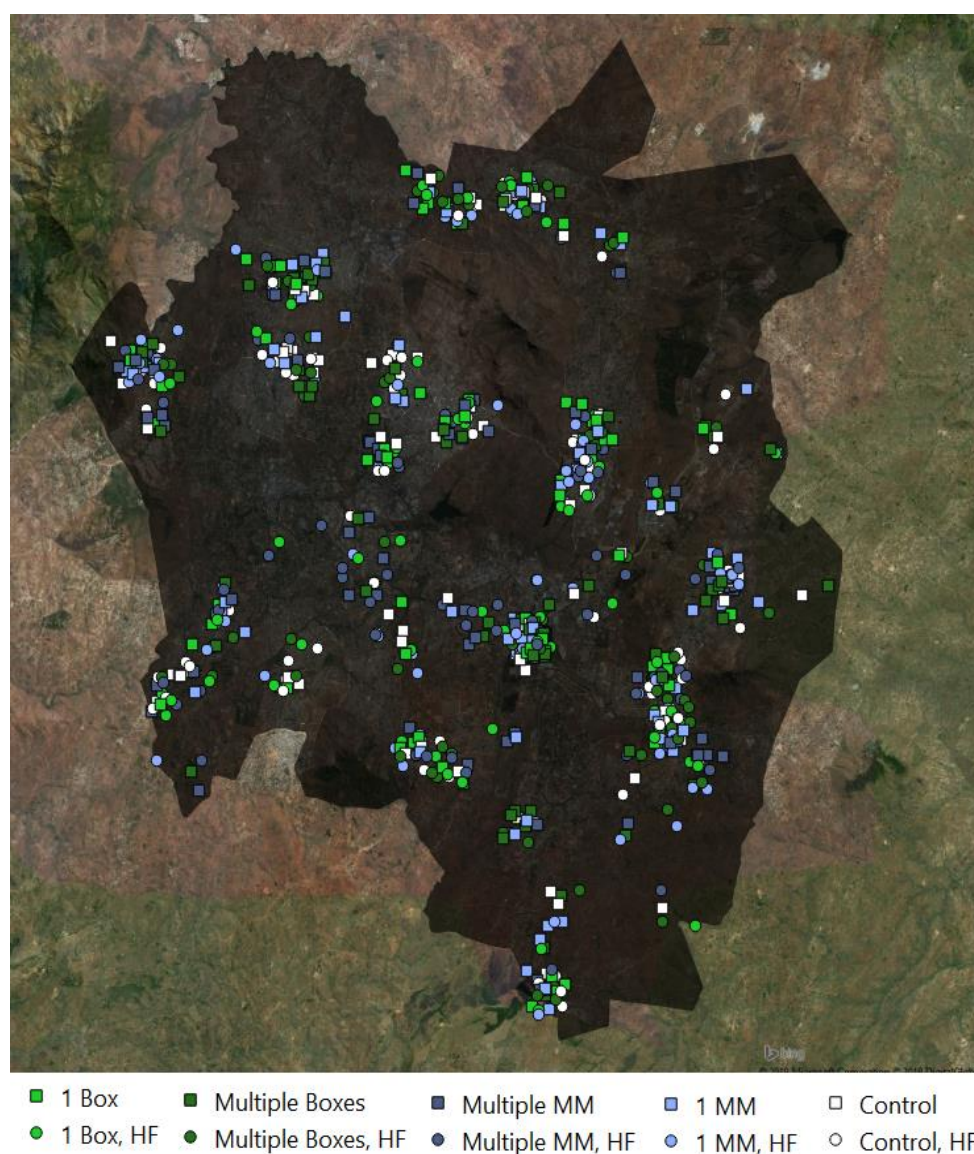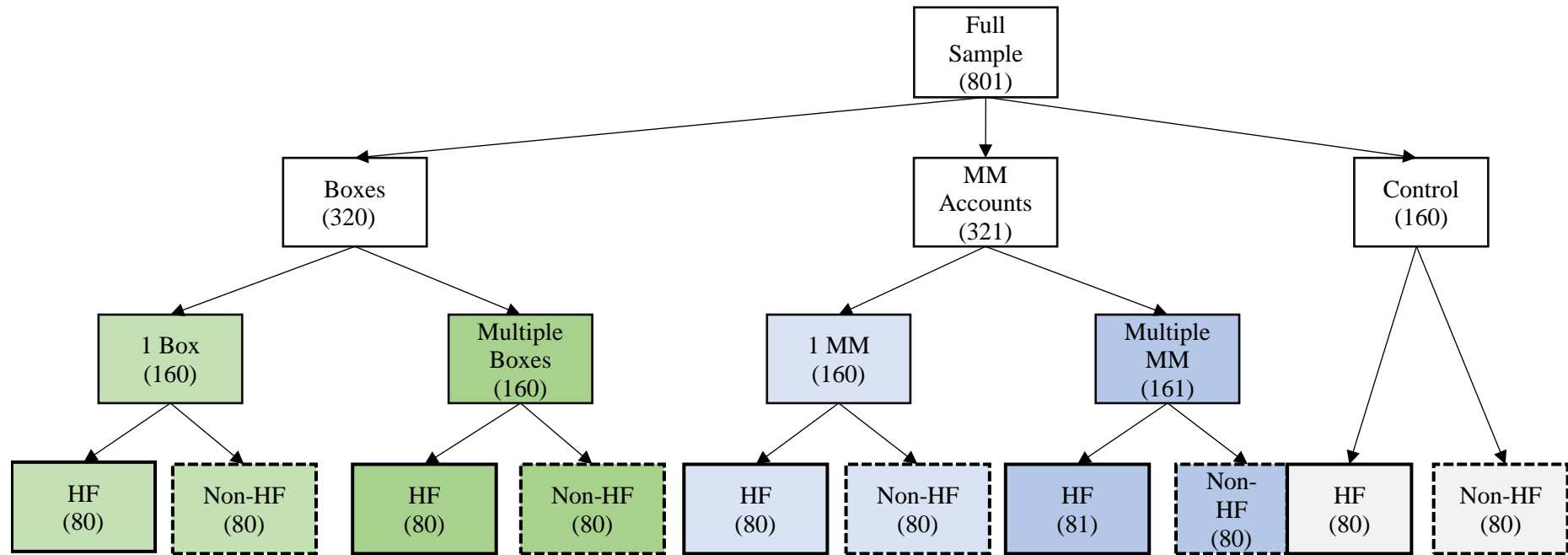# Web Appendix A - Main Appendix Figures and Tables

Saving for Multiple Financial Needs: Evidence from Lockboxes and Mobile Money in Malawi

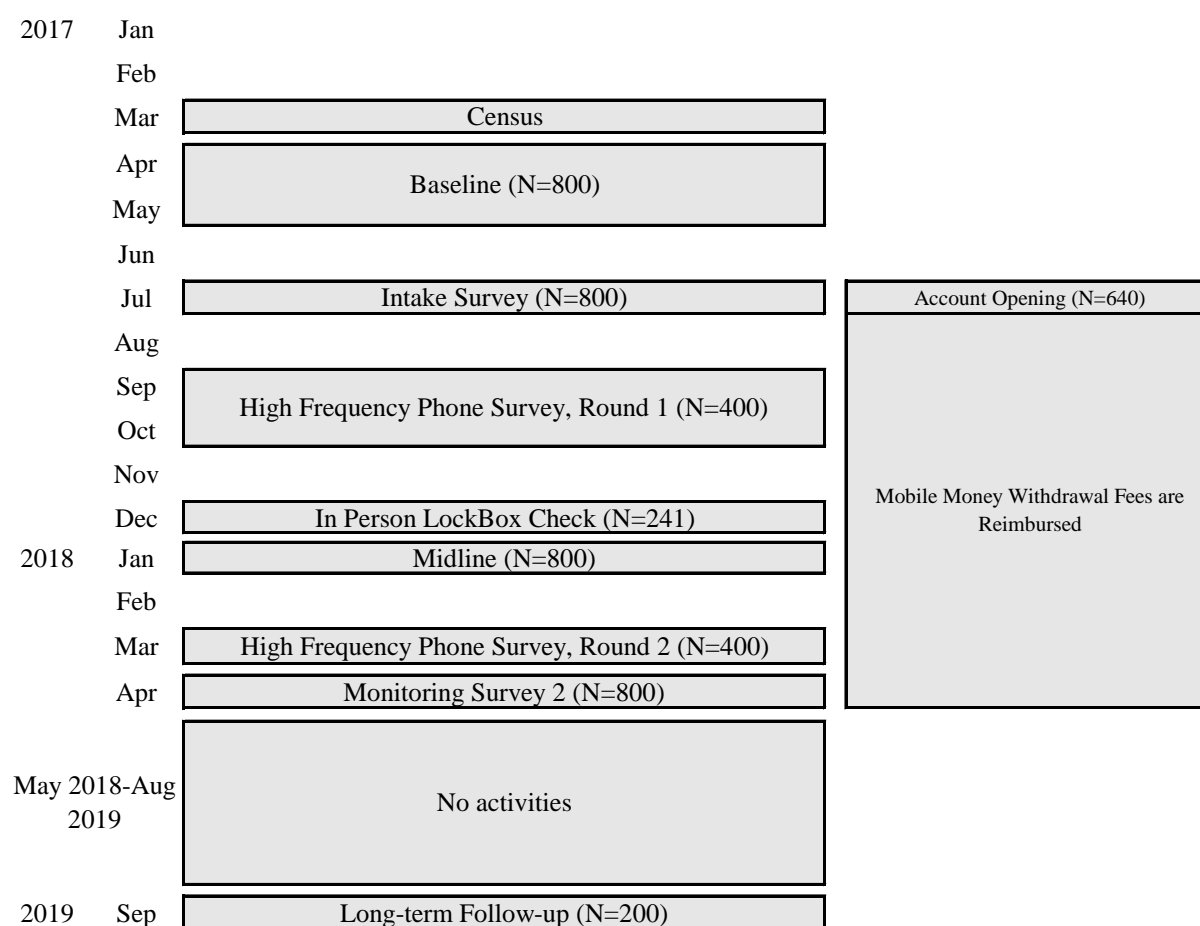Shilpa Aggarwal, Valentina Brailovskaya and Jonathan Robinson

Notes: GPS coordinates are shown with added random noise for visibility.

	Full Sample (801)		

Boxes (320)	MM Accounts (321)	Control (160)

1 Box (160)	Multiple Boxes (160)	1 MM (160)	Multiple MM (161)

HF (80)	Non-HF (80)	HF (80)	Non-HF (80)	HF (80)	Non-HF (80)	HF (81)	Non-HF (80)	HF (80)	Non-HF (80)

|			
2017	Jan		
	Feb		
	Mar	Census	
	Apr	Baseline (N=800)	
	May		
	Jun		
	Jul	Intake Survey (N=800)	Account Opening (N=640)
	Aug		
	Sep	High Frequency Phone Survey, Round 1 (N=400)	
	Oct		
	Nov		
	Dec	In Person LockBox Check (N=241)	Mobile Money Withdrawal Fees are Reimbursed
2018	Jan	Midline (N=800)	
	Feb		
	Mar	High Frequency Phone Survey, Round 2 (N=400)	
	Apr	Monitoring Survey 2 (N=800)	
May 2018-Aug 2019		No activities	
2019	Sep	Long-term Follow-up (N=200)	

Panel A. Cumulative usage: Deposits and Withdrawals
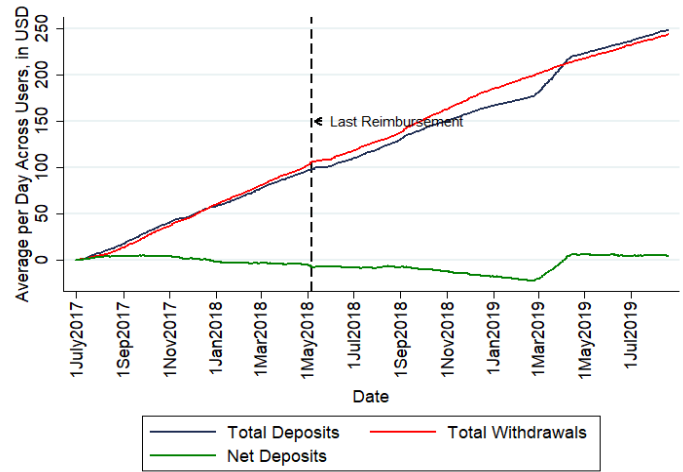
Panel B. Deposits and Withdrawals (averages per day, smoothed over 2 week period)
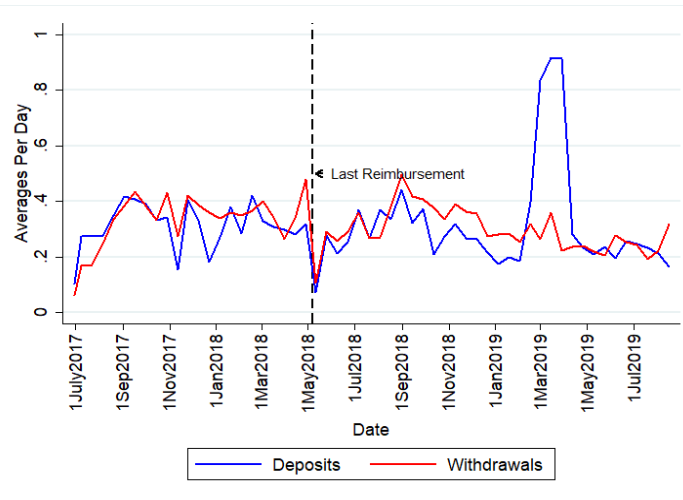
Panel C. Running Balance (averages per day, smoothed over 2 week period)
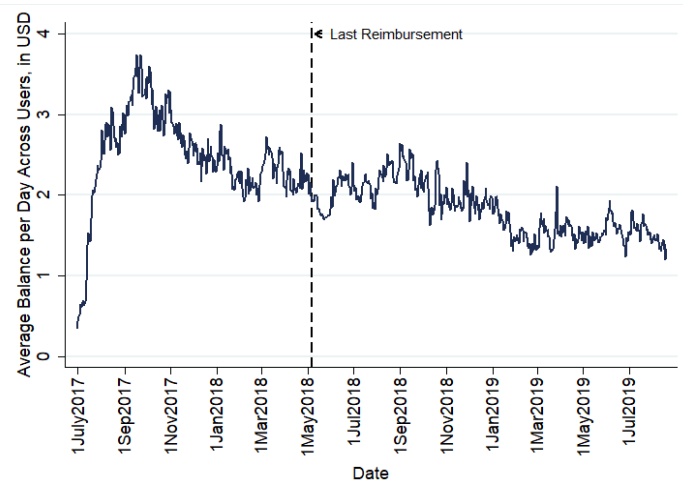
Notes: Data taken from administrative data from telecom company for mobile money accounts. Panel A shows average (per-person) cumulative deposits, withdrawals and net deposits (the difference) over time. Panel B shows average deposits and withdrawals during the study period. The values are daily averages collapsed into 2 week periods. Panel C shows running balances. The dashed line represents the date at which withdrawals stopped being reimbursed.

Web Appendix Table A1. Savings goals

	(1)	(2)	(3)	(4)	(5)
	Savings goals listed at baseline (all respondents)	Savings goals listed for treatment accounts			
		One box	Multiple boxes	One mobile money	Multiple mobile money
Expand business, start new business, or invest in inventory	0.64	0.33	0.55	0.36	0.49
General consumption	0.40	0.03	0.16	0.04	0.08
Emergencies	0.40	0.11	0.43	0.18	0.21
Buying land	0.18	0.25	0.28	0.26	0.22
Durable goods	0.11	0.08	0.12	0.02	0.03
Children's education	0.12	0.12	0.24	0.09	0.16
Home improvement	0.07	0.04	0.13	0.04	0.04
Home expenses (rent, utilities, etc.)	0.07	0.01	0.02	0.01	0.03
Agriculture	0.04	0.04	0.08	0.01	0.03
Observations	801	159	160	160	156

Notes: The unit of observation is the individual. List is restricted to goals that were named by at least 5% of people at baseline. At baseline (in column 1), goals were measured by asking respondents about their current savings in various sources. If the amount saved in a source was non-zero, respondents were asked about what the savings were for.

Web Appendix Table A2. Attrition

	(1)	(2)	(3)	(4)	(5)	(6)
	High Frequency Phone Surveys (HFPS)				Monitoring Surveys	
	Round 1 (September-October 2018)		Round 2 (March 2018)		Completed round 1 (January 2018)	Completed round 2 (April 2018)
	Completed at least 1 survey	Percentage completed	Completed at least 1 survey	Percentage completed		
One lockbox	0.00	-0.02	0.00	-0.03	0.01	0.00
	(0.02)	(0.04)	(0.06)	(0.06)	(0.04)	(0.04)
Multiple lockboxes	-0.04	-0.05	0.03	-0.01	-0.01	0.05
	(0.02)	(0.04)	(0.06)	(0.06)	(0.04)	(0.04)
One mobile money	0.00	0.03	0.04	0.06	0.05	0.04
	(0.02)	(0.04)	(0.06)	(0.06)	(0.04)	(0.04)
Multiple mobile money	-0.01	-0.06	0.03	0.00	-0.02	0.02
	(0.02)	(0.04)	(0.06)	(0.06)	(0.04)	(0.04)
High Frequency Surveys					-0.07**	-0.03
					(0.03)	(0.03)
Observations	400	400	400	400	801	801
Control Mean	0.99	0.89	0.84	0.74	0.86	0.78

Notes: See text for discussion of surveys and Figure A3 for a project timeline. Standard errors in parentheses. *, **, and *** indicate significance at 10%, 5%, and 1% respectively.

Web Appendix Table A3. Summary statistics and randomization check from intake survey

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		Full Sample				HFPS sample only		
		p-value for F-test of joint equality				*p*-value for F-test of joint equality		
	Control Mean	1 Box = Multi Box = 0	1 MM = Multi MM = 0	Joint equality	Control Mean	1 Box = Multi Box = 0	1 MM = Multi MM = 0	Joint equality
Average hours worked	7.70	0.54	0.42	0.60	8.13	0.63	0.32	0.62
	(3.88)				(3.82)			
Average profits	4.27	0.45	0.18	0.35	4.57	0.71	0.43	0.67
	(5.74)				(6.05)			
Hours farmed	0.03	0.69	0.12	0.04**	0.01	0.76	0.27	0.098*
	(0.16)				(0.10)			
Total value of deposits to savings	3.40	0.11	0.16	0.081*	3.37	0.34	0.66	0.60
	(6.01)				(5.47)			
Total value of withdrawals from savings	2.14	0.11	0.18	0.016**	2.38	0.46	0.41	0.34
	(5.09)				(6.30)			
Average Food expenditures	1.56	0.72	0.90	0.90	1.60	0.98	0.88	0.97
	(1.16)				(1.11)			
Average Total expenditures[1]	2.49	0.95	0.54	0.82	2.40	0.74	0.66	0.86
	(1.79)				(1.45)			
Net transfers to friends and family	0.17	0.072*	0.21	0.21	0.34	0.12	0.041**	0.14
	(1.12)				(1.25)			
Net transfers to spouse	-0.16	0.82	0.39	0.73	-0.07	0.49	0.69	0.68
	(0.16)				(0.07)			
Observations	761				392			

Note: Variables are converted to daily values. Means are population weighted. Randomization check_intake is performed only for businesses that appear in the analysis sample (i.e. completed a monitoring survey or at least one phone survey). Monetary values are winsorized at 1% and expressed in USD.

[1]Expenditures measured at the intake survey are a subset of those in later surveys, and include food, personal items, household items, and transportation.

Web Appendix Table A4. Take-up of project accounts, survey responses

	(1)	(2)	(3)	(4)
	Box groups		Mobile money	
	One box	Multiple boxes	One account	Multiple accounts
Panel A. HFPS (covering approximately 3.5 months in total)				
Made at least 1 transaction	0.94	0.91	0.79	0.63
Total value of deposits (monthly average)	20.03	33.27	32.13	25.68
	(30.96)	(43.31)	(45.41)	(39.12)
Total value of withdrawals (monthly average)	4.23	14.04	23.21	16.58
	(10.80)	(39.40)	(36.22)	(29.76)
Observations	80	80	80	80
Panel B. Monitoring surveys (covering approximately 4 months in total)				
Made at least 1 transaction	0.81	0.83	0.59	0.56
Total value of deposits (monthly average)	34.91	47.60	24.21	21.62
	(44.00)	(64.44)	(35.35)	(39.54)
Total value of withdrawals (monthly average)	23.39	32.52	19.33	16.57
	(35.02)	(47.66)	(30.77)	(34.39)
Observations	160	161	160	160

Notes: See text for discussion of data sources. Means are presented, with standard deviations in parentheses. The value of deposits and withdrawals are winsorized at 5% level.

Web Appendix Table A5. FDR-adjusted q-values for pre-specified outcomes (high frequency phone survey)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
		Individual treatments				Pooled	
	One box	Multiple Boxes	One mobile Money	Multiple Mobile Money	All Accounts	Boxes	Mobile money
Savings							
Total Value of Box Deposits	0.001***	0.001***	0.16	0.23	0.002***	0.001***	0.11
	[0.008***]	[0.001***]	[0.59]	[0.72]	[0.009***]	[0.001***]	[0.30]
Total Value of Mobile Money Deposits	0.038**	0.041**	0.022**	0.17	0.89	0.026**	0.022**
	[0.26]	[0.26]	0.163	[0.59]	[0.99]	[0.12]	0.118
Total Value of Deposits	0.57	0.064*	0.68	0.22	0.68	0.34	0.76
	[1.00]	[0.31]	[1.00]	[0.71]	[0.99]	[0.59]	[1.00]
Business Outcomes							
=1 if worked in main business	0.019**	0.99	0.17	0.17	0.069*	0.13	0.089*
	[0.16]	[1.00]	[0.59]	[0.59]	[0.24]	0.334	[0.29]
Hours in Main Business	0.049**	0.70	0.20	0.79	0.34	0.29	0.53
	[0.28]	[1.00]	[0.66]	[1.00]	[0.81]	[0.55]	[0.81]
=1 if worked secondary occupation	0.64	0.51	0.67	0.80	0.86	0.87	0.89
	[1.00]	[1.00]	[1.00]	[1.00]	[0.99]	[1.00]	[1.00]
Hours in Other occupations	0.33	0.26	0.1*	0.49	0.82	0.58	0.18
	[0.90]	[0.77]	[0.45]	[1.00]	[0.99]	[0.89]	[0.41]
=1 if farmed	0.17	0.004***	0.006***	0.77	0.002***	0.008***	0.027**
	[0.59]	[0.057*]	[0.066*]	[1.00]	[0.009***]	[0.053*]	[0.12]
Hours Farming	0.043**	0.01**	0.001***	0.38	0.001***	0.003***	0.004***
	[0.26]	[0.096*]	[0.031**]	[0.92]	[0.009***]	0.034**	[0.034**]
Business Profits	0.34	0.39	0.13	0.15	0.13	0.28	0.09*
	[0.91]	[0.92]	[0.57]	[0.59]	[0.38]	[0.55]	[0.29]
Business Revenues	0.63	0.57	0.88	0.78	0.74	0.52	0.96
	[1.00]	[1.00]	[1.00]	[1.00]	[0.99]	[0.81]	[1.00]
Expenditures							
Food	0.37	0.82	0.98	0.81	0.77	0.51	0.93
	[0.92]	[1.00]	[1.00]	[1.00]	[0.99]	[0.81]	[1.00]
Personal	0.38	0.97	0.75	0.73	0.78	0.65	0.95
	[0.92]	[1.00]	[1.00]	[1.00]	[0.99]	[0.95]	[1.00]
Household	0.48	0.31	0.11	0.58	0.22	0.27	0.33
	[1.00]	[0.87]	[0.48]	[1.00]	[0.56]	[0.55]	[0.59]
Education	0.002***	0.011**	0.059*	0.56	0.002***	0.001***	0.082*
	[0.037**]	[0.096*]	[0.31]	[1.00]	[0.009***]	[0.007***]	[0.29]
Holiday	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
Total	0.089*	0.30	0.26	0.77	0.19	0.097*	0.50
	[0.41]	[0.87]	[0.77]	[1.00]	[0.53]	[0.29]	[0.81]
Credit							
Value of loans received	0.27	0.98	0.54	0.67	0.54	0.41	0.84
	[0.77]	[1.00]	[1.00]	[1.00]	[0.99]	[0.77]	[1.00]
Value of credit to customers	-	-	-	-	-	-	-

Notes: Naïve p-values are presented first, with q-values in square brackets. Standard errors are adjusted using the procedure in Anderson (2008).
Regressions are population weighted.
*, **, and *** indicate significance at 10%, 5%, and 1% respectively.

Web Appendix Table A6. FDR-adjusted q-values for pre-specified outcomes (monitoring surveys)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Individual treatments				Pooled		
	One box	Multiple Boxes	One mobile Money	Multiple Mobile Money	All Accounts	Boxes	Mobile money
Savings							
Total Value of Box Deposits	0.001***	0.001***	0.86	0.57	0.001***	0.001***	0.78
	[0.001***]	[0.001***]	[1.00]	[1.00]	[0.001***]	[0.001***]	[0.89]
Total Value of Mobile Money Deposits	0.27	0.23	0.013**	0.025**	0.39	0.20	0.006***
	[1.00]	[1.00]	[0.41]	[0.62]	[0.67]	[0.73]	0.175
Total Value of Deposits	0.87	0.037**	0.22	0.55	0.21	0.21	0.31
	[1.00]	[0.75]	[1.00]	[1.00]	[0.57]	[0.73]	[0.81]
Business Outcomes							
=1 if worked in main business	0.21	0.44	0.087*	0.45	0.12	0.24	0.11
	[1.00]	[1.00]	[0.86]	[1.00]	[0.54]	[0.73]	[0.67]
Hours in Main Business	0.48	0.24	0.046**	0.28	0.095*	0.28	0.057*
	[1.00]	[1.00]	[0.76]	[1.00]	[0.54]	[0.81]	[0.67]
=1 if worked secondary occupation	0.56	0.065*	0.37	0.69	0.34	0.41	0.43
	[1.00]	[0.86]	[1.00]	[1.00]	[0.67]	[0.85]	[0.85]
Hours in Other occupations	0.40	0.28	0.21	0.67	0.38	0.73	0.26
	[1.00]	[1.00]	[1.00]	[1.00]	[0.67]	[0.89]	[0.73]
=1 if farmed	0.28	0.085*	0.11	0.61	0.16	0.092*	0.43
	[1.00]	[0.86]	[1.00]	[1.00]	[0.54]	[0.67]	[0.85]
Hours Farming	0.17	0.021**	0.009***	0.19	0.004***	0.016**	0.014**
	[1.00]	[0.62]	[0.38]	[1.00]	[0.051*]	[0.20]	[0.20]
Business Profits	0.20	0.46	0.14	0.20	0.13	0.23	0.11
	[1.00]	[1.00]	[1.00]	[1.00]	[0.54]	[0.73]	[0.67]
Business Revenues	0.07*	0.33	0.12	0.30	0.088*	0.1*	0.13
	[0.86]	[1.00]	[1.00]	[1.00]	[0.54]	[0.67]	[0.70]
Expenditures							
Food	0.32	0.22	0.21	0.97	0.27	0.21	0.43
	[1.00]	[1.00]	[1.00]	[1.00]	[0.67]	[0.73]	[0.85]
Personal	0.29	0.62	0.23	0.17	0.18	0.36	0.13
	[1.00]	[1.00]	[1.00]	[1.00]	[0.54]	[0.81]	[0.70]
Household	0.038**	0.69	0.23	0.46	0.16	0.15	0.25
	[0.75]	[1.00]	[1.00]	[1.00]	[0.54]	[0.73]	[0.73]
Education	0.83	0.55	0.87	0.82	0.92	0.83	0.99
	[1.00]	[1.00]	[1.00]	[1.00]	[0.84]	[0.89]	[0.89]
Holiday	0.41	0.98	0.13	0.45	0.30	0.61	0.18
	[1.00]	[1.00]	[1.00]	[1.00]	[0.67]	[0.89]	[0.73]
Total	0.1*	0.62	0.16	0.54	0.18	0.22	0.22
	[1.00]	[1.00]	[1.00]	[1.00]	[0.54]	[0.73]	[0.73]
Credit							
Value of loans received	0.68	0.74	0.40	0.87	0.60	0.68	0.56
	[1.00]	[1.00]	[1.00]	[1.00]	[0.67]	[0.89]	[0.89]
Value of credit extended to customers customers	0.053*	0.086*	0.19	0.14	0.023**	0.018**	0.091*
	[0.76]	[0.86]	[1.00]	[1.00]	[0.20]	[0.20]	[0.67]

Notes: Naïve p-values are presented first, with q-values in square brackets. Standard errors are adjusted using the procedure in Anderson (2008).
Regressions are population weighted.
*, **, and *** indicate significance at 10%, 5%, and 1% respectively.

Web Appendix Table A7. Treatment effects on other measures of farming activity

	(1)	(2)	(3)
	Land		Farm inputs
	=1 if bought land	=1 if rented land	
Panel A. Individual Accounts			
One lockbox	0.02	0.09*	8.13
	(0.02)	(0.05)	(4.94)
Multiple lockboxes	0.06**	0.09*	7.10
	(0.03)	(0.05)	(5.55)
One mobile money account	0.03	0.06	10.92**
	(0.03)	(0.05)	(4.93)
Multiple mobile money accounts	0.04	0.03	1.83
	(0.02)	(0.04)	(4.47)
p-values			
One lockbox = multiple lockbox	0.12	0.93	0.85
One m.m. = multiple m.m.	0.80	0.46	0.039**
Panel B. Pooled Lockboxes and Mobile Money Accounts			
Boxes	0.04*	0.09**	7.61*
	(0.02)	(0.04)	(4.47)
Mobile Money	0.03	0.05	6.79
	(0.02)	(0.04)	(4.18)
p-values			
Lockbox = Mobile Money	0.80	0.25	0.82
Observations	645	646	1302
Number of Businesses	645	646	719
Control Mean	0.02	0.05	27.67
Control SD	0.13	0.21	40.90

Notes: All regressions control for strata, date fixed effects and are probability weighted (see in the text for details). All monetary variables are expressed in USD and are winsorized at 5%.

Standard errors clustered at individual level in parentheses. *, **, and *** indicate significance at 10%, 5%, and 1% respectively.

Web Appendix Table A8. Treatment effects on transfers (high frequency phone surveys)

	(1)	(2)	(3)	(4)
		Interpersonal transfers		
	Received transfer	Value	Gave transfer	Value
Panel A. Individual Accounts				
One lockbox	0.06	0.37	0.06	1.18
	(0.06)	(1.19)	(0.06)	(1.03)
Multiple lockboxes	0.00	-0.15	0.07	0.64
	(0.05)	(1.00)	(0.06)	(0.91)
One mobile money account	0.05	1.13	0.11*	0.80
	(0.06)	(1.30)	(0.06)	(0.87)
Multiple mobile money accounts	0.05	-0.40	0.06	0.30
	(0.06)	(1.11)	(0.07)	(0.78)
p-values				
One lockbox = multiple lockbox	0.26	0.26	0.98	0.65
One m.m. = multiple m.m.	0.93	0.93	0.46	0.55
Panel B. Pooled Lockboxes and Mobile Money Accounts				
Boxes	0.03	0.13	0.07	0.92
	(0.05)	(0.95)	(0.05)	(0.76)
Mobile Money	0.05	0.45	0.09	0.59
	(0.05)	(1.03)	(0.05)	(0.71)
p-values				
Lockbox = Mobile Money	0.61	0.61	0.60	0.66
Observations	4536	4536	4536	4536
Number of Businesses	390	390	390	390
Control Mean	0.38	5.48	0.59	5.05
Control SD	0.49	12.42	0.49	8.23

Notes: Transfers include gifts and loans, and both cash and in-kind payments and do not include survey compensation. Variables are measured over the 7 days prior to the survey and converted to daily averages. All regressions control for strata, a measure of the dependent variable during the intake survey (where applicable), baseline characterstics, assignement to high frequency group and are probability weighted (see in the text for details). Date fixed effects are included. All monetary variables are expressed in USD and are winsorized at 5%.

Standard errors clustered at individual level in parentheses. *, **, and *** indicate significance at 10%, 5%, and 1% respectively.

Web Appendix Table A9. Treatment effects on transfers (monitoring surveys)

	(1)	(2)	(3)	(4)
	Interpersonal transfers			
	Received transfer	Value	Gave transfer	Value
Panel A. Individual Accounts				
One lockbox	-0.05	-0.03	-0.05	0.02
	(0.05)	(0.07)	(0.05)	(0.05)
Multiple lockboxes	-0.11**	(0.03)	-0.02	0.00
	(0.06)	(0.08)	(0.06)	(0.05)
One mobile money account	-0.03	-0.06	(0.01)	0.06
	(0.05)	(0.07)	(0.05)	(0.05)
Multiple mobile money accounts	0.02	(0.01)	(0.04)	0.02
	(0.06)	(0.07)	(0.06)	(0.05)
p-values				
One lockbox = multiple lockbox	0.32	0.32	0.66	0.76
One m.m. = multiple m.m.	0.40	0.40	0.68	0.41
Panel B. Pooled Lockboxes and Mobile Money Accounts				
Boxes	-0.08*	-0.03	-0.03	0.01
	(0.05)	(0.07)	(0.05)	(0.04)
Mobile Money	(0.01)	-0.04	(0.02)	0.04
	(0.05)	(0.07)	(0.05)	(0.04)
p-values				
Lockbox = Mobile Money	0.072*	0.072*	0.81	0.45
Observations	1321	1321	1321	1321
Number of Businesses	722	722	722	722
Control Mean	0.58	0.43	0.59	0.26
Control SD	0.49	0.73	0.49	0.39

Notes: Transfers include gifts and loans, and both cash and in-kind payments and do not include survey compensation. Variables are measured over the 7 days prior to the survey and converted to daily averages. All regressions control for strata, a measure of the dependent variable during the intake survey (where applicable), baseline characterstics, assignement to high frequency group and are probability weighted (see in the text for details). Survey date fixed effects are included. All monetary variables are expressed in USD and are winsorized at 5%.

Standard errors clustered at individual level in parentheses. *, **, and *** indicate significance at 10%, 5%, and 1% respectively.

Web Appendix Table A10. How did respondents use their mobile money accounts?

Panel A. Airtel Transactional History (July 2017 - April 2018)

Used Mobile Money to Deposit/Withdraw Cash	0.95
Average Amount Deposited	117.96
	(149.82)
Average Amount Withdrawn	130.51
	(176.00)
Used Mobile Money to make transfers	0.67
Transfers Sent	14.08
	(25.99)
Transfers Received	12.29
	(29.41)
Used Mobile Money to make payments	0.72
Transactions Made	10.07
	(16.70)
Observations	246

Panel B. Debriefing questions about mobile money

Used Mobile Money for longer-term savings	0.83
Used Mobile Money to store money temporarily	0.12
Observations	259

Notes: Panel A comes from Airtel administrative data. Data is restricted to accounts with non-zero usage. Panel B comes from responses collected during a debriefing section of the endline survey, at the conclusion of the project. Data is restricted to the mobile money treatment group in the experiment.

Web Appendix Table A11. Effect of accounts on coping with health shocks

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Net transfers across all sources	Net deposits		Expenditures			Labor supply & income	
		Experimental Accounts	All sources	Medical Expenses	Food	Total	Hours worked	Total income
Panel A. Respondent sick								
Respondent sick	-0.86	-	-1.09	1.80***	1.06**	3.57***	-0.39	0.09
	(1.42)	-	(1.29)	(0.48)	(0.42)	(1.20)	(0.74)	(2.09)
1 Box * respondent sick	4.98*	-0.54	-2.42	-0.9	-0.23	-3.67	0.23	-1.04
	(2.71)	(1.01)	(2.22)	(0.58)	(0.64)	(2.31)	(0.89)	(2.95)
Multiple Box * respondent sick	-1.83	0.84	-0.24	-0.4	0.08	0.71	-0.37	0.21
	(1.99)	(0.79)	(2.13)	(0.59)	(0.83)	(2.06)	(0.96)	(2.37)
1 MM * respondent sick	2.41	0.39	-1.43	0.09	-1.46*	-0.94	-0.85	0.72
	(1.83)	(0.54)	(1.95)	(0.70)	(0.75)	(2.58)	(0.95)	(2.48)
Multiple MM * respondent sick	1.97	0.41	0.23	-0.76	-2.01***	-3.72*	-0.53	-2.73
	(2.02)	(0.86)	(1.75)	(0.52)	(0.61)	(2.09)	(0.90)	(2.47)
p-values								
Joint significance interaction terms	0.039**	0.48	0.52	0.28	0.92	0.18	0.75	0.88
Observations	4543	4538	4538	4543	4529	4543	4543	4543
Number of businesses	391	391	391	391	391	391	391	391
Control Mean	-0.12	0.00	12.04	0.49	10.27	27.36	8.77	25.19
Control SD	11.08	0.00	23.55	1.58	6.26	20.36	4.87	20.95
Panel B. Household member sick								
Household member sick	2.22	-0.27	-0.33	2.52***	1.48**	5.72***	-1.25*	1.22
	(2.25)	(0.23)	(1.23)	(0.36)	(0.74)	(2.12)	(0.69)	(1.58)
1 Box * household member sick	-3.92	0.62	-1.78	0.73	-1.15	-2.72	1.14	-2.32
	(2.87)	(1.03)	(2.01)	(0.55)	(0.88)	(2.61)	(0.83)	(1.94)
Multiple Box * household member sick	-1.32	-0.56	0.39	-0.53	-0.45	-2.79	2.01**	0.61
	(2.45)	(1.00)	(2.27)	(0.49)	(0.86)	(3.06)	(0.79)	(2.35)
1 MM * household member sick	-0.14	0.35	1.77	-0.10	-1.91**	-2.86	1.04	-4.04
	(3.14)	(0.69)	(2.47)	(0.47)	(0.92)	(2.76)	(0.83)	(2.62)
Multiple MM * household member sick	-1.51	-0.75	-2.75	-0.48	-0.91	-2.42	1.48*	-2.93
	(2.56)	(0.79)	(2.49)	(0.47)	(0.89)	(3.11)	(0.83)	(2.34)
p-values								
Joint significance interaction terms	0.33	0.72	0.60	0.066*	0.36	0.54	0.034**	0.26
Observations	4543	4538	4538	4543	4529	4543	4543	4543
Number of Businesses	391	391	391	391	391	391	391	391
Control Mean	-0.29	0.00	11.52	0.40	10.09	26.35	8.67	24.81
Control SD	10.64	0.00	21.64	1.38	6.10	19.18	4.87	20.55

Notes: Regression are at the week level. Fixed effects regressions with survey date fixed effects. Regressions are population weighted. Transfers include gifts and loans, and both cash and in-kind payments. Net transfers and withdrawals are positive for inflows and negative for outflows. Standard errors clustered at individual level in parentheses. *, **, and *** indicate significance at 10%, 5%, and 1% respectively.

Web Appendix Table A12. Effect of accounts on treating illness

	(1)	(2)
	=1 if fully treated illness	=1 if treated immediately
Panel A. Respondent sick		
One lockbox	0.02	-0.17*
	(0.07)	(0.09)
Multiple lockboxes	0.06	-0.04
	(0.06)	(0.09)
One mobile money account	-0.06	0.05
	(0.06)	(0.08)
Multiple mobile money accounts	-0.04	-0.08
	(0.07)	(0.10)
p-values		
Joint significance all accounts	0.44	0.036**
Observations	500	500
Number of businesses	249	249
Control Mean	0.83	0.78
Control SD	-	-
Panel B. Household member sick		
One lockbox	-0.07	-0.03
	(0.05)	(0.07)
Multiple lockboxes	0.02	0.12*
	(0.05)	(0.07)
One mobile money account	-0.08	0.1
	(0.06)	(0.06)
Multiple mobile money accounts	0.05	0.12*
	(0.04)	(0.07)
p-values		
Joint significance all accounts	0.04**	0.092*
Observations	614	614
Number of businesses	260	260
Control Mean	0.95	0.74
Control SD	-	-

Notes: Regressions are restricted to observations in which the respondent (or a household member was sick). The dependent variable in column 1 is an indicator for treating an illness fully, and the dependent variable in column 2 is an indicator for treating the illness immediately. All regressions control for strata and are probability weighted (see in the text for details). Standard errors clustered at individual level in parentheses. *, **, and *** indicate significance at 10%, 5%, and 1% respectively.

Web Appendix Table A13. Treatment effects on prevalence of sickness

	(1)	(2)
	=1 if member of household sick in past week	=1 if respondent sick in past week
One lockbox	0.01	0.02
	(0.03)	(0.03)
Multiple lockboxes	0.02	0.01
	(0.03)	(0.02)
One mobile money account	0.01	0.03
	(0.02)	(0.03)
Multiple mobile money accounts	-0.02	-0.02
	(0.02)	(0.02)
Observations	4543	4543
Number of businesses	391	391
Control Mean	0.12	0.12

Notes: Standard errors clustered at individual level in parentheses. All regressions control for strata and are probability weighted (see in the text for details). Standard errors clustered at individual level in parentheses. *, **, and *** indicate significance at 10%, 5%, and 1% respectively.

Table A14. Long-term usage of accounts

	(1)	(2)	(3)	(4)
	Box groups		Mobile money	
	One box	Multiple boxes	One account	Multiple accounts
Panel A. Survey conducted in September 2019				
Still has access to at least 1 account	0.94	0.97	0.64	0.74
Still uses the account	0.69	0.56	0.39	0.44
Reported at least 1 deposit in the last 1 month	0.60	0.44	0.28	0.29
Value of deposits in the past 1 month	14.40	18.87	9.27	9.02
	(27.85)	(39.89)	(23.21)	(23.34)
Reported at least 1 withdrawal in the last 1 month	0.37	0.33	0.28	0.35
Value of withdrawals in the past 1 month	5.89	6.95	6.49	7.76
	(15.42)	(15.57)	(16.21)	(19.34)
Has a non-zero balance in the account	0.53	0.51	0.33	0.32
Current Balance in the account	31.57	13.63	7.28	9.87
	(82.84)	(27.59)	(18.95)	(24.25)
Observations	35	39	36	34
Panel B. Telecom administrative data (June 2018-August 2019)				
Made at least 1 deposit after June 2018	-	-	0.53	0.54
Value of Deposits (monthly average)	-	-	5.93	7.17
	-	-	(12.40)	(13.83)
Average Running Monthly Balance	-	-	1.80	1.71
	-	-	(3.32)	(3.38)
Observations			160	160

Notes: In Panel A, data comes from the follow up phone survey conducted in September 2019 and collected information on usage in the past 1 month with a randomly selected 200 participants. About 72% of the random sample was reached. Attrition rates were not different between groups. In Panel B, data comes from the administrative Airtel data for all subjects in the mobile money group. The value and number of deposits and withdrawals are winsorized at 5% level.

Web Appendix B - Additional Measures of Savings

Saving for Multiple Financial Needs: Evidence from Lockboxes and Mobile Money in Malawi

Shilpa Aggarwal, Valentina Brailovskaya and Jonathan Robinson

Web Appendix Table B1. Treatment effects on withdrawals (high frequency phone surveys)

	(1)	(2)	(3)	(4)	(5)	(6)
	Withdrawal Value from experimental account	Total value of lockbox withdrawals	Total value of mobile money withdrawals	Total Value of withdrawals from other savings sources		Total Value of Withdrawals
				Cash at home	Bank accounts	
Panel A. Individual Accounts						
One lockbox	0.19***	0.16*	-0.07	-0.06	0.25	0.19
	(0.07)	(0.09)	(0.05)	(0.19)	(0.20)	(0.34)
Multiple lockboxes	0.46***	0.48***	(0.04)	-0.40**	0.11	0.25
	(0.12)	(0.16)	(0.06)	(0.18)	(0.23)	(0.40)
One mobile money account	0.29***	-0.06	0.18**	0.13	0.32	0.57
	(0.08)	(0.06)	(0.07)	(0.26)	(0.35)	(0.47)
Multiple mobile money accounts	0.23***	-0.07	0.07	-0.24	0.16	-0.13
	(0.06)	(0.07)	(0.06)	(0.16)	(0.18)	(0.31)
p-values						
One lockbox = multiple lockbox	0.042**	0.092*	0.62	0.037**	0.55	0.88
One m.m. = multiple m.m.	0.47	0.78	0.17	0.072*	0.57	0.073*
Panel B. Pooled Lockboxes and Mobile Money Accounts						
Boxes	0.32***	0.31***	-0.06	-0.22	0.18	0.22
	(0.07)	(0.09)	(0.05)	(0.17)	(0.18)	(0.32)
Mobile Money	0.26***	-0.07	0.13**	-0.03	0.25	0.25
	(0.05)	(0.06)	(0.06)	(0.20)	(0.25)	(0.36)
p-values						
Lockbox = Mobile Money	0.43	0.001***	0.001***	0.19	0.75	0.92
Observations	4526	4526	4526	4526	4526	4526
Number of Businesses	390	390	390	390	390	390
Control Mean	0.00	0.15	0.16	0.76	0.39	1.69
Control SD	0.00	0.81	0.65	1.96	6.10	6.74

Note: All results are converted to daily averages. Value of withdrawals was measured over the past 7 days. All regressions control for strata, a measure of the dependent variable during the intake survey (where applicable), baseline characteristics, assignement to high frequency group and are probability weighted (see in the text for details). Date and date survey fixed effects are included in Panel A and B, respecitvely. All monetary variables are expressed in USD and are winsorized at 5%.
Standard errors clustered at individual level in parentheses. *, **, and *** indicate significance at 10%, 5%, and 1% respectively.

Web Appendix Table B2. Treatment effects on withdrawals (monitoring surveys)

	(1)	(2)	(3)	(4)	(5)	(6)
	Value of withdrawals from experimental account	Total value of lockbox withdrawals	Total value of mobile money withdrawals	Total value of withdrawals from other savings sources		Total value of withdrawals
				Cash at home	Bank accounts	
Panel A. Individual Accounts						
One lockbox	0.47***	0.41***	-0.02	-0.13***	0.08	0.32**
	(0.07)	(0.08)	(0.03)	(0.04)	(0.07)	(0.13)
Multiple lockboxes	0.77***	0.69***	0.02	-0.16***	0.19	0.77***
	(0.08)	(0.09)	(0.03)	(0.05)	(0.13)	(0.19)
One mobile money account	0.23***	0.07	0.13***	0.03	0.15	0.42***
	(0.04)	(0.06)	(0.04)	(0.06)	(0.10)	(0.15)
Multiple mobile money accounts	0.18***	0.02	0.08**	-0.07	0.12	0.19
	(0.04)	(0.05)	(0.04)	(0.05)	(0.08)	(0.12)
p-values						
One lockbox = multiple lockbox	0.042**	0.092*	0.62	0.037**	0.55	0.88
One m.m. = multiple m.m.	0.47	0.78	0.17	0.072*	0.57	0.073*
Panel B. Pooled Lockboxes and Mobile Money Accounts						
Boxes	0.61***	0.54***	0.00	-0.15***	0.13	0.53***
	(0.06)	(0.07)	(0.03)	(0.04)	(0.08)	(0.13)
Mobile Money	0.20***	0.04	0.11***	-0.02	0.13	0.31***
	(0.03)	(0.05)	(0.03)	(0.05)	(0.08)	(0.12)
p-values						
Lockbox = Mobile Money	0.001***	0.001***	0.001***	0.001***	0.95	0.049**
Observations	1321	1321	1321	1321	1321	1321
Number of Businesses	722	722	722	722	722	722
Control Mean	0.00	0.15	0.12	0.19	0.16	0.62
Control SD	0.00	0.49	0.29	0.41	1.24	1.60

Note: All results are converted to daily averages. Withdrawals were measured over the past 2 months. All regressions control for strata, a measure of the dependent variable during the intake survey (where applicable), baseline characteristics, assignement to high frequency group and are probability weighted (see in the text for details). Date and date survey fixed effects are included in Panel A and B, respecitvely. All monetary variables are expressed in USD and are winsorized at 5%.

Standard errors clustered at individual level in parentheses. *, **, and *** indicate significance at 10%, 5%, and 1% respectively.

Web Appendix Table B3. Treatment effects on balances (monitoring surveys only)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Balance in Lockboxes		Balance in Mobile Money		Balance in other savings sources			Total Balance
	Project lockboxes	All lockboxes	Project Mobile money	All mobile money accounts	Cash at home	Bank accounts	Savings groups	
Panel A. Individual Accounts								
One lockbox	48.94***	47.81***	0.30	-4.40	-7.92**	-8.38	4.76	26.93
	(7.27)	(7.51)	(0.97)	(3.52)	(3.90)	(15.10)	(6.42)	(20.98)
Multiple lockboxes	57.27***	56.29***	0.35	-3.74	-10.02***	8.58	-2.54	45.72*
	(6.78)	(7.04)	(1.17)	(3.51)	(3.45)	(21.31)	(7.36)	(24.30)
One mobile money account	-0.62	17.04***	10.04***	3.55	-0.20	25.81	-6.97	35.77
	(2.98)	(5.72)	(2.76)	(4.22)	(4.17)	(23.18)	(5.82)	(26.49)
Multiple mobile money accounts	-0.05	10.55*	16.28***	9.00**	0.49	10.00	-5.51	18.21
	(2.39)	(5.52)	(3.26)	(4.31)	(4.26)	(16.46)	(6.59)	(21.33)
p-values								
One lockbox = multiple lockbox	0.40	0.39	0.97	0.81	0.42	0.34	0.28	0.42
One m.m. = multiple m.m.	0.86	0.35	0.11	0.19	0.86	0.40	0.79	0.46
Panel B. Pooled Lockboxes and Mobile Money Accounts								
Boxes	52.90***	51.75***	0.41	-4.02	-8.91**	-0.71	1.31	35.62*
	(5.05)	(5.40)	(0.87)	(3.25)	(3.45)	(15.93)	(5.98)	(19.40)
Mobile Money	-0.57	13.75***	12.98***	6.11	0.18	17.74	-6.09	26.97
	(2.16)	(4.39)	(2.29)	(3.73)	(3.74)	(17.88)	(5.58)	(21.05)
p-values								
Lockbox = Mobile Money	0.001***	0.001***	0.001***	0.001***	0.001***	0.16	0.10	0.60
Observations	647	647	646	647	644	632	647	647
Number of Businesses	647	647	646	647	644	632	647	647
Control Mean	0.00	3.50	0.00	12.17	13.60	38.04	22.98	94.76
Control SD	0.00	15.47	0.00	27.12	24.76	108.40	45.24	126.90

Note: Balances were measured as of the date of the endline survey only. All regressions control for strata, a measure of the dependent variable during the intake survey survey (where applicable), baseline characteristics, date of the survey fixed effects, assignement to high frequency group and are probability weighted (see in the text for details). All monetary variables are expressed in USD and are winsorized at 5%. Standard errors clustered at individual level in parentheses.
Standard errors clustered at individual level in parentheses. *, **, and *** indicate significance at 10%, 5%, and 1% respectively.

Web Appendix Table B4. Treatment effects on net deposits (evidence from high frequency phone surveys)

	(1)	(2)	(3)	(4)	(5)	(6)
	Net Deposits to experimental account	Total lockbox net deposits	Total mobile money net deposits	Net Deposits from other savings sources		Total Net Deposits
				Cash at home	Bank accounts	
Panel A. Individual Accounts						
One lockbox	0.63***	0.43***	-0.10*	-0.36***	-0.05	0.04
	(0.09)	(0.10)	(0.06)	(0.09)	(0.07)	(0.23)
Multiple lockboxes	1.10***	0.96***	-0.09*	-0.34***	0.00	0.63*
	(0.17)	(0.19)	(0.05)	(0.11)	(0.13)	(0.32)
One mobile money account	0.13**	-0.11	0.01	0.10	-0.01	0.00
	(0.06)	(0.08)	(0.06)	(0.16)	(0.09)	(0.24)
Multiple mobile money accounts	0.21***	-0.09	0.03	-0.13	0.00	-0.11
	(0.07)	(0.09)	(0.07)	(0.12)	(0.08)	(0.23)
p-values						
One lockbox = multiple lockbox	0.01***	0.007***	0.78	0.75	0.73	0.093*
One m.m. = multiple m.m.	0.33	0.84	0.77	0.13	0.87	0.65
Panel B. Pooled Lockboxes and Mobile Money Accounts						
Boxes	0.86***	0.68***	-0.10*	-0.35***	-0.03	0.33
	(0.11)	(0.12)	(0.05)	(0.09)	(0.08)	(0.23)
Mobile Money	0.16***	-0.11	0.02	-0.01	0.00	-0.06
	(0.05)	(0.07)	(0.05)	(0.12)	(0.07)	(0.20)
p-values						
Lockbox = Mobile Money	0.001***	0.001***	0.002***	0.001***	0.79	0.083*
Observations	4526	4526	4526	4526	4526	4526
Number of Businesses	390	390	390	390	390	390
Control Mean	0.00	0.28	0.15	0.48	0.27	1.68
Control SD	0.00	0.71	0.58	1.16	2.44	3.22

Note: All results are converted to daily averages. Deposits and withdrawals were measured over the past 7 days. All regressions control for strata, a measure of the dependent variable during the intake survey (where applicable), baseline characterstics, assignement to high frequency group and are probability weighted (see in the text for details). Date fixed effects are included. All monetary variables are expressed in USD and are winsorized at 5%.

Standard errors clustered at individual level in parentheses. *, **, and *** indicate significance at 10%, 5%, and 1% respectively.

Web Appendix Table B5. Treatment effects on net deposits (monitoring surveys)

	(1)	(2)	(3)	(4)	(5)	(6)
				Net Deposits from other savings sources		
	Net Deposits to experimental account	Total lockbox net deposits	Total mobile money net deposits	Cash at home	Bank accounts	Total Net Deposits
Panel A. Individual Accounts						
One lockbox	0.25***	0.16***	-0.03	-0.11***	-0.04	-0.02
	(0.04)	(0.05)	(0.02)	(0.03)	(0.05)	(0.10)
Multiple lockboxes	0.28***	0.18***	-0.05**	-0.14***	0.02	0.00
	(0.04)	(0.06)	(0.02)	(0.03)	(0.07)	(0.11)
One mobile money account	0.04	-0.02	-0.01	-0.04	0.13*	0.12
	(0.03)	(0.04)	(0.03)	(0.03)	(0.08)	(0.11)
Multiple mobile money accounts	0.06**	-0.03	0.03	-0.01	0.03	0.03
	(0.02)	(0.04)	(0.02)	(0.04)	(0.05)	(0.09)
p-values						
One lockbox = multiple lockbox	0.01***	0.007***	0.78	0.75	0.73	0.093*
One m.m. = multiple m.m.	0.33	0.84	0.77	0.13	0.87	0.65
Panel B. Pooled Lockboxes and Mobile Money Accounts						
Boxes	0.26***	0.17***	-0.04**	-0.12***	-0.01	-0.01
	(0.03)	(0.04)	(0.02)	(0.03)	(0.05)	(0.08)
Mobile Money	0.05**	-0.03	0.01	-0.03	0.08	0.08
	(0.02)	(0.03)	(0.02)	(0.03)	(0.06)	(0.09)
p-values						
Lockbox = Mobile Money	0.001***	0.001***	0.002***	0.001***	0.044**	0.24
Observations	1321	1321	1321	1321	1321	1321
Number of Businesses	722	722	722	722	722	722
Control Mean	0.00	0.13	0.07	0.13	0.16	0.55
Control SD	0.00	0.41	0.23	0.29	0.55	0.85

Note: All results are converted to daily averages. Deposits and withdrawals over the past 2 months in the monitoring surveys. All regressions control for strata, a measure of the dependent variable during the intake survey (where applicable), baseline characteristics, assignement to high frequency group and are probability weighted (see in the text for details). Survey date fixed effects are included. All monetary variables are expressed in USD and are winsorized at 5%.
Standard errors clustered at individual level in parentheses. *, **, and *** indicate significance at 10%, 5%, and 1% respectively.
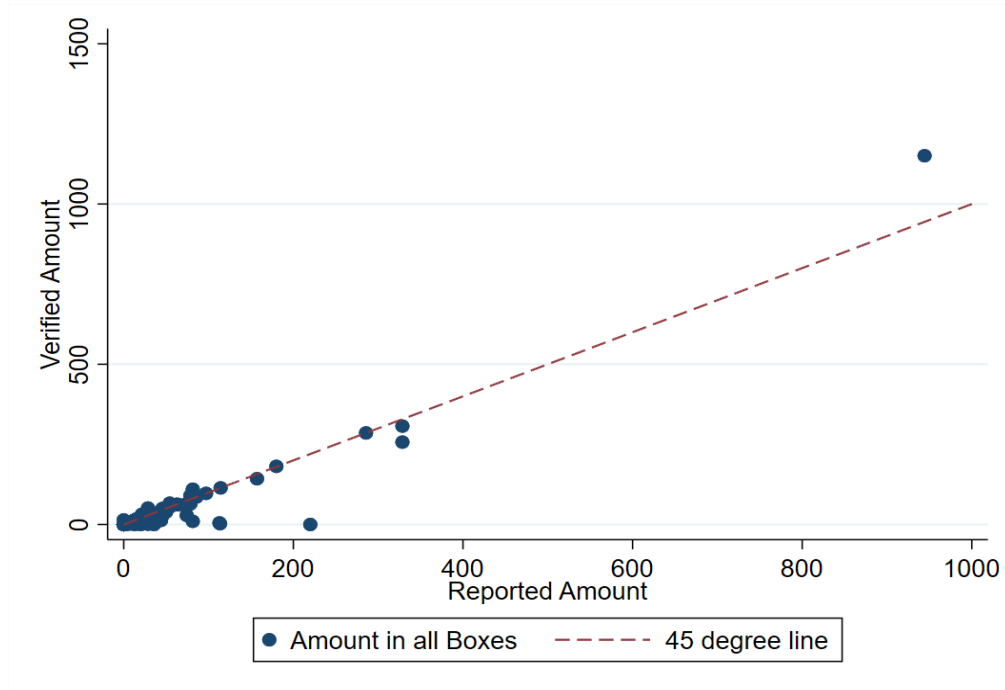
Web Appendix C - Assessing Possible Threats to Validity

Saving for Multiple Financial Needs: Evidence from Lockboxes and Mobile Money in Malawi
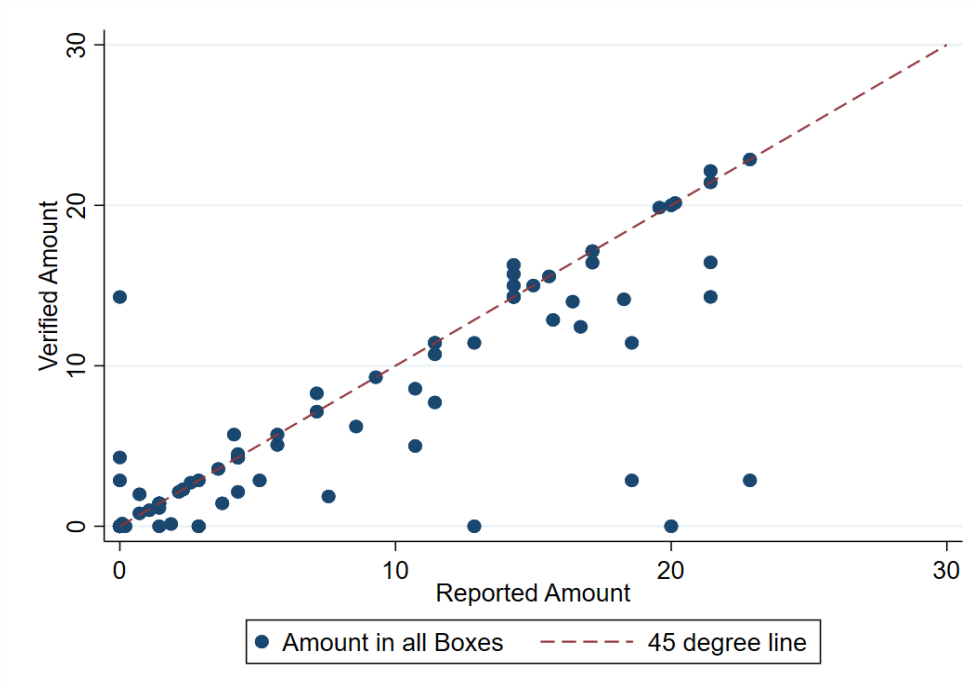
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Panel A. Verified vs. reported balance (all boxes)

Panel B. Verified vs. reported balances (below 75th percentile)

Notes: The y-axis is the amount actually found in the lockbox during the check in December 2018 and the x-axis is the amount reported as the balance (prior to opening the box). 260 Respondents were assigned to the lockbox check group, and 241 completed pre-lockbox check survey, 215 consented to show us the lockbox, 190 consented to open the lockbox. Panel A shows all boxes, Panel B shows only those below the 75th percentile for both measures. About 50% of users reported the exact balance in the boxes, 14% under-reported, and 37% over-reported.

Web Appendix Table C1. Correlations between Self-Reports and Administrative Data for Mobile Money Groups

	(1)	(2)
	Mobile money transaction data from telecom	
	=1 if deposit appears in telco data	Value of deposits in telco data

Values reported in HFPS survey

Panel A. Day Level

=1 if reported a deposit	0.344***	-
	(0.01)	-
Total value of reported deposits	-	0.452***
	-	(0.02)
Observations	3,704	3,704
Number of respondents	156	156
Mean of dependent variable	0.0473	0.314
SD of dependent variable	0.212	2.14

Panel B. Week Level

=1 if reported a deposit	0.525***	-
	(0.02)	-
Total value of reported deposits	-	0.653***
	-	(0.02)
Observations	1,851	1,851
Number of respondents	156	156
Mean of dependent variable	0.226	2.4
SD of dependent variable	0.418	6.707

Panel C. Cumulative over entire HFPS period

Total value of reported deposits	-	0.823***
	-	(0.049)
Observations		294
Number of respondents		156
Mean of dependent variable		18.17
SD of dependent variable		32.42

Panel D. Long Term Usage Survey

=1 if reported a deposit in the last month	0.600***	
	(0.09)	
Total Value of Deposits in the last month		0.445***
		(0.07)
Observations	70	70
Number of Respondents	70	70
Mean of dependent variable	0.201	2.738
SD of dependent variable	0.4	7.702

Notes: Independent variables are from high-frequency phone surveys. Dependent variables are from administrative data of mobile money transactions from the telecom company. The regressions are run without a constant term. All monetary variables are expressed in USD and are winsorized at 5%. *, **, and *** indicate significance at 10%, 5%, and 1% respectively.

Web Appendix Table C2. Correlations between reported and verified balances in boxes

	(1)	(2)	(3)	(4)
	Independently Verified Balance in Boxes			
	All Boxes (pooled)	Silver	Black	Brown
Panel A. All box groups				
Self Reported balance in survey	1.073	0.93	0.812	1.367
	(0.02)	(0.01)	(0.09)	(0.01)
p-values				
Beta = 1	0.002***	0.001***	0.035**	0.001***
Observations	190	185	65	46
Panel B. One box group				
Self Reported balance in survey	0.878	-	-	-
	(0.02)	-	-	-
p-values				
Beta = 1	0.001***			
Observations	94	-	-	-
Panel C. Multiple box group				
Self Reported balance in survey	1.127	0.993	0.812	1.367
	(0.03)	(0.01)	(0.09)	(0.01)
p-values				
Beta = 1	0.001***	0.60	0.035**	0.001***
Observations	96	91	65	46

Note: Regressions are run with a constant term. 260 Respondents were assigned to the lockbox check group, and 241 completed pre-lockbox check survey, 215 consented to show us the lockbox, 193 consented to open the lockbox.

Web Appendix Table C3. Does high frequency surveying affect reporting?

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Savings		Labor supply				Business outcomes		
	Total value of deposits into experimental account[1]	Total Deposits	Main business		Farming		Profits	Revenues	Total expenditures
			=1 if worked	Hours	=1 if farmed	Hours			
HFPS	0.06	-0.21	0.00	0.20	-0.14**	-1.04	0.39	0.76	-8.54*
	(0.04)	(0.27)	(0.05)	(0.60)	(0.07)	(0.65)	(0.48)	(1.82)	(4.86)
One lockbox	0.72***	-0.09	0.01	0.11	-0.07	0.04	-0.06	-1.67	4.07
	(0.09)	(0.26)	(0.04)	(0.54)	(0.07)	(0.70)	(0.58)	(2.00)	(5.25)
Multiple lockboxes	1.02***	0.41	-0.04	-0.69	0.00	0.83	-0.12	0.03	1.39
	(0.13)	(0.32)	(0.04)	(0.57)	(0.09)	(0.76)	(0.50)	(1.60)	(5.70)
One mobile money account	0.25***	0.17	-0.08	-1.07	0.04	1.31	-0.03	-1.67	4.17
	(0.06)	(0.30)	(0.06)	(0.72)	(0.08)	(0.92)	(0.53)	(1.66)	(5.55)
Multiple mobile money accounts	0.28***	0.40	0.00	-0.59	-0.06	0.36	-0.04	-1.19	2.91
	(0.06)	(0.28)	(0.04)	(0.55)	(0.07)	(0.76)	(0.51)	(1.78)	(5.33)
Interactions									
One lockbox*HFPS	-0.19	0.14	-0.10	-0.87	0.26***	1.45	-0.78	-1.43	2.30
	(0.13)	(0.37)	(0.07)	(0.79)	(0.10)	(1.23)	(0.71)	(2.57)	(6.37)
Multiple lockboxes*HFPS	-0.25	0.19	0.04	0.43	0.19	1.70	-0.21	-2.56	0.67
	(0.17)	(0.43)	(0.07)	(0.85)	(0.12)	(1.50)	(0.71)	(2.31)	(6.90)
One mobile money account*HFPS	-0.03	0.14	0.03	0.24	0.09	0.61	-0.94	-0.53	1.28
	(0.08)	(0.38)	(0.08)	(0.93)	(0.11)	(1.28)	(0.70)	(2.54)	(6.69)
Multiple mobile money accounts*HFPS	-0.13	-0.58	-0.05	0.33	0.07	1.01	-0.80	-0.21	-1.77
	(0.08)	(0.37)	(0.07)	(0.86)	(0.09)	(1.22)	(0.67)	(2.52)	(6.66)
p-values									
Joint significance of interaction terms	0.23	0.22	0.18	0.46	0.093*	0.69	0.57	0.74	0.98
Observations	1321	1321	9247	9247	1321	1319	1306	1315	1321
Number of Businesses	722	722	722	722	722	722	720	721	722
Control mean	0.00	1.53	0.74	7.35	0.24	2.05	3.02	10.07	37.41
Control sd	0.00	1.80	0.44	5.08	0.43	5.76	3.37	13.51	26.12

Notes: Deposits (columns 1-2), business earnings (columns 7-8) and total expenditures (column 9) are measured over the past week and converted to daily values. Labor supply in the main business (columns 3-4) is measured at the daily level in the past 7 days prior to the survey date. Farming is presented over a week since this is how it was measured in the surveys and it is the only way to present the extensive margin. All regressions control for strata, a measure of the dependent variable during the intake survey (where applicable), baseline characterstics, date of the survey fixed effects, assignment to high frequency group and are probability weighted (see in the text for details). All monetary variables are expressed in USD and are winsorized at 5%.

Standard errors clustered at individual level in parentheses. *, **, and *** indicate significance at 10%, 5%, and 1% respectively.

[1]Experimental account is the mobile money or box, depending on the treatment group.

Web Appendix D - Additional Pre-specified Analyses

Saving for Multiple Financial Needs: Evidence from Lockboxes and Mobile Money in Malawi

Shilpa Aggarwal, Valentina Brailovskaya and Jonathan Robinson

Web Appendix Table D1. Heterogeneity by pre-specified characteristics (high frequency phone surveys)

Interacted variable	(1) Total value of deposits into experimental account[1] Taxed	(2) Female	(3) Hyperbolic	(4) Total value of deposits Taxed	(5) Female	(6) Hyperbolic
One lockbox	0.67***	0.95***	0.76***	0.05	0.05	-0.68**
	(0.14)	(0.21)	(0.14)	(0.49)	(0.56)	(0.35)
Multiple lockboxes	1.32***	1.77***	1.49***	0.45	0.91	0.63
	(0.27)	(0.41)	(0.31)	(0.52)	(0.69)	(0.52)
One mobile money account	0.16	0.40**	0.32***	-0.16	-0.58	0.04
	(0.10)	(0.16)	(0.11)	(0.53)	(0.44)	(0.46)
Multiple mobile money accounts	0.31***	0.37**	0.25**	-0.34	-0.86*	-0.75**
	(0.11)	(0.15)	(0.11)	(0.37)	(0.49)	(0.36)
X	-0.04	-0.03	-0.06	-0.46	-0.46	-0.85**
	(0.11)	(0.10)	(0.14)	(0.44)	(0.39)	(0.35)
One lockbox * X	0.21	-0.36	0.03	-0.52	-0.48	2.35**
	(0.28)	(0.26)	(0.33)	(0.69)	(0.67)	(1.12)
Multiple lockboxes * X	0.67	-0.42	0.42	1.04	-0.15	0.67
	(0.60)	(0.51)	(0.64)	(1.00)	(0.82)	(0.94)
One mobile money account * X	0.35*	-0.17	-0.15	0.77	1.55**	0.15
	(0.21)	(0.21)	(0.21)	(0.79)	(0.74)	(0.62)
Multiple mobile money accounts * X	-0.03	-0.08	0.27	-0.35	0.98	1.54**
	(0.22)	(0.20)	(0.26)	(0.72)	(0.61)	(0.68)
p-values						
Joint significance of accounts for X = 0	0.001***	0.001***	0.001***	0.61	0.086*	0.012**
Joint significance of interaction terms	0.36	0.43	0.72	0.29	0.094*	0.063*
Observations	4536	4536	4536	4536	4536	4536
Number of businesses	390	390	390	390	390	390
Control Mean for X = 0	0.00	0.00	0.00	2.56	2.32	2.47
Control SD	0.00	0.00	0.00	4.63	2.49	4.31

Notes: Each column is a separate regression of the outcome on the treatments, the given variable, and the interactions between the treatments and variable. The coefficient labeled as "X" is the variable, and the interactions "account * X" are the interactions. The variable "taxed" is equal to 1 if the respondent gave money at baseline but didn't receive. Deposits are measured over the past week and converted to daily values. All regressions control for strata, a measure of the dependent variable during the intake survey (where applicable), baseline characteristics, assignment to high frequency group and are probability weighted (see in the text for details). Date fixed effects are included.

Standard errors clustered at individual level in parentheses. *, **, and *** indicate significance at 10%, 5%, and 1% respectively.

[1]Experimental account is the mobile money or box, depending on the treatment group.

Web Appendix Table D2. Heterogeneity by pre-specified characteristics (monitoring surveys)

Interacted variable	(1) Total value of deposits into experimental account[1] Taxed	(2) Female	(3) Hyperbolic	(4) Total value of deposits Taxed	(5) Female	(6) Hyperbolic
One lockbox	0.54***	0.72***	0.66***	-0.09	-0.19	0.07
	(0.07)	(0.10)	(0.08)	(0.22)	(0.28)	(0.23)
Multiple lockboxes	0.81***	1.01***	0.90***	0.22	0.36	0.25
	(0.10)	(0.13)	(0.10)	(0.32)	(0.36)	(0.27)
One mobile money account	0.28***	0.25***	0.21***	0.35	0.11	0.19
	(0.06)	(0.06)	(0.05)	(0.27)	(0.29)	(0.24)
Multiple mobile money accounts	0.18***	0.24***	0.23***	0.04	-0.22	0.11
	(0.05)	(0.07)	(0.05)	(0.23)	(0.28)	(0.23)
X	-0.08*	0.02	0.01	-0.13	-0.45	-0.21
	(0.05)	(0.05)	(0.05)	(0.29)	(0.28)	(0.26)
One lockbox * X	0.26*	-0.19	-0.21*	0.59	0.56	0.11
	(0.14)	(0.13)	(0.12)	(0.44)	(0.38)	(0.39)
Multiple lockboxes * X	0.25	-0.2	0	0.45	0.03	0.63
	(0.19)	(0.19)	(0.22)	(0.50)	(0.48)	(0.65)
One mobile money account * X	-0.1	-0.03	0.09	-0.03	0.41	0.63
	(0.08)	(0.08)	(0.10)	(0.41)	(0.39)	(0.44)
Multiple mobile money accounts * X	0.13	-0.04	-0.06	0.14	0.58	-0.34
	(0.11)	(0.09)	(0.13)	(0.43)	(0.39)	(0.37)
p-values						
Joint significance of accounts for X = 0	0.001***	0.001***	0.001***	0.48	0.49	0.90
Joint significance of interaction terms	0.02**	0.66	0.43	0.67	0.53	0.20
Observations	1321	1321	1321	1321	1321	1321
Number of businesses	722	722	722	722	722	722
Control Mean for X = 0	0.00	0.00	0.00	1.53	1.62	1.63
Control SD	0.00	0.00	0.00	1.91	1.62	1.89

Notes: Each column is a separate regression of the outcome on the treatments, the given variable, and the interactions between the treatments and variable. The coefficient labeled as "X" is the variable, and the interactions "account * X" are the interactions. The variable "taxed" is equal to 1 if the respondent gave money at baseline but didn't receive. Deposits are measured over the past week and converted to daily values. All regressions control for strata, a measure of the dependent variable during the intake survey (where applicable), baseline characteristics, assignment to high frequency group and are probability weighted (see in the text for details). Survey date fixed effects are included.

Standard errors clustered at individual level in parentheses. *, **, and *** indicate significance at 10%, 5%, and 1% respectively.

[1]Experimental account is the mobile money or box, depending on the treatment group.

Web Appendix Table D3. Heterogeneity by account ownership (high frequency phone surveys)

Interacted variable	(1) Total value of deposits into experimental account[1]	(2)	(4) Total value of deposits	(5)
	Owned Lockbox at Baseline	Owned Mobile Money Account at Baseline	Owned Lockbox at Baseline	Owned Mobile Money Account at Baseline
One lockbox	0.66***	0.61***	-0.4	-0.14
	(0.14)	(0.14)	(0.40)	(0.42)
Multiple lockboxes	1.54***	1.34***	0.81	0.18
	(0.32)	(0.32)	(0.52)	(0.45)
One mobile money account	0.34***	0.26**	0.16	0.37
	(0.10)	(0.12)	(0.46)	(0.50)
Multiple mobile money accounts	0.32***	0.27*	-0.52	-0.01
	(0.11)	(0.15)	(0.36)	(0.44)
X	0.03	-0.01	0.07	0.61
	(0.13)	(0.13)	(0.45)	(0.48)
One lockbox * X	0.52	0.35	0.91	-0.13
	(0.34)	(0.25)	(0.76)	(0.71)
Multiple lockboxes * X	0.19	0.46	-0.04	1.11
	(0.71)	(0.56)	(0.96)	(0.87)
One mobile money account * X	-0.23	0.14	-0.17	-0.4
	(0.23)	(0.19)	(0.77)	(0.73)
Multiple mobile money accounts * X	-0.17	0.14	0.7	-0.65
	(0.26)	(0.20)	(0.80)	(0.63)
p-values				
Joint significance of accounts for X = 0	0.001***	0.001***	0.067*	0.86
Joint significance of interaction terms	0.45	0.50	0.53	0.15
Observations	4536	4536	4536	4536
Number of businesses	390	390	390	390
Control Mean for X = 0	0.00	0.00	2.36	2.14
Control SD	0.00	0.00	4.30	2.54

Notes: Each column is a separate regression of the outcome on the treatments, the given variable, and the interactions between the treatments and variable. The coefficient labeled as "X" is the variable, and the interactions "account * X" are the interactions. The variable "taxed" is equal to 1 if the respondent gave money at baseline but didn't receive. Deposits are measured over the past week and converted to daily values. All regressions control for strata, a measure of the dependent variable during the intake survey (where applicable), baseline characteristics, assignment to high frequency group and are probability weighted (see in the text for details). Date fixed effects are included.

Standard errors clustered at individual level in parentheses. *, **, and *** indicate significance at 10%, 5%, and 1% respectively.

[1]Experimental account is the mobile money or box, depending on the treatment group.

Web Appendix Table D4. Heterogeneity by account ownership (monitoring surveys)

Interacted variable	(1) Total value of deposits into experimental account[1]	(2)	(4) Total value of deposits	(5)
	Owned Lockbox at Baseline	Owned Mobile Money Account at Baseline	Owned Lockbox at Baseline	Owned Mobile Money Account at Baseline
One lockbox	0.62***	0.57***	0	0.11
	(0.08)	(0.08)	(0.20)	(0.20)
Multiple lockboxes	0.90***	0.64***	0.28	0.12
	(0.09)	(0.12)	(0.25)	(0.29)
One mobile money account	0.26***	0.14***	0.28	0.14
	(0.05)	(0.05)	(0.22)	(0.27)
Multiple mobile money accounts	0.21***	0.20***	-0.05	0.27
	(0.05)	(0.06)	(0.20)	(0.24)
X	0	-0.07	0.04	0.42
	(0.06)	(0.05)	(0.38)	(0.28)
One lockbox * X	0.02	0.1	0.57	-0.01
	(0.14)	(0.12)	(0.53)	(0.38)
Multiple lockboxes * X	0.02	0.45***	0.62	0.42
	(0.25)	(0.16)	(0.77)	(0.44)
One mobile money account * X	-0.17*	0.17**	0.24	0.35
	(0.10)	(0.08)	(0.54)	(0.40)
Multiple mobile money accounts * X	0.06	0.05	0.71	-0.34
	(0.11)	(0.08)	(0.54)	(0.38)
p-values				
Joint significance of accounts for X = 0	0.001***	0.001***	0.42	0.86
Joint significance of interaction terms	0.37	0.048**	0.10	0.042**
Observations	1321	1321	1321	1321
Number of businesses	722	722	722	722
Control Mean for X = 0	0.00	0.00	1.50	1.15
Control SD	0.00	0.00	1.86	1.17

Notes: Each column is a separate regression of the outcome on the treatments, the given variable, and the interactions between the treatments and variable. The coefficient labeled as "X" is the variable, and the interactions "account * X" are the interactions. The variable "taxed" is equal to 1 if the respondent gave money at baseline but didn't receive. Deposits are measured over the past week and converted to daily values. All regressions control for strata, a measure of the dependent variable during the intake survey (where applicable), baseline characteristics, assignment to high frequency group and are probability weighted (see in the text for details). Survey date fixed effects are included.
Standard errors clustered at individual level in parentheses. *, **, and *** indicate significance at 10%, 5%, and 1% respectively.
[1]Experimental account is the mobile money or box, depending on the treatment group.

Web Appendix Table D5. Effects of receiving random payments (high frequency phone surveys)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Savings		Labor supply				Business outcomes		
	Value of deposits into experimental account[1]	Total value of deposits	Main business		Farming		Profits	Revenues	Total expenditures
			=1 if worked	Hours	=1 if farmed	Hours			
Received a random payment last period	-	-0.72	0.02	0.01	0.01	0.06	0.60	3.56**	-0.65
	-	(0.74)	(0.01)	(0.15)	(0.01)	(0.08)	(0.50)	(1.64)	(0.64)
1 Box * Received a random payment	-1.47**	0.50	0.02	0.46*	-0.03	-0.11	1.10	3.28	-0.01
	(0.75)	(1.50)	(0.02)	(0.24)	(0.02)	(0.10)	(0.71)	(2.49)	(1.43)
Multiple Box * Received a random payment	0.18	2.15	0.05	0.54*	-0.01	0.01	0.63	3.70	0.55
	(0.68)	(1.39)	(0.03)	(0.29)	(0.02)	(0.12)	(1.07)	(3.70)	(1.12)
1 MM * Received a random payment	0.35	2.27	-0.02	-0.48*	0.03	0.38*	1.00	4.70*	-0.31
	(0.40)	(1.54)	(0.03)	(0.27)	(0.03)	(0.21)	(0.68)	(2.61)	(1.13)
Multiple MM * Received a random payment	-0.46	3.40	0.08**	0.93**	0.02	0.21	0.53	2.41	-0.49
	(0.54)	(2.85)	(0.03)	(0.46)	(0.02)	(0.14)	(0.87)	(3.33)	(1.33)
p-values									
Joint significance all account interactions	0.18	0.22	0.039**	0.011**	0.22	0.20	0.42	0.25	0.97
Observations	3808	3808	30460	30459	3806	3806	3854	3862	3808
Number of businesses	384	384	392	392	383	383	385	385	384
Control Mean	0.00	14.69	0.81	8.14	0.03	0.12	21.87	75.77	25.94
Control SD	0.00	17.42	0.40	4.71	0.18	0.78	16.66	80.75	18.81

Notes: Regressions include individual fixed effects. Deposits (columns 1-2), business earnings (columns 7-8) and total expenditures (column 9) are measured over the past week and converted to daily values. Labor supply in the main business (columns 3-4) is measured at the daily level in the past 7 days prior to the survey date. Farming is presented over a week since this is how it was measured in the surveys and it is the only way to present the extensive margin. All regressions control for individual fixed effects, strata, a measure of the dependent variable during the intake survey (where applicable), baseline characteristics, date fixed effects, assignment to high frequency group and are probability weighted (see in the text for details).

Standard errors clustered at individual level in parentheses. *, **, and *** indicate significance at 10%, 5%, and 1% respectively.

[1]Experimental account is the mobile money or box, depending on the treatment group.

Web Appendix E - Results without baseline controls

Saving for Multiple Financial Needs: Evidence from Lockboxes and Mobile Money in Malawi

Shilpa Aggarwal, Valentina Brailovskaya and Jonathan Robinson

Web Appendix Table E1. Treatment effects on deposits (high frequency phone surveys), specification without baseline controls

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
			First Stage			Value of deposits into other savings sources			
	Value of deposits into experimental account[1]	=1 if deposited into any lockbox[2]	Total lockbox deposits[2]	=1 if deposited into any mobile money account[3]	Total mobile money deposits[3]	Cash at home	Bank accounts	Savings groups[4]	Total Value of Deposits[5]
Panel A. Individual Accounts									
One lockbox	0.75***	0.49***	0.45***	-0.06	-0.11*	-0.66***	-0.01	-0.16*	-0.32
	(0.13)	(0.05)	(0.14)	(0.04)	(0.06)	(0.17)	(0.10)	(0.09)	(0.36)
Multiple lockboxes	1.59***	0.62***	1.28***	-0.05	-0.10	-0.53***	0.03	-0.07	0.95*
	(0.29)	(0.05)	(0.28)	(0.04)	(0.07)	(0.18)	(0.13)	(0.08)	(0.49)
One mobile money account	0.35***	-0.04	-0.10	0.18***	0.22**	0.29	-0.13	-0.09	0.24
	(0.09)	(0.05)	(0.11)	(0.05)	(0.08)	(0.32)	(0.10)	(0.07)	(0.40)
Multiple mobile money accounts	0.30***	-0.04	-0.16	0.14***	0.14*	-0.29*	-0.06	-0.08	-0.46
	(0.09)	(0.06)	(0.10)	(0.05)	(0.08)	(0.18)	(0.09)	(0.07)	(0.32)
p-values									
One lockbox = multiple lockbox	0.006***	0.014**	0.004***	0.63	0.83	0.31	0.80	0.35	0.012**
One m.m. = multiple m.m.	0.68	0.94	0.61	0.49	0.39	0.028**	0.58	0.95	0.065*
Panel B. Pooled Lockboxes and Mobile Money Accounts									
Boxes	1.16***	0.55***	0.84***	-0.05	-0.10*	-0.60***	0.01	-0.11	0.29
	(0.17)	(0.05)	(0.17)	(0.03)	(0.06)	(0.16)	(0.09)	(0.07)	(0.36)
Mobile Money	0.32***	-0.04	-0.14	0.16***	0.18***	0.03	-0.10	-0.09	-0.09
	(0.08)	(0.05)	(0.09)	(0.04)	(0.07)	(0.23)	(0.07)	(0.06)	(0.32)
p-values									
Lockbox = Mobile Money	0.001***	0.001***	0.001***	0.001***	0.001***	0.001***	0.32	0.65	0.26
Observations	4534	4534	4534	4534	4534	4534	4534	4534	4534
Number of Businesses	391	391	391	391	391	391	391	391	391
Control Mean	0.00	0.25	0.35	0.20	0.24	1.04	0.29	0.45	2.43
Control SD	0.00	0.43	0.82	0.40	0.68	1.80	2.76	0.82	3.93

Notes: All results are converted to daily averages. Value of value of deposits was measured over the past 7 days. All regressions control for strata, a measure of the dependent variable during the intake survey (where applicable), date fixed effects, assignment to high frequency group and are probability weighted (see in the text for details). All monetary variables are expressed in USD and are winsorized at 5%. Standard errors clustered at individual level in parentheses. *, **, and *** indicate significance at 10%, 5%, and 1% respectively.

[1]Experimental account is the mobile money or box, depending on the treatment group, and is mechanically 0 for the control group.

[2]Includes non-project lockbox

[3]Includes non-project mobile money accounts

[4]Savings groups include VSLAs and ROSCAs.

[5]Total deposits is the sum of the other columns, as well as other less common types of savings (such as safekeeping with shopkeepers or friends).

Web Appendix Table E2. Treatment effects on deposits (monitoring surveys), specification without baseline controls

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		First Stage				Value of deposits into other savings sources			
	Value of deposits into experimental account[1]	=1 if deposited into any lockbox[2]	Total lockbox deposits[2]	=1 if deposited into any mobile money account[2]	Total mobile money deposits[2]	Cash at home	Bank accounts	Savings groups[4]	Total Value of Deposits[5]
Panel A. Individual Accounts									
One lockbox	0.63***	0.63***	0.48***	-0.10*	-0.05	-0.23***	-0.05	-0.10	-0.07
	(0.06)	(0.05)	(0.08)	(0.05)	(0.04)	(0.06)	(0.07)	(0.10)	(0.20)
Multiple lockboxes	0.93***	0.60***	0.78***	-0.06	-0.03	-0.27***	0.21*	-0.20*	0.59**
	(0.09)	(0.05)	(0.11)	(0.06)	(0.04)	(0.06)	(0.12)	(0.11)	(0.24)
One mobile money account	0.26***	-0.03	0.04	0.24***	0.13***	0.00	0.33***	-0.13	0.32
	(0.04)	(0.05)	(0.07)	(0.06)	(0.05)	(0.07)	(0.12)	(0.11)	(0.22)
Multiple mobile money accounts	0.20***	0.00	-0.05	0.22***	0.10**	-0.07	0.05	-0.12	0.06
	(0.04)	(0.06)	(0.06)	(0.06)	(0.05)	(0.07)	(0.08)	(0.11)	(0.21)
p-values									
One lockbox = multiple lockbox	0.004***	0.45	0.011**	0.42	0.70	0.22	0.019**	0.33	0.003***
One m.m. = multiple m.m.	0.26	0.54	0.15	0.75	0.56	0.24	0.008***	0.90	0.18
Panel B. Pooled Lockboxes and Mobile Money Accounts									
Boxes	0.77***	0.62***	0.63***	-0.08	-0.04	-0.25***	0.07	-0.15	0.25
	(0.06)	(0.04)	(0.08)	(0.05)	(0.04)	(0.06)	(0.08)	(0.10)	(0.19)
Mobile Money	0.23***	-0.02	0.00	0.23***	0.12***	(0.03)	0.20**	-0.12	0.20
	(0.03)	(0.05)	(0.06)	(0.05)	(0.04)	(0.07)	(0.09)	(0.10)	(0.19)
p-values									
Lockbox = Mobile Money	0.001***	0.001***	0.001***	0.001***	0.001***	0.001***	0.15	0.73	0.71
Observations	1323	1323	1323	1323	1323	1323	1323	1323	1323
Number of Businesses	723	723	723	723	723	723	723	723	723
Control Mean	0.00	0.30	0.25	0.36	0.18	0.30	0.23	0.54	1.53
Control SD	0.00	0.46	0.62	0.48	0.38	0.55	0.98	0.93	1.80

Notes: All results are converted to daily averages. Value of deposits was measured over the past 2 months in the monitoring surveys. All regressions control for strata, a measure of the dependent variable during the intake survey (where applicable), date of the survey fixed effects, assignment to high frequency group and are probability weighted (see in the text for details). All monetary variables are expressed in USD and are winsorized at 5%.

Standard errors clustered at individual level in parentheses. *, **, and *** indicate significance at 10%, 5%, and 1% respectively.

[1]Experimental account is the mobile money or box, depending on the treatment group, and is mechanically 0 for the control group.

[2]Includes non-project lockbox and/or mobile money accounts.

[3]Savings groups include VSLAs and ROSCAs.

[4]Total deposits is the sum of the other columns, as well as other less common types of savings (such as safekeeping with shopkeepers or friends).

Web Appendix Table E3. Treatment effects on labor supply and business outcomes (high frequency phone surveys), specification without baseline controls

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
			Labor Supply				Business outcomes		Credit Taken[1]	
	Main Business		Other occupations		Farming					
	=1 if worked	Hours	=1 if worked	Hours	=1 if farmed	Hours	Profits	Revenues	Took out loan	Value
Panel A. Individual Accounts										
One lockbox	-0.08**	-0.83**	-0.02	-0.90	0.02	0.20*	-0.37	-0.54	-0.03	0.41
	(0.03)	(0.42)	(0.04)	(0.92)	(0.02)	(0.11)	(0.33)	(0.96)	(0.05)	(0.45)
Multiple lockboxes	0.00	0.13	0.05	2.53	0.08***	0.51***	-0.30	-0.64	0.00	-0.07
	(0.03)	(0.36)	(0.05)	(2.05)	(0.03)	(0.19)	(0.39)	(1.12)	(0.05)	(0.36)
One mobile money account	-0.05	-0.55	0.03	-1.23	0.09***	0.56***	-0.42	-0.13	0.04	0.13
	(0.03)	(0.42)	(0.04)	(0.82)	(0.03)	(0.17)	(0.34)	(1.07)	(0.05)	(0.33)
Multiple mobile money accounts	-0.06	0.09	0.00	-0.46	0.00	0.13	-0.58*	0.34	-0.05	-0.23
	(0.04)	(0.58)	(0.04)	(0.82)	(0.02)	(0.11)	(0.33)	(1.15)	(0.05)	(0.34)
p-values										
One lockbox = multiple lockbox	0.014**	0.024**	0.20	0.073*	0.025**	0.10	0.86	0.93	0.025**	0.10
One m.m. = multiple m.m.	0.75	0.27	0.45	0.23	0.007***	0.016**	0.64	0.72	0.007***	0.016**
Panel B. Pooled Lockboxes and Mobile Money Accounts										
Boxes	-0.04	-0.37	0.02	0.84	0.05***	0.35***	-0.34	-0.59	-0.02	0.17
	(0.03)	(0.33)	(0.04)	(1.29)	(0.02)	(0.12)	(0.30)	(0.85)	(0.04)	(0.33)
Mobile Money	-0.06*	-0.28	0.02	-0.88	0.05**	0.36***	-0.49*	0.08	0.00	-0.03
	(0.03)	(0.40)	(0.03)	(0.76)	(0.02)	(0.12)	(0.29)	(0.91)	(0.04)	(0.29)
p-values										
Lockbox = Mobile Money	0.66	0.81	0.98	0.14	0.98	0.94	0.56	0.46	0.64	0.52
Observations	31472	31471	4605	4605	4541	4541	26086	26256	4544	4632
Number of Businesses	392	392	391	391	391	391	392	392	391	391
Control Mean	0.81	8.21	0.18	1.78	0.06	0.20	3.37	11.86	0.33	0.97
Control SD	0.39	4.67	0.38	7.23	0.23	1.20	3.59	15.78	0.47	4.24

Notes: The main business outcomes (in Columns 1-2 and 7-8) were measured at the daily level. Labor supply in secondary occupations, farming, credit (Columns 3-4, 5-6 and 9-10) are presented over a week since this is how it was measured in the surveys and it is the only way to present the extensive margin. There are fewer observations for profits/revenues (compared to main business) because this was only asked for the past 4 days in the second round of HFPS (labor supply was asked for a 7 day recall). All regressions control for strata, a measure of the dependent variable during the intake survey (where applicable), date fixed effects, assignment to high frequency group and are probability weighted (see in the text for details). All monetary variables are expressed in USD and are winsorized at 5%.
Standard errors clustered at individual level in parentheses. *, **, and *** indicate significance at 10%, 5%, and 1% respectively.

[1]Credit include digital loans and loans from VSLAs, ROSCAs, banks, microfinance institutions, and moneylenders.

Web Appendix Table E4. Treatment effects on labor supply and business outcomes (monitoring surveys), specification without baseline controls

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Labor Supply						Business outcomes		Credit Taken[1]		Credit to Customers
	Main Business		Other occupations		Farming				Took out loan	Value	
	=1 if worked	Hours	=1 if worked	Hours	=1 if farmed	Hours	Profits	Revenues			
Panel A. Individual Accounts											
One lockbox	-0.04	-0.26	-0.02	-0.62	0.05	0.81	-0.42	-2.21*	0.01	1.29	0.14*
	(0.03)	(0.40)	(0.03)	(0.79)	(0.05)	(0.59)	(0.37)	(1.30)	(0.05)	(1.14)	(0.08)
Multiple lockboxes	-0.01	-0.29	0.09**	1.51	0.09	1.64**	-0.16	-0.95	-0.03	1.43	0.17*
	(0.03)	(0.41)	(0.04)	(1.23)	(0.06)	(0.69)	(0.36)	(1.19)	(0.06)	(1.81)	(0.09)
One mobile money account	-0.06	-0.83*	0.04	1.20	0.11*	1.92***	-0.44	-1.84	0.02	1.40	0.13*
	(0.04)	(0.48)	(0.04)	(1.05)	(0.06)	(0.66)	(0.35)	(1.23)	(0.05)	(1.31)	(0.07)
Multiple mobile money accounts	-0.03	-0.49	0.02	0.55	-0.03	0.89	-0.47	-1.31	0.00	-0.10	0.10
	(0.04)	(0.40)	(0.03)	(0.80)	(0.05)	(0.72)	(0.35)	(1.26)	(0.05)	(1.22)	(0.08)
p-values											
One lockbox = multiple lockbox	0.47	0.93	0.015**	0.068*	0.52	0.28	0.48	0.30	0.46	0.93	0.75
One m.m. = multiple m.m.	0.49	0.48	0.67	0.59	0.013**	0.20	0.92	0.65	0.61	0.26	0.77
Panel B. Pooled Lockboxes and Mobile Money Accounts											
Boxes	-0.03	-0.27	0.03	0.42	0.07	1.21**	-0.29	-1.60	0.01	1.29	0.14*
	(0.03)	(0.35)	(0.03)	(0.85)	(0.05)	(0.51)	(0.31)	(1.08)	(0.05)	(1.14)	(0.08)
Mobile Money	-0.05	-0.67*	0.03	0.88	0.04	1.44***	-0.46	-1.62	0.01	0.71	0.11*
	(0.03)	(0.37)	(0.03)	(0.73)	(0.05)	(0.55)	(0.31)	(1.09)	(0.05)	(1.09)	(0.06)
p-values											
Lockbox = Mobile Money	0.38	0.21	0.80	0.63	0.51	0.67	0.49	0.98	0.51	0.67	0.80
Observations	9261	9261	1321	1321	1323	1321	1308	1317	1323	1323	1317
Number of Businesses	723	723	723	723	723	723	721	722	723	723	719
Control Mean	0.74	7.35	0.13	1.82	0.24	2.05	3.02	10.07	0.67	5.57	0.23
Control SD	0.44	5.08	0.33	8.34	0.43	5.76	3.37	13.51	0.47	10.71	0.54

Notes: Labor supply in the main business (columns 1-2) was measured at the daily level (for 7 days prior to the survey date), other variables were measured over the past week. Labor supply in secondary occupations, farming, credit (Columns 3-4, 5-6 and 9-10) are presented over a week since this is how it was measured in the surveys and it is the only way to present the extensive margin. Profits and revenues (columns 7-8) are measured at the weekly level, but are converted to daily averages. Credit to customers (column 11) is measured over a month but converted to daily averages. All regressions control for strata, a measure of the dependent variable during the intake survey (where applicable), date of the survey fixed effects, assignment to high frequency group and are probability weighted (see in the text for details). All monetary variables are expressed in USD and are winsorized at 5%. Standard errors clustered at individual level in parentheses. *, **, and *** indicate significance at 10%, 5%, and 1% respectively.

[1]Credit include digital loans and loans from VSLAs, ROSCAs, banks, microfinance institutions, and moneylenders.

Web Appendix Table E5. Treatment effects on expenditures (high frequency phone surveys), specification without baseline controls

	(1) Staple foods	(2) Personal expenses	(3) Household expenses	(4) School expenses	(5) Total
Panel A. Individual Accounts					
One lockbox	0.07	0.05	0.05	0.13***	0.38
	(0.12)	(0.07)	(0.08)	(0.05)	(0.36)
Multiple lockboxes	0.05	0.00	0.11	0.16***	0.53
	(0.13)	(0.08)	(0.10)	(0.06)	(0.43)
One mobile money account	0.03	0.03	0.17*	0.13**	0.57
	(0.14)	(0.08)	(0.10)	(0.06)	(0.44)
Multiple mobile money accounts	-0.03	-0.04	-0.05	0.01	-0.22
	(0.12)	(0.07)	(0.07)	(0.04)	(0.34)
p-values					
One lockbox = multiple lockbox	0.90	0.48	0.55	0.60	0.75
One m.m. = multiple m.m.	0.65	0.28	0.039**	0.05*	0.071*
Panel B. Pooled Lockboxes and Mobile Money Accounts					
Boxes	0.06	0.03	0.08	0.14***	0.45
	(0.11)	(0.06)	(0.07)	(0.04)	(0.32)
Mobile Money	0.00	0.00	0.07	0.08*	0.21
	(0.12)	(0.06)	(0.07)	(0.04)	(0.34)
p-values					
Lockbox = Mobile Money	0.52	0.61	0.92	0.16	0.47
Observations	4530	4544	4544	4544	4544
Number of Businesses	391	391	391	391	391
Control Mean	1.47	0.50	0.54	0.22	3.93
Control SD	0.90	0.59	0.91	0.58	2.87

Note: Expenditures are measured over the 7 days prior to the survey and are expressed in daily values. Total expenditures include the other columns in addition to other categories not shown here. All regressions control for strata, a measure of the dependent variable during the intake survey (where applicable), date fixed effects, assignment to high frequency group and are probability weighted (see in the text for details). All monetary variables are expressed in USD and are winsorized at 5%. Standard errors clustered at individual level in parentheses. *, **, and *** indicate significance at 10%, 5%, and 1% respectively.

Web Appendix Table E6. Treatment effects on expenditures (monitoring surveys), specification without baseline controls

	(1)	(2)	(3)	(4)	(5)	(6)
	Staple foods	Personal expenses	Household expenses	School Expenses	Holiday Spending	Total
Panel A. Individual Accounts						
One lockbox	0.13	0.11	0.35**	0.00	0.01	0.65
	(0.14)	(0.10)	(0.18)	(0.07)	(0.01)	(0.48)
Multiple lockboxes	0.19	0.09	0.14	(0.03)	0.01	0.50
	(0.16)	(0.10)	(0.18)	(0.07)	(0.01)	(0.51)
One mobile money account	0.25	0.15	0.26	0.04	0.02*	0.93*
	(0.16)	(0.11)	(0.18)	(0.07)	(0.01)	(0.51)
Multiple mobile money accounts	-0.03	0.13	0.09	-0.04	0.01	0.16
	(0.14)	(0.10)	(0.17)	(0.07)	(0.01)	(0.51)
p-values						
One lockbox = multiple lockbox	0.69	0.85	0.19	0.64	0.90	0.74
One m.m. = multiple m.m.	0.058*	0.79	0.31	0.16	0.33	0.12
Panel B. Pooled Lockboxes and Mobile Money Accounts						
Boxes	0.15	0.10	0.25	-0.02	0.01	0.58
	(0.13)	(0.09)	(0.16)	(0.06)	(0.01)	(0.43)
Mobile Money	0.12	0.14	0.19	0.00	0.01	0.58
	(0.13)	(0.09)	(0.16)	(0.06)	(0.01)	(0.45)
p-values						
Lockbox = Mobile Money	0.73	0.60	0.61	0.69	0.39	0.98
Observations	1319	1322	1322	1323	1323	1323
Number of Businesses	723	723	723	723	723	723
Control Mean	1.88	0.72	0.98	0.41	0.06	5.34
Control SD	1.28	0.87	1.46	0.62	0.09	3.73

Note: Expenditures in columns 1-3 are measured over the 7 days prior to the survey and are expressed in daily values. Education and holiday spending (columns 4-5) are measured over a few months prior to the survey and converted to daily values for comparability. Total expenses include the other columns in addition to categories shown here. All regressions control for strata, a measure of the dependent variable during the intake survey (where applicable), date of the survey fixed effects, assignment to high frequency group and are probability weighted (see in the text for details). All monetary variables are expressed in USD and are winsorized at 5%. Standard errors clustered at individual level in parentheses. *, **, and *** indicate significance at 10%, 5%, and 1% respectively.

Web Appendix Table E7. Treatment effects on transfers (HFPS), without baseline controls

	(1)	(2)	(3)	(4)
		Interpersonal transfers		
	Received transfer	Value	Gave transfer	Value
Panel A. Individual Accounts				
One lockbox	0.03	-0.30	0.07	1.03
	(0.06)	(1.24)	(0.06)	(1.05)
Multiple lockboxes	0.01	-0.12	0.09	1.01
	(0.06)	(1.12)	(0.06)	(0.93)
One mobile money account	0.06	1.03	0.12**	1.17
	(0.06)	(1.33)	(0.06)	(0.91)
Multiple mobile money accounts	0.05	-0.66	0.07	0.34
	(0.07)	(1.14)	(0.07)	(0.80)
p-values				
One lockbox = multiple lockbox	0.68	0.68	0.72	0.99
One m.m. = multiple m.m.	0.85	0.85	0.41	0.35
Panel B. Pooled Lockboxes and Mobile Money Accounts				
Boxes	0.02	-0.21	0.08	1.02
	(0.05)	(1.00)	(0.05)	(0.80)
Mobile Money	0.05	0.28	0.10*	0.80
	(0.06)	(1.07)	(0.06)	(0.74)
p-values				
Lockbox = Mobile Money	0.42	0.42	0.60	0.78
Observations	4544	4544	4544	4544
Number of Businesses	391	391	391	391
Control Mean	0.38	5.48	0.59	5.05
Control SD	0.49	12.42	0.49	8.23

Notes: Transfers include gifts and loans, and both cash and in-kind payments and do not include survey compensation. Variables are measured over the 7 days prior to the survey and converted to daily averages. All regressions control for strata, a measure of the dependent variable during the intake survey (where applicable), assignement to high frequency group and are probability weighted (see in the text for details). Date fixed effects are included. All monetary variables are expressed in USD and are winsorized at 5%.

Standard errors clustered at individual level in parentheses. *, **, and *** indicate significance at 10%, 5%, and 1% respectively.

Web Appendix Table E8. Treatment effects on transfers (monitoring surveys), without baseline controls

	(1) Received transfer	(2) Value	(3) Gave transfer	(4) Value
Panel A. Individual Accounts				
One lockbox	-0.05	-0.05	-0.04	0.02
	(0.05)	(0.08)	(0.06)	(0.05)
Multiple lockboxes	-0.11*	0.00	(0.01)	0.03
	(0.06)	(0.08)	(0.06)	(0.06)
One mobile money account	-0.01	(0.03)	0.00	0.08
	(0.05)	(0.08)	(0.06)	(0.05)
Multiple mobile money accounts	0.01	(0.02)	(0.03)	0.01
	(0.06)	(0.08)	(0.06)	(0.05)
p-values				
One lockbox = multiple lockbox	0.38	0.38	0.66	0.78
One m.m. = multiple m.m.	0.75	0.75	0.61	0.23
Panel B. Pooled Lockboxes and Mobile Money Accounts				
Boxes	-0.08*	-0.02	-0.02	0.03
	(0.05)	(0.07)	(0.05)	(0.04)
Mobile Money	0.00	-0.03	(0.02)	0.05
	(0.05)	(0.07)	(0.05)	(0.04)
p-values				
Lockbox = Mobile Money	0.054*	0.054*	0.85	0.60
Observations	1323	1323	1323	1323
Number of Businesses	723	723	723	723
Control Mean	0.58	0.43	0.59	0.26
Control SD	0.49	0.73	0.49	0.39

Notes: Transfers include gifts and loans, and both cash and in-kind payments and do not include survey compensation. Variables are measured over the 7 days prior to the survey and converted to daily averages. All regressions control for strata, a measure of the dependent variable during the intake survey (where applicable), assignement to high frequency group and are probability weighted (see in the text for details). Survey date fixed effects are included. All monetary variables are expressed in USD and are winsorized at 5%. Standard errors clustered at individual level in parentheses. *, **, and *** indicate significance at 10%, 5%, and 1% respectively.