

## APPENDIX A. ADDITIONAL TABLES AND FIGURES

TABLE A.1. Experimental Comparison of Targeting under Self-Targeting and Automatic Screening Treatments (Variations)

Self-targeting compared to:	No Stratum Fixed Effects (1)	With Stratum Fixed Effects (2)
Hypothetical Universal Automatic Screening using Baseline Data (bootstrap) – Online Appendix Table C.8	-0.097 (0.060)	-0.089 (0.073)
Hypothetical Universal Automatic Screening using Baseline Data (using the Government’s Poverty Line) – Online Appendix Table C.10	-0.144*** (0.041)	-0.138*** (0.04)
Hypothetical Universal Automatic Screening (using Baseline and Government Data) – Online Appendix Table C.11	-0.247*** (0.061)	-0.192*** (0.066)
↳ Hypothetical Universal Automatic Screening using Baseline Data (without noise in PMT score) – Online Appendix Table C.12	-0.091 (0.059)	-0.061 (0.063)
Hypothetical Universal Automatic Screening (using Baseline and Government Data, without noise in PMT score) – Online Appendix Table C.13	-0.127* (0.066)	-0.043 (0.064)

Notes: This table reports the effect of the self targeting treatment on the poverty level of beneficiaries. Each cell in the table reports the coefficient on the self targeting dummy from an OLS regression where the dependent variable is log consumption, and the sample is beneficiary households. In Column (2) the regressions include stratum fixed effects. The first row reports average coefficients and bootstrapped standard errors from 100 bootstrap iterations, where the noise in the PMT score is re-sampled each time. For detailed notes on each row, see Online Appendix Tables C.8, C.10, C.11, C.12 and C.13 respectively.

## APPENDIX B. ONLINE APPENDIX: OPPORTUNITY COST TREATMENT

In addition to varying the distance to the registration site, within self-targeting villages we also experimentally varied whether one or two household members were required to come to the registration site. In half of the self-targeting treatment villages, households were told that any adult in the household could do so. Given that the program was geared towards women, we expected that mostly women would apply. In the other half of the villages, we required that both the husband and the wife jointly apply at the registration site. Note that there was a fear of screening out poor households where the primary wage earner had migrated for work. Thus, if the spouse was unable to attend due to a pre-specified reason (illness, out of village for work), the household was required to bring a letter signed by the hamlet head providing the reasons for the spouse's unavailability, the rationale being that obtaining the letter in advance would still be costly to households. On average, 29 percent of applicants in the spouse sub-treatment villages provided such a letter.

As shown in Online Appendix Table C.21, we also do not observe significantly fewer people applying when we require both spouses to apply in person rather than allowing either spouse to apply alone.<sup>41</sup> Given this, it is not surprising that we find no effect either on the interaction of *BOTH* with per capita consumption (Column (5)), or when we interact the treatment with quintile bins of consumption (Column (6)). One potential reason why requiring both spouses did not decrease enrollments is that a total of 29 percent of interviewees came with an excuse letter, suggesting that this provision may have been used to allow those with high opportunity costs to register anyway. This suggests that ordeals may in fact be hard to enforce in practice – loopholes such as this one, which the government put in place to be fair to those who, for exogenous reasons, could not possibly comply with the ordeal, can be exploited to undo the intent of the ordeal. This phenomenon seems similar to related problems observed in providing incentives to nurses in India to show up at work – a loophole that was required to exempt those who could not attend because of a legitimate outside obligation from the incentive program was expanded so much that it undid the entire impact of the incentive program (Banerjee, Duflo and Glennerster, 2008).

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<sup>41</sup>In fact, the estimates suggest that requiring both spouses to attend actually increases overall applications somewhat, perhaps because requiring both spouses means that the second spouse acts as a commitment device to show up, or perhaps because it is more fun to go together. Unreported OLS results are similar.

APPENDIX C. ONLINE APPENDIX: ADDITIONAL TABLES AND FIGURES

TABLE C.1. Experiment Validation

	Mean in	Mean in	Difference	
	Automatic Screening	Self-Targeting	No Stratum Fixed Effects	With Stratum Fixed Effects
	(1)	(2)	(3)	(4)
Average Log Per Capita Consumption	13.112 (0.228)	13.105 (0.251)	-0.007 (0.024)	-0.001 (0.021)
Average Years of Education: Household Head	7.297 (2.208)	7.145 (2.043)	-0.152 (0.213)	-0.118 (0.167)
Average PMT Score	12.795 (0.228)	12.792 (0.251)	-0.003 (0.024)	0.003 (0.019)
Percentage of Households in Agriculture	0.073 (0.068)	0.071 (0.063)	-0.002 (0.007)	-0.004 (0.005)
Years of Education: Hamlet Head	8.131 (3.773)	8.060 (3.333)	-0.070 (0.357)	-0.044 (0.314)
Log Number of Households in Hamlet	4.227 (0.520)	4.241 (0.468)	0.014 (0.049)	0.031 (0.045)
Distance to Subdistrict Office	7.459 (21.990)	6.375 (8.136)	-1.085 (1.658)	-1.090 (1.617)
Log Village Size	4.038 (1.574)	3.925 (1.476)	-0.113 (0.153)	-0.129* (0.067)
Religious Buildings per Household	0.005 (0.003)	0.005 (0.003)	0.000 (0.000)	-0.000 (0.000)
Primary Schools per Household	0.003 (0.001)	0.003 (0.001)	-0.000 (0.000)	-0.000 (0.000)
Observations	200	200	400	400
<i>Joint Significance Test (chi squared)</i>			2.53	7.63
<i>p-value</i>			0.99	0.67

Notes: This table provides mean baseline characteristics (chosen before the data was obtained) for villages in the automatic screening (Column (1)) and self-targeting (Column (2)) treatments, respectively. Differences between the treatments, without and with strata fixed effects, are provided in Columns (3) and (4), respectively. Columns (3) and (4) also report the p-value from a joint test across all characteristics. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

TABLE C.2. Probability of Showing Up as a Function of the Observed and Unobserved Components of Baseline Log Per Capita Consumption (OLS)

	Showed Up		
	All (1)	Very poor (2)	Not very poor (3)
Observable consumption ( $y_i^o$ )	-0.415*** (0.031)	-0.070 (0.410)	-0.416*** (0.031)
Unobservable consumption ( $y_i^u$ )	-0.169*** (0.025)	-0.166 (0.122)	-0.168*** (0.025)
Stratum fixed effects	No	No	No
Observations	2,000	114	1,886
Mean of dependent variable	0.377	0.658	0.360

Notes: OLS version of Table 4. Each column reports the coefficients from an OLS regression of the show up dummy on the observable and the unobservable components of log consumption. Very poor is defined as being eligible for the program based on the PMT score calculated using baseline asset data (see footnote 19). Robust standard errors, clustered at the village level, shown in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

TABLE C.3. Probability of Showing Up and Probability of being Pre-Screened as Functions of Consumption

	(1)	(2)	(3)	(4)
Dependent variable	Showed up		Was pre-screened	
Sample	Self-targeting		Automatic Screening	
Log consumption	-1.486***		-1.022***	
	(0.116)		(0.145)	
Observable Consumption ( $y^o$ )		-2.224***		-2.084***
(PMT score)		(0.226)		(0.240)
Unobservable Consumption ( $y^u$ )		-0.907***		-0.356**
		(0.130)		(0.146)
Observations	2,000	2,000	1,996	1,996

Notes: This table reports results from logit regressions on log consumption (Columns (1) and (3)), and the observable and unobservable components of log consumption (Columns (2) and (4)). In Columns (1) and (2) the sample is self-targeting villages and the dependent variable is whether the household showed up to the applications site. In Columns (3) and (4) the sample is the automatic screening villages and the dependent variable is whether the household was pre-screened by the government to receive the PMT interview. Robust standard errors are clustered at the sub-district level.

TABLE C.4. Factors Predicting Show Up (Logit)

	Show Up									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		
<i>Panel A: All Households</i>										
Observable consumption ( $y_i^o$ )	-1.807*** (0.215)	-2.172*** (0.199)	-2.216*** (0.201)	-1.709*** (0.210)	-2.210*** (0.199)	-2.224*** (0.201)	-2.179*** (0.222)	-1.545*** (0.237)		
Unobservable consumption ( $y_i^u$ )	-0.721*** (0.139)	-0.852*** (0.139)	-0.905*** (0.136)	-0.814*** (0.132)	-0.911*** (0.136)	-0.905*** (0.135)	-0.906*** (0.136)	-0.626*** (0.138)		
Self-perceived wealth								-0.606*** (0.065)	-0.510*** (0.067)	
# of comm. activities								-0.120** (0.058)	-0.081 (0.060)	
Hrs weekly on comm. activities								-0.008 (0.006)	-0.007 (0.006)	
Closely related to vill leader								-0.230 (0.535)	0.176 (0.585)	
Has received raskin								1.051*** (0.224)	0.973*** (0.245)	
Has received askeskin								0.385*** (0.128)	0.325** (0.126)	
Has received BLT								0.523*** (0.131)	0.412*** (0.132)	
# negative income shocks								0.024 (0.072)	-0.025 (0.076)	
Widow								0.670** (0.296)	0.469 (0.298)	
HH head years education									-0.007 (0.017)	0.024 (0.018)
Observations	1,999	2,000	2,000	2,000	2,000	2,000	2,000	1,999		
Dependent Var. Mean	0.377	0.377	0.377	0.377	0.377	0.377	0.377	0.377		
<i>Panel B: Eligible by PMT Score</i>										
Observable consumption ( $y_i^o$ )	0.179 (1.773)	-0.189 (1.728)		-0.193 (1.925)	-1.262 (1.789)	-0.329 (1.779)	-0.659 (1.988)	-1.083 (1.984)		
Unobservable consumption ( $y_i^u$ )	-0.767 (0.607)	-0.798 (0.612)		-0.732 (0.591)	-0.709 (0.594)	-0.787 (0.589)	-0.805 (0.584)	-0.703 (0.680)		
Self-perceived wealth								-0.651** (0.282)	-0.660** (0.279)	
# of comm. activities								0.271 (0.279)	0.496 (0.311)	
Hrs weekly on comm. activities								-0.063 (0.039)	-0.069* (0.039)	
Closely related to vill leader										
Has received raskin								1.011 (1.101)	0.802 (1.495)	
Has received askeskin								0.011 (0.545)	0.020 (0.561)	
Has received BLT								0.179 (0.568)	-0.074 (0.628)	
# negative income shocks								-0.502** (0.230)	-0.502* (0.285)	
Widow								0.532 (1.337)	0.479 (1.173)	
HH head years education									0.062 (0.086)	0.119 (0.092)
Observations	114	114		114	114	114	114	114		
Dependent Var. Mean	0.658	0.658		0.658	0.658	0.658	0.658	0.658		

Notes: In each panel, each column reports the coefficients from a logit regression of the show up dummy on the observable and the unobservable components of log consumption and other regressors. The sample is all households in the self-targeting treatment in Panel A, and all very poor households (those eligible for the program based on the PMT score calculated using baseline asset data; see footnote 19) in Panel B. Robust standard errors, clustered at the village level, in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1



TABLE C.5. Factors Predicting Show Up (OLS)

	Show Up							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Panel A: All Households</i>								
Observable consumption ( $y_i^o$ )	-0.313*** (0.034)	-0.402*** (0.031)	-0.415*** (0.031)	-0.296*** (0.035)	-0.414*** (0.031)	-0.414*** (0.031)	-0.408*** (0.036)	-0.296*** (0.035)
Unobservable consumption ( $y_i^u$ )	-0.116*** (0.024)	-0.155*** (0.025)	-0.168*** (0.025)	-0.139*** (0.024)	-0.169*** (0.025)	-0.168*** (0.025)	-0.169*** (0.025)	-0.061*** (0.022)
Self-perceived wealth	-0.113*** (0.011)							-0.083*** (0.010)
# of comm. activities		-0.020** (0.009)						-0.024*** (0.009)
Hrs weekly on comm. activities		-0.002 (0.001)						-0.000 (0.001)
Closely related to vill leader			-0.046 (0.101)					0.037 (0.093)
Has received raskin				0.113*** (0.027)				0.080*** (0.026)
Has received askeskin				0.081*** (0.026)				0.038 (0.023)
Has received BLT				0.122*** (0.029)				0.099*** (0.027)
# negative income shocks					0.003 (0.015)			-0.001 (0.014)
Widow						0.136** (0.063)		0.083 (0.054)
HH head years education							-0.001 (0.003)	0.004 (0.003)
Observations	1,999	2,000	2,000	2,000	2,000	2,000	2,000	1,999
Dependent Var. Mean	0.377	0.377	0.377	0.377	0.377	0.377	0.377	0.377
Adjusted R-Squared	0.185	0.151	0.139	0.179	0.139	0.141	0.139	0.288
<i>Panel B: Eligible by PMT Score</i>								
Observable consumption ( $y_i^o$ )	0.040 (0.381)	-0.040 (0.389)		-0.042 (0.439)	-0.263 (0.384)	-0.072 (0.411)	-0.146 (0.452)	-0.400 (0.465)
Unobservable consumption ( $y_i^u$ )	-0.151 (0.115)	-0.160 (0.119)		-0.154 (0.125)	-0.143 (0.121)	-0.168 (0.122)	-0.171 (0.122)	0.080 (0.125)
Self-perceived wealth	-0.142** (0.060)							-0.041 (0.076)
# of comm. activities		0.058 (0.059)						0.012 (0.088)
Hrs weekly on comm. activities		-0.014 (0.009)						-0.004 (0.010)
Closely related to vill leader								
Has received raskin				0.245 (0.269)				0.129 (0.475)
Has received askeskin				0.002 (0.124)				0.052 (0.137)
Has received BLT				0.040 (0.132)				0.133 (0.167)
# negative income shocks					-0.113** (0.052)			-0.120 (0.080)
Widow						0.108 (0.257)		0.126 (0.250)
HH head years education							0.013 (0.018)	0.021 (0.019)
Observations	114	114		114	114	114	114	114
Dependent Var. Mean	0.658	0.658		0.658	0.658	0.658	0.658	0.658
Adjusted R-Squared	0.0585	0.0185		-0.0132	0.0283	-0.00560	-0.00115	0.300

Notes: All regressions are OLS, but otherwise follow Online Appendix Table C.4. Robust standard errors, clustered at the village level, in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

TABLE C.6. Experimental Comparison of Targeting under Self-Targeting and Automatic Screening Treatments (OLS)

	Log consumption (beneficiaries) (baseline) (OLS) (1)	Log consumption (beneficiaries) (baseline + midline) (OLS) (2)	Receives Benefits (LOGIT) (3)	Error (LOGIT) (4)	Exclusion Error (LOGIT) (5)	Inclusion Error (LOGIT) (6)
<i>Panel A: No Stratum Fixed Effects</i>						
Self targeting	-0.208*** (0.076)	-0.193*** (0.060)	0.269 (0.178)	-0.015 (0.010)	-0.053 (0.042)	-0.010 (0.007)
Log consumption			-0.037*** (0.009)			
Log consumption * Self targeting			-0.021 (0.013)			
Observations	159	904	3,996	3,998	249	3,749
Mean of dependent variable	12.78	13.61	0.0398	0.0870	0.880	0.0344
<i>Panel B: With Stratum Fixed Effects</i>						
Self targeting	-0.114 (0.077)	-0.175*** (0.058)	0.297* (0.171)	-0.016* (0.009)	-0.064 (0.047)	-0.011* (0.006)
Log consumption			-0.036*** (0.009)			
Log consumption * Self targeting			-0.023* (0.013)			
Observations	159	904	3,996	3,998	249	3,749
Mean of dependent variable	12.78	13.61	0.0398	0.0870	0.880	0.0344

Notes: OLS version of Table 5. In each panel, each column reports the coefficients from an OLS regression with dependent variable indicated in the column header. See the notes for Table 5 for sample and variable definitions. In Panel A and Columns (1) and (2) of Panel B, robust standard errors, clustered at the village level, are shown in parentheses. In Panel B, Columns (2) - (6), robust standard errors are clustered at the stratum level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

TABLE C.7. Factors interacted with Self-Targeting treatment predicting benefit receipt (Logit)

	Receives Benefit					
	(1)	(2)	(3)	(4)	(5)	(6)
Observable consumption ( $y_i^o$ ) x Self targeting	-0.037 (0.040)	-0.029 (0.024)	-0.011 (0.021)	-0.012 (0.017)	-0.025 (0.030)	-0.060 (0.049)
Unobservable consumption ( $y_i^u$ ) x Self targeting	-1.243*** (0.439)	-1.218*** (0.445)	-1.205*** (0.435)	-1.251*** (0.440)	-1.217*** (0.436)	-1.184*** (0.441)
Self-perceived wealth x Self targeting	0.157 (0.228)					0.176 (0.235)
# of comm. activities x Self targeting		0.229 (0.218)				0.234 (0.222)
Hrs weekly on comm. activities x Self targeting		-0.010 (0.030)				-0.009 (0.030)
# negative income shocks x Self targeting			-0.083 (0.255)			-0.016 (0.265)
Widow x Self targeting				-1.136 (1.225)		-1.032 (1.198)
HH head years education x Self targeting					0.027 (0.065)	0.014 (0.069)
Observations	3,995	3,996	3,996	3,996	3,996	3,995
Mean of dependent variable	0.0398	0.0398	0.0398	0.0398	0.0398	0.0398

Notes: Each column in this table reports results from a logit regression of the received benefit dummy on household characteristics and these interacted with the self-targeting treatment. Only interaction coefficients are reported. Robust standard errors, clustered at the village level, in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

TABLE C.8. Comparison of Targeting under Self-Targeting and Hypothetical Universal Automatic Screening using Baseline Data (bootstrap)

	Log consumption (beneficiaries) (OLS) (1)	Receives Benefits (logit) (2)	Error (logit) (3)	Exclusion Error (logit) (4)	Inclusion Error (logit) (5)
<i>Panel A: No Stratum Fixed Effects</i>					
Self targeting	-0.097 (0.060)	3.646 (3.891)	-0.271 (0.115)	0.521 (0.398)	-0.638 (0.165)
Log consumption		-1.318 (0.217)			
Log consumption * Self targeting		-0.336 (0.303)			
Observations	194.8	4001.4	4003.3	252.2	3751.1
Mean of dependent variable	12.79	0.049	0.096	0.873	0.044
<i>Panel B: With Stratum Fixed Effects</i>					
Self targeting	-0.089 (0.073)	4.029 (4.094)	-0.297 (0.116)	0.518 (0.508)	-0.654 (0.168)
Log consumption		-1.331 (0.225)			
Log consumption * Self targeting		-0.366 (0.319)			
Observations	194.8	3837.6	3973.4	178.3	3555.0
Mean of dependent variable	12.79	0.051	0.097	0.825	0.046

Notes: Bootstrap version of Table 6. In each panel, each column reports results from 100 bootstrap iterations, clustered at the village level (column 1) and at the sub-district level (columns 2-5). Each column reports the average coefficients, bootstrapped standard errors, average number of observations, and average mean of dependent variable in the sample, from a regression with dependent variable indicated in the column header. For each bootstrap iteration, we resample the noise in the PMT score and select beneficiaries based on the noisy PMT. We then run the regressions in Table 6. See the notes for Table 6 for sample and variable definitions. In Panel A and Column (1) of Panel B, bootstrapped standard errors, clustered at the village level, are shown in parentheses. In Panel B, Columns (2) - (5), bootstrapped standard errors are clustered at the stratum level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

TABLE C.9. Comparison of Targeting under Self-Targeting and Hypothetical Universal Automatic Screening using Baseline Data (OLS)

	Log consumption (beneficiaries) (OLS) (1)	Receives Benefits (OLS) (2)	Error (OLS) (3)	Exclusion Error (OLS) (4)	Inclusion Error (OLS) (5)
<i>Panel A: No Stratum Fixed Effects</i>					
Self targeting	-0.116** (0.059)	-0.367** (0.167)	-0.037*** (0.010)	0.058 (0.036)	-0.039*** (0.007)
Log consumption		-0.061*** (0.012)			
Log consumption * Self targeting		0.025** (0.012)			
Observations	193	3,996	3,998	243	3,755
Mean of dependent variable	12.84	0.048	0.096	0.893	0.045
<i>Panel B: With Stratum Fixed Effects</i>					
Self targeting	-0.136** (0.062)	-0.298* (0.167)	-0.039*** (0.011)	0.016 (0.038)	-0.040*** (0.007)
Log consumption		-0.059*** (0.012)			
Log consumption * Self targeting		0.020 (0.012)			
Observations	193	3,996	3,998	243	3,755
Mean of dependent variable	12.84	0.048	0.096	0.893	0.045

Notes: OLS version of Table 6. In each panel, each column reports the coefficients from an OLS regression with dependent variable indicated in the column header. See the notes for Online Appendix Table C.6 for sample and variable definitions. Households in self-targeting villages are defined as beneficiaries if they applied for benefits and if their PMT score according to the baseline asset data (with random noise) was below the required threshold. Households in automatic screening villages are defined as beneficiaries if their PMT score according to the baseline asset data (with random noise) was below the required threshold. (The threshold is computed using the baseline data, in the same way as the government threshold. See footnote 19). In Panel A and Column (1) of Panel B, robust standard errors, clustered at the village level, are shown in parentheses. In Panel B, Columns (2) - (5), robust standard errors are clustered at the stratum level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

TABLE C.10. Comparison of Targeting under Self-Targeting and Hypothetical Universal Automatic Targeting using Baseline Data and the Government's Poverty Line

	Log consumption (beneficiaries) (OLS) (1)	Receives Benefits (LOGIT) (2)	Error (LOGIT) (3)	Exclusion Error (LOGIT) (4)	Inclusion Error (LOGIT) (5)
<i>Panel A: No Stratum Fixed Effects</i>					
Self targeting	-0.144*** (0.041)	7.089** (2.782)	-0.485*** (0.091)	0.564* (0.294)	-0.746*** (0.113)
Log consumption		-1.009*** (0.142)			
Log consumption * Self targeting		-0.610*** (0.216)			
Observations	461	3,996	3,998	249	3,749
Mean of dependent variable	12.86	0.115	0.150	0.779	0.108
<i>Panel B: With Stratum Fixed Effects</i>					
Self targeting	-0.138*** (0.040)	7.367** (2.897)	-0.499*** (0.090)	0.346 (0.328)	-0.764*** (0.113)
Log consumption		-0.975*** (0.139)			
Log consumption * Self targeting		-0.632*** (0.225)			
Observations	461	3,916	3,968	180	3,671
Mean of dependent variable	12.86	0.118	0.151	0.722	0.111

Notes: Version of Table 6 using the government PMT threshold. In each panel, each column reports the coefficients from a logit or OLS regression with dependent variable indicated in the column header. See the notes for Table 5 for sample and variable definitions. Households in self-targeting villages are defined as beneficiaries if they applied for benefits and if their PMT score according to the baseline asset data (with random noise) was below the required threshold used by the government. Households in automatic screening villages are defined as beneficiaries if their PMT score according to the baseline asset data (with random noise) was below the threshold used by the government. In Panel A and Column (1) of Panel B, robust standard errors, clustered at the village level, are shown in parentheses. In Panel B, Columns (2) - (5), robust standard errors are clustered at the stratum level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

TABLE C.11. Comparison of Targeting under Self-Targeting and Hypothetical Universal Automatic Targeting using Baseline and Government Data

	Log consumption (beneficiaries) (OLS) (1)	Receives Benefits (LOGIT) (2)	Error (LOGIT) (3)	Exclusion Error (LOGIT) (4)	Inclusion Error (LOGIT) (5)
<i>Panel A: No Stratum Fixed Effects</i>					
Self targeting	-0.247*** (0.061)	13.593*** (3.956)	-0.472*** (0.125)	-0.183 (0.335)	-0.923*** (0.184)
Log consumption		-0.858*** (0.195)			
Log consumption * Self targeting		-1.122*** (0.310)			
Observations	221	3,996	3,998	249	3,749
Mean of dependent variable	12.84	0.055	0.101	0.863	0.050
<i>Panel B: With Stratum Fixed Effects</i>					
Self targeting	-0.192*** (0.066)	16.094*** (4.426)	-0.493*** (0.128)	-0.298 (0.338)	-0.957*** (0.187)
Log consumption		-0.856*** (0.204)			
Log consumption * Self targeting		-1.318*** (0.348)			
Observations	221	3,567	3,938	125	3,300
Mean of dependent variable	12.84	0.062	0.102	0.752	0.057

Notes: Version of Table 6 where asset data from baseline asset data (with random noise) is used only for households not pre-screened in the automatic enrollment treatment. In each panel, each column reports the coefficients from a logit or OLS regression with dependent variable indicated in the column header. See the notes for Table 5 for sample and variable definitions. Households in self-targeting villages are defined as beneficiaries if they applied for and received benefits. Households in automatic screening villages are defined as beneficiaries if either they were interviewed by the government and received the benefit, or they were not interviewed by the government and their PMT score according to the baseline asset data (with random noise) was below the required threshold. (The threshold is computed using the baseline data, in the same way as the government threshold. See footnote 19). In Panel A and Column (1) of Panel B, robust standard errors, clustered at the village level, are shown in parentheses. In Panel B, Columns (2) - (5), robust standard errors are clustered at the stratum level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

TABLE C.12. Comparison of Targeting under Self-Targeting and Hypothetical Universal Automatic Targeting using Baseline Data, without Noise in PMT Score

	Log consumption (beneficiaries) (OLS) (1)	Receives Benefits (LOGIT) (2)	Error (LOGIT) (3)	Exclusion Error (LOGIT) (4)	Inclusion Error (LOGIT) (5)
<i>Panel A: No Stratum Fixed Effects</i>					
Self targeting	-0.091 (0.059)	2.184 (4.317)	-0.241 (0.158)	0.604* (0.335)	-0.656*** (0.212)
Log consumption		-2.294*** (0.268)			
Log consumption * Self targeting		-0.228 (0.339)			
Observations	211	3,996	3,998	249	3,749
Mean of dependent variable	12.64	0.053	0.087	0.775	0.041
<i>Panel B: With Stratum Fixed Effects</i>					
Self targeting	-0.061 (0.063)	3.784 (4.527)	-0.261* (0.157)	0.622 (0.387)	-0.679*** (0.213)
Log consumption		-2.344*** (0.279)			
Log consumption * Self targeting		-0.355 (0.356)			
Observations	211	3,399	3,868	171	3,111
Mean of dependent variable	12.64	0.062	0.090	0.690	0.050

Notes: Version of Table 6 where all beneficiaries are determined using baseline asset data (without any random noise). In each panel, each column reports the coefficients from a logit or OLS regression with dependent variable indicated in the column header. See the notes for Table 5 for sample and variable definitions. Households in self-targeting villages are defined as beneficiaries if they applied for benefits and if their PMT score according to the baseline asset data (without any random noise) was below the required threshold. Households in automatic screening villages are defined as beneficiaries if their PMT score according to the baseline asset data (without any random noise) was below the required threshold. (The threshold is computed using the baseline data, in the same way as the government threshold. See footnote 19). In Panel A and Column (1) of Panel B, robust standard errors, clustered at the village level, are shown in parentheses. In Panel B, Columns (2) - (5), robust standard errors are clustered at the stratum level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1



TABLE C.13. Comparison of Targeting under Self-Targeting and Hypothetical Universal Automatic Targeting using Baseline and Government Data, without Noise in PMT Score

	Log consumption (beneficiaries) (OLS) (1)	Receives Benefits (LOGIT) (2)	Error (LOGIT) (3)	Exclusion Error (LOGIT) (4)	Inclusion Error (LOGIT) (5)
<i>Panel A: No Stratum Fixed Effects</i>					
Self targeting	-0.127* (0.066)	5.707 (4.402)	-0.291** (0.139)	0.397 (0.344)	-0.688*** (0.187)
Log consumption		-1.480*** (0.263)			
Log consumption * Self targeting		-0.499 (0.345)			
Observations	205	3,996	3,998	249	3,749
Mean of dependent variable	12.75	0.051	0.092	0.823	0.043
<i>Panel B: With Stratum Fixed Effects</i>					
Self targeting	-0.043 (0.064)	7.378 (5.133)	-0.309** (0.140)	0.541 (0.363)	-0.711*** (0.191)
Log consumption		-1.566*** (0.273)			
Log consumption * Self targeting		-0.633 (0.403)			
Observations	205	3,489	3,938	140	3,130
Mean of dependent variable	12.75	0.059	0.093	0.707	0.051

Notes: Version of Table 6 where asset data from baseline asset data is used without adding any random noise, and only for households not pre-screened in the automatic enrollment treatment. In each panel, each column reports the coefficients from a logit or OLS regression with dependent variable indicated in the column header. See the notes for Table 5 for sample and variable definitions. Households in self-targeting villages are defined as beneficiaries if they applied for and received the benefit. Households in automatic screening villages are defined as beneficiaries if either they were interviewed by the government and received the benefit, or they were not interviewed by the government and their PMT score according to the baseline asset data (without any random noise) was below the required threshold. (The threshold is computed using the baseline data, in the same way as the government threshold. See footnote 19). In Panel A and Column (1) of Panel B, robust standard errors, clustered at the village level, are shown in parentheses. In Panel B, Columns (2) - (5), robust standard errors are clustered at the stratum level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

TABLE C.14. Experimental Results: Probability of Showing Up as a Function of Distance (OLS)

	No stratum fixed effects			With stratum fixed effects		
	(1)	(2)	(3)	(4)	(5)	(6)
Close subtreatment	0.048 (0.034)	0.451 (0.471)	0.045 (0.058)	0.058** (0.026)	0.280 (0.457)	0.040 (0.052)
Log consumption		-0.277*** (0.023)			-0.254*** (0.022)	
Close subtreatment * Log consumption		-0.032 (0.035)			-0.019 (0.034)	
Consumption quintile 2			-0.078 (0.058)			-0.079 (0.055)
Consumption quintile 3			-0.201*** (0.054)			-0.183*** (0.050)
Consumption quintile 4			-0.256*** (0.047)			-0.231*** (0.047)
Consumption quintile 5			-0.434*** (0.044)			-0.405*** (0.044)
Close subtreatment * Consumption quintile 2			-0.060 (0.079)			-0.054 (0.073)
Close subtreatment * Consumption quintile 3			0.064 (0.071)			0.070 (0.064)
Close subtreatment * Consumption quintile 4			-0.085 (0.066)			-0.053 (0.062)
Close subtreatment * Consumption quintile 5			0.001 (0.065)			0.020 (0.063)
Stratum fixed effects	No	No	No	Yes	Yes	Yes
Observations	2,000	2,000	2,000	2,000	2,000	2,000
Mean of dependent variable	0.377	0.377	0.377	0.377	0.377	0.377

Notes: OLS version of Table 7. The sample is all households in self-targeting villages. Robust standard errors, clustered at the village level, in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

TABLE C.15. Effect of Close Subtreatment on Distance

## (A) All Villages

VARIABLES	Reported distance		GPS distance	
	(1)	(2)	(3)	(4)
Close subtreatment	-1.686*** (0.167)	-1.077 (1.688)	-0.963*** (0.209)	-1.317 (3.496)
Log per capita consumption		-0.125 (0.090)		-0.173 (0.185)
Close subtreatment * Log per capita consumption		-0.048 (0.132)		0.026 (0.257)
Observations	1,999	1,999	1,847	1,847
Mean of dependent variable	1.079	1.079	0.652	0.652

## (B) Rural Villages

VARIABLES	Reported distance		GPS distance	
	(1)	(2)	(3)	(4)
Close subtreatment	-1.248*** (0.154)	-2.032 (1.603)	-0.897*** (0.199)	-4.574 (3.952)
Log per capita consumption		-0.159* (0.096)		-0.191 (0.244)
Close subtreatment * Log per capita consumption		0.059 (0.123)		0.281 (0.289)
Observations	1,320	1,320	1,319	1,319
Mean of dependent variable	0.606	0.606	0.463	0.463

## (c) Urban Villages

VARIABLES	Reported distance		GPS distance	
	(1)	(2)	(3)	(4)
Close subtreatment	-2.639*** (0.412)	-3.055 (3.327)	-1.418*** (0.427)	-0.974 (3.238)
Log per capita consumption		-0.222 (0.174)		-0.249** (0.101)
Close subtreatment * Log per capita consumption		0.030 (0.263)		-0.036 (0.246)
Observations	679	679	528	528
Mean of dependent variable	1.997	1.997	1.124	1.124

Notes: This table shows the reported and measured distance between households in the self-targeting treatment and the registration site. Each column in each table reports the coefficients from a regression of distance reported at baseline (columns (1) and (2)) or distance between the geographic coordinates of the household and that of the registration site for that household, on strata fixed effects, the close subtreatment (columns (1) and (3)), and on log consumption and the interaction between the two (columns (2) and (4)). Robust standard errors are clustered at the village level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

TABLE C.16. Estimated Parameters Values for the Model (Discount Rate Robustness Check)

	$u_\varepsilon$	$\sigma_\varepsilon$	$\alpha$	$\gamma$	$\pi$
$\delta = 0.5$	-47,391 (4,133)	38,980 (7,283)	0.51 (0.07)	8.08 (0.57)	-0.72 (0.05)
$\delta = 0.95$	-92,845 (7,976)	68,116 (13,408)	0.50 (0.07)	8.04 (0.61)	-0.72 (0.05)

Notes: This table reports the estimated model parameters for alternative values of the yearly discount factor  $\delta$  between application and the first disbursement. See notes for Table 8.

TABLE C.17. The Sensitivity of Estimated Parameters to Moment Values

	$\nu_\varepsilon$	$\sigma_\varepsilon$	$\alpha$	$\gamma$	$\pi$
	(1)	(2)	(3)	(4)	(5)
<i>Panel A. Mean Show-up moments</i>					
Far subtreatment, first consumption quintile	-0.61	0.54	0.21	0.08	-0.06
Far subtreatment, second consumption quintile	-0.67	0.53	-0.24	-0.03	0.04
Far subtreatment, third consumption quintile	-0.56	0.30	-0.37	-0.09	0.09
Far subtreatment, fourth consumption quintile	-0.29	-0.05	-0.27	-0.12	0.12
Far subtreatment, fifth consumption quintile	-0.09	-0.45	-0.29	-0.28	0.28
Far minus Close subtreatment, first consumption quintile	-0.61	0.53	-0.03	0.14	-0.13
Far minus Close subtreatment, second consumption quintile	-0.54	0.43	-0.35	0.00	0.00
Far minus Close subtreatment, third consumption quintile	-0.57	0.35	-0.52	-0.03	0.03
Far minus Close subtreatment, fourth consumption quintile	-0.25	-0.01	-0.31	-0.07	0.07
Far minus Close subtreatment, fifth consumption quintile	-0.14	-0.32	-0.40	-0.18	0.18
Top tercile observable consumption, bottom tercile unobservable consumption	0.12	-0.14	0.44	-0.10	0.12
Top tercile observable consumption, top tercile unobservable consumption	0.08	-0.22	0.11	-0.14	0.15
Bottom tercile observable consumption, bottom tercile unobservable consumption	-0.05	0.09	-0.01	0.17	-0.17
Bottom tercile observable consumption, top tercile unobservable consumption	-0.10	0.15	-0.43	0.11	-0.13
Top distance quartile	-0.05	0.01	-0.10	-0.01	0.01
Bottom distance quartile	0.07	-0.06	0.31	-0.06	0.07
<i>Panel B. Mean <math>\lambda</math> function moments</i>					
$E(\Phi(\gamma + \pi y_i) - benefit_i   showup_i = 1)$	-0.59	-0.21	-0.13	-1.88	1.93
$E((\Phi(\gamma + \pi y_i) - benefit_i)(y_i - \bar{y})   showup_i = 1)$	-0.08	-0.61	-0.31	-2.97	2.94
$E(\lambda_{induced}(y_i) - benefit_i   showup_i = 1)$	0.64	-0.06	0.49	1.58	-1.61
$E((\lambda_{induced}(y_i) - benefit_i)(y_i - \bar{y})   showup_i = 1)$	0.11	0.48	0.49	3.00	-2.96

Notes: This table reports the scaled sensitivity matrix measure  $\tilde{\Lambda}$  proposed by Gentzkow and Shapiro (2014). The estimated model is the one described in Section 7, except that moments 5-10 are the difference between the far and close subtreatments of the difference between mean show-up as predicted in the model and in reality, in the five consumption quintiles; this change leads to very similar estimated parameters (not shown) and allows us to ascertain the relative contribution of the experimental variation. For every parameter  $\theta \in \{\nu_\varepsilon, \sigma_\varepsilon, \alpha, \gamma, \pi\}$  (column) and moment  $m$  (row) the scaled sensitivity  $\tilde{\Lambda}_{\theta m}$  measures the expected change in the estimated parameter  $\hat{\theta}$  from a change in the moment  $\hat{m}$  (holding constant the values of the other moments); both changes are measured in standard deviations. To calculate this, we first compute the unscaled sensitivity measure  $\Lambda = (\hat{G}'\hat{W}\hat{G})^{-1}\hat{G}'\hat{W}$  where  $\hat{G}$  is the numerically estimated Jacobian at the estimated parameter values, and  $\hat{W}$  is the (second stage) estimated optimal weighting matrix. The scaled sensitivity measure is then defined by  $\tilde{\Lambda}_{\theta m} = \Lambda_{\theta m} \frac{SD(\hat{m})}{SD(\hat{\theta})}$  where  $SD(\hat{m})$  and  $SD(\hat{\theta})$  are the bootstrap estimated standard deviations of  $\hat{m}$  and  $\hat{\theta}$  (using 100 bootstrap runs).

TABLE C.18. Summary Statistics of Modeled Registration Costs

	Experimental Statistics		Modified Statistics				
	Reported Total Cost		Assuming Same Travel Technology (Far)	Additional Distance		Inflated Wait Time	
	(Close)	(Far)		+ 3km (Far)	+ 6km (Far)	Wait Time * 3 (Far)	Wait Time * 6 (Far)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Mean total monetary cost to register (Rp.)	3,235	5,012	5,036	6,154	6,739	12,645	24,096
Mean distance to registration site (km)	0.28	1.83	1.83	4.83	7.83	1.83	1.83
Mean Wait Time (mins)	157	176	176	176	176	527	1054

Notes: This table reports row variable averages in the close or far subsamples of the self-targeting sample. The first two columns use the costs reported in the data, while Columns (3)-(7) use modified cost variables that serve as input in the counterfactual exercise presented in Table 10 and discussed in Section 7. Costs assume one individual per household goes to sign-up location, even for households in opportunity cost subtreatment.

TABLE C.19. Modeled Effects of Time and Distance Costs on Show Up Rates (Corrected for Small Sample Differences)

	Show Up Rate (Experimental)	Predicted Show Up Probability (Model)				
		Baseline Model	$\sigma_\varepsilon = \hat{\sigma}_\varepsilon/2$	$\sigma_\varepsilon = 0$	Assuming Same Travel Technology	Constant $\mu(\cdot)$ and $\lambda(\cdot)$
		(1)	(2)	(3)	(4)	(5)
<i>Panel A: Logistic Regressions</i>						
Close	0.000 (0)	-0.200 (2.901)	-0.154 (3.146)	-0.073 (3.369)	-0.208 (2.829)	-0.168 (2.037)
Log consumption	-1.425*** (0.148)	-1.642*** (0.161)	-2.202*** (0.179)	-2.479*** (0.201)	-1.642*** (0.16)	-0.104 (0.119)
Close * Log consumption	0.000 (0)	0.017 (0.223)	0.014 (0.242)	0.007 (0.26)	0.018 (0.217)	0.015 (0.155)
Observations	1,978	5,934,000	5,934,000	5,934,000	5,934,000	5,934,000
P-value		0.939	0.955	0.978	0.935	0.922
<i>Panel B: Show-Up Rates</i>						
Above poverty line, far	34.13	33.84	29.33	27.51	33.83	45.87
Above poverty line, close	34.13	34.28	29.73	27.88	34.28	46.71
Below poverty line, far	53.97	70.97	71.78	72.67	70.95	46.78
Below poverty line, close	53.97	71.15	71.95	72.77	71.14	47.21
<i>Panel C: Show-Up Rate Ratios</i>						
Poor to rich ratio, far	1.581 (0.211)	2.097 (0.201)	2.447 (0.241)	2.641 (0.268)	2.097 (0.211)	1.02 (0.144)
Poor to rich ratio, close	1.581 (0.211)	2.075 (0.204)	2.42 (0.236)	2.61 (0.273)	2.075 (0.193)	1.011 (0.138)
Difference of ratios	0 (0)	0.022 (0.255)	0.027 (0.292)	0.032 (0.322)	0.022 (0.258)	0.009 (0.184)
P-value		0.931	0.926	0.922	0.934	0.96

Notes: Version of Table 9 on alternate sample. The sample consists of households in the far subtreatment, who are duplicated and assigned to the close subtreatment. The duplicate households are assigned the same consumption, household size and wage rate as the original households. They are assigned the average wait time specific to the close subtreatment, and money cost equal to zero in Columns (2)-(4) and (6). The money cost in Column (5) is calculated using the same marginal cost for original and duplicate households. Empirical Column (1) shows no results, since duplicate households are assigned the same show-up outcome as the original households.

TABLE C.20. Modeled Effects of the Fraction of Sophisticated Households

	(1)	(2)	(3)	(4)
	Experimental	Log consumption $\alpha = 0$	Log consumption $\alpha = 0.50$	Log consumption $\alpha = 1$
Log Consumption	12.687*** (0.026)	12.622*** (0.020)	12.679*** (0.021)	12.726*** (0.022)
Percentile of consumption distribution	20.8	17.2	20.5	23.3
Observations	744	1,971	1,971	1,971

Notes: This table reports the expected average per capita consumption level of predicted beneficiaries under different assumptions on the fraction of sophisticated households  $\alpha$ . Column (1) reports the mean log consumption level among beneficiaries in the data. Columns (2)-(4) report the average per capita log consumption level in the self-targeting sample, weighted by the unconditional probability of receiving benefits predicted by the model, assuming that the fraction of sophisticated households is 0, 0.5 and 1, respectively. The unconditional probability is the product of the probability to receive benefits conditional on applying times the unconditional probability of applying. The former is estimated as a probit regression of the get benefit dummy on the PMT score computed using the baseline data (see notes for Online Appendix Table C.11) in the sample of households who actually apply, and the latter is simulated using the model. The percentiles corresponding to the average per capita log consumption levels are reported in the second row. Robust standard errors clustered at the village level are reported in parentheses. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$



TABLE C.21. Experimental Results: Probability of Showing up as a Function of Opportunity Cost Treatment

	No stratum fixed effects			With stratum fixed effects		
	(1)	(2)	(3)	(4)	(5)	(6)
Both spouse sub-treatment	0.196 (0.146)	4.303 (2.840)	0.421* (0.235)	0.185* (0.099)	3.334 (2.857)	0.350 (0.247)
Log consumption		-1.324*** (0.145)			-1.343*** (0.144)	
Both spouse sub-treatment * Log consumption		-0.318 (0.217)			-0.244 (0.217)	
Consumption quintile 2			-0.301 (0.208)			-0.323 (0.216)
Consumption quintile 3			-0.503*** (0.185)			-0.487*** (0.185)
Consumption quintile 4			-1.159*** (0.181)			-1.131*** (0.204)
Consumption quintile 5			-1.886*** (0.267)			-1.983*** (0.280)
Both spouse sub-treatment * Consumption quintile 2			-0.288 (0.319)			-0.273 (0.385)
Both spouse sub-treatment * Consumption quintile 3			-0.363 (0.287)			-0.254 (0.350)
Both spouse sub-treatment * Consumption quintile 4			-0.203 (0.301)			-0.100 (0.334)
Both spouse sub-treatment * Consumption quintile 5			-0.468 (0.366)			-0.302 (0.347)
Stratum fixed effects	No	No	No	Yes	Yes	Yes
Observations	2,000	2,000	2,000	1,960	1,960	1,960
Mean of dependent variable	0.377	0.377	0.377	0.385	0.385	0.385

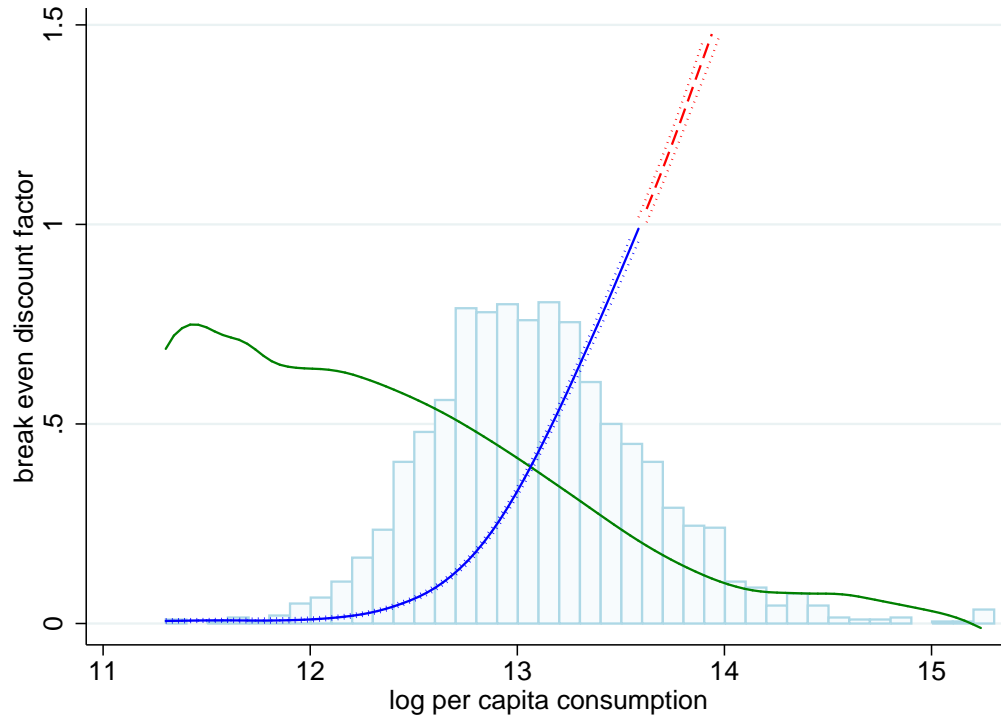
Notes: Each column reports the coefficients from a logit regression of the show up dummy on the both spouse sub-treatment and other regressors. The sample is all households in self-targeting villages. In Columns (1) - (3), robust standard errors are clustered at the village level. In Columns (4) - (6), robust standard errors are clustered at the stratum level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

TABLE C.22. Model Fit: Comparison of Empirical Simulated Moments

	Empirical	Model	Moment Value (difference)
	(1)	(2)	(3)
<i>Panel A. Mean Show-up moments</i>			
Far subtreatment, first consumption quintile	0.549	0.631	-0.082
Far subtreatment, second consumption quintile	0.479	0.482	-0.003
Far subtreatment, third consumption quintile	0.366	0.366	0.000
Far subtreatment, fourth consumption quintile	0.296	0.282	0.014
Far subtreatment, fifth consumption quintile	0.119	0.138	-0.019
Close subtreatment, first consumption quintile	0.603	0.601	0.001
Close subtreatment, second consumption quintile	0.465	0.473	-0.008
Close subtreatment, third consumption quintile	0.468	0.395	0.072
Close subtreatment, fourth consumption quintile	0.260	0.277	-0.017
Close subtreatment, fifth consumption quintile	0.163	0.157	0.006
Top tercile observable consumption, bottom tercile unobservable consumption	0.276	0.320	-0.044
Top tercile observable consumption, top tercile unobservable consumption	0.100	0.120	-0.020
Bottom tercile observable consumption, bottom tercile unobservable consumption	0.657	0.671	-0.014
Bottom tercile observable consumption, top tercile unobservable consumption	0.479	0.463	0.017
Top distance quartile	0.313	0.385	-0.072
Bottom distance quartile	0.426	0.388	0.037
<i>Panel B. Mean <math>\lambda</math> function moments</i>			
$E(\Phi(\gamma + \pi y_i) - benefit_i   showup_i = 1)$	0.097	0.127	-0.030
$E((\Phi(\gamma + \pi y_i) - benefit_i)(y_i - \bar{y})   showup_i = 1)$	-0.043	-0.053	0.011
$E(\lambda_{induced}(y_i) - benefit_i   showup_i = 1)$	0.097	0.127	-0.030
$E((\lambda_{induced}(y_i) - benefit_i)(y_i - \bar{y})   showup_i = 1)$	-0.043	-0.053	0.010

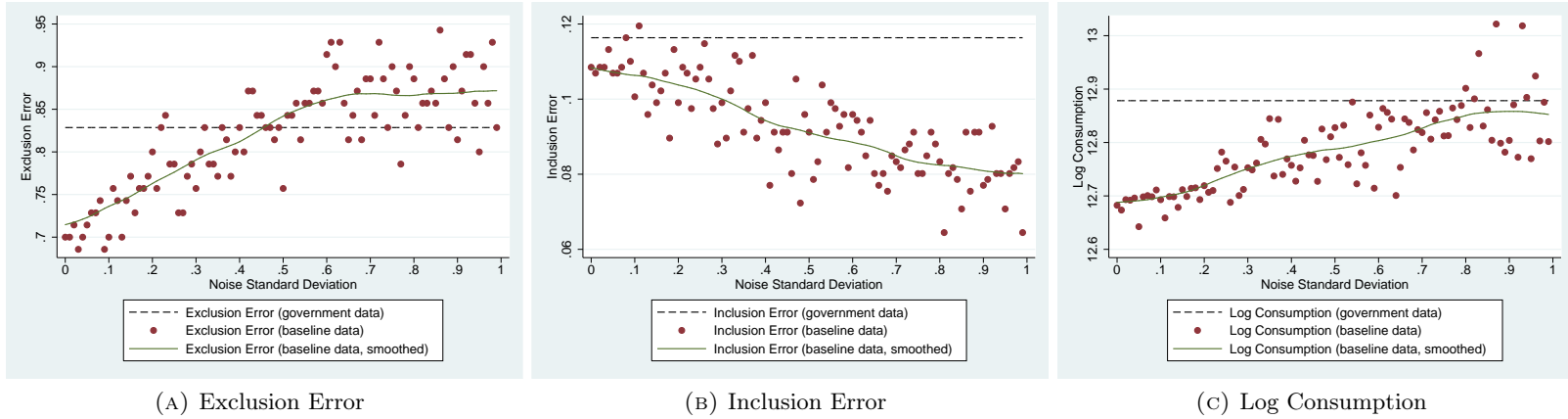
Notes: This table reports the empirical and simulated components of the moments in the model estimated in Section 7. Panel A reports moments based on means of show-up rates in different subgroups of the population. Panel B reports moments based on the  $\lambda$  function. Column (1) reports the value based on empirical data, and Column (2) reports the value based on the estimated model.

FIGURE C.1. Break-even Discount Factor for Showing Up



Notes: This figure plots the breakeven discount factor that makes a household indifferent between applying for benefits (showing up) and not applying. The breakeven discount factor is calculated by equating the application cost borne by the household with the expected net present value of benefits, conditional on applying. The latter term equals the probability to receive benefits conditional on applying (obtained from a probit regression of benefit receipt on log consumption), times the expected net present value of benefits. Benefits are received yearly for six years starting one year after the application date. Households are risk-neutral. The break-even discount factor is obtained by running a non-parametric Fan regression of the ratio between costs and (undiscounted) expected benefits, and then inverting the resulting function to obtain the yearly discount factor. The result is plotted as a blue solid line if the discount factor lies below 1, and as a red dashed line if it lies above 1. Bootstrapped pointwise 95 percent confidence intervals, clustered at the village level, are shown in the dotted lines. The green line shows the predicted values of the probability of showing up from a local linear regression of the show up dummy on log consumption. The background histogram shows the distribution of log consumption in the self-targeting sample.

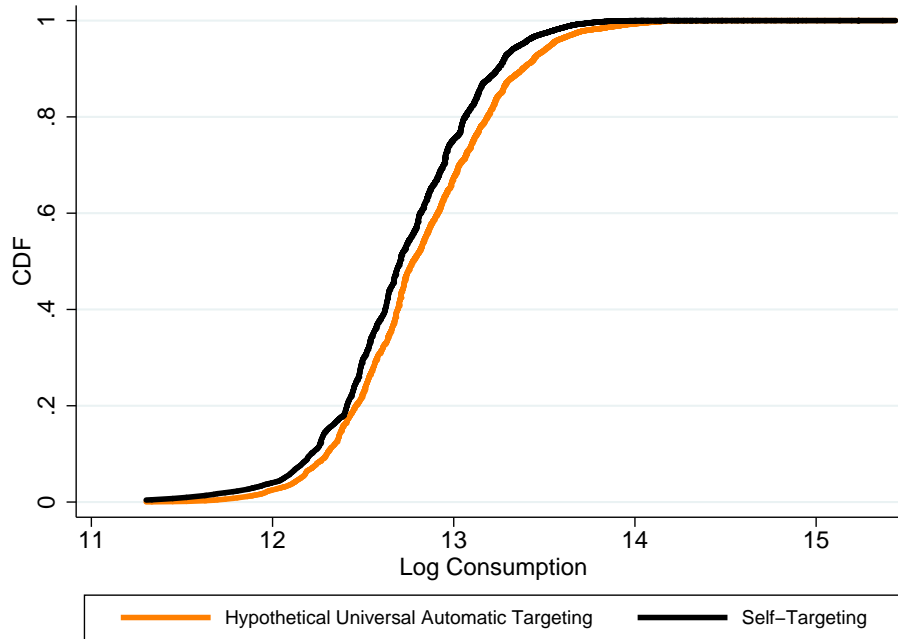
FIGURE C.2. Comparison between Government and Baseline Data



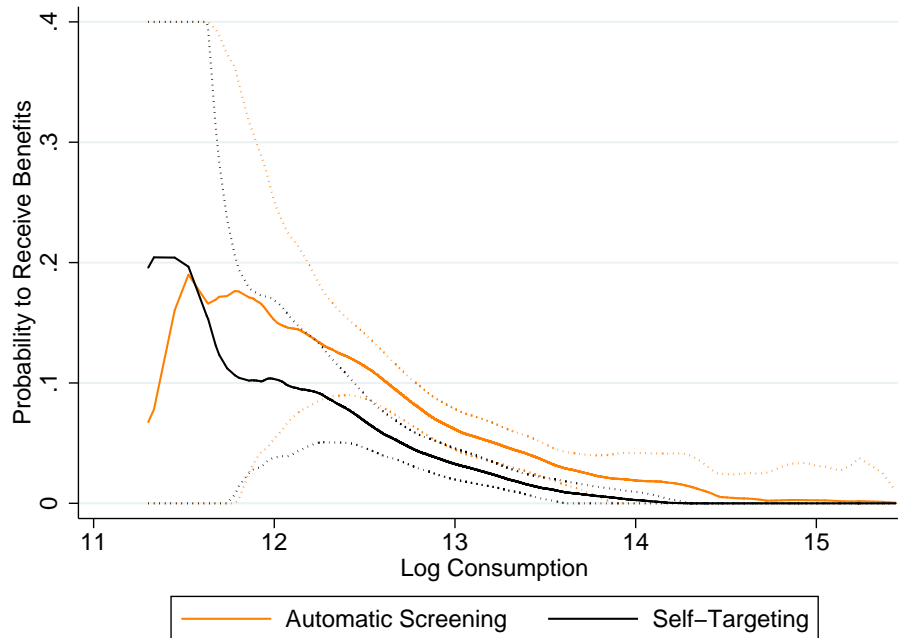
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Notes: Each graph compares the outcome variable computed using the government PMT score and using the baseline survey PMT score with noise added. The sample is all pre-screened households in the automatic enrollment treatment. For each value of the noise standard deviation  $\sigma \in [0, 1]$  that is a multiple of 0.01, we add a random variable with mean zero and standard deviation  $\sigma$  to the PMT score calculated using baseline data, and use the noisy PMT score to compute the outcome variable. The result is shown in each figure by the scatterplot. The green line is a Kernel-weighted local polynomial smoothing of the scatterplot, with Epanechnikov kernel and bandwidth equal to 0.076. The horizontal dashed line plots the outcome variable calculated using the government's PMT score.

FIGURE C.3. Comparison of Self-Selection and Hypothetical Universal Automatic Targeting



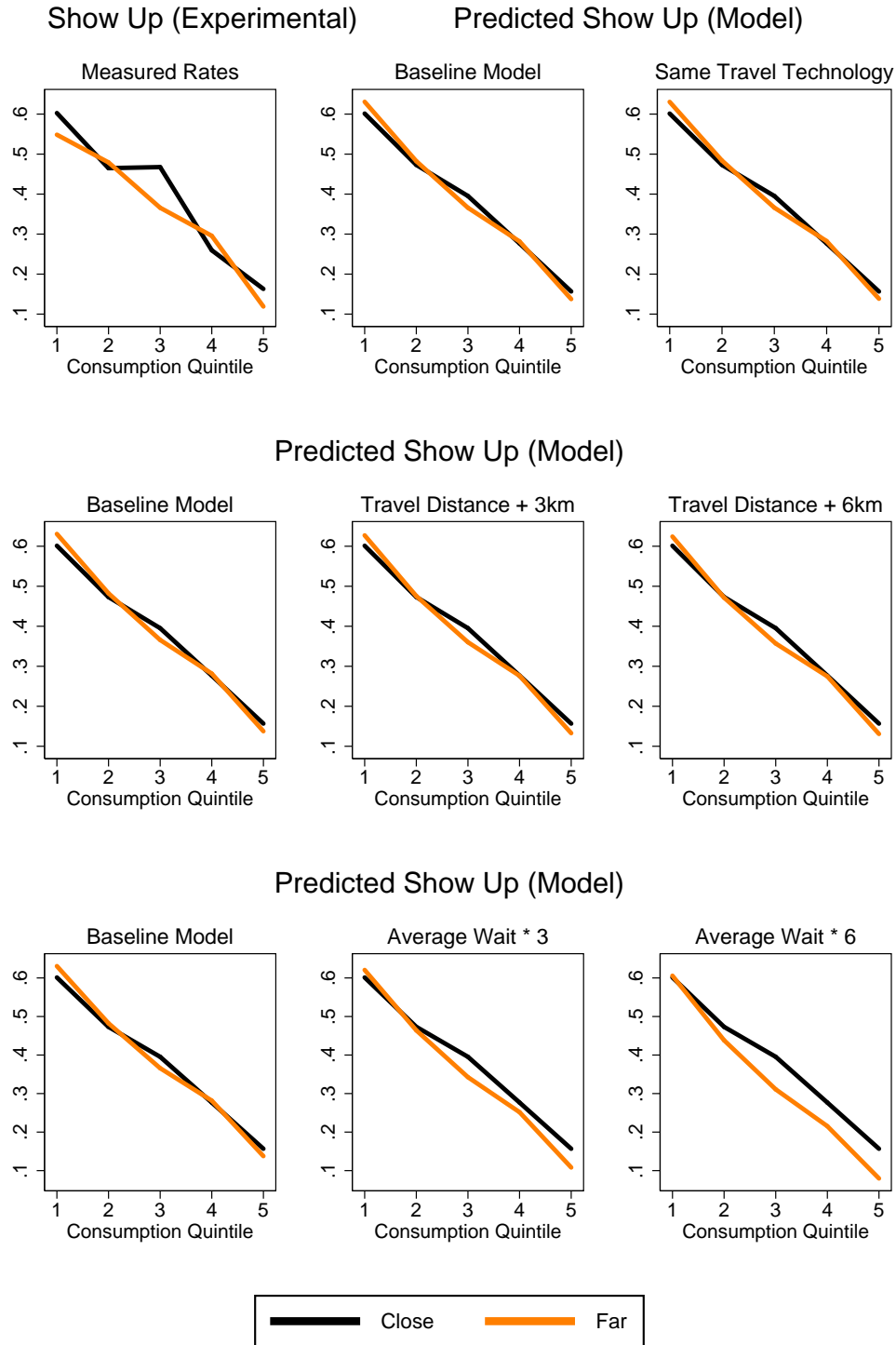
(A) CDF of Consumption of Beneficiaries



(B) Getting Benefit as a Function of Log Per Capita Consumption

Notes: Bootstrap version of Figure 5. We average results from 100 bootstrap iterations that are clustered at the village level. For Panel A, for each bootstrap iterations we resample the noise in the PMT score and select beneficiaries based on the noisy PMT. We then compute the empirical CDF of log per capita consumption of beneficiaries in the self-targeting and hypothetical universal automatic targeting treatments, and calculate the Kolmogorov-Smirnov test of equality. We extend the CDFs by linear interpolation to all values of logconsumption in the original data. Panel A reports the average CDFs. The average Kolmogorov-Smirnov test of equality yields a p-value of 0.21 (calculated using a randomized inference method). Panel B reports averaged local linear regressions of benefit receipt on log per capita consumption in the two treatments. Bootstrapped pointwise 95 percent confidence intervals, clustered at the village level, are shown in dashes.

FIGURE C.4. Model Fit and Counterfactuals



Notes: Each subfigure plots the probability of showing up as a function of consumption quintile, in the far subpopulation (orange line) and in the close subpopulation (black line). The top left subfigure uses measured show-up outcomes from the self-targeting treatment. All other subfigures use show up probabilities predicted using the model, under different assumptions of the application cost in the far subpopulation, holding the cost in the close subpopulation constant.