

Appendix Table 1: Randomization Matrix

	<i>Number of active SIM cards/cellphone numbers owned by all household members</i>	<i>Number of swan neck toilets installed in the household's dwelling</i>
<i>Number of flat-screen TVs with 30" or larger screen owned by all household members</i>	8 provinces	8 provinces
<i>Number of rooms in the household's dwelling</i>	10 provinces	8 provinces

Notes: This figure illustrates the four potential questions that were randomly assigned to households in the PBDT targeting questionnaire in 2015.

Appendix Table 2: Randomization Check

	(1) Urban	(2) HH Size	(3) Owns home phone	(4) Owns cellphone	(5) Nb. people with phones in HH	(6) Nb. SIM Cards in HH	(7) Cable TV in HH	(8) WC Goose in HH
TV Treatment	-0.043 (0.039) [0.229]	-0.164** (0.066) [0.025]	-0.012 (0.008) [0.070]	-0.004 (0.018) [0.969]	-0.088 (0.072) [0.289]	-0.100 (0.076) [0.178]	0.016 (0.017) [0.343]	0.010 (0.025) [0.817]
Cell Treatment	-0.001 (0.035) [0.989]	-0.077 (0.063) [0.369]	0.012* (0.006) [0.061]	-0.018 (0.018) [0.815]	0.004 (0.067) [0.963]	0.020 (0.069) [0.805]	-0.008 (0.016) [0.650]	0.017 (0.027) [0.722]
Observations	70,741	70,741	70,741	70,741	70,741	70,741	70,741	70,741
Strata FE	YES	YES	YES	YES	YES	YES	YES	YES
Dep. Var Mean	0.431	3.866	0.0487	0.837	1.700	1.804	0.0831	0.698

Notes: This table tests for balance between treatment and control groups along 8 baseline characteristics. Outcome variables were chosen from the March 2014 SUSENAS and the analysis was run after the randomization, but before the experiment was implemented. Regressions are estimated by OLS and standard errors, clustered at the province level, are shown in parentheses. Randomization inference p -values are shown in brackets.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$ shown computed using the clustered standard errors.

Appendix Table 3: District-times-Urban/Rural Controls Selected by Double-LASSO Procedure for Table 1 Specifications*Panel A: 2016 Outcome Data*

Owns TV	Computer ownership (July 2010); Computer ownership (Pooled 2012); Computer ownership (Pooled 2014); Concrete roof (Feb. 2007); Concrete roof (July 2007); Concrete roof (July 2008); Concrete roof (July 2009); Concrete roof (Pooled 2011); Concrete roof (Pooled 2012); Concrete roof (Pooled 2014); Cook with bottled water (Pooled 2014); Drink clean water (March 2015); Electricity (Pooled 2011); Electricity (Pooled 2012); Electricity (Pooled 2014); Home internet (July 2009); Kerosene gas (Pooled 2013); Landline for internet (July 2008); Lease home (July 2010); Lighting wattage 2200 (July 2010); Lighting wattage 2200 (Pooled 2013); Lighting wattage higher than 2200 (July 2009); Lighting wattage higher than 2200 (Pooled 2012); Lighting wattage no meter (Pooled 2011); Marble/granite floor (March 2015); Mutual squat toilet (Pooled 2012); Mutual squat toilet (March 2015); Mutual water (Pooled 2012); Not buying drinking water (March 2015); Use landlines for internet (July 2008); Number household members use other internet (July 2009); Own house (Pooled 2013); Personal goose toilet (Pooled 2013); Personal squat toilet (July 2009); Personal squat toilet (March 2010); Personal squat toilet (Pooled 2012); Personal toilet (July 2009); Personal toilet (July 2010); Personal toilet (March 2015); Public internet (March 2015); Soil floor (March 2015); Urban; Use internet for financial purposes (March 2015)
Nb. SIM Cards	Bamboo floor (July 2010); Computer ownership (July 2010); Computer ownership (Pooled 2012); Computer ownership (Pooled 2014); Concrete roof (Pooled 2011); Concrete roof (Pooled 2012); Cook using bottled water (Pooled 2014); Drink clean water (March 2015); Four or more families in house (Pooled 2013); Landline for internet (July 2008); Lighting wattage higher than 2200 (July 2009); Personal toilet (March 2015); Public internet (March 2015); Refill cooking water (Pooled 2014); Rent house (March 2009); Soil floor (Pooled 2011); Use internet at office (July 2007); Use internet at school (March 2015); Use a public water source (Feb. 2007); Use a public water source (March 2008); Urban
Nb. Rooms	Drink river water (March 2015); No public toilet (March 2015); Personal toilet (March 2015); Public squat toilet (Pooled 2013); Residential house (Pooled 2012); Shingle roof (Pooled 2011); Wood floor (Pooled 2013)
Owns WC	Bamboo floor (July 2010); Drink river water (March 2009); Drink river water (Pooled 2012); Drink river water (Pooled 2013); Drink water from unprotected spring (Pooled 2014); Goose toilet (Pooled 2012); No electricity (March 2015); Not buying drinking water (March 2015); Other electricity (Feb. 2007); Other electricity (March 2009); Other roof (March 2008); Personal goose toilet (Pooled 2013); Personal goose toilet (Pooled 2014); Personal squat toilet (March 2015); Personal toilet (March 2008); Personal toilet (March 2015); Public squat toilet (March 2015); Squat toilet (July 2010);

Appendix Table 3: District-times-Urban/Rural Controls Selected by Double-LASSO Procedure for Table 1 Specifications*Panel B: 2017 Outcome Data*

Owns TV	Asbestos roof (July 2008); Computer ownership (Pooled 2014); Concrete roof (July 2007); Concrete roof (March 2010); Concrete roof (Pooled 2012); Concrete roof (March 2015); Cook bottled water (Pooled 2014); Drink clean water (March 2015); Landline for internet (July 2008); Laptop ownership (July 2010); Lease home (July 2007); Lease home (March 2008); Lease home (July 2010); Lease home (Pooled 2011); Lease home (March 2015); Lighting wattage 2200 (July 2009); Lighting wattage 2200 (July 2010); Lighting wattage higher than 2200 (July 2009); Lighting wattage higher than 2200 (Pooled 2012); Home internet (July 2009); Marble/granite floor (March 2015); Mutual water source (Pooled 2012); Mutual squat toilet (July 2010); Personal goose toilet (Pooled 2011); Personal toilet (July 2009); Refill cooking water (Pooled 2014); Refill wash water (March 2015); Rent house (Pooled 2013); Urban; Use internet at office (March 2015); Use internet for financial purposes (March 2015)
Nb. People with Phones	Computer ownership (Pooled 2012); Computer ownership (Pooled 2014); Concrete roof (Pooled 2012); Cook bottled water (Pooled 2014); Drink clean water (March 2015); Landline for internet (July 2008); Lease house (July 2007); Lease house (July 2010); Personal toilet (March 2015); Public internet (March 2015); Public water source (Pooled 2011); Rent house (March 2009); Soil floor (Pooled 2011); Urban; Use internet at office (July 2007); Use internet at office (March 2015); Use internet for financial purposes (March 2015)
Nb. Rooms	Drink river water (Pooled 2013); Drink river water (March 2015); High-quality wood floor (Pooled 2013); No public toilet (July 2007); Paraffin lamp for light (July 2010); Personal toilet (March 2015); Residential house (Pooled 2012); Residential house (Pooled 2013)
Owns WC	Goose toilet (March 2008); Mutual squat toilet (Pooled 2014); No access to water (March 2015); No public toilet (July 2007); No toilet (Feb. 2007); Oil lamp for light (Pooled 2013); Personal goose toilet (Pooled 2011); Personal squat toilet (Pooled 2011); Personal squat toilet (Pooled 2012); Personal toilet (March 2015); Personal unclosed pit toilet (March 2015)

Appendix Table 4: Replication of Table 1, Dropping Control Variables

	(1) Own TV	(2) Nb. SIM Cards	(3) Nb. Rooms	(4) Own WC
<i>Panel A: 2016 Data</i>				
TV Treatment	-0.0309* (0.0171) [0.018]	-0.0827 (0.0780) [0.336]		
Cell Treatment	0.00213 (0.0144) [0.893]	0.0111 (0.0720) [0.911]		
Room Treatment			-0.0527 (0.199) [0.788]	0.0162 (0.0214) [0.555]
WC Treatment			0.0346 (0.188) [0.885]	-0.00842 (0.0227) [0.801]
Observations	291,414	291,414	291,414	291,414
Controls	None	None	None	None
Strata FE	YES	YES	YES	YES
Dep. Variable Mean	0.110	2.183	6.150	0.672
FWER-adjusted <i>p</i> -value	0.266	0.959	0.959	0.959
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	(1) Own TV	(2) Nb. People with Phones	(3) Nb. Rooms	(4) Own WC
<i>Panel B: 2017 Data</i>				
TV Treatment	-0.0205 (0.0196) [0.124]	-0.0651 (0.0636) [0.418]		
Cell Treatment	0.00966 (0.0160) [0.466]	-0.0147 (0.0602) [0.869]		
Room Treatment			-0.0983 (0.187) [0.594]	0.0144 (0.0201) [0.596]
WC Treatment			-0.0128 (0.176) [0.956]	-0.00988 (0.0211) [0.755]
Observations	297,276	297,276	297,276	297,276
Controls	None	None	None	None
Strata FE	YES	YES	YES	YES
Dep. Variable Mean	0.116	1.957	6.229	0.696
FWER-adjusted <i>p</i> -value	0.749	0.927	0.927	0.927

Notes: This table replicates Table 1, but does not include the control variables selected by the double lasso (other than the strata) in the regressions. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Appendix Table 5: Replication of Table 1, Alternate Cell Phone Outcome Variable in 2016

	(1) Nb. People with Phones
TV Treatment	-0.0113 (0.0316) [0.838]
Cell Treatment	-0.0128 (0.0305) [0.834]
Observations	291,414
Controls	Lasso
Strata FE	YES
Dep. Variable Mean	1.924
FWER-adjusted <i>p</i> -value	0.734

Notes: The SIM card question in the 2016 SUSENAS was removed in the 2017 survey. Instead, we used the number of people with phones as an alternative measure of SIM card usage in 2017 (Table 1, Panel B, Column 2). In this table, we replicate the 2016 analysis using number of phones rather than number of SIM cards as the outcome variable. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Appendix Table 6: Replication of Table 2, with Data Truncated in March 2016

	(1)	(2)	(3)
	Log Sales	Log Sales	Log Sales
TV Treatment x Post	0.0614 (0.0564)	0.0614 (0.0789)	0.0572 (0.0482)
Cell Treatment x Post	0.201*** (0.0564)	0.201** (0.0789)	0.103** (0.0474)
Observations	156	156	156
Model/Standard Errors	Robust	Newey	Panel-Corrected AR(1)
Dep. Variable Mean	10.76	10.76	10.76
TV coef. = -0.95 F-statistic / chi-squared	321.1	164.4	436.6
TV coef. = -0.95 <i>p</i> -value	<0.001	<0.001	<0.001

Notes: This table replicates Table 2, but truncates the data in March 2016. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Appendix Table 7a: Effect of Treatment on Actual Television Sales (Month FE)

	(1) Log Sales	(2) Log Sales	(3) Log Sales
TV Treatment x Post	0.0540 (0.0470)	0.0540 (0.0785)	0.0498 (0.0564)
Cell Treatment x Post	0.190*** (0.0470)	0.190** (0.0785)	-0.00391 (0.0509)
Observations	192	192	192
Model/Standard Errors	Robust	Newey	Panel-Corrected AR(1)
Dep. Variable Mean	10.77	10.77	10.77
TV coef. = -.95 F-statistic / chi-squared	456.4	163.4	314.8
TV coef. = -.95 p-value	<0.001	<0.001	<0.001

Notes: This table replicates Table 2, but includes month fixed effects in all regressions. *** p<0.01, ** p<0.05, * p<0.1.

Appendix Table 7b: Effect of Treatments on Actual Television Sales (Month-Year FE)

	(1) Log Sales	(2) Log Sales	(3) Log Sales
TV Treatment x Post	0.0540 (0.0365)	0.0540 (0.0582)	0.0509 (0.0515)
Cell Treatment x Post	0.190*** (0.0365)	0.190*** (0.0582)	0.0417 (0.0511)
Observations	192	192	192
Model/Standard Errors	Robust	Newey	Panel-Corrected AR(1)
Dep. Variable Mean	10.77	10.77	10.77
TV coef. = -.95 F-statistic / chi-squared	757	297.6	377.6
TV coef. = -.95 p-value	<0.001	<0.001	<0.001

Notes: This table replicates Table 2, but includes month-of-year fixed effects in all regressions. *** p<0.01, ** p<0.05, * p<0.1.

Appendix Table 8: Effect of Treatments on SIM Card Ownership, Dropping Jakarta for Robustness

	(1)	(2)	(3)
	Log Subscribers	Log Subscribers	Log Subscribers
<i>Panel A: 2015 Data</i>			
Cell Treatment	-0.310 (0.407) [0.196]	-0.135 (0.145) [0.532]	-0.143 (0.153) [0.508]
TV Treatment	-0.173 (0.414) [0.511]	-0.162 (0.155) [0.393]	-0.148 (0.142) [0.467]
Observations	33	33	33
Log population control	N	Y	Y
Strata FE	N	N	Y
Dep. Variable Mean	14.90	14.90	14.90
<i>Panel B: 2016 Data</i>			
Cell Treatment	-0.332 (0.403) [0.169]	-0.159 (0.147) [0.480]	-0.171 (0.159) [0.445]
TV Treatment	-0.168 (0.410) [0.544]	-0.157 (0.159) [0.487]	-0.135 (0.145) [0.573]
Observations	33	33	33
Log population control	N	Y	Y
Strata FE	N	N	Y
Dep. Variable Mean	15.13	15.13	15.13
<i>Panel C: 2017 Data</i>			
Cell Treatment	-0.241 (0.408) [0.232]	-0.0610 (0.133) [0.562]	-0.0606 (0.107) [0.573]
TV Treatment	0.0231 (0.411) [0.901]	0.0347 (0.131) [0.748]	0.0206 (0.108) [0.835]
Observations	33	33	33
Log population control	N	Y	Y
Strata FE	N	N	Y
Dep. Variable Mean	15.52	15.52	15.52

Notes: This table replicates Table 3, dropping Jakarta for robustness. *** p<0.01, ** p<0.05, * p<0.1.

Appendix Table 9: Effect of Treatments on SIM Card Ownership, All Years Pooled

	(1) Log Subscribers	(2) Log Subscribers	(3) Log Subscribers
Cell Treatment	-0.216 (0.231) [0.344]	-0.0930 (0.0932) [0.568]	-0.0982 (0.0931) [0.551]
TV Treatment	-0.184 (0.237) [0.434]	-0.118 (0.0973) [0.452]	-0.117 (0.0895) [0.469]
Observations	102	102	102
Log population control	N	Y	Y
Strata FE	N	N	Y
Dep. Variable Mean	15.22	15.22	15.22

Notes: This table replicates Table 3, pooling all data from 2015-2017 into a single regression within each column.

*** p<0.01, ** p<0.05, * p<0.1.

Appendix Table 10: Effect of Treatments on SIM Card Ownership, All Years Pooled (Jakarta Dropped)

	(1) Log Subscribers	(2) Log Subscribers	(3) Log Subscribers
Cell Treatment	-0.294 (0.233) [0.183]	-0.118 (0.0943) [0.462]	-0.125 (0.0939) [0.448]
TV Treatment	-0.106 (0.236) [0.645]	-0.0946 (0.0984) [0.576]	-0.0876 (0.0883) [0.618]
Observations	99	99	99
Log population control	N	Y	Y
Strata FE	N	N	Y
Dep. Variable Mean	15.18	15.18	15.18

Notes: This table replicates Appendix Table 8, pooling all data from 2015-2017 into a single regression within each column.

*** p<0.01, ** p<0.05, * p<0.1.

Appendix Figure 1: Timeline

#	Event	2013	2014	2015	2016	2017	
1	Baseline SUSENAS data*	[Shaded area from start to mid-2014]			[Bar]		
2	PBDT Questionnaire			[Bar]			
3	Main SUSENAS				[Bar]	[Bar]	
4	Television Sales Data	[Shaded area from start to mid-2016]					
5	Cell phone Sales Data			[Shaded area from mid-2014 to end]			

Notes: This timeline illustrates the major events associated with this paper. The baseline SUSENAS data are available 2/2005, 7/2005, 3/2006, 7/2006, 2/2007, 7/2007, 3/2008, 7/2008, 3/2009, 7/2009, 3/2010, 7/2010, 2011, 2012, 2013, 2014, and 3/2015, and outcome data are available 3/2016 and 3/2017.