

Regressions with Cluster average Food Security

March 1, 2018

Table 1: Cluster level average of logFCS measure: IPC zone covariates

	(1) clust_logFCS	(2) clust_logFCS	(3) clust_logFCS
ipc_lag1	0.015 (0.027)	0.002 (0.025)	-0.022 (0.025)
ipc_lag12	-0.163*** (0.059)	-0.077 (0.055)	-0.020 (0.066)
ipczone_L12raincytot	-0.070 (0.081)	-0.034 (0.076)	-0.023 (0.078)
ipczone_L12day1rain	-0.165** (0.075)	0.081 (0.075)	-0.069 (0.081)
ipczone_L12maxdays	-0.220 (0.223)	-0.156 (0.206)	-0.044 (0.208)
ipczone_floodmax	-0.348 (0.473)	-0.204 (0.436)	0.165 (0.443)
ipczone_price	-0.142*** (0.036)	-0.184*** (0.035)	-0.180*** (0.035)
ipczone_thinn	0.005 (0.034)	-0.011 (0.031)	-0.009 (0.031)
ipczone_percent_ag	-0.118 (0.075)	0.126 (0.080)	0.020 (0.083)
ipczone_elevation	-0.070* (0.040)	-0.079** (0.038)	-0.118*** (0.040)
ipczone_nutri_reten_constrained	-0.026 (0.036)	-0.025 (0.037)	-0.023 (0.037)
ipczone_dist_road	-0.009*** (0.001)	-0.003** (0.001)	-0.003** (0.001)
ipczone_dist_admarc	0.009*** (0.003)	0.010*** (0.003)	0.008*** (0.003)
ipczone_roof		0.169 (0.114)	0.181 (0.121)
ipczone_cells_own		0.203*** (0.063)	0.028 (0.073)
ipczone_hhsize			0.002 (0.036)
ipczone_hh_age			-0.015** (0.007)
ipczone_hh_gender			-0.188 (0.199)
ipczone_asset			0.334*** (0.073)
Observations	553	553	553
R ²	0.158	0.294	0.329

Table 2: Cluster level average of logFCS measure: TA level covariates

	(1) clust_logFCS	(2) clust_logFCS	(3) clust_logFCS
ipc_lag1	0.032 (0.025)	0.025 (0.020)	0.016 (0.019)
ipc_lag12	−0.140*** (0.053)	−0.113*** (0.042)	−0.092** (0.044)
TA_L12raincytot	0.132** (0.065)	0.090* (0.052)	0.117** (0.052)
TA_L12day1rain	−0.014 (0.156)	−0.089 (0.125)	−0.114 (0.125)
TA_L12maxdays	0.063 (0.173)	0.148 (0.139)	0.189 (0.138)
TA_floodmax	−0.052 (0.400)	0.138 (0.320)	0.243 (0.318)
TA_price	−0.035 (0.042)	−0.068** (0.034)	−0.064* (0.034)
TA_thinn	−0.012 (0.040)	−0.005 (0.032)	−0.007 (0.032)
TA_percent_ag	−0.071 (0.045)	0.051 (0.037)	0.043 (0.037)
TA_elevation	−0.020 (0.034)	−0.098*** (0.028)	−0.106*** (0.027)
TA_nutri_reten_constrained	−0.020 (0.024)	−0.016 (0.019)	−0.025 (0.019)
TA_dist_road	−0.008*** (0.001)	−0.002*** (0.001)	−0.002*** (0.001)
TA_dist_admarc	0.002 (0.002)	0.004*** (0.001)	0.004*** (0.001)
TA_roof		0.147*** (0.051)	0.066 (0.054)
TA_cells_own		0.175*** (0.024)	0.162*** (0.025)
TA_hhsize			−0.028* (0.015)
TA_hh_age			−0.002 (0.002)
TA_hh_gender			−0.080 (0.086)
TA_asset			0.141*** (0.033)
Observations	546	546	546
R ²	0.168	0.470	0.497

Table 3: Cluster level average of logFCS measure

	(1) clust_logFCS	(2) clust_logFCS	(3) clust_logFCS
ipc_lag1	0.019 (0.025)	0.020 (0.019)	0.013 (0.018)
ipc_lag12	-0.134** (0.053)	-0.105*** (0.039)	-0.075* (0.039)
clust_L12raincytot	0.095 (0.058)	0.094** (0.043)	0.112*** (0.042)
clust_L12day1rain	0.091 (0.123)	-0.010 (0.092)	-0.077 (0.090)
clust_L12maxdays	0.144 (0.148)	0.130 (0.111)	0.180* (0.107)
clust_floodmax	-0.028 (0.316)	0.153 (0.234)	0.258 (0.227)
clust_price	-0.049 (0.030)	-0.070*** (0.023)	-0.076*** (0.022)
clust_thinn	-0.014 (0.024)	-0.000 (0.018)	-0.007 (0.018)
clust_percent_ag	-0.071** (0.034)	0.006 (0.026)	0.006 (0.025)
clust_elevation	-0.021 (0.032)	-0.111*** (0.024)	-0.120*** (0.024)
clust_nutri_reten_constrained	-0.008 (0.020)	-0.002 (0.015)	-0.009 (0.014)
clust_dist_road	-0.008*** (0.001)	-0.003*** (0.001)	-0.003*** (0.001)
clust_dist_admarc	0.000 (0.001)	0.003*** (0.001)	0.003*** (0.001)
clust_roof		0.189*** (0.037)	0.145*** (0.037)
clust_cells_own		0.155*** (0.017)	0.133*** (0.018)
clust_hhsize			-0.010 (0.010)
clust_hh_age			-0.003* (0.001)
clust_hh_gender			-0.028 (0.053)
clust_asset			0.121*** (0.021)
Observations	532	532	532
R ²	0.189	0.557	0.591

Table 4: Cluster level average of HDDS measure: IPC zone covariates

	(1) clust_HDDS	(2) clust_HDDS	(3) clust_HDDS
ipc_lag1	−0.007 (0.089)	−0.076 (0.083)	−0.151* (0.084)
ipc_lag12	−0.608*** (0.197)	−0.382** (0.185)	−0.157 (0.224)
ipczone_L12raincytot	−0.887*** (0.269)	−0.893*** (0.255)	−0.709*** (0.265)
ipczone_L12day1rain	−0.264 (0.250)	0.408 (0.252)	0.011 (0.273)
ipczone_L12maxdays	−0.364 (0.746)	−0.009 (0.690)	0.214 (0.703)
ipczone_floodmax	−0.820 (1.579)	−0.132 (1.456)	0.813 (1.495)
ipczone_price	−0.397*** (0.119)	−0.609*** (0.117)	−0.596*** (0.117)
ipczone_thinn	−0.146 (0.112)	−0.164 (0.105)	−0.174* (0.104)
ipczone_percent_ag	−0.508** (0.250)	0.053 (0.269)	−0.260 (0.281)
ipczone_elevation	0.003 (0.135)	−0.095 (0.128)	−0.145 (0.137)
ipczone_nutri_reten_constrained	−0.038 (0.119)	0.079 (0.123)	0.139 (0.125)
ipczone_dist_road	−0.028*** (0.004)	−0.010** (0.004)	−0.009** (0.004)
ipczone_dist_admarc	0.024** (0.010)	0.029*** (0.009)	0.017* (0.010)
ipczone_roof		1.295*** (0.380)	1.021** (0.409)
ipczone_cells_own		0.262 (0.210)	0.065 (0.247)
ipczone_hhsize			−0.089 (0.120)
ipczone_hh_age			−0.008 (0.022)
ipczone_hh_gender			0.467 (0.673)
ipczone_asset			0.915*** (0.246)
Observations	553	553	553
R ²	0.158	0.291	0.312

Table 5: Cluster level average of HDDS measure : TA level covariates

	(1) clust_HDDS	(2) clust_HDDS	(3) clust_HDDS
ipc_lag1	0.086 (0.082)	0.049 (0.066)	0.012 (0.065)
ipc_lag12	−0.531*** (0.175)	−0.444*** (0.141)	−0.300** (0.145)
TA_L12raincytot	0.033 (0.216)	−0.147 (0.174)	−0.068 (0.172)
TA_L12day1rain	0.597 (0.518)	0.301 (0.416)	0.144 (0.414)
TA_L12maxdays	−0.088 (0.576)	0.129 (0.462)	0.385 (0.459)
TA_floodmax	−0.109 (1.334)	0.461 (1.069)	0.763 (1.056)
TA_price	−0.037 (0.139)	−0.201* (0.114)	−0.205* (0.112)
TA_thinn	−0.129 (0.132)	−0.085 (0.106)	−0.107 (0.105)
TA_percent_ag	−0.228 (0.149)	0.127 (0.124)	0.072 (0.123)
TA_elevation	0.162 (0.113)	−0.118 (0.092)	−0.130 (0.091)
TA_nutri_reten_constrained	−0.083 (0.080)	−0.048 (0.065)	−0.072 (0.064)
TA_dist_road	−0.027*** (0.003)	−0.007*** (0.003)	−0.007** (0.003)
TA_dist_admarc	0.001 (0.006)	0.012** (0.005)	0.010** (0.005)
TA_roof		0.852*** (0.171)	0.588*** (0.178)
TA_cells_own		0.416*** (0.081)	0.348*** (0.084)
TA_hhsize			−0.065 (0.050)
TA_hh_age			−0.014* (0.008)
TA_hh_gender			0.163 (0.285)
TA_asset			0.538*** (0.110)
Observations	546	546	546
R ²	0.166	0.467	0.497

Table 6: Cluster level average of HDDS measure

	(1) clust_HDDS	(2) clust_HDDS	(3) clust_HDDS
ipc_lag1	0.040 (0.083)	0.041 (0.062)	0.004 (0.059)
ipc_lag12	-0.470*** (0.174)	-0.370*** (0.129)	-0.214* (0.128)
clust_L12raincytot	-0.057 (0.191)	-0.057 (0.142)	-0.000 (0.137)
clust_L12day1rain	0.675* (0.405)	0.287 (0.304)	-0.000 (0.294)
clust_L12maxdays	0.308 (0.490)	0.202 (0.367)	0.428 (0.350)
clust_floodmax	-0.326 (1.044)	0.261 (0.777)	0.610 (0.740)
clust_price	-0.085 (0.099)	-0.175** (0.075)	-0.205*** (0.071)
clust_thinn	-0.108 (0.081)	-0.060 (0.060)	-0.094 (0.058)
clust_percent_ag	-0.186 (0.113)	0.051 (0.086)	0.042 (0.082)
clust_elevation	0.174 (0.107)	-0.130 (0.081)	-0.161** (0.079)
clust_nutri_reten_constrained	-0.086 (0.066)	-0.059 (0.049)	-0.084* (0.047)
clust_dist_road	-0.028*** (0.003)	-0.009*** (0.002)	-0.008*** (0.002)
clust_dist_admarc	-0.004 (0.005)	0.005 (0.004)	0.005 (0.003)
clust_roof		0.805*** (0.121)	0.648*** (0.119)
clust_cells_own		0.425*** (0.058)	0.333*** (0.058)
clust_hhsize			-0.028 (0.031)
clust_hh_age			-0.015*** (0.005)
clust_hh_gender			0.079 (0.173)
clust_asset			0.460*** (0.068)
Observations	532	532	532
R ²	0.201	0.559	0.606

Table 7: Cluster level average of with RCSI measure:IPC zone covariates

	(1) clust_RCSI	(2) clust_RCSI	(3) clust_RCSI
ipc_lag1	1.935*** (0.283)	1.789*** (0.281)	1.519*** (0.284)
ipc_lag12	1.019 (0.627)	0.392 (0.628)	0.489 (0.755)
ipczone_L12raincytot	-1.063 (0.855)	-2.020** (0.865)	-1.505* (0.890)
ipczone_L12day1rain	1.755** (0.795)	0.129 (0.853)	-1.207 (0.918)
ipczone_L12maxdays	-5.702** (2.368)	-4.896** (2.335)	-2.588 (2.365)
ipczone_floodmax	2.365 (5.014)	3.434 (4.931)	8.532* (5.030)
ipczone_price	0.397 (0.379)	0.015 (0.396)	0.032 (0.392)
ipczone_thinn	-0.418 (0.357)	-0.149 (0.355)	-0.231 (0.351)
ipczone_percent_ag	2.104*** (0.793)	-0.228 (0.911)	-1.038 (0.944)
ipczone_elevation	-1.107*** (0.427)	-1.547*** (0.435)	-2.002*** (0.460)
ipczone_nutri_reten_constrained	1.684*** (0.377)	2.470*** (0.418)	2.561*** (0.419)
ipczone_dist_road	0.000 (0.013)	-0.038** (0.015)	-0.044*** (0.015)
ipczone_dist_admarc	-0.043 (0.030)	-0.031 (0.030)	-0.046 (0.033)
ipczone_roof		4.630*** (1.288)	3.714*** (1.377)
ipczone_cells_own		-3.360*** (0.712)	-4.665*** (0.832)
ipczone_hhsize			-0.930** (0.404)
ipczone_hh_age			-0.182** (0.075)
ipczone_hh_gender			-3.414 (2.265)
ipczone_asset			2.452*** (0.826)
Observations	553	553	553
R ²	0.400	0.426	0.450

Table 8: Cluster level average of with RCSI measure: TA level covariates

	(1) clust_RCSI	(2) clust_RCSI	(3) clust_RCSI
ipc_lag1	2.222*** (0.264)	2.275*** (0.255)	2.273*** (0.258)
ipc_lag12	0.460 (0.567)	0.331 (0.547)	0.533 (0.578)
TA_L12raincytot	-1.016 (0.698)	-0.757 (0.677)	-0.839 (0.686)
TA_L12daylrain	-0.113 (1.675)	0.316 (1.617)	0.320 (1.655)
TA_L12maxdays	0.480 (1.861)	0.146 (1.797)	0.318 (1.833)
TA_floodmax	5.701 (4.309)	4.846 (4.154)	4.700 (4.217)
TA_price	1.442*** (0.449)	1.675*** (0.444)	1.610*** (0.448)
TA_thinn	0.529 (0.426)	0.468 (0.412)	0.453 (0.418)
TA_percent_ag	0.493 (0.482)	-0.041 (0.480)	-0.077 (0.489)
TA_elevation	-1.244*** (0.365)	-0.834** (0.359)	-0.793** (0.364)
TA_nutri_reten_constrained	0.917*** (0.257)	0.869*** (0.251)	0.835*** (0.255)
TA_dist_road	0.031*** (0.010)	0.002 (0.011)	0.003 (0.011)
TA_dist_admarc	0.027 (0.018)	0.012 (0.018)	0.010 (0.018)
TA_roof		-1.195* (0.665)	-1.088 (0.712)
TA_cells_own		-0.645** (0.316)	-0.810** (0.336)
TA_hhsize			0.234 (0.199)
TA_hh_age			-0.021 (0.033)
TA_hh_gender			0.680 (1.137)
TA_asset			0.376 (0.439)
Observations	546	546	546
R ²	0.382	0.429	0.431

Table 9: Cluster level average of with RCSI measure

	(1) clust_RCSI	(2) clust_RCSI	(3) clust_RCSI
ipc_lag1	2.223*** (0.276)	2.226*** (0.265)	2.266*** (0.265)
ipc_lag12	0.836 (0.577)	0.685 (0.553)	0.882 (0.574)
clust_L12raincytot	-0.310 (0.636)	-0.311 (0.609)	-0.471 (0.613)
clust_L12day1rain	-0.407 (1.345)	0.213 (1.300)	0.567 (1.316)
clust_L12maxdays	-1.174 (1.629)	-0.958 (1.569)	-1.175 (1.569)
clust_floodmax	0.833 (3.467)	-0.010 (3.324)	-0.342 (3.316)
clust_price	0.645* (0.329)	0.796** (0.320)	0.817** (0.319)
clust_thinn	0.021 (0.268)	-0.052 (0.257)	0.008 (0.259)
clust_percent_ag	0.510 (0.376)	0.185 (0.366)	0.128 (0.366)
clust_elevation	-1.182*** (0.355)	-0.728** (0.347)	-0.552 (0.354)
clust_nutri_reten_constrained	0.497** (0.220)	0.450** (0.212)	0.425** (0.212)
clust_dist_road	0.032*** (0.010)	0.006 (0.010)	0.006 (0.010)
clust_dist_admarc	0.017 (0.016)	0.003 (0.016)	0.003 (0.016)
clust_roof		-1.359*** (0.520)	-0.971* (0.535)
clust_cells_own		-0.528** (0.248)	-0.649** (0.260)
clust_hhsize			0.426*** (0.141)
clust_hh_age			-0.013 (0.021)
clust_hh_gender			0.951 (0.776)
clust_asset			-0.210 (0.305)
Observations	532	532	532
R ²	0.359	0.414	0.426