Two Sides of the Same Rupee?
Comparing Demand for Microcredit and Microsaving in a Framed Field Experiment in Rural Pakistan

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Appendix 1: Construction of the variables and balance of randomisation

The following table — taken from the Pre-Analysis Plan — describes how each variable was constructed.

Table A1: **Construction of variables**

VARIABLE	DEFINITION	SOURCE
	DATA ON CONTRACTS OFFERED:	
y_{it}	A dummy variable for whether individual i accepts the contract in period t.	Individual contract offers.
r_{it}	The interest rate offered in period t, such that $r = 10\%$, $r = 0\%$ or $r = -10\%$.	Individual contract offers.
d_{it}	The day payment is received by individual i in period t, such that $d = 1$, $d = 3$, $d = 4$ or $d = 6$.	Individual contract offers.
$rneg_{it}$	A dummy variable equal to 1 when the interest rate in period t is -0.1; 0 otherwise.	Individual contract offers.
$rpos_{it}$	A dummy variable equal to 1 when the interest rate in period t is 0.1; 0 otherwise.	Individual contract offers.
$d1_{it}$	A dummy variable equal to 1 when the payment is received by individual i on the first day of the product cycle in period t; 0 otherwise.	Individual contract offers.
$d6_{it}$	A dummy variable equal to 1 when payment is received on the sixth day of the cycle in period t; 0 otherwise.	Individual contract offers.
	DATA ON INDIVIDUALS:	
Age	The age of individual i.	Baseline questionnaire (Q.10).
Education	A dummy variable for whether individual i has 1 or more years of schooling.	Baseline questionnaire (Q.11).
Literate	A dummy variable for whether individual i assesses that she can read and write.	Baseline questionnaire (Q.12).
Distance	A continuous variable for the number of minutes i reports that she takes to walk from her home to the meeting place.	Baseline questionnaire (Q.13).
Log(Distance)	The natural log of the 'distance' variable.	Baseline questionnaire (Q.13).
Years as a client	The number of years that individual i has been a client of NRSP.	Baseline questionnaire (Q.14).
Money owed	A dummy variable for whether individual i owes money above the median level of money owed by the sample.	Baseline questionnaire (Q.15).
Household size	A dummy variable for whether individual i has a household size above the median household size of the sample.	Baseline questionnaire (Q.16).
Final decision	A dummy variable for whether individual i makes the final decision about spending money in the household (either alone or jointly).	Baseline questionnaire (Q.17).
Family pressure	A dummy variable for whether family members request money whenever individual i has money on hand.	Baseline questionnaire (Q.18).
Difficult to save	A dummy variable for whether individual i finds it hard to save money.	Baseline questionnaire (Q.19).
Owns livestock	A dummy variable for whether individual i or her family owns livestock.	Baseline questionnaire (Q.20).

Grows crops for sale	A dummy variable for whether individual i or her family grow crops for sale.	Baseline questionnaire (Q.23).
Runs a business	A dummy variable for whether individual i or her family run a business.	Baseline questionnaire (Q.26).
Income from salaried work or casual labour	A dummy variable for whether individual i or her spouse earns income from salaried work or from casual labour.	Baseline questionnaire (Q.30 and 32).
Save or invest	A dummy variable for a hypothetical situation in which NRSP loans Rs 1000 to individual i, and individual i chooses to save or invest it (0 if the individual lists other purposes).	Baseline questionnaire (Q.34); to be coded by Uzma Afzal and Farah Said, based on individual responses.
`group`	An index for the individual's experiment group.	Baseline questionnaire (ID control section).

Table A2 shows a detailed summary of other respondent characteristics. Tables A3, A4 and A5 report the specific regressions used to form the balance tests reported in Table A2.

Table A2: **Randomisation balance**

	N	Mean	S.Dev.	1st Q.	Median	3rd Q.	Min.	Max.	Balance (p-value)
Age (years)	888	38.6	10.4	30.0	38.0	46.0	18.0	70.0	0.842
Dummy: Any education	889	0.3	0.5	0.0	0.0	1.0	0.0	1.0	0.760
Dummy: Literate	889	0.3	0.5	0.0	0.0	1.0	0.0	1.0	0.408
Distance (minutes)	887	4.5	3.8	2.0	4.0	5.0	1.0	30.0	0.313
Log (distance (minutes))	887	1.2	0.8	0.7	1.4	1.6	0.0	3.4	0.363
Years as a client	889	2.7	1.6	1.0	2.0	3.0	1.0	10.0	0.039**
Dummy: Owes more than 20,000 PKR	889	0.4	0.5	0.0	0.0	1.0	0.0	1.0	0.381
Dummy: Household larger than 6	889	0.4	0.5	0.0	0.0	1.0	0.0	1.0	0.997
Dummy: Respondent makes final decision on spending	889	0.3	0.5	0.0	0.0	1.0	0.0	1.0	0.048**
Dummy: Family members request money	889	0.7	0.5	0.0	1.0	1.0	0.0	1.0	0.660
Dummy: Respondent finds it hard to save	889	0.4	0.5	0.0	0.0	1.0	0.0	1.0	0.308
Dummy: Respondent or family owns livestock	889	0.5	0.5	0.0	0.0	1.0	0.0	1.0	0.238
Dummy: Respondent or family grows crops for sale	889	0.2	0.4	0.0	0.0	0.0	0.0	1.0	0.717
Dummy: Respondent or family runs a business	889	0.3	0.5	0.0	0.0	1.0	0.0	1.0	0.454
Respondent owns the business	889	0.1	0.2	0.0	0.0	0.0	0.0	1.0	0.128
Respondent's husband owns the business	889	0.2	0.4	0.0	0.0	0.0	0.0	1.0	0.158
Dummy: Respondent earns from casual labour	889	0.2	0.4	0.0	0.0	0.0	0.0	1.0	0.148
Dummy: Husband of the respondent earns from casual labour	889	0.4	0.5	0.0	0.0	1.0	0.0	1.0	0.481
Dummy: Respondent earns from salaried labour	889	0.1	0.3	0.0	0.0	0.0	0.0	1.0	0.240
Dummy: Husband of the respondent earns from salaried labour	889	0.2	0.4	0.0	0.0	0.0	0.0	1.0	0.143
Dummy: Respondent married	889	0.9	0.3	1.0	1.0	1.0	0.0	1.0	0.438
Dummy: Respondent would save/invest a 1000 PKR loan	888	0.3	0.4	0.0	0.0	1.0	0.0	1.0	0.415

This table describes the key covariates for our sample, recorded at baseline. The p-values for randomisation balance were generated by regressing each covariate on dummy variables for the contractual terms offered (in a saturated specification), and running a joint test that all parameters other than the intercept are zero. We show each of these regressions in detail in the following tables (Tables A3, A4 and A5).

Table A3: **Balance regressions 1**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dummy: Negative interest	-0.279	-0.032	-0.028	-0.138	-0.126	-0.130	-0.005	-0.013
	(0.869)	(0.050)	(0.047)	(0.300)	(0.072)*	(0.167)	(0.049)	(0.039)
Dummy: Positive interest	-0.069	0.013	0.015	-0.122	-0.079	-0.052	-0.035	-0.024
	(0.843)	(0.039)	(0.039)	(0.330)	(0.067)	(0.138)	(0.046)	(0.037)
Dummy: Payment day is 1	0.264	-0.000	-0.000	-0.004	-0.080	0.026	0.017	-0.026
	(0.778)	(0.035)	(0.032)	(0.382)	(0.080)	(0.163)	(0.040)	(0.047)
Dummy: Payment day is 6	-0.632	0.014	0.013	-0.461	-0.145	-0.044	-0.005	-0.009
	(0.955)	(0.051)	(0.050)	(0.258)*	(0.062)**	(0.200)	(0.058)	(0.049)
Dummy: Negative interest and payment day is 1	0.345	-0.006	-0.024	-0.199	0.050	-0.249	-0.022	0.020
	(1.166)	(0.048)	(0.048)	(0.486)	(0.119)	(0.212)	(0.065)	(0.056)
Dummy: Negative interest and payment day is 6	1.365	0.003	-0.005	0.528	0.204	0.084	-0.030	0.004
	(1.257)	(0.069)	(0.064)	(0.352)	(0.099)**	(0.246)	(0.060)	(0.055)
Dummy: Positive interest and payment day is 1	0.094	0.001	0.001	0.077	0.077	0.002	0.013	0.030
	(1.042)	(0.047)	(0.048)	(0.538)	(0.102)	(0.225)	(0.055)	(0.065)
Dummy: Positive interest and payment day is 6	0.738	-0.016	-0.016	0.286	0.123	0.011	-0.010	0.007
	(1.497)	(0.067)	(0.066)	(0.401)	(0.087)	(0.203)	(0.065)	(0.058)
Constant	38.500	0.330	0.322	4.619	1.284	2.766	0.406	0.414
	(0.768)***	(0.041)***	(0.040)***	(0.321)***	(0.085)***	(0.212)***	(0.047)***	(0.041)***
Obs.	2344	2347	2347	2341	2341	2347	2347	2347
R^2	0.001	0.002	0.002	0.002	0.003	0.004	0.002	0.000
Balance test (p-value)	0.842	0.760	0.408	0.313	0.363	0.039**	0.381	0.997

This shows the regressions used to construct the balance statistics in Table A2; this is generated by estimating equation 5, treating each covariate in turn as an outcome variable. The outcome variables take the same order as those in Table A2; this table shows outcome variables 1-8. The 'balance test' is a joint test that all parameters other than the intercept are zero.

Table A4: **Balance regressions 2**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dummy: Negative interest	0.079	0.047	0.025	0.013	-0.020	0.027	0.005	0.063
	(0.045)*	(0.048)	(0.056)	(0.042)	(0.028)	(0.042)	(0.021)	(0.027)**
Dummy: Positive interest	0.090	0.058	0.040	-0.055	-0.045	-0.015	-0.009	-0.011
	(0.043)**	(0.054)	(0.044)	(0.042)	(0.038)	(0.039)	(0.018)	(0.034)
Dummy: Payment day is 1	0.072	0.078	0.052	-0.012	-0.006	0.043	0.013	0.059
	(0.041)*	(0.052)	(0.051)	(0.038)	(0.047)	(0.044)	(0.025)	(0.034)*
Dummy: Payment day is 6	0.013	0.048	0.054	0.013	-0.044	0.032	0.006	0.025
	(0.052)	(0.044)	(0.055)	(0.044)	(0.038)	(0.049)	(0.020)	(0.037)
Dummy: Negative interest and payment day is 1	0.002	-0.086	-0.007	0.005	0.045	-0.043	-0.004	-0.091
	(0.062)	(0.059)	(0.076)	(0.054)	(0.050)	(0.061)	(0.039)	(0.043)**
Dummy: Negative interest and payment day is 6	0.015	-0.024	-0.006	-0.005	0.061	-0.010	-0.003	-0.048
	(0.071)	(0.063)	(0.073)	(0.058)	(0.041)	(0.075)	(0.033)	(0.047)
Dummy: Positive interest and payment day is 1	-0.124	-0.073	-0.100	0.095	0.068	0.004	-0.019	-0.005
	(0.057)**	(0.063)	(0.071)	(0.061)	(0.050)	(0.058)	(0.032)	(0.049)
Dummy: Positive interest and payment day is 6	-0.029	-0.057	-0.015	-0.004	0.070	-0.039	-0.018	0.006
	(0.073)	(0.073)	(0.059)	(0.054)	(0.062)	(0.060)	(0.031)	(0.044)
Constant	0.234	0.644	0.391	0.498	0.234	0.330	0.069	0.165
	(0.035)***	(0.070)***	(0.054)***	(0.055)***	(0.059)***	(0.044)***	(0.018)***	(0.029)***
Obs.	2347	2347	2347	2347	2347	2347	2347	2347
R^2	0.009	0.002	0.004	0.003	0.003	0.003	0.002	0.004
Balance test (p-value)	0.048**	0.660	0.308	0.238	0.717	0.454	0.128	0.158

This shows the regressions used to construct the balance statistics in Table A2; this is generated by estimating equation 5, treating each covariate in turn as an outcome variable. The outcome variables take the same order as those in Table A2; this table shows outcome variables 9-16. The 'balance test' is a joint test that all parameters other than the intercept are zero.

Table A5: **Balance regressions 3**

	(1)	(2)	(3)	(4)	(5)	(6)
Dummy: Negative interest	-0.053	-0.026	0.024	0.047	0.024	0.016
	(0.033)	(0.043)	(0.020)	(0.035)	(0.025)	(0.032)
Dummy: Positive interest	-0.007	0.014	0.041	0.001	-0.013	0.033
	(0.029)	(0.046)	(0.024)*	(0.033)	(0.032)	(0.041)
Dummy: Payment day is 1	-0.014	-0.054	0.040	0.017	0.012	0.057
	(0.030)	(0.044)	(0.019)**	(0.039)	(0.031)	(0.045)
Dummy: Payment day is 6	-0.005	-0.058	0.016	0.066	0.019	0.053
	(0.039)	(0.039)	(0.028)	(0.040)	(0.033)	(0.038)
Dummy: Negative interest and payment day is 1	0.020	0.083	-0.040	-0.066	-0.042	-0.045
	(0.054)	(0.054)	(0.036)	(0.049)	(0.034)	(0.055)
Dummy: Negative interest and payment day is 6	0.029	0.049	0.025	-0.124	-0.071	0.017
	(0.055)	(0.052)	(0.031)	(0.051)**	(0.045)	(0.053)
Dummy: Positive interest and payment day is 1	0.035	0.026	-0.028	-0.016	0.009	-0.093
	(0.042)	(0.069)	(0.027)	(0.053)	(0.050)	(0.050)*
Dummy: Positive interest and payment day is 6	0.000	0.024	-0.000	-0.018	-0.024	-0.061
	(0.047)	(0.053)	(0.034)	(0.054)	(0.057)	(0.056)
Constant	0.230	0.379	0.050	0.207	0.862	0.238
	(0.038)***	(0.050)***	(0.014)***	(0.036)***	(0.024)***	(0.033)***
Obs.	2347	2347	2347	2347	2347	2346
R^2	0.003	0.002	0.005	0.004	0.002	0.004
Balance test (p-value)	0.148	0.481	0.240	0.143	0.438	0.415

This shows the regressions used to construct the balance statistics in Table A2; this is generated by estimating equation 5, treating each covariate in turn as an outcome variable. The outcome variables take the same order as those in Table A2; this table shows outcome variables 17-23. The 'balance test' is a joint test that all parameters other than the intercept are zero.

Appendix 2: Breach of experimental protocol

In three of the 32 groups, our research assistants observed serious breaches of the experiment protocol. In summary:

1. In one group, one woman (who was not supposed to be present) pressured the others into a mass walk-out; as a result, only six out of 45 women agreed to participate in the research.

2. In a second group, one man gathered all the participants and spoke to them before the ballots at the second meeting. He also told research assistants that participants in the area are 'too busy' for this kind of scheme. When drawing the contracts, it seemed that at least some of the participants exchanged glances with this gentleman when prompted for a decision. At this group's first meeting, 24 of the 27 participants accepted the contract offer; whereas at the second meeting, 0 of the 16 remaining participants accepted the contract offer.

3. In a third group, all women declined the offer in the third meeting, because the owner of the host house was ill and she apparently instructed everyone to decline so that she would not have to host the daily payment meetings. The week 2 ballot may also have been affected by these considerations, since she was apparently already ill in week 2.

We drop these three groups from the analysis, a decision taken before we began any of the analysis.

Appendix 3: Further regressions

As in the main text, let us define y_{iw} as a dummy variable for whether individual i agreed to the offered contract in experiment wave $w \in \{1, 2, 3\}$. Define $r_{iw} \in \{-0.1, 0, 0.1\}$ as the interest rate offered. As an alternative to the regression specification in the main text, we can estimate the following simpler linear probability model:

$$y_{iw} = \beta_0 + \beta_r \cdot r_{iw} + \mu_{iw}. \tag{1}$$

We can then also estimate the following model to allow for asymmetric interest rate effects:

$$y_{iw} = \beta_0 + \beta_{neg} \cdot rneg_{iw} + \beta_{pos} \cdot rpos_{iw} + \mu_{iw}, \tag{2}$$

where $rneg_{iw}$ is a dummy for $r_{iw} = -0.1$ and $rpos_{iw}$ as a dummy for $r_{iw} = 0.1$. A zero interest rate is the omitted category.

We estimate a similar regression to test sensitivity to the day of the lumpsum payment p. Formally, let $p_{iw} \in \{1, 3, 4, 6\}$ be the day of payment, and $p1_{iw}$ and $p6_{iw}$ be corresponding dummy variables (leaving days 3 and 4 as the joint omitted category). We estimate:

$$y_{iw} = \beta_0 + \beta_d \cdot p_{iw} + \mu_{iw} \tag{3}$$

$$y_{iw} = \beta_0 + \beta_1 \cdot p1_{iw} + \beta_6 \cdot p6_{iw} + \mu_{iw}. \tag{4}$$

Since p_{iw} and r_{iw} are randomized and orthogonal to each other, we obtain the same results if we combined both sets of regressors into a single regression.
We also estimate a saturated specification:

$$\begin{aligned} y_{iw} = \beta_0 + \beta_{neg} \cdot rneg_{iw} + \beta_{pos} \cdot rpos_{iw} + \beta_1 \cdot p1_{iw} + \beta_6 \cdot p6_{iw} + \gamma_{neg,1} \cdot rneg_{iw} \cdot p1_{iw} \\ + \gamma_{neg,6} \cdot rneg_{iw} \cdot p6_{iw} + \gamma_{pos,1} \cdot rpos_{iw} \cdot p1_{iw} + \gamma_{pos,6} \cdot rpos_{iw} \cdot p6_{iw} + \mu_{iw}. \end{aligned} \tag{5}$$

where the omitted category is an offer of a zero interest rate with lump sum payment on either day 3 or day 4.

Table A6 shows the results. We observe in column 1 a significant response to the interest rate r. This is confirmed in column 2 where we find a significant negative effect of $r = -0.1$ on take-up, and a significant positive effect of $r = 0.1$. The effect of payment day on take-up is shown in column3 to be significantly negative: receiving the lumpsum later reduces take-up. This is confirmed in column 4 which shows that, relative to receive the lumpsum on days 3 or 4, receiving it on day 1 ($p = 1$) significantly increases take-up while receiving it on day 6 ($p = 6$) significantly reduces it. Column 5 shows that the saturated specification does not alter these findings: the coefficients on day of payment and interest rate barely change from columns 3 and 4, and the interaction effects are not significant.

While the estimated effects of contract terms are statistically significant, they are not particularly large. For example, column 2 shows an average take-up of about 67% for clients with $r = 0$; this falls only to 54% for clients offered $r = -0.1$, and rises to 73% for clients offered $r = 0.1$. Similarly, column 4 shows an average take-up of 63% for clients with $p = 3$ or $p = 4$, which rises to 75% for clients offered $p = 1$ and falls to 57% for $p = 6$.

< Table A6 here. >

We then proceed to disaggregate by baseline characteristics. Table A7 shows that literate respondents were about 10 percentage points less likely to take up the product than illiterate respondents, and were significantly more responsive to the interest rate (in particular, they were substantially more likely to react positively to a positive interest rate).

< Table A7 here. >

Table A8 considers heterogeneity by the distance that the respondent lives from the meeting place. We bifurcate the sample into those respondents living more than four minutes' walk away and those living less (four minutes' walk being the median distance in the sample). We find generally similar responses to the contracts offered, with the notable exception of being offered payment on day 1: respondents living further away were significantly and substantially less likely to agree to a contract offering payment on day 1.

< Table A8 here. >

Table A9 disaggregates by occupation — that is, by whether the respondent (or her spouse) receives income from growing crops for sale, runs a business, or earns income from salaried work or casual labour. (That is, we compare women meeting *any* of these categories with women who meet *none*. Relatively few women — only 58 — fall into the latter category.) Responses are generally homogenous between these two groups. (Columns (5) and (6) imply that women without income are sensitive to negative interest rates only when they are offered on day 6 — but it seems likely that this result is driven by the small number of women not earning income in this way.)

< Table A9 here. >

We then disaggregate by occupation type. In particular, we consider when the occupation is likely to lead to daily earnings and inflow of money such as casual labor and small businesses. Nearly two-third of the sample (or their spouse) earn money through either of these activities and is likely to see a small, daily inflow of income. As can be seen in Table A10, similar to the case for occupation above, women without such income are sensitive to negative rates when they are offered on day 6.

< Table A10 here. >

Finally, we consider various measures of respondents' demand for lump-sum payments, and for their ability to hold cash balances; we test heterogeneity by whether the respondent reported that she would save/invest a hypothetical loan of 1000 rupees (Table A11), whether family members request money whenever the respondent has it on hand (Table A12), whether the respondent reports difficulty in saving (Table A13) and whether the respondent described a lumpy purchase with a hypothetical loan of 1000 rupees (Table A14). There are several significant differences among the first two of these four comparisons. First, take-up is generally higher among those who described saving or investing a hypothetical loan than those who did not (see particularly columns 1 and 2 of Table A11). Similarly, those who did not describe saving or investing such a loan were significantly more likely to accept a contract with a negative interest rate than those who did (columns 1 and 2, Table A11). Similarly, respondents who did not face family pressure were significantly more responsive to the interest rate (in particular, the offer of a positive interest rate) than those who do face such pressure (columns 1 and 2, Table A12).

< Table A11 here. >
< Table A12 here. >
< Table A13 here. >
< Table A14 here. >

Table A6: **Determinants of take-up: Interest rate and payment day**

	(1)	(2)	(3)	(4)	(5)
Dependent variable: **Whether the respondent accepted the offer**					
Interest rate r	0.929				
	(0.142)***				
Payment day p			-0.036		
			(0.005)***		
$r = -0.1$		-0.125			-0.099
		(0.030)***			(0.048)**
$r = +0.1$		0.063			0.082
		(0.024)**			(0.045)*
$p = 1$				0.126	0.152
				(0.030)***	(0.052)***
$p = 6$				-0.055	-0.042
				(0.025)**	(0.056)
$r = -0.1$ and $p = 1$					-0.077
					(0.073)
$r = -0.1$ and $p = 6$					0.011
					(0.071)
$r = +0.1$ and $p = 1$					-0.010
					(0.054)
$r = +0.1$ and $p = 6$					-0.042
					(0.060)
Constant	0.646	0.668	0.776	0.627	0.628
	(0.039)***	(0.045)***	(0.040)***	(0.044)***	(0.056)***
Obs.	2347	2347	2347	2347	2347
R^2	0.026	0.027	0.023	0.025	0.053

This table reports LPM estimates for take-up as a function of contract terms.
Parentheses show standard errors, which allow for clustering by microfinance group.
Significance: $* \Leftrightarrow p < 0.1$, $** \Leftrightarrow p < 0.05$, $*** \Leftrightarrow p < 0.01$.

Table A7: **Heterogeneity by literacy**

	(1)	(2)	(3)	(4)	(5)	(6)
Literate?	**YES**	**NO**	**YES**	**NO**	**YES**	**NO**
Dependent variable: **Whether the respondent accepted the offer**						
Dummy: Negative interest	-0.092	-0.143			-0.023	-0.135
	(0.055)	(0.037)***			(0.099)	(0.060)**
Dummy: Positive interest	0.147	0.022			0.144	0.054
	(0.045)***	(0.027)			(0.076)*	(0.059)
Dummy: Payment day is 1			0.171	0.106	0.196	0.131
			(0.040)***	(0.035)***	(0.070)***	(0.054)**
Dummy: Payment day is 6			-0.070	-0.047	-0.048	-0.038
			(0.037)*	(0.029)	(0.086)	(0.066)
Dummy: Negative interest and payment day is 1					-0.125	-0.055
					(0.155)	(0.069)
Dummy: Negative interest and payment day is 6					-0.069	0.043
					(0.119)	(0.088)
Dummy: Positive interest and payment day is 1					0.016	-0.024
					(0.072)	(0.069)
Dummy: Positive interest and payment day is 6					0.000	-0.066
					(0.100)	(0.088)
Constant	0.599	0.701	0.598	0.641	0.548	0.667
	(0.062)***	(0.043)***	(0.057)***	(0.043)***	(0.083)***	(0.054)***
Obs.	746	1601	746	1601	746	1601
R^2	0.042	0.024	0.042	0.018	0.085	0.044
Parameter equality: Intercept (p-value)	0.057*		0.300		0.125	
Parameter equality: All other parameters (p-value)	0.051*		0.185		0.148	

Parentheses show standard errors, which allow for clustering by microfinance group.
Significance: $* \Leftrightarrow p < 0.1$, $** \Leftrightarrow p < 0.05$, $*** \Leftrightarrow p < 0.01$.

Table A8: **Heterogeneity by distance**

	(1)	(2)	(3)	(4)	(5)	(6)
Distance > 4 minutes?	**YES**	**NO**	**YES**	**NO**	**YES**	**NO**
Dependent variable: **Whether the respondent accepted the offer**						
Dummy: Negative interest	-0.121	-0.133			-0.110	-0.093
	(0.045)**	(0.037)***			(0.071)	(0.070)
Dummy: Positive interest	0.072	0.053			0.081	0.083
	(0.035)**	(0.035)			(0.072)	(0.073)
Dummy: Payment day is 1			0.063	0.173	0.057	0.223
			(0.039)	(0.034)***	(0.069)	(0.060)***
Dummy: Payment day is 6			-0.061	-0.051	-0.037	-0.048
			(0.036)*	(0.033)	(0.068)	(0.075)
Dummy: Negative interest and payment day is 1					-0.078	-0.085
					(0.112)	(0.075)
Dummy: Negative interest and payment day is 6					0.049	-0.018
					(0.097)	(0.099)
Dummy: Positive interest and payment day is 1					0.068	-0.068
					(0.084)	(0.075)
Dummy: Positive interest and payment day is 6					-0.098	0.001
					(0.099)	(0.085)
Constant	0.645	0.688	0.635	0.623	0.637	0.624
	(0.059)***	(0.054)***	(0.050)***	(0.060)***	(0.067)***	(0.080)***
Obs.	1039	1302	1039	1302	1039	1302
R^2	0.027	0.028	0.010	0.041	0.046	0.070
Parameter equality: Intercept (p-value)	0.516		0.858		0.890	
Parameter equality: All other parameters (p-value)	0.932		0.012**		0.022**	

Parentheses show standard errors, which allow for clustering by microfinance group.
Significance: $* \Leftrightarrow p < 0.1$, $** \Leftrightarrow p < 0.05$, $*** \Leftrightarrow p < 0.01$.

Table A9: **Heterogeneity by economic activity**

Respondent or spouse grows crops for sale, runs a business or earns from salaried/casual labour?	(1) **YES**	(2) **NO**	(3) **YES**	(4) **NO**	(5) **YES**	(6) **NO**
Dependent variable: **Whether the respondent accepted the offer**						
Dummy: Negative interest	-0.125	-0.108			-0.111	0.133
	(0.031)***	(0.146)			(0.052)**	(0.237)
Dummy: Positive interest	0.070	-0.064			0.082	0.067
	(0.024)***	(0.104)			(0.044)*	(0.151)
Dummy: Payment day is 1			0.119	0.258	0.143	0.290
			(0.031)***	(0.095)**	(0.053)**	(0.152)*
Dummy: Payment day is 6			-0.059	0.015	-0.066	0.324
			(0.026)**	(0.112)	(0.055)	(0.156)*
Dummy: Negative interest and payment day is 1					-0.076	-0.111
					(0.078)	(0.220)
Dummy: Negative interest and payment day is 6					0.047	-0.606
					(0.072)	(0.283)**
Dummy: Positive interest and payment day is 1					-0.009	0.019
					(0.056)	(0.195)
Dummy: Positive interest and payment day is 6					-0.021	-0.352
					(0.059)	(0.213)
Constant	0.663	0.739	0.629	0.595	0.634	0.533
	(0.045)***	(0.107)***	(0.044)***	(0.093)***	(0.054)***	(0.167)***
Obs.	2223	124	2223	124	2223	124
R^2	0.029	0.009	0.023	0.065	0.054	0.129
Parameter equality: Intercept (p-value)	0.424		0.682		0.484	
Parameter equality: All other parameters (p-value)	0.319		0.301		0.000***	

Parentheses show standard errors, which allow for clustering by microfinance group.
Significance: $* \Leftrightarrow p < 0.1$, $** \Leftrightarrow p < 0.05$, $*** \Leftrightarrow p < 0.01$.

Table A10: **Heterogeneity by economic activity - Respondent or spouse earns from casual labor or business**

Respondent or spouse earns from business or casual labor, runs a business or earns from casual labour?	(1) **YES**	(2) **NO**	(3) **YES**	(4) **NO**	(5) **YES**	(6) **NO**
Dependent variable: **Whether the respondent accepted the offer**						
Dummy: Negative interest	-0.153***	-0.102**			-0.170**	-0.0340
	(0.0362)	(0.0386)			(0.0633)	(0.0612)
Dummy: Positive interest	0.0643*	0.0621*			0.0352	0.128**
	(0.0324)	(0.0343)			(0.0636)	(0.0553)
Dummy: Payment day is 1			0.124***	0.126***	0.127	0.176***
			(0.0439)	(0.0339)	(0.0809)	(0.0634)
Dummy: Payment day is 6			-0.0639	-0.0501	-0.122	0.0255
			(0.0423)	(0.0314)	(0.0854)	(0.0537)
Dummy: Negative interest and payment day is 1					-0.122	-0.0449
					(0.121)	(0.0912)
Dummy: Negative interest and payment day is 6					0.184*	-0.135*
					(0.103)	(0.0715)
Dummy: Positive interest and payment day is 1					0.0860	-0.0986
					(0.0812)	(0.0786)
Dummy: Positive interest and payment day is 6					0.00354	-0.0828
					(0.0985)	(0.0563)
Constant	0.650***	0.682***	0.608***	0.646***	0.647***	0.609***
	(0.0575)	(0.0423)	(0.0563)	(0.0446)	(0.0619)	(0.0616)
Obs.	1,087	1,260	1,087	1,260	1,087	1,260
R^2	0.035	0.021	0.024	0.025	0.078	0.048
Parameter equality: Intercept (p-value)	0.461		0.418		0.481	
Parameter equality: All other parameters (p-value)	0.400		0.950		0.000***	

Parentheses show standard errors, which allow for clustering by microfinance group.
Significance: $* \Leftrightarrow p < 0.1$, $** \Leftrightarrow p < 0.05$, $*** \Leftrightarrow p < 0.01$.

Table A11: **Heterogeneity by whether or not the respondent would save/invest a hypothetical loan of 1000 PKR**

	(1)	(2)	(3)	(4)	(5)	(6)
Respondent would save/invest a loan for 1000 PKR?	**YES**	**NO**	**YES**	**NO**	**YES**	**NO**
***Dependent variable:* Whether the respondent accepted the offer**						
Dummy: Negative interest	-0.186	-0.102			-0.132	-0.091
	(0.060)***	(0.033)***			(0.084)	(0.052)*
Dummy: Positive interest	0.009	0.085			0.007	0.105
	(0.039)	(0.028)***			(0.068)	(0.047)**
Dummy: Payment day is 1			0.124	0.126	0.114	0.158
			(0.042)***	(0.035)***	(0.073)	(0.051)***
Dummy: Payment day is 6			0.027	-0.093	0.077	-0.101
			(0.033)	(0.032)***	(0.089)	(0.063)
Dummy: Negative interest and payment day is 1					-0.085	-0.067
					(0.124)	(0.071)
Dummy: Negative interest and payment day is 6					-0.066	0.040
					(0.130)	(0.081)
Dummy: Positive interest and payment day is 1					0.107	-0.039
					(0.088)	(0.049)
Dummy: Positive interest and payment day is 6					-0.063	-0.019
					(0.101)	(0.071)
Constant	0.793	0.620	0.687	0.607	0.726	0.598
	(0.033)***	(0.057)***	(0.039)***	(0.053)***	(0.057)***	(0.064)***
Obs.	631	1715	631	1715	631	1715
R^2	0.041	0.025	0.014	0.032	0.062	0.059
Parameter equality: Intercept (p-value)	0.007***		0.129		0.083*	
Parameter equality: All other parameters (p-value)	0.220		0.005***		0.006***	

Parentheses show standard errors, which allow for clustering by microfinance group.
Significance: $* \Leftrightarrow p < 0.1$, $** \Leftrightarrow p < 0.05$, $*** \Leftrightarrow p < 0.01$.

Table A12: **Heterogeneity by whether family members request money whenever the respondent has money on hand**

	(1)	(2)	(3)	(4)	(5)	(6)
Family members request money whenever it is on hand?	**YES**	**NO**	**YES**	**NO**	**YES**	**NO**
Dependent variable: **Whether the respondent accepted the offer**						
Dummy: Negative interest	-0.122	-0.132			-0.092	-0.129
	(0.037)***	(0.046)***			(0.055)	(0.080)
Dummy: Positive interest	0.037	0.121			0.034	0.177
	(0.031)	(0.038)***			(0.057)	(0.063)***
Dummy: Payment day is 1			0.109	0.165	0.122	0.205
			(0.037)***	(0.040)***	(0.066)*	(0.065)***
Dummy: Payment day is 6			-0.080	-0.001	-0.081	0.030
			(0.030)**	(0.040)	(0.069)	(0.076)
Dummy: Negative interest and payment day is 1					-0.092	-0.029
					(0.087)	(0.100)
Dummy: Negative interest and payment day is 6					0.018	0.007
					(0.087)	(0.119)
Dummy: Positive interest and payment day is 1					0.031	-0.086
					(0.072)	(0.075)
Dummy: Positive interest and payment day is 6					-0.010	-0.103
					(0.076)	(0.095)
Constant	0.680	0.641	0.644	0.592	0.661	0.570
	(0.050)***	(0.076)***	(0.042)***	(0.083)***	(0.060)***	(0.084)***
Obs.	1629	718	1629	718	1629	718
R^2	0.020	0.047	0.026	0.026	0.048	0.075
Parameter equality: Intercept (p-value)	0.648		0.529		0.316	
Parameter equality: All other parameters (p-value)	0.080*		0.292		0.021**	

Parentheses show standard errors, which allow for clustering by microfinance group.
Significance: $* \Leftrightarrow p < 0.1$, $** \Leftrightarrow p < 0.05$, $*** \Leftrightarrow p < 0.01$.

Table A13: **Heterogeneity by whether the respondent reports difficulty in saving**

Respondent reports difficulty saving?	(1) YES	(2) NO	(3) YES	(4) NO	(5) YES	(6) NO
Dependent variable: **Whether the respondent accepted the offer**						
Dummy: Negative interest	-0.139	-0.112			-0.157	-0.057
	(0.046)***	(0.033)***			(0.058)**	(0.068)
Dummy: Positive interest	0.018	0.096			0.032	0.122
	(0.042)	(0.025)***			(0.053)	(0.066)*
Dummy: Payment day is 1			0.144	0.115	0.143	0.161
			(0.037)***	(0.042)**	(0.062)**	(0.073)**
Dummy: Payment day is 6			-0.057	-0.046	-0.073	-0.016
			(0.044)	(0.036)	(0.077)	(0.076)
Dummy: Negative interest and payment day is 1					-0.009	-0.126
					(0.073)	(0.115)
Dummy: Negative interest and payment day is 6					0.081	-0.039
					(0.084)	(0.101)
Dummy: Positive interest and payment day is 1					0.020	-0.040
					(0.085)	(0.079)
Dummy: Positive interest and payment day is 6					-0.025	-0.048
					(0.070)	(0.087)
Constant	0.646	0.684	0.580	0.661	0.618	0.635
	(0.064)***	(0.051)***	(0.047)***	(0.063)***	(0.060)***	(0.077)***
Obs.	1015	1332	1015	1332	1015	1332
R^2	0.021	0.034	0.029	0.020	0.053	0.055
Parameter equality: Intercept (p-value)	0.591		0.481		0.844	
Parameter equality: All other parameters (p-value)	0.188		0.321		0.802	

Parentheses show standard errors, which allow for clustering by microfinance group.
Significance: $* \Leftrightarrow p < 0.1$, $** \Leftrightarrow p < 0.05$, $*** \Leftrightarrow p < 0.01$.

Table A14: **Heterogeneity by whether the respondent described a lumpy purchase at baseline**

	(1)	(2)	(3)	(4)	(5)	(6)
Respondent described a lumpy consumption good?	**YES**	**NO**	**YES**	**NO**	**YES**	**NO**
***Dependent variable:* Whether the respondent accepted the offer**						
Dummy: Negative interest	-0.168	-0.108			-0.117	-0.091
	(0.042)***	(0.035)***			(0.076)	(0.051)*
Dummy: Positive interest	0.049	0.069			0.044	0.099
	(0.036)	(0.028)**			(0.080)	(0.047)**
Dummy: Payment day is 1			0.139	0.122	0.222	0.133
			(0.039)***	(0.037)***	(0.079)***	(0.058)**
Dummy: Payment day is 6			-0.026	-0.067	-0.055	-0.037
			(0.047)	(0.030)**	(0.117)	(0.054)
Dummy: Negative interest and payment day is 1					-0.227	-0.026
					(0.118)*	(0.074)
Dummy: Negative interest and payment day is 6					0.055	-0.008
					(0.142)	(0.080)
Dummy: Positive interest and payment day is 1					-0.036	-0.008
					(0.084)	(0.056)
Dummy: Positive interest and payment day is 6					0.029	-0.070
					(0.143)	(0.054)
Constant	0.716	0.649	0.643	0.621	0.667	0.612
	(0.037)***	(0.054)***	(0.045)***	(0.053)***	(0.075)***	(0.063)***
Obs.	657	1690	657	1690	657	1690
R^2	0.040	0.023	0.023	0.026	0.074	0.050
Parameter equality: Intercept (p-value)	0.212		0.695		0.508	
Parameter equality: All other parameters (p-value)	0.517		0.743		0.513	

Parentheses show standard errors, which allow for clustering by microfinance group.
Significance: $* \Leftrightarrow p < 0.1$, $** \Leftrightarrow p < 0.05$, $*** \Leftrightarrow p < 0.01$.

Appendix 4: Time and Attrition

Table A15 shows the stability of assigned type — using a Naive Bayes Classifier to assign types — and is discussed in the main paper. It shows the stability of estimated types between experiment waves 1 and 2 (rows) and between experiment waves 2 and 3 (columns).

< Table A15 here. >

Table A16 tests how behaviour varies across experiment waves. First, we test the effect of previous take-up on future behaviour. To do this, we include lagged acceptance as an additional explanatory variable; we instrument lagged acceptance with the lagged contractual offer (in a saturated specification). Two key conclusions emerge. First, lagged acceptance has a large and highly significant effect: accepting in period t causes a respondent to be about 30 percentage points more likely to accept in period $t + 1$. This speaks to possible 'familiarity' or 'reassurance' effects: it suggests that trying the product improves respondents' future perceptions of the offer. Second, because the experiment was randomised, this lag effect does not substantially change any of the parameters we estimated in Table A6.

< Table A16 here. >

For completeness, we also show in Table A17 the reduced form estimation of the effect of previous contractual terms on current behaviour. We find that having been offered a negative interest rate in the previous period reduces the probability of take-up in the current period by about 10 percentage points. We find no effect of having been offered a positive interest rate in the previous period, and no effect of the time of offered payment in the previous period.

< Table A17 here. >

Table A18 first tests the effect of experiment wave on product take-up (columns (1) and (2)). The table then estimates the 'saturated' specification separately for each experiment wave (columns (4), (5) and (6)), and reports p-values for parameter equality across waves (column (7)). The results show a large and highly significant general decline in willingness to adopt (that is, the intercept term is significantly smaller in the third experiment wave); this is in addition to a significant increase in sensitivity to a positive interest rate, and to receiving a negative interest rate on the first payment day.

< Table A18 here. >

Table A19 tests the effect of the offered contract on attrition — that is, the effect of an offer in period t on whether the respondent attrits before period $t + 1$. We find that respondents are more likely to attrit having just been offered a contract with payment on day 6 (regardless of whether the interest rate was positive, negative or zero). We find no other significant effect of contractual terms on attrition. A separate estimation (omitted for brevity) tests attrition as a function of a large number of baseline characteristics; none of the characteristics significant predicts attrition.

< Table A19 here. >

Table A20 compares the saturated estimations from Table A6 with a saturated estimation using only those respondents who remained in the experiment for all three rounds: we find that this attrition has no significant effect on our parameter estimates ($p = 0.334$).

< Table A20 here. >

Finally, Tables A21 and A22 assume the take-up decisions of attriters as not taking up the product. Individuals who have exited the experiment because of attrition or default are considered to have been offered the product, with simulated, randomly drawn interest rate and day of lump sum payment, and then refused it. In addition to the 709 individuals who participated in all rounds, we include here simulated offers for defaulters and those who simply refused to participate. Product take-up decision for these individuals is coded as 'refused'. Table A21 repeats the regression results for this constructed sample. Other than very small differences in the size of coefficients, there are no significant effects on our parameter estimates. Table A22 repeats the structural estimation for the same data. Compared to the main structural estimations reported in the paper, this exercise leads us to estimate a lower proportion in Type G (31.8% rather than 40.5%), and a higher proportion that are 'not rationalised' (29.1% rather than 24.1%), but the estimates remain otherwise very stable; in particular, the proportions classified as being in the 'benchmark model' and the 'alternative model' do not change meaningfully, nor do the general conclusions of the estimation.

< Table A21 here. >

< Table A22 here. >

Table A15: **Stability of classified types**

CLASSIFICATION (WAVES 1 & 2)	CLASSIFICATION (WAVES 2 & 3)							
	A	B	C	D	E	F	G	TOTAL
A	3	0	0	2	2	0	7	14
B	2	2	0	0	1	1	0	6
C	0	0	0	3	0	0	1	4
D	1	1	0	88	3	7	0	100
E	1	0	0	1	0	0	1	3
F	0	0	0	28	1	38	13	80
G	11	0	0	0	6	32	319	368
TOTAL	18	3	0	122	13	78	341	575

Table A16: **Determinants of take-up: Dynamics**

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable: **Whether the respondent accepted the offer**						
Lag: Acceptance (dummy)	0.335	0.311	0.311	0.312	0.322	0.294
	(0.111)***	(0.111)***	(0.111)***	(0.105)***	(0.106)***	(0.107)***
Interest rate		1.093				
		(0.135)***				
Payment day				-0.031		
				(0.007)***		
Dummy: Negative interest			-0.114			-0.067
			(0.031)***			(0.054)
Dummy: Positive interest			0.105			0.134
			(0.020)***			(0.042)***
Dummy: Payment day is 1					0.113	0.169
					(0.032)***	(0.049)***
Dummy: Payment day is 6					-0.046	-0.048
					(0.028)*	(0.050)
Dummy: Negative interest and payment day is 1						-0.149
						(0.083)*
Dummy: Negative interest and payment day is 6						0.027
						(0.079)
Dummy: Positive interest and payment day is 1						-0.050
						(0.057)
Dummy: Positive interest and payment day is 6						-0.031
						(0.055)
Dummy: Experiment round 3	-0.081	-0.081	-0.081	-0.074	-0.076	-0.074
	(0.049)*	(0.048)*	(0.049)*	(0.048)	(0.048)	(0.047)
Constant	0.439	0.448	0.451	0.556	0.419	0.411
	(0.085)***	(0.084)***	(0.086)***	(0.090)***	(0.087)***	(0.095)***
Obs.	1418	1418	1418	1418	1418	1418
R^2	0.201	0.228	0.228	0.211	0.216	0.246
Kleibergen-Paap (p-value)	0.009***	0.008***	0.008***	0.009***	0.009***	0.009***
Hansen J test (p-value)	0.760	0.842	0.844	0.636	0.589	0.654

Table A17: **Determinants of take-up: Reduced form on past contractual terms**

	(1)	(2)	(3)	(4)	(5)
Dependent variable: **Whether the respondent accepted the offer**					
Lag interest rate	0.388				
	(0.159)**				
Lag payment day			-0.010		
			(0.008)		
Dummy: Lag negative interest		-0.096			-0.084
		(0.029)***			(0.057)
Dummy: Lag positive interest		-0.016			-0.004
		(0.030)			(0.046)
Dummy: Lag payment day is 1				0.018	0.023
				(0.038)	(0.049)
Dummy: Lag payment day is 6				-0.038	-0.019
				(0.033)	(0.070)
Dummy: Lag negative interest and lag payment day is 1					-0.026
					(0.091)
Dummy: Lag negative interest and lag payment day is 6					-0.010
					(0.073)
Dummy: Lag positive interest and lag payment day is 1					0.000
					(0.060)
Dummy: Lag positive interest and lag payment day is 6					-0.038
					(0.079)
Dummy: Experiment wave 3	-0.092	-0.094	-0.094	-0.095	-0.098
	(0.043)**	(0.043)**	(0.043)**	(0.043)**	(0.043)**
Constant	0.673	0.713	0.710	0.681	0.712
	(0.049)***	(0.048)***	(0.054)***	(0.057)***	(0.055)***
Obs.	1418	1418	1418	1418	1418
R^2	0.013	0.016	0.010	0.011	0.018

Table A18: **Determinants of take-up: Heterogeneity by experiment wave**

	(1)	(2)	(3)	(4)	(5)	Equality (p-value)
Dependent variable: **Whether the respondent accepted the offer**						
Experiment wave	-0.052					
	(0.021)**					
Dummy: Experiment wave 2		-0.017				
		(0.041)				
Dummy: Experiment wave 3		-0.107				
		(0.042)**				
Dummy: Negative interest			-0.171	-0.122	0.012	**0.257**
			(0.066)**	(0.061)*	(0.091)	
Dummy: Positive interest			-0.029	0.112	0.194	**0.024****
			(0.066)	(0.057)*	(0.090)**	
Dummy: Payment day is 1			0.146	0.115	0.222	**0.437**
			(0.069)**	(0.059)*	(0.082)**	
Dummy: Payment day is 6			-0.025	-0.132	0.039	**0.229**
			(0.068)	(0.084)	(0.076)	
Dummy: Negative interest and payment day is 1			0.087	-0.117	-0.241	**0.061***
			(0.089)	(0.091)	(0.132)*	
Dummy: Negative interest and payment day is 6			-0.001	0.078	-0.053	**0.701**
			(0.089)	(0.105)	(0.141)	
Dummy: Positive interest and payment day is 1			0.031	-0.037	-0.050	**0.723**
			(0.081)	(0.075)	(0.103)	
Dummy: Positive interest and payment day is 6			-0.012	0.029	-0.149	**0.420**
			(0.083)	(0.102)	(0.099)	
Constant	0.752	0.690	0.714	0.667	0.473	**0.011****
	(0.058)***	(0.044)***	(0.072)***	(0.064)***	(0.072)***	
Obs.	2347	2347	889	745	713	
R^2	0.008	0.009	0.060	0.070	0.065	

Parentheses show standard errors, which allow for clustering by microfinance group.
Significance: $* \Leftrightarrow p < 0.1$, $** \Leftrightarrow p < 0.05$, $*** \Leftrightarrow p < 0.01$.

Table A19: **Determinants of attrition: Contractual terms**

	(1)	(2)	(3)	(4)	(5)
Dependent variable: **Whether the respondent attrited in a given period**					
Lag: Interest rate	-0.068				
	(0.091)				
Lag: Payment day			0.015		
			(0.004)***		
Lag: Dummy: Negative interest		-0.018			0.015
		(0.022)			(0.030)
Lag: Dummy: Positive interest		-0.031			0.006
		(0.016)*			(0.026)
Lag: Dummy: Payment day is 1				-0.028	-0.017
				(0.020)	(0.034)
Lag: Dummy: Payment day is 6				0.049	0.124
				(0.018)**	(0.038)***
Lag: Dummy: Negative interest and payment day is 1					-0.018
					(0.041)
Lag: Dummy: Negative interest and payment day is 6					-0.100
					(0.056)*
Lag: Dummy: Positive interest and payment day is 1					-0.014
					(0.044)
Lag: Dummy: Positive interest and payment day is 6					-0.114
					(0.038)***
Dummy: Experiment round 3	-0.118	-0.119	-0.112	-0.112	-0.112
	(0.024)***	(0.024)***	(0.023)***	(0.023)***	(0.024)***
Constant	0.164	0.182	0.109	0.155	0.149
	(0.021)***	(0.024)***	(0.022)***	(0.025)***	(0.031)***
Obs.	1634	1634	1634	1634	1634
R^2	0.036	0.037	0.045	0.045	0.051

Table A20: **Attrition: Sensitivity analysis**

	Original estimation	Respondents never attriting
Dependent variable: **Whether the respondent accepted the offer**		
Dummy: Negative interest	-0.099	-0.111
	(0.048)**	(0.049)**
Dummy: Positive interest	0.082	0.074
	(0.045)*	(0.046)
Dummy: Payment day is 1	0.152	0.149
	(0.052)***	(0.053)***
Dummy: Payment day is 6	-0.042	-0.061
	(0.056)	(0.061)
Dummy: Negative interest and payment day is 1	-0.077	-0.071
	(0.073)	(0.076)
Dummy: Negative interest and payment day is 6	0.011	0.017
	(0.071)	(0.078)
Dummy: Positive interest and payment day is 1	-0.010	0.010
	(0.054)	(0.053)
Dummy: Positive interest and payment day is 6	-0.042	-0.004
	(0.060)	(0.065)
Constant	0.628	0.633
	(0.056)***	(0.059)***
Obs.	2347	2127
R^2	0.053	0.061
H_0: All parameters equal (p-value)	0.334	

Table A21: **Attrition: Coding attriters as refusing the contract**

	(1)	(2)	(3)	(4)	(5)
Dependent variable: **Whether the respondent accepted the offer**					
Interest rate	0.963				
	(0.140)***				
Payment day			-0.031		
			(0.005)***		
Dummy: Negative interest		-0.107			-0.088
		(0.028)***			(0.048)*
Dummy: Positive interest		0.086			0.088
		(0.026)***			(0.045)*
Dummy: Payment day is 1				0.099	0.137
				(0.031)***	(0.054)**
Dummy: Payment day is 6				-0.059	-0.076
				(0.024)**	(0.054)
Dummy: Negative interest and payment day is 1					-0.099
					(0.068)
Dummy: Negative interest and payment day is 6					0.045
					(0.065)
Dummy: Positive interest and payment day is 1					-0.019
					(0.057)
Dummy: Positive interest and payment day is 6					0.012
					(0.062)
Constant	0.568	0.575	0.681	0.558	0.554
	(0.036)***	(0.041)***	(0.035)***	(0.043)***	(0.056)***
Obs.	2673	2673	2673	2673	2673
R^2	0.026	0.026	0.017	0.017	0.045

Table A22: **Structural estimates: Coding attriters as refusing the contract**

TYPE	ESTIMATED PROPORTION	95% CONFIDENCE	
		LOWER	UPPER
'TYPE A'	0.0%	0.0%	2.5%
'TYPE B'	4.9%	1.9%	8.1%
'TYPE C'	4.9%	1.7%	8.0%
'TYPE D'	14.1%	11.0%	16.9%
'TYPE E'	5.1%	2.9%	7.7%
'TYPE F'	10.2%	7.6%	13.0%
'TYPE G'	31.8%	28.5%	35.3%
NOT RATIONALISED	29.1%	26.0%	32.2%
N	891		
log-likelihood	-676.435		

This table reports Non-Parametric Maximum Likelihood estimates from our mixture model, but with attriters coded as refusing. 'Types' refer to Table 9 in the paper. 'Not rationalised' means that an individual did not behave as any of the types predict. 95% confidence intervals are obtained from a bootstrap with 1000 replications.

Appendix 5: Take-up by staff member and location

The staff members who offered the product received precise instructions on how to present the experimental design. In spite of this, readers may nonetheless remain concerned that some enumerators misrepresented eligibility for the show-up fee. If our results were driven by misunderstanding, we would expect always-takers to be found in experimental sessions organized by these enumerators. By extension we expect never-takers to be found in those sessions as well: if participants believe they have to take up the product in all three rounds to earn the show-up fee and participation is driven by the desire to earn the show-up fee, then participants would see no point in taking up the product in some rounds and not in others.

To investigate this, we break down take-up by the identity of the staff member who explained the product. In the following we show, for each staff member, the proportion of always-takers, never-takers, and sometimes-takers. We see that all staff members have a sizeable proportion of sometimes-takers among their participants, and that never-takers and always-takers are not unduly concentrated on one or two staff members. When we ran a probit of a dummy for 'always accept' on staff member dummies, we obtained a Pseudo-R2 of just 1.8%. This provides further support for the notion that common misunderstandings were not the cause of the observed take-up behaviour.

Table A23: **Adoption patterns by staff member**

	PROPORTION ACCEPTING...			
	ALWAYS	NEVER	ONCE OR TWICE	TOTAL
STAFF MEMBER 1	57.4%	9.4%	33.2%	202
STAFF MEMBER 2	38.9%	20.4%	40.7%	280
STAFF MEMBER 3	41.4%	19.8%	38.8%	227

We then test how much of the variation in this behaviour is explained by variation in the session in which the product was presented. If there was widespread misunderstanding of the product, we would expect this to be correlated within the sessions in which the product was offered — either because a particular staff member explained the product badly (as just discussed), or because particular respondents had managed inadvertently to mislead others in their session to misunderstand the product. (Of course, there are many reasons other than misunderstanding that might lead to such correlation within groups — so, in some sense, correlation within groups provides an upper bound on the potential importance of common misunderstanding.) We formed a dummy variable for whether a given respondent had agreed to all of the product offers. We then ran a probit with group dummies as the explanatory variables, and checked the Pseudo-R2 statistic: it is just 18.9%.

Appendix 6: Solving the structural model numerically

We solve the structural model as follows:

1. We consider each possible path for $(L_1, \ldots, L_T)$. For each path, we solve two optimisation problems:
   (a) We find whether *any* vector $(m_1, \ldots, m_T)$ is feasible; this is a *linear programming* problem.
   (b) If and only if there exists a feasible solution, we use a 'direct attack' method (Adda and Cooper, 2003, p.10) to solve for optimal $(m_1, \ldots, m_T)$ and record the indirect utility; we implement this as a one-shot *non-linear program*.
2. There are 2^T possible paths $(L_1, \ldots, L_T)$. Having solved across each of them, we then choose the single optimal path. This is a simple *binary integer programming* problem.
3. We repeat this entire process for each unique value of (r, p) (*i.e.* for each of the 12 contracts that we offered).
4. We repeat again, across a fine grid of possible values for γ. For each possible value, we solve both for the case $m_t \geq 0$ and the case $m_t = 0$.

References

Adda, J. and Cooper, R.W. (2003). *Dynamic Economics: Quantitative Methods and Applications*, The MIT press.