

Does the Classic Microfinance Contract Discourage Entrepreneurship Among the Poor? Experimental Evidence from India

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ONLINE APPENDIX

Online Appendix Table 1: Randomization Check

	Control	Treat	Difference
	(1)	(2)	(3)
Panel A: Controls for subsequent specifications (where indicated that controls included)			
Age	34.5080 (0.408)	33.7990 (0.413)	-0.7131 (0.573)
Married	0.9110 (0.014)	0.8640 (0.017)	-0.0470** (0.0223)
Muslim	0.0070 (0.004)	0.0220 (0.007)	0.0145 (0.0125)
Years of Education	6.6090 (0.172)	6.4880 (0.195)	-0.1200 (0.3316)
Household Size	4.0680 (0.069)	4.1800 (0.071)	0.1106 (0.1042)
Household Shock	0.6070 (0.024)	0.6320 (0.024)	0.0248 (0.0609)
Has a Business (Narrow definition)	0.7720 (0.02)	0.7850 (0.02)	0.0129 (0.0407)
Owns Home	0.8160 (0.019)	0.8090 (0.019)	-0.0071 (0.0344)
Has Financial Control	0.8380 (0.018)	0.8250 (0.019)	-0.0134 (0.0391)
Loan Amt 4000 RPS	0.0120 (0.005)	0.0140 (0.006)	0.0025 (0.0102)
Loan Amt 5000 RPS	0.0470 (0.01)	0.0380 (0.009)	-0.0093 (0.0186)
Loan Amt 6000 RPS	0.2890 (0.022)	0.2310 (0.021)	-0.0579 (0.0436)
Loan Amt 8000 RPS	0.5670 (0.024)	0.5810 (0.024)	0.0162 (0.0506)
Loan Amt 9000 RPS	0.0000 (0)	0.0050 (0.003)	0.0047 (0.0047)
Loan Amount 10000	0.0820 (0.013)	0.1310 (0.017)	0.0461 (0.0368)
No Drain in Neighborhood	0.1290 (0.016)	0.1050 (0.015)	-0.0239 (0.0365)
Joint Test p-value			0.1948
Panel B: Additional summary statistics			
Has a Business (Broad definition)	0.9770 (0.008)	0.9790 (0.007)	0.0023 (0.0102)
Manages at Least One Household Business	0.7840 (0.022)	0.7990 (0.022)	0.0147 (0.0384)
At Least One Household Member is a Wage Earner	0.5150 (0.024)	0.4470 (0.024)	-0.0676 (0.0428)
Client Earns Wage	0.2000 (0.019)	0.2040 (0.02)	0.0046 (0.0334)
Socioeconomic Index (PCA)	-0.1030 (0.07)	0.1050 (0.072)	0.2011 (0.1272)
Has a Savings Account	0.1740 (0.019)	0.2060 (0.021)	0.0323 (0.0389)
Had Non-VFS Loan in Past Year from Baseline	0.0630 (0.014)	0.0360 (0.012)	-0.0263 (0.0208)
Client is Risk Loving	0.5910 (0.024)	0.4930 (0.024)	-0.0992** (0.0443)
Client is Impatient	0.5050 (0.025)	0.4820 (0.025)	-0.0229 (0.042)
Lost Workdays Due to Shock (broad measure of shock)	0.1860 (0.019)	0.1340 (0.017)	-0.0522 (0.0371)
Spent Money Due to Shock (broad measure of shock)	0.0550 (0.011)	0.0610 (0.012)	0.0059 (0.0201)
At Least One Household Member was Chronically Ill	0.1960 (0.0230)	0.1820 (0.0250)	-0.0095 (0.0371)

* significant at 10% level ** significant at 5% level *** significant at 1% level

- (1) All data are from baseline survey (survey 1), unless specified otherwise. Columns (1) and (2) report means with standard deviations in parentheses. Column (3) reports the test of differences of means where we control for batch dummies and cluster standard errors by loan group.
- (2) Joint Test is the Chi-Sq. Statistic, which is computed by jointly estimating a system of seemingly unrelated regressions where the explanatory variable is a dummy for grace period with standard errors adjusted for within loan group correlation and the regressions include stratification dummies.
- (3) Household shock: a dummy for birth, death, or heavy rain or flood in the last 30 days.
- (4) Has a Business (Narrow definition): whether household reported at least one business in operation at baseline, excluding businesses formed either during 30 days prior to or after loan group formation.
- (5) Manages household business: a dummy variable measuring whether client answered that she was involved in the managing of and can answer detailed questions about at least one business that the household owns.
- (6) At Least One Household Member is a Wage Earner and Client Earns Wage: a dummy for whether the client or any other household member receives a salary.
- (7) Has Financial Control: whether client answered "yes" to the following question: "If a close relative like your parents or siblings fell sick and needed money would you be able to lend money to that relative, if you had the extra money?"
- (8) Variable reports the residual category of loan size 7000 RPS.
- (9) Has a Business (Broad definition): whether according to the business start and end dates reported by clients in endline survey (Survey 3), the client would have had at least one business open at the time of the loan
- (10) Socioeconomic Index: a principal component analysis index of whether the household had owned a radio, cassette player, camera, refrigerator, washing machine, heater, television, VCR, pressure lamp, tubewell, wristwatch, or clock for longer than one year. The question was not asked of 99 of the respondents and so they are excluded
- (11) Has Savings Account: a dummy for whether the client or any other household member has a formal or informal savings account
- (12) Non-VFS loan in past year: a dummy drawn from both Survey 1 and the baseline survey given to our respondents in an earlier intervention
- (13) Risk loving: a dummy for above median riskiness in a risk index, the details of which are presented in the data appendix.
- (14) Impatient: a dummy for having a monthly discount rate above the median, the details of which are presented in the data appendix.
- (15) Lost workdays and spent money due to shock broad: dummies for any negative shocks the household reports in the last 30 days including birth, death, heavy rain/flood, or illness.
- (16) At Least One Household Member was Chronically Ill: whether any household member had been ill for over 3 months in the 12 months preceding the survey.

Online Appendix Table 2: Impact of Grace Period on Time to Repayment

	Disbursement to first repayment	Days Between Meetings	Duration of Meeting
	(1)	(2)	(3)
<i>Panel A (no controls)</i>			
Grace Period	51.79*** (1.502)	0.306 (0.328)	0.569 (1.033)
<i>Panel B (with loan officer fixed effects)</i>			
Grace Period	51.51*** (1.353)	0.341 (0.309)	-0.043 (0.437)
Observations	169	169	169
Control Mean	14.64 (0.983)	14.57 (0.213)	18.22 (0.748)

Notes:

* significant at 10% level ** significant at 5% level *** significant at 1% level

- (1) Outcome variables are measured at group-level as: number days from loan disbursement to first repayment (column 1), number days between each group meeting since first loan repayment meeting (column 2), and number of minutes spent at each meeting since first loan repayment meeting (column 3). Column (2) and (3) outcomes are averaged across all meetings in first 120 days.
- (2) Data comes from VFS administrative data and from data collected at group meetings by loan officers
- (3) All Regressions include stratification fixed effects. Panel B regressions include loan officer fixed effects.

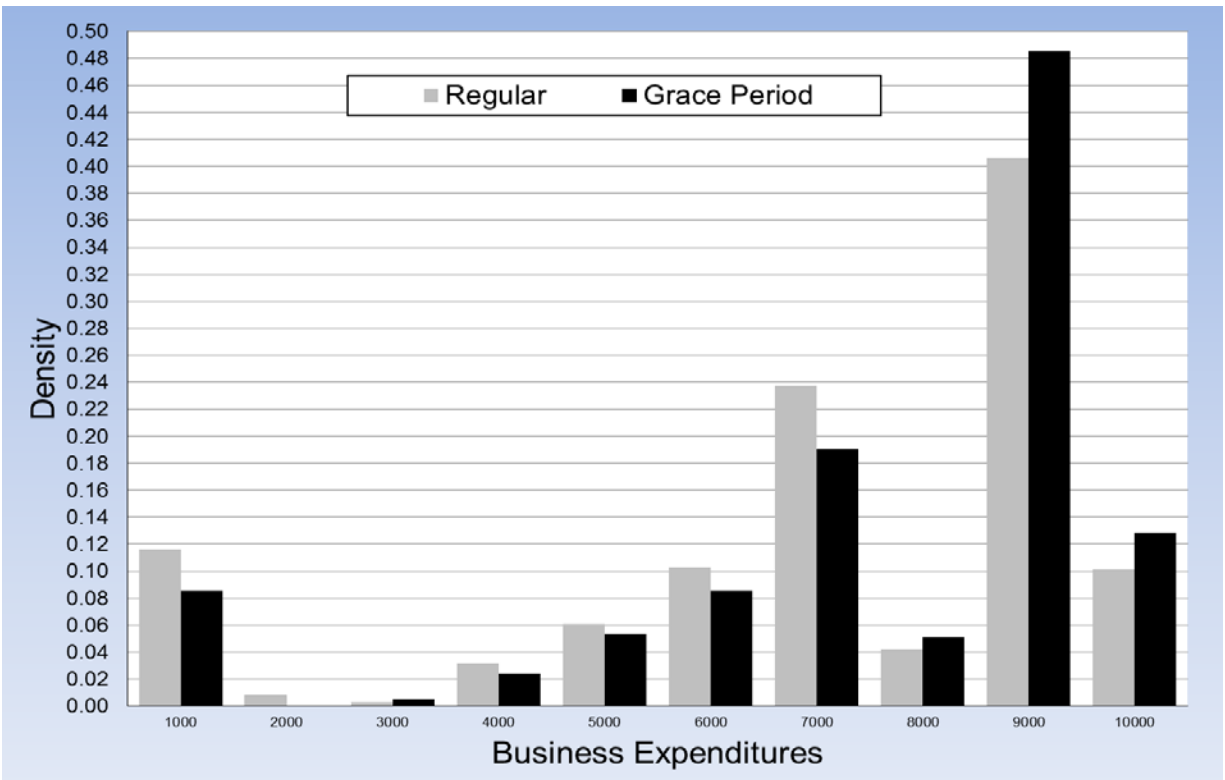
Online Appendix Table 3: Estimating the Production Function

	Capital	Average Weekly Profits	Capital Top Coded	Average Weekly Profits Top Coded
	OLS	2SLS	OLS	2SLS
	(1)	(2)	(3)	(4)
<i>Panel A (no controls)</i>				
Grace Period	28,336.08*** (10,477.58)		23,705.49*** (8565.79)	
Capital		0.0325** (0.0155)		0.0276** (0.0114)
Total Hours	774.03*** (114.52)	3.533 (9.577)	650.65*** (93.62)	1.155 (8.037)
<i>Panel B (with controls)</i>				
Grace Period	36286.20*** (10795.25)		29639.13*** (8827.77)	
Capital		0.0256** (0.0119)		0.0219*** (0.0077)
Total Hours	822.19*** (118.52)	5.957 (7.408)	693.11*** (96.92)	2.897 (5.936)
Observations	752	752	752	752
Control Mean	35,730.16 (93,264.52)	1586.9 (121.8)	35,535.86 (91,147.87)	1579.3 (117.9)

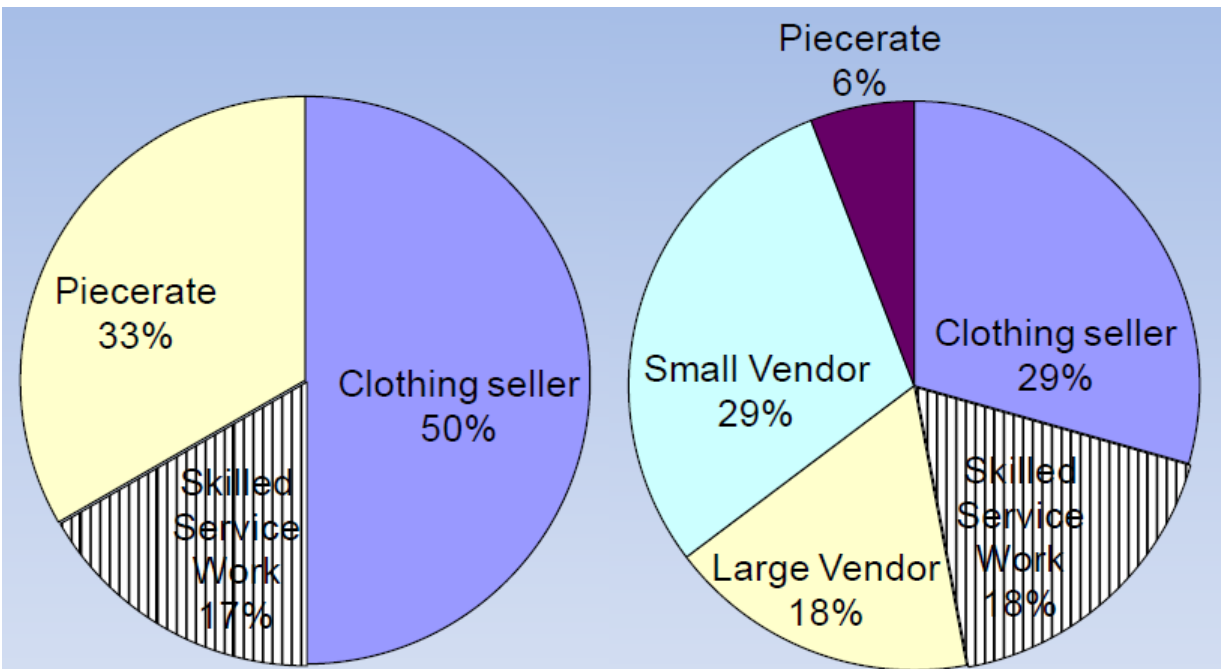
Notes:

* significant at 10% level ** significant at 5% level *** significant at 1% level

- (1) The regressions presented show the first stage (odd columns) and 2SLS (even columns) estimates of average weekly profits using the grace period assignment as an instrument for capital stock. The outcome variables are: "Can you please tell us the average weekly profit you have now or when your business was last operational?" (columns 2 and 4); capital which is defined as the sum of equipment, raw materials, and inventory. Columns (3) - (4) show the regressions on a top coded sample (see notes to Table 2).
- (2) Data in columns (1)-(4) comes from Survey 3. Columns (3) and (4) run the regression on a top coded sample, where the top 0.5% of the cumulative distribution of profits is top coded to the value of profits at the 99.5th percentile.
- (3) Regressions include stratification fixed effects and standard errors are clustered by loan group. Panel B regressions include all controls presented in Panel A of Online Appendix Table 1 and loan officer fixed effects. If a control variable is missing, its value is set to zero and a dummy is included for whether the variable is missing.

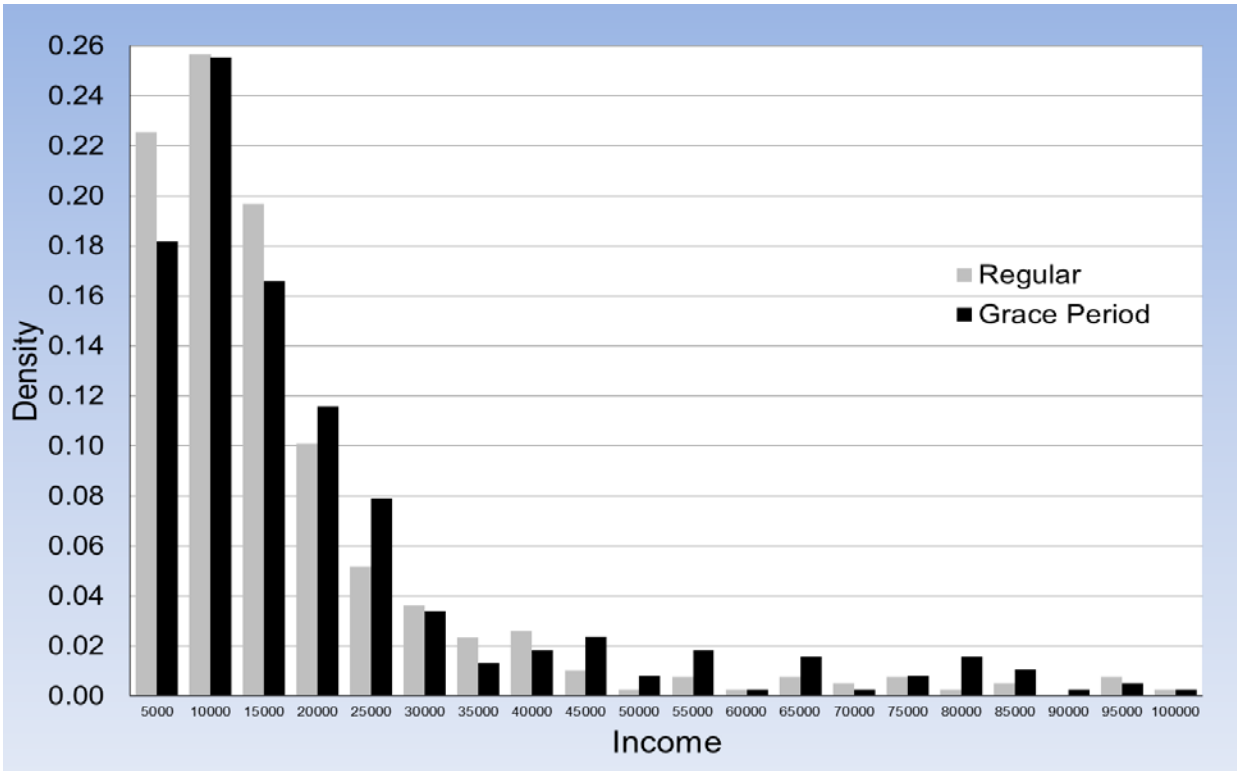


Online Appendix Figure 1: Distribution of business expenditures divided into Rs.1000 bins by grace and regular clients. The figure is top coded at Rs.10000 and it is constructed using data from Survey 2.

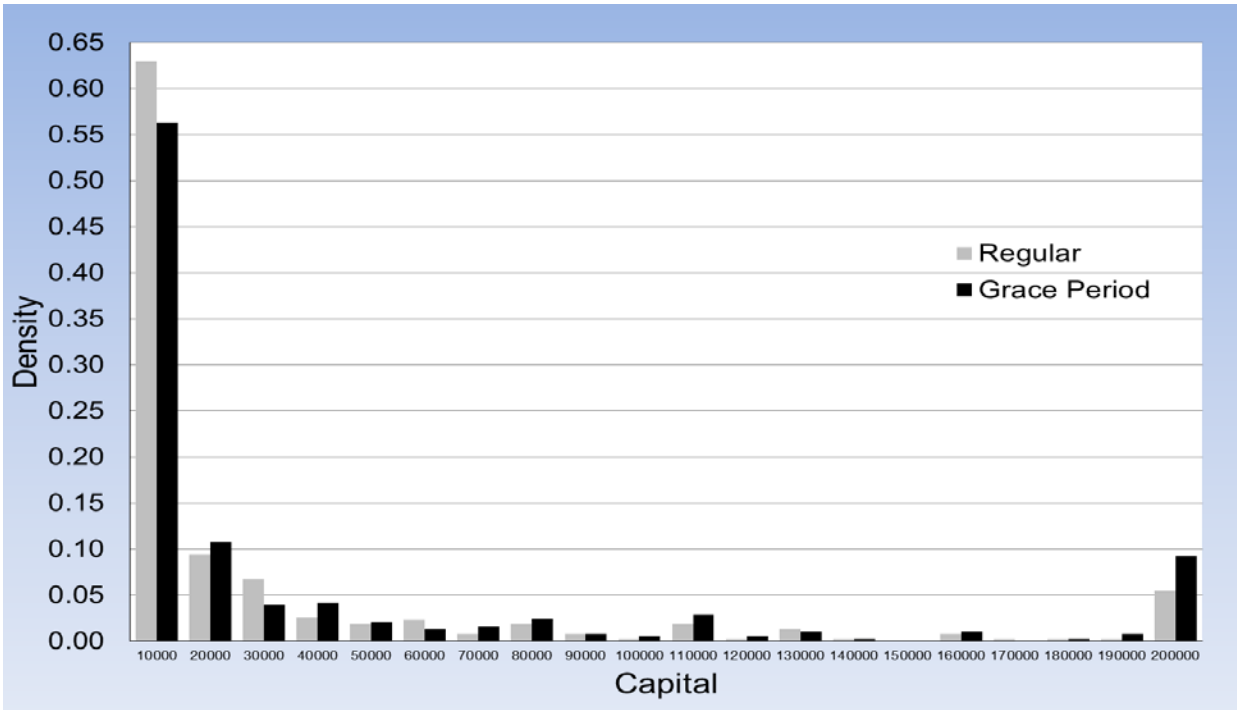


Online Appendix Figure 2: Distribution of Business Types for New Businesses of Regular (left) and Grace (right) Period Clients¹

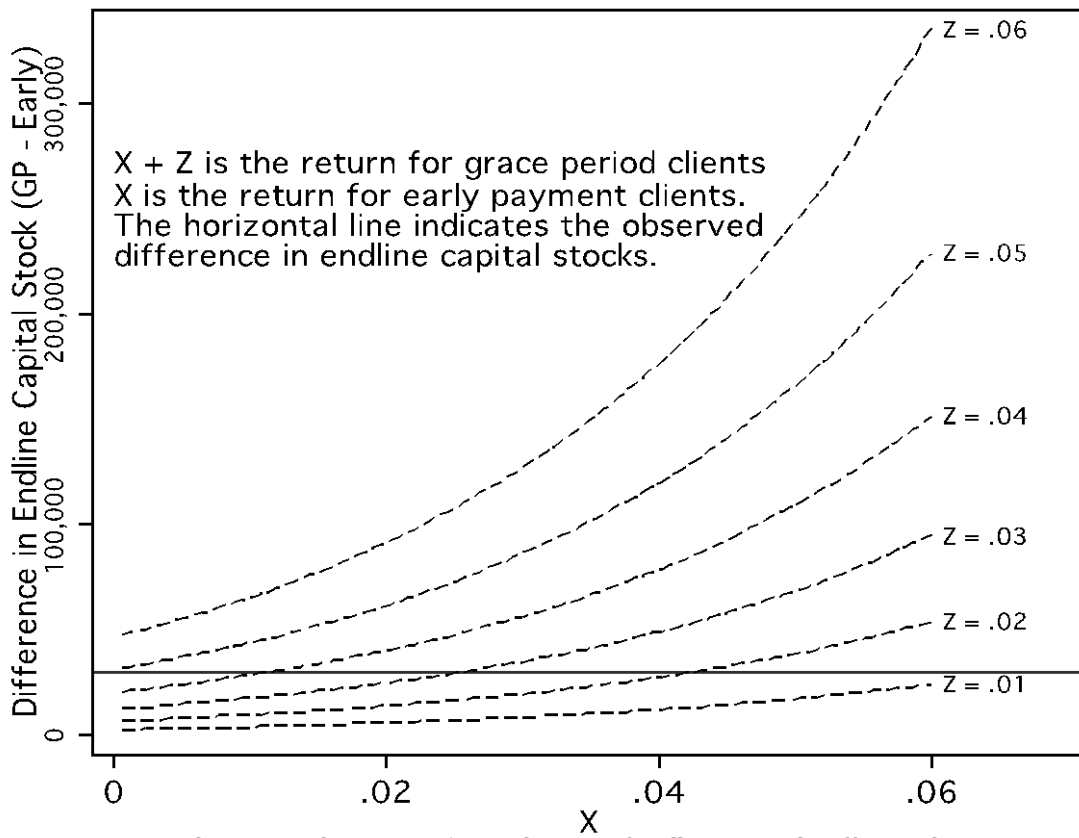
¹ See Footnote 1 for description of major types of businesses within each grouping.



Online Appendix Figure: 3: Distribution of income divided into Rs.5000 bins by grace and regular clients. The figure is top coded at Rs.100000 and it is constructed using data from Survey 3.



Online Appendix Figure 4: Distribution of capital (equipment, raw materials, and inventory) divided into Rs.1000 bins by grace and regular clients. The figure is top coded at Rs.200000 and it is constructed using data from Survey 3.



Online Appendix Figure 5: Simulations of Endline Capital Differential