knowledge, our paper is the first to integrate mental accounts within a cash transfer program. Laajaj (2017) shows both theoretically and empirically that alleviating external poverty constraints (as cash transfers do) increases the recipient’s planning horizon, suggesting that a soft commitment device grounded in mental accounting can be an effective complement to cash transfers.

The third strand of literature to which our paper contributes concerns the effectiveness of cash transfer programs as a social protection policy. Meta-analyses have documented lasting positive effects beyond the duration of cash transfer programs (Bastagli et al., 2016; Crosta et al., 2024). Although several studies have examined the effects of varying the frequency, amount, and duration of cash transfers (Haushofer and Shapiro, 2016; Banerjee et al., 2023), others have combined cash transfers with interventions designed to alleviate additional (behavioral) constraints to enhance their impact (Ahmed et al., 2025). Examples include psychological counseling (Haushofer et al., 2023), asset transfers (Bossuoy et al., 2022), and aspiration workshops (Orkin et al., 2024). In contrast, our interventions consisted of only a small change in the way the cash was disbursed.² As such, our intervention has several advantages: it requires negligible upfront fixed costs, seamlessly integrates into existing NGO operations, is highly scalable, and can be easily adaptable to new settings, including digital payment

²Our paper furthermore differs from Benhassine et al. (2015), who “label” an unconditional cash transfer for education by having enrollment done at schools. Borrella-Mas et al. (2023) nudge cash transfer recipients through an SMS indicating the share designated for child-related expenses.

systems and lump sum transfers.

Finally, our paper contributes to policy discussions on humanitarian aid. The number of people relying on humanitarian assistance continues to rise, with 35 million refugees, 108 million displaced individuals, and over 400 million in need of humanitarian aid by the end of 2022 ([Development Initiatives, 2023](#); [UNHCR, 2023](#)). Notably, 78% of humanitarian aid recipients live in protracted displacement settings, prompting humanitarian organizations to shift their focus from addressing only short-term basic needs to incorporating longer-term development objectives.³ As a result, cash transfers have emerged as a widely favored humanitarian policy due to their scalability, flexibility, cost-effectiveness, and the greater autonomy they afford recipients.⁴ Our intervention has the potential to enhance the effectiveness of humanitarian cash transfers, as it is highly scalable and low-cost (\$1.78 per household) and has demonstrated positive effects on households’ financial resilience one year after the program’s conclusion.

The remainder of this paper is structured as follows. Section 2 outlines the context and experimental design, while Section 3 presents the results. Sections 4 and 5 discuss heterogeneity and potential mechanisms. Section 6 examines cost-effectiveness and Section 7 concludes.

2 Context and Experimental Design

2.1 Context

Uganda experienced a significant influx of refugees from 2016 to 2018, with over 900,000 South Sudanese nationals fleeing a civil war. Since then, the number of refugees has continued to rise and exceeded 1.8 million by April 2025 ([UNHCR, 2025b](#)).⁵ Upon arrival at a refugee settlement in Uganda, each refugee household is allocated a 30-by-30-meter plot of land for shelter construction and small-scale agriculture. Within these settlements, the World Food Programme (WFP) provides food assistance, and health

³Protracted refugee situations are “those in which at least 25,000 refugees from the same country have been living in exile for more than five consecutive years” ([UNHCR, 2025a](#)).

⁴Several studies have conducted evaluations of cash transfer programs in humanitarian settings include [Hidrobo et al. \(2014\)](#); [Aker \(2017\)](#); [Ozler et al. \(2021\)](#); [Altındağ and O’Connell \(2023\)](#); [Gupta et al. \(2024\)](#).

⁵Refugees do not believe the conflict will end soon, and hence do not have the desire to return to South Sudan: at baseline, only 7% of households said they would want to return to South Sudan in the next two years, with the remaining households intended on staying in Uganda.

centers offer free medical services.⁶ Schools are available too, but they are costly as parents must cover the costs of supplies, uniforms, and school and examination fees.⁷ Refugees can rent additional agricultural land from Ugandan landowners, and although they also have freedom of movement and the right to work, 91.5% of refugees continue to reside within the designated refugee settlements.

For this study we partnered with the Danish Refugee Council (DRC), which implemented an unconditional cash transfer program in two of Uganda’s refugee settlements: Rhino Camp and Imvepi. Only the most vulnerable households were eligible to receive transfers totaling \$178.22 PPP (equivalent to US\$ 56.91) per household member, disbursed in seven (equal) monthly installments.^{8,9} These transfers are meant to help recipient households meet their basic needs and work towards becoming self-reliant through savings and investments. Recipients could choose their preferred transfer modality, either physical cash or mobile money. However, over 90% opted for physical cash due to limited mobile phone ownership and poor cellular connectivity within the settlements.

⁶Larger treatments (e.g., amputations) are also covered, however referrals need to be made to regional hospitals with the appropriate facilities. Health centers within settlements typically provide basic medical services.

⁷Tuition fees are paid per term, costing 2,000 UGX (\$1.70 PPP) for primary school children, and 50,000-100,000 UGX (\$42.43-84.86 PPP) for secondary school children. There are three terms per academic year. Furthermore, national examination fees cost 34,000, 179,000, and 201,000 UGX (\$28.85, \$151.91, \$170.58 PPP) for primary, lower secondary, and upper secondary school exams, respectively. Scholastic materials cost around 15,000 UGX (\$12.73 PPP) and 120,000 UGX (\$101.84 PPP) per primary and secondary school child, respectively.

⁸Vulnerability was calculated using a 27-item Vulnerability Scoring Model, covering three broad categories: Household Demographics, Socio-Economic Situation and Food Security, and Sectoral. Households were identified and referred by other humanitarian organizations, before being individually assessed by DRC staff. The individual questions, answers, and cut-off scores for vulnerability were confidential and hence cannot be shared.

⁹The size of the transfer was based on the Minimum Expenditure Basket (MEB), a calculation done by the Uganda Cash Working Group that captures the costs of a refugee household meeting its basic needs. The MEB was divided into *food* and *non-food* items (see Appendix D), with DRC’s cash transfers covering the MEB value for *non-food* items. The World Food Programme’s food aid covered the food component of the MEB. The total value of the cash transfer was smaller than those typically given by GiveDirectly. Given that Egger et al. (2022) document cash transfer-induced inflation of less than 1%, inflationary concerns as a result of the cash transfers are low.

2.2 Experimental Design

2.2.1 Description of the Sample

We enrolled 861 refugee households eligible for DRC’s seven-month-long unconditional cash transfer program in our RCT. As shown in Appendix Tables [A1](#) and [A2](#), the mean year of arrival in Uganda was 2018, with 90% originating from South Sudan and the remaining 10% from the Democratic Republic of the Congo. Among household heads, 81.6% are female, with an average age of 38 years, and an average of 5 years of schooling (23.69% of household heads had no formal schooling).¹⁰ The average household consists of 4.36 children, with an average age of 8.71 years. At baseline, households had \$29.13 PPP in savings (with 59% of households not having any savings), \$32.46 PPP in outstanding debt (65% of households had no debt), and \$89.49 worth of livestock (67% of households had no livestock). Additionally, 85% exhibit symptoms of moderate or severe depression, as measured by the Center for Epidemiologic Studies Depression Scale (CES-D). The mean (and median) monthly income of households — excluding cash transfers — is \$49.22 PPP (\$16.97 PPP), resulting in an average daily income of \$0.26 PPP per household member.¹¹ Households primarily earn income from livestock rearing and crop cultivation, in addition to receiving a monthly food ration from the WFP. For 91% of households, the value of DRC’s monthly cash transfer exceeds their baseline monthly income.

Our experimental sample consisted of 861 households. All households met the vulnerability criterion, and were therefore eligible to receive the cash transfers. Households were randomly assigned to either the control group (receiving only the cash transfer, **CO**) or to one of the two treatment arms: cash plus four envelopes with self-chosen allocations (Mental Accounting, **MA**), or cash plus four envelopes with an externally recommended default allocation (Mental Accounting with Default, **MAD**). Randomization was stratified based on the household head’s age, gender, household size, country of origin, geographic zone, timing of the cash transfer, year of arrival, and vulnerability score.¹² Treatment arms are balanced, as shown in Appendix Tables [A1](#)

¹⁰The majority of households are female-headed because the husbands typically stay in their native country, and send their spouses and children to Uganda in search of safety. Given both South Sudan and the Democratic Republic of the Congo are patriarchic societies, for many women this is the first time they are responsible for the household, and the finances.

¹¹The World Bank’s extreme poverty line lies at \$2.15 PPP per person per day.

¹²A median split was used for stratify by the household head’s age, household size, year of arrival, and vulnerability score.

and A2.

2.2.2 Treatment Implementation

DRC identified eligible households only shortly before the program began, leaving insufficient time to conduct a pre-transfer baseline survey. Instead, the baseline survey was implemented two weeks after the first cash transfer, which all households received in one unlabeled envelope, the NGO’s status quo. As a result, the intervention refers to months 2 to 7 of the cash transfer program.

During the baseline survey, all households in **CO**, **MA** and **MAD** were encouraged to consider their future spending and investment plans. They also received an *Investment Opportunities* sheet, which outlined productive investment options identified through focus group discussions prior to the intervention, with associated costs based on median market prices in the refugee settlements. This sheet aimed to reduce information constraints preventing productive investments.

For **CO** households, the baseline survey ended after receiving the *Investment Opportunities* sheet. The baseline survey of the households in **MA** and **MAD** had one additional module, in which households were given the opportunity to allocate their future monthly cash transfers among four smaller envelopes, labeled *Education*, *Health*, *Investments*, and *Other* (see Figure 1).¹³

In **MA**, those household heads who opted-in for the four labeled envelopes, were subsequently invited to allocate their monthly cash transfer across them. The allocation would then be implemented in all future installments. In the **MAD** treatment, household heads who opted-in were shown a recommended allocation across the four envelopes, based on the Minimum Expenditure Basket, a calculation done by the Uganda Cash Working Group that captures the costs of a refugee household meeting its basic needs (for more details, see Appendix D). The household head could choose to either accept or reject this recommendation. If rejected, they determined their own allocation, as was the case in the **MA** setup. Households that opted-in for the four labeled envelopes (either in **MA** or **MAD**) further received an *Envelope Allocation* sheet at the end of the baseline survey. This sheet displayed the monetary amounts allocated

¹³The envelope categories and labels (in the form of stickers) were piloted prior to the intervention and refined through focus group discussions with past recipients of DRC’s unconditional cash transfer. They represent physical (*Investment*) and human (*Education* and *Health*) capital. Follow-up groups discussions conducted seven months after the endline survey revealed that most households would not have chosen different categories. Only two households mentioned that a food envelope would have been helpful.

to each envelope category, allowing households to verify that their cash transfer was accurately distributed.¹⁴

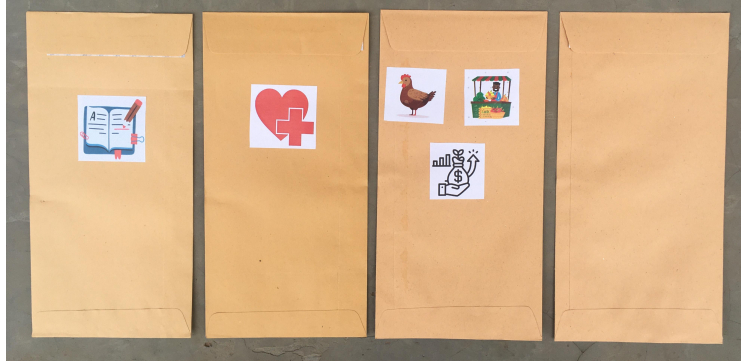


Figure 1. Four Labeled Envelopes (*Education, Health, Investments, Other*)

Table 1 presents the information on take-up and subsequent cash allocations in the **MA** and **MAD** treatments. As shown in the first row of Table 1, 93.8% of the households in **MA** opted to receive the cash transfer in the four labeled envelopes, versus 92.5% of households in **MAD**. Demand for the soft commitment device was thus high, and did not significantly differ between **MA** and **MAD** ($p = 0.56$). Next, as shown in the second row of Table 1, 96% of households in **MAD** who agreed to receiving their money in four envelopes, also ended up accepting the default allocation. Finally, allocations across the four envelope categories differ substantially between the **MA** and **MAD** treatments, with **MA** households allocating more to education and health on average, while allocating less to investments and other expenses; these differences are jointly significant at $p < 0.01$ according to a χ^2 test. Combined with the very high acceptance rate of the default allocation in **MAD**, this documents a strong demand for guidance or a lack of strong ex-ante preferences.

Logistics of Cash Transfers and Envelopes

Cash transfers were distributed monthly on a pre-specified date. A money van from a Ugandan bank arrived at designated locations in the refugee settlements at a pre-announced time. DRC staff first verified the identity of the household head, who then collected the cash transfer from the money van (see Figure C4).¹⁵ After having received

¹⁴Appendix C provides further details on the *Investment Opportunities* and *Envelope Allocation* sheets.

¹⁵Bank tellers were unaware of households' treatment assignments. As such, we can rule out that denominations differed between treatment groups. This is important as denomination sizes have been

Table 1: Allocations Across Envelopes: *MA* vs. *MAD*.

		(1) <i>MA</i>		(2) <i>MAD</i>	(3) Pairwise t-test
Variable	N	Mean/(SD)	N	Mean/(SD)	Difference
Uptake	288	0.938 (0.242)	281	0.925 (0.263)	0.013
Default Accepted			260	0.962 (0.193)	
Education Share	270	0.268 (0.149)	260	0.168 (0.021)	0.100***
Health Share	270	0.198 (0.112)	260	0.173 (0.017)	0.025***
Investment Share	270	0.288 (0.148)	260	0.330 (0.023)	-0.042***
Other Share	270	0.246 (0.163)	260	0.330 (0.023)	-0.084***
Joint distribution test					$\chi^2(2, 8) = 40.24^{***}$

Notes: Columns (1) and (2) show the average value (and standard deviation) for respondents in the two intervention treatments: Mental Accounting and Mental Accounting with Default. Differences in shares are reported in column (3), with statistical significance as determined using standard pairwise t-tests. The Chi-squared test checks for the equality of the distributions over the four envelope categories between *MA* and *MAD*. Appendix Figure B1 displays histograms of the allocation shares across the four envelopes for *MA* and *MAD*. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

their cash, the household head proceeded to the *Envelopes Stand* (see Figure C5).¹⁶

At the *Envelopes Stand*, DRC workers verified whether the household was to have their money stored in the four labeled envelopes. If so, their cash was divided between the four envelopes based on the allocations obtained during the baseline survey, and the four labeled envelopes were subsequently put in one large unlabeled envelope. The money of both the control group households as well as of the treatment households that opted-out of the four labeled envelopes, was put directly into the large, unlabeled envelope. All households in the experimental sample thus left the premises with one big envelope, reducing the chance of spillovers.¹⁷ The cash distribution process had a Complaints Desk, where recipient households could lodge complaints to DRC staff.

shown to affect spending patterns (Raghubir and Srivastava, 2009).

¹⁶Household heads waited in a queue standing three meters from the stand, and arrived one at a time. Order and safety were maintained by two armed security guards employed by the bank.

¹⁷Focus discussions conducted 1.5 years after the cash transfer program ended indicated that households in the control group were unaware of the four labeled envelopes.

The staff members responsible for running the complaints desk were trained by the research team on how to document and respond to complaints regarding the RCT and its treatments. No complaints related to the field experiment were lodged.

2.3 Theory of Change

In a Pre-Analysis Plan – which successfully underwent a Stage 1 Review at the *Journal of Development Economics* – we pre-registered the Theory of Change (Wicker et al., 2023). We hypothesized that the four labeled envelopes would help cash transfer recipients through three mechanisms: “(i) it will induce recipients to think more acutely about their plans for the future, (ii) receiving a new set of envelopes every month acts as a reminder of those original plans, and (iii) taking out money from an envelope to spend on a different goal makes it very salient to the recipients that they are diverging from their initial plan and can be psychologically taxing. We posited that the three mechanisms would induce recipients to plan to save more, and spend their money more in line with their initial plans. The long-run effectiveness of the cash transfers are thus expected to improve as a result, as recipients save and invest more of the cash transfer in future-oriented expenditures.” In Section 5, we present suggestive evidence consistent with these mechanisms.

While we pre-registered the hypothesis that the four labeled envelopes would help households save and invest, we remained agnostic about whether **MA** or **MAD** would be more effective, and pre-registered the following potential mechanisms. On the one hand, the default information in **MAD** was more paternalistic and offered useful structure to those with little or no budgeting experience, potentially helping correct ‘planning errors’ such as those documented in Augenblick et al. (2024). On the other hand, because the recommendations were not tailored to individual circumstances, they may have felt less relevant, reducing adherence and maybe limiting its impact. In contrast, the **MA** treatment provides autonomy and involves an active choice about the allocation across expenditure categories. The active choice made in the **MA** treatment can also make households more likely to stick to their budget when making spending decisions (Falk and Zimmermann, 2017; Brownback et al., 2025), and can hence more closely align actual spending with the planned spending. In short, **MAD** offers structured support but may lack relevance, while **MA** fosters engagement and discipline but may be challenging for those household heads with less budgeting experience. We discuss evidence in favor of these and other mechanisms in Section 5.

2.4 Econometric Specification

As stated before, the baseline survey was implemented two weeks after the first cash transfer had taken place. Follow-up surveys were conducted two weeks after the program ended (midline), and again one year later (endline) to document both the immediate and longer-term effects of the intervention (see a detailed timeline of the project in Appendix F). Attrition was low at 5.92% and 14.4% for midline and endline, respectively. Appendix Tables A3 and A4 show that there was no differential attrition between experimental arms.

To estimate the effects of the four-envelope intervention on the outcomes of interest, we run the following pre-registered model:

$$Y_{ht} = \beta_0 + \beta_1 4\text{Envelopes}_h + \delta_e + \gamma_z + X_h + Y_{h0} + \varepsilon_h, \quad t = \{1, 2\}. \quad (1)$$

where Y_{ht} represents outcome variable Y for household h measured at midline ($t = 1$) and endline ($t = 2$). **4Envelopes** is a dummy variable capturing whether household h was randomized into the treatment group (combining both the **MA** and **MAD** treatments), and hence β_1 is our key parameter of interest. X_h is a vector of pre-registered baseline covariates, consisting of the stratification variables and those variables that were unbalanced at baseline (Bruhn and McKenzie, 2009). We also include fixed effects for the Settlement Zone in which the household lives (γ_z) and for the enumerator (δ_e), following Maio and Fiala (2020). Following McKenzie (2012), we control for the outcome variables measured at baseline, Y_{h0} , whenever available. Finally, ε_h is a heteroskedasticity-robust error term. In a second pre-registered specification, we evaluate **MA** and **MAD** separately. Given we report treatment effects on several outcome variables, we report sharpened q-values following Anderson (2008).

As pre-registered, we perform robustness checks by winsorizing at the 5% level, versus not winsorizing at all. Furthermore, we winsorized separately per treatment, and also winsorize the whole sample, as discussed by Wicker (2025). Finally, we select control variables via double-selection least absolute shrinkage and selection operator (LASSO), following Belloni et al. (2014). Results are robust to all specifications, as shown in Online Appendix N.

3 Results

We first present the treatment effects of the intervention at endline to document the longer-term changes in outcomes. Subsequently, we make use of the midline data, to explore the mechanisms driving the treatment effects after one year. We present results for the *4Envelopes* intervention (pooling *MA* and *MAD*), as well as for each treatment separately.

3.1 Effects One Year Post-Cash Transfers

Table 2 presents the estimated treatment effects of the four-envelope intervention on economic outcomes one year after the end of the cash transfer program. Columns (1) and (2) report effects on total investment and lumpy investments. To measure total investment, respondents were presented a series of investment items and asked how many of those items they had purchased in the last year.¹⁸ These were then multiplied by the median market price taken from three vendors in the refugee settlement. To measure lumpy investments, respondents were asked: “Since the end of the cash transfer last year, did you make any large purchase that will help you to generate more income?” and then: “If yes, what were your 5 largest investments? (please specify: description of investment, amount spent, month purchased)”.¹⁹

Compared to households in the control group, households that were offered the four envelopes spent 25.66% more on investments (0.23 s.d.) in the year since the end of the cash transfer program, and 31.2% more on lumpy investments (0.19 s.d.); see columns (1) and (2) of Table 2. Columns (3) and (4) suggest that these larger investments translate into a 18.2% higher monthly income and 22.3% higher savings (0.16 and 0.14 s.d., respectively). These results suggest that earmarking an envelope for *Investments* may help households allocate funds toward investments after the cash transfer program ends, potentially leading to higher returns, increased monthly income, and larger savings.

¹⁸The list of investments can be determined in focus group discussions prior to the baseline survey. See Appendix A for more details.

¹⁹Examples of lumpy investments include pigs, machinery, and market stalls. Note that ‘total’ and ‘lumpy’ may overlap. While the measure of lumpy investments may have some measurement error, there is no reason to believe that the measurement error is correlated with treatment status. Furthermore, to alleviate concerns that purchases made are truly *lumpy*, we run robustness checks by trimming the lower bound of *Lumpy Investments* at 50 and 100 USD PPP. Results are robust to this specification, see Appendix Table G15.

Table 2: Endline Outcomes (USD PPP)

	(1) Total Investment	(2) Lumpy Investment	(3) Monthly Income	(4) Savings	(5) Durable Goods	(6) Educ. Exp.	(7) Health Exp.
Envelopes	66.83* (36.32)	17.71** (7.19)	5.07* (2.61)	9.59* (5.66)	-15.20 (35.29)	-18.84 (17.32)	-52.15** (21.37)
Sharp. q-val	0.091	0.055	0.091	0.100	0.236	0.146	0.055
Control Group Mean	261.50	56.72	27.89	42.97	294.87	278.68	367.37
Control Group S.D.	294.28	92.82	32.26	69.04	463.74	256.20	323.84
N	737	737	737	737	737	737	737

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

Columns (5)-(7) present the differences in expenditures on durable goods, education and health. Treatment households spend less on durable goods over the past year and also less on education, but neither difference is statistically different. We also find, however, that treatment households spent 14.2% (0.16 s.d.) less on health care in the year following the cash transfer program, and this difference is significant at $p = ???$. Online Appendix B further decomposes these treatment effects on health expenditures, showing that the observed negative effects are entirely driven by relatively lower spending on latrines in the treatment group after the cash transfers ended. However, decomposing the treatment effect on health expenditures at midline (immediately after the cash transfer ended) reveals that treatment households increased their spending on latrines during the cash transfer period. Hence, while total spending on health-related expenses, particularly on latrines, does not differ statistically significantly between treatment and control households over the 18 months between baseline and endline ($p = 0.23$), the timing of these expenditures does. Treatment households upgrade the quality of their latrines (a lumpy health investment) *sooner* than those in the control group.²⁰

Turning to the negative (albeit statistically insignificant) coefficient on education-related spending, an interesting pattern emerges. In the year between the midline and endline survey, the DRC implemented the *Education in Emergencies* cash transfer

²⁰Appendix B discusses health outcomes in more detail, including treatment effects on health-related indicators, such as the number of health needs, and household's ability to meet their health needs. No statistically significant differences are documented.

program, targeting households whose children were not enrolled in school. We find that treatment households were 12% less likely to receive this additional conditional cash transfer ($p = 0.08$), see Online Appendix C. As a result, the reduction in education-related spending we observe may be due to the treatment households having been less likely to receive additional education-related humanitarian assistance.²¹ This raises broader insight into evaluating the effectiveness of humanitarian interventions: when interventions significantly improve the living conditions of its recipients, these recipients are less likely to receive additional humanitarian assistance in the future. As a result, general equilibrium treatment effect estimates likely underestimate the true partial equilibrium treatment effect. We will discuss this in more detail in Section 6.

3.2 Post-Cash Transfer Effects: Immediate Outcomes

To understand how households in the treatment arms financed the larger (lumpy) investments after the end of the cash transfer, Table 3 reports treatment effects of the intervention on economic outcomes at midline, immediately after the end of the cash transfer program. Columns (1) and (2) report large effects on households' savings (72.1%, 0.53 standard deviations) and on the value of loans pending to repay (71.3%, 0.35 standard deviations). Interestingly, we also find that treatment households had spent significantly less on durable goods, although this difference is not statistically significant; see column (3). Durable goods provide utility, obviously, but they can also serve as a costly commitment device as they can be sold in case of emergencies (Kang and Kang, 2022). Purchases of durable goods may thus have been lower among treatment households to free up funds for savings, but maybe also because the envelopes reduced the demand for durable goods as a costly commitment device.

While the increase in savings was expected, the rise in loans was not. We conjectured that these loans were needed to complement savings and pay for the lumpy investment we observe at endline.²² We probed the validity of this conjecture in focus group discussions seven months after the endline survey, and find suggestive evidence

²¹Results from the focus group discussions conducted seven months after the endline survey are also in line with this explanation, as treatment households are more likely to agree that they were better able to pay school fees by saving money over time.

²²Households with more savings could in principle be perceived as more trustworthy lenders, and hence may be eligible for larger loans. However, we do not find evidence for such channel. Lenders interviewed in the refugee settlements stated that they do not ask for savings, instead preferring WFP food aid as collateral, and focus group discussions conducted seven months after the endline survey indicated that households did not disclose their level of savings when obtaining loans.

for this; see Section 5 for more details. In any case, households had repaid these larger loans at endline, as shown in Appendix Table E13.

Column (4) of Table 3 shows a (statistically insignificant) reduction in total investment during the cash transfer period. Together with the increase in savings and loans, this may suggest that, relative to households in the control group, treated households postponed some investments and chose to save money and supplement savings with loans to finance lumpy investments.²³ Column (5) of Table 3 documents no treatment effect on monthly self-reported income, which aligns with expectations as treatment households have not yet made additional investments. Finally, Columns (6) and (7) report negative and positive effects on education and health-related expenses, respectively, but both are statistically insignificant.

Table 3: Midline Outcomes (USD PPP)

	(1) Savings	(2) Loans	(3) Durable Goods	(4) Total Investment	(5) Monthly Income	(6) Educ. Exp.	(7) Health Exp.
Envelopes	33.23*** (5.88)	18.23*** (5.66)	-14.48 (59.64)	-27.60 (34.20)	-0.35 (3.73)	-9.46 (10.71)	17.74 (16.21)
Sharp. q-val	0.001	0.004	1.000	0.724	1.000	0.724	0.724
Control Group Mean	46.09	25.55	437.05	272.05	40.02	171.88	166.62
Control Group S.D.	63.26	52.38	772.52	476.95	49.67	170.03	263.67
N	810	810	810	810	810	810	810

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

3.3 Decomposing MA vs. MAD

Having documented the overall effectiveness of the four labeled envelopes, we now test which of the two types of interventions was more effective – offering a default allocation, or not. On one hand, the default allocation can offer households valuable guidance on how to manage the large cash transfer. On the other hand, since the default had been developed for the needs of the average refugee household, and hence it may not have aligned well with each household’s unique needs and circumstances. To examine the

²³Cumulative investments over the 18 months between the baseline and endline were 19.59% higher among treatment households ($p = 0.08$).

differential effects of providing the default allocation recommendation, we decompose treatment effects reported in Tables 2 and 3 separately for **MA** and **MAD**.

3.3.1 MA vs MAD: Endline results

Table 4 reports treatment effects for **MA** and **MAD** one year after the end of the cash transfer program (i.e., at endline). Column (1) shows that households in **MAD** had invested significantly more compared to those in the control group (by 39.9%, 0.35 standard deviations). While **MA** invested less than **MAD**, the difference is not statistically significant ($p = 0.31$). In Column (2), both **MA** and **MAD** households spent significantly more on lumpy investments than households in the control group. While **MAD** households had spent more on lumpy investments compared to **MA** households, this difference is again not statistically significant ($p = 0.56$).

Contrary to the investment patterns, Columns (3) and (4) show that households in **MA** earned higher monthly incomes and had greater savings than households both **CO** and **MAD**. Despite larger investments, **MAD** households did not have higher income or savings than those in the control group. Section 5 discusses possible explanations, with suggestive evidence indicating that while **MAD** households primarily invested in more common income-generating activities such as agriculture and livestock, **MA** households had been more likely to diversify by starting businesses.

Columns (5)-(7) show little variation in treatment effects between **MA** and **MAD** households with respect to expenditure on durable goods, and education- and health-related expenses.

3.3.2 MA vs MAD – midline results

Table 5 reproduces Table 3, decomposing the combined treatment into **MA** and **MAD**. While households in both treatments had substantially larger savings at the end of the cash transfer program (Column (1)), **MAD** households additionally took out larger loans, equaling 121.3% of the outstanding loan value of households in the control group (0.59 standard deviations, Column (2)). The larger loans taken out by **MAD** households are reflected in the subsequent larger investments made by **MAD** households in between midline and endline (see Table 4). These larger loans are paid back, as the treatment effect of **MAD** on the value of outstanding loans in Table 4 (Column (5)) is negative and statistically insignificant.

Table 4: MA vs MAD: Endline Outcomes (USD PPP)

	(1) Total Investment	(2) Lumpy Investment	(3) Monthly Income	(4) Savings	(5) Durable Goods	(6) Educ. Exp.	(7) Health Exp.
MA	28.93 (40.88)	14.81* (8.72)	8.47** (3.33)	17.32** (6.99)	-18.85 (40.04)	-15.20 (20.02)	-51.88** (24.46)
MAD	104.26* (57.24)	20.58** (8.51)	1.72 (2.97)	1.95 (6.12)	-11.58 (41.53)	-22.45 (20.51)	-52.42** (24.84)
Sharp. q-val MA	0.316	0.099	0.050	0.050	0.377	0.316	0.061
Sharp. q-val MAD	0.141	0.125	0.805	0.805	0.805	0.378	0.125
Control Group Mean	261.50	56.72	27.89	42.97	294.87	278.68	367.37
Control Group S.D.	294.28	92.82	32.26	69.04	463.74	256.20	323.84
t-test MA vs. MAD	0.31	0.56	0.11	0.07	0.93	0.89	0.98
F-test	0.16	0.04	0.04	0.03	0.89	0.53	0.05
N	737	737	737	737	737	737	737

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

Columns (3) and (4) of Table 5 indicate that **MAD** households spend less on durable goods and invested less than households in the control group, while **MA** households spend significantly more on durable goods than **MAD** households ($p = 0.06$). However, both measures are very noisy. Columns (5)-(7) indicate that the treatment effects on monthly income, educational expenses, and health-related expenses are statistically indistinguishable between households in the three experimental arms.

Our pre-registered hypotheses were agnostic regarding the effectiveness of the **MA** versus **MAD** treatments, due to the trade-offs associated with providing a default (see section 2.3 more a longer discussion). The mechanisms underlying the different effects of the two sub-treatments will be discussed more in Section 5.

3.4 Other Outcomes

While the focus of our study was on investment, savings, and income, we pre-registered other outcome variables too. Online Appendix D documents statistically insignificant treatment effects on downstream outcomes like school attendance, total monthly spending and other expenditure patterns at midline and endline for treatment households. Similarly, the effects of treatment on food security, mental health, school attendance, the ability to meet health needs, and welfare-related results (such as self-reliance and

Table 5: MA vs MAD: Midline Outcomes (USD PPP)

	(1) Savings	(2) Loans	(3) Durable Good	(4) Total Investment	(5) Monthly Income	(6) Educ. Exp.	(7) Health Exp.
MA	30.08*** (6.78)	6.60 (5.03)	63.05 (75.19)	-11.59 (41.88)	-1.62 (4.08)	-4.40 (12.54)	25.90 (19.01)
MAD	36.72*** (7.85)	30.98*** (9.11)	-99.41 (62.32)	-45.10 (33.33)	1.04 (4.70)	-15.01 (12.03)	8.82 (19.53)
Sharp. q-val MA	0.001	0.613	0.796	0.808	0.808	0.808	0.613
Sharp. q-val MAD	0.001	0.003	0.228	0.271	0.425	0.271	0.425
Control Group Mean	46.09	25.55	437.05	272.05	40.02	171.88	166.62
Control Group S.D.	63.26	52.38	772.52	476.95	49.67	170.03	263.67
t-test MA vs. MAD	0.45	0.02	0.06	0.28	0.75	0.32	0.58
F-test	0.00	0.00	0.05	0.30	0.83	0.43	0.39
N	810	810	810	810	810	810	810

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

subjective well-being) are reported in the online Appendix E, again with statistically insignificant effects.²⁴ Given the intervention was incorporated within a large cash transfer program (the cash transfer value exceeded monthly baseline income for 91% of households) and cost less than 0.46% of the cash transfer value, we did not expect effects on downstream outcome variables a year after the end of the intervention.

In summary, the results indicate that offering households the opportunity to divide their monthly cash transfer across four labeled envelopes increased savings and loans during the cash transfer period. These, in turn, were used to finance larger investments after the cash transfer ended. These larger investments resulted in a higher monthly income and greater savings. Although the effects on income and savings are primarily driven by households in the **MA** treatment, households in **MAD** took out larger loans and spent more on investments after the end of the cash transfer program. In the next section, we further explore the heterogeneity of these results, while Section 5 discusses potential mechanisms.

²⁴At midline, we find statistically significant positive treatment effects on self-reliance. Decomposing the index into its individual components highlights that this treatment effect is driven by an improvement in household’s social network - which we think is unrelated to the treatment.

4 Heterogeneity

We pre-registered several dimensions along which we expected heterogeneous treatment effects.²⁵ However, we do not observe consistent heterogeneity across these variables, except for one: whether the household is still using the four labeled envelopes one year after the end of the intervention (see Online Appendix M).

4.1 Persistent Envelope Users

Although the final set of four envelopes was distributed with the last cash transfer, 37% of households that opted in for the four envelopes at baseline were still using them one year after the intervention ended. We refer to these households as *Persistent* users.²⁶ Compared to households that also opted in for the four envelopes at baseline but discontinued their use after the cash transfer program ended (*Non-Persistent*), the heads of *Persistent* households tend to be younger, have arrived in Uganda six months later on average, have greater outstanding loans at baseline, and exhibit a stronger desire for self-sufficiency (see Appendix Table A5). At endline, the proportion of *Persistent* users is marginally higher among **MA** than **MAD** ($p = 0.083$, see Online Appendix Table F14), while *Persistent* users were not statistically more or less likely than *Non-Persistent* users to accept the default allocation in the **MAD** treatment ($p = 0.353$).

An important question is whether the four-labeled envelopes benefited *Persistent* users more than *Non-Persistent* users – if only because households that continued using the envelopes are more likely to have benefited from them. We can, however, try to mitigate selection effects by using Propensity Score Matching (PSM). We use a LASSO Machine Learning algorithm to construct pairs of *Persistent* and *Non-Persistent* users that are similar in terms of their observable characteristics. Online Appendix Tables M35 and M36 present the PSM regression results at midline and endline, documenting larger and more statistically significant treatment effects among *Persistent* users, compared to the intention-to-treat treatment effects reported in Tables 2 and 3.

²⁵These include: baseline levels of self-control, vulnerability, income, remittances, the gender of the household head, naive diversification, hyperbolic discounting, desire for sufficient income, and depression.

²⁶As pre-registered, we identify *Persistent* users by asking households that opted-in for the 4 envelopes at endline: “Are you still using the four labeled envelopes currently to budget your money?”. Those answering yes are categorized as *Persistent* users.

5 Mechanisms

In this section, we discuss potential mechanisms that could explain the treatment effects documented in Sections 3 and 4. In line with our pre-registered Theory of Change, we find suggestive evidence that the four envelopes intervention functioned as a commitment device, helping households adhere to their savings and investment plans. The intervention helped households accumulate savings by facilitating ex-ante planning and reinforcing commitment through the partitioning and labeling of the cash transfers. Additionally, it influenced investments decisions by enabling households to delay investments, thereby facilitating those with higher upfront costs. In what follows, we present evidence supporting these mechanisms and ruling out alternative explanations.

5.1 Accumulation of Savings

The treatment effects presented in Section 3 indicate substantial positive impacts on accumulated savings during the cash transfer period, as well as sustained savings one year later. These effects are particularly pronounced among *Persistent* users who continued using the four labeled envelopes even after the cash transfer program ended. In the following sub-sections, we examine which aspects of the intervention contributed to the increase in savings.

Planning

An important requirement for accumulating savings is having a plan for their future use. This appears to be a key feature of our intervention, as reported by recipients themselves. At baseline, household heads who opted into the four-labeled envelopes were asked an open-ended question about what they considered to be the most valuable aspect of the envelopes. Their responses were categorized into four main themes: planning and committing, safety, resisting temptations, and savings (or other). As shown in Appendix Table A7, *Persistent* users - who benefit the most from the intervention - were significantly more likely than *Non-Persistent* users to report that the envelopes would help them with planning and committing to their financial goals. However, they were no more likely than others to cite safety, resisting temptation, or increasing savings as key benefits.

Interestingly, when asked immediately after the end of the cash transfer program

(at midline), *Persistent* users were no more likely than *Non-Persistent* users to state that the best part of the four-labeled envelopes was planning and committing (see Online Appendix Table K21). This is because the share of *Non-Persistent* users who stated that the four-labeled envelopes helped with planning and committing increased compared to at baseline, suggesting that they may have learned that envelopes could help with planning and committing throughout the duration of the cash transfer.²⁷ Nevertheless, *Persistent* users more quickly recognized how the intervention could help them plan for and commit to future expenditures. By internalizing that the labeled envelopes could help as a planning and commitment aide, *Persistent* users could have interacted differently with the intervention than *Non-Persistent* users, for which we provide further evidence in the next subsection.

Partitioning and Labeling

A key feature of the four-labeled envelopes is the ability to partition the cash transfer into four designated accounts and discipline spending. We find suggestive evidence that this mechanism was at play. During the midline survey, households who opted into the four-labeled envelopes were asked about their perceptions of the impact of the envelopes on their decision-making. Appendix Table A8 presents OLS regression results comparing *Persistent* users to *Non-Persistent* users. While the intervention did not differentially affect household heads' perceptions of their ability to reject remittance requests, resist temptation, or save for schooling and health emergencies, *Persistent* envelope users were more likely to agree that dividing the cash transfer into multiple accounts, and labeling these accounts for specific categories helped discipline their spending. Although the OLS regressions do not allow for a causal interpretation, they provide suggestive evidence that the users that benefited most from the intervention valued the division and labeling more.

Combining these insights suggests that those who benefited most from the intervention anticipated that the commitment device could help them *plan* and *commit* to their future expenditures. The partitioning and labeling of the cash transfer served as a monthly *reminder*, helping them discipline their spending in line with their initial plans. This aligns closely with the principles of mental accounting (Thaler, 1985) and supports our pre-registered Theory of Change.

²⁷Of the 34 households that were offered the intervention at baseline but turned it down, 13 regretted doing so at midline, with 9 stating that it would have helped them with their planning and budgeting.

5.2 Investment Decisions

Tables 2 and 3 highlight differences in investment decisions between treated and control households. While control households tend to make more investments when the cash transfer is disbursed (albeit not significantly so), treatment households *delay* their investments until after the cash transfer ends, at which point they make larger, *lumpier* investments. Additionally, we find that the treatment postpones investments in enterprises and leads to shifts in the types of investments made.

Lumpy Investments

The four envelopes intervention may have played a crucial role in facilitating lumpier investments by allowing households to accumulate larger sums within their *Investment* envelope. Given that the cash transfer amounted to \$25 PPP per household member per month, larger households naturally received a greater total transfer. If all households allocated the same proportion of their transfer to the *Investment* envelope, larger households would have had more funds available for investment than smaller households.²⁸

Accumulating more money in the *Investment* envelope not only enables larger investments but is particularly important for lumpier investments, which require a substantial upfront payment. Appendix Table A9 provides empirical support for this mechanism, showing heterogeneous treatment effects on lumpy investment based on a median split of household size. The results indicate that while the intervention did not lead to greater total investments among larger households, it did result in more lumpy investments — likely because these households had more funds set aside in their *Investment* envelope.

These findings provide suggestive evidence that the four-labeled envelopes helped facilitate lumpier investments for households with sufficient funds.

Timing and Type of Investments

At baseline, most households derive their income from agriculture or livestock, consistent with the broader economic landscape of Uganda’s refugee settlements (UNHCR, 2025b). Investing in agriculture or livestock represents a continuation of the status

²⁸Households above and below the median size allocated equal proportions of their cash transfer to the *Investment* envelope (30.9% vs. 30.8%, $p = 0.89$).

quo, whereas investing in enterprises — such as market stalls, kiosks, or restaurants — diversifies income sources. Compared to agriculture and livestock, which are subject to seasonal fluctuations and harvests, enterprises provide a more stable income stream and are less vulnerable to climate shocks, such as droughts.

Appendix Table A10 decomposes investments across agriculture, livestock, and enterprises, reporting average treatment effects at midline and endline. During the cash transfer period, treatment households invested more in agriculture but less in enterprises. However, one year after the cash transfer ended, this pattern reversed: treatment households made significantly larger investments in enterprises, more than doubling the enterprise investments of the control group (116% increase).

By combining midline and endline investment flows, we estimate the total value of the investment activities since the start of the cash transfer program. Panel C of Table A10 shows that the value of cumulative investments in enterprises was 46% larger in the treatment group compared to the control group. Online Appendix Table K33 further decomposes these results across *MA* vs. *MAD*, revealing distinct investment patterns: *MA* households invested more in enterprises, while *MAD* households invested more in livestock. This difference in investment choices may explain why positive effects on endline savings and monthly income are observed for *MA* households but not for *MAD*.

5.3 Loan Purpose

Table 3 shows that, compared to control households, treatment households had significantly more loans immediately after the cash transfer ended. But what were these loans used for? To explore this (and other) question(s), we conducted focus group discussions with households in *CO*, *MA*, and *MAD* treatment arms seven months after the endline survey. These discussions revealed distinct motivations for taking out loans across groups. While households in *CO* primarily used loans to cope with shocks and smooth consumption, households in *MA* and *MAD* took out loans for investments instead. This suggests that the intervention shifted the purpose of borrowing — from merely bridging short-term budget gaps to financing forward-looking capital investments.

Moreover, loan patterns differed substantially between *MA* and *MAD* households, which might explain their investment choices. Table 5 shows that, in addition to accumulating savings, households in the *MAD* treatment took out significantly more

loans than those in the **MA** group ($p = 0.02$).²⁹ Focus group discussions revealed that interest rates on loans in Rhino Camp and Imvepi are extremely high, ranging from 10–20% per month. Given these high borrowing costs, **MAD** households probably needed to invest in activities such as livestock ($p = 0.01$, Appendix Table A10) that generated immediate returns (e.g. milk, eggs) and could be sold when debt payments are due.

Why did **MAD** households take out larger loans? The focus group discussions also provided a potential answer to this question: **MAD** households mentioned that they frequently moved money from the *Investment* envelopes to the *Education* envelope, as the amount was insufficient for those with older children. This is because the fraction of the cash transfer allocated to each envelope category in **MAD** did not differ with family composition, while school fees are substantially higher for older children.³⁰ As a consequence, **MAD** households subsequently supplemented the investment-labeled savings with loans for investment purposes, in order to have sufficient liquidity for their investments. This highlights the strength of the *Investment* envelope, as households took out loans (with high interest rates) in order to make the investments they had initially planned.

5.4 Different Strength of Commitment

While the nature of the commitment device — the four-labeled envelopes — was identical for households in **MA** and **MAD**, the strength of the commitment may have differed. In the **MAD** treatment, the allocation was recommended by humanitarian NGOs, which could have reinforced adherence to the suggested budgeting framework. In contrast, the **MA** treatment involved an active choice, which could make households more likely to align their spending to their budget decisions (Falk and Zimmermann, 2017; Brownback et al., 2025). But was this consequential?

Appendix Table A11 compares **MA** to **MAD** households on responses regarding how they used the four envelopes during the cash transfer program. Half of all house-

²⁹Collins et al. (2009) documented that nearly every household in their survey held both low-interest savings and high-interest loans simultaneously, highlighting the prevalence of this practice.

³⁰This highlights a limitation of the **MAD** intervention, as the amount of money allocated to the *Education* envelope depended on the family size, but not its composition. Primary school fees are \$1.70 PPP per academic term, with three terms per year. Furthermore, scholastic materials cost \$12.73 PPP per term, per child. For secondary schools, the respective costs are \$42.43 PPP and \$101.84 PPP. At baseline, only 3.72% of households have a child in secondary school, which is primarily due to the limited number of spots available.

holds moved money across envelopes and used funds for unrelated expenses at least once (50% in **MA**, 46% in **MAD**), highlighting that households took advantage of the flexibility of the intervention, compared to harder commitments. Despite this, most households did not express a desire to change their allocation across categories, with no significant difference between **MA** and **MAD**. This finding is somewhat surprising given the differing degrees of personalization in the two treatments, suggesting that even when allocation recommendations were externally set, households largely accepted and adhered to them.

Envelopes were not sealed once the money was placed inside them at the cash distribution point, and hence the household sealing the envelope reveals a preference for a harder commitment. Appendix Table A11 illustrates that 52% of households made the commitment device *harder* by sealing the envelopes. **MAD** households furthermore self-report improvements in their ability to avoid unnecessary expenditures, save for schooling, and for health needs, compared to **MA** households — providing further insights into the mechanisms through which the commitment device had differential effects.

5.5 Budgeting Habit Formation

We pre-registered that the treatment could be also effective by helping households form new budgeting habits – i.e., fostering automatic, unconscious behaviors that support better financial decisions — rather than relying solely on more deliberate planning and commitment. While it is difficult to separate conscious from unconscious mechanisms driving behavior, we find no clear empirical support for budgeting habit formation as the main mechanism behind the sustained behavioral change we observe in *Persistent* users.

If automatic budgeting habits were the dominant mechanism, we would expect the specific allocation across envelopes to matter less. Yet, we observe differential treatment effects between **MA** and **MAD**, which had statistically different allocations across envelopes. Additionally, the share of *Persistent* users is statistically significantly higher in the **MA** group than in **MAD**—a pattern inconsistent with habit formation driving outcomes uniformly across arms.

Further, only 12% of households reported at midline that they used the envelopes to allocate income from other sources, and this proportion does not differ significantly between *Persistent* and *Not Persistent* users ($p = 0.30$). If it was all about habit

formation, we would expect both a higher rate and a stronger association with persistence. Moreover, 15.5% of households in the treatment arm stated at midline that they would have preferred to change their allocation during the transfer period—again inconsistent with automatic behavior driven by habit.

5.6 Investments vs. Education vs. Health

The three labeled categories — education, health, and investment — were selected based on focus group discussions conducted with past recipients of the cash transfer program. These discussions identified them as the most important yet unmet capital needs of refugee households, either physical (investment) or human (education and health). However, the three categories differ along three key dimensions — degree of predictability, flexibility, and salience of consequences — which may influence the effectiveness of commitment devices. In what follows, we first characterize each category and then discuss how these characteristics could explain the differential effectiveness of the intervention across envelopes.

Predictability of Value and Timing

School-related expenses are known and due each academic term by a fixed date, which is communicated in advance. As such, there is a very high predictability with respect to both the timing and amount. This is in contrast to health shocks, which are by nature unpredictable — both in the amount, and when they will occur. As such, households often struggle to save for such unpredictable events: focus group discussions revealed that households typically rely on loans rather than savings to deal with health emergencies.

Productive investments can vary in their predictability: agricultural expenditures follow seasons and are hence more predictable than investments in enterprises, where costs and returns are less seasonally dependent and can hence be incurred at any time throughout the year.

Flexibility of Value and Timing

Another dimension along which the expenditure categories differ concerns the degree of flexibility the household head has in implementing the planned expenditure. Education-related expenses are inflexible: if school fees are not paid by a certain date,

the child cannot attend school. Both the date and monetary amount of the school fees are known, and not flexible. As a result, this type of expenditure is well-suited to structured savings plans, since households know the exact amount required, the due date, and the consequences of non-payment.

While responses to health shocks are not flexible (explaining why households take out loans despite high interest rates), preventive health investments — such as latrine upgrades — are relatively flexible. If the upgrade is not completed this month, it can be postponed until the next. In the absence of dedicated savings, households may procrastinate on these types of investments until they become urgent (i.e. when the latrine pit overflows).

Investments aimed at increasing ones income offer high flexibility, as households can adjust their investment plans based on the capital available. For instance, a household can buy fewer poultry than originally planned or rent a smaller plot of land for cultivation if funds are limited. Similarly, the timing of investments is flexible: live-stock and non-farm enterprise investments can be purchased at any time throughout the year, and hence households have flexibility in the timing of investments too. This is in contrast with most agricultural investments, which follow harvesting seasons and are hence less flexible time-wise.

Immediacy and Salience of Consequences

The third dimension along which the three accounts differ is the salience of consequences if the spending is not made. For education-related expenditures such as school fees, the consequences are salient and immediately observed: if school fees are not paid by the deadline, the child is unable to attend school. Relatedly, the consequences of not addressing urgent health needs — both preventive (e.g., an overflowing latrine pit) and health shocks — are very salient and immediately felt. Compared to education and health-related expenditures, the physical, psychological, and social cost of not making productive investments, or not following the investment plan, are less salient and the immediate consequences of delaying them are more ambiguous.

Category Characteristics and Commitment Device Effectiveness

When expenditures are *unpredictable* — such as health shocks — commitment devices are unlikely to be helpful, as the target for which one is saving is not clear. This can explain why households took out loans in response to negative shocks, rather

than accumulating savings in anticipation of a shock. For more predictable capital investments, when the consequences to non-investments are salient and immediate, this is likely enough of a reason to incur the cost and hence commitment devices do not help much. For example, while treatment households upgraded their latrines sooner than households in the control group, they also eventually upgraded their latrines when it was necessary.

For capital investments that are *flexible* and where the consequences of inaction are *not immediately salient*, commitment devices are likely to be most effective — as documented in this study with respect to productive investments in income-generating activities.

Relating the characteristics of these three expenditure types to the theoretical models most commonly used to rationalize demand for commitment devices can provide insights into the differential effectiveness of the four labeled envelopes. As outlined in [Bryan et al. \(2010\)](#), the two models most commonly are the quasi-hyperbolic discounting model of [Strotz \(1955\)](#); [Phelps and Pollak \(1968\)](#); [Laibson \(1997\)](#) and the temptation preference model of [Gul and Pesendorfer \(2001, 2004\)](#), which can be interpreted as a dual-self model ([Thaler and Shefrin, 1981](#); [Fudenberg and Levine, 2006](#)).³¹

At baseline, school attendance is 96%, indicating that education is a key priority for households even before the introduction of the four labeled envelopes. This suggests that preferences for education are time-consistent, with that the long-run planner and short-run doer placing a high value on education. As such, the demand for commitment, and value of a commitment device for such high-priority expenditures is low as households already ensure school fees are paid.

Similarly, unexpected shocks cannot be incorporated into inter-temporal consumption decisions, as they are by nature unpredictable. When health shocks arise — in line with physiological needs being the base of Maslow’s hierarchy of needs — these are prioritized over other forms of consumption. However, neither the timing nor the size of the health shock can be anticipated, and hence the planner-self cannot commit their future self to save for the unexpected health shock. As such, (soft) commitment devices are unlikely to be effective, with insurance being a preferred.

Compared with the short-run doer, the long-run planner places a higher value on future-oriented productive investments. This is because the planner internalizes both the short-term costs as well as long-term gains, while the doer only faces the short-

³¹[O’Donoghue and Rabin \(1999\)](#) introduced the notions of sophistication and naivete within the quasi-hyperbolic discounting models.

term costs. Furthermore, productive investments are more flexible in their timing, amount, and definition, these can become susceptible to “broad choice bracketing” (Read et al., 1999), meaning that the timeline for productive investments can be widely defined (encouraging procrastination) and non-productive expenditures can more easily be rationalized as productive investments (e.g., meeting with friends can be post-rationalized as discussing business ideas). As such, commitment devices can help align the preferences of the planner with the actions of the doer, by “tying the hands of the doer to the mast” (Ashraf et al., 2006).

5.7 Other Potential Explanations

In the preceding subsections, we have presented evidence suggesting that the mechanism through which the four envelopes help households increase their savings and investment is by promoting better planning and spending discipline, in line with our pre-registered Theory of Change. In this section, we consider other potential mechanisms in turn and provide evidence in Online Appendix K that rules out each of them .

5.7.1 Self-control

We pre-specified that the four envelopes could improve self-control, thereby facilitating increased savings and investment. However, as shown in Online Appendix Table K22, we find no evidence supporting this mechanism: the intervention did not lead to improvements in the self-control index neither at midline nor at endline. We speculate that this lack of effect may be due to two main factors. First, the self-control index may capture relatively stable personality traits that are less susceptible to short-term interventions, especially those targeting financial behavior rather than psychological processes directly (Tangney et al., 2004; Duckworth and Kern, 2011).³² Second, measurement limitations may have played a role: the self-control index, though pre-specified, may lack sensitivity to detect small or domain-specific changes induced by the intervention.

In addition, we pre-specified that the intervention would be more effective for households with mild self-control challenges at baseline. The rationale, as outlined in our

³²For example, questions from the self-control index included “I say inappropriate things”, “I get distracted easily”, and “Pleasure and fun sometimes keep me from getting work done”, all of which are unlikely to be affected by the four labeled envelopes, even if financial self-control increased.

pre-analysis plan, was that the intervention may not be strong enough for households with severe self-control challenges, while households with few self-control challenges would not benefit from the intervention. Hence we pre-specified that households with mild self-control challenges would benefit more from external commitment devices that help structure spending and reduce reliance on internal self-regulation. However, as shown in Online Appendix Section [M.2](#), we do not find evidence consistent with this channel: there is no heterogeneity in treatment effects on savings and investment outcomes by the household’s baseline level of self-control.

There are several potential explanations for this null finding. One possibility is that households with lower self control may also face other constraints, such as mental health challenges, that limit their ability to benefit from the intervention, even when a commitment device is provided.³³ Alternatively, households with higher self control may have been better positioned to integrate the envelopes into their financial routines and extract more value from the tool, despite having less need for behavioral reinforcement. Lastly, it is also possible that the self-control index used at baseline does not fully capture the specific behavioral frictions relevant to financial decision-making in this context, thereby limiting its predictive power for heterogeneous treatment effects.

5.7.2 Theft

Another pre-specified alternative mechanism was that having four envelopes could help reduce the incidence of money theft, thereby enabling treated households to accumulate more savings. The rationale was that, with multiple envelopes, households could store money in different locations, effectively diversifying the risk of theft. This was also the reason why 6% of households cited safety concerns as a motivation for adopting the four labeled envelopes. However, as shown in Online Appendix Table [K25](#), we find no statistically significant treatment effects on reported theft incidents at either midline or endline.

5.7.3 Substituting Other Saving Mechanisms

A potential unintended consequence of the four-labeled envelopes could be that they discourage households from adopting other savings mechanisms, such as mobile money

³³The correlation between self-control and depression scores at baseline is -0.10 ($p = 0.0017$), indicating that higher self control was correlated with lower depression scores.

or savings groups.³⁴ As such, the intervention could not only influence *how much* households save, but also *where* they save. However, we find no evidence of this effect, with precisely estimated null results on the likelihood of using alternative types of savings (Online Appendix Table K26). Furthermore, removing the amount saved in the four labeled envelopes from the value of savings results in no treatment effects on savings, indicating that on both the intensive and extensive margin the intervention complemented existing savings (see Online Appendix Table H16). Compared with other forms of savings mechanisms that offer a form of commitment (e.g., group pressure in saving groups), the labeled envelopes offered greater flexibility and less costly commitment.

5.7.4 Remittances

Motivated by the literature on the effects of social pressure (in the form of kin and village taxes) on expenditure patterns and investment decisions (Jakiela and Ozier, 2015; Goldberg, 2017; Bernhardt et al., 2019; Riley, 2024), we pre-registered that the four labeled envelopes, particularly the **MAD** treatment, could help households decline remittance requests from family, friends, and neighbors. We document small increases in remittances received and small decreases in remittances given at midline (Online Appendix Tables K31). At endline, the treatment effects on remittances receive persist (Online Appendix Table K32). While the treatment effects are statistically significant, they are not economically meaningful, as they are small in magnitude. Comparing **MA** to **MAD**, Online Appendix Table A8 reports that **MAD** households were no more likely to agree with the statement that “Using the four labeled envelopes made it easier to reject people’s request to borrow money”, suggesting that the default allocation did not make it easier for households to turn down remittance requests.

5.7.5 Experimentally Induced Responses

Given refugees’ dependence on humanitarian aid and the magnitude of the cash transfers, one concern may be that survey respondents provided answers they believed the enumerator wanted to hear, rather than truthful ones. Conversely, since humanitarian aid is allocated based on vulnerability, respondents may also have had an incentive to under-report their living conditions to appear more vulnerable and thus become eligible

³⁴Bank penetration is extremely low in this context; no households had a bank account at baseline, midline, or endline.

for additional assistance. Below we present evidence from pre-registered approaches we took to mitigate such concerns.

First, following [Dhar et al. \(2022\)](#), we measure social desirability bias and find no heterogeneous treatment effects (Online Appendix Tables [K27](#) and [K28](#)).³⁵ Second, we find no treatment effects on educational and health-related expenses, which suggests that experimenter demand effects are unlikely to have been present —otherwise, we would observe effects across all spending categories. Third, we find no treatment effect on households’ self-reported expectations about receiving an additional cash transfer from the NGO in the future at endline (Online Appendix Table [K30](#)). This suggests that respondents did not tailor their answers to signal eligibility for future assistance, providing further evidence against experimenter demand effects. Lastly, total investments and lumpy investments were measured using two different methodologies, providing further reassurance that treatment effects reflect truthful reporting rather than experimenter demand bias.

A related concern is that households may have feared retribution from the NGO —such as having future assistance withheld — if they did not allocate funds according to the envelopes’ intended categories. However, focus group discussions seven months after the endline survey indicated that this was not a concern, as households did not perceive any risk of retribution. This aligns with the emphasis placed during baseline surveys that the research was conducted independently of the NGO.³⁶ Moreover, 40.88% of households who opted into the four-labeled envelopes reported moving money across envelopes, further suggesting that they did not fear non-compliance would affect future aid.

Another concern is related to the fact that respondents decided their allocation across the four labeled envelopes in front of the enumerator, potentially making the commitment public rather than private. While this does not affect the treatment effect estimates, it could influence the underlying mechanisms. For example, [Exley and Naecker \(2017\)](#) provide evidence that demand for commitment devices is higher when

³⁵There are no treatment effects on the social desirability bias index, see Online Appendix Table [K29](#)). We therefore do not control for the social desirability bias index score in our regressions, as pre-registered.

³⁶During the baseline survey, we emphasized that households were free to spend the money as they wished (“As before, you are free to spend your money as you want”) and that their individual data would not be shared with NGOs (“Your answers will be used for research purposes only and will be confidential. Your name and answers will not be given to anyone other than the researchers”). If household heads had feared that noncompliance would reduce their likelihood of receiving additional humanitarian assistance, this number should have been 0%.

these commitments are made public, and [Kast et al. \(2018\)](#) provide suggestive evidence that public commitments help microcredit clients save more in Chile. While we cannot rule out this channel — as all commitments are made in front of an enumerator — we can rule out that *who* household heads made the commitment in front of does not have an effect on the effectiveness of the four labeled envelopes. Treatment effect estimates remain unchanged when including fixed effects for the enumerator at baseline (see Online Appendix Tables [I17](#) and [I18](#)). Additionally, enumerators were effectively randomly assigned, with only 2.79% of midline and endline surveys conducted by the same enumerator-respondent pair as at baseline. Treatment effects do not differ based on whether the midline or endline enumerator also conducted the baseline survey (see Online Appendix Tables [J19](#) and [J20](#)). Finally, the primary motivation underlying the importance of public vs. private commitments is that uptake of a commitment device could have been a public signal to others in the community. Given enumerators were Ugandans that did not live in the refugee settlements, this motivation is unlikely to have been a significant factor in the uptake or effectiveness of the four labeled envelopes.

6 Cost-Effectiveness

The total costs of the four-labeled envelopes per household were \$1.78 (\$5.57 PPP, see Appendix [L](#) for detailed calculations). One year after the end of the cash transfer program, the intervention increased savings by 0.14 standard deviations. Similarly, it increased monthly income by 0.16 standard deviations. This equals a 0.08 and 0.09 standard deviation increase in savings and monthly income per dollar spent.

As a pre-registered reference point, [Aggarwal et al. \(2023\)](#) offered multiple lockboxes (with locks and keys) to micro-entrepreneurs in urban Malawi as a form of commitment device. The intervention led to a 0.21-0.27 standard deviation increase in savings. As the lockboxes on average cost \$9.50 per micro-entrepreneur, this results in a 0.02-0.03 standard deviation increase in savings per dollar spent. Therefore, our intervention is highly cost-effective, while being a much softer commitment device, far cheaper, and easy to integrate within an NGO’s ongoing operations.

Furthermore, our estimated treatment effects are likely to be a lower bound: eligibility for humanitarian aid is based on vulnerability: the more vulnerable a household, the more likely they are to receive humanitarian assistance. Given this, causal estimations of the treatment effects of successful humanitarian interventions are likely to

understate the true treatment effect, as these households become less vulnerable and will thus be less likely to receive further assistance from other NGOs. This is less likely to be a concern in development settings (where the majority of behavioral interventions and cash transfer programs are evaluated) as less assistance is available, and refugees are typically more dependent on additional assistance due to their greater vulnerability. We therefore likely underestimate the true treatment effect, as suggested by the evidence we provide that treatment households are less likely to receive an additional conditional cash transfer earmarked for education - indicating they are also perceived as less vulnerable by independent NGO metrics.

7 Conclusion

We conducted a Randomized Controlled Trial among 861 refugee households who were eligible for a seven-month-long unconditional cash transfer equaling \$25.46 PPP per household member per month. Households were randomized across a control group and two treatment arms, who were both offered the chance to receive their monthly cash transfer divided across four envelopes labeled *Education*, *Health*, *Investments*, and *Others* - rather than the NGO's status quo of placing the money inside one unlabeled envelope.

Demand for the intervention was high, with 93% of households opting for the labeled envelopes. Compared with households in the control group, households in the treatment groups have larger savings and outstanding loans shortly after the cash transfer ends. These savings and loans are spent on (lumpy) productive investments, which result in a higher monthly income one year later. Furthermore, treatment households have larger savings, and no longer have larger outstanding loans compared with households in the control group.

The positive treatment effects are particularly pronounced among those households who still use the envelopes one year after the end of the intervention. Compared with households who stopped using the envelopes after the end of the intervention, these households are more likely to believe that the labeled envelopes will help them with their planning and committing to their plans, and after the end of the intervention were more likely to agree that partitioning the cash transfer, and having labels, helped discipline spending. The limited effectiveness of the intervention on *Non-Persistent* users is in line with [John \(2020\)](#), who argue that the limited effectiveness of commit-

ment devices can be due to individual's inability to follow through with their initial commitment. An alternative explanation is that the commitment device was too weak to effectively overcome self-control problems (Kremer et al., 2019).

At a cost of merely \$1.78 per recipient, the intervention represents an additional cost of 0.46% on top of the total cash transfer value. The documented positive treatment effects result in an increase in monthly income and savings of 0.09 and 0.08 standard deviations per dollar spent, respectively. As such, the intervention is highly cost-effective, and easy to implement at scale. The treatment effects suggest that the *Investment* envelope was more effective than the *Education* and *Health* envelopes. As such, future programs may consider to only have an investment-related commitment device, which further reduces costs. This presents an interesting avenue for future research and policy, for both development and humanitarian actors.

This study demonstrates that the effectiveness of cash transfers can be enhanced by incorporating low-cost interventions grounded in behavioral economics. Our results suggest that commitment constraints that prevent lumpy, productive investments can be addressed through the use of commitment devices grounded in mental accounting. As such, this paper provides a further motivation why households under-invest in high-return investments (Kremer et al., 2019), but open questions remain whether these findings will replicate in other contexts, with digital payments, or when incorporated within different cash transfer payment structures, for example, lump sum transfers.

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Appendices to:

**Mental Accounting and Cash Transfers: Experimental
Evidence from a Humanitarian Setting**

by Till Wicker, Patricio Dalton, and Daan van Soest

A Additional Tables

Table A1: Balance Table for Stratified Variables.

Variable	N	(1) <i>CO</i> Mean/(SD)	N	(2) <i>MA</i> Mean/(SD)	N	(3) <i>MAD</i> Mean/(SD)	N	F-test F-stat/P-value	(1)-(2) P-value	(1)-(3) Pairwise t-test P-value	(2)-(3) P-value
<i>Stratified Variables</i>											
Age of HH Head	292	38.897 (14.593)	288	38.573 (14.000)	281	37.562 (13.270)	861	0.707 0.493	0.785	0.253	0.377
HH Head is Female	292	0.829 (0.377)	288	0.812 (0.391)	281	0.833 (0.374)	861	0.227 0.797	0.610	0.899	0.528
HH size	292	6.459 (2.760)	288	6.375 (2.838)	281	6.228 (2.662)	861	0.515 0.598	0.718	0.308	0.524
Arrival Year	292	2018.240 (3.675)	288	2018.201 (3.737)	281	2018.242 (3.829)	861	0.011 0.989	0.901	0.994	0.898
Country of Origin: South Sudan	292	0.901 (0.300)	288	0.910 (0.287)	281	0.900 (0.300)	861	0.093 0.911	0.711	0.990	0.704
Share of Protection Referrals	292	0.592 (0.492)	288	0.611 (0.488)	281	0.605 (0.490)	861	0.109 0.897	0.647	0.760	0.881

Notes: Columns (1), (2), and (3) show the average value (and standard deviation) for respondents in each of the three treatments: Cash Only, Mental Accounting, and Mental Accounting with Default. The F-test reports the joint test for orthogonality, including both the F-statistic and associated p-value. The normalized difference between means is reported, together with significance levels based on t-tests. 861 households were surveyed, of which one did not have an adult head of household and another did not answer whether the adults were working (hence Percentage Adults working has 859 observations). 342 households had Vulnerability Scores from DRC. Randomization was further stratified on the Zone of Residence, however as this is a categorical variable, it is not included in the balance table. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

Table A2: Balance Table for Non-Stratified Variables.

Variable	(1) <i>CO</i>		(2) <i>MA</i>		(3) <i>MAD</i>		F-test		(1)-(2)	(1)-(3)	(2)-(3)
	N	Mean/(SD)	N	Mean/(SD)	N	Mean/(SD)	N	F-stat/P-value	P-value	Pairwise t-test P-value	P-value
<i>Non-Stratified Variables</i>											
Highest Schooling Attained	292	5.233 (4.160)	288	5.149 (4.061)	281	4.801 (4.102)	861	0.886 0.413	0.807	0.211	0.309
Fraction of Kids in School	267	0.952 (0.178)	264	0.957 (0.166)	253	0.964 (0.141)	784	0.312 0.732	0.748	0.426	0.634
Poverty Likelihood	292	0.633 (0.212)	288	0.624 (0.197)	281	0.612 (0.215)	861	0.726 0.484	0.595	0.242	0.493
Self-Reliance Index	292	1.950 (0.614)	288	2.016 (0.617)	281	2.019 (0.660)	861	1.106 0.331	0.195	0.198	0.965
Experienced Shock	292	0.418 (0.494)	288	0.455 (0.499)	281	0.488 (0.501)	861	1.408 0.245	0.369	0.094*	0.436
Seasonal Migration	292	0.027 (0.164)	288	0.052 (0.223)	281	0.053 (0.225)	861	1.470 0.231	0.128	0.114	0.945
Risk Preferences	292	4.305 (3.364)	288	4.003 (3.315)	281	4.064 (3.510)	861	0.639 0.528	0.278	0.402	0.832
Time Preferences	292	5.267 (3.755)	288	5.163 (3.867)	281	5.125 (3.761)	861	0.109 0.897	0.743	0.650	0.904
Hyperbolic Discounters	292	0.086 (0.280)	288	0.122 (0.327)	281	0.125 (0.331)	861	1.382 0.252	0.156	0.128	0.913
Aspirations	292	0.005 (0.705)	288	0.070 (0.635)	281	-0.013 (0.735)	861	1.146 0.318	0.242	0.765	0.148
Self-Control	292	36.760 (6.009)	288	36.455 (6.108)	281	37.384 (5.587)	861	1.825 0.162	0.544	0.199	-0.059*
Locus of Control	292	28.462 (5.859)	288	28.500 (5.995)	281	28.238 (6.321)	861	0.155 0.857	0.939	0.660	0.613
Depressed	292	0.880 (0.325)	288	0.837 (0.370)	281	0.836 (0.371)	861	1.448 0.236	0.135	0.133	0.987
Monthly Income (\$ PPP)	292	40.699 (66.196)	288	42.364 (73.393)	281	51.967 (87.631)	861	1.816 0.163	0.774	0.082*	0.157
Savings (\$ PPP)	292	28.356 (57.693)	288	30.362 (54.595)	281	28.678 (53.578)	861	0.109 0.897	0.667	0.945	0.711
Outstanding loan amount (\$ PPP)	292	37.534 (81.101)	288	31.289 (67.015)	281	28.388 (65.329)	861	1.226 0.294	0.313	0.139	0.601
Livestock (\$ PPP)	292	74.575 (193.552)	288	97.917 (226.820)	281	96.354 (215.124)	861	1.096 0.335	0.183	0.203	0.933
Acres of Land	56	1.304 (2.619)	54	1.734 (4.663)	60	1.350 (4.307)	170	0.203 0.816	0.543	0.945	0.642
Remittances Given (\$ PPP)	292	11.212 (11.826)	288	11.666 (11.944)	281	11.192 (9.541)	861	0.165 0.848	0.646	0.983	0.602
Remittances Received (\$ PPP)	292	11.760 (15.419)	288	11.670 (12.517)	281	10.737 (10.971)	861	0.628 0.534	0.351	0.362	0.946
1st CT: Share on Educ.	277	0.224 (0.181)	268	0.221 (0.169)	261	0.220 (0.170)	806	0.046 0.955	0.845	0.768	0.916
1st CT: Share on Health	277	0.115 (0.124)	268	0.120 (0.133)	261	0.128 (0.145)	806	0.660 0.517	0.661	0.257	0.491
1st CT: Share on Inv.	277	0.284 (0.264)	268	0.272 (0.257)	261	0.285 (0.270)	806	0.194 0.824	0.601	0.960	0.575

Notes: Columns (1), (2), and (3) show the average value (and standard deviation) for respondents in each of the three treatments: Cash Only, Mental Accounting, and Mental Accounting with Default. The F-test reports the joint test for orthogonality, including both the F-statistic and associated p-value. The p-value between means is reported, together with significance levels based on t-tests. All monetary values are reported in 2022 USD PPP. 861 households were surveyed, of which one did not have an adult head of household and another did not answer whether the adults were working (hence Percentage Adults working has 859 observations). 170 had additional land, and 784 households had children in a school-going age. 55 households did not know how they intended to spend their first cash transfer (CT). Variables winsorized at the 1% level include: Outstanding Loan Value, Monthly Income, Savings Amount, Livestock, Acres of Land, Remittances Given, Remittances Received, and Aspirations. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

Table A3: Midline: Attrition

	(1)	(2)
	Attrition	
Envelopes	0.00 (0.02)	
MA		-0.01 (0.02)
MAD		0.01 (0.02)
Age of HoHH	-0.00** (0.00)	-0.00** (0.00)
HH size	-0.00 (0.00)	-0.00 (0.00)
Female	-0.01 (0.02)	-0.01 (0.02)
Origin: SSD	-0.02 (0.03)	-0.02 (0.03)
Arrival Year	0.00 (0.00)	0.00 (0.00)
Protection Referral	-0.03 (0.02)	-0.03 (0.02)
BL Monthly Income	-0.00 (0.00)	-0.00 (0.00)
BL Self-Control	0.00 (0.00)	0.00 (0.00)
BL Exp. Neg Shock	-0.00 (0.02)	-0.00 (0.02)
Early	-0.10*** (0.03)	-0.10*** (0.03)
Control Group Mean	0.06	0.06
Control Group S.D.	0.23	0.23
N	861	861

Notes: Intention to Treat estimates. Attrition is a dummy variable equal to one if the household was surveyed at baseline, but not at midline. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Control mean refers to the mean value of the outcome in the control group at midline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

Table A4: Endline: Attrition

	(1)	(2)
	Attrition	
Envelopes	0.00 (0.02)	
MA		0.03 (0.03)
MAD		-0.02 (0.03)
Age of HoHH	-0.00** (0.00)	-0.00** (0.00)
HH size	-0.00 (0.00)	-0.00 (0.00)
Female	-0.02 (0.03)	-0.02 (0.03)
Origin: SSD	-0.08 (0.08)	-0.08 (0.08)
Arrival Year	0.01*** (0.00)	0.01*** (0.00)
Protection Referral	-0.09*** (0.04)	-0.09*** (0.03)
BL Monthly Income	0.00 (0.00)	0.00 (0.00)
BL Self-Control	0.00 (0.00)	0.00 (0.00)
BL Exp. Neg Shock	-0.00 (0.02)	-0.00 (0.02)
Early	-0.12** (0.05)	-0.12** (0.05)
Control Group Mean	0.14	0.14
Control Group S.D.	0.35	0.35
N	861	861

Notes: Intention to Treat estimates. Attrition is a dummy variable equal to one if the household was surveyed at baseline, but not at endline. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Control mean refers to the meal value of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

Table A5: Baseline imbalances: Persistent vs. Non-Persistent Users

Variable	(1) <i>Persistent</i>		(2) <i>Non-Persistent</i>		(3) Pairwise t-test
	N	Mean/(SD)	N	Mean/(SD)	Difference
Loan Amount	170	39.11 (83.24)	286	25.29 (157.31)	0.037**
Intended Inv. Share of CT	163	0.32 (0.27)	264	0.26 (0.25)	0.009***
HoHH Age	170	36.94 (13.06)	286	39.84 (13.52)	0.025**
Arrival Year	170	2018.37 (3.79)	316	2017.66 (3.89)	0.061*
Desire for Suff. Income	170	0.58 (0.50)	316	0.48 (0.50)	0.031**

Notes: Columns (1) and (2) show the average value (and standard deviation) for households that opted-in for the four labeled envelopes and are still using them at endline (Persistent), and households that opted-in for the four labeled envelopes and are not using them at endline anymore (Non-Persistent). The significance levels based on t-tests is reported in column (3). This table only reports variables with statistically significant differences between Persistent and Non-Persistent households. All other variables listed in Tables A1 and A2 are not statistically significantly different between Persistent and Non-Persistent households. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

Table A6: 2SLS Regression: Persistent Envelope Users, Endline

	(1) Productive Investments	(2) Lumpy Investments	(3) Monthly Income	(4) Savings	(5) Loans	(6) Durable Goods
Persistent	195.90* (102.92)	51.60** (20.14)	14.64** (7.32)	27.97* (15.69)	-16.91 (13.25)	-44.29 (99.57)
Sharp. q-val	0.104	0.068	0.104	0.104	0.127	0.281
F-statistic	227.44	230.26	230.26	230.40	231.45	230.26
Control Group Mean	261.50	56.72	27.89	42.97	44.14	294.87
Control Group S.D.	294.28	92.82	32.26	69.04	76.53	463.74
N	737	737	737	737	737	737

Notes: 2SLS IV estimates for 'Persistent'. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD. Persistent is coded as a dummy variable equal to one if the household is still using the envelopes at endline, and zero otherwise. Online Appendix A describes how outcome variables are calculated. Control mean refers to the mean value of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

Table A7: Balance Table for Best Aspect of Envelopes.

Variable	(1) <i>Persistent</i>		(2) <i>Not Persistent</i>		(3) Pairwise t-test
	N	Mean/(SD)	N	Mean/(SD)	Difference
Envelope Advantage: Planning	170	0.812 (0.392)	286	0.734 (0.442)	0.060*
Envelope Advantage: Safety	170	0.041 (0.199)	286	0.073 (0.261)	0.166
Envelope Advantage: Resist Temptation	170	0.065 (0.247)	286	0.059 (0.237)	0.821
Envelope Advantage: Savings	170	0.041 (0.199)	286	0.045 (0.209)	0.830

Notes: Columns (1) and (2) show the average value (and standard deviation) for households that opted-in for the four labeled envelopes and are still using them at endline (Persistent), and households that opted-in for the four labeled envelopes and are not using them at endline anymore (Not Persistent). The significance levels based on t-tests is reported in column (3). ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

Table A8: Behavioral Responses to Labeled Envelopes.

	(1) Dividing Cash Helped Discipline	(2) Labeling Categories Helped Discipline	(3) Reject Requests	(4) Avoid Temptation	(5) Save for School	(6) Save for Health
Persistent	0.14** (0.07)	0.11* (0.07)	0.08 (0.06)	0.11 (0.08)	0.05 (0.06)	0.06 (0.07)
Control Group Mean	4.01	3.97	4.06	3.86	4.11	4.00
Control Group S.D.	0.84	0.85	0.72	0.97	0.73	0.74
N	440	440	440	440	440	440

Notes: Intention to Treat estimates, based on PD Lasso regressions (Belloni et al., 2014). Persistent is a dummy variable equal to 1 if the household is still using the labeled envelope at endline. Respondents were asked to indicate the degree to which they agree with the following statements on a scale from 1 to 5: (1) “Dividing the money across four envelopes instead of one helped discipline spending and increase savings and investment”; (2) “Labeling the four envelopes for explicit categories helped discipline spending and increase savings and investment”; (3) “Using the four labeled envelopes made it easier to reject people’s request to borrow money”; (4) “Using the four labeled envelopes made it easier to not spend money on unnecessary consumption (e.g. alcohol, snacks, etc.)”; (5) “Using the four labeled envelopes made it easier to save for school fees”; (6) “Using the four labeled envelopes made it easier to save for health expenses”. Control mean refers to the mean value of the outcome among non-persistent envelope users at midline. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

Table A9: HTE by Household Size

	(1)	(2)
	Productive Investments	Lumpy Investments
Envelopes	91.95 (64.13)	0.25 (11.35)
Large Family	45.77 (65.05)	-5.42 (14.34)
Envelopes * Large Family	-42.84 (77.98)	29.91** (15.18)
t-test MA vs. MAD	0.31	0.56
Control Group Mean	262.33	57.80
Control Group S.D.	310.59	99.59
N	737	737

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. 'Large Family' is an indicator equal to one if the household's family size is larger than the median household size. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

Table A10: Decomposing Timing and Investment Type

	(1)	(2)	(3)
	Agriculture	Livestock	Enterprise
<i>Panel A. Midline</i>			
Envelopes	4.12** (2.02)	7.75 (16.18)	-50.87** (24.56)
t-test MA vs. MAD	0.26	0.63	0.73
Control Group Mean	7.85	141.05	101.39
N	810	810	810
<i>Panel B. Endline</i>			
Envelopes	-3.60 (3.30)	-2.54 (18.86)	67.21*** (23.18)
t-test MA vs. MAD	0.88	0.01	0.63
Control Group Mean	20.67	140.61	57.67
N	737	737	737
<i>Panel C. Combined</i>			
Envelopes	-0.25 (4.50)	7.33 (32.17)	72.82* (40.04)
t-test MA vs. MAD	0.55	0.12	0.51
Control Group Mean	29.62	286.77	157.16
N	707	707	707

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Agriculture, Livestock, and Enterprise refer to pre-specified investments in each of the three categories. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

Table A11: Additional Behavioral Responses to Labeled Envelopes

	(1) Spent Money on Items Outside of Env. Category	(2) Liked to Change Allocation per Env.	(3) I sealed the Envelopes	(4) Dividing Money Helped Discipline Spending	(5) Labeling Env. Helped Discipline Spending
MAD	-0.10 (0.07)	-0.04 (0.03)	0.07* (0.04)	0.11 (0.07)	0.16** (0.07)
MA Mean	0.68	0.17	0.48	4.01	3.95
MA SD	0.91	0.38	0.50	0.88	0.85
N	499	499	499	499	499
	(6) Reject Money Requests	(7) Using Labeled Envelopes Avoid Unnec. Spending	(8) Made it Easier to Save for School	(9) Save for Health	(10) Felt Obligation to Only Spend on Env. Category
MAD	0.05 (0.07)	0.11* (0.06)	0.11* (0.06)	0.10* (0.06)	0.13 (0.09)
MA Mean	3.85	3.98	4.07	4.05	3.66
MA SD	0.96	0.80	0.73	0.69	1.04
N	499	499	499	499	499

Notes: Intention to Treat estimates. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Question (1) was asked on a four point scale, with the answer options ranging from 'Rarely or none of the time' to 'Most or all of the time', while Questions (2) and (3) were yes/no questions. Questions (4)-(10) were answered on a five-point Likert Agree-ability scale. MA mean and standard deviation refer to the mean value and standard deviation of the outcome in the MA group at midline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

B Histograms

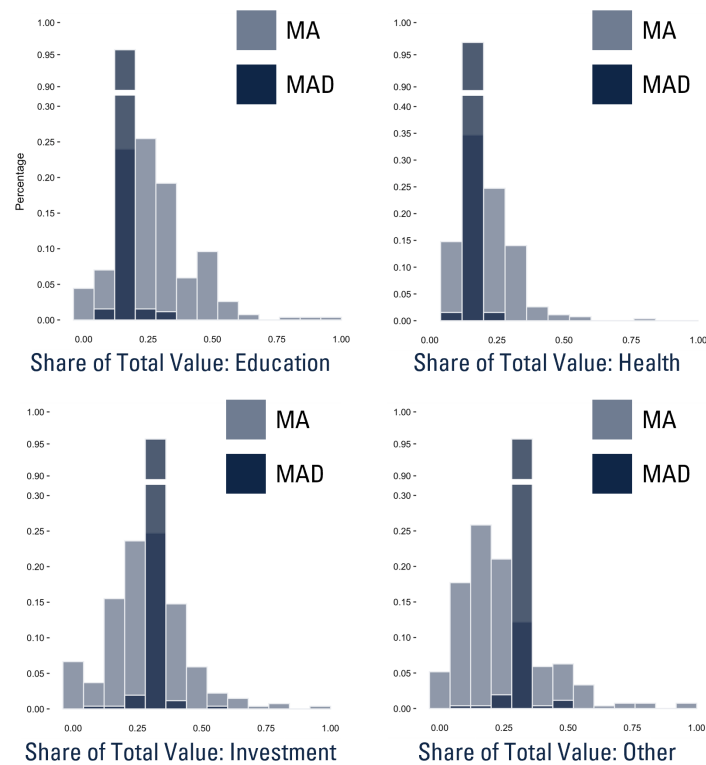


Figure B1. Histogram of Allocations across the Four Envelope Categories.

C Investment Opportunity and Envelopes Sheet

Investment Opportunities Sheet













Investments			
			
20,000 UGX Chicken	100,000 UGX Goat	900,000 UGX Cow	200,000 UGX Pig
			
900,000 UGX Simsim (p.a.)	800,000 UGX Rice (p.a.)	900,000 UGX Cassava (p.a.)	1,400,000 UGX Groundnut (p.a.)
			
1,300,000 UGX Market Vendor	4,000,000 UGX Boda-boda	250,000 UGX Bicycle	1,000,000 UGX Mechanic

Figure C1. Investment Opportunities page 1.













Investments			
			
20,000 UGX Guinea Fowl	20,000 UGX Rabbit	40,000 UGX Bee Farming	400,000 UGX Onion (p.a.)
			
300,000 UGX Tomato (p.a.)	400,000 UGX Maize (p.a.)	300,000 UGX Eggplant (p.a.)	300,000 UGX Watermelon (p.a.)
			
1,400,000 UGX Hair Salon	1,400,000 UGX Tailoring	1,200,000 UGX Brick-making	1,800,000 UGX Carpentry

Figure C2. Investment Opportunities page 2.

At baseline, the *Investment Opportunities* sheet was given to households in all three treatments, to provide information about available investment opportunities and associated prices. Market prices are the median price after obtaining prices from three randomly chosen vendors from different markets across the refugee settlements. The prices were further confirmed by both DRC staff, the enumerators, and households that participated in the pilot.

Envelopes Overview Sheet





	Education UGX
	Health UGX
	Investment/ Livelihoods UGX
	Other UGX

Figure C3. Envelopes Overview Sheet.

This *Envelopes Overview Sheet* was given to households in the **MA** and **MAD** treatments at the end of the baseline survey that opted-in to receive future cash transfers across the four

envelopes instead of the status quo. The enumerator wrote the monetary values allocated to each of the four envelopes, as a reminder for the households.

D Minimum Expenditure Basket

Table D1: Minimum Expenditure Basket

MEB Component	2021 (UGX)
Food	276,904
Hygiene	16,069
Water	3,750
Education	28,667
Energy	49,495
Transport	11,001
Communication	4,256
Clothing	3,806
Health	2,669
Personal Expenditure	6,080
Livelihood	37,705
Total	440,342

The Minimum Expenditure Basket (MEB) consists of eleven categories, divided into *food* and *non-food* items that are all deemed basic needs, and is specific to the setting of refugee settlements in Uganda. The United Nations and NGO partners in the Cash Working Group base the allocations per category on household surveys conducted with refugees across all settlements in Uganda (including Rhino Camp and Imvepi), and also consider local prices. In 2019, a harmonization of the MEB was conducted, during which each sub Working Group (e.g. the Health Working Group) identified basic needs within their domain - and hence the composition of each category is the same across all refugee settlements in Uganda. The cost of meeting these basic needs can vary per settlement based on local prices and is updated on a quarterly basis based on the prices per refugee settlement. The process of the MEB is used in most humanitarian settings, for example Ethiopia/Somalia, Jordan, Turkey, Bangladesh, etc.

The default allocation for **MAD** is: Education (16.6%), Health (16.6%), Investments (33.3%), and Others (33.3%). Percentages are in terms of the household's total cash transfer value. Given the World Food Programme gave food assistance in addition to the cash transfers, the food component is excluded from the calculations. Hygiene, Water and Health are combined into the *Health* envelope, while Livelihood, Communication, and Transport are combined into the *Investment* envelope. *Other* encompasses Energy, Clothing, and Personal Expenditure.

E Deviation from Pre-Analysis Plan

We submitted a Pre-Analysis Plan to the *Journal of Development Economics* on February 24th 2022, and successfully underwent a Stage 1 review on July 21st, 2023. Below we outline how we deviate from our Pre-Analysis Plan, and why:

- Lumpy Investments were not pre-registered as an outcome variable. This is because the Pre-Analysis Plan placed a greater emphasis on consumption patterns, rather than investment patterns.
- The Focus Group Discussion after the endline survey was not pre-registered, but introduced to help understand some of the underlying mechanisms.
- Heterogeneity based on **Persistent** users was not pre-registered, as we had not anticipated the treatment to have such a persistent effect on households.
- Income is reported based on monthly income, rather than the average across the last quarter. This is because focus group discussions indicated that households thought about their income on a monthly (or shorter) basis, and struggled to recall income over the last three months.
- Savings and Durable Goods are reported separately, however are both reported.
- Marginal Propensity to Consume, and other consumption-related outcomes are not reported as primary outcomes, due to the noisy data collection.
- Winsorizing is done separately by treatment arm, as discussed in [Wicker \(2025\)](#). Results are robust to winsorizing the whole sample, including at the 5% level, and not winsorizing.

F Timeline

Table F2: Timeline of RCT

Event	Timing
Focus Group Discussion	July 2022
First Cash Transfer: Early Group	Third Week of August 2022
Baseline Survey: Early Group	First Week of September 2022
First Cash Transfer: Late Group	Third Week of September 2022
Baseline Survey: Late Group	First Week of October 2022
Last Cash Transfer: Early Group	Third Week of February 2023
Midline Survey: Early Group	First Week of March 2023
Last Cash Transfer: Late Group	Third Week of March 2023
Midline Survey: Late Group	First Week of April 2023
Endline Survey	April 2024
Focus Group Discussion	November 2024

Focus group discussions were led by local refugee enumerators, who had not been enumerators in the previous data collection rounds. Focus groups discussions were conducted in groups of 5-6 household heads, in Ofua 4, 5, and 6 villages in Rhino Camp refugee settlement. Five different groups were identified: *CO*; *MA*, Persistent users; *MA*, Non-persistent users; *MAD*, Persistent users; *MAD*, Non-persistent users. For each of these five groups, two separate focus group discussions were conducted.



Figure C4. Cash Distribution.



Figure C5. Envelopes Stand.

Online Appendix to:
**Mental Accounting and Cash Transfers: Experimental
Evidence from a Humanitarian Setting**

by Till Wicker, Patricio Dalton, and Daan van Soest

A Measurement of Outcome Variables

Table A3: Outcome Variables Description (1).

Spending on Productive Investments

Total Investment	Self-reported purchases of livestock (cattle, goats, sheep, pigs rabbits, chicken, turkey, ducks, guinea foals, livestock feeds, vet services, other), agriculture (seeds, manure, chemical fertilizer, pesticides, land, other), enterprise-related investments (market stall, supplies, training courses), and other (mobile phone, hoe, panga, bicycle, motorcycle, sewing machine, wheelbarrow, other) since the last survey round. Market values are the median from three market vendors in the refugee settlements.
Lumpy Investment	Self-reported value of the five largest investments made since the last survey round.
Monthly Income	Self-reported income in the last month. No income is coded as 0.
Savings	Self-reported level of savings. No savings is coded as 0.
Loans	Self-reported value of outstanding loan value to be repaid. No outstanding debt is coded as 0.
Durable Assets	Self-reported quantity of durable assets (including furniture, battery, solar panel, etc.). Market values are the median from three market vendors in the refugee settlements.
Education Expenditures	Self-reported quantity purchases of books, pens, school uniforms, bags, and other self-mentioned education-related items. Market values are the median from three market vendors in the refugee settlements. These are combined with the self-reported monetary value of school fees.

Table A4: Outcome Variables Description (2).

Spending on Productive Investments

Health Expenditures	Self-reported quantity purchases of Water Filters, ORS, Latrine Upgrades, Mosquito Nets, Water Guard, and other self-mentioned health-related items. Market values are the median from three market vendors in the refugee settlements. These are combined with the self-reported monetary value of medicine expenditures.
Monthly Spending	Monthly expenditure on designated categories (Education, Health, Investment, Food, Clothes, Household Items, Temptation Goods, and Loans), summed together.
School Attendance	Average across all school-aged children (6-18) of self-reported school attendance (number of days) in the week before the survey.
Health Needs Met	Average across all household members of the number of times that a household was able to meet the health needs in case there were health needs in the last 3 months.
Self-Reliance	12-item Self-Reliance Index .
Food Security	5-item Reduced Coping Strategies Index .
Self-Control	10-item Self-Control index from Tangney et al. (2004) , adapted by Sedlmayr et al. (2020) .
Theft	Whether the household had experienced theft within the last six months.
Savings Location	Households were asked — conditional on having positive savings — whether they had savings in that location.
Social Desirability	13-item Marlowe-Crowne Social Desirability Scale, based on Dhar et al. (2022) .
Remittances	Self-reported amount of remittances given and received in the last 30 days.
Subjective Well-Being	5-item Satisfaction With Life Scale .
Depression	20-item CES-D Scale .
Anxiety	7-item GAD-7 Scale .
Optimism	10-item Revised Life Orientation Test (LOT-R)
Aspirations	Adaptation of Bernard and Taffesse (2014) , considering income, savings, and education as the three variables of interest.

B Decomposing Health Expenses

B.1 Endline

Table B5: Endline: Health Expenditures Decomposed

	(1)	(2)
	Preventive Health	Medicine
Envelopes	-48.20** (20.14)	-6.17 (7.85)
t-test MA vs. MAD	0.85	0.97
Control Group Mean	307.61	52.27
Control Group S.D.	305.57	104.15
N	737	737

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Preventive health refers to expenses on Latrines, Water Filters, ORS, Mosquito Nets, and WaterGuard. Respondents were asked how often they had purchased these items since the last survey, and the frequency was multiplied by the median price of three market vendors in the refugee settlements. Control mean refers to the meal value of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

Table B6: Endline: Preventive Health Expenditures Decomposed

	(1)	(2)	(3)	(4)	(5)
	WaterFilter	ORS	Latrine	Mosquito	WaterGuard
Envelopes	0.10 (0.08)	0.02 (0.04)	-46.27** (19.56)	-3.00 (3.25)	0.66 (0.56)
t-test MA vs. MAD	0.81	0.02	1.00	0.34	0.31
Control Group Mean	0.24	0.09	267.44	38.54	0.96
Control Group S.D.	0.98	0.52	296.13	47.20	6.52
N	737	737	737	737	737

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Respondents were asked how often they had purchased these items since the last survey, and the frequency was multiplied by the median price of three market vendors in the refugee settlements. Control mean refers to the meal value of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

B.2 Midline

Table B7: Midline: Health Expenditures Decomposed

	(1)	(2)
	Preventive Health	Medicine
Envelopes	19.56 (16.17)	-0.14 (0.91)
t-test MA vs. MAD	0.54	0.06
Control Group Mean	162.58	2.06
Control Group S.D.	263.32	12.13
N	810	810

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Preventive health refers to expenses on Latrines, Water Filters, ORS, Mosquito Nets, and WaterGuard. Respondents were asked how often they had purchased these items in the last 6 months, and the frequency was multiplied by the median price of three market vendors in the refugee settlements. Control mean refers to the meal value of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

Table B8: Midline: Preventive Health Expenditures Decomposed

	(1)	(2)	(3)	(4)	(5)
	WaterFilter	ORS	Latrine	Mosquito	WaterGuard
Envelopes	0.02 (0.04)	-0.01** (0.01)	23.10 (15.51)	-3.16 (2.60)	-0.13* (0.07)
t-test MA vs. MAD	0.57	.	0.62	0.36	.
Control Group Mean	0.08	0.01	131.80	29.16	0.14
Control Group S.D.	0.57	0.10	247.24	43.36	1.32
N	810	810	810	810	810

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Respondents were asked how often they had purchased these items in the last 6 months, and the frequency was multiplied by the median price of three market vendors in the refugee settlements. Control mean refers to the meal value of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

C Decomposing Education Expenses

Table C9: Received Additional Cash Transfer

	(1)	(2)
	Educ. in Emergency	Unconditional
	Cash Transfer	
Envelopes	-0.04*	-0.02
	(0.03)	(0.03)
t-test MA vs. MAD	0.27	0.22
Control Group Mean	0.32	0.62
Control Group S.D.	0.47	0.49
N	737	737

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. EiE refers to an Education in Emergencies cash transfer, given by DRC. It's selection is based on at-risk or out-of-school children, and hence the evaluation criteria is separate from the cash program we are evaluating. Control mean refers to the mean value of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

D Monthly Spending

D.1 Midline

Table D10: Midline: Spending

	(1) Monthly Spending (\$PPP)	(2) Education	(3) Health	(4) Fraction of Monthly Spending on Invest.	(5) Food	(6) Clothes	(7) HH Items	(8) Tempt.	(9) Loans
Envelopes	15.34 (15.19)	-1.11 (1.27)	-0.44 (0.99)	0.44 (1.04)	0.27 (1.26)	-0.14 (0.56)	-0.09 (0.50)	-0.00 (0.04)	1.12** (0.44)
t-test MA vs. MAD	0.51	0.11	0.34	0.95	0.76	0.92	0.24	0.95	0.22
Control Group Mean	259.25	24.76	14.54	8.10	26.83	2.50	6.25	0.06	1.36
Control Group S.D.	211.02	18.53	12.96	13.30	17.20	6.88	6.58	0.57	5.22
N	810	810	810	810	810	810	810	810	810

Notes: Intention to Treat estimates, XXX. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

D.2 Endline

Table D11: Endline: Spending

	(1) Monthly Spending (\$PPP)	(2) Education	(3) Health	(4) Fraction of Monthly Spending on Invest.	(5) Food	(6) Clothes	(7) HH Items	(8) Tempt.	(9) Loans
Envelopes	-12.24 (16.70)	-1.62 (1.57)	-0.08 (1.22)	0.65 (0.90)	-2.03 (1.52)	0.58 (0.51)	-1.07 (0.83)	0.08 (0.12)	1.34* (0.70)
t-test MA vs. MAD	0.12	0.89	0.97	0.47	0.60	0.79	0.93	0.08	0.65
Control Group Mean	215.66	20.80	12.71	4.48	30.36	1.97	9.53	0.14	2.81
Control Group S.D.	240.69	18.38	13.83	10.67	19.83	6.07	10.94	1.02	7.98
N	737	737	737	737	737	737	737	737	737

Notes: Intention to Treat estimates, based on PD Lasso regressions (Belloni et al., 2014). ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

Consumption was measured in the last month, and hence we are unable to comment on the treatment's overall effects on consumption - as we only document it at one point in time. Ex-ante, it is unclear whether the treatment would impact the total value of consumption, and consumption expenditures. We document a decrease in monthly consumption - albeit statistically insignificant - for treatment households one year after the intervention. This is primarily driven by **MAD** households, where the reduction in consumption is statistically significant (not correcting for MHT). This can be post-rationalized using an Euler equation: for a given C_{t+1} , higher returns to investments imply a higher marginal utility of consumption in time t ($u'(C_t)$). Given the non-linearities in returns to lumpy investments (see Kaboski et al. (2024)), we can assume that $f'(K_t)$ is higher, on average, for treatment households than control households, as they made more lumpy investments. The Euler equation - $u'(C_t) = f'(K_t)\delta u'(C_{t+1})$ - can hence rationalize why households who have high returns to investments, are willing to forgo consumption in the short run. This is in line with

[Balboni et al. \(2021\)](#), who find that an asset transfer reduces short-term consumption and investments in productive assets in the longer-run. [Egger et al. \(2022\)](#) discuss the limitations of spending/consumption patterns as a measure of welfare, as a result of which we do not draw welfare conclusions based on the consumption patterns.

E Other Outcome Variables

E.1 Midline

Table E12: Midline: Spending-Related Outcomes

	(1) School Attendance	(2) Health Needs Met	(3) Self-Reliance	(4) Food Security	5 Loan Amount (USD PPP)
Envelopes	0.02 (0.07)	0.00 (0.01)	0.15** (0.06)	0.02 (0.06)	18.23*** (5.66)
t-test MA vs. MAD	0.37	0.26	0.73	0.05	0.02
Control Group Mean	4.49	0.90	0.00	0.00	25.55
Control Group S.D.	0.86	0.17	1.00	1.00	52.38
N	736	810	810	810	810

Notes: Intention to Treat estimates. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean refers to the meal value of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

E.2 Endline

Table E13: Endline: Spending-Related Outcomes

	(1) School Attendance	(2) Health Needs Met	(3) Self-Reliance	(4) Food Security	5 Loan Amount (USD PPP)
Envelopes	0.02 (0.09)	-0.00 (0.01)	0.01 (0.07)	0.01 (0.06)	-5.88 (4.76)
t-test MA vs. MAD	0.84	0.37	0.36	0.52	0.61
Control Group Mean	4.22	0.88	0.00	0.00	44.14
Control Group S.D.	1.03	0.22	1.00	1.00	76.53
N	676	737	737	737	

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean refers to the meal value of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

F Persistent Users: MA vs. MAD

Table F14: Persistent User: MA vs. MAD

	(1)
	Persistent User
MA	0.08* (0.04)
Control Group Mean	0.34
Control Group S.D.	0.47
N	456

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. The outcome variable is an indicator variable if the household experienced a theft incident in their house in the last six months. Control mean refers to the mean value of the outcome in the control group at baseline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

G Lumpy Investments Specification

Table G15: Lumpy Investments: Alternative Specifications

	(1)	(2)	(3)
	Lumpy Investments at Endline		
	No Trim	Trim from below at 50 USD PPP	Trim from below at 100 USD PPP
Envelopes	17.71** (7.19)	17.86** (7.23)	18.62** (7.43)
t-test MA vs. MAD	0.56	0.62	0.53
Control Group Mean	56.72	55.51	49.64
Control Group S.D.	92.82	93.38	94.68
N	737	737	737

Notes: Intention to Treat estimates, based on PD Lasso regressions (Belloni et al., 2014). Persistent is a dummy variable equal to 1 if the household is still using the labeled envelope at endline. Respondents were asked an open-ended question of “What was the biggest added value of the envelopes?”. Control mean refers to the meal value of the outcome among non-persistent envelope users at midline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

H Savings Excluding Envelopes

Table H16: Savings Without Money Saved in Envelopes

	(1)	(2)
	Midline	Endline
Envelopes	3.88 (5.14)	-6.22 (4.91)
t-test MA vs. MAD	0.79	0.71
Control Group Mean	46.09	42.97
Control Group S.D.	63.26	69.04
N	810	737

Notes: Intention to Treat estimates, based on PD Lasso regressions (Belloni et al., 2014). Persistent is a dummy variable equal to 1 if the household is still using the labeled envelope at endline. Respondents were asked an open-ended question of “What was the biggest added value of the envelopes?”. Control mean refers to the meal value of the outcome among non-persistent envelope users at midline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

I Including Baseline Enumerator Fixed Effects

Table I17: Endline Outcomes (USD PPP) - With Fixed Effects for Baseline Enumerator

	(1) Total Investment	(2) Lumpy Investment	(3) Monthly Income	(4) Savings	(5) Loans	(6) Durable Goods	(7) Educ. Exp.	(8) Health Exp.
Envelopes	66.45* (37.62)	18.08** (7.22)	4.93* (2.61)	9.41 (5.80)	-4.82 (5.01)	-18.48 (36.33)	-17.26 (17.65)	-54.07** (21.87)
t-test MA vs. MAD	0.31	0.56	0.11	0.07	0.61	0.93	0.89	0.98
Control Group Mean	261.50	56.72	27.89	42.97	44.14	294.87	278.68	367.37
Control Group S.D.	294.28	92.82	32.26	69.04	76.53	463.74	256.20	323.84
N	737	737	737	737	737	737	737	737

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

Table I18: Midline Outcomes (USD PPP) - With Fixed Effects for Baseline Enumerator

	(1) Savings	(2) Loans	(3) Durable Goods	(4) Total Investment	(5) Monthly Income	(6) Educ. Exp.	(7) Health Exp.
Envelopes	33.79*** (6.28)	21.29*** (6.33)	-35.22 (60.06)	-33.62 (34.19)	-0.05 (3.90)	-5.88 (10.60)	12.98 (16.75)
t-test MA vs. MAD	0.45	0.02	0.06	0.28	0.75	0.32	0.58
Control Group Mean	46.09	25.55	437.05	272.05	40.02	171.88	166.62
Control Group S.D.	63.26	52.38	772.52	476.95	49.67	170.03	263.67
N	810	810	810	810	810	810	810

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

J Multiple Times Same Enumerator

Table J19: Endline Outcomes (USD PPP) - HTE by Whether Enumerator was same at Baseline and Endline

	(1) Total Investment	(2) Lumpy Investment	(3) Monthly Income	(4) Savings	(5) Loans	(6) Durable Goods	(7) Educ. Exp.	(8) Health Exp.
Envelopes	63.71* (35.51)	18.03** (7.31)	5.51** (2.68)	9.01 (5.80)	-5.01 (4.80)	-13.85 (36.15)	-21.21 (17.51)	-51.69** (21.90)
Env_Same_Enum.	97.09 (307.52)	-9.98 (44.84)	-13.28 (13.53)	17.50 (25.26)	-27.67 (40.15)	-40.78 (168.94)	69.97 (113.04)	-13.94 (109.60)
Same_Enum.	209.87 (161.71)	24.36 (35.40)	-0.61 (10.12)	-9.63 (19.62)	40.14 (38.18)	50.73 (123.85)	51.27 (88.11)	26.24 (94.30)
Control Group Mean	261.50	56.72	27.89	42.97	44.14	294.87	278.68	367.37
Control Group S.D.	294.28	92.82	32.26	69.04	76.53	463.74	256.20	323.84
N	737	737	737	737	737	737	737	737

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

Table J20: Midline Outcomes (USD PPP) - HTE by Whether Enumerator was same at Baseline and Midline

	(1) Savings	(2) Loans	(3) Durable Goods	(4) Total Investment	(5) Monthly Income	(6) Educ. Exp.	(7) Health Exp.
Envelopes	31.17*** (5.96)	17.70*** (5.74)	-22.50 (60.93)	-21.83 (34.46)	-0.25 (3.61)	-10.76 (10.81)	13.89 (16.38)
Env_Same_Enum.	74.92** (35.94)	20.09 (29.35)	274.54 (177.02)	-224.77 (283.68)	-8.39 (39.90)	49.98 (64.23)	128.00 (118.22)
same_Same_Enum.	-56.46*** (13.56)	-22.97 (15.30)	-136.72 (94.51)	236.40 (268.91)	29.43 (34.40)	-50.28 (57.93)	-45.93 (95.00)
Control Group Mean	46.09	25.55	437.05	272.05	40.02	171.88	166.62
Control Group S.D.	63.26	52.38	772.52	476.95	49.67	170.03	263.67
N	810	810	810	810	810	810	810

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

K Other Mechanisms

K.1 Partitioning at Midline

Table K21: Midline: Best Part of the labeled Envelopes

	(1)	(2)	(3)	(4)
	Best Part of the 4 labeled Envelopes			
	Easy to Hide	Safety	Saving	Planning
Persistent	0.01 (0.01)	-0.01 (0.02)	-0.01 (0.03)	0.01 (0.04)
t-test MA vs. MAD	0.33	0.40	0.38	0.87
Control Group Mean	0.01	0.07	0.11	0.74
Control Group S.D.	0.08	0.25	0.31	0.44
N	440	440	440	440

Notes: Intention to Treat estimates, based on PD Lasso regressions (Belloni et al., 2014). Persistent is a dummy variable equal to 1 if the household is still using the labeled envelope at endline. Respondents were asked an open-ended question of “What was the biggest added value of the envelopes?”. Control mean refers to the meal value of the outcome among non-persistent envelope users at midline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

K.2 Self-Control

Table K22: Mechanism: Self-Control

	(1)
	Self-Control Index
<i>Panel A. Midline</i>	
Envelopes	0.16 (0.28)
t-test MA vs. MAD	0.61
Control Group Mean	39.01
Control Group S.D.	5.92
N	810
<i>Panel B. Endline</i>	
Envelopes	0.06 (0.34)
t-test MA vs. MAD	0.66
Control Group Mean	40.40
Control Group S.D.	5.71
N	737

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Column (1) creates an average index, while Column (2) creates an [Anderson \(2008\)](#) index. Control mean refers to the meal value of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

K.3 Information from Default

We don't document differential levels of savings at midline between **MA** and **MAD**. Furthermore, at endline, we document higher levels of savings among **MA** households. This suggests, if anything, that the information provided by the default allocation did not foster savings.

Tables K23 and K24 below reports heterogeneous treatment effects for **MA** (compared against **MAD**) based on the *Sum of Squared Distance* between the household's allocation across the four envelopes, and the default.³⁷ The interaction term between **MA** and the Sum of Squared Distance is not statistically significant across any of the outcome variables, suggesting that the treatment effect does not vary depending on the distance of a household's allocation to the default - and hence the additional information obtained from the default.

Table K23: Distance from The MAD Default Recommendation: Endline

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Productive Investments		Lumpy Investments		Monthly Income		Savings		Loans	
MA	-96.32 (80.69)	-94.45 (81.28)	-5.40 (9.99)	-7.70 (9.90)	5.94* (3.58)	4.88 (3.68)	13.03* (6.86)	13.80* (7.07)	-0.92 (4.91)	-1.29 (4.94)
MA_SSD		-5.72 (20.78)		7.08 (7.38)		3.31** (1.68)		-2.36 (2.41)		1.11 (1.93)
Control Group Mean	378.26	378.26	78.71	78.71	29.53	29.53	47.45	47.45	40.00	40.00
Control Group S.D.	873.14	873.14	114.97	114.97	39.10	39.10	74.80	74.80	60.84	60.84
N	456	456	456	456	456	456	456	456	456	456

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Online Appendix A describes how outcome variables are calculated. Control mean refers to the mean value of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

³⁷For the detailed specification, see the Pre-Analysis Plan (Wicker et al., 2023).

Table K24: Distance from The MAD Default Recommendation: Midline

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Productive		Monthly		Savings		Loans		Durable	
	Investments		Income						Goods	
MA	57.52*	59.58*	0.00	0.62	-0.76	-1.45	-26.30**	-26.54**	162.19**	120.94
	(33.22)	(33.66)	(4.50)	(4.56)	(9.08)	(8.94)	(11.03)	(10.81)	(73.13)	(73.95)
MA_SSD		-6.58		-1.98		2.21		0.75		131.86
		(17.82)		(1.73)		(3.91)		(4.22)		(88.92)
Control Group Mean	227.17	227.17	38.83	38.83	85.42	85.42	51.48	51.48	342.53	342.53
Control Group S.D.	254.95	254.95	51.27	51.27	112.06	112.06	129.70	129.70	665.72	665.72
N	499	499	499	499	499	499	499	499	499	499

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Online Appendix A describes how outcome variables are calculated. Control mean refers to the mean value of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

K.4 Greater Safety

Table K25: Mechanism: Greater Safety

	(1) Experienced Theft in Last 6 Months
<i>Midline</i>	
Envelopes	0.02 (0.03)
t-test MA vs. MAD	0.67
Control Group Mean	0.18
Control Group S.D.	0.39
N	810
<i>Endline</i>	
Envelopes	0.02 (0.04)
t-test MA vs. MAD	0.62
Control Group Mean	0.39
Control Group S.D.	0.49
N	737

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. The outcome variable is an indicator variable if the household experienced a theft incident in their house in the last six months. Control mean refers to the mean value of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

K.5 Formalized Savings Sources

Table K26: Mechanism: Formalized Savings Sources

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Has Savings	SACCO	MoMo	Less Formal Group	Friend and Family	Home	VLSA	ROSCA
Envelopes	0.02 (0.04)	-0.02 (0.02)	-0.00 (0.01)	0.06 (0.04)	-0.00 (0.01)	-0.01 (0.04)	0.02 (0.04)	
t-test MA vs. MAD	0.24	0.18	0.11	0.75	0.11	0.09	0.91	
Control Group Mean	0.58	0.09	0.02	0.73	0.01	0.18	0.45	
Control Group S.D.	0.49	0.29	0.14	0.44	0.12	0.39	0.50	
N	737	437.00	437.00	437.00	437.00	437.00	437.00	

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Has Savings is a dummy variable equal to 1 if the household has savings at endline. The other variables refer to savings locations. MoMo is mobile money, SACCO is a formally registered savings group, VLSA is a village savings and loans association, an informal savings group that does not have a revolving fund, which is how they differ from ROSCAs, who have a revolving fund that pays out every time. 'Less Formal Group' combines VLSA and ROSCAs. Friends and Family, and Home, are indicators for savings with friends and family, or saving at home. Control mean refers to the mean value of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

K.6 Social Desirability Bias - Heterogeneity by Social Desirability Bias

K.6.1 Endline, Envelopes

Table K27: Endline Outcomes (USD PPP) - Envelopes

	(1) Total Investment	(2) Lumpy Investment	(3) Monthly Income	(4) Savings	(5) Loans	(6) Durable Goods	(7) Educ. Exp.	(8) Health Exp.
Envelopes	-26.47 (128.85)	-7.16 (23.90)	9.08 (7.45)	2.77 (15.81)	12.30 (13.30)	-45.68 (97.49)	54.66 (48.59)	30.82 (67.67)
SDS_score	-20.32* (11.18)	-3.74 (2.80)	0.67 (0.94)	-1.61 (2.07)	2.68 (1.88)	-7.53 (11.37)	7.91 (6.73)	15.09 (9.35)
Env_SDS	15.12 (20.20)	3.67 (3.57)	-0.70 (1.20)	1.11 (2.54)	-3.33 (2.06)	3.89 (15.04)	-12.99* (7.74)	-14.24 (10.78)
Control Group Mean	261.50	56.72	27.89	42.97	44.14	294.87	278.68	367.37
Control Group S.D.	294.28	92.82	32.26	69.04	76.53	463.74	256.20	323.84
N	707	707	707	707	707	707	707	707

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

Table K28: Midline Outcomes (USD PPP) - Heterogeneity by Social Desirability Bias

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Savings	Loans	Durable Goods	Total Investment	Monthly Income	Educ. Exp.	Health Exp.
Envelopes	34.98** (15.36)	21.84 (14.24)	-26.37 (185.14)	-56.66 (152.06)	2.41 (10.27)	47.50 (30.46)	2.06 (45.05)
m_SDS_score	4.78** (2.24)	-1.03 (2.35)	12.44 (20.88)	-6.85 (17.71)	-0.39 (1.59)	9.02* (4.73)	5.58 (6.11)
Env_SDS	-0.36 (2.66)	-0.57 (2.22)	1.71 (28.54)	4.84 (22.13)	-0.44 (1.61)	-9.40* (5.19)	2.45 (7.02)
Control Group Mean	46.09	25.55	437.05	272.05	40.02	171.88	166.62
Control Group S.D.	63.26	52.38	772.52	476.95	49.67	170.03	263.67
N	810	810	810	810	810	810	810

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

Table K29: Mechanism: Social Desirability Bias

	(1)
	Social Desirability Bias
Envelopes	0.11 (0.13)
MA	0.12 (0.15)
MAD	0.10 (0.15)
t-test MA vs. MAD	0.91
Control Group Mean	6.12
Control Group S.D.	2.18
Observations	810

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean refers to the meal value of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

Table K30: Expectation to Receive Additional Cash Transfer

	(1) Expect to Receive Add. Round of Cash Transfer
Envelopes	0.00 (0.03)
t-test MA vs. MAD	0.82
Control Group Mean	0.61
Control Group S.D.	0.49
Observations	737

Notes: Intention to Treat estimates. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Respondents were asked whether they expected to receive an additional cash transfer from DRC in the future. Control mean refers to the mean value of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

K.7 Remittances

Table K31: Mechanism: Remittances, Midline

	(1)	(2)
	Remittances (USD PPP)	
	Received	Given
Envelopes	2.05** (0.96)	-2.75* (1.65)
t-test MA vs. MAD	0.30	0.05
Control Group Mean	5.00	7.30
Control Group S.D.	8.94	27.73
Observations	810	810

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Remittances Received and Given are self-reported remittances received and given to/from neighbors, friends, and family in the last 30 days. Control mean refers to the mean value of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

Table K32: Mechanism: Remittances, Endline

	(1)	(2)
	Remittances (USD PPP)	
	Received	Given
Envelopes	1.56*	0.80
	(0.93)	(0.50)
t-test MA vs. MAD	0.96	0.80
Control Group Mean	4.23	2.91
Control Group S.D.	9.52	5.97
Observations	737	737

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Remittances Received and Given are self-reported remittances received and given to/from neighbors, friends, and family in the last 30 days. Control mean refers to the mean value of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

K.8 Decomposing Timing and Type of Investment: MA vs. MAD

Table K33: Decomposing Timing and Investment Type

	(1)	(2)	(3)
	Agriculture	Livestock	Enterprise
<i>Panel A. Midline</i>			
MA	6.66** (2.66)	13.95 (20.63)	-52.44** (25.59)
MAD	1.34 (2.43)	0.96 (17.41)	-49.15** (24.26)
t-test MA vs. MAD	0.26	0.63	0.73
F-test	0.04	0.77	0.12
Control Group Mean	7.85	141.05	101.39
Control Group S.D.	19.28	211.52	385.85
N	810	810	810
<i>Panel B. Endline</i>			
MA	-1.64 (4.08)	-31.44* (17.91)	73.58** (32.58)
MAD	-5.55 (3.68)	26.09 (27.22)	60.90* (31.05)
t-test MA vs. MAD	0.88	0.01	0.63
F-test	0.31	0.05	0.02
Control Group Mean	20.67	140.61	57.67
Control Group S.D.	43.09	223.25	77.41
N	737	737	737
<i>Panel C. Combined</i>			
MA	2.63 (5.23)	-16.84 (35.37)	81.94 (50.57)
MAD	-3.30 (5.39)	32.97 (39.53)	63.14 (47.34)
t-test MA vs. MAD	0.55	0.12	0.51
F-test	0.57	0.43	0.19
Control Group Mean	29.62	286.77	157.16
Control Group S.D.	53.18	366.15	389.55
N	707	707	707

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. MA and MAD refer to the two treatments, which differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Agriculture, Livestock, and Enterprise refer to pre-specified investments in each of the three categories. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

L Cost-Effectiveness Calculations

Costs:

- Procurement of Envelopes
 - 500 Envelopes cost \$13.55 \Rightarrow one envelope cost \$0.027
 - Each household received $(4*6) = 24$ envelopes. \Rightarrow total cost of envelopes = \$0.65
- Procurement of Stickers
 - 24 stickers cost \$0.407 \Rightarrow one sticker cost \$0.017
 - Each household received $(6*6) = 36$ stickers. \Rightarrow total cost of stickers = \$0.61
- Total Procurement Costs: $\$0.65 + \$0.62 = \$1.27$
- Labor Costs: Putting Stickers on Envelopes
 - On average, 6 stickers per minute \Rightarrow 360 stickers per hour
 - Every household receives $(6*6) = 36$ stickers \Rightarrow 6 minutes
 - Daily wage: 50,000 UGX = \$13.55, for 8 hours \Rightarrow 6 minutes = \$0.17
- Labor Costs: Cash Distribution
 - 2 employees, 1 minute per household
 - Daily wage: 50,000 UGX = \$13.55, for 8 hours
 - 1 minute, for 2 employees, for 6 cash transfers \Rightarrow \$0.34

Combining the costs per household:

- Procurement Envelopes: \$0.65
- Procurement Stickers: \$0.62
- Labour costs: stickers on envelopes: \$0.17
- Labour costs: handing out envelopes: \$0.34
- **Total Cost: \$1.78**

Total costs could have been reduced by only having 3 stickers, instead of 6. This would have reduced the ‘Procurement of Stickers costs’, and ‘Labor Costs: Putting Stickers on Envelopes’ by half. Then the costs would have equaled: \$1.39.

Cost-Effectiveness Calculation for Aggarwal et al. (2023)

Each lockbox cost \$3.40, with an additional lock and key costing an additional \$1.00.

In the single-box treatment, households were only offered one lockbox. In the multiple-box treatment, households were offered up to three lockboxes. 24% only took 1 lockbox, 33% took 2 lockboxes, and 42% took all three lockboxes. 1% did not take any lockboxes. Hence, in the 'multiple lockboxes' treatment, households on average took $(0.01 * 0 + 0.24 * 1 + 0.33 * 2 + 0.42 * 3 =)$ 2.16 lockboxes. With each lockbox costing \$4.40, the average cost of the intervention is $2.16 * 4.40 = 9.50$.

Column 9 in Tables 4 and 5 of ([Aggarwal et al., 2023](#)) report treatment effects of the multiple lockboxes on total deposits, with treatment effects of 0.84 and 0.49 (with a Control group standard deviation of 3.93 and 1.80, respectively). Hence treatment effects, expressed in terms of standard deviations, are $0.84/3.93 = 0.21$ and $0.49/1.80 = 0.27$,

M Heterogeneous Treatment Effects

M.1 Persistent Users

Table M34: 2SLS Regression: Persistent Envelope Users, Midline

	(1) Savings	(2) Loans	(3) Durable Good	(4) Productive Investments	(5) Monthly Income
Persistent	112.09*** (20.02)	60.55*** (18.71)	-48.71 (193.89)	-93.59 (112.41)	-1.18 (12.11)
Sharp. q-val	0.001	0.003	1.000	0.682	1.000
Control Group Mean	46.09	25.55	437.05	272.05	40.02
Control Group S.D.	56.88	47.10	694.58	428.83	44.99
F-statistic	193.75	199.34	196.18	194.40	196.18
N	810	810	810	810	810

Notes: 2SLS IV estimates for 'Persistent'. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Productive investments refer to investments in a pre-specified list of productive assets, multiplied by the median market price obtained from three vendors in the refugee settlements. Lumpy investments are self-reported large investments made in the previous year in physical and human capital. Savings are total savings held by the household. Monthly income is self-reported monthly income, while Durable Goods refer to the acquisition of a pre-specified list of durable, non-productive assets, multiplied by the median market price obtained from three vendors in the refugee settlements. Control mean refers to the meal value of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

Table M35: Endline: Persistent users (Propensity Score Matching)

	(1) Productive Investments	(2) Lumpy Investments	(3) Monthly Income	(4) Savings	(5) Loans	(6) Durable Goods	(7) Educ Exp.	(8) Health Exp.
Persistent	130.45** (52.44)	34.35** (12.39)	11.41*** (4.14)	44.11 (11.19)	1-7.40 (5.82)	79.76 (71.46)	36.34 (40.34)	-36.15 (36.12)
N	421	421	421	421	421	421	421	421

Notes: Propensity Score Matching based on LASSO-selected control variables. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. Persistent is coded as a dummy variable equal to one if the household is still using the envelopes at endline, and zero otherwise. Online Appendix A describes how outcome variables are calculated. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

Table M36: Midline: Persistent users (Propensity Score Matching)

	(1) Savings	(2) Loans	(3) Durable Good	(4) Productive Investments	(5) Monthly Income	(6) Educ Exp.	(7) Health Exp
Persistent	51.60*** (11.50)	25.01* (13.20)	114.94 (115.75)	57.06 (59.90)	0.41 (5.50)	19.56 (14.78)	95.44 * (45.55)
N	439	439	439	439	439	439	439

Notes: Propensity Score Matching based on LASSO-selected control variables. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. Persistent is coded as a dummy variable equal to one if the household is still using the envelopes at endline, and zero otherwise. Online Appendix A describes how outcome variables are calculated. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

M.2 Self-Control

M.2.1 Endline, Envelopes

Table M37: Endline Outcomes (USD PPP) - Envelopes

	(1) Total Investment	(2) Lumpy Investment	(3) Monthly Income	(4) Savings	(5) Loans	(6) Durable Goods	(7) Educ. Exp.	(8) Health Exp.
Envelopes	-671.79 (1202.68)	23.63 (198.79)	-53.91 (79.80)	94.09 (160.96)	-36.54 (138.60)	1072.03 (853.60)	-289.74 (609.67)	-352.98 (652.32)
Self-Control	-22.48 (40.66)	2.75 (8.33)	1.45 (3.11)	7.47 (7.30)	6.12 (5.96)	77.13** (38.86)	-2.05 (28.04)	4.18 (30.08)
Env_Self-Control	41.45 (64.95)	-1.19 (11.21)	3.33 (4.37)	-5.18 (9.08)	0.70 (7.85)	-40.65 (47.99)	14.29 (32.94)	12.41 (36.17)
Self-Control2	0.32 (0.54)	-0.03 (0.11)	-0.01 (0.04)	-0.10 (0.10)	-0.09 (0.08)	-0.86 (0.53)	0.01 (0.37)	-0.10 (0.41)
Env_Self-Control2	-0.57 (0.86)	0.03 (0.15)	-0.05 (0.06)	0.08 (0.13)	0.00 (0.11)	0.29 (0.66)	-0.18 (0.44)	-0.11 (0.49)
Control Group Mean	261.50	56.72	27.89	42.97	44.14	294.87	278.68	367.37
Control Group S.D.	294.28	92.82	32.26	69.04	76.53	463.74	256.20	323.84
N	737	737	737	737	737	737	737	737

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

M.2.2 Endline, MA and MAD

Table M38: Endline Outcomes (USD PPP) - MA vs. MAD

	(1) Total Investment	(2) Lumpy Investment	(3) Monthly Income	(4) Savings	(5) Loans	(6) Durable Goods	(7) Educ. Exp.	(8) Health Exp.
MA	95.73 (1184.28)	-1.56 (223.56)	-83.49 (89.78)	187.74 (178.58)	-78.58 (130.54)	1300.93 (937.84)	-198.78 (662.60)	-220.53 (690.40)
MAD	-1411.70 (2309.07)	104.00 (270.81)	-29.80 (106.70)	-111.81 (193.80)	2.94 (222.39)	866.17 (1143.81)	-229.71 (734.20)	-451.65 (890.22)
Self-Control	-23.18 (40.31)	2.65 (8.34)	1.52 (3.10)	7.70 (7.32)	6.13 (5.97)	76.97** (38.97)	-2.17 (27.97)	4.15 (30.13)
MA_Self-Control	-8.34 (65.20)	-0.00 (12.72)	5.21 (4.95)	-10.51 (10.28)	3.54 (7.39)	-55.86 (53.24)	6.43 (36.20)	3.16 (38.57)
MAD_Self-Control	90.07 (121.21)	-5.18 (15.16)	1.67 (5.91)	5.76 (10.71)	-1.97 (12.37)	-26.66 (62.95)	14.13 (39.11)	19.76 (48.41)
Self-Control2	0.33 (0.54)	-0.03 (0.11)	-0.02 (0.04)	-0.10 (0.10)	-0.09 (0.08)	-0.85 (0.54)	0.01 (0.37)	-0.10 (0.41)
MA_Self-Control2	0.18 (0.90)	0.01 (0.18)	-0.07 (0.07)	0.16 (0.14)	-0.04 (0.10)	0.53 (0.74)	-0.04 (0.49)	0.04 (0.53)
MAD_Self-Control2	-1.29 (1.56)	0.08 (0.21)	-0.02 (0.08)	-0.07 (0.15)	0.05 (0.17)	0.07 (0.84)	-0.22 (0.51)	-0.24 (0.65)
Control Group Mean	261.50	56.72	27.89	42.97	44.14	294.87	278.68	367.37
Control Group S.D.	294.28	92.82	32.26	69.04	76.53	463.74	256.20	323.84
N	737	737	737	737	737	737	737	737

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

M.2.3 Midline, Envelopes

Table M39: Midline Outcomes (USD PPP) - Envelopes

	(1) Savings	(2) Loans	(3) Durable Goods	(4) Total Investment	(5) Monthly Income	(6) Educ. Exp.	(7) Health Exp.
Envelopes	277.58 (245.73)	387.06 (273.36)	143.92 (1775.61)	1638.30* (990.83)	64.82 (109.38)	243.70 (361.17)	317.77 (525.68)
Self-Control	5.85 (5.78)	3.21 (5.51)	43.04 (66.56)	67.46** (33.51)	-0.19 (3.84)	19.08 (16.67)	-15.53 (21.19)
Env_Self-Control	-12.05 (13.06)	-19.15 (14.44)	-5.39 (97.85)	-90.45* (54.14)	-3.60 (5.95)	-14.45 (19.59)	-17.43 (28.89)
Self-Control2	-0.07 (0.08)	-0.05 (0.08)	-0.52 (0.92)	-0.91* (0.47)	0.00 (0.05)	-0.26 (0.22)	0.21 (0.29)
Env_Self-Control2	0.14 (0.17)	0.24 (0.19)	0.03 (1.32)	1.20* (0.72)	0.05 (0.08)	0.20 (0.26)	0.25 (0.39)
Control Group Mean	46.09	25.55	437.05	272.05	40.02	171.88	166.62
Control Group S.D.	63.26	52.38	772.52	476.95	49.67	170.03	263.67
N	810	810	810	810	810	810	810

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

M.2.4 Midline, MA and MAD

Table M40: Midline Outcomes (USD PPP) - MA vs. MAD

	(1) Savings	(2) Loans	(3) Durable Goods	(4) Total Investment	(5) Monthly Income	(6) Educ. Exp.	(7) Health Exp.
MA	247.38 (312.32)	-18.12 (120.87)	-1254.04 (2186.86)	1908.11 (1221.83)	69.42 (118.88)	136.49 (365.81)	359.53 (578.17)
MAD	334.64 (338.70)	1330.44** (671.66)	1425.46 (2045.62)	689.37 (850.46)	57.93 (172.68)	583.13 (488.88)	298.27 (720.98)
Self-Control	5.84 (5.76)	3.11 (5.51)	38.40 (66.86)	66.86** (33.44)	-0.18 (3.85)	19.20 (16.65)	-15.39 (21.22)
MA_Self-Control	-10.16 (16.66)	2.17 (6.63)	83.19 (122.12)	-101.38 (65.68)	-3.80 (6.42)	-10.39 (20.00)	-20.91 (31.92)
MAD_Self-Control	-15.35 (17.79)	-68.28* (34.97)	-88.83 (110.81)	-44.61 (48.08)	-3.29 (9.24)	-30.43 (26.36)	-15.04 (39.25)
Self-Control2	-0.07 (0.08)	-0.05 (0.07)	-0.46 (0.92)	-0.90* (0.47)	0.00 (0.05)	-0.26 (0.22)	0.21 (0.29)
MA_Self-Control2	0.11 (0.22)	-0.04 (0.09)	-1.26 (1.66)	1.30 (0.86)	0.05 (0.09)	0.17 (0.27)	0.31 (0.44)
MAD_Self-Control2	0.19 (0.23)	0.88* (0.45)	1.26 (1.48)	0.65 (0.66)	0.05 (0.12)	0.38 (0.35)	0.19 (0.53)
Control Group Mean	46.09	25.55	437.05	272.05	40.02	171.88	166.62
Control Group S.D.	63.26	52.38	772.52	476.95	49.67	170.03	263.67
N	810	810	810	810	810	810	810

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

M.3 Depression

M.3.1 Endline, Envelopes

Table M41: Endline Outcomes (USD PPP) - Envelopes

	(1) Total Investment	(2) Lumpy Investment	(3) Monthly Income	(4) Savings	(5) Loans	(6) Durable Goods	(7) Educ. Exp.	(8) Health Exp.
Envelopes	189.82 (219.70)	77.72** (35.84)	2.71 (26.27)	13.19 (33.39)	-1.17 (34.13)	-473.58 (386.92)	26.45 (77.90)	-189.92 (129.67)
Env_Dep_mild	-107.55 (236.22)	-46.44 (42.35)	6.00 (27.46)	2.74 (36.70)	-3.91 (36.21)	615.19 (396.11)	-36.95 (88.82)	226.18 (145.39)
Env_Dep_mod	-111.14 (239.04)	-72.54* (39.35)	7.97 (26.71)	-6.05 (34.99)	6.31 (35.81)	406.43 (390.61)	2.19 (84.04)	167.56 (136.77)
Env_Dep_sev	-125.72 (231.95)	-57.07 (36.82)	-1.38 (26.58)	-2.86 (33.59)	-9.58 (34.69)	475.51 (391.17)	-69.01 (80.33)	117.32 (132.55)
Dep_mild	39.44 (111.07)	42.34 (26.13)	-17.97 (22.35)	-11.57 (30.54)	2.56 (34.84)	-459.30 (390.94)	-18.40 (76.52)	-77.39 (139.70)
Dep_moderate	159.33 (120.46)	72.54*** (21.48)	-18.05 (22.22)	-5.19 (30.15)	6.29 (34.96)	-312.74 (389.53)	-6.07 (71.81)	-34.69 (132.99)
Dep_severe	149.84 (108.26)	59.62*** (18.86)	-13.86 (22.15)	1.34 (30.04)	14.27 (33.94)	-364.84 (387.77)	42.02 (72.00)	23.05 (130.82)
Control Group Mean	261.50	56.72	27.89	42.97	44.14	294.87	278.68	367.37
Control Group S.D.	294.28	92.82	32.26	69.04	76.53	463.74	256.20	323.84
N	737	737	737	737	737	737	737	737

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

M.3.2 Endline, MA and MAD

Table M42: Endline Outcomes (USD PPP) - MA vs. MAD

	(1) Total Investment	(2) Lumpy Investment	(3) Monthly Income	(4) Savings	(5) Loans	(6) Durable Goods	(7) Educ. Exp.	(8) Health Exp.
MA	-73.26 (224.11)	5.44 (28.59)	-24.09 (22.19)	-6.04 (34.56)	-9.35 (34.65)	-436.60 (405.38)	72.42 (104.85)	-145.46 (134.12)
MAD	303.33 (283.90)	110.88** (44.59)	14.66 (29.82)	20.43 (36.71)	1.04 (34.53)	-484.58 (388.00)	8.47 (78.41)	-203.43 (131.67)
MA_Dep_mild	131.71 (236.63)	20.62 (35.98)	31.63 (23.19)	29.96 (39.11)	14.47 (37.72)	506.09 (412.60)	-95.77 (115.93)	136.51 (151.61)
MA_Dep_mod	119.21 (248.90)	-6.14 (33.26)	39.55* (23.17)	20.34 (36.38)	10.97 (36.74)	389.48 (410.26)	-38.53 (110.41)	128.27 (143.25)
MA_Dep_sev	101.51 (234.18)	17.74 (30.61)	30.58 (22.81)	26.26 (34.56)	-4.61 (35.11)	437.08 (409.39)	-108.51 (106.91)	80.08 (137.94)
MAD_Dep_mild	-191.76 (301.82)	-73.76 (52.06)	-4.53 (31.83)	-14.00 (40.38)	-18.12 (36.59)	712.41* (409.93)	-4.05 (90.95)	292.75* (152.37)
MAD_Dep_mod	-187.03 (308.90)	-98.99** (48.52)	-9.57 (30.36)	-21.79 (39.09)	8.01 (36.40)	394.83 (393.30)	14.41 (88.23)	175.74 (140.31)
MAD_Dep_sev	-206.47 (303.72)	-91.96** (46.30)	-17.78 (30.11)	-18.82 (37.47)	-9.17 (35.34)	488.66 (393.62)	-56.54 (82.15)	125.40 (135.48)
Dep_mild	35.54 (110.19)	42.57 (26.24)	-18.00 (22.27)	-12.29 (30.17)	1.92 (34.78)	-457.60 (392.29)	-17.09 (76.50)	-74.67 (139.75)
Dep_moderate	156.19 (119.44)	72.60*** (21.56)	-18.22 (22.16)	-6.06 (29.77)	5.86 (34.89)	-311.66 (390.85)	-5.14 (71.73)	-32.75 (132.86)
Dep_severe	145.22 (107.26)	59.45*** (19.00)	-13.90 (22.10)	0.65 (29.67)	13.80 (33.85)	-363.73 (389.14)	43.06 (71.97)	24.87 (130.67)
Control Group Mean	261.50	56.72	27.89	42.97	44.14	294.87	278.68	367.37
Control Group S.D.	294.28	92.82	32.26	69.04	76.53	463.74	256.20	323.84
N	737	737	737	737	737	737	737	737

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

M.3.3 Midline, Envelopes

Table M43: Midline Outcomes (USD PPP) - Envelopes

	(1) Savings	(2) Loans	(3) Durable Goods	(4) Total Investment	(5) Monthly Income	(6) Educ. Exp.	(7) Health Exp.
Envelopes	10.36 (42.97)	-5.48 (40.85)	-212.49 (384.25)	50.19 (169.80)	5.49 (31.63)	-89.65 (87.69)	-189.49 (130.06)
Env_Dep_mild	24.83 (46.17)	5.36 (41.33)	307.98 (462.80)	-118.63 (194.75)	-3.47 (34.16)	122.52 (92.31)	210.68 (139.36)
Env_Dep_mod	17.26 (44.17)	14.19 (42.21)	208.94 (407.05)	-57.12 (178.04)	-7.36 (32.48)	98.35 (91.73)	160.33 (133.81)
Env_Dep_sev	26.46 (43.79)	34.85 (41.11)	163.49 (385.24)	-82.38 (176.10)	-6.06 (31.82)	67.36 (88.41)	236.64* (131.79)
Dep_mild	-33.35 (39.13)	-14.28 (38.52)	-238.07 (364.74)	-47.82 (156.81)	-24.40 (27.70)	-141.15 (86.57)	-104.40 (130.59)
Dep_moderate	-33.63 (36.91)	-6.68 (40.16)	-206.37 (331.54)	-48.98 (136.66)	-13.49 (26.22)	-92.55 (86.93)	-116.48 (126.86)
Dep_severe	-27.02 (36.50)	-8.68 (39.48)	-307.40 (316.23)	-34.80 (136.63)	-18.72 (25.64)	-83.64 (83.84)	-152.19 (125.63)
Control Group Mean	46.09	25.55	437.05	272.05	40.02	171.88	166.62
Control Group S.D.	63.26	52.38	772.52	476.95	49.67	170.03	263.67
N	810	810	810	810	810	810	810

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

M.3.4 Midline, MA and MAD

Table M44: Midline Outcomes (USD PPP) - MA vs. MAD

	(1) Savings	(2) Loans	(3) Durable Goods	(4) Total Investment	(5) Monthly Income	(6) Educ. Exp.	(7) Health Exp.
MA	-31.11 (47.35)	0.66 (49.92)	-446.20 (317.85)	-120.99 (139.53)	-18.20 (29.31)	-30.82 (104.03)	-197.64 (131.33)
MAD	33.87 (47.69)	-9.11 (40.54)	-100.02 (474.57)	155.41 (212.72)	20.66 (37.94)	-125.15 (85.20)	-180.82 (138.70)
MA_Dep_mild	62.16 (51.65)	-4.77 (50.26)	704.29 (452.16)	34.03 (167.68)	16.49 (32.07)	48.89 (110.13)	170.25 (141.18)
MA_Dep_mod	67.16 (48.92)	5.36 (51.42)	540.65 (357.65)	122.06 (152.55)	13.43 (30.45)	54.60 (108.08)	191.79 (136.45)
MA_Dep_sev	61.35 (48.49)	10.20 (50.23)	436.83 (323.81)	130.42 (153.14)	19.22 (29.52)	9.20 (104.68)	260.90* (134.17)
MAD_Dep_mild	5.97 (50.99)	16.60 (41.41)	-20.95 (535.58)	-209.36 (236.46)	-14.41 (41.33)	175.33* (90.06)	256.46* (152.21)
MAD_Dep_mod	-16.66 (49.28)	22.27 (42.26)	-31.43 (498.47)	-173.13 (222.24)	-18.85 (39.04)	114.79 (90.36)	121.72 (143.14)
MAD_Dep_sev	8.51 (49.05)	55.42 (42.62)	7.55 (475.69)	-225.83 (216.43)	-22.60 (38.32)	102.37 (86.51)	213.63 (140.84)
Dep_mild	-34.49 (39.35)	-15.08 (39.12)	-249.26 (365.61)	-45.09 (158.74)	-23.82 (27.98)	-141.16 (87.08)	-101.52 (132.00)
Dep_moderate	-35.27 (37.10)	-6.54 (40.67)	-224.74 (331.16)	-50.59 (138.95)	-13.14 (26.50)	-92.90 (87.38)	-116.11 (128.22)
Dep_severe	-28.21 (36.69)	-8.82 (40.00)	-317.58 (316.23)	-35.17 (138.91)	-18.40 (25.92)	-83.87 (84.27)	-151.36 (127.03)
Control Group Mean	46.09	25.55	437.05	272.05	40.02	171.88	166.62
Control Group S.D.	63.26	52.38	772.52	476.95	49.67	170.03	263.67
N	810	810	810	810	810	810	810

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

M.4 Vulnerability

M.4.1 Endline, Envelopes

Table M45: Endline Outcomes (USD PPP) - Envelopes

	(1) Total Investment	(2) Lumpy Investment	(3) Monthly Income	(4) Savings	(5) Loans	(6) Durable Goods	(7) Educ. Exp.	(8) Health Exp.
Envelopes	65.34 (55.36)	20.95* (11.40)	8.57* (5.05)	21.27** (9.17)	-3.29 (8.98)	13.11 (56.49)	-34.15 (24.54)	-53.27 (35.42)
Prot_ref	6.11 (73.79)	6.68 (13.79)	7.34 (5.04)	11.23 (11.84)	-1.95 (10.41)	35.24 (68.07)	17.69 (34.19)	31.48 (42.56)
Env_Prot_ref	2.34 (77.56)	-5.10 (14.42)	-5.49 (6.18)	-18.35 (11.89)	-4.06 (10.62)	-44.48 (71.66)	24.06 (33.74)	1.75 (44.09)
Control Group Mean	261.50	56.72	27.89	42.97	44.14	294.87	278.68	367.37
Control Group S.D.	294.28	92.82	32.26	69.04	76.53	463.74	256.20	323.84
N	737	737	737	737	737	737	737	737

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

M.4.2 Endline, MA and MAD

Table M46: Endline Outcomes (USD PPP) - MA vs. MAD

	(1) Total Investment	(2) Lumpy Investment	(3) Monthly Income	(4) Savings	(5) Loans	(6) Durable Goods	(7) Educ. Exp.	(8) Health Exp.
MA	36.62 (54.89)	32.00** (15.38)	21.88*** (7.36)	41.52*** (12.39)	0.58 (10.36)	39.77 (68.64)	-13.41 (30.30)	-41.43 (42.51)
MAD	91.87 (93.72)	11.50 (12.93)	-3.12 (5.22)	3.41 (9.97)	-6.61 (9.62)	-9.87 (64.80)	-52.30* (27.73)	-63.55 (39.26)
Prot_ref	5.70 (73.77)	5.93 (13.72)	6.79 (4.99)	10.62 (11.81)	-2.21 (10.44)	33.61 (68.23)	16.73 (34.22)	30.84 (42.57)
MA_Prot_ref	-11.02 (79.10)	-25.59 (18.38)	-20.07** (8.41)	-36.67** (15.40)	-11.35 (11.98)	-88.75 (84.03)	-1.33 (40.51)	-15.29 (51.93)
MAD_Prot_ref	19.68 (122.96)	14.43 (17.18)	7.69 (6.75)	-2.29 (12.87)	2.90 (11.77)	-2.65 (84.29)	47.35 (38.48)	17.66 (49.65)
Control Group Mean	261.50	56.72	27.89	42.97	44.14	294.87	278.68	367.37
Control Group S.D.	294.28	92.82	32.26	69.04	76.53	463.74	256.20	323.84
N	737	737	737	737	737	737	737	737

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

M.4.3 Midline, Envelopes

Table M47: Midline Outcomes (USD PPP) - Envelopes

	(1) Savings	(2) Loans	(3) Durable Goods	(4) Total Investment	(5) Monthly Income	(6) Educ. Exp.	(7) Health Exp.
Envelopes	26.00*** (8.11)	17.41** (7.90)	-71.34 (110.10)	-23.30 (47.77)	-3.17 (6.55)	-30.62 (19.70)	38.39 (25.19)
Prot_ref	14.48 (11.31)	10.62 (9.25)	-69.04 (124.99)	20.39 (69.66)	-6.07 (7.57)	-38.92* (22.37)	57.49* (31.88)
Env_Prot_ref	11.43 (11.21)	1.35 (11.11)	93.56 (128.34)	-7.07 (67.41)	4.64 (7.79)	34.82 (23.36)	-33.97 (33.27)
Control Group Mean	46.09	25.55	437.05	272.05	40.02	171.88	166.62
Control Group S.D.	63.26	52.38	772.52	476.95	49.67	170.03	263.67
N	810	810	810	810	810	810	810

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

M.4.4 Midline, MA and MAD

Table M48: Midline Outcomes (USD PPP) - MA vs. MAD

	(1) Savings	(2) Loans	(3) Durable Goods	(4) Total Investment	(5) Monthly Income	(6) Educ. Exp.	(7) Health Exp.
MA	34.73*** (10.96)	6.83 (7.48)	109.59 (151.82)	-7.16 (58.01)	-1.32 (7.53)	-31.95 (21.43)	63.48** (30.64)
MAD	16.98* (8.91)	28.27** (11.97)	-257.97*** (97.22)	-39.83 (46.95)	-5.09 (7.42)	-29.21 (22.73)	12.50 (29.87)
Prot_ref	14.05 (11.36)	10.27 (9.23)	-70.78 (124.78)	20.86 (69.73)	-6.21 (7.59)	-38.56* (22.34)	57.10* (31.89)
MA_Prot_ref	-6.76 (13.77)	-0.30 (10.32)	-70.45 (172.91)	-7.26 (80.72)	-0.31 (8.91)	44.68* (26.39)	-60.51 (39.64)
MAD_Prot_ref	30.84** (13.84)	4.40 (16.88)	257.27** (125.65)	-8.71 (67.67)	9.98 (9.30)	23.90 (26.34)	-7.01 (39.52)
Control Group Mean	46.09	25.55	437.05	272.05	40.02	171.88	166.62
Control Group S.D.	63.26	52.38	772.52	476.95	49.67	170.03	263.67
N	810	810	810	810	810	810	810

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

M.5 Income

M.5.1 Endline, Envelopes

Table M49: Endline Outcomes (USD PPP) - Envelopes

	(1) Total Investment	(2) Lumpy Investment	(3) Monthly Income	(4) Savings	(5) Loans	(6) Durable Goods	(7) Educ. Exp.	(8) Health Exp.
Envelopes	83.77* (44.67)	23.38*** (8.19)	4.92 (3.57)	5.96 (6.83)	-9.71 (7.15)	-13.72 (46.32)	9.43 (21.26)	-45.32 (29.57)
High_inc	77.57* (43.76)	26.05** (11.42)	3.27 (4.47)	1.54 (10.69)	-7.33 (8.65)	59.43 (63.23)	28.60 (33.02)	2.59 (39.23)
Env_High_inc	-30.49 (87.03)	-10.26 (15.23)	0.67 (5.58)	8.51 (11.88)	8.03 (10.05)	2.89 (71.46)	-61.86* (35.91)	-15.42 (43.75)
Control Group Mean	261.50	56.72	27.89	42.97	44.14	294.87	278.68	367.37
Control Group S.D.	294.28	92.82	32.26	69.04	76.53	463.74	256.20	323.84
N	737	737	737	737	737	737	737	737

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

M.5.2 Endline, MA and MAD

Table M50: Endline Outcomes (USD PPP) - MA vs. MAD

	(1) Total Investment	(2) Lumpy Investment	(3) Monthly Income	(4) Savings	(5) Loans	(6) Durable Goods	(7) Educ. Exp.	(8) Health Exp.
MA	75.56 (58.78)	21.00** (10.58)	7.86* (4.56)	6.90 (8.01)	-9.54 (7.83)	-1.13 (55.04)	5.77 (24.17)	-53.17 (33.15)
MAD	90.27* (54.72)	25.60** (10.03)	2.14 (3.95)	5.37 (7.59)	-9.94 (8.03)	-26.37 (51.09)	13.21 (25.57)	-37.53 (34.30)
High_inc	81.09* (44.53)	26.23** (11.41)	3.08 (4.46)	0.92 (10.63)	-7.21 (8.66)	60.75 (63.52)	27.93 (33.10)	2.04 (39.29)
MA_High_inc	-98.48 (77.07)	-12.11 (17.84)	1.54 (7.28)	23.32 (15.17)	5.18 (10.84)	-35.88 (79.84)	-44.51 (42.12)	3.17 (50.42)
MAD_High_inc	42.80 (136.31)	-8.05 (17.94)	-0.50 (6.43)	-7.33 (12.60)	11.02 (11.47)	42.72 (84.30)	-79.90* (41.50)	-34.32 (49.96)
Control Group Mean	261.50	56.72	27.89	42.97	44.14	294.87	278.68	367.37
Control Group S.D.	294.28	92.82	32.26	69.04	76.53	463.74	256.20	323.84
N	737	737	737	737	737	737	737	737

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

M.5.3 Midline, Envelopes

Table M51: Midline Outcomes (USD PPP) - Envelopes

	(1) Savings	(2) Loans	(3) Durable Goods	(4) Total Investment	(5) Monthly Income	(6) Educ. Exp.	(7) Health Exp.
Envelopes	36.19*** (7.61)	15.71** (6.61)	-70.32 (80.59)	23.55 (41.12)	-3.35 (5.07)	-7.79 (14.97)	23.48 (23.57)
High_inc	0.26 (9.87)	-6.92 (9.01)	-36.78 (85.76)	82.63 (58.04)	1.68 (6.25)	-12.32 (19.81)	-11.02 (27.30)
Env_High_inc	-7.59 (11.89)	5.20 (10.80)	127.25 (106.28)	-111.90* (66.56)	7.20 (7.79)	-5.16 (21.72)	-14.56 (32.75)
Control Group Mean	46.09	25.55	437.05	272.05	40.02	171.88	166.62
Control Group S.D.	63.26	52.38	772.52	476.95	49.67	170.03	263.67
N	810	810	810	810	810	810	810

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

M.5.4 Midline, MA and MAD

Table M52: Midline Outcomes (USD PPP) - MA vs. MAD

	(1) Savings	(2) Loans	(3) Durable Goods	(4) Total Investment	(5) Monthly Income	(6) Educ. Exp.	(7) Health Exp.
MA	30.80*** (8.76)	7.62 (6.86)	1.59 (100.46)	37.07 (53.97)	-4.11 (5.71)	-2.42 (17.76)	29.77 (27.13)
MAD	41.84*** (10.45)	23.78** (9.65)	-143.60* (82.01)	9.87 (42.51)	-2.60 (5.91)	-13.27 (16.70)	17.17 (28.12)
High_inc	0.15 (9.90)	-6.17 (8.88)	-40.24 (85.50)	81.72 (57.76)	1.80 (6.27)	-12.55 (19.85)	-11.56 (27.31)
MA_High_inc	-1.37 (13.92)	-2.65 (10.98)	135.82 (143.75)	-105.39 (81.10)	5.68 (8.84)	-5.08 (25.55)	-9.27 (38.38)
MAD_High_inc	-13.92 (15.82)	15.91 (17.67)	103.96 (119.49)	-122.10 (74.42)	9.11 (9.61)	-6.25 (24.66)	-21.94 (39.35)
Control Group Mean	46.09	25.55	437.05	272.05	40.02	171.88	166.62
Control Group S.D.	63.26	52.38	772.52	476.95	49.67	170.03	263.67
N	810	810	810	810	810	810	810

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

M.6 Sex

M.6.1 Endline, Envelopes

Table M53: Endline Outcomes (USD PPP) - Envelopes

	(1) Total Investment	(2) Lumpy Investment	(3) Monthly Income	(4) Savings	(5) Loans	(6) Durable Goods	(7) Educ. Exp.	(8) Health Exp.
Envelopes	176.32 (139.00)	55.53*** (18.91)	2.24 (6.71)	-5.77 (14.57)	-23.35* (13.64)	-99.60 (90.52)	-3.13 (41.54)	-15.54 (46.85)
Female	-23.89 (67.37)	20.64 (13.06)	-4.70 (5.54)	-19.96 (12.30)	-10.20 (13.49)	-110.25 (83.65)	-2.69 (35.79)	2.80 (44.11)
Env_Female	-132.54 (147.50)	-45.77** (20.44)	3.42 (7.36)	18.59 (15.93)	21.17 (14.68)	102.14 (97.52)	-19.01 (45.76)	-44.30 (52.92)
Control Group Mean	261.50	56.72	27.89	42.97	44.14	294.87	278.68	367.37
Control Group S.D.	294.28	92.82	32.26	69.04	76.53	463.74	256.20	323.84
N	737	737	737	737	737	737	737	737

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

M.6.2 Endline, MA and MAD

Table M54: Endline Outcomes (USD PPP) - MA vs. MAD

	(1) Total Investment	(2) Lumpy Investment	(3) Monthly Income	(4) Savings	(5) Loans	(6) Durable Goods	(7) Educ. Exp.	(8) Health Exp.
MA	70.26 (150.48)	47.90** (24.02)	1.84 (8.48)	1.64 (18.08)	-21.83 (14.77)	-112.24 (106.73)	-24.97 (47.11)	25.22 (54.26)
MAD	287.88 (211.11)	63.58*** (24.22)	2.34 (7.19)	-14.01 (15.40)	-24.80* (13.86)	-86.42 (100.10)	18.75 (51.18)	-57.02 (53.31)
Female	-21.58 (67.51)	20.81 (13.08)	-4.80 (5.53)	-20.26* (12.28)	-10.18 (13.50)	-110.02 (83.80)	-2.55 (35.83)	2.35 (44.07)
MA_Female	-50.66 (156.77)	-40.26 (25.67)	8.05 (9.42)	19.05 (19.63)	18.10 (15.73)	113.48 (114.65)	11.73 (51.37)	-93.50 (61.26)
MAD_Female	-221.41 (219.40)	-51.82** (26.01)	-0.77 (7.88)	19.24 (16.76)	24.14 (15.33)	90.13 (109.16)	-49.70 (55.86)	5.66 (60.15)
Control Group Mean	261.50	56.72	27.89	42.97	44.14	294.87	278.68	367.37
Control Group S.D.	294.28	92.82	32.26	69.04	76.53	463.74	256.20	323.84
N	737	737	737	737	737	737	737	737

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

M.6.3 Midline, Envelopes

Table M55: Midline Outcomes (USD PPP) - Envelopes

	(1) Savings	(2) Loans	(3) Durable Goods	(4) Total Investment	(5) Monthly Income	(6) Educ. Exp.	(7) Health Exp.
Envelopes	25.90* (13.80)	23.05** (10.80)	-75.98 (132.31)	-10.05 (94.54)	-2.46 (9.08)	7.85 (26.24)	51.04 (36.49)
Female	-3.44 (11.68)	9.89 (8.75)	-186.23 (117.89)	-20.24 (84.36)	-5.00 (8.04)	7.54 (21.13)	15.65 (30.41)
Env_Female	8.56 (15.24)	-5.86 (10.98)	74.63 (147.29)	-21.29 (101.00)	2.56 (9.93)	-21.01 (28.43)	-40.40 (41.21)
Control Group Mean	46.09	25.55	437.05	272.05	40.02	171.88	166.62
Control Group S.D.	63.26	52.38	772.52	476.95	49.67	170.03	263.67
N	810	810	810	810	810	810	810

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

M.6.4 Midline, MA and MAD

Table M56: Midline Outcomes (USD PPP) - MA vs. MAD

	(1) Savings	(2) Loans	(3) Durable Goods	(4) Total Investment	(5) Monthly Income	(6) Educ. Exp.	(7) Health Exp.
MA	19.35 (15.88)	17.14 (12.69)	-49.89 (154.43)	21.88 (118.05)	-7.43 (10.20)	-12.80 (30.15)	34.67 (42.90)
MAD	33.95** (17.26)	31.54** (12.69)	-117.03 (160.26)	-49.60 (98.21)	3.54 (10.92)	31.44 (33.43)	69.19 (47.18)
Female	-3.37 (11.70)	10.24 (8.81)	-188.72 (118.17)	-20.72 (84.47)	-4.98 (8.05)	7.32 (21.08)	15.34 (30.39)
MA_Female	13.28 (17.57)	-12.91 (14.00)	138.25 (177.53)	-41.00 (127.49)	7.13 (11.21)	10.45 (33.04)	-10.54 (48.55)
MAD_Female	2.46 (19.21)	-0.72 (13.54)	21.54 (173.43)	5.32 (103.91)	-2.98 (11.88)	-55.81 (35.39)	-72.62 (51.90)
Control Group Mean	46.09	25.55	437.05	272.05	40.02	171.88	166.62
Control Group S.D.	63.26	52.38	772.52	476.95	49.67	170.03	263.67
N	810	810	810	810	810	810	810

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

M.7 Desire for Sufficient Income

M.7.1 Endline, Envelopes

Table M57: Endline Outcomes (USD PPP) - Envelopes

	(1) Total Investment	(2) Lumpy Investment	(3) Monthly Income	(4) Savings	(5) Loans	(6) Durable Goods	(7) Educ. Exp.	(8) Health Exp.
Envelopes	55.22 (46.76)	24.30*** (9.23)	4.29 (3.92)	0.92 (8.51)	1.37 (7.37)	-35.41 (49.95)	-45.43* (26.56)	-39.86 (31.38)
DesInc	27.46 (42.15)	17.18 (10.56)	-1.74 (4.02)	-13.28 (9.01)	7.68 (8.79)	-26.84 (59.62)	-60.30** (28.44)	24.15 (35.98)
Env_DesInc	23.86 (84.64)	-12.24 (14.19)	1.45 (5.50)	16.45 (11.30)	-13.84 (9.78)	38.44 (71.31)	49.68 (33.55)	-23.11 (43.43)
Control Group Mean	261.50	56.72	27.89	42.97	44.14	294.87	278.68	367.37
Control Group S.D.	294.28	92.82	32.26	69.04	76.53	463.74	256.20	323.84
N	737	737	737	737	737	737	737	737

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

M.7.2 Endline, MA and MAD

Table M58: Endline Outcomes (USD PPP) - MA vs. MAD

	(1) Total Investment	(2) Lumpy Investment	(3) Monthly Income	(4) Savings	(5) Loans	(6) Durable Goods	(7) Educ. Exp.	(8) Health Exp.
MA	35.93 (46.46)	29.67** (12.32)	11.12** (5.17)	11.01 (10.32)	-2.54 (8.38)	-2.21 (59.28)	-35.22 (30.36)	-51.49 (37.20)
MAD	73.61 (69.66)	19.65* (10.35)	-1.87 (4.36)	-8.27 (9.02)	4.87 (8.11)	-64.69 (54.85)	-54.60* (30.35)	-29.56 (34.41)
DesInc	28.21 (42.34)	17.37 (10.58)	-1.71 (4.01)	-13.23 (9.02)	7.63 (8.80)	-26.09 (59.71)	-60.21** (28.47)	23.91 (36.06)
MA_DesInc	-13.25 (81.61)	-28.06 (17.16)	-4.97 (6.96)	11.84 (14.16)	-8.30 (11.00)	-31.58 (82.29)	37.74 (38.16)	-0.70 (49.67)
MAD_DesInc	63.51 (112.90)	2.83 (17.09)	6.98 (6.31)	19.59 (12.41)	-18.82* (10.96)	103.80 (81.48)	60.17 (40.90)	-43.89 (49.83)
Control Group Mean	261.50	56.72	27.89	42.97	44.14	294.87	278.68	367.37
Control Group S.D.	294.28	92.82	32.26	69.04	76.53	463.74	256.20	323.84
N	737	737	737	737	737	737	737	737

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

M.7.3 Midline, Envelopes

Table M59: Midline Outcomes (USD PPP) - Envelopes

	(1) Savings	(2) Loans	(3) Durable Goods	(4) Total Investment	(5) Monthly Income	(6) Educ. Exp.	(7) Health Exp.
Envelopes	34.88*** (8.89)	31.33*** (8.92)	55.65 (84.10)	20.67 (50.48)	5.18 (5.47)	-15.50 (16.97)	32.00 (24.91)
DesInc	0.10 (8.54)	13.74** (6.84)	82.68 (95.45)	79.14 (58.54)	12.93** (5.83)	-0.76 (18.43)	20.31 (26.57)
Env_DesInc	-3.70 (12.69)	-25.00** (12.01)	-133.65 (126.24)	-91.88 (74.34)	-10.45 (7.41)	11.60 (22.02)	-27.12 (33.73)
Control Group Mean	46.09	25.55	437.05	272.05	40.02	171.88	166.62
Control Group S.D.	63.26	52.38	772.52	476.95	49.67	170.03	263.67
N	810	810	810	810	810	810	810

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

M.7.4 Midline, MA and MAD

Table M60: Midline Outcomes (USD PPP) - MA vs. MAD

	(1) Savings	(2) Loans	(3) Durable Goods	(4) Total Investment	(5) Monthly Income	(6) Educ. Exp.	(7) Health Exp.
MA	29.18*** (9.83)	12.15 (7.73)	133.56 (116.52)	45.01 (60.90)	5.17 (6.38)	-15.91 (19.07)	61.70** (28.58)
MAD	40.56*** (11.91)	50.68*** (14.54)	-25.37 (81.38)	-3.99 (48.47)	5.32 (6.54)	-15.49 (19.23)	2.84 (29.85)
DesInc	0.04 (8.56)	13.72** (6.88)	80.80 (95.59)	79.04 (58.72)	13.01** (5.84)	-1.07 (18.44)	20.86 (26.61)
MA_DesInc	1.78 (14.78)	-10.83 (11.65)	-133.18 (172.52)	-107.19 (91.12)	-12.87 (8.50)	21.31 (25.48)	-66.53* (39.08)
MAD_DesInc	-8.99 (16.21)	-38.11** (17.60)	-142.85 (119.23)	-78.05 (70.91)	-7.84 (9.04)	1.17 (24.74)	12.06 (39.80)
Control Group Mean	46.09	25.55	437.05	272.05	40.02	171.88	166.62
Control Group S.D.	63.26	52.38	772.52	476.95	49.67	170.03	263.67
N	810	810	810	810	810	810	810

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

M.8 Hyperbolic Discounting

M.8.1 Endline, Envelopes

Table M61: Endline Outcomes (USD PPP) - Envelopes

	(1) Total Investment	(2) Lumpy Investment	(3) Monthly Income	(4) Savings	(5) Loans	(6) Durable Goods	(7) Educ. Exp.	(8) Health Exp.
Envelopes	80.49** (40.42)	22.89*** (7.67)	6.21** (2.83)	9.11 (6.11)	-6.89 (4.97)	7.19 (37.51)	-15.82 (18.28)	-54.26** (22.54)
Hyperbolic	-30.10 (87.74)	33.55 (21.92)	9.14 (7.96)	-9.01 (14.03)	-4.18 (15.46)	120.31 (95.77)	53.91 (49.25)	29.36 (60.17)
Env_Hyperbolic	-103.59 (101.46)	-52.33** (26.17)	-12.00 (10.28)	6.60 (19.18)	9.48 (17.50)	-218.90** (106.46)	-40.41 (55.54)	8.86 (71.94)
Control Group Mean	261.50	56.72	27.89	42.97	44.14	294.87	278.68	367.37
Control Group S.D.	294.28	92.82	32.26	69.04	76.53	463.74	256.20	323.84
N	737	737	737	737	737	737	737	737

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

M.8.2 Endline, MA and MAD

Table M62: Endline Outcomes (USD PPP) - MA vs. MAD

	(1) Total Investment	(2) Lumpy Investment	(3) Monthly Income	(4) Savings	(5) Loans	(6) Durable Goods	(7) Educ. Exp.	(8) Health Exp.
MA	31.12 (45.26)	20.78** (9.52)	9.62*** (3.59)	14.87** (7.41)	-8.61 (5.44)	-3.83 (42.88)	-17.25 (20.76)	-68.78*** (25.68)
MAD	130.02** (64.72)	24.91*** (9.00)	2.88 (3.21)	3.59 (6.52)	-5.12 (5.64)	18.61 (44.42)	-14.02 (21.94)	-38.85 (26.25)
Hyperbolic	-32.41 (89.32)	33.49 (21.94)	9.29 (7.90)	-8.80 (14.10)	-4.27 (15.49)	119.63 (95.60)	53.69 (49.47)	28.31 (60.51)
MA_Hyperbolic	0.46 (116.11)	-59.03** (27.21)	-11.95 (14.58)	24.06 (25.68)	15.19 (19.46)	-150.84 (116.03)	6.23 (68.38)	142.96* (79.25)
MAD_Hyperbolic	-196.32* (116.54)	-45.99 (31.29)	-12.33 (9.84)	-9.99 (19.37)	4.32 (19.95)	-281.04** (117.80)	-83.43 (57.66)	-114.07 (80.46)
Control Group Mean	261.50	56.72	27.89	42.97	44.14	294.87	278.68	367.37
Control Group S.D.	294.28	92.82	32.26	69.04	76.53	463.74	256.20	323.84
N	737	737	737	737	737	737	737	737

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

M.8.3 Midline, Envelopes

Table M63: Midline Outcomes (USD PPP) - Envelopes

	(1) Savings	(2) Loans	(3) Durable Goods	(4) Total Investment	(5) Monthly Income	(6) Educ. Exp.	(7) Health Exp.
Envelopes	30.33*** (6.18)	14.61** (5.68)	-14.01 (62.06)	-46.94 (36.61)	-2.76 (3.92)	-12.43 (11.31)	23.36 (16.98)
Hyperbolic	-19.85 (14.33)	-26.49*** (8.85)	135.21 (199.77)	-95.52 (74.73)	-15.10** (6.02)	-18.75 (35.50)	67.67 (52.28)
Env_Hyperbolic	26.99 (18.64)	37.02** (18.38)	-39.94 (255.50)	185.82* (105.01)	24.01** (9.56)	29.62 (39.55)	-64.60 (61.69)
Control Group Mean	46.09	25.55	437.05	272.05	40.02	171.88	166.62
Control Group S.D.	63.26	52.38	772.52	476.95	49.67	170.03	263.67
N	810	810	810	810	810	810	810

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

M.8.4 Midline, MA and MAD

Table M64: Midline Outcomes (USD PPP) - MA vs. MAD

	(1) Savings	(2) Loans	(3) Durable Goods	(4) Total Investment	(5) Monthly Income	(6) Educ. Exp.	(7) Health Exp.
MA	29.29*** (7.36)	3.48 (5.39)	61.35 (78.35)	-37.61 (43.59)	-3.64 (4.34)	-8.69 (13.25)	24.24 (19.79)
MAD	31.42*** (8.12)	26.74*** (8.75)	-96.21 (64.20)	-56.81 (35.59)	-1.80 (4.92)	-16.48 (12.81)	22.60 (20.91)
Hyperbolic	-20.06 (14.34)	-27.11*** (8.94)	139.34 (200.19)	-94.31 (74.93)	-15.16** (6.02)	-18.44 (35.60)	68.34 (52.52)
MA_Hyperbolic	12.53 (21.05)	32.74** (13.12)	-19.01 (324.03)	241.67 (153.16)	20.78* (11.87)	40.41 (45.19)	-3.04 (68.59)
MAD_Hyperbolic	42.15* (24.34)	42.13 (31.80)	-66.14 (258.50)	126.80 (106.54)	27.38** (12.92)	18.15 (41.31)	-128.87* (69.30)
Control Group Mean	46.09	25.55	437.05	272.05	40.02	171.88	166.62
Control Group S.D.	63.26	52.38	772.52	476.95	49.67	170.03	263.67
N	810	810	810	810	810	810	810

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

M.9 Naive Diversification

M.9.1 Endline, Envelopes

Table M65: Endline Outcomes (USD PPP) - Envelopes

	(1) Total Investment	(2) Lumpy Investment	(3) Monthly Income	(4) Savings	(5) Loans	(6) Durable Goods	(7) Educ. Exp.	(8) Health Exp.
Envelopes	89.17 (58.94)	23.85** (9.77)	0.18 (3.70)	3.68 (8.26)	-4.99 (7.09)	9.74 (49.48)	-23.03 (26.87)	-19.52 (31.67)
Naive	14.44 (47.72)	9.85 (11.10)	-3.90 (3.98)	-7.92 (9.05)	-6.13 (8.97)	31.84 (60.72)	-54.60* (29.07)	64.36* (37.51)
Env_Naive	-43.78 (84.46)	-11.61 (14.70)	9.54* (5.49)	11.29 (11.59)	-2.30 (9.91)	-47.74 (67.99)	4.22 (35.20)	-60.72 (43.69)
Control Group Mean	261.50	56.72	27.89	42.97	44.14	294.87	278.68	367.37
Control Group S.D.	294.28	92.82	32.26	69.04	76.53	463.74	256.20	323.84
N	737	737	737	737	737	737	737	737

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

M.9.2 Endline, MA and MAD

Table M66: Endline Outcomes (USD PPP) - MA vs. MAD

	(1) Total Investment	(2) Lumpy Investment	(3) Monthly Income	(4) Savings	(5) Loans	(6) Durable Goods	(7) Educ. Exp.	(8) Health Exp.
MA	22.72 (63.75)	10.61 (11.66)	0.40 (4.26)	6.74 (10.25)	-9.10 (7.79)	-9.57 (56.57)	-40.34 (32.02)	-13.65 (35.79)
MAD	148.41* (85.97)	35.73*** (11.97)	0.06 (4.34)	1.08 (9.30)	-1.27 (8.05)	27.08 (58.12)	-7.35 (31.50)	-24.80 (36.29)
Naive	15.21 (47.86)	10.02 (11.09)	-3.88 (3.98)	-7.93 (9.03)	-6.07 (8.99)	32.09 (60.79)	-54.35* (29.08)	64.28* (37.56)
MA_Naive	12.76 (89.29)	8.35 (17.34)	15.36** (6.85)	20.05 (14.34)	3.95 (10.74)	-16.81 (78.44)	47.11 (41.99)	-71.63 (49.76)
MAD_Naive	-92.09 (117.16)	-30.99* (17.50)	2.94 (6.43)	0.70 (12.49)	-8.41 (11.34)	-78.07 (79.43)	-39.98 (39.35)	-49.82 (50.17)
Control Group Mean	261.50	56.72	27.89	42.97	44.14	294.87	278.68	367.37
Control Group S.D.	294.28	92.82	32.26	69.04	76.53	463.74	256.20	323.84
N	737	737	737	737	737	737	737	737

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

M.9.3 Midline, Envelopes

Table M67: Midline Outcomes (USD PPP) - Envelopes

	(1) Savings	(2) Loans	(3) Durable Goods	(4) Total Investment	(5) Monthly Income	(6) Educ. Exp.	(7) Health Exp.
Envelopes	33.39*** (9.06)	18.02* (10.26)	29.24 (94.57)	28.27 (34.34)	-4.05 (5.91)	-2.15 (16.90)	13.13 (23.63)
Naive	-0.98 (9.16)	0.09 (7.59)	38.25 (103.40)	119.86** (58.50)	-3.21 (6.60)	7.98 (19.95)	-0.27 (27.62)
Env_Naive	-1.91 (12.93)	-3.67 (13.49)	-105.85 (137.67)	-56.42 (68.09)	2.20 (8.24)	-15.20 (24.18)	19.39 (35.38)
Control Group Mean	46.09	25.55	437.05	272.05	40.02	171.88	166.62
Control Group S.D.	63.26	52.38	772.52	476.95	49.67	170.03	263.67
N	707	707	707	707	707	707	707

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

M.9.4 Midline, MA and MAD

Table M68: Midline Outcomes (USD PPP) - MA vs. MAD

	(1) Savings	(2) Loans	(3) Durable Goods	(4) Total Investment	(5) Monthly Income	(6) Educ. Exp.	(7) Health Exp.
MA	25.92** (10.47)	0.69 (8.88)	157.70 (134.73)	35.40 (40.38)	-7.42 (6.39)	-2.94 (19.60)	8.71 (28.91)
MAD	40.20*** (12.08)	33.99** (15.00)	-88.71 (90.10)	21.52 (39.60)	-1.00 (7.41)	-1.56 (19.06)	16.98 (27.68)
Naive	-1.00 (9.18)	-0.06 (7.64)	38.93 (103.36)	120.27** (58.55)	-3.15 (6.61)	8.27 (19.97)	0.14 (27.59)
MA_Naive	4.80 (15.05)	4.60 (11.92)	-196.28 (182.75)	-39.10 (87.08)	8.81 (9.40)	0.15 (28.64)	44.01 (41.95)
MAD_Naive	-7.53 (17.20)	-8.14 (19.86)	-37.91 (142.84)	-79.33 (69.28)	-4.67 (10.20)	-33.37 (26.60)	-8.78 (41.71)
Control Group Mean	46.09	25.55	437.05	272.05	40.02	171.88	166.62
Control Group S.D.	63.26	52.38	772.52	476.95	49.67	170.03	263.67
N	707	707	707	707	707	707	707

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

M.10 Remittances Received

M.10.1 Endline, Envelopes

Table M69: Endline Outcomes (USD PPP) - Envelopes

	(1) Total Investment	(2) Lumpy Investment	(3) Monthly Income	(4) Savings	(5) Loans	(6) Durable Goods	(7) Educ. Exp.	(8) Health Exp.
Envelopes	71.45* (36.64)	15.05** (7.49)	5.82** (2.81)	8.94 (5.93)	-2.38 (4.75)	-31.39 (37.96)	-28.55 (18.13)	-50.70** (22.73)
High_Remmit_Rec	106.85 (89.60)	-2.52 (16.69)	3.99 (5.92)	-8.38 (14.96)	19.61 (18.89)	-101.55 (91.15)	-61.48 (37.61)	-23.74 (54.48)
Env_High_Remmit_Rec	-42.95 (157.39)	28.62 (26.33)	-7.89 (8.85)	6.44 (20.72)	-35.98* (20.96)	167.83 (118.04)	100.62* (56.56)	-17.55 (67.26)
Control Group Mean	261.50	56.72	27.89	42.97	44.14	294.87	278.68	367.37
Control Group S.D.	294.28	92.82	32.26	69.04	76.53	463.74	256.20	323.84
N	737	737	737	737	737	737	737	737

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

M.10.2 Endline, MA and MAD

Table M70: Endline Outcomes (USD PPP) - MA vs. MAD

	(1) Total Investment	(2) Lumpy Investment	(3) Monthly Income	(4) Savings	(5) Loans	(6) Durable Goods	(7) Educ. Exp.	(8) Health Exp.
MA	41.94 (43.90)	12.36 (9.35)	9.64*** (3.61)	16.35** (7.21)	-2.22 (5.23)	-46.31 (42.75)	-29.97 (20.12)	-50.59* (25.93)
MAD	97.62* (56.77)	17.57** (8.58)	2.04 (3.14)	1.86 (6.38)	-2.79 (5.54)	-14.42 (44.04)	-26.06 (21.67)	-50.73* (26.38)
High_Remmit_Rec	107.08 (90.99)	-2.58 (16.71)	4.13 (5.96)	-7.98 (15.09)	19.72 (18.86)	-103.13 (90.98)	-62.00 (37.66)	-23.78 (54.56)
MA_High_Remmit_Rec	-153.40 (119.05)	23.94 (26.04)	-12.66 (9.22)	10.46 (28.04)	-50.06** (21.86)	301.42** (135.99)	159.72* (84.56)	-13.09 (77.95)
MAD_High_Remmit_Rec	73.43 (259.78)	33.88 (39.34)	-3.83 (12.45)	0.77 (23.43)	-21.92 (23.71)	37.02 (142.97)	41.67 (57.53)	-22.04 (80.67)
Control Group Mean	261.50	56.72	27.89	42.97	44.14	294.87	278.68	367.37
Control Group S.D.	294.28	92.82	32.26	69.04	76.53	463.74	256.20	323.84
N	737	737	737	737	737	737	737	737

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

M.10.3 Midline, Envelopes

Table M71: Midline Outcomes (USD PPP) - Envelopes

	(1) Savings	(2) Loans	(3) Durable Goods	(4) Total Investment	(5) Monthly Income	(6) Educ. Exp.	(7) Health Exp.
Envelopes	33.45*** (6.14)	16.53*** (6.01)	-22.48 (62.50)	-28.87 (36.92)	0.88 (3.92)	-6.15 (11.32)	18.47 (17.26)
High_Remmit_Rec	-10.84 (15.76)	-15.13 (9.41)	14.34 (116.16)	6.26 (67.97)	15.52 (11.59)	35.61 (30.52)	-5.93 (36.95)
Env_High_Remmit_Rec	-7.67 (20.85)	17.84 (16.04)	96.36 (207.54)	15.83 (94.31)	-12.10 (14.89)	-33.66 (37.69)	-9.41 (46.42)
Control Group Mean	46.09	25.55	437.05	272.05	40.02	171.88	166.62
Control Group S.D.	63.26	52.38	772.52	476.95	49.67	170.03	263.67
N	810	810	810	810	810	810	810

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

M.10.4 Midline, MA and MAD

Table M72: Midline Outcomes (USD PPP) - MA vs. MAD

	(1) Savings	(2) Loans	(3) Durable Goods	(4) Total Investment	(5) Monthly Income	(6) Educ. Exp.	(7) Health Exp.
MA	30.91*** (7.02)	4.61 (5.23)	49.39 (76.16)	-18.33 (44.43)	0.35 (4.28)	-1.27 (13.37)	27.64 (20.20)
MAD	36.18*** (8.25)	29.47*** (9.74)	-100.03 (66.55)	-39.88 (36.28)	1.41 (4.86)	-11.43 (12.47)	8.48 (20.81)
High_Remmit_Rec	-10.87 (15.76)	-15.08 (9.42)	13.79 (116.51)	5.97 (68.10)	15.55 (11.61)	35.58 (30.56)	-5.95 (36.94)
MA_High_Remmit_Rec	-9.43 (25.08)	21.14 (22.23)	156.79 (323.98)	79.35 (128.90)	-21.02 (15.30)	-31.71 (41.84)	-20.45 (52.64)
MAD_High_Remmit_Rec	-5.36 (24.97)	15.84 (19.59)	19.17 (185.35)	-56.04 (83.69)	-2.18 (19.92)	-36.52 (46.50)	1.55 (57.57)
Control Group Mean	46.09	25.55	437.05	272.05	40.02	171.88	166.62
Control Group S.D.	63.26	52.38	772.52	476.95	49.67	170.03	263.67
N	810	810	810	810	810	810	810

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

M.11 Remittances Given

M.11.1 Endline, Envelopes

Table M73: Endline Outcomes (USD PPP) - Envelopes

	(1) Total Investment	(2) Lumpy Investment	(3) Monthly Income	(4) Savings	(5) Loans	(6) Durable Goods	(7) Educ. Exp.	(8) Health Exp.
Envelopes	75.88* (39.13)	16.69** (7.44)	4.68* (2.73)	5.09 (5.85)	-5.18 (5.03)	-34.09 (37.03)	-24.28 (18.10)	-46.94** (22.37)
High_Remmit_Giv	103.54 (80.60)	5.03 (15.76)	-2.71 (6.72)	-27.61* (15.26)	-4.88 (14.57)	-63.36 (103.08)	-34.31 (42.86)	108.64* (58.54)
Env_High_Remmit_Giv	-114.31 (135.52)	14.29 (25.45)	5.11 (9.97)	59.26** (22.98)	-9.03 (15.95)	252.43* (137.10)	71.39 (59.46)	-61.92 (69.29)
Control Group Mean	261.50	56.72	27.89	42.97	44.14	294.87	278.68	367.37
Control Group S.D.	294.28	92.82	32.26	69.04	76.53	463.74	256.20	323.84
N	737	737	737	737	737	737	737	737

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

M.11.2 Endline, MA and MAD

Table M74: Endline Outcomes (USD PPP) - MA vs. MAD

	(1) Total Investment	(2) Lumpy Investment	(3) Monthly Income	(4) Savings	(5) Loans	(6) Durable Goods	(7) Educ. Exp.	(8) Health Exp.
MA	33.43 (42.01)	11.72 (9.05)	8.08** (3.45)	11.41 (7.04)	-5.60 (5.60)	-54.13 (40.96)	-19.70 (20.74)	-51.03** (25.79)
MAD	116.48* (60.54)	21.57** (8.73)	1.47 (3.12)	-0.81 (6.40)	-4.81 (5.68)	-13.83 (43.65)	-28.82 (21.14)	-42.75 (25.96)
High_Remmit_Giv	105.06 (81.25)	4.91 (15.86)	-2.96 (6.77)	-28.17* (15.18)	-4.77 (14.59)	-65.44 (102.24)	-34.10 (43.02)	108.06* (58.68)
MA_High_Remmit_Giv	-64.07 (181.94)	31.79 (30.50)	4.70 (12.76)	67.15** (30.40)	-12.60 (17.32)	384.07** (162.86)	51.39 (70.62)	-28.99 (75.95)
MAD_High_Remmit_Giv	-162.58 (119.73)	-9.92 (36.01)	3.33 (11.11)	41.90* (21.67)	-3.00 (17.07)	57.27 (137.98)	99.88 (77.22)	-111.44 (86.20)
Control Group Mean	261.50	56.72	27.89	42.97	44.14	294.87	278.68	367.37
Control Group S.D.	294.28	92.82	32.26	69.04	76.53	463.74	256.20	323.84
N	737	737	737	737	737	737	737	737

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

M.11.3 Midline, Envelopes

Table M75: Midline Outcomes (USD PPP) - Envelopes

	(1) Savings	(2) Loans	(3) Durable Goods	(4) Total Investment	(5) Monthly Income	(6) Educ. Exp.	(7) Health Exp.
Envelopes	34.77*** (6.03)	18.07*** (6.00)	-26.60 (58.74)	-20.43 (35.06)	1.39 (3.83)	-4.79 (10.99)	20.34 (16.79)
High_Remmit_Giv	1.59 (21.56)	-14.08 (14.24)	50.72 (213.29)	104.39 (119.67)	15.39 (12.08)	65.32 (41.93)	11.97 (49.05)
Env_High_Remmit_Giv	-25.66 (24.23)	1.76 (16.91)	176.44 (320.34)	-89.50 (138.67)	-22.95 (14.61)	-59.08 (48.56)	-35.41 (61.81)
Control Group Mean	46.09	25.55	437.05	272.05	40.02	171.88	166.62
Control Group S.D.	63.26	52.38	772.52	476.95	49.67	170.03	263.67
N	810	810	810	810	810	810	810

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

M.11.4 Midline, MA and MAD

Table M76: Midline Outcomes (USD PPP) - MA vs. MAD

	(1) Savings	(2) Loans	(3) Durable Goods	(4) Total Investment	(5) Monthly Income	(6) Educ. Exp.	(7) Health Exp.
MA	31.56*** (7.09)	6.03 (5.26)	51.73 (73.57)	-4.50 (43.59)	-0.00 (4.28)	-0.90 (13.03)	31.96 (19.78)
MAD	38.18*** (7.95)	30.60*** (9.62)	-108.39* (61.10)	-36.92 (33.68)	2.87 (4.75)	-8.72 (12.39)	8.03 (20.15)
High_Remmit_Giv	1.76 (21.55)	-13.71 (14.10)	48.61 (213.73)	104.14 (119.96)	15.45 (12.09)	65.39 (42.04)	11.39 (49.17)
MA_High_Remmit_Giv	-14.71 (26.84)	9.12 (18.14)	109.13 (383.07)	-92.67 (152.64)	-19.67 (15.68)	-48.19 (52.12)	-66.94 (69.39)
MAD_High_Remmit_Giv	-44.78* (26.22)	0.29 (18.96)	225.77 (385.37)	-101.51 (165.81)	-28.17 (20.08)	-86.32 (53.87)	16.88 (79.63)
Control Group Mean	46.09	25.55	437.05	272.05	40.02	171.88	166.62
Control Group S.D.	63.26	52.38	772.52	476.95	49.67	170.03	263.67
N	810	810	810	810	810	810	810

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

N Robustness

N.1 No Winsorizing

Table N77: Endline Outcomes (USD PPP) - No winsorizing

	(1) Total Investment	(2) Lumpy Investment	(3) Monthly Income	(4) Savings	(5) Loans	(6) Durable Goods	(7) Educ. Exp.	(8) Health Exp.
Envelopes	194.38* (103.97)	20.04** (7.95)	10.69* (5.45)	13.55* (7.06)	-6.47 (5.62)	-22.53 (48.70)	-9.05 (22.46)	-53.24** (21.77)
Control Group Mean	272.87	57.33	28.06	43.64	46.24	325.51	281.10	369.13
Control Group S.D.	379.41	95.33	33.10	72.29	90.63	683.28	267.60	328.34
N	737	737	737	737	737	737	737	737

Notes: Intention to Treat estimates. Monetary outcomes are converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

Table N78: Midline Outcomes (USD PPP) - No winsorizing

	(1) Savings	(2) Loans	(3) Durable Goods	(4) Total Investment	(5) Monthly Income	(6) Educ. Exp.	(7) Health Exp.
Envelopes	34.47*** (6.31)	35.18*** (13.42)	-12.29 (67.12)	-12.98 (38.33)	0.22 (4.34)	-4.49 (15.58)	45.22* (25.41)
Control Group Mean	46.46	25.55	447.35	275.60	40.95	177.85	168.54
Control Group S.D.	65.16	52.38	844.29	503.28	54.74	208.12	269.19
N	810	810	810	810	810	810	810

Notes: Intention to Treat estimates. Monetary outcomes are converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

Table N79: Endline Outcomes (USD PPP) - No winsorizing

	(1) Total Investment	(2) Lumpy Investment	(3) Monthly Income	(4) Savings	(5) Loans	(6) Durable Goods	(7) Educ. Exp.	(8) Health Exp.
MA	171.43 (156.00)	16.71* (9.58)	19.63** (9.46)	20.81** (8.22)	-6.17 (6.77)	-31.48 (54.04)	-15.26 (21.42)	-53.19** (24.86)
MAD	216.99 (146.87)	23.33** (9.55)	1.98 (3.64)	6.36 (8.25)	-6.76 (5.95)	-13.66 (57.80)	-2.91 (32.62)	-53.29** (25.26)
t-test MA vs. MAD	0.81	0.47	0.08	0.22	0.99	0.85	0.48	0.99
F-test	0.17	0.03	0.12	0.04	0.50	0.84	0.76	0.05
Control Group Mean	272.87	57.33	28.06	43.64	46.24	325.51	281.10	369.13
Control Group S.D.	379.41	95.33	33.10	72.29	90.63	683.28	267.60	328.34
N	737	737	737	737	737	737	737	737

Notes: Intention to Treat estimates. Monetary outcomes are converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

Table N80: Midline Outcomes (USD PPP) - No winsorizing

	(1) Savings	(2) Loans	(3) Durable Goods	(4) Total Investment	(5) Monthly Income	(6) Educ. Exp.	(7) Health Exp.
MA	31.50*** (7.20)	25.72 (15.88)	70.17 (85.65)	-0.22 (46.20)	-0.66 (4.58)	7.15 (21.67)	58.89* (32.19)
MAD	37.73*** (8.39)	45.55*** (15.88)	-102.61 (71.53)	-26.92 (39.26)	1.18 (5.53)	-17.23 (15.11)	30.24 (29.10)
t-test MA vs. MAD	0.42	0.51	0.08	0.45	0.79	0.21	0.49
F-test	0.00	0.02	0.10	0.70	0.94	0.37	0.17
Control Group Mean	46.46	25.55	447.35	275.60	40.95	177.85	168.54
Control Group S.D.	65.16	52.38	844.29	503.28	54.74	208.12	269.19
N	810	810	810	810	810	810	810

Notes: Intention to Treat estimates. Monetary outcomes are converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

N.1.1 5% Winsorizing, Per Treatment Arm

Table N81: Endline Outcomes (USD PPP) - 5% Winsorizing Per Treatment

	(1) Total Investment	(2) Lumpy Investment	(3) Monthly Income	(4) Savings	(5) Loans	(6) Durable Goods	(7) Educ. Exp.	(8) Health Exp.
Envelopes	-2.06 (15.75)	15.74*** (6.08)	5.07** (2.02)	7.23 (4.44)	-2.66 (3.63)	-12.67 (32.71)	-21.70 (13.96)	-51.51** (20.65)
Control Group Mean	238.80	53.07	25.43	39.52	37.85	284.95	266.32	361.41
Control Group S.D.	210.99	81.62	23.99	57.20	54.43	430.02	218.06	313.27
N	737	737	737	737	737	737	737	737

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 95th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

Table N82: Midline Outcomes (USD PPP) - 5% Winsorizing Per Treatment

	(1) Savings	(2) Loans	(3) Durable Goods	(4) Total Investment	(5) Monthly Income	(6) Educ. Exp.	(7) Health Exp.
Envelopes	29.36*** (4.59)	11.15*** (3.30)	-26.98 (34.68)	-21.46 (16.02)	-0.27 (3.13)	-9.10 (8.23)	16.57 (16.04)
Control Group Mean	42.67	22.25	369.84	223.47	37.72	160.80	165.80
Control Group S.D.	52.05	40.42	518.97	245.33	42.10	131.97	261.95
N	810	810	810	810	810	810	810

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 95th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

Table N83: Endline Outcomes (USD PPP) - 5% Winsorizing Per Treatment

	(1) Total Investment	(2) Lumpy Investment	(3) Monthly Income	(4) Savings	(5) Loans	(6) Durable Goods	(7) Educ. Exp.	(8) Health Exp.
MA	-4.11 (18.16)	13.35* (7.36)	7.92*** (2.57)	12.99** (5.17)	-3.76 (4.02)	-13.35 (37.83)	-20.02 (15.72)	-49.50** (23.76)
MAD	-0.03 (18.41)	18.11** (7.17)	2.27 (2.27)	1.55 (4.95)	-1.56 (4.22)	-11.99 (38.00)	-23.36 (16.27)	-53.49** (23.86)
t-test MA vs. MAD	0.72	0.62	0.08	0.07	0.53	0.96	0.85	0.90
F-test	0.97	0.03	0.01	0.02	0.64	0.93	0.30	0.04
Control Group Mean	238.80	53.07	25.43	39.52	37.85	284.95	266.32	361.41
Control Group S.D.	210.99	81.62	23.99	57.20	54.43	430.02	218.06	313.27
N	737	737	737	737	737	737	737	737

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 95th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

Table N84: Midline Outcomes (USD PPP) - 5% Winsorizing Per Treatment

	(1) Savings	(2) Loans	(3) Durable Goods	(4) Total Investment	(5) Monthly Income	(6) Educ. Exp.	(7) Health Exp.
MA	28.04*** (5.43)	3.12 (3.45)	17.74 (41.23)	-16.07 (18.29)	-0.59 (3.54)	-5.44 (9.48)	25.29 (18.86)
MAD	30.80*** (5.78)	19.98*** (4.59)	-75.97** (38.63)	-27.36 (17.54)	0.08 (3.77)	-13.11 (9.47)	7.01 (19.25)
t-test MA vs. MAD	0.62	0.00	0.08	0.65	1.00	0.39	0.55
F-test	0.00	0.00	0.04	0.30	0.98	0.38	0.40
Control Group Mean	42.67	22.25	369.84	223.47	37.72	160.80	165.80
Control Group S.D.	52.05	40.42	518.97	245.33	42.10	131.97	261.95
N	810	810	810	810	810	810	810

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 95th percent level, separately per experimental group, and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

N.1.2 1% Winsorizing, Whole Treatment

Table N85: Endline Outcomes (USD PPP) - 1% Winsorizing Whole Sample

	(1) Total Investment	(2) Lumpy Investment	(3) Monthly Income	(4) Savings	(5) Loans	(6) Durable Goods	(7) Educ. Exp.	(8) Health Exp.
Envelopes	42.99 (35.84)	16.78** (7.23)	4.89* (2.65)	7.99 (5.61)	-4.29 (4.55)	-14.04 (35.40)	-19.64 (17.45)	-51.66** (21.38)
Control Group Mean	272.87	57.26	28.06	43.64	42.79	294.87	279.46	367.27
Control Group S.D.	379.41	95.02	33.10	72.29	70.27	463.74	259.39	323.62
N	737	737	737	737	737	737	737	737

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

Table N86: Midline Outcomes (USD PPP) - 1% Winsorizing Whole Sample

	(1) Savings	(2) Loans	(3) Durable Goods	(4) Total Investment	(5) Monthly Income	(6) Educ. Exp.	(7) Health Exp.
Envelopes	31.33*** (5.69)	13.89*** (4.35)	-29.67 (56.11)	-24.47 (28.00)	-0.88 (3.65)	-8.98 (10.76)	17.50 (16.21)
Control Group Mean	46.46	25.55	436.08	260.10	40.02	171.88	166.87
Control Group S.D.	65.16	52.38	767.25	400.20	49.67	170.03	264.22
N	810	810	810	810	810	810	810

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

Table N87: Endline Outcomes (USD PPP) - 1% Winsorizing Whole Sample

	(1) Total Investment	(2) Lumpy Investment	(3) Monthly Income	(4) Savings	(5) Loans	(6) Durable Goods	(7) Educ. Exp.	(8) Health Exp.
MA	24.06 (43.03)	14.20 (8.78)	8.30** (3.36)	14.71** (6.61)	-4.87 (5.17)	-15.87 (40.48)	-15.55 (20.20)	-50.86** (24.54)
MAD	61.69 (47.23)	19.33** (8.46)	1.53 (3.01)	1.33 (6.22)	-3.71 (5.18)	-12.22 (41.46)	-23.69 (20.53)	-52.45** (24.81)
t-test MA vs. MAD	0.55	0.61	0.11	0.11	0.72	0.99	0.92	0.95
F-test	0.42	0.06	0.04	0.04	0.62	0.92	0.50	0.05
Control Group Mean	272.87	57.26	28.06	43.64	42.79	294.87	279.46	367.27
Control Group S.D.	379.41	95.02	33.10	72.29	70.27	463.74	259.39	323.62
N	737	737	737	737	737	737	737	737

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

Table N88: Midline Outcomes (USD PPP) - 1% Winsorizing Whole Sample

	(1) Savings	(2) Loans	(3) Durable Goods	(4) Total Investment	(5) Monthly Income	(6) Educ. Exp.	(7) Health Exp.
MA	29.55*** (6.69)	6.05 (4.72)	33.43 (66.56)	-17.06 (32.93)	-1.65 (4.06)	-4.91 (12.49)	25.65 (19.02)
MAD	33.28*** (7.28)	22.48*** (5.93)	-98.79 (61.25)	-32.58 (30.04)	-0.03 (4.45)	-13.44 (12.36)	8.57 (19.54)
t-test MA vs. MAD	0.56	0.02	0.09	0.58	0.90	0.39	0.58
F-test	0.00	0.00	0.08	0.55	0.90	0.55	0.40
Control Group Mean	46.46	25.55	436.08	260.10	40.02	171.88	166.87
Control Group S.D.	65.16	52.38	767.25	400.20	49.67	170.03	264.22
N	810	810	810	810	810	810	810

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 99th percent level and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

N.1.3 5% Winsorizing, Whole Treatment

Table N89: Endline Outcomes (USD PPP) - 5% Winsorizing Whole Sample

	(1) Total Investment	(2) Lumpy Investment	(3) Monthly Income	(4) Savings	(5) Loans	(6) Durable Goods	(7) Educ. Exp.	(8) Health Exp.
Envelopes	-3.04 (15.73)	14.13** (6.18)	3.75* (2.14)	6.72 (4.39)	-1.97 (3.67)	-10.65 (32.37)	-17.23 (13.67)	-49.41** (20.61)
Control Group Mean	239.08	54.21	26.72	39.52	37.85	282.88	263.29	360.13
Control Group S.D.	211.78	84.77	27.74	57.20	54.43	423.82	210.68	311.42
N	737	737	737	737	737	737	737	737

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 95th percent level and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

Table N90: Midline Outcomes (USD PPP) - 5% Winsorizing Whole Sample

	(1) Savings	(2) Loans	(3) Durable Goods	(4) Total Investment	(5) Monthly Income	(6) Educ. Exp.	(7) Health Exp.
Envelopes	25.41*** (4.76)	8.26** (3.22)	-27.39 (34.39)	-11.35 (14.98)	-1.10 (3.24)	-7.04 (8.28)	17.37 (16.08)
Control Group Mean	45.11	23.45	368.67	214.89	38.53	160.37	165.80
Control Group S.D.	59.31	44.25	516.11	221.31	44.39	130.85	261.95
N	810	810	810	810	810	810	810

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 95th percent level and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

Table N91: Endline Outcomes (USD PPP) - 5% Winsorizing Whole Sample

	(1) Total Investment	(2) Lumpy Investment	(3) Monthly Income	(4) Savings	(5) Loans	(6) Durable Goods	(7) Educ. Exp.	(8) Health Exp.
MA	-5.74 (18.02)	11.75 (7.41)	6.22** (2.60)	11.96** (5.06)	-2.36 (4.16)	-10.95 (37.55)	-14.73 (15.65)	-47.04** (23.77)
MAD	-0.38 (18.43)	16.49** (7.25)	1.33 (2.44)	1.54 (4.93)	-1.58 (4.24)	-10.34 (37.66)	-19.70 (15.99)	-51.76** (23.83)
t-test MA vs. MAD	0.67	0.62	0.15	0.09	0.76	0.94	0.92	0.88
F-test	0.94	0.06	0.05	0.03	0.85	0.95	0.44	0.06
Control Group Mean	239.08	54.21	26.72	39.52	37.85	282.88	263.29	360.13
Control Group S.D.	211.78	84.77	27.74	57.20	54.43	423.82	210.68	311.42
N	737	737	737	737	737	737	737	737

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 95th percent level and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

Table N92: Midline Outcomes (USD PPP) - 5% Winsorizing Whole Sample

	(1) Savings	(2) Loans	(3) Durable Goods	(4) Total Investment	(5) Monthly Income	(6) Educ. Exp.	(7) Health Exp.
MA	25.25*** (5.60)	3.33 (3.65)	14.06 (40.61)	-8.97 (17.22)	-1.42 (3.63)	-3.95 (9.56)	25.35 (18.87)
MAD	25.60*** (5.70)	13.66*** (3.95)	-72.79* (38.68)	-13.94 (16.88)	-0.74 (3.86)	-10.43 (9.66)	8.63 (19.38)
t-test MA vs. MAD	0.87	0.03	0.11	0.94	1.00	0.46	0.59
F-test	0.00	0.00	0.06	0.71	0.93	0.55	0.40
Control Group Mean	45.11	23.45	368.67	214.89	38.53	160.37	165.80
Control Group S.D.	59.31	44.25	516.11	221.31	44.39	130.85	261.95
N	810	810	810	810	810	810	810

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 95th percent level and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at baseline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

N.1.4 Winsorized Fraction of Observations

Table N93: Fraction of Endline Observations Winsorized

Treatment	Total Investment	Lumpy Investment	Monthly Income	Savings	Loans	Durable Goods	Educ. Exp.	Health Exp.
<i>Traditional Winsorizing: 1%</i>								
CO	0.000	0.003	0.000	0.000	0.014	0.007	0.003	0.010
MA	0.007	0.007	0.007	0.014	0.003	0.007	0.007	0.003
MAD	0.018	0.014	0.000	0.007	0.004	0.011	0.014	0.011
<i>Winsorizing By Treatment: 1%</i>								
CO	0.007	0.007	0.003	0.007	0.007	0.007	0.007	0.007
MA	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.003
MAD	0.007	0.007	0.000	0.007	0.004	0.007	0.007	0.007

Table N94: Fraction of Midline Observations Winsorized

Treatment	Savings	Loans	Durable Goods	Total Investments	Monthly Income	Educ. Expenses	Health Expenses
<i>Traditional Winsorizing: 1%</i>							
CO	0.000	0.000	0.010	0.014	0.007	0.007	0.007
MA	0.010	0.010	0.010	0.010	0.007	0.014	0.007
MAD	0.018	0.014	0.007	0.004	0.011	0.007	0.007
<i>Winsorizing By Treatment: 1%</i>							
CO	0.007	0.000	0.007	0.007	0.007	0.007	0.007
MA	0.003	0.007	0.007	0.007	0.007	0.007	0.007
MAD	0.007	0.004	0.007	0.007	0.004	0.007	0.007

Table N95: Fraction of Endline Observations Winsorized

Treatment	Total Investment	Lumpy Investment	Monthly Income	Savings	Loans	Durable Goods	Educ. Exp.	Health Exp.
<i>Traditional Winsorizing: 5%</i>								
CO	0.038	0.031	0.027	0.041	0.038	0.048	0.055	0.058
MA	0.042	0.045	0.059	0.045	0.017	0.031	0.038	0.031
MAD	0.046	0.046	0.039	0.036	0.025	0.046	0.032	0.036
<i>Winsorizing By Treatment: 5%</i>								
CO	0.041	0.041	0.034	0.041	0.038	0.041	0.041	0.041
MA	0.042	0.038	0.035	0.042	0.042	0.042	0.042	0.042
MAD	0.043	0.043	0.043	0.036	0.025	0.043	0.043	0.043

Table N96: Fraction of Midline Observations Winsorized

Treatment	Savings	Loans	Durable Goods	Total Investments	Monthly Income	Educ. Expenses	Health Expenses
<i>Traditional Winsorizing: 5%</i>							
CO	0.014	0.024	0.055	0.058	0.027	0.048	0.031
MA	0.052	0.031	0.052	0.049	0.031	0.045	0.031
MAD	0.068	0.064	0.032	0.032	0.032	0.046	0.018
<i>Winsorizing By Treatment: 5%</i>							
CO	0.034	0.045	0.045	0.045	0.045	0.045	0.031
MA	0.045	0.045	0.045	0.045	0.031	0.045	0.031
MAD	0.046	0.032	0.046	0.046	0.032	0.046	0.046

N.2 PD Lasso

Table N97: Endline Outcomes (USD PPP) - PD Lasso, Envelopes

	(1) Total Investment	(2) Lumpy Investment	(3) Monthly Income	(4) Savings	(5) Loans	(6) Durable Goods	(7) Educ. Exp.	(8) Health Exp.
Envelopes	71.34** (35.14)	18.18** (7.09)	5.91** (2.56)	10.49* (5.51)	-6.15 (4.85)	-14.53 (33.97)	-16.83 (16.70)	-50.35** (20.88)
Control Group Mean	261.50	56.72	27.89	42.97	44.14	294.87	278.68	367.37
Control Group S.D.	294.28	92.82	32.26	69.04	76.53	463.74	256.20	323.84
N	737	737	737	737	737	737	737	737

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 95th percent level and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

Table N98: Midline Outcomes (USD PPP) - PD Lasso, Envelopes

	(1) Savings	(2) Loans	(3) Durable Goods	(4) Total Investment	(5) Monthly Income	(6) Educ. Exp.	(7) Health Exp.
Envelopes	34.17*** (5.70)	16.84*** (5.49)	-14.45 (56.76)	-19.24 (32.59)	0.12 (3.59)	-7.73 (10.37)	18.75 (15.82)
Control Group Mean	46.09	25.55	437.05	272.05	40.02	171.88	166.62
Control Group S.D.	63.26	52.38	772.52	476.95	49.67	170.03	263.67
N	810	810	810	810	810	810	810

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 95th percent level and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

Table N99: Endline Outcomes (USD PPP) - PD Lasso, MA vs. MAD

	(1) Total Investment	(2) Lumpy Investment	(3) Monthly Income	(4) Savings	(5) Loans	(6) Durable Goods	(7) Educ. Exp.	(8) Health Exp.
MA	35.58 (40.37)	14.37* (8.51)	8.72*** (3.27)	18.29*** (6.98)	-7.29 (5.35)	-17.98 (38.86)	-14.48 (19.44)	-49.63** (23.74)
MAD	105.98** (52.26)	21.87*** (8.33)	3.18 (2.88)	2.93 (5.80)	-5.05 (5.38)	-11.19 (39.35)	-19.11 (19.51)	-51.05** (24.08)
t-test MA vs. MAD	0.31	0.56	0.11	0.07	0.61	0.93	0.89	0.98
F-test	0.11	0.03	0.03	0.02	0.39	0.90	0.59	0.05
Control Group Mean	261.50	56.72	27.89	42.97	44.14	294.87	278.68	367.37
Control Group S.D.	294.28	92.82	32.26	69.04	76.53	463.74	256.20	323.84
N	737	737	737	737	737	737	737	737

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 95th percent level and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.

Table N100: Midline Outcomes (USD PPP) - PD Lasso, MA vs. MAD

	(1) Savings	(2) Loans	(3) Durable Goods	(4) Total Investment	(5) Monthly Income	(6) Educ. Exp.	(7) Health Exp.
MA	31.45*** (6.63)	5.37 (4.93)	64.34 (72.67)	-3.14 (40.99)	-1.35 (3.94)	-3.25 (12.18)	25.47 (18.47)
MAD	37.07*** (7.46)	29.05*** (8.71)	-98.40* (59.15)	-36.40 (31.72)	1.68 (4.48)	-12.50 (11.60)	11.58 (18.98)
t-test MA vs. MAD	0.45	0.02	0.06	0.28	0.75	0.32	0.58
F-test	0.00	0.00	0.05	0.40	0.79	0.53	0.39
Control Group Mean	46.09	25.55	437.05	272.05	40.02	171.88	166.62
Control Group S.D.	63.26	52.38	772.52	476.95	49.67	170.03	263.67
N	810	810	810	810	810	810	810

Notes: Intention to Treat estimates. Monetary outcomes are winsorized at the 95th percent level and converted into 2022 USD PPP. All regressions include strata variables, imbalanced baseline variables, and the baseline value of the outcome, where available. Envelopes is the pooled treatment of MA and MAD, where MA and MAD differ because households in MAD were first shown a default recommended allocation of the cash transfer across the four envelope categories. Online Appendix A describes how outcome variables are calculated. Control mean and standard deviation refer to the mean value and standard deviation of the outcome in the control group at endline. Robust standard errors are in parentheses. ***, ** and * represent significant differences at the 1, 5 and 10% level, respectively.