1 Figures

Figure 1: Seasonal Food Security and Pre-Trends

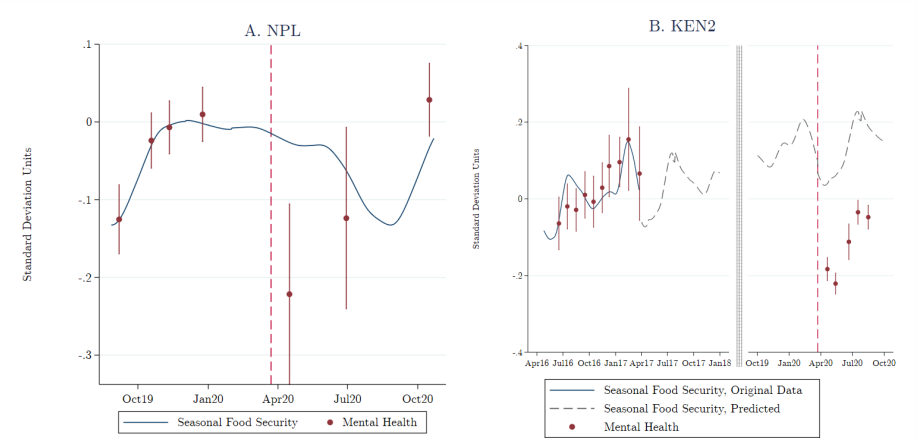
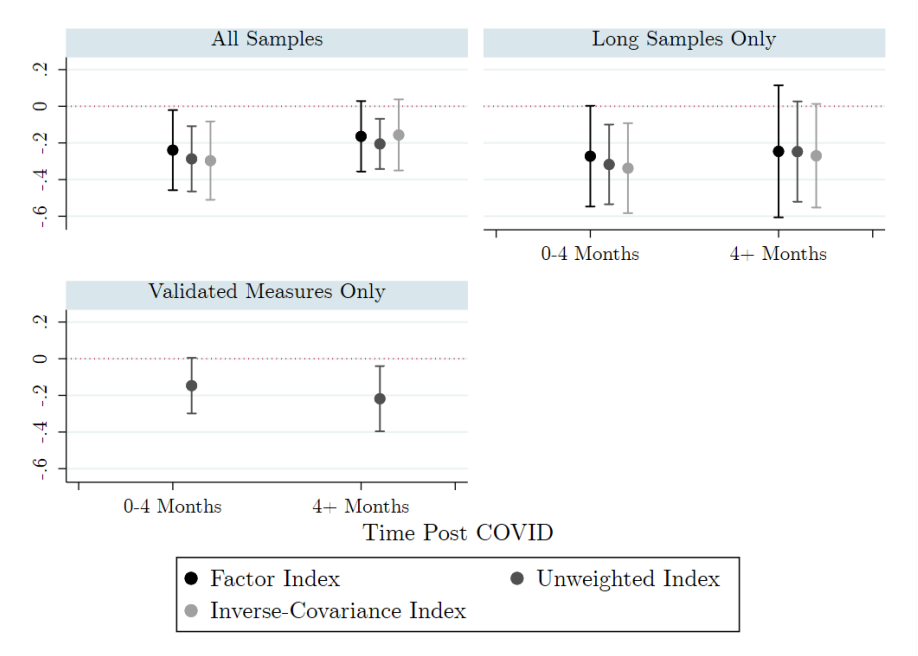


Figure 2: Random Effects Aggregates Different Estimation Strategies



2 Tables

Table 1: Best Estimates from Each Sample

	Season + Time Trend			Seasonal Food Security Ctrl		Time Control	Pre-Post Only			
	(1) RWA	(2) COL	(3) KEN1	(4) KEN2	(5) NPL	(6) KEN3	(7) BGD	(8) NGA	(9) SLE	(10) DRC
0										
0-2 months	-0.251	-0.133	-0.705***	-0.249***	-0.201***	-0.0804		0		
	(0.381)	(0.0894)	(0.193)	(0.0159)	(0.0617)	(0.0515)		(.)		
2-4 months	-0.429		-0.873***	-0.201***	-0.0623	-0.199**		0		
	(0.430)		(0.183)	(0.0272)	(0.0627)	(0.0930)		(.)		
4-6 months	-0.148		-0.851***	-0.203***		-0.259**	0.0171			
	(0.309)		(0.208)	(0.0405)		(0.121)	(0.0389)			
6-9 months	0.0118	-0.299***			0.0580**	-0.362**				
	(0.266)	(0.100)			(0.0292)	(0.159)				
9-12 months	-0.268					-0.625**				
	(0.326)					(0.226)				
12-15 months						-0.729**		-0.356***	-0.198***	-0.241***
						(0.268)		(0.0831)	(0.0342)	(0.0477)
year	-0.284*	0.140**	0.0172			0.640***				
	(0.151)	(0.0601)	(0.161)			(0.214)				
Seasonal Food Security				0.454***	0.134***					
				(0.106)	(0.0307)					
Observations	1712	2503	5405	24899	13143	8342	6311	1081	6036	3133
Households	.	.	.	.	.	.	.	.	.	.

Standard errors in parentheses

* $p < .1$, ** $p < .05$, *** $p < .01$

Table 2: RD Estimates from Select Countries

	(1) RE Aggregate	(2) COL	(3) KEN3	(4) KEN1	(5) NPL	(6) RWA
RD_Estimate	-0.203	-0.124	-0.0678	-0.714***	-0.307***	0.264*
	(0.166)	(0.148)	(0.336)	(0.000)	(0.001)	(0.094)
Observations		2503	8342	5405	12976	1159

p-values in parentheses

* $p < .1$, ** $p < .05$, *** $p < .01$

3 Supplemental Figures

Figure S1: Data collection and lean season timeline

Figure S2: Mental Health, Lockdowns, and Cases

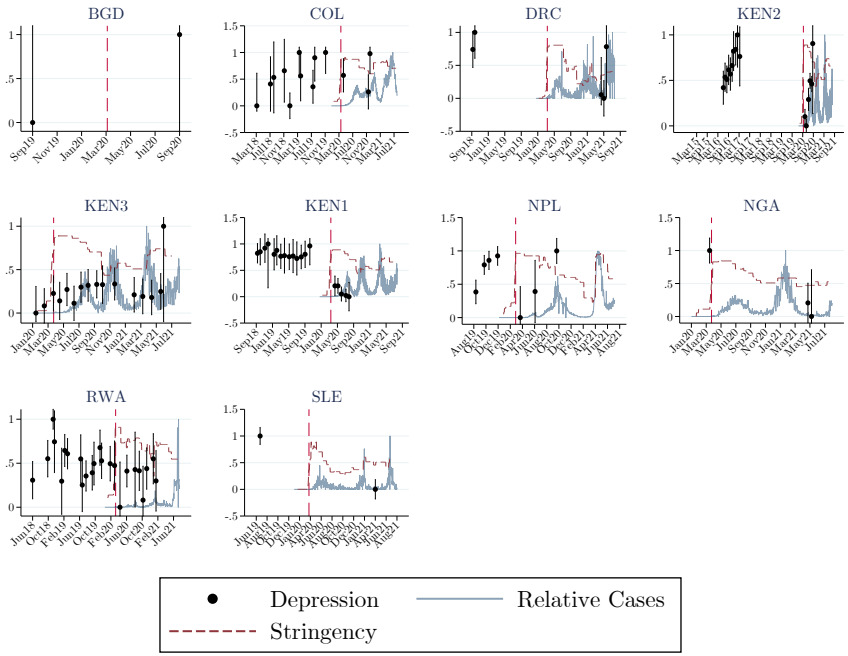
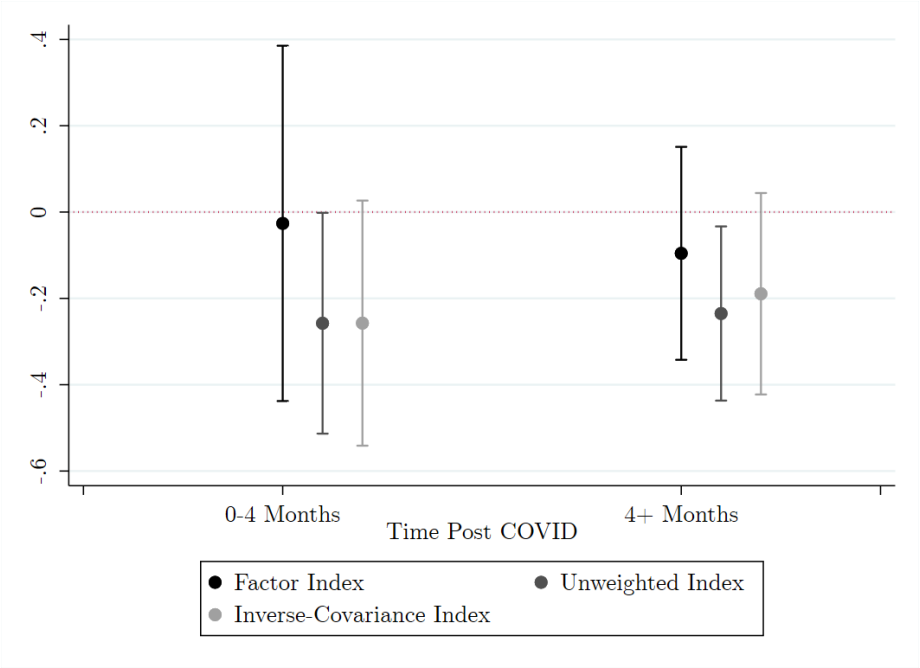
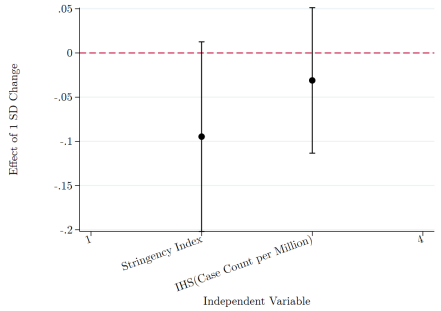


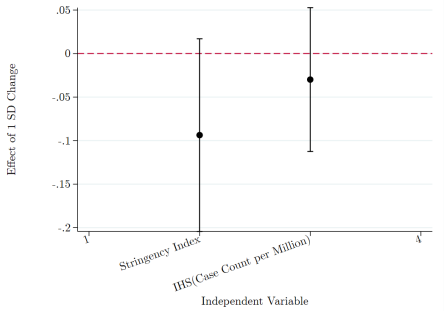
Figure S3: Random Effects Aggregates With Individual Fixed Effects and No Additional Controls



(a) Independent Variables Aggregated by Week



(b) Independent Variables Aggregated by Fortnight



(c) Independent Variables Aggregated by Month

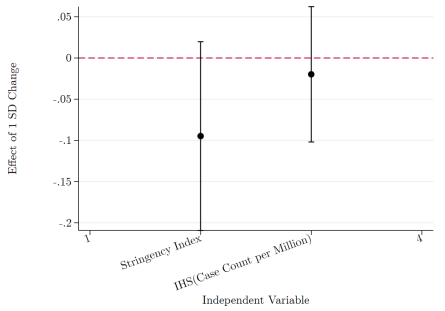
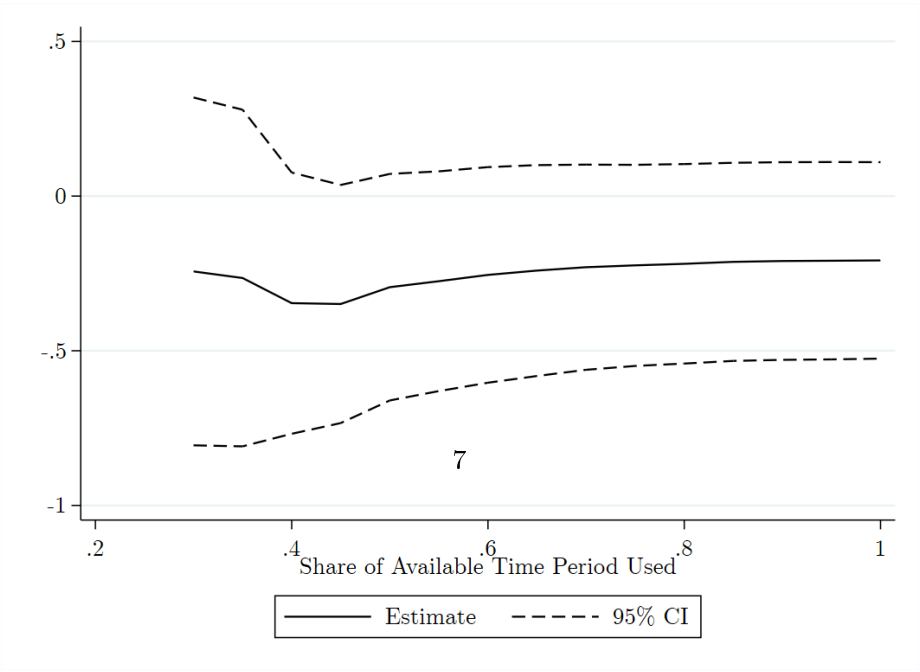


Figure S4: **Relationship between COVID-19 Policies, Cases, and Depression**

Note: Figure shows estimates of the relationship between unweighted depression index and COVID-19 policies and cases. Methodology for these estimates can be found in **S5 Appendix.**

Figure S5: Sensitivity of RD Estimates to Time Duration Used in Estimation



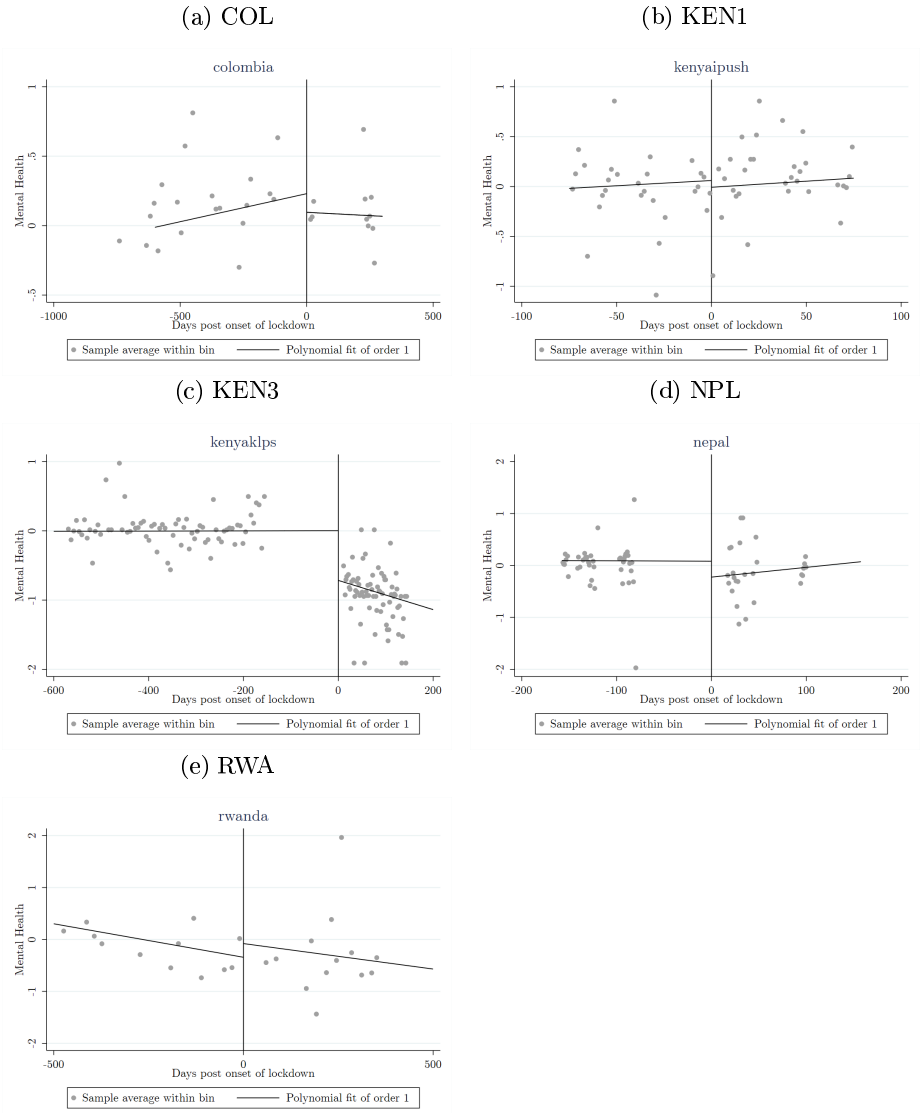


Figure S6: Regression Discontinuity Plots for Five Samples

Figure shows a graphical representation of the regression discontinuity (RD) estimates for each of the five samples in **Table 2**. The x-axis is the running variable in the RD design, days post onset of lockdowns in that country. The y-axis is standard deviation units of our unweighted depression index. The points are the average values of the index within discrete time bins. The solid lines are linear fits to the points shown pre and post the onset of the lockdown.

4 Supplemental Tables

Table S4: Best Estimates from Each Sample (ICW Index)

	Season + Time Trend			Seasonal Food Security Ctrl		Time Control	Pre-Post Only			
	(1) RWA	(2) COL	(3) KEN1	(4) KEN2	(5) NPL	(6) KEN3	(7) BGD	(8) NGA	(9) SLE	(10) DRC
0										
0-2 months	-0.245	-0.0963	-0.705***	-0.304***	-0.196***	-0.0190		0		
	(0.378)	(0.0895)	(0.193)	(0.0156)	(0.0618)	(0.0478)		(.)		
2-4 months	-0.409		-0.873***	-0.271***	-0.0576	-0.152*		0		
	(0.430)		(0.183)	(0.0268)	(0.0626)	(0.0754)		(.)		
4-6 months	-0.113		-0.851***	-0.275***		-0.241**	0.0828**			
	(0.307)		(0.208)	(0.0400)		(0.0871)	(0.0381)			
6-9 months	0.0421	-0.287***			0.0605**	-0.423***				
	(0.264)	(0.103)			(0.0292)	(0.115)				
9-12 months	-0.248					-0.789***				
	(0.323)					(0.161)				
12-15 months						-0.911***		-0.351***	-0.174***	0.263***
						(0.191)		(0.0829)	(0.0343)	(0.0482)
year	-0.317**	0.127**	0.0172			0.878***				
	(0.150)	(0.0613)	(0.161)			(0.153)				
Seasonal Food Security				0.423***	0.136***					
				(0.105)	(0.0307)					
Observations	1712	2503	5405	24899	13143	8342	6311	1081	6036	3183
Households	.	.	.	.	.	.	.	.	.	.

Standard errors in parentheses

* $p < .1$, ** $p < .05$, *** $p < .01$

Table S5: Best Estimates from Each Sample (Factor Index)

	Season + Time Trend			Seasonal Food Security Ctrl		Time Control	Pre-Post Only			
	(1) RWA	(2) COL	(3) KEN1	(4) KEN2	(5) NPL	(6) KEN3	(7) BGD	(8) NGA	(9) SLE	(10) DRC
0										
0-2 months	0	-0.201**	-0.705***	-0.188***	-0.231***	-0.0527		0		
	(.)	(0.0907)	(0.193)	(0.0623)	(0.0652)	(0.0377)		(.)		
2-4 months	-0.342		-0.873***	0.0491	-0.0913	-0.187***		0		
	(0.630)		(0.183)	(0.108)	(0.0680)	(0.0601)		(.)		
4-6 months	-0.672		-0.851***	0.162		-0.297***	-0.0699*			
	(0.458)		(0.208)	(0.160)		(0.0613)	(0.0392)			
6-9 months	-0.461	-0.336***			0.0443	-0.474***				
	(0.389)	(0.101)			(0.0307)	(0.0795)				
9-12 months	-0.603					-0.848***				
	(0.480)					(0.108)				
12-15 months						-0.986***		-0.342***	-0.226***	0.177***
						(0.128)		(0.0835)	(0.0364)	(0.0537)
year	0.541***	0.147**	0.0172			0.919***				
	(0.190)	(0.0599)	(0.161)			(0.104)				
Seasonal Food Security				1.811***	0.127***					
				(0.421)	(0.0331)					
Observations	1532	2503	5405	24838	13084	8342	6311	1076	5724	2857
Households	.	.	.	.	.	.	.	.	.	.

Standard errors in parentheses

* $p < .1$, ** $p < .05$, *** $p < .01$

Table S6: Pre-post differences in depression index (Factor Index)

	(1) BGD	(2) COL	(3) KEN2	(4) KEN3	(5) KEN1	(6) NPL	(7) NGA	(8) RWA	(9) SLE	(10) DRC
0										
0-2 months		-0.0499	-0.0255	0.133***	-0.731***	-0.251***	0	0		
		(0.0572)	(0.0239)	(0.0434)	(0.0776)	(0.0726)	(.)	(.)		
2-4 months			0.183***	0.166***	-0.922***	-0.135*	0	0.832***		
			(0.0286)	(0.0471)	(0.0672)	(0.0754)	(.)	(0.204)		
4-6 months	-0.0699*		0.351***	0.196***	-0.934***			0.334		
	(0.0392)		(0.0286)	(0.0463)	(0.101)			(0.340)		
6-9 months		-0.0676		0.184***		0.0484		0.256		
		(0.0452)		(0.0493)		(0.0342)		(0.236)		
9-12 months				0.103*				0.00953		
				(0.0537)				(0.271)		
12-15 months				0.141***			-0.342***		-0.226***	0.177***
				(0.0534)			(0.0835)		(0.0364)	(0.0537)
Observations	6311	2503	24909	8342	5405	13084	1076	1532	5724	2857

Standard errors in parentheses

* $p < .1$, ** $p < .05$, *** $p < .01$

Table S7: Pre-post differences in depression index (ICW Index)

	(1) BGD	(2) COL	(3) KEN2	(4) KEN3	(5) KEN1	(6) NPL	(7) NGA	(8) RWA	(9) SLE	(10) DRC
0										
0-2 months		-0.00959	-0.455***	0.158***	-0.731***	-0.221***	0	-0.258		
		(0.0556)	(0.0227)	(0.0437)	(0.0776)	(0.0721)	(.)	(0.336)		
2-4 months			-0.309***	0.185***	-0.922***	-0.105	0	-0.310**		
			(0.0269)	(0.0468)	(0.0672)	(0.0727)	(.)	(0.140)		
4-6 months	0.0828**		-0.212***	0.231***	-0.934***			-0.617***		
	(0.0381)		(0.0276)	(0.0447)	(0.101)			(0.215)		
6-9 months		-0.0173		0.205***		0.0697**		-0.370**		
		(0.0450)		(0.0475)		(0.0341)		(0.178)		
9-12 months				0.120**				-0.741***		
				(0.0522)				(0.169)		
12-15 months				0.166***			-0.351***		-0.174***	0.263***
				(0.0512)			(0.0829)		(0.0343)	(0.0482)
Observations	6311	2503	24970	8342	5405	13143	1081	1712	6036	3183

Standard errors in parentheses

* $p < .1$, ** $p < .05$, *** $p < .01$

Table S8: Pre-post differences in depression index

	(1) BGD	(2) COL	(3) KEN2	(4) KEN3	(5) KEN1	(6) NPL	(7) NGA	(8) RWA	(9) SLE	(10) DRC
0										
0-2 months		-0.0166	-0.353***	0.0489	-0.731***	-0.226***	0	-0.243		
		(0.0546)	(0.0226)	(0.0410)	(0.0776)	(0.0720)	(.)	(0.340)		
2-4 months			-0.179***	0.0467	-0.922***	-0.110	0	-0.283**		
			(0.0268)	(0.0442)	(0.0672)	(0.0729)	(.)	(0.142)		
4-6 months	0.0171		-0.0737***	0.0850**	-0.934***			-0.594***		
	(0.0389)		(0.0275)	(0.0425)	(0.101)			(0.216)		
6-9 months		-0.0108		0.0958**		0.0669**		-0.351*		
		(0.0451)		(0.0458)		(0.0341)		(0.180)		
9-12 months				0.0377				-0.725***		
				(0.0493)				(0.171)		
12-15 months				0.0558			-0.356***		-0.198***	-0.241***
				(0.0489)			(0.0831)		(0.0342)	(0.0477)
Observations	6311	2503	24970	8342	5405	13143	1081	1712	6036	3133

Standard errors in parentheses

* $p < .1$, ** $p < .05$, *** $p < .01$

Table S9: Heterogeneity in Estimates by Gender

	(1) KEN1	(2) KEN2	(3) NPL	(4) KEN3	(5) DRC	(6) NGA	(7) SLE
0-4 months	-0.931***	-0.447***	-0.166*	-0.125	0	0	0
	(-3.50)	(-6.35)	(-2.22)	(-0.45)	(.)	(.)	(.)
4+ months	-0.869**	-0.351*	0.0333		-0.254***	-0.416***	-0.237***
	(-2.74)	(-2.07)	(0.75)		(-3.66)	(-3.35)	(-5.35)
0-4 months × Female	0.225	0.144	-0.0472	-0.0467			
	(0.63)	(1.75)	(-0.40)	(-0.16)			
4+ months × Female	0.0855	0.117	0.0282		0.0273	0.105	0.0984
	(0.20)	(0.59)	(0.41)		(0.29)	(0.63)	(1.41)
Obs	5405	18503	11165	3906	3107	1081	6036
P: row 3 = 0 and row 4 = 0	0.749	0.0685	0.820	0.876	0.775	0.530	0.157

t statistics in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table S10: Heterogeneity in Estimates by Socioeconomic Status

	(1) COL	(2) KEN1	(3) RWA	(4) KEN2	(5) NPL	(6) KEN3	(7) BGD	(8) DRC	(9) NGA	(10) SLE
0-4 months	-0.152	-0.790	0.330	-0.337***	-0.194**	-0.512*	0	0	0	0
	(-1.15)	(-1.58)	(0.52)	(-6.43)	(-2.59)	(-2.08)	(.)	(.)	(.)	(.)
4+ months	-0.253	-0.816	0.375	-0.281*	0.0347		-0.126*	-0.235**	-0.328*	-0.201***
	(-1.64)	(-1.42)	(0.58)	(-2.18)	(0.70)		(-2.25)	(-2.88)	(-2.30)	(-4.28)
0-4 months × High SES	0.00722	-0.192	-1.206	-0.00766	0.0708	0.562				
	(0.04)	(-0.33)	(-1.08)	(-0.10)	(0.64)	(1.79)				
4+ months × High SES	-0.119	-0.0981	-0.401	0.0337	0.0647		0.264***	-0.00761	-0.0482	0.00674
	(-0.60)	(-0.15)	(-0.55)	(0.19)	(0.95)		(3.41)	(-0.08)	(-0.27)	(0.10)
Obs	2503	3162	1617	18517	13123	3885	6311	3133	1075	6036
P: row 3 = 0 and row 4 = 0	0.783	0.923	0.559	0.887	0.571	0.0741	0.000660	0.940	0.784	0.921

t statistics in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table S11: Heterogeneity in Estimates by Age

	(1) COL	(2) KEN1	(3) RWA	(4) KEN2	(5) NPL	(6) KEN3	(7) BGD	(8) DRC	(9) NGA	(10) SLE
0-4 months	-0.0912	-0.974***	-0.157	-0.431***	-0.183*	-0.156	0	0	0	0
	(-0.66)	(-3.62)	(-0.31)	(-8.91)	(-2.39)	(-0.79)	(.)	(.)	(.)	(.)
4+ months	-0.313*	-0.942**	-0.0379	-0.376**	0.0596		0.0584	-0.204**	-0.270*	-0.216***
	(-1.99)	(-2.95)	(-0.10)	(-3.18)	(1.22)		(0.99)	(-2.65)	(-2.31)	(-4.26)
0-4 months × High Age	-0.125	0.282	-0.208	0.205**	0.0378	-0.00486				
	(-0.68)	(0.79)	(-0.32)	(2.75)	(0.35)	(-0.02)				
4+ months × High Age	-0.00878	0.201	-0.142	0.288	-0.00686		-0.0764	-0.0687	-0.165	0.0309
	(-0.04)	(0.47)	(-0.28)	(1.58)	(-0.10)		(-0.98)	(-0.65)	(-1.00)	(0.45)
Obs	2503	5405	1712	18517	11853	3888	6304	2540	1081	5926
P: row 3 = 0 and row 4 = 0	0.754	0.720	0.939	0.0107	0.930	0.987	0.330	0.513	0.320	0.653

t statistics in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$