# DEBT TRAPS? MARKET VENDORS AND MONEYLENDER DEBT IN INDIA AND THE PHILIPPINES 

Dean Karlan<br>Sendhil Mullainathan<br>Benjamin N. Roth<br>Working Paper 24272<br>http://www.nber.org/papers/w24272<br>NATIONAL BUREAU OF ECONOMIC RESEARCH<br>1050 Massachusetts Avenue<br>Cambridge, MA 02138<br>February 2018

All authors declare that they have no relevant or material financial interests that relate to the research described in this paper. The views expressed herein are those of the authors and do not necessarily reflect the views of the National Bureau of Economic Research.

NBER working papers are circulated for discussion and comment purposes. They have not been peer-reviewed or been subject to the review by the NBER Board of Directors that accompanies official NBER publications.
© 2018 by Dean Karlan, Sendhil Mullainathan, and Benjamin N. Roth. All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that full credit, including © notice, is given to the source.

Debt Traps? Market Vendors and Moneylender Debt in India and the Philippines
Dean Karlan, Sendhil Mullainathan, and Benjamin N. Roth
NBER Working Paper No. 24272
February 2018
JEL No. D12,D91,O12


#### Abstract

A debt trap occurs when someone takes on a high-interest rate loan and is barely able to pay back the interest, and thus perpetually finds themselves in debt (often by re-financing). Studying such practices is important for understanding financial decision-making of households in dire circumstances, and also for setting appropriate consumer protection policies. We conduct a simple experiment in three sites in which we paid off high-interest moneylender debt of individuals. Most borrowers returned to debt within six weeks. One to two years after intervention, treatment individuals were borrowing at the same rate as control households.


Dean Karlan<br>Northwestern University<br>Room 4441<br>Global Hub<br>2211 Campus Drive<br>Evanston, IL 60208<br>and CEPR<br>and also NBER<br>dean.karlan@gmail.com<br>Sendhil Mullainathan<br>Department of Economics<br>Littauer M-18<br>Harvard University<br>Cambridge, MA 02138<br>and NBER<br>mullain@fas.harvard.edu

Benjamin N. Roth

Harvard Business School
931 Massachusetts Avenue
Cambridge, MA, 02139
broth@hbs.edu

## I. Introduction

Small-scale entrepreneurs throughout the developing world often rely on moneylenders for working capital, borrowing on a daily or weekly basis at exorbitant interest rates. The ubiquity of this type of borrowing is a long-standing puzzle for development economists: why do these entrepreneurs not save a little bit and then borrow less, given their implicitly high risk-free rate of return to savings? We report on three experiments in which we gave cash grants and brief financial training to market vendors in India and the Philippines with high interest rate debt. We then test how long before, and whether, individuals go back to using high interest rate debt again.

One striking pattern emerges: most vendors fall back into debt within six weeks, and two years later the likelihood and volume of borrowing at high interest rates is nearly identical for treatment and control vendors. The timing of reversion differs across the experiments. A brief, focused financial education training does little to mitigate this effect. Unsurprisingly, therefore, neither treatment had a sustained meaningful impact on business profits, household expenditures, or ability to smooth against unforeseen shocks. While the average treatment impact is small and short-lived, there are also important differences across experimental sites. Most notably, in one of the Philippine experiments, about a third of the treated vendors stayed out of debt for at least six months, although even there we find no difference between treatment and control after two years.

These results illuminate the difficulty that small-scale entrepreneurs face in escaping usage of high interest rate moneylender debt. Not only do borrowers seem unable to save their way out of debt, but also, even after receiving a windfall grant and being lifted from debt, they fall back into borrowing at some point in the following months.

This may happen for several reasons. Critically, we are able to rule out one key hypothesis: vendors have sufficiently lucrative investment opportunities that sustained borrowing is profit maximizing. There are many more possible mechanisms, and no doubt no single one explains everyone's reversion. Thus disentangling and assessing the relative importance of each would require more observations and data than afforded by our sample, but we explore several possibilities and consider these fruitful areas for further study. For example, the vendors may be susceptible to unavoidable consumption and income shocks that force them to return to borrowing. Vendors may suffer from self-control problems such as present bias. Vendors may not have access to a reliable savings technology. Finally, vendors may not understand the long-term cost of repeated borrowing at high interest rates.

Repeated borrowing at high interest rates is not unique to the samples we study (see Banerjee (2004) for a survey of the literature documenting high interest rate borrowing across developing countries). Some key descriptive results: Drèze et al. (1997) reports the case of repeated, high interest rate borrowing amongst farmers in the Indian village of Palanpur. Total borrowing in Palanpur exceeds $40 \%$ of annual income, and moneylenders charge an average interest rate above $42 \%$ per year (though institutional lenders in the village charge substantially lower interest rates). Banerjee and Duflo (2007) reports borrowing rates from 11\% (rural poor in East Timor) to 93\% (in Pakistan) across 13 developing countries, oftentimes from moneylenders. In Udaipur, India, they document average monthly interest rates above $3 \%$, and in Hyderabad it was nearly 4\%.

This is also a relevant issue in the United States. Skiba and Tobacman (2011) reports high serial correlation in borrowing from payday lenders among low income Americans. Bertrand and Morse (2011) reports rates of using one payday loan to pay down another (and specifically find that informing borrowers of this tendency makes them less likely to immediately do so).

## II. Experimental Design and Data

We conducted three experiments: Chennai, India in 2007 (1000 market vendors), Cagayan de Oro, Philippines in 2007 ( 250 market vendors), and Cagayan de Oro, Philippines in 2010 (701 market vendors, from different markets than in 2007). Each experiment took place in urban market settings. Going stall to stall, we identified individuals eligible for the study based on the following criteria: (1) they were the decision-maker of the business, (2) they borrowed consistently from a professional moneylender (defined as interest rate at or above $5 \%$ per month) for the past five years, and (3) they had an outstanding balance of US\$100 or below in the Philippines or US\$50 or below in India with moneylenders.

Both 2007 experiments included the same four equal-sized treatment arms: debt payoff; financial education; debt payoff and financial education; and, control. We implemented a brief financial training in small groups of roughly 25 vendors by a professional survey team. In the Philippines, 105 out of the 125 vendors invited to the training attended ${ }^{2}$ and only nominal compensation was given for attendance. ${ }^{3}$ In India, 434 out of 500 individuals attended the financial training. The training emphasized two messages: (1) that lending at high rates from moneylenders led to a large loss of money and thus consumption every year compared with other alternatives, and (2) that savings and consumption discipline could help vendors avoid having to take out loans at all. The training included interactive activities, discussion, and lecture. The Appendix includes a summary of the financial planning curriculum.

In the 2010 Philippines experiment, participants were randomized into one of four groups: debt payoff; savings account; debt payoff and savings account; and, control. All three treatment groups also received a 5-10 minutes financial education lesson (i.e., slightly briefer than the 2007 financial education, but no longer separately tested as its own treatment arm). Because of problems with insufficient compliance with account opening requirements (specifically, providing necessary documentation and identification), only a few savings accounts were opened, and thus there is nothing to analyze with respect to the savings account treatment arms. For analysis, we collapse this wave to two groups: debt payoff and financial training (with and without the offered savings account) and control.

[^0]In all three sites, the financial training was conducted prior to the announcement of the debt payoff. Several days after the financial training, surveyors went to those selected for debt payoff and informed them they had won a prize through the lottery. In the Philippines, as debt collectors generally collect repayments daily in this area, surveyors waited until the collectors arrived and paid off the debt in view of the vendors. In India, individuals were instructed to come to a central location to pickup money if they were in a debt payoff treatment group. The amount paid was equal to the amount the debt collector said was owed, up to 5,000 pesos ( $\sim U S \$ 100$ ) in the Philippines or 3000 rupees ( $\sim 50$ ) in India.

The 2007 Philippines and India experiments did not employ stratification. The 2010 Philippines experiment stratified on quintile of preexisting debt level. Baseline surveys measured (a) the history of their savings and debt over the past few years, (b) basic cognitive skills and educational level, (c) mental health that could be linked to ability to fulfill plans, (d) business information, e.g. assets and revenues, and (e) demographic data. Appendix Table 1 presents baseline statistics and verification of orthogonality of assignments to treatment.

We conducted four follow-up surveys, starting 4-6 weeks after the debt payoff, and ending at the latest 2 years after the debt payoff. See Figure 1 for a summary of the timing of each experiment's data. Follow-up surveys measured (a) whether the vendors had moneylender and other types of debt, (b) what changes have occurred in the business (i.e., if the business has expanded significantly or not) (c) any shocks the household has experienced, and how they coped, (d) some components of consumption, (e) savings.

In the 2007 India experiment, 881 of 1000 completed all four follow-up surveys. In the 2007 Philippines experiment, 206 of 250 completed all four follow-up surveys. In the 2010 Philippines experiment, 569 of 701 completed all four follow-up surveys. Appendix Table 1 presents orthogonality results for comparison of attrition rates. Out of 13 comparisons across the three sites, we reject equality of survey attrition rates in one test, the Philippines 2010 site ( $76 \%$ completed all surveys in control whereas $84 \%$ completed all surveys in treatment, $p$-value $=$ 0.022 ).

## III. Results

Tables $1-3$ present the impact of our treatments in India 2007, Philippines 2007 and Philippines 2010, respectively. ${ }^{4}$ Across all columns in each table, the specification is

$$
y_{i t}=\alpha+\sum_{j, t} \beta_{j t} \text { Treatment }_{j i} * \text { wave }_{t}+\gamma_{1} y_{i 0}+\gamma_{2} v_{i}+\text { wave }_{t}+\epsilon_{i t}
$$

[^1]where $y_{i t}$ refers to an outcome for respondent $i$ in wave $t$, Treatment Thi $_{j i}$ is an indicator for whether respondent $i$ was assigned treatment $j$, wave $e_{t}$ is a dummy for wave $t, \mathrm{y}_{\mathrm{i} 0}$ is the baseline value of the outcome variable for respondent $i$, and $v_{i}$ is a vector of dummy variables for quintile of preexisting debt at baseline for respondent $i$ (used in Philippines 2010 only). Throughout, standard errors are clustered at the respondent level.

Columns 1 and 2 of each table report treatment impact on the primary outcome variable: moneylender borrowing (column 1 is binary for "has any outstanding moneylender debt", and column 2 is the amount of outstanding moneylender debt). In India 2007 (Table 1), borrowers granted debt relief only were 17pp (se=4pp) less likely to borrow from a moneylender after the first follow-up, and borrowed only US\$8 (se=\$2) less on average, relative to a control mean debt of US\$25. Financial training had no direct impact on borrowing (treatment effect is a reduction in borrowing of $2 p p$, se=3pp). The combined treatments of debt payoff and financial training produced results similar to the debt payoff only treatment arm: a reduction in borrowing of 20pp (se=4pp) and a reduction of US\$6 (se=\$2). By the second follow-up ( $5-8$ months), however, treatment effects had already mostly dissipated: $-6 p p$ ( $s e=4 p p$ ) for debt payoff only; and -9pp (se=4pp) for debt payoff and financial training. By the third follow-up (9-10 months), all results were no longer statistically significant: +3pp (se=4pp) for debt payoff only and -5pp (se=4pp) for the debt payoff and financial training. Effects on amount borrowed similarly dissipated (Column $2)$.

Effects were somewhat larger and more persistent in the Philippines 2007 site, (Table 2). Borrowers offered debt relief were 37pp (se=8pp) less likely to borrow from a moneylender at the first follow-up and by the third follow-up they remain 28pp (se=9pp) less likely to borrow. They borrowed US\$47 (se=\$15) less at first follow-up and by third follow-up borrowed US\$46 (se=\$18) less, relative to a control mean borrowing of US\$82. At the final measurement treatment effects have entirely dissipated, but we note that we focused the final measurement on just moneylender loans used for working capital. ${ }^{5}$ Financial training had no impact on its own (first follow-up: 0pp, se=7pp; second follow-up: 0pp, se=7pp; third follow-up: 1pp, se=8pp; fourth follow-up: $-2 p p$, se=9pp). The treatment effects for the combined debt payoff and financial training were larger than the debt payoff treatments (e.g., 47pp reduction vs 37pp reduction for the first follow-up), however the t-test of equality of treatment effects yields $p$ values of $0.29,0.06,0.10$, and 0.08 across the four waves. Hence there is some suggestive evidence that the financial training in Philippines slowed the reversion rate back into moneylender debt, but by the final follow-up at 18 months the effect of the combined treatment was also null (-5pp, se=8pp).

The Philippines 2010 (Table 3) results are more similar to the India 2007 site: borrowers granted debt relief were only about 9pp less likely to borrow from a moneylender after the first follow-up (se=4pp), and borrowed only US\$33 less on average, relative to a control mean debt of

[^2]US\$126 (se=\$10). The second (4 months), third (8 months) and fourth (18-19 months) follow-ups all yielded null results: $-5 p p(s e=4 p p$ ); $-1 p p$ ( $s e=4 p p$ ); $-4 p p$ ( $s e=4 p p$ ) for the likelihood of having moneylender debt.

Columns 3-5 report impacts on household coping mechanisms in response to income shocks. In India and the Philippines 2010 all impacts were small and short lived, while effects in Philippines 2007 are larger, though still modest. ${ }^{6}$

In India, at first follow-up vendors who got debt relief were 12 pp ( $\mathrm{se=5pp}$ ) more likely to use savings to cope with low household income but by second follow-up that effect is not statistically significant. Similarly, they are 6pp (se=3pp) less likely to respond to low household income by reducing consumption, but the effect vanishes by second follow-up. Financial training seems to have no impact.

In Philippines 2007, at first follow-up, households offered debt relief only are 45pp (se=12pp) less likely to respond to low income by borrowing and those offered debt relief and financial training are 33pp (se=14pp) less likely. This effect dissipates for the debt relief only treatment arm, but mostly does not for the combined debt relief and financial training treatment arm: second follow-up treatment effect is $+16 p p$ ( $s e=20 p p$ ); third follow-up is $-44 p p$ ( $s e=16 p p$ ); fourth follow-up is -24pp (se=13pp).

Effects in the Philippines 2010 are similar to India (again). If anything, Table 3 Column 4 shows a 16pp (se=9pp) increase in the likelihood that households respond to an income shock by borrowing money. While the size of this effect fluctuates across waves, in the fourth follow-up households granted debt relief are 20pp (se=6pp) more likely to respond to an income shock by borrowing money. This may be spurious, however, since the effect is not present in the second or third follow-ups.

Column 6 reports impacts on household expenditures. ${ }^{7}$ Across the board, debt relief had little to no impact on expenditure. Column 7 reports impacts on vendors' savings. In all sites vendors who received debt relief are no more likely to have any form of savings at the final followup (though in India there is a small increase in savings for those who received financial training).

Finally, Column 8 reports impact on profits. In India effects are small and short-lived. By the second follow-up, we cannot reject that profits of the treatment and control groups are the same. Similarly, we cannot reject that there was no impact on profits in Philippines 2007, though we only have profits data from the fourth follow-up. In Philippines 2010 there may have been a sustained impact on profits. At fourth follow-up, vendors offered debt relief earned an extra US\$1.15 (se=\$0.59) of profits on a typical day, relative to a control mean of US\$6.9.

Taken together these results suggest that, for the most part, the impact of debt relief was modest and fleeting. In India and the Philippines 2010, effects on borrowing were small at first follow-up and dissipated by the second follow-up, and correspondingly the effects on income

[^3]smoothing and profits were limited. In Philippines 2007 the impact on borrowing was somewhat larger and more persistent, though more than half of the vendors offered debt relief were already back in debt by first follow-up.

## III. Interpretation and Discussion

It is puzzling how and why small-scale entrepreneurs repeatedly borrow for working capital at high moneylender interest rates without expanding their business. It is perhaps even more surprising that after being lifted from debt by outside forces (i.e., this experiment), entrepreneurs return to moneylender debt so quickly. There are many possible explanations for this phenomenon, and distinguishing between them requires more power than our sample affords, but with an eye toward guiding future research on this subject we discuss a few explanations below and put forward some suggestive evidence.

A first possibility is that entrepreneurs have such high returns to investment that continuous borrowing at high interest rates is justified from the perspective of long-term profit maximization. If this were the case, we would expect a few results that we do not find. First, despite a rapid reversion to borrowing, vendors offered debt relief should have experienced a marked increase in their profitability. With the possible exception of Philippines 2010 (which yields an increase in firm profits of $\$ 1.15 /$ day (se $=\$ 0.59$ ) after $18-19$ months), this is largely absent from the above results. Second, as vendors reach diminishing returns to investment, they should no longer borrow to expand their investment, and standard theory then predicts a corresponding reduction in borrowing. This as well is counter to our results. We thus do not believe this is a likely explanation of the reversion to debt.

Table 4 examines several potential explanations by estimating heterogeneous treatment effects using the following specification:

$$
y_{i t}=\alpha+\sum_{j} \beta_{j} \text { Treatment }_{j i}+\sum_{k} \theta_{k} H_{k i}+\sum_{j, k} \phi_{j k} H_{k i} * \text { Treatment }_{j i}+\gamma_{1} y_{i 0}+\gamma_{2} v_{i}+\epsilon_{i t}
$$

where $H_{k i}$ is the $k^{\prime}$ th characteristic of interest for vendor $i$, and all other variables are defined as above. Robust standard errors are clustered at the vendor level. We present the estimates for the first follow-up in Table 4, and Appendix Tables A11, A12 and A13 present the same for the second, third and fourth follow-ups.

The second possibility we consider is that vendors suffer from time inconsistent preferences, such as present bias, or temptation challenges (Strotz 1955; Shefrin and Thaler 1992; Laibson 1997; O’Donoghue and Rabin 1999; Fudenberg and Levine 2006). In Table 4 we explore heterogeneous treatment effects of debt relief and financial training with respect to the level of present bias displayed by vendors at baseline. Vendors were asked to make hypothetical tradeoffs between differing amounts of money delivered at different times and were defined to be present biased if they exhibited lower patience for tradeoffs that included
immediate payoffs. ${ }^{8}$ We find little evidence of heterogeneity with respect to time inconsistency, although the confidence intervals on the heterogeneity are wide and often include the point estimate for the main treatment effect.

A third possibility is that borrowers lack a savings technology that allows them to accumulate capital and stay out of debt. Without a secure place to store capital, saving may be constrained by family pressures (e.g., Ashraf, Karlan, and Yin 2010; Schaner 2015; Jakiela and Ozier 2016), self-control (Ashraf, Karlan, and Yin 2006; Dupas and Robinson 2013b), or mere safety and low transaction costs (Dupas and Robinson 2013a; Prina 2015; Dupas et al. 2017). We explore heterogeneous treatment effects with respect to whether the vendor had a formal bank account at baseline. The results are noisy and fluctuate in sign, providing little evidence in support of this theory (but also fail to reject this theory). We also attempted to explore this hypothesis directly by opening formal savings accounts for some vendors in the Philippines 2010 experiment, but because of the implementation obstacles referenced above, this treatment was abandoned.

A fourth possibility is that venders do not understand the long-term cost of repeated borrowing at high rates. The financial training was explicitly designed to address this potential misperception, and had little effect on vendors' overall borrowing. That said, as with all training modules, there remains a confound between the efficacy of communication and the value of information being communicated; i.e., perhaps the training was not well executed. We also explore heterogeneous treatment effects with respect to an index of financial literacy and ability to answer basic mathematical questions. ${ }^{9}$ In India, of vendors offered debt relief, those with higher mathematical ability are more likely to stay out of debt at first follow-up, although across other sites the estimates are noisy and fluctuate in sign.

A final possibility is that vendors suffer frequent shocks to their income and upon experiencing such a shock revert to borrowing as a method of smoothing. Vendors who suffer an income shock but already have substantial debt to moneylenders may face a binding borrowing constraint, with no other option than to reduce their consumption. By offering vendors debt relief, we may have relaxed this borrowing constraint, improving their ability to smooth their income until they fell back into debt and their borrowing constraint once again became binding. This is consistent with the results from Philippines 2010 in which we see that vendors offered debt

[^4]relief are more likely to respond to low household income by borrowing in both the first followup and fourth follow-up, although in India and Philippines 2007 the effect on borrowing to smooth income shocks seems to be reversed.

To test this hypothesis, we use baseline characteristics to predict likelihood to experience an income shock in each follow-up wave and each site. We then include likelihood of a shock in the test for heterogeneous treatment effects. ${ }^{10}$ The estimates for India and Philippines 2007 provide weak evidence suggesting that vendors more likely to experience an income shock were less successful at staying out of debt.

These mechanisms are important distinctions for policy. If, for example, the issue is driven by financial literacy and poor planning, such as an underestimate of the likely future costs of borrowing, public policies which require disclosure policies focused on this likelihood may change behavior (e.g., see Bertrand and Morse (2011)). Similarly, if return to debt is driven by unabsorbed shocks, this makes salient how debt is filling in a missing insurance market for the poor. Improvements to social protection policies and insurance markets may help alleviate a problem erroneously perceived as a credit market problem. Evidence for this argument also comes from South Africa, in which borrowing at high interest rates (circa 200\% APR) from a consumer micro-lender helped individuals absorb shocks, which led to an increase in likelihood of being employed a year later and consequently a reduction in the poverty headcount ratio (Karlan and Zinman 2010). This suggests both that shutting down or restricting credit markets, even at high interest rates, may lead to downward spirals even worse than perpetual borrowing. Thus the large gap between borrowing and lending interest rates in developing countries should be a call to action to understand how to bring down costs for lending, not a cause to shut down credit markets. At current rates, however, this experiment demonstrates the importance of learning more about what individuals are doing with high interest moneylender debt, the circumstances of their decisions to borrow, and what market changes could satisfy their needs without warranting such expensive borrowing.

[^5]
## References

Aleem, Irfan. 1990. "Imperfect Information, Screening, and the Costs of Informal Lending: A Study of a Rural Credit Market in Pakistan." World Bank Economic Review 4 (3):329-49.

Ashraf, Nava, Dean Karlan, and Wesley Yin. 2006. "Tying Odysseus to the Mast: Evidence from a Commitment Savings Product in the Philippines." Quarterly Journal of Economics 121 (2):673-97.
—_. 2010. "Female Empowerment: Further Evidence from a Commitment Savings Product in the Philippines." World Development 38 (3):333-44.

Banerjee, Abhijit. 2004. "Inequality and Investment." World Bank Growth Commission Chapter. https://economics.mit.edu/files/514.

Banerjee, Abhijit, and Esther Duflo. 2007. "The Economic Lives of the Poor." Journal of Economic Perspectives 21 (1).

Bertrand, M., and A. Morse. 2011. "Information Disclosure, Cognitive Biases, and Payday Borrowing." Journal of Finance 66 (6):1865-93.

Drèze, Jean, Peter Lanjouw, and Naresh Sharma. 1997. "Credit in Rural India: A Case Study." SSRN Scholarly Paper ID 1126936. Rochester, NY: Social Science Research Network.
https://papers.ssrn.com/abstract=1126936.
Dupas, Pascaline, Dean Karlan, Jonathan Robinson, and Diego Ubfal. 2017. "Banking the Unbanked? Evidence from Three Countries." American Economic Journal: Applied Economics forthcoming. https://doi.org/10.1257/app. 20160597.

Dupas, Pascaline, and Jonathan Robinson. 2013a. "Savings Constraints and Microenterprise Development: Evidence from a Field Experiment in Kenya." American Economic Journal: Applied Economics 5 (1):16392. https://doi.org/10.1257/app.5.1.163.
——. 2013b. "Why Don't the Poor Save More? Evidence from Health Savings Experiments." American Economic Review 103 (4):1138-71. https://doi.org/10.1257/aer.103.4.1138.

Fudenberg, Drew, and David Levine. 2006. "A Dual Self Model of Impulse Control." American Economic Review 96 (5):1449-76.

Jakiela, Pamela, and Owen Ozier. 2016. "Does Africa Need a Rotten Kin Theorem? Experimental Evidence from Village Economies." The Review of Economic Studies 83 (1):231-68. https://doi.org/10.1093/restud/rdv033.

Karlan, Dean, and Jonathan Zinman. 2010. "Expanding Credit Access: Using Randomized Supply Decisions to Estimate the Impacts." Review of Financial Studies 23 (1):433-64.

Laibson, David. 1997. "Golden Eggs and Hyperbolic Discounting." Quarterly Journal of Economics 112 (2):443-77.

O’Donoghue, Ted, and Matthew Rabin. 1999. "Doing It Now or Later." American Economic Review 89 (1):103-24.

Prina, Silvia. 2015. "Banking the Poor via Savings Accounts: Evidence from a Field Experiment." Journal of Development Economics 115:16-31.

Schaner, Simone. 2015. "Do Opposites Detract? Intrahousehold Preference Heterogeneity and Inefficient Strategic Savings." American Economic Journal: Applied Economics 7 (2):135-74.

Shefrin, H., and R. Thaler. 1992. "Mental Accounting, Saving, and Self-Control." In Choice Over Time. New York: Russell Sage Foundation.

Skiba, Paige, and Jeremy Tobacman. 2011. "Do Payday Loans Cause Bankruptcy?" Working paper. Vanderbilt University, Nashville TN.

Strotz, R.H. 1955. "Myopia and Inconsistency in Dynamic Utility Maximization." Review of Economic Studies 23 (3):165-80.


| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ | $(8)$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |


| Any | Amount |  |  |  | HH monthly total |  | Take-home |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Moneylender | Moneylender | savings |  | cutting | expenditures | Any | profit typical |
| Debt | Debt (USD) |  |  | consumption | (USD) |  | day (USD) |


| Only Payoff in 1st Follow-up (2-4 months) | -0.17 | -8.35 | 0.12 | -0.06 | -0.06 | 26.51 |  | -0.04 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (0.04) | (1.99) | (0.05) | (0.06) | (0.03) | (21.44) |  | (0.15) |
| Only Payoff in 2nd Follow-up (5-8 months) | -0.06 | 0.31 | 0.08 | -0.08 | 0.00 | 14.50 |  | -0.18 |
|  | (0.04) | (2.09) | (0.05) | (0.05) | (0.03) | (18.49) |  | (0.16) |
| Only Payoff in 3rd Follow-up (9-10 months) | 0.03 | -0.51 | 0.06 | -0.02 | 0.00 | 8.62 | 0.00 | 0.03 |
|  | (0.04) | (2.14) | (0.04) | (0.06) | (0.02) | (19.10) | (0.03) | (0.17) |
| Only Training in 1st Follow-up (2-4 months) | -0.02 | -1.57 | -0.04 | 0.05 | -0.01 | -14.37 |  | -0.02 |
|  | (0.03) | (2.02) | (0.05) | (0.05) | (0.04) | (19.60) |  | (0.14) |
| Only Training in 2nd Follow-up (5-8 months) | 0.03 | 0.05 | 0.05 | -0.07 | 0.01 | -33.95 |  | -0.15 |
|  | (0.04) | (1.88) | (0.05) | (0.05) | (0.03) | (15.65) |  | (0.16) |
| Only Training in 3rd Follow-up (9-10 months) | 0.02 | -1.77 | 0.02 | -0.04 | 0.01 | -18.68 | 0.06 | -0.33 |
|  | (0.04) | (2.08) | (0.04) | (0.06) | (0.02) | (16.26) | (0.02) | (0.16) |
| Payoff + Training in 1st Follow-up (2-4 months) | -0.20 | -6.46 | 0.10 | -0.10 | 0.01 | 2.43 |  | 0.32 |
|  | (0.04) | (2.19) | (0.05) | (0.06) | (0.04) | (19.85) |  | (0.15) |
| Payoff + Training in 2nd Follow-up (5-8 months) | -0.09 | -0.55 | 0.04 | -0.04 | -0.01 | -16.70 |  | 0.16 |
|  | (0.04) | (2.10) | (0.05) | (0.05) | (0.03) | (15.95) |  | (0.16) |
| Payoff + Training in 3rd Follow-up (9-10 months) | -0.05 | -1.40 | 0.02 | -0.01 | -0.01 | -1.21 | 0.06 | -0.06 |
|  | (0.04) | (2.12) | (0.04) | (0.06) | (0.02) | (17.49) | (0.02) | (0.17) |
| Observations | 2,643 | 2,632 | 1,742 | 1,742 | 1,742 | 2,418 | 881 | 2,601 |
| Observations, F1 | 881 | 870 | 593 | 593 | 593 | 880 |  | 869 |
| Observations, F2 | 881 | 881 | 529 | 529 | 529 | 873 |  | 877 |
| Observations, F3 | 881 | 881 | 620 | 620 | 620 | 665 | 881 | 855 |
| Control mean dependent var | 0.69 | 24.83 | 0.16 | 0.63 | 0.07 | 238.01 | 0.92 | 2.87 |
| Control SD dependent var | 0.46 | 25.57 | 0.37 | 0.48 | 0.25 | 181.84 | 0.28 | 1.76 |
| Baseline Outcome Measure Included? | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| p-value for test: Payoff F1 = Payoff + Training F1 | 0.49 | 0.36 | 0.65 | 0.51 | 0.02 | 0.31 |  | 0.03 |
| p-value for test: Payoff F2 = Payoff + Training F2 | 0.53 | 0.70 | 0.49 | 0.42 | 0.64 | 0.05 |  | 0.03 |
| p-value for test: Payoff F3 = Payoff + Training F3 | 0.03 | 0.68 | 0.36 | 0.87 | 0.62 | 0.61 | 0.01 | 0.58 |
| p-value for test: Training F1 = Payoff + Training F1 | 0.00 | 0.02 | 0.01 | 0.01 | 0.48 | 0.45 |  | 0.03 |
| p-value for test: Training F2 = Payoff + Trainingg F2 | 0.00 | 0.77 | 0.83 | 0.51 | 0.56 | 0.18 |  | 0.04 |
| p-value for test: Training F3 = Payoff + Training F3 | 0.07 | 0.86 | 0.91 | 0.59 | 0.28 | 0.29 | 0.71 | 0.07 |
| p-value for test: Payoff F1 = Payoff F3 | 0.00 | 0.00 | 0.27 | 0.54 | 0.08 | 0.47 |  | 0.70 |
| p-value for test: Training F1 = Training F3 | 0.44 | 0.93 | 0.28 | 0.23 | 0.52 | 0.86 |  | 0.09 |
| p-value for test: Payoff + Training F1 = Payoff + Training F3 | 0.00 | 0.06 | 0.17 | 0.21 | 0.65 | 0.88 |  | 0.06 |

1. ${ }^{* * *} \mathrm{p}<0.01,{ }^{* *} \mathrm{p}<0.05,{ }^{*} \mathrm{p}<0.1$. 2. Robust standard errors clustered at the vendor level in parentheses. 3. All regressions also include the baseline value of the outcome variable (coded as zero, with an indicator for observations missing at baseline, whenever unavailable) and a survey wave fixed effect. 4. Column 1 is whether they borrowed from a money lender for working capital, column 2 is the amount they borrowed from a money lender for working capital in USD, column 3 is whether they coped with a HH income shock by using savings (missing if no HH income shock), column 4 is whether they coped with a HH income shock by borrowing (missing if no HH income shock), column 5 is whether they coped with a HH income shock by cutting consumption (missing if no HH income shock), column 6 is total monthly HH expenditures in USD, column 7 is whether they currently have any form of savings, and column 8 is their approximate take-home business profit on a typical day in USD. 5. For columns $3-5$, at baseline, of those that experienced an income shock, $58.1 \%$ experienced one from family sickness/accident/death, $23.39 \%$ from slow business, and $16.1 \%$ from unemployment.

| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ | $(6)$ | $(7)$ | $(8)$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| Any | Amount |  |  |  | HH monthly total |  | Take-home |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Moneylender | Moneylender | savings | borrowing | cutting | expenditures | savings | profit typical |
| Debt | Debt (USD) |  |  | consumption | (USD) |  | day (USD) |


| Only Payoff in 1st Follow-up (1 month) | -0.37 | -46.73 | 0.21 | -0.45 | -0.01 | -16.79 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (0.08) | (14.98) | (0.13) | (0.12) | (0.14) | (17.78) |  |  |
| Only Payoff in 2nd Follow-up (2 months) | -0.31 | -64.56 | 0.08 | 0.21 | -0.26 | -15.63 |  |  |
|  | (0.08) | (12.83) | (0.13) | (0.17) | (0.18) | (20.79) |  |  |
| Only Payoff in 3rd Follow-up (3 months) | -0.28 | -45.64 | 0.04 | -0.28 | 0.02 | -0.15 |  |  |
|  | (0.09) | (17.62) | (0.17) | (0.18) | (0.18) | (22.92) |  |  |
| Only Payoff in 4th Follow-up (18 months) | 0.11 | 9.33 | -0.06 | 0.17 | -0.08 | -10.59 | 0.09 | 2.79 |
|  | (0.09) | (14.27) | (0.14) | (0.13) | (0.11) | (47.49) | (0.09) | (2.19) |
| Only Training in 1st Follow-up (1 month) | 0.00 | -2.48 | 0.37 | -0.27 | 0.03 | -32.12 |  |  |
|  | (0.07) | (14.55) | (0.15) | (0.15) | (0.15) | (17.84) |  |  |
| Only Training in 2nd Follow-up (2 months) | 0.00 | -1.89 | 0.17 | 0.33 | -0.20 | -46.14 |  |  |
|  | (0.07) | (16.77) | (0.13) | (0.16) | (0.17) | (22.53) |  |  |
| Only Training in 3rd Follow-up (3 months) | 0.01 | -5.32 | 0.03 | -0.16 | 0.02 | -33.23 |  |  |
|  | (0.08) | (17.88) | (0.16) | (0.19) | (0.19) | (24.43) |  |  |
| Only Training in 4th Follow-up (18 months) | -0.02 | -12.91 | -0.14 | 0.00 | 0.14 | 15.12 | 0.04 | 0.07 |
|  | (0.09) | (13.35) | (0.14) | (0.14) | (0.14) | $(56.53)$ | (0.09) | (2.41) |
| Payoff + Training in 1st Follow-up (1 month) | -0.47 | -64.22 | 0.18 | -0.33 | 0.12 | -1.68 |  |  |
|  | (0.08) | (12.59) | (0.14) | (0.14) | (0.14) | (20.91) |  |  |
| Payoff + Training in 2nd Follow-up (2 months) | -0.49 | -72.39 | 0.32 | 0.16 | -0.12 | -24.62 |  |  |
|  | (0.08) | (13.80) | (0.18) | (0.20) | (0.19) | (24.66) |  |  |
| Payoff + Training in 3rd Follow-up (3 months) | -0.44 | -65.63 | 0.19 | -0.44 | -0.04 | -19.71 |  |  |
|  | (0.09) | (14.62) | (0.16) | (0.16) | (0.18) | (24.83) |  |  |
| Payoff + Training in 4th Follow-up (18 months) | -0.05 | -5.22 | 0.01 | -0.24 | 0.16 | -29.61 | 0.11 | 5.35 |
|  | (0.08) | (14.31) | (0.14) | (0.13) | (0.14) | (50.01) | (0.09) | (4.83) |
| Observations | 824 | 822 | 298 | 298 | 298 | 823 | 206 | 194 |
| Observations, F1 | 206 | 206 | 82 | 82 | 82 | 206 |  |  |
| Observations, F2 | 206 | 206 | 53 | 53 | 53 | 205 |  |  |
| Observations, F3 | 206 | 206 | 58 | 58 | 58 | 206 |  |  |
| Observations, F4 | 206 | 204 | 105 | 105 | 105 | 206 | 206 | 194 |
| Control mean dependent var | 0.69 | 81.90 | 0.26 | 0.53 | 0.48 | 271.57 | 0.57 | 7.52 |
| Control SD dependent var | 0.46 | 89.63 | 0.44 | 0.50 | 0.50 | 194.98 | 0.50 | 7.62 |
| Baseline Outcome Measure Included? | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| p-value for test: Payoff F1 = Payoff + Training F1 | 0.29 | 0.20 | 0.86 | 0.33 | 0.41 | 0.39 |  |  |
| p-value for test: Payoff F2 = Payoff + Training F2 | 0.06 | 0.46 | 0.23 | 0.81 | 0.48 | 0.65 |  |  |
| p-value for test: Payoff F3 = Payoff + Training F3 | 0.10 | 0.18 | 0.39 | 0.33 | 0.73 | 0.43 |  |  |
| p-value for test: Payoff F4 = Payoff + Training F4 | 0.08 | 0.24 | 0.64 | 0.00 | 0.06 | 0.69 | 0.76 | 0.53 |
| p-value for test: Training F1 = Payoff + Training F1 | 0.00 | 0.00 | 0.30 | 0.73 | 0.56 | 0.10 |  |  |
| p-value for test: Training F2 = Payoff + Training F2 | 0.00 | 0.00 | 0.46 | 0.41 | 0.67 | 0.32 |  |  |
| p-value for test: Training F3 = Payoff + Training F3 | 0.00 | 0.00 | 0.36 | 0.12 | 0.72 | 0.61 |  |  |
| p-value for test: Training F4 = Payoff + Training F4 | 0.69 | 0.50 | 0.29 | 0.10 | 0.89 | 0.43 | 0.44 | 0.25 |
| p-value for test: Payoff F1 = Payoff F4 | 0.00 | 0.01 | 0.11 | 0.00 | 0.71 | 0.90 |  |  |
| p-value for test: Training F1 = Training F4 | 0.85 | 0.59 | 0.01 | 0.16 | 0.57 | 0.42 |  |  |
| p-value for test: Payoff + Training F1 = Payoff + Training F4 | 0.00 | 0.00 | 0.36 | 0.60 | 0.81 | 0.57 |  |  |

1. ${ }^{* * *} \mathrm{p}<0.01,{ }^{* *} \mathrm{p}<0.05,{ }^{*} \mathrm{p}<0.1$. 2. Robust standard errors clustered at the vendor level in parentheses. 3. All regressions also include the baseline value of the outcome variable (coded as zero, with an indicator for observations missing at baseline, whenever unavailable) and a survey wave fixed effect. 4. Column 1 is whether they borrowed from a money lender for working capital, column 2 is the amount they borrowed from a money lender for working capital in USD, column 3 is whether they coped with a HH income shock by using savings (missing if no HH income shock), column 4 is whether they coped with a HH income shock by borrowing (missing if no HH income shock), column 5 is whether they coped with a HH income shock by cutting consumption (missing if no HH income shock), column 6 is total monthly HH expenditures in USD, column 7 is whether they currently have any form of savings, and column 8 is their approximate take-home business profit on a typical day in USD. 5.For columns 3-5, at baseline, of those that experienced an income shock, $60.4 \%$ experienced one from slow business, $25.5 \%$ from family sickness/accident/death, and $17.9 \%$ from unemployment.

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Any <br> Moneylender Debt | Amount Moneylender Debt (USD) | Coped via savings | Coped via borrowing | Coped via cutting consumption | HH monthly total expenditures (USD) | Any savings | Take-home profit typical day (USD) |


| Payoff + Training in 1st Follow-up (1 month) | -0.09 | -32.53 | -0.07 | 0.16 | -0.08 | 2.39 |  | 0.65 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (0.04) | (10.09) | (0.08) | (0.09) | (0.09) | (8.06) |  | (0.41) |
| Payoff + Training in 2nd Follow-up (4 months) | -0.05 | -14.31 | -0.01 | -0.06 | 0.03 | -6.73 |  | 1.00 |
|  | (0.04) | (10.19) | (0.06) | (0.09) | (0.08) | (9.75) |  | (0.53) |
| Payoff + Training in 3rd Follow-up (8 months) | -0.01 | -13.01 | -0.06 | 0.13 | -0.09 | -2.39 |  | 1.58 |
|  | (0.04) | (11.29) | (0.07) | (0.09) | (0.09) | (9.21) |  | (0.63) |
| Payoff + Training in 4th Follow-up (18-19 months) | -0.04 | -12.04 | 0.01 | 0.19 | 0.00 | -3.40 | 0.04 | 1.15 |
|  | (0.04) | (18.62) | (0.04) | (0.06) | (0.05) | (10.67) | (0.04) | (0.59) |
| Observations | 2,272 | 2,158 | 670 | 670 | 670 | 2,073 | 569 | 2,133 |
| Observations, F1 | 569 | 569 | 132 | 132 | 132 | 494 |  | 554 |
| Observations, F2 | 566 | 565 | 145 | 145 | 145 | 496 |  | 541 |
| Observations, F3 | 568 | 568 | 131 | 131 | 131 | 517 |  | 543 |
| Observations, F4 | 569 | 456 | 262 | 262 | 262 | 566 | 569 | 495 |
| Control mean dependent var | 0.70 | 125.77 | 0.16 | 0.37 | 0.27 | 220.48 | 0.47 | 6.89 |
| Control SD dependent var | 0.46 | 148.71 | 0.37 | 0.48 | 0.45 | 116.53 | 0.50 | 4.10 |
| Baseline Outcome Measure Included? | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| p-value for test: Payoff + Training F1 = Payoff + Training F4 | 0.31 | 0.25 | 0.39 | 0.74 | 0.40 | 0.58 |  | 0.36 |

1. ${ }^{* * *} \mathrm{p}<0.01,{ }^{* *} \mathrm{p}<0.05,{ }^{*} \mathrm{p}<0.1$. 2. Robust standard errors clustered at the vendor level in parentheses. 3. All regressions also include the baseline value of the outcome variable (coded as zero, with an indicator for observations missing at baseline, whenever unavailable), a survey wave fixed effect, and a vector of dummy variables for quintile of preexisting debt at baseline. 4. Column 1 is whether they borrowed from a money lender for working capital, column 2 is the amount they borrowed from a money lender for working capital in USD, column 3 is whether they coped with a HH income shock by using savings (missing if no HH income shock), column 4 is whether they coped with a HH income shock by borrowing (missing if no HH income shock), column 5 is whether they coped with a HH income shock by cutting consumption (missing if no HH income shock), column 6 is total monthly HH expenditures in USD, column 7 is whether they currently have any form of savings, and column 8 is their approximate take-home business profit on a typical day in USD. 5. For columns 3-5, at baseline, of those that experienced an income shock, $59.2 \%$ experienced one from family sickness/accident/death, $6.9 \%$ from slow business, and $6.3 \%$ from unemployment.

|  | (1) | (2) | (3) | (4) | (5) | (6) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | India 2007 |  | Philippines 2007 |  | Philippines 2010 |  |
|  | Any moneylender debt | Amount moneylender debt (USD) | Any moneylender debt | Amount moneylender debt (USD) | Any moneylender debt | Amount moneylender debt (USD) |
| Only Payoff | -0.29 | -18.47 | -0.72 | -91.41 |  |  |
|  | (0.16) | (9.42) | (0.17) | (34.97) |  |  |
| Only Training | -0.24 | -21.53 | -0.30 | -45.03 |  |  |
|  | (0.15) | (11.82) | (0.13) | (33.60) |  |  |
| Payoff \& Training Treatment | -0.68 | -33.10 | -0.60 | -65.50 | -0.09 | -10.82 |
|  | (0.16) | (10.03) | (0.17) | (34.54) | (0.07) | (23.24) |
| Time inconsistent preferences | -0.03 | -0.85 | -0.15 | -8.65 | -0.02 | 9.91 |
|  | (0.06) | (3.27) | (0.17) | (32.33) | (0.08) | (24.93) |
| Has savings at a bank | 0.00 | 1.04 | 0.00 | 22.10 | 0.02 | 11.28 |
|  | (0.09) | (4.69) | (0.12) | (23.48) | (0.06) | (18.68) |
| Financial literacy index (7 vars) | -0.03 | -0.72 | -0.03 | 1.31 | 0.00 | -10.89 |
|  | (0.02) | (1.56) | (0.04) | (8.66) | (0.03) | (10.50) |
| Math skills index (4 vars) | 0.01 | 1.22 | 0.01 | -1.19 | 0.01 | 0.28 |
|  | (0.02) | (1.64) | (0.04) | (7.23) | (0.03) | (7.87) |
| Predicted probability of HH income shock | -0.12 | -22.09 | -0.36 | -32.12 | -0.15 | -39.15 |
|  | (0.17) | (11.19) | (0.20) | (49.05) | (0.23) | (71.12) |
| Only Payoff X Time inconsistent preferences | 0.04 | 2.95 | 0.61 | 33.45 |  |  |
|  | (0.08) | (4.37) | (0.22) | (37.95) |  |  |
| Only Payoff X Has savings at a bank | -0.10 | -1.43 | -0.08 | -45.68 |  |  |
|  | (0.13) | (5.79) | (0.20) | (34.90) |  |  |
| Only Payoff X Financial literacy Index | -0.02 | -0.39 | 0.04 | 10.76 |  |  |
|  | (0.04) | (2.09) | (0.08) | (13.66) |  |  |
| Only Payoff X Math skills Index | -0.04 | -2.74 | -0.03 | 22.69 |  |  |
|  | (0.03) | (1.94) | (0.10) | (22.18) |  |  |
| Only Payoff X Predicted probability of HH income shock | 0.18 | 14.36 | 0.63 | 111.66 |  |  |
|  | (0.23) | (13.35) | (0.34) | (78.05) |  |  |
| Only Training X Time inconsistent preferences | -0.08 | -3.55 | 0.29 | -13.57 |  |  |
|  | (0.08) | (4.17) | (0.19) | (40.72) |  |  |
| Only Training X Has savings at a bank | -0.02 | -1.62 | -0.14 | -37.52 |  |  |
|  | (0.14) | (6.29) | (0.18) | (37.00) |  |  |
| Only Training X Financial literacy Index | 0.01 | 2.60 | 0.05 | -19.47 |  |  |
|  | (0.03) | (2.23) | (0.06) | (15.39) |  |  |
| Only Training X Math skills Index | -0.01 | -1.76 | -0.09 | -18.74 |  |  |
|  | (0.02) | (1.92) | (0.10) | (11.69) |  |  |
| Only Training X Predicted probability of HH income shock | 0.37 | 31.54 | 0.57 | 108.24 |  |  |
|  | (0.22) | (16.94) | (0.25) | (57.12) |  |  |
| Payoff + Training X Time inconsistent preferences | 0.12 | 2.60 | 0.28 | 37.18 | 0.07 | -10.18 |
|  | (0.08) | (4.54) | (0.28) | (44.87) | (0.10) | (28.47) |
| Payoff + Training X Has savings at a bank | -0.02 | 0.55 | 0.05 | -10.08 | -0.03 | 1.59 |
|  | (0.13) | (6.98) | (0.21) | (29.17) | (0.08) | (21.78) |
| Payoff + Training X Financial literacy Index | 0.01 | 0.15 | 0.00 | -1.65 | -0.01 | 7.28 |
|  | (0.04) | (2.32) | (0.09) | (10.28) | $(0.03)$ | (11.88) |
| Payoff + Training X Math skills Index | -0.03 | -1.51 | -0.07 | -5.87 | -0.06 | -8.96 |
|  | (0.04) | (2.65) | (0.12) | (12.21) | (0.04) | (9.64) |
| Payoff + Training X Predicted probability of HH income shock | 0.67 | 38.57 | 0.11 | -6.49 | -0.04 | -89.64 |
|  | (0.23) | (13.96) | (0.34) | (55.58) | (0.27) | (78.18) |
| Observations | 881 | 870 | 206 | 206 | 564 | 564 |
| Control mean dependent var | 0.76 | 28.91 | 0.87 | 94.55 | 0.77 | 125.71 |
| Control SD dependent var | 0.43 | 27 | 0.34 | 76.98 | 0.42 | 130.57 |
| Baseline Outcome Measure Included? | Yes | Yes | Yes | Yes | Yes | Yes |

1. ${ }^{* * *} \mathrm{p}<0.01,{ }^{* *} \mathrm{p}<0.05,{ }^{*} \mathrm{p}<0.1$. 2. Robust standard errors in parentheses. 3. All regressions also include the baseline value of the outcome variable (coded as zero, with an indicator for observations missing at baseline, whenever unavailable) and columns 5 and 6 include a vector of dummy variables for quintile of preexisting debt at baseline. 4 . Columns 1,3 , and 5 are whether they borrowed from a money lender for working capital; columns 2,4 , and 6 are the amount they borrowed from a money lender for working capital in USD. See narrative in paper for details on the covariates.

|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Both | Training Only | Payoff <br> Only | Control | Overall | (1) vs. (2), p-value | (1) vs. (3), p-value | (1) vs. (4), p-value | (2) vs. (3), p-value | $\begin{gathered} \text { (2) vs. (4), } \\ \text { p-value } \end{gathered}$ | (3) vs. (4), p-value | p -value from joint orthogonality test of treatment arms |
| A. India 2007 |  |  |  |  |  |  |  |  |  |  |  |  |
| Any moneylender debt | 0.65 | 0.70 | 0.68 | 0.72 | 0.69 | 0.21 | 0.51 | 0.08 | 0.56 | 0.62 | 0.28 | 0.34 |
| Amount moneylender debt (USD) | 16.33 | 18.79 | 18.31 | 19.88 | 18.33 | 0.10 | 0.18 | 0.02 | 0.75 | 0.49 | 0.30 | 0.13 |
| Coped via savings | 0.16 | 0.19 | 0.18 | 0.22 | 0.19 | 0.56 | 0.76 | 0.30 | 0.79 | 0.66 | 0.49 | 0.77 |
| Coped via borrowing | 0.83 | 0.80 | 0.77 | 0.74 | 0.78 | 0.57 | 0.32 | 0.09 | 0.65 | 0.25 | 0.51 | 0.36 |
| Coped via cutting consumption | 0.15 | 0.09 | 0.13 | 0.12 | 0.12 | 0.20 | 0.76 | 0.55 | 0.35 | 0.49 | 0.78 | 0.63 |
| HH monthly total expenditures (USD) | 133.49 | 132.24 | 135.62 | 130.08 | 132.86 | 0.83 | 0.71 | 0.51 | 0.56 | 0.69 | 0.31 | 0.79 |
| Any savings | 0.93 | 0.95 | 0.96 | 0.95 | 0.95 | 0.45 | 0.11 | 0.45 | 0.38 | 1.00 | 0.38 | 0.46 |
| Take-home profit typical day (USD) | 2.55 | 2.66 | 2.64 | 2.76 | 2.65 | 0.33 | 0.42 | 0.06 | 0.84 | 0.43 | 0.31 | 0.35 |
| Surveyed in all rounds | 0.90 | 0.87 | 0.88 | 0.87 | 0.88 | 0.33 | 0.57 | 0.26 | 0.68 | 0.89 | 0.59 | 0.69 |
| N | 250 | 250 | 250 | 250 | 1000 |  |  |  |  |  |  |  |
| B. Philippines 2007 |  |  |  |  |  |  |  |  |  |  |  |  |
| Any moneylender debt | 0.90 | 0.89 | 0.85 | 0.86 | 0.88 | 0.75 | 0.39 | 0.41 | 0.60 | 0.62 | 0.97 | 0.80 |
| Amount moneylender debt (USD) | 74.00 | 74.91 | 65.70 | 68.32 | 70.73 | 0.93 | 0.39 | 0.57 | 0.32 | 0.50 | 0.77 | 0.74 |
| Coped via savings | 0.19 | 0.17 | 0.24 | 0.27 | 0.22 | 0.87 | 0.64 | 0.47 | 0.53 | 0.39 | 0.83 | 0.80 |
| Coped via borrowing | 0.67 | 0.46 | 0.56 | 0.57 | 0.57 | 0.14 | 0.44 | 0.45 | 0.49 | 0.44 | 0.96 | 0.53 |
| Coped via cutting consumption | 0.59 | 0.54 | 0.24 | 0.43 | 0.45 | 0.72 | 0.01 | 0.24 | 0.03 | 0.44 | 0.14 | 0.06 |
| HH monthly total expenditures (USD) | 25.83 | 27.71 | 22.57 | 26.24 | 25.59 | 0.49 | 0.18 | 0.87 | 0.06 | 0.59 | 0.13 | 0.24 |
| Any savings | 0.46 | 0.42 | 0.50 | 0.46 | 0.46 | 0.65 | 0.66 | 1.00 | 0.37 | 0.65 | 0.66 | 0.85 |
| Take-home profit typical day (USD) | 10.04 | 9.54 | 7.74 | 9.67 | 9.25 | 0.85 | 0.38 | 0.90 | 0.42 | 0.96 | 0.46 | 0.82 |
| Surveyed in all rounds | 0.83 | 0.79 | 0.82 | 0.86 | 0.82 | 0.62 | 0.97 | 0.63 | 0.65 | 0.33 | 0.60 | 0.81 |
| N | 63 | 62 | 62 | 63 | 250 |  |  |  |  |  |  |  |
| C. Philippines 2010 |  |  |  |  |  |  |  |  |  |  |  |  |
| Any moneylender debt | 0.83 |  |  | 0.83 | 0.83 |  |  | 0.85 |  |  |  | 0.85 |
| Amount moneylender debt (USD) | 106.91 |  |  | 105.52 | 106.45 |  |  | 0.86 |  |  |  | 0.86 |
| Coped via savings | 0.24 |  |  | 0.29 | 0.26 |  |  | 0.48 |  |  |  | 0.48 |
| Coped via borrowing | 0.46 |  |  | 0.40 | 0.44 |  |  | 0.51 |  |  |  | 0.51 |
| Coped via cutting consumption | 0.13 |  |  | 0.15 | 0.14 |  |  | 0.84 |  |  |  | 0.84 |
| HH monthly total expenditures (USD) | 15.52 |  |  | 14.93 | 15.33 |  |  | 0.42 |  |  |  | 0.42 |
| Any savings | 0.60 |  |  | 0.61 | 0.60 |  |  | 0.65 |  |  |  | 0.65 |
| Take-home profit typical day (USD) | 7.69 |  |  | 7.85 | 7.74 |  |  | 0.75 |  |  |  | 0.75 |
| Surveyed in all rounds | 0.84 |  |  | 0.76 | 0.81 |  |  | 0.02 |  |  |  | 0.02 |
| N | 468 |  |  | 233 | 701 |  |  |  |  |  |  |  |
| Within each panel A-C, row 1 is whether they borrowed from a money lender for working capital, row 2 is the amount they borrowed from a money lender for working capital in USD, row 3 is whether they coped with a HH income shock by using savings (missing if no HH income shock), row 4 is whether they coped with a HH income shock by borrowing (missing if no HH income shock), row 5 is whether they coped with a HH income shock by cutting consumption (missing if no HH income shock), row 6 is total monthly HH expenditures in USD, row 7 is whether they currently have any form of savings, row 8 is their approximate take-home business profit on a typical day in USD, and row 9 is whether they were surveyed in all rounds of data collection. |  |  |  |  |  |  |  |  |  |  |  |  |


|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Amount moneylender debt <br> (USD) | Amount moneylender debt (Win. 1\% USD) | Amount moneylender debt (Win. 5\% USD) | HH monthly total expenditures (USD) | HH monthly total expenditures (Win. 1\% USD) | HH monthly total expenditures (Win 5\% USD) | Take-home profit typical day (USD) | Take-home profit typical day (Win 1\% USD) | Take-home profit typical day (Win 5\% USD) |
| Only Payoff in 1st Follow-up (2-4 months) | $\begin{gathered} -8.35 \\ (1.99) \end{gathered}$ | $\begin{gathered} -7.91 \\ (1.91) \end{gathered}$ | $\begin{gathered} -7.12 \\ (1.82) \end{gathered}$ | $\begin{gathered} 26.51 \\ (21.44) \end{gathered}$ | $\begin{gathered} 22.89 \\ (19.52) \end{gathered}$ | $\begin{gathered} 5.22 \\ (14.52) \end{gathered}$ | $\begin{gathered} -0.04 \\ (0.15) \end{gathered}$ | $\begin{gathered} -0.08 \\ (0.13) \end{gathered}$ | $\begin{gathered} -0.03 \\ (0.12) \end{gathered}$ |
| Only Payoff in 2nd Follow-up (5-8 months) | $\begin{gathered} 0.31 \\ (2.09) \end{gathered}$ | $\begin{gathered} 0.22 \\ (2.03) \end{gathered}$ | $\begin{gathered} -0.19 \\ (1.91) \end{gathered}$ | $\begin{gathered} 14.50 \\ (18.49) \end{gathered}$ | $\begin{gathered} 17.89 \\ (16.20) \end{gathered}$ | $\begin{gathered} 12.97 \\ (12.78) \end{gathered}$ | $\begin{gathered} -0.18 \\ (0.16) \end{gathered}$ | $\begin{gathered} -0.17 \\ (0.16) \end{gathered}$ | $\begin{gathered} -0.11 \\ (0.14) \end{gathered}$ |
| Only Payoff in 3rd Follow-up (9-10 months) | $\begin{gathered} -0.51 \\ (2.14) \end{gathered}$ | $\begin{gathered} -0.42 \\ (2.07) \end{gathered}$ | $\begin{gathered} -0.08 \\ (1.94) \end{gathered}$ | $\begin{gathered} 8.62 \\ (19.10) \end{gathered}$ | $\begin{gathered} 4.92 \\ (16.95) \end{gathered}$ | $\begin{gathered} -0.01 \\ (11.35) \end{gathered}$ | $\begin{gathered} 0.03 \\ (0.17) \end{gathered}$ | $\begin{gathered} 0.07 \\ (0.15) \end{gathered}$ | $\begin{gathered} 0.06 \\ (0.13) \end{gathered}$ |
| Only Training in 1st Follow-up (2-4 months) | $\begin{aligned} & -1.57 \\ & (2.02) \end{aligned}$ | $\begin{gathered} -1.07 \\ (1.86) \end{gathered}$ | $\begin{gathered} -0.63 \\ (1.73) \end{gathered}$ | $\begin{gathered} -14.37 \\ (19.60) \end{gathered}$ | $\begin{aligned} & -16.17 \\ & (18.35) \end{aligned}$ | $\begin{aligned} & -23.95 \\ & (14.25) \end{aligned}$ | $\begin{gathered} -0.02 \\ (0.14) \end{gathered}$ | $\begin{gathered} -0.02 \\ (0.14) \end{gathered}$ | $\begin{gathered} -0.03 \\ (0.11) \end{gathered}$ |
| Only Training in 2nd Follow-up (5-8 months) | $\begin{gathered} 0.05 \\ (1.88) \end{gathered}$ | $\begin{gathered} 0.43 \\ (1.82) \end{gathered}$ | $\begin{gathered} 0.53 \\ (1.77) \end{gathered}$ | $\begin{aligned} & -33.95 \\ & (15.65) \end{aligned}$ | $\begin{aligned} & -27.99 \\ & (13.76) \end{aligned}$ | $\begin{gathered} -21.31 \\ (11.57) \end{gathered}$ | $\begin{gathered} -0.15 \\ (0.16) \end{gathered}$ | $\begin{gathered} -0.14 \\ (0.15) \end{gathered}$ | $\begin{gathered} -0.1 \\ (0.13) \end{gathered}$ |
| Only Training in 3rd Follow-up (9-10 months) | $\begin{gathered} -1.77 \\ (2.08) \end{gathered}$ | $\begin{gathered} -1.51 \\ (1.99) \end{gathered}$ | $\begin{gathered} -1.29 \\ (1.85) \end{gathered}$ | $\begin{gathered} -18.68 \\ (16.26) \end{gathered}$ | $\begin{gathered} -17.68 \\ (15.46) \end{gathered}$ | $\begin{gathered} -15.19 \\ (10.83) \end{gathered}$ | $\begin{gathered} -0.33 \\ (0.16) \end{gathered}$ | $\begin{gathered} -0.28 \\ (0.14) \end{gathered}$ | $\begin{gathered} -0.22 \\ (0.12) \end{gathered}$ |
| Payoff + Training in 1st Follow-up (2-4 months) | $\begin{gathered} -6.46 \\ (2.19) \end{gathered}$ | $\begin{gathered} -6.11 \\ (2.10) \end{gathered}$ | $\begin{gathered} -5.70 \\ (1.97) \end{gathered}$ | $\begin{gathered} 2.43 \\ (19.85) \end{gathered}$ | $\begin{gathered} -2.97 \\ (17.29) \end{gathered}$ | $\begin{gathered} -6.88 \\ (13.88) \end{gathered}$ | $\begin{gathered} 0.32 \\ (0.15) \end{gathered}$ | $\begin{gathered} 0.30 \\ (0.14) \end{gathered}$ | $\begin{gathered} 0.27 \\ (0.12) \end{gathered}$ |
| Payoff + Training in 2nd Follow-up (5-8 months) | $\begin{gathered} -0.55 \\ (2.10) \end{gathered}$ | $\begin{gathered} -0.53 \\ (2.05) \end{gathered}$ | $\begin{gathered} -0.80 \\ (1.95) \end{gathered}$ | $\begin{gathered} -16.7 \\ (15.95) \end{gathered}$ | $\begin{gathered} -11.78 \\ (13.92) \end{gathered}$ | $\begin{gathered} -7.70 \\ (11.39) \end{gathered}$ | $\begin{gathered} 0.16 \\ (0.16) \end{gathered}$ | $\begin{gathered} 0.15 \\ (0.16) \end{gathered}$ | $\begin{gathered} 0.19 \\ (0.13) \end{gathered}$ |
| Payoff + Training in 3rd Follow-up (9-10 months) | $\begin{aligned} & -1.40 \\ & (2.12) \end{aligned}$ | $\begin{aligned} & -1.48 \\ & (2.01) \end{aligned}$ | $\begin{aligned} & -1.18 \\ & (1.88) \end{aligned}$ | $\begin{gathered} -1.21 \\ (17.49) \end{gathered}$ | $\begin{gathered} -2.20 \\ (16.13) \end{gathered}$ | $\begin{gathered} -3.64 \\ (10.99) \end{gathered}$ | $\begin{gathered} -0.06 \\ (0.17) \end{gathered}$ | $\begin{gathered} -0.03 \\ (0.15) \end{gathered}$ | $\begin{gathered} -0.06 \\ (0.13) \end{gathered}$ |
| Observations | 2,632 | 2,632 | 2,632 | 2,418 | 2,418 | 2,418 | 2,601 | 2,601 | 2,601 |
| Observations, F1 | 870 | 870 | 870 | 880 | 880 | 880 | 869 | 869 | 869 |
| Observations, F2 | 881 | 881 | 881 | 873 | 873 | 873 | 877 | 877 | 877 |
| Observations, F3 | 881 | 881 | 881 | 665 | 665 | 665 | 855 | 855 | 855 |
| Control mean dependent var | 24.83 | 24.56 | 23.98 | 238.01 | 235.20 | 227.06 | 2.87 | 2.85 | 2.75 |
| Control SD dependent var | 25.57 | 24.62 | 23.09 | 181.84 | 164.35 | 133.09 | 1.76 | 1.63 | 1.37 |
| Baseline Outcome Measure Included? | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| p-value for test: Payoff F1 = Payoff + Training F1 | 0.36 | 0.38 | 0.48 | 0.31 | 0.20 | 0.40 | 0.03 | 0.01 | 0.02 |
| p-value for test: Payoff F2 = Payoff + Training F2 | 0.70 | 0.73 | 0.76 | 0.05 | 0.05 | 0.09 | 0.03 | 0.04 | 0.02 |
| p-value for test: Payoff F3 = Payoff + Training F3 | 0.68 | 0.60 | 0.57 | 0.61 | 0.67 | 0.74 | 0.58 | 0.53 | 0.34 |
| p-value for test: Training F1 = Payoff + Training F1 | 0.02 | 0.01 | 0.01 | 0.45 | 0.49 | 0.23 | 0.03 | 0.02 | 0.01 |
| p-value for test: Training F2 = Payoff + Trainingg F2 | 0.77 | 0.63 | 0.48 | 0.18 | 0.20 | 0.22 | 0.04 | 0.04 | 0.02 |
| p-value for test: Training F3 = Payoff + Training F3 | 0.86 | 0.99 | 0.95 | 0.29 | 0.32 | 0.27 | 0.07 | 0.08 | 0.23 |
| p-value for test: Payoff F1 = Payoff F3 | 0.00 | 0.00 | 0.00 | 0.47 | 0.43 | 0.74 | 0.70 | 0.41 | 0.57 |
| p-value for test: Training F1 $=$ Training F3 | 0.93 | 0.85 | 0.75 | 0.86 | 0.95 | 0.59 | 0.09 | 0.13 | 0.20 |
| p-value for test: Payoff + Training F1 = Payoff + Training F3 | 0.06 | 0.06 | 0.05 | 0.88 | 0.97 | 0.84 | 0.06 | 0.07 | 0.03 |


|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Amount moneylender debt (USD) | Amount moneylender debt (Win. 1\% USD) | Amount moneylender debt (Win. 5\% USD) | HH monthly total expenditures (USD) | HH monthly total expenditures (Win. 1\% USD) | $\begin{gathered} \text { HH monthly } \\ \text { total } \\ \text { expenditures } \\ \text { (Win 5\% USD) } \end{gathered}$ | Take-home profit typical day (USD) | Take-home profit typical day (Win 1\% USD) | Take-home profit typical day (Win 5\% USD) |
| Only Payoff in 1st Follow-up (1 month) | -46.73 | -48.90 | -49.41 | -16.79 | -14.6 | -11.5 |  |  |  |
|  | (14.98) | (13.77) | (11.40) | (17.78) | (16.91) | (15.26) |  |  |  |
| Only Payoff in 2nd Follow-up (2 months) | -64.56 | -64.62 | -59.1 | -15.63 | -15.73 | -7.06 |  |  |  |
|  | (12.83) | (12.77) | (11.21) | (20.79) | (20.72) | (17.98) |  |  |  |
| Only Payoff in 3rd Follow-up (3 months) | -45.64 | -47.91 | -45.47 | -0.15 | -0.80 | -2.97 |  |  |  |
|  | (17.62) | (16.53) | (13.76) | (22.92) | (22.73) | (21.61) |  |  |  |
| Only Payoff in 4th Follow-up (18 months) | 9.33 |  |  |  |  |  | 2.79 | 2.09 | 0.36 |
|  | (14.27) | (11.60) | (9.01) | (47.49) | (47.31) | (42.24) | (2.19) | (1.93) | (0.95) |
| Only Training in 1st Follow-up (1 month) | $-2.48$ | $-2.54$ | $-4.07$ | $-32.12$ | $-28.93$ | $-29.15$ |  |  |  |
|  | $(14.55)$ -1.89 | $(14.52)$ -2.62 | (12.28) -6.42 | (17.84) -46.14 | (16.94) | (14.82) $-36.57$ |  |  |  |
| Only Training in 2nd Follow-up (2 months) | (16.77) | (16.48) | (12.82) | (22.53) | (21.88) | (18.25) |  |  |  |
| Only Training in 3rd Follow-up (3 months) | -5.32 | -5.38 | -4.93 | -33.23 | -33.36 | -34.63 |  |  |  |
|  | (17.88) | (17.83) | (15.09) | (24.43) | (23.51) | (21.88) |  |  |  |
| Only Training in 4th Follow-up (18 months) | -12.91 | -7.90 | -5.25 | 15.12 | 8.52 | -8.25 | 0.07 | -0.52 | 0.14 |
|  | (13.35) | (10.49) | (8.41) | (56.53) | (53.44) | (43.22) | (2.41) | (2.07) | (1.03) |
| Payoff + Training in 1st Follow-up (1 month) | -64.22 | -63.98 | -60.98 | -1.68 | -5.06 | -8.93 |  |  |  |
|  | (12.59) | (12.53) | (11.52) | (20.91) | (18.74) | (15.40) |  |  |  |
| Payoff + Training in 2nd Follow-up (2 months) | -72.39 | -72.15 | -67.36 | -24.62 | -29.92 | -22.87 |  |  |  |
|  | (13.80) | (13.72) | (12.03) | (24.66) | (23.10) | (19.17) |  |  |  |
| Payoff + Training in 3rd Follow-up (3 months) | -65.63 | -65.4 | -59.75 | -19.71 | -20.21 | -21.56 |  |  |  |
|  | (14.62) | (14.55) | (12.77) | (24.83) | (24.74) | (22.55) |  |  |  |
| Payoff + Training in 4th Follow-up (18 months) | -5.22 | -0.32 | -1.71 | -29.61 | -30.81 | -35.4 | 5.35 | 3.72 | -1.29 |
|  | (14.31) | (11.48) | (8.38) | (50.01) | (49.67) | (41.20) | (4.83) | (3.73) | (0.90) |
| Observations | 822 | 822 | 822 | 823 | 823 | 823 | 194 | 194 | 194 |
| Observations, F1 | 206 | 206 | 206 | 206 | 206 | 206 |  |  |  |
| Observations, F2 | 206 | 206 | 206 | 205 | 205 | 205 |  |  |  |
| Observations, F3 | 206 | 206 | 206 | 206 | 206 | 206 |  |  |  |
| Observations, F4 | 204 | 204 | 204 | 206 | 206 | 206 | 194 | 194 | 194 |
| Control mean dependent var | 81.9 | 80.64 | 75.79 | 271.57 | 271.23 | 265.89 | 7.52 | 7.52 | 6.94 |
| Control SD dependent var | 89.63 | 85.13 | 73.15 | 194.98 | 194.05 | 178.81 | 7.62 | 7.62 | 5.50 |
| Baseline Outcome Measure Included? | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| p-value for test: Payoff F1 = Payoff + Training F1 | 0.20 | 0.23 | 0.29 | 0.39 | 0.56 | 0.85 |  |  |  |
| p-value for test: Payoff F2 = Payoff + Training F2 | 0.46 | 0.48 | 0.43 | 0.65 | 0.43 | 0.31 |  |  |  |
| p-value for test: Payoff F3 = Payoff + Training F3 | 0.18 | 0.20 | 0.25 | 0.43 | 0.43 | 0.40 |  |  |  |
| p-value for test: Payoff F4 = Payoff + Training F4 | 0.24 | 0.23 | 0.09 | 0.69 | 0.65 | 0.45 | 0.53 | 0.62 | 0.06 |
| p-value for test: Training F1 $=$ Payoff + Training F1 | 0.00 | 0.00 | 0.00 | 0.10 | 0.16 | 0.15 |  |  |  |
| p-value for test: Training F2 $=$ Payoff + Training F2 | 0.00 | 0.00 | 0.00 | 0.32 | 0.44 | 0.40 |  |  |  |
| p-value for test: Training F3 $=$ Payoff + Training F3 | 0.00 | 0.00 | 0.00 | 0.61 | 0.61 | 0.57 |  |  |  |
| p-value for test: Training F4 = Payoff + Training F4 | 0.50 | 0.50 | 0.68 | 0.43 | 0.46 | 0.51 | 0.25 | 0.27 | 0.13 |
| p-value for test: Payoff F1 = Payoff F4 | 0.01 | 0.00 | 0.00 | 0.90 | 0.92 | 0.89 |  |  |  |
| p-value for test: Training F1 $=$ Training F4 <br> p-value for test: Payoff + Training F1 = Payoff + Training F4 | 0.59 | 0.76 | 0.94 | 0.42 | 0.49 | 0.64 |  |  |  |
|  | 0.00 | 0.00 | 0.00 | 0.57 | 0.60 | 0.52 |  |  |  |




| Only Payoff in 1st Follow-up (2-4 months) | 0.04 | 0.10 | -0.02 | -0.04 |
| :---: | :---: | :---: | :---: | :---: |
|  | (0.04) | (0.04) | (0.05) | (0.02) |
| Only Payoff in 2nd Follow-up (5-8 months) | 0.05 | 0.06 | -0.01 | 0.00 |
|  | (0.05) | (0.03) | (0.05) | (0.02) |
| Only Payoff in 3rd Follow-up (9-10 months) | 0.01 | 0.06 | -0.01 | 0.00 |
|  | (0.04) | (0.03) | (0.05) | (0.02) |
| Only Training in 1st Follow-up (2-4 months) | 0.01 | -0.02 | 0.04 | -0.01 |
|  | (0.04) | (0.03) | (0.05) | (0.03) |
| Only Training in 2nd Follow-up (5-8 months) | 0.03 | 0.04 | -0.02 | 0.00 |
|  | (0.05) | (0.03) | (0.05) | (0.02) |
| Only Training in 3rd Follow-up (9-10 months) | 0.00 | 0.04 | -0.03 | 0.00 |
|  | (0.04) | (0.03) | (0.05) | (0.02) |
| Payoff + Training in 1st Follow-up (2-4 months) | -0.05 | 0.05 | -0.10 | 0.00 |
|  | (0.05) | (0.04) | (0.05) | (0.03) |
| Payoff + Training in 2nd Follow-up (5-8 months) | -0.01 | 0.02 | -0.03 | -0.01 |
|  | (0.05) | (0.03) | (0.05) | (0.02) |
| Payoff + Training in 3rd Follow-up (9-10 months) | -0.01 | 0.02 | -0.03 | -0.01 |
|  | (0.04) | (0.03) | (0.05) | (0.02) |
| Observations | 2,643 | 2,643 | 2,643 | 2,643 |
| Observations, F1 | 881 | 881 | 881 | 881 |
| Observations, F2 | 881 | 881 | 881 | 881 |
| Observations, F3 | 881 | 881 | 881 | 881 |
| Control mean dependent var | 0.66 | 0.11 | 0.46 | 0.05 |
| Control SD dependent var | 0.48 | 0.32 | 0.50 | 0.21 |
| Baseline Outcome Measure Included? | Yes | Yes | Yes | Yes |
| p-value for test: Payoff F1 = Payoff + Training F1 | 0.04 | 0.22 | 0.08 | 0.05 |
| p-value for test: Payoff F2 = Payoff + Training F2 | 0.23 | 0.30 | 0.77 | 0.54 |
| p-value for test: Payoff F3 = Payoff + Training F3 | 0.61 | 0.30 | 0.77 | 0.54 |
| p-value for test: Training F1 = Payoff + Training F1 | 0.16 | 0.05 | 0.00 | 0.67 |
| p-value for test: Training F2 = Payoff + Trainingg F2 | 0.47 | 0.59 | 0.96 | 0.53 |
| p-value for test: Training F3 = Payoff + Training F3 | 0.73 | 0.59 | 0.96 | 0.53 |
| p-value for test: Payoff F1 = Payoff F3 | 0.64 | 0.41 | 0.94 | 0.10 |
| p-value for test: Training F1 $=$ Training F3 <br> p-value for test: Payoff + Training F1 = Payoff + Training F3 | 0.94 | 0.15 | 0.28 | 0.65 |
|  | 0.49 | 0.57 | 0.24 | 0.81 |

1. ${ }^{* * *} \mathrm{p}<0.01,{ }^{* *} \mathrm{p}<0.05,{ }^{*} \mathrm{p}<0.1 .2$. Robust standard errors clustered at the vendor level in parentheses. 3. All regressions also include the baseline value of the outcome variable (coded as zero, with an indicator for observations missing at baseline, whenever unavailable) and a survey wave fixed effect. 4 . Column 1 is whether they experienced an unexpected reduction in HH income, column 2 is whether they coped with a HH income shock by using savings (equals 0 if no HH income shock), column 3 is whether they coped with a HH income shock by borrowing (equals 0 if no HH income shock), and column 4 is whether they coped with a HH income shock by cutting consumption (equals 0 if no HH income shock).


| Only Payoff in 1st Follow-up (1 month) | -0.06 | 0.09 | -0.24 | -0.04 |
| :---: | :---: | :---: | :---: | :---: |
|  | (0.10) | (0.07) | (0.07) | (0.09) |
| Only Payoff in 2nd Follow-up (2 months) | 0.04 | 0.04 | 0.08 | -0.05 |
|  | (0.09) | (0.04) | (0.06) | (0.07) |
| Only Payoff in 3rd Follow-up (3 months) | 0.03 | 0.03 | -0.07 | 0.03 |
|  | (0.09) | (0.05) | (0.07) | (0.06) |
| Only Payoff in 4th Follow-up (18 months) | 0.02 | -0.02 | 0.11 | -0.03 |
|  | (0.10) | (0.08) | (0.09) | (0.07) |
| Only Training in 1st Follow-up (1 month) | -0.17 | 0.09 | -0.18 | -0.11 |
|  | (0.10) | (0.07) | (0.08) | (0.08) |
| Only Training in 2nd Follow-up (2 months) | 0.07 | 0.07 | 0.14 | -0.02 |
|  | (0.09) | (0.04) | (0.07) | (0.07) |
| Only Training in 3rd Follow-up (3 months) | -0.01 | 0.01 | -0.05 | 0.01 |
|  | (0.09) | (0.05) | (0.07) | (0.06) |
| Only Training in 4th Follow-up (18 months) | -0.06 | -0.09 | -0.03 | 0.06 |
|  | (0.10) | (0.08) | (0.09) | (0.08) |
| Payoff + Training in 1st Follow-up (1 month) | -0.17 | 0.03 | -0.21 | -0.07 |
|  | (0.09) | (0.06) | (0.08) | (0.09) |
| Payoff + Training in 2nd Follow-up (2 months) | -0.10 | 0.04 | 0.01 | -0.09 |
|  | (0.08) | (0.04) | (0.05) | (0.07) |
| Payoff + Training in 3rd Follow-up (3 months) | 0.02 | 0.06 | -0.12 | 0.00 |
|  | (0.09) | (0.06) | (0.06) | (0.06) |
| Payoff + Training in 4th Follow-up (18 months) | -0.05 | -0.03 | -0.12 | 0.08 |
|  | (0.10) | (0.08) | (0.08) | (0.08) |
| Observations | 824 | 824 | 824 | 824 |
| Observations, F1 | 206 | 206 | 206 | 206 |
| Observations, F2 | 206 | 206 | 206 | 206 |
| Observations, F3 | 206 | 206 | 206 | 206 |
| Observations, F4 | 206 | 206 | 206 | 206 |
| Control mean dependent var | 0.39 | 0.1 | 0.21 | 0.19 |
| Control SD dependent var | 0.49 | 0.3 | 0.41 | 0.39 |
| Baseline Outcome Measure Included? | Yes | Yes | Yes | Yes |
| p-value for test: Payoff F1 = Payoff + Training F1 | 0.26 | 0.39 | 0.56 | 0.72 |
| p-value for test: Payoff F2 = Payoff + Training F2 | 0.08 | 0.98 | 0.27 | 0.44 |
| p-value for test: Payoff F3 = Payoff + Training F3 | 0.93 | 0.53 | 0.39 | 0.67 |
| p-value for test: Payoff F4 = Payoff + Training F4 | 0.47 | 0.96 | 0.01 | 0.14 |
| p-value for test: Training F1 = Payoff + Training F1 | 0.98 | 0.34 | 0.63 | 0.62 |
| p-value for test: Training F2 = Payoff + Training F2 | 0.04 | 0.64 | 0.05 | 0.26 |
| p-value for test: Training F3 = Payoff + Training F3 | 0.78 | 0.34 | 0.25 | 0.86 |
| p-value for test: Training F4 = Payoff + Training F4 | 0.89 | 0.37 | 0.23 | 0.78 |
| p-value for test: Payoff F1 = Payoff F4 | 0.55 | 0.28 | 0.00 | 0.93 |
| p -value for test: Training F1 $=$ Training F4 | 0.41 | 0.06 | 0.14 | 0.13 |
| p-value for test: Payoff + Training F1 = Payoff + Training F4 | 0.38 | 0.59 | 0.34 | 0.19 |

outcome variable (coded as zero, with an indicator for observations missing at baseline, whenever unavailable) and a survey wave fixed effect. 4 . Column 1 is whether they experienced an unexpected reduction in HH income, column 2 is whether they coped with a HH income shock by using savings (equals 0 if no HH income shock), column 3 is whether they coped with a HH income shock by borrowing (equals 0 if no HH income shock), and column 4 is whether they coped with a HH income shock by cutting consumption (equals 0 if no HH income shock).

|  | (1) | (2) | (3) | (4) |
| :---: | :---: | :---: | :---: | :---: |
|  | HH income shock | Coped via savings $(0$ if no shock $)$ | Coped via borrowing (0 if no shock) | Coped via cutting consumption (0 if no shock) |
| Payoff + Training in 1st Follow-up (1 month) | 0.01 | -0.01 | 0.04 | -0.02 |
|  | (0.04) | (0.02) | (0.03) | (0.02) |
| Payoff + Training in 2nd Follow-up (4 months) | -0.01 | 0.00 | -0.03 | 0.00 |
|  | (0.04) | (0.02) | (0.03) | (0.03) |
| Payoff + Training in 3rd Follow-up (8 months) | 0.01 | -0.01 | 0.03 | -0.02 |
|  | (0.04) | (0.02) | (0.03) | $(0.03)$ |
| Payoff + Training in 4th Follow-up (18-19 months) | 0.00 | 0.00 | 0.08 | 0.00 |
|  | $(0.04)$ | (0.02) | $(0.03)$ | (0.02) |
| Observations | 2,272 | 2,272 | 2,272 | 2,272 |
| Observations, F1 | 569 | 569 | 569 | 569 |
| Observations, F2 | 566 | 566 | 566 | 566 |
| Observations, F3 | 569 | 569 | 569 | 569 |
| Observations, F4 | 568 | 568 | 568 | 568 |
| Control mean dependent var | 0.30 | 0.05 | 0.11 | 0.08 |
| Control SD dependent var | 0.46 | 0.21 | 0.31 | 0.27 |
| Baseline Outcome Measure Included? | Yes | Yes | Yes | Yes |
| p-value for test: Payoff + Training F1 = Payoff + Training F4 | 0.86 | 0.53 | 0.23 | 0.57 |

1. ${ }^{* * *} \mathrm{p}<0.01,{ }^{* *} \mathrm{p}<0.05,{ }^{*} \mathrm{p}<0.1$. 2. Robust standard errors clustered at the vendor level in parentheses. 3. All regressions also include the baseline value of the outcome variable (coded as zero, with an indicator for observations missing at baseline, whenever unavailable) and a survey wave fixed effect. 4. Column 1 is whether they experienced an unexpected reduction in HH income, column 2 is whether they coped with a HH income shock by using savings (equals 0 if no HH income shock), column 3 is whether they coped with a HH income shock by borrowing (equals 0 if no HH income shock), and column 4 is whether they coped with a HH income shock by cutting consumption (equals 0 if no HH income shock).

|  | (1) | (2) | (3) | (4) |
| :---: | :---: | :---: | :---: | :---: |
|  | HH monthly food expenditures (USD) | HH monthly school expenditures (USD) | HH monthly non-food expenditures (USD) | HH monthly total expenditures (USD) |
| Only Payoff in 1st Follow-up (2-4 months) | 0.62 | 2.85 | 24.35 | 26.51 |
|  | (2.98) | (3.27) | (19.97) | (21.44) |
| Only Payoff in 2nd Follow-up (5-8 months) | 2.47 | 4.62 | 9.28 | 14.5 |
|  | (2.93) | (3.02) | (17.25) | (18.49) |
| Only Payoff in 3rd Follow-up (9-10 months) | 0.38 | -0.92 | 8.20 | 8.62 |
|  | (2.85) | (2.66) | (17.00) | (19.10) |
| Only Training in 1st Follow-up (2-4 months) | -5.61 | 1.80 | -10.11 | -14.37 |
|  | (2.92) | (3.55) | (18.64) | (19.60) |
| Only Training in 2nd Follow-up (5-8 months) | -0.48 | -0.27 | -32.92 | -33.95 |
|  | (3.00) | (1.21) | (14.64) | (15.65) |
| Only Training in 3rd Follow-up (9-10 months) | -3.48 | 2.40 | -15.51 | -18.68 |
|  | (2.56) | (4.21) | (14.09) | (16.26) |
| Payoff + Training in 1st Follow-up (2-4 months) | 1.20 | -0.56 | 3.16 | 2.43 |
|  | (3.27) | (2.28) | (19.08) | (19.85) |
| Payoff + Training in 2nd Follow-up (5-8 months) | 0.09 | 2.70 | -18.27 | -16.7 |
|  | (2.83) | (2.39) | (15.27) | (15.95) |
| Payoff + Training in 3rd Follow-up (9-10 months) | 1.98 | 0.28 | -1.72 | -1.21 |
|  | (2.86) | (3.14) | (15.31) | (17.49) |
| Observations | 2,605 | 2,632 | 2,436 | 2,418 |
| Observations, F1 | 881 | 881 | 880 | 880 |
| Observations, F2 | 881 | 881 | 873 | 873 |
| Observations, F3 | 843 | 870 | 683 | 665 |
| Control mean dependent var | 75.39 | 6.69 | 155.70 | 238.01 |
| Control SD dependent var | 31.56 | 25.27 | 167.25 | 181.84 |
| Baseline Outcome Measure Included? | Yes | Yes | Yes | Yes |
| p-value for test: Payoff F1 = Payoff + Training F1 | 0.86 | 0.26 | 0.35 | 0.31 |
| p-value for test: Payoff F2 = Payoff + Training F2 | 0.40 | 0.59 | 0.07 | 0.05 |
| p-value for test: Payoff F3 = Payoff + Training F3 | 0.58 | 0.67 | 0.57 | 0.61 |
| p-value for test: Training F1 = Payoff + Training F1 | 0.03 | 0.48 | 0.53 | 0.45 |
| p-value for test: Training F2 = Payoff + Trainingg F2 | 0.84 | 0.20 | 0.23 | 0.18 |
| p-value for test: Training F3 = Payoff + Training F3 | 0.04 | 0.62 | 0.34 | 0.29 |
| p-value for test: Payoff F1 = Payoff F3 | 0.95 | 0.26 | 0.49 | 0.47 |
| p-value for test: Training F1 = Training F3 | 0.51 | 0.91 | 0.81 | 0.86 |
| p-value for test: Payoff + Training F1 = Payoff + Training F3 | 0.83 | 0.81 | 0.83 | 0.88 |

1. ${ }^{* * *} \mathrm{p}<0.01,{ }^{* *} \mathrm{p}<0.05, * \mathrm{p}<0.1$. 2. Robust standard errors clustered at the vendor level in parentheses. 3. All regressions also include the baseline value of the outcome variable (coded as zero, with an indicator for observations missing at baseline, whenever unavailable) and a survey wave fixed effect.

|  | (1) | (2) | (3) | (4) |
| :---: | :---: | :---: | :---: | :---: |
|  | HH monthly food expenditures (USD) | HH monthly school expenditures (USD) | HH monthly non-food expenditures (USD) | HH monthly total expenditures (USD) |
| Only Payoff in 1st Follow-up (1 month) | -13.00 | -3.63 | -2.15 | -16.79 |
|  | (9.49) | (6.60) | (9.85) | (17.78) |
| Only Payoff in 2nd Follow-up (2 months) | -9.06 | -10.83 | 2.27 | -15.63 |
|  | (8.44) | (9.75) | (15.54) | (20.79) |
| Only Payoff in 3rd Follow-up (3 months) | -5.61 | -3.58 | 7.05 | -0.15 |
|  | (8.84) | (4.84) | (18.56) | (22.92) |
| Only Payoff in 4th Follow-up (18 months) | 5.66 | -6.81 | -11.43 | -10.59 |
|  | (8.56) | (7.66) | (38.37) | (47.49) |
| Only Training in 1st Follow-up (1 month) | -15.85 | -7.66 | -7.87 | -32.12 |
|  | (9.67) | (4.40) | (10.76) | (17.84) |
| Only Training in 2nd Follow-up (2 months) | -12.58 | -18.05 | -14.77 | -46.14 |
|  | (9.16) | (9.60) | (16.57) | (22.53) |
| Only Training in 3rd Follow-up (3 months) | -20.12 | -4.25 | -8.11 | -33.23 |
|  | (8.79) | (5.10) | (20.58) | (24.43) |
| Only Training in 4th Follow-up (18 months) | 8.82 | -6.45 | 13.49 | 15.12 |
|  | (8.93) | (9.42) | (47.25) | (56.53) |
| Payoff + Training in 1st Follow-up (1 month) | -9.92 | -4.17 | 12.49 | -1.68 |
|  | (10.60) | (5.67) | (13.01) | (20.91) |
| Payoff + Training in 2nd Follow-up (2 months) | -8.93 | -12.8 | -3.16 | -24.62 |
|  | (10.65) | (10.02) | (16.64) | (24.66) |
| Payoff + Training in 3rd Follow-up (3 months) | -8.29 | 3.87 | -15.23 | -19.71 |
|  | (9.99) | (7.72) | (18.77) | (24.83) |
| Payoff + Training in 4th Follow-up (18 months) | 3.37 | -4.89 | -28.03 | -29.61 |
|  | (9.64) | (7.48) | (40.67) | (50.01) |
| Observations | 824 | 824 | 823 | 823 |
| Observations, F1 | 206 | 206 | 206 | 206 |
| Observations, F2 | 206 | 206 | 205 | 205 |
| Observations, F3 | 206 | 206 | 206 | 206 |
| Observations, F4 | 206 | 206 | 206 | 206 |
| Control mean dependent var | 106.63 | 27.18 | 137.76 | 271.57 |
| Control SD dependent var | 49.56 | 46.70 | 167.74 | 194.98 |
| Baseline Outcome Measure Included? | Yes | Yes | Yes | Yes |
| p-value for test: Payoff F1 = Payoff + Training F1 | 0.73 | 0.94 | 0.23 | 0.39 |
| p-value for test: Payoff F2 = Payoff + Training F2 | 0.99 | 0.73 | 0.68 | 0.65 |
| p-value for test: Payoff F3 = Payoff + Training F3 | 0.79 | 0.30 | 0.21 | 0.43 |
| p-value for test: Payoff F4 = Payoff + Training F4 | 0.81 | 0.78 | 0.66 | 0.69 |
| p-value for test: Training F1 = Payoff + Training F1 | 0.49 | 0.49 | 0.13 | 0.10 |
| p-value for test: Training F2 = Payoff + Training F2 | 0.71 | 0.32 | 0.43 | 0.32 |
| p-value for test: Training F3 = Payoff + Training F3 | 0.22 | 0.28 | 0.72 | 0.61 |
| p-value for test: Training F4 = Payoff + Training F4 | 0.58 | 0.86 | 0.38 | 0.43 |
| p-value for test: Payoff F1 = Payoff F4 | 0.11 | 0.72 | 0.81 | 0.90 |
| p -value for test: Training F1 $=$ Training F4 | 0.05 | 0.90 | 0.66 | 0.42 |
| p-value for test: Payoff + Training F1 = Payoff + Training F4 | 0.29 | 0.93 | 0.33 | 0.57 |


|  | (1) | (2) | (3) | (4) |
| :---: | :---: | :---: | :---: | :---: |
|  | HH monthly food expenditures (USD) | HH monthly school expenditures (USD) | HH monthly non-food expenditures (USD) | HH monthly total expenditures (USD) |
| Payoff + Training in 1st Follow-up (1 month) | -2.94 | 2.72 | 2.21 | 2.39 |
|  | (4.14) | (2.22) | (4.46) | (8.06) |
| Payoff + Training in 2nd Follow-up (4 months) | -8.01 | 0.30 | 0.16 | -6.73 |
|  | (4.52) | (2.61) | (6.11) | (9.75) |
| Payoff + Training in 3rd Follow-up (8 months) | -3.55 | -1.78 | 0.78 | -2.39 |
|  | (4.32) | (3.74) | (4.77) | (9.21) |
| Payoff + Training in 4th Follow-up (18-19 months) | -3.31 | 0.42 | -1.24 | -3.40 |
|  | (4.54) | (2.83) | (6.70) | (10.67) |
| Observations | 2,266 | 2,183 | 2,080 | 2,073 |
| Observations, F1 | 566 | 541 | 495 | 494 |
| Observations, F2 | 566 | 542 | 497 | 496 |
| Observations, F3 | 566 | 533 | 521 | 517 |
| Observations, F4 | 568 | 567 | 567 | 566 |
| Control mean dependent var | 129.29 | 18.44 | 73.91 | 220.48 |
| Control SD dependent var | 55.37 | 32.50 | 66.57 | 116.53 |
| Baseline Outcome Measure Included? | Yes | Yes | Yes | Yes |
| p-value for test: Payoff + Training F1 = Payoff + Training F4 | 0.94 | 0.48 | 0.61 | 0.58 |


|  | (1) | (2) | (3) | (4) | (5) | (6) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | India 2007 |  | Philippines 2007 |  | Philippines 2010 |  |
|  | Any moneylender debt | Amount moneylender debt (USD) | $\begin{gathered} \text { Any } \\ \text { moneylender } \\ \text { debt } \end{gathered}$ | Amount moneylender debt (USD) | Any moneylender debt | Amount moneylender debt (USD) |
| Only Payoff | 0.05 | -9.32 | -0.19 | -51.83 |  |  |
|  | (0.17) | (12.94) | (0.13) | (24.86) |  |  |
| Only Training | 0.30 | -3.28 | 0.06 | -4.15 |  |  |
|  | (0.16) | (12.85) | (0.11) | (28.71) |  |  |
| Payoff + Training | -0.30 | -31.23 | -0.54 | -81.00 | 0.04 | -1.02 |
|  | (0.20) | (13.20) | (0.14) | (26.20) | (0.08) | (21.45) |
| Time inconsistent preferences | 0.01 | -0.93 | 0.02 | 14.10 | 0.08 | 31.53 |
|  | (0.06) | (3.10) | (0.16) | (29.94) | (0.08) | (27.11) |
| Has savings at a bank | 0.15 | 8.11 | 0.02 | 13.24 | 0.01 | 12.48 |
|  | (0.10) | (5.51) | (0.12) | (23.74) | (0.07) | (18.62) |
| Financial literacy index ( 7 vars) | -0.08 | -2.93 | -0.03 | 3.08 | -0.03 | -7.23 |
|  | (0.03) | (1.35) | (0.06) | (9.40) | (0.03) | (7.71) |
| Math skills index (4 vars) | 0.01 | 0.26 | -0.07 | -14.04 | -0.02 | 10.07 |
|  | (0.02) | (1.14) | (0.06) | (7.57) | (0.03) | (8.30) |
| Predicted probability of HH income shock | 0.12 | -26.91 | 0.09 | -17.55 | -0.12 | -87.5 |
|  | (0.20) | (18.58) | (0.19) | (38.34) | (0.24) | (69.85) |
| Only Payoff X Time inconsistent preferences | -0.03 | 2.62 | 0.35 | 16.23 |  |  |
|  | (0.09) | (4.99) | (0.23) | (35.61) |  |  |
| Only Payoff X Has savings at a bank | -0.05 | -6.49 | -0.2 | -35.09 |  |  |
|  | (0.13) | (7.32) | (0.21) | (27.79) |  |  |
| Only Payoff X Financial literacy Index | 0.06 | 2.68 | 0.12 | 4.79 |  |  |
|  | (0.04) | (2.17) | (0.09) | (11.50) |  |  |
| Only Payoff X Math skills Index | -0.05 | -2.41 | 0.13 | 13.11 |  |  |
|  | (0.03) | (1.50) | (0.10) | (9.87) |  |  |
| Only Payoff X Predicted probability of HH income shock | -0.17 | 15.44 | -0.56 | -44.29 |  |  |
|  | (0.27) | (21.22) | (0.34) | (43.80) |  |  |
| Only Training X Time inconsistent preferences | -0.15 | -5.79 | -0.03 | -27.84 |  |  |
|  | (0.08) | (3.98) | (0.21) | (40.55) |  |  |
| Only Training X Has savings at a bank | -0.15 | -7.45 | 0.00 | -27.31 |  |  |
|  | (0.14) | (7.02) | (0.18) | (38.96) |  |  |
| Only Training X Financial literacy Index | 0.06 | 3.04 | 0.01 | -28.55 |  |  |
|  | (0.04) | (1.89) | (0.06) | (16.61) |  |  |
| Only Training X Math skills Index | -0.02 | -1.86 | 0.01 | -3.75 |  |  |
|  | (0.03) | (1.33) | (0.09) | (13.60) |  |  |
| Only Training X Predicted probability of HH income shock | -0.37 | 8.87 | -0.21 | 32.91 |  |  |
|  | (0.26) | (20.89) | (0.25) | (60.76) |  |  |
| Payoff + Training X Time inconsistent preferences | 0.02 | 0.38 | 0.15 | 5.56 | -0.01 | -45.99 |
|  | (0.09) | (4.35) | (0.27) | (45.96) | (0.10) | (30.09) |
| Payoff + Training X Has savings at a bank | -0.06 | -1.65 | 0.05 | -4.91 | -0.01 | 3.25 |
|  | (0.13) | (7.93) | (0.20) | (30.21) | (0.09) | (23.67) |
| Payoff + Training X Financial literacy Index | 0.02 | 1.00 | 0.01 | -10.16 | 0.01 | 11.47 |
|  | (0.04) | (2.13) | (0.09) | (13.39) | (0.03) | (9.26) |
| Payoff + Training X Math skills Index | -0.04 | -1.13 | -0.06 | -6.04 | 0.00 | -17.93 |
|  | (0.04) | (2.23) | (0.11) | (10.54) | (0.04) | (10.35) |
| Payoff + Training X Predicted probability of HH income shock | 0.34 | 50.56 | -0.06 | 17.88 | -0.36 | -26.66 |
|  | (0.32) | (21.57) | (0.29) | (52.90) | (0.30) | (80.98) |
| Observations | 881 | 881 | 206 | 206 | 565 | 564 |
| Control mean dependent var | 0.67 | 22.14 | 0.85 | 104.06 | 0.73 | 114.03 |
| Control SD dependent var | 0.47 | 22.92 | 0.36 | 86.56 | 0.45 | 129.43 |
| Baseline Outcome Measure Included? | Yes | Yes | Yes | Yes | Yes | Yes |
| 1. ${ }^{* * *} \mathrm{p}<0.01,{ }^{* *} \mathrm{p}<0.05,{ }^{*} \mathrm{p}<0.1$. 2. Robust standard errors in parentheses. 3. All regressions also include the baseline value of the outcome variable (coded as zero, with an indicator for observations missing at baseline, whenever unavailable) and columns 5 and 6 include a vector of dummy variables for quintile of preexisting debt at baseline. 4. Columns 1,3 , and 5 are whether they borrowed from a money lender for working capital; columns 2,4 , and 6 are the amount they borrowed from a money lender for working capital in USD. See narrative in paper for details on the covariates. |  |  |  |  |  |  |


|  | (1) | (2) | (3) | (4) | (5) | (6) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | India 2007 |  | Philippines 2007 |  | Philippines 2010 |  |
|  | Any moneylender debt | Amount moneylender debt (USD) | $\begin{gathered} \text { Any } \\ \text { moneylender } \\ \text { debt } \end{gathered}$ | Amount moneylender debt (USD) | Any moneylender debt | Amount moneylender debt (USD) |
| Only Payoff | 0.59 | 22.91 | -0.45 | -125.34 |  |  |
|  | (0.22) | (13.64) | (0.18) | (35.44) |  |  |
| Only Training | 0.34 | 7.78 | -0.10 | -49.18 |  |  |
|  | (0.20) | (13.98) | (0.17) | (36.24) |  |  |
| Payoff + Training | 0.27 | 7.49 | -0.39 | -102.73 | 0.04 | 4.20 |
|  | (0.20) | (12.09) | (0.18) | (31.58) | (0.08) | (20.91) |
| Time inconsistent preferences | 0.00 | 0.12 | -0.05 | -12.44 | 0.12 | 15.02 |
|  | (0.06) | (3.39) | (0.20) | (29.30) | (0.09) | (24.80) |
| Has savings at a bank | 0.12 | -0.79 | 0.04 | 14.58 | 0.08 | 14.85 |
|  | (0.10) | (3.80) | (0.14) | (27.03) | (0.07) | (18.62) |
| Financial literacy index (7 vars) | -0.03 | -1.26 | -0.08 | -8.89 | -0.07 | -2.26 |
|  | (0.03) | (1.70) | (0.06) | (10.21) | (0.03) | (7.10) |
| Math skills index (4 vars) | 0.01 | 0.57 | -0.15 | -21.4 | -0.03 | -2.78 |
|  | (0.02) | (1.44) | (0.05) | (7.61) | (0.03) | (8.98) |
| Predicted probability of HH income shock | 0.57 | 16.62 | 0.02 | -112.16 | -0.17 | -28.37 |
|  | (0.21) | (14.49) | (0.31) | (55.35) | (0.22) | (50.18) |
| Only Payoff X Time inconsistent preferences | 0.02 | 2.09 | 0.38 | 30.87 |  |  |
|  | (0.08) | (4.81) | (0.27) | (54.96) |  |  |
| Only Payoff X Has savings at a bank | 0.06 | -0.04 | -0.08 | -25.13 |  |  |
|  | (0.13) | (5.19) | (0.23) | (37.75) |  |  |
| Only Payoff X Financial literacy Index | 0.08 | 2.37 | 0.18 | 23.14 |  |  |
|  | (0.04) | (2.25) | (0.09) | (15.86) |  |  |
| Only Payoff X Math skills Index | -0.03 | -2.11 | 0.14 | 24.77 |  |  |
|  | (0.03) | (1.82) | (0.09) | (17.12) |  |  |
| Only Payoff X Predicted probability of HH income shock | -0.82 | -33.64 | 0.52 | 297.08 |  |  |
|  | (0.31) | (19.43) | (0.41) | (106.99) |  |  |
| Only Training X Time inconsistent preferences | -0.04 | -2.74 | 0.1 | -8.19 |  |  |
|  | (0.08) | (4.21) | (0.25) | (40.86) |  |  |
| Only Training X Has savings at a bank | -0.15 | -2.12 | 0.07 | -25.33 |  |  |
|  | (0.14) | (5.34) | (0.20) | (44.59) |  |  |
| Only Training X Financial literacy Index | 0.00 | 1.40 | 0.05 | -7.92 |  |  |
|  | (0.04) | (2.34) | (0.07) | (18.19) |  |  |
| Only Training X Math skills Index | 0.02 | 1.16 | 0.03 | -7.59 |  |  |
|  | (0.02) | (1.64) | (0.10) | (13.50) |  |  |
| Only Training X Predicted probability of HH income shock | -0.41 | -12.16 | 0.38 | 190.63 |  |  |
|  | (0.27) | (19.64) | (0.41) | (77.41) |  |  |
| Payoff + Training X Time inconsistent preferences | -0.01 | -2.52 | -0.28 | -29.78 | -0.06 | -23.00 |
|  | (0.08) | (4.30) | (0.25) | (36.66) | (0.10) | (28.61) |
| Payoff + Training X Has savings at a bank | 0.05 | 10.44 | -0.01 | -5.05 | -0.12 | -8.84 |
|  | (0.13) | (5.95) | $(0.21)$ | (34.53) | $(0.09)$ | (23.46) |
| Payoff + Training X Financial literacy Index | 0.05 | 1.06 | 0.19 | 14.33 | 0.04 | 1.43 |
|  | (0.04) | (2.40) | (0.09) | (12.54) | (0.03) | (8.66) |
| Payoff + Training X Math skills Index | -0.04 | -3.56 | -0.07 | -3.34 | 0.03 | 5.01 |
|  | (0.04) | (2.21) | (0.07) | (9.85) | (0.04) | (11.31) |
| Payoff + Training X Predicted probability of HH income shock | -0.47 | -13.61 | -0.29 | 134.87 | -0.02 | -42.07 |
|  | (0.27) | (17.16) | (0.42) | (68.04) | (0.25) | (62.36) |
| Observations | 881 | 881 | 206 | 206 | 563 | 563 |
| Control mean dependent var | 0.63 | 23.44 | 0.78 | 98.17 | 0.67 | 114.94 |
| Control SD dependent var | 0.48 | 26.22 | 0.42 | 93.98 | 0.47 | 141.28 |
| Baseline Outcome Measure Included? | Yes | Yes | Yes | Yes | Yes | Yes |
| 1. ${ }^{* * *} \mathrm{p}<0.01, * * \mathrm{p}<0.05,{ }^{*} \mathrm{p}<0.1 .2$. Robust standard errors in parentheses. 3. All regressions also include the baseline value of the outcome variable (coded as zero, with an indicator for observations missing at baseline, whenever unavailable) and columns 5 and 6 include a vector of dummy variables for quintile of preexisting debt at baseline. 4. Columns 1,3 , and 5 are whether they borrowed from a money lender for working capital; columns 2,4 , and 6 are the amount they borrowed from a money lender for working capital in USD. See narrative in paper for details on the covariates. |  |  |  |  |  |  |


|  | (1) | (2) | (3) | (4) | (5) | (6) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | India 2007 |  | Philippines 2007 |  | Philippines 2010 |  |
|  | Any moneylender debt | Amount moneylender debt (USD) | Any moneylender debt | Amount moneylender debt (USD) | Any moneylender debt | Amount moneylender debt (USD) |
| Only Payoff |  |  | 0.00 | -28.58 |  |  |
|  |  |  | (0.18) | (39.35) |  |  |
| Only Training |  |  | 0.08 | -23.3 |  |  |
|  |  |  | (0.18) | (37.29) |  |  |
| Payoff + Training |  |  | -0.03 | -31.99 | -0.04 | -53.08 |
|  |  |  | (0.15) | (37.81) | (0.11) | (48.06) |
| Time inconsistent preferences |  |  | -0.11 | -7.62 | 0.08 | -24.5 |
|  |  |  | (0.17) | (25.73) | (0.09) | (31.08) |
| Has savings at a bank |  |  | -0.10 | 8.68 | -0.01 | -24.76 |
|  |  |  | (0.18) | (20.21) | (0.07) | (32.78) |
| Financial literacy index (7 vars) |  |  | 0.11 | 15.46 | 0.04 | -5.53 |
|  |  |  | (0.05) | (11.33) | (0.04) | (11.78) |
| Math skills index (4 vars) |  |  | 0.00 | -6.84 | -0.06 | -3.72 |
|  |  |  | (0.05) | (8.95) | (0.03) | (11.30) |
| Predicted probability of HH income shock |  |  | 0.31 | -12.52 | -0.01 | -22.23 |
|  |  |  | (0.22) | (49.00) | (0.17) | (53.32) |
| Only Payoff X Time inconsistent preferences |  |  | 0.30 | 31.91 |  |  |
|  |  |  | (0.26) | (35.53) |  |  |
| Only Payoff X Has savings at a bank |  |  | 0.19 | 25.29 |  |  |
|  |  |  | (0.25) | (35.79) |  |  |
| Only Payoff X Financial literacy Index |  |  | -0.01 | -4.76 |  |  |
|  |  |  | (0.07) | (13.86) |  |  |
| Only Payoff X Math skills Index |  |  | -0.05 | -1.19 |  |  |
|  |  |  | (0.10) | (13.20) |  |  |
| Only Payoff X Predicted probability of HH income shock |  |  | -0.02 | 48.41 |  |  |
|  |  |  | (0.30) | (53.70) |  |  |
| Only Training X Time inconsistent preferences |  |  | 0.24 | 8.24 |  |  |
|  |  |  | (0.27) | (31.72) |  |  |
| Only Training X Has savings at a bank |  |  | 0.04 | -15.04 |  |  |
|  |  |  | (0.26) | (30.09) |  |  |
| Only Training X Financial literacy Index |  |  | -0.16 | -18.04 |  |  |
|  |  |  | (0.08) | (12.62) |  |  |
| Only Training X Math skills Index |  |  | 0.03 | 8.01 |  |  |
|  |  |  | (0.11) | (13.15) |  |  |
| Only Training X Predicted probability of HH income shock |  |  | -0.27 | 28.27 |  |  |
|  |  |  | (0.29) | (51.57) |  |  |
| Payoff + Training X Time inconsistent preferences |  |  | -0.03 | -11.08 | 0.04 | 6.45 |
|  |  |  | (0.21) | (29.38) | (0.11) | (39.07) |
| Payoff + Training X Has savings at a bank |  |  | 0.37 | 28.71 | -0.04 | 57.88 |
|  |  |  | (0.23) | (29.81) | (0.09) | (38.90) |
| Payoff + Training X Financial literacy Index |  |  | -0.18 | -29.84 | 0.02 | 0.92 |
|  |  |  | (0.08) | (14.39) | (0.04) | (14.29) |
| Payoff + Training X Math skills Index |  |  | -0.03 | 14.28 | 0.08 | 12.83 |
|  |  |  | $(0.08)$ | (15.20) | $(0.04)$ | (14.45) |
| Payoff + Training X Predicted probability of HH income shock |  |  | -0.19 | 53.73 | 0.03 | 29.63 |
|  |  |  | (0.27) | (53.30) | (0.21) | (78.31) |
| Observations |  |  | 206 | 204 | 564 | 452 |
| Control mean dependent var |  |  | 0.28 | 30.83 | 0.65 | 155.62 |
| Control SD dependent var |  |  | 0.45 | 82.13 | 0.48 | 195.14 |
| Baseline Outcome Measure Included? |  |  | Yes | Yes | Yes | Yes |
| 1. ${ }^{* * *} \mathrm{p}<0.01,{ }^{* *} \mathrm{p}<0.05,{ }^{*} \mathrm{p}<0.1$. 2. Robust standard errors in parentheses. 3. All regressions also include the baseline value of the outcome variable (coded as zero, with an indicator for observations missing at baseline, whenever unavailable) and columns 5 and 6 include a vector of dummy variables for quintile of preexisting debt at baseline. 4. Columns 1,3 , and 5 are whether they borrowed from a money lender for working capital; columns 2,4 , and 6 are the amount they borrowed from a money lender for working capital in USD. See narrative in paper for details on the covariates. |  |  |  |  |  |  |



1. ${ }^{* * *} \mathrm{p}<0.01,{ }^{* *} \mathrm{p}<0.05,{ }^{*} \mathrm{p}<0.1$. 2. Standard errors in parentheses. 3. Regressions include indicators for missing observations of regressors with regressors recoded to 0 when missing. 4. This table reports the marginal probability effect of each dependent variable.

|  | (1) | (2) | (3) | (4) |
| :---: | :---: | :---: | :---: | :---: |
|  | HH income shock, Follow-up 1 (1 month) | HH income shock, Follow-up 2 (2 months) | HH income shock, Follow-up 3 (3 months) | HH income shock, Follow-up 4 (18 months) |
| Total value of business assets (thousands, USD) | 0.68 | 0.38 | 2.45 | -0.45 |
|  | (1.07) | (0.88) | (1.06) | (1.12) |
| Value of merchandise bought typical day (thousands, USD) | -5.14 | -4.35 | -1.81 | 0.35 |
|  | (2.73) | (2.44) | (2.06) | (0.87) |
| Take-home profit typical day (thousands, USD) | 4.39 | 8.43 | -12.96 | 0.09 |
|  | (5.05) | (4.76) | (8.34) | (1.87) |
| Save when excess profits on a good day | -0.14 | -0.10 | -0.11 | -0.02 |
|  | (0.17) | (0.12) | (0.12) | (0.04) |
| Any moneylender debt | -0.45 | -0.64 | -0.18 | 0.03 |
|  | (0.19) | (0.29) | (0.27) | (0.11) |
| Amount moneylender debt (thousands, USD) | 5.10 | 3.25 | -1.68 | 0.81 |
|  | (2.23) | (1.57) | (1.66) | (1.89) |
| HH income shock | 0.02 | -0.11 | 0.06 | 0.03 |
|  | (0.15) | (0.11) | (0.11) | (0.07) |
| Any savings | 0.11 | 0.23 | 0.01 | -0.28 |
|  | (0.19) | (0.16) | (0.14) | (0.20) |
| Current amount of savings (thousands, USD) | 0.94 | -3.06 | -1.01 | 5.04 |
|  | (1.36) | (1.90) | (1.59) | (9.97) |
| Household size | 0.10 | 0.06 | 0.02 | 0.01 |
|  | (0.04) | (0.03) | (0.03) | (0.02) |
| HH monthly total expenditures (thousands, USD) | -5.13 | 2.64 | -9.35 | -0.93 |
|  | (6.72) | (4.79) | (5.76) | (2.42) |
| HH monthly total income (thousands, USD) | -0.77 | 0.18 | -0.23 | 0.49 |
|  | (0.60) | (0.43) | (0.50) | (1.15) |
| Mean of dependent variable | 0.4 | 0.28 | 0.29 | 0.51 |
| Mean of yhat | 0.47 | 0.27 | 0.26 | 0.56 |
| SD of yhat | 0.27 | 0.29 | 0.23 | 0.38 |
| Pseudo-R squared | 0.16 | 0.375 | 0.24 | 0.45 |

1. ${ }^{* * *} \mathrm{p}<0.01,{ }^{* *} \mathrm{p}<0.05,{ }^{*} \mathrm{p}<0.1$. 2. Standard errors in parentheses. 3. Regressions include indicators for missing observations of regressors with regressors recoded to 0 when missing. 4. This table reports the marginal probability effect of each dependent variable.

|  | $(1)$ | $(2)$ | $(3)$ | $(4)$ |
| :--- | :---: | :---: | :---: | :---: |
|  |  |  |  |  |

1. ${ }^{* * *} \mathrm{p}<0.01,{ }^{* *} \mathrm{p}<0.05,{ }^{*} \mathrm{p}<0.1$. 2. Standard errors in parentheses. 3. Regressions include indicators for missing observations of regressors with regressors recoded to 0 when missing. 4 . This table reports the marginal probability effect of each dependent variable.

## FINANCIAL PLANNING CURRICULUM

Participants: All vendors who completed the baseline survey
Group 1: Financial Training Only
Group 2: Financial Training and Debt Pay Off
The training for the two groups should be identical.
The main messages to convey are:

- Borrowing daily working capital from informal moneylenders is an avoidable waste;
- They can make more money and increase consumption in a year by avoiding moneylenders;
- There are better alternatives either borrowing from lower-cost loans like rural banks or through savings.


## CONTENT OVERVIEW:

## Section A: Awareness of problem

1. How much loans have you taken out in the past?
2. How much interest have you paid out in the past?
3. How much difference does it make to borrow from other lending institutions with lower interest rates (NGO, rural banks) or to save?
4. Value of maintenance of income, expense, and profit accounts, planning for expected lumpy expenses like rent, school fees etc. and unexpected expenses

## Section B: Saving

1. Why save?
2. How to save?
3. Where to save?
4. Devices to help you save

## Section C: Debt Management

1. Why borrow?
2. Risks and cost of borrowing
a. Understanding interest amount vs. rate of interest
3. Why borrow
a. Advantages and disadvantages of borrowing vs. saving
4. Bad debt vs. Good debt
5. Controlling debt
a. Warning signs

## Section D: Follow-up class

1. Review of above
2. Review of their maintenance of their accounts since first class
3. A little quiz to see if they grasped everything

## START:

Introduction of class and trainer;
Present goal of the workshop: We are here to discuss your business, your borrowing habits, amount of money you are spending on interest payment and how you can increase your overall income.

## SECTION A: AWARENESS OF PROBLEM

## Part 1. Awareness of the problem

Ask for a volunteer who is willing to share his/her borrowing information. (Choose someone that takes a high interest moneylender loan for working capital, e.g. Bombay loans at $20 \%$ a month interest and working capital of 5000 to 6000 pesos.)

Find out how many days she opens shop in a week. (Choose someone whose profile we expect to be a high interest to profit ratio person for dramatic effect)

- Ask her if she has an idea of how much income she made last year.
- Ask her and a few more volunteers if they can guess how much cumulative loan amount and interest amount paid last year.
- Ask a few more people to guess and write on a piece of paper and put it aside
- Tell the class lets discuss her finances.
- Ask her if her income is enough or if there are things she would like to buy or consume but doesn't have enough money for it.
- Ask her and write out:
- How much gross profits she made on an average day last week;
- How much she paid on an average day in interest last week in moneylender loans;
- How much she paid on an average day in interest last week in rural bank;
- Write out total profits and total interest for moneylender loans and rural banks separately
- Multiply by 50 weeks and write down the figures on the board.
- Show on the board how much gross profits she made.
- Compare it to total interest paid.
- Subtract and show how much she actually consumed. Compute the above yearly figures for the past 5 and 10 years.

POINT: The interest paid is from her profits from labor and hard work; that for want of 1 day's working capital money she is losing so much money in a year in interest.

- What does the difference buy you?
--xx years of elementary schooling fee: tuition, supplies, uniform, miscellaneous fees
--xx days of food consumption
- Ask her what she would do with the interest money if she had kept it instead of paying it to money lender;
- Ask her if she would like to discuss ways to enjoy that money rather than pay as interest;

Note to instructor: Be sure to never talk ill about the money lender. And to tell the class to not burn bridges with them and to keep this training content from the money lender.

## Part 2. Why do you borrow from moneylenders?

- Why do you keep borrowing from moneylenders?
- Do you think you can manage without borrowing from moneylenders?
- Give examples of vendors who do not borrow on daily moneylender loans to show another world is possible.

POINT: It is possible to change the behaviors to enjoy the money that you pay to the money lenders.

## SECTION B: SAVINGS

Savings is money put aside by an individual or household for use in the future

1. Why save?

- Ask the class what are the benefits of savings are:
- Many situations (both expected and unexpected) in which you will need a lump-sum of money larger than the regular flow of income
- Fiesta, birth, education, emergencies, and discovery of investment opportunities
- Less need to borrow, which comes with cost


## 2. Different ways to save

- Ask the class what the "Non-cash forms of savings" are:
- Jewelry
- Land
- Livestock

These items could easily be converted into cash

- Savings at home
- Disadvantages: temptation to spend, risk of theft
- Paluwagan / Thandal
- Advantages: encourages discipline, support among members
- Disadvantages: no interest earning, depends on group solidarity
- Formal savings
- Advantages: safely saved, interest earning
- Disadvantages: transportation cost

3. How to save?

- "Managing money well begins with hanging on to what you have. This means avoiding unnecessary expenditure and then finding a safe place to store whatever money is left over. Making that choice-the choice to save rather than to consume-is the foundation of money management."
- Making a Savings Plan

1. Set savings goals (we discussed about this in the last section)
2. Figure out how much you need to save over what period of time to meet your goals
3. Figure out how much you need to save on weekly and daily basis
4. Figure out where you can find that amount in your budget (using business income, cutting unnecessary expenses)
5. Decide where you will save
6. Keep track of the savings

- Work with the class to set their savings goals

4. Helping you save

- Commitment savings
- Lock box
- Keys to successful savings
- Save as much as you can as soon as you can. The more you save, the better off you'll be.
- Put aside the money for saving first, then allocate the rest of the money for spending
- Calculate how your money can grow over time if you save regularly in an account that earns interest.
- Don't save at home-avoid temptation to spend it!
- Spend carefully
- Find savings product that matches your savings goal and personality


## SECTION C: DEBT MANAGEMENT

1. What is $D E B T$ ?

- Ask the class: What does "debt" mean to you?
"What you owe when you borrow something-cash or tangible goods from someone else, or when you purchase on credit."

2. Cost of borrowing

- Cost of borrowing is usually the interest rate you pay
- Give examples from the class
- Loan amount
- Daily payment
- Loan term
- How much is the interest amount?
- How much is the interest rate?
- Do a few more examples and have the class work on interest amount and rate calculation.

3. Why borrow?

- Ask the class: What do you borrow?
- Write out the reasons for borrowing
- Explain that there are three reasons for borrowing:
a) To invest
b) To respond to an unexpected emergency (e.g. sickness of family member, natural disaster, etc.)
c) To consume (e.g. pay for rent, buy food to eat)

Loans provide you with a lump sum of money that might be difficult to obtain otherwise;

- What are the advantages and disadvantages of borrowing?


## Advantages:

- Gain access to more money than you have
- You get money quickly when you need it


## Disadvantages:

- You pay the cost of borrowing (interest is the price of borrowing)
- You face the responsibility to repay on time (tiring)
- You face penalties for late payment
- You face loss of confidence and self-esteem when you can't repay
- You may not be able to borrow if you can't repay
- All these disadvantages that you face as a consequence of not being able to repay is called "RISK"
- How about using your own money (savings, profits, etc.)?


## Advantages

- Avoid cost of borrowing
- You are free to use your money as you wish
- You avoid the obligation of continuous repayment


## Disadvantages

- You have limited amount of money
- You have limited amount to invest, respond to unexpected emergency, and to consume

POINT: Borrowing is NOT the same as using your own money you have from your business profits or savings.
4. Bad debt, Good debt-How do you decide when and how much to borrow?

There are advantages and disadvantages of borrowing. Borrowing is NOT always bad, but the risks that come with taking a loan should make you think carefully about when and how much to borrow.

- Borrowing is good when it helps you gain financially and bad when it becomes a financial burden.
- Two key questions when calculating how much debt to afford:

1) What percentage of my household/business budget can I afford to make available for debt repayment? Will I have enough left over to adequately cover other household expenses?
2) What are the consequences if I cannot repay my loan?
5. Controlling debt
a. Don't borrow more than you can afford to repay $\rightarrow$ Budgeting is the key to realize how much you can afford
b. Save money regularly for emergencies
c. Warning signs

- Using credit to purchase things you once bought with cash
- Getting loans or borrowing from family/friends to pay your debts
- Using savings to repay loans

POINT: Borrowing is not our enemy, but bad credit habits are!

## SECTION D: FOLLOW-UP CLASS

1. Review of above
2. Review of their maintenance of their accounts since first class
3. A little quiz to see if they grasped everything

Best practices

1. Tailor program for illiterates; avoid too much of written word
2. Hire trainer from an SHG or similar who is from the same socio-economic background as participants. In fact ask the union to nominate volunteers from its members to be trained and in turn to train their peers.
3. Have follow-up class
4. Class size of 25 max
5. Do a focus group discussion with some potential participants to understand their needs, get feedback on curriculum, method of instructions, dates, logistics etc
6. Pay them money to attend (like say a day's profits); take up tends to be low for these things
7. Market it well to maximize take up

[^0]:    ${ }^{2}$ Many of the twenty vendors who declined to come to the training said that they could not afford to take time away from their stalls. Also, several vendors were not present at the time when invitations were given. ${ }^{3}$ Vendors were given transportation, light refreshments, a coffee mug, and a certificate of completion in the Philippines, and in India they were given a steel money box with locks and engraving that said "IFMR, Financial training class, July 2007" (in tamil) with the intent of reminding them in the future about the lessons learned in the class and 100 Rs to compensate generously for transport costs.

[^1]:    ${ }^{4}$ Appendix Tables A2-A4 presents robustness checks with respect to outliers for key outcomes (debt level, household expenditures and take-home enterprise profit) by winsorizing the top $1 \%$ and $5 \%$ of each outcome.

[^2]:    ${ }^{5}$ While in follow-ups 1-3, the debt module covers all outstanding loans, the debt module in follow-up 4 asks about all outstanding loans but only if the respondent has taken loans as a source of funding for working capital at least one day of the past 30 days. While 189 respondents had at least one outstanding loan, only 95 respondents had taken out loans as a source of funding for working capital at least one day of the past 30 days.

[^3]:    ${ }^{6}$ Across Columns 3-5 in Tables 1-3 we treat an observation as missing if they do not suffer a household shock in the relevant wave. In Appendix Tables A5 - A7 we present the same regressions where instead we households who suffer a shock are coded as not responding to a shock through the relevant method.
    ${ }^{7}$ Appendix Tables A8-A10 separately examine individual components of household expenditures.

[^4]:    ${ }^{8}$ The time inconsistent preferences dummy is based on two questions at baseline that capture time preference reversal. It equals 1 for those willing to forfeit a certain amount of money to receive the sum today instead of in 30 days but unwilling to forfeit this same amount of money to receive the sum in 6 months instead of 7 months.
    ${ }^{9}$ The financial literacy index is made up of 7 baseline variables: whether they regret a purchase from the past week, whether they spend time developing a financial plan (not included in India 2007), whether they have ever created a financial plan (not included in Phil. 2010), whether the HH mostly/always sticks to the financial plan (not included in Phil. 2010), whether the HH regularly sets a detailed budget, whether they agree that without a plan HH spending would go up, and whether the HH regularly tracks their spending. Each of the components is standardized against the control mean at baseline and all the components are then averaged and standardized to create a single score. The math skills index is made up of 3 baseline variables in India 2007 and Phil. 2007 and 4 baseline variables in Phil. 2010, each a word problem testing basic math skills. Each of the components is standardized against the control mean at baseline and all the components are then averaged and standardized to create a single score.

[^5]:    ${ }^{10}$ The likelihood of experiencing an income shock comes from 11 separate probit regressions using 12 baseline variables to predict the probability of a household income shock in each survey wave within each site. The baseline variables used for these prediction models are the total value of business assets (USD), the value of merchandise bought per trip to market on average day (USD), the approximate taken-home profit typical day (USD), whether they save when excess profits on a good day, whether they have borrowed from money lender for working capital, the amount borrowed from money lenders for working capital (USD), whether an unexpected event caused a household income shock, whether they currently have any form of savings, their current amount of savings (USD), household size, household total expenditures (USD), and total monthly household income (USD). See Appendix Tables A14-A16 for the output of each probit regression.

