Government Trust and Covid-19 Vaccination: The Role of Supply Disruptions and Political Allegiances in Sierra Leone

Online Appendix

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ONLINE APPENDIX

TABLE A1—ALL ETHNICITIES AND PROPORTION VACCINATED IN A CHIEFDOM

	Covid-19 vaccination					Child Immunization (Measles)	
	During first 6 months (Mar - Sep 2021)		During first 12 months (Mar 2021 - Mar 2022)			During SLPP government (2018 - 2019)	During APC government (2012 - 2013)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Proportion vaccinated w/ Covid-19 first dose	Proportion vaccinated w/ Covid-19 first dose	Proportion vaccinated w/ Covid-19 first dose	Proportion vaccinated w/ Covid-19 first dose	Proportion vaccinated w/ Covid-19 first dose ($\geq 18 years$)	Proportion vaccinated w/ measles first dose	Proportion vaccinated w/ measles first dose
Temne	-0.025	-0.030	-0.060	-0.054	-0.171	-0.039	-0.054
	(0.009)	(0.008)	(0.035)	(0.031)	(0.072)	(0.017)	(0.028)
	[0.042]	[0.006]	[0.089]	[0.091]	[0.056]	[0.055]	[0.064]
Loko	-0.042	-0.042	-0.139	-0.133	-0.284	0.027	0.078
	(0.014)	(0.015)	(0.046)	(0.044)	(0.085)	(0.024)	(0.049)
	[0.021]	[0.029]	[0.045]	[0.062]	[0.049]	[0.440]	[0.427]
Sherbro	-0.016	-0.016	-0.059	-0.055	-0.095	-0.148	-0.177
	(0.009)	(0.009)	(0.036)	(0.032)	(0.065)	(0.079)	(0.136)
	[0.115]	[0.113]	[0.477]	[0.439]	[0.250]	[0.524]	[0.524]
Limba	-0.017	-0.015	0.036	0.062	0.131	-0.056	-0.144
	(0.020)	(0.022)	(0.080)	(0.083)	(0.120)	(0.030)	(0.028)
	[0.556]	[0.600]	[0.736]	[0.554]	[0.423]	[0.181]	[0.000]
Kissi	-0.046	-0.045	-0.194	-0.188	-0.314	0.027	0.039
	(0.010)	(0.010)	(0.030)	(0.029)	(0.057)	(0.028)	(0.067)
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.507]	[0.507]
Kono	-0.042	-0.041	-0.122	-0.126	-0.318	-0.087	-0.064
	(0.007)	(0.007)	(0.021)	(0.024)	(0.044)	(0.010)	(0.017)
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.039]
Susu	-0.010	-0.009	-0.015	-0.009	-0.142	-0.101	-0.269
	(0.008)	(0.009)	(0.026)	(0.024)	(0.045)	(0.060)	(0.031)
	[0.278]	[0.299]	[0.607]	[0.739]	[0.022]	[0.469]	[0.003]
Fullah	-0.033	-0.033	-0.055	-0.049	-0.155	-0.054	-0.110
	(0.007)	(0.008)	(0.021)	(0.019)	(0.045)	(0.012)	(0.017)
	[0.001]	[0.006]	[0.003]	[0.003]	[0.012]	[0.000]	[0.000]
Krim	-0.063	-0.063	-0.215	-0.211	-0.351	-0.079	-0.148
	(0.007)	(0.007)	(0.018)	(0.016)	(0.044)	(0.012)	(0.017)
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
Yalunka	0.003	0.003	-0.136	-0.130	-0.265	-0.061	-0.084
	(0.007)	(0.007)	(0.020)	(0.018)	(0.045)	(0.012)	(0.017)
	[0.685]	[0.665]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
Koranko	-0.033	-0.033	-0.033	-0.028	-0.197	-0.115	-0.072
	(0.012)	(0.012)	(0.026)	(0.024)	(0.066)	(0.013)	(0.037)
	[0.038]	[0.060]	[0.253]	[0.309]	[0.045]	[0.000]	[0.135]
Mende Mean	0.068	0.068	0.298	0.298	0.523	0.956	0.885
Number of health centers	✓	✓	✓	✓	✓	n/a	n/a
Urban Dummy	✓	✓	✓	✓	✓	✓	✓
Year Fixed Effect	n/a	n/a	n/a	n/a	n/a	✓	✓
Drop Western Area Urban	✗	✓	✗	✓	✓	✓	✓
Observations	164	156	164	156	136	312	312

$*p < .10, **p < .05, ***p < .01$; Standard errors clustered at the district level in parentheses. In square brackets, we report the wild cluster bootstraped p-values. The analysis is at the chiefdom level, the third-level units of administration in Sierra Leone.

TABLE A2—ETHNICITIES AND PROPORTION VACCINATED IN A CHIEFDOM INCLUDING TILL DATE DATA

	Covid-19 vaccination							
	During first 6 months (Mar - Sep 2021)		During first 12 months (Mar 2021 - Mar 2022)			Full duration (Mar 2021 - Dec 2022)		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Proportion vaccinated w/ Covid-19 first dose	Proportion vaccinated w/ Covid-19 first dose	Proportion vaccinated w/ Covid-19 first dose	Proportion vaccinated w/ Covid-19 first dose	Proportion vaccinated w/ Covid-19 first dose ($\geq 18 years$)	Proportion vaccinated w/ Covid-19 first dose	Proportion vaccinated w/ Covid-19 first dose	Proportion vaccinated w/ Covid-19 first dose ($\geq 18 years$)
Temne	-0.025	-0.030	-0.063	-0.057	-0.180	-0.016	-0.011	-0.184
	(0.008)	(0.008)	(0.034)	(0.030)	(0.070)	(0.067)	(0.067)	(0.111)
	[0.036]	[0.006]	[0.075]	[0.080]	[0.049]	[0.830]	[0.872]	[0.161]
Kono	-0.042	-0.041	-0.122	-0.125	-0.319	-0.068	-0.072	-0.361
	(0.007)	(0.007)	(0.021)	(0.023)	(0.043)	(0.029)	(0.033)	(0.069)
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.059]	[0.100]	[0.025]
Other ethnicities	-0.027	-0.027	-0.059	-0.050	-0.133	-0.031	-0.019	-0.120
	(0.009)	(0.009)	(0.040)	(0.038)	(0.065)	(0.058)	(0.056)	(0.095)
	[0.009]	[0.013]	[0.256]	[0.264]	[0.051]	[0.602]	[0.758]	[0.235]
Mende Mean	0.068	0.068	0.298	0.298	0.523	0.429	0.429	0.749
Number of health centers	✓	✓	✓	✓	✓	✓	✓	✓
Urban Dummy	✓	✓	✓	✓	✓	✓	✓	✓
Drop Western Area Urban	✗	✓	✗	✓	✓	✗	✓	✓
Observations	164	156	164	156	136	164	156	136

Notes: Each column reports results for a single OLS regression of the dependent variable listed in the column heading on the variables listed in the row headings, a binary variable indicating if the chiefdom is urban and the number of health centers. In Columns 1, 3 and 6, the sample includes observations from Western Area Urban (WAU) while in all other columns observations from WAU are not included in the sample. Standard errors clustered at the district level in parentheses. Wild cluster bootstrapped p-values in square brackets.

TABLE A3—ETHNICITIES AND PROPORTION VACCINATED IN A CHIEFDOM WITH REGION FIXED EFFECT

	Covid-19 vaccination					Child Immunization (Measles)	
	During first 6 months (Mar - Sep 2021)		During first 12 months (Mar 2021 - Mar 2022)			During SLPP government (2018 - 2019)	During APC government (2012 - 2013)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Proportion vaccinated w/ Covid-19 first dose	Proportion vaccinated w/ Covid-19 first dose	Proportion vaccinated w/ Covid-19 first dose	Proportion vaccinated w/ Covid-19 first dose	Proportion vaccinated w/ Covid-19 first dose ($\geq 18 years$)	Proportion vaccinated w/ measles first dose	Proportion vaccinated w/ measles first dose
Temne	-0.035	-0.039	-0.148	-0.146	-0.260	-0.044	-0.027
	(0.011)	(0.011)	(0.046)	(0.044)	(0.079)	(0.044)	(0.082)
	[0.008]	[0.003]	[0.019]	[0.011]	[0.007]	[0.358]	[0.802]
Kono	-0.042	-0.041	-0.122	-0.125	-0.319	-0.087	-0.064
	(0.007)	(0.007)	(0.021)	(0.023)	(0.043)	(0.010)	(0.017)
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.028]
Other ethnicities	-0.035	-0.034	-0.123	-0.118	-0.192	-0.065	-0.068
	(0.009)	(0.009)	(0.031)	(0.029)	(0.056)	(0.049)	(0.088)
	[0.017]	[0.016]	[0.000]	[0.000]	[0.000]	[0.354]	[0.495]
Mende Mean	0.068	0.068	0.298	0.298	0.523	0.956	0.885
No. of health centers	✓	✓	✓	✓	✓	n/a	n/a
Urban FE	✓	✓	✓	✓	✓	✓	✓
Year FE	n/a	n/a	n/a	n/a	n/a	✓	✓
South FE	✓	✓	✓	✓	✓	✓	✓
Drop WAU district	✗	✓	✗	✓	✓	✓	✓
Observations	164	156	164	156	136	312	312

Notes: Each column reports results for a single OLS regression of the dependent variable listed in the column heading on the variables listed in the row headings, a binary variable indicating if the chiefdom is urban, the number of health centers (if relevant), region (south) fixed effect, and indicators for the year (if relevant). Columns 1 and 3, include observations from Western Area Urban (WAU) in others they are dropped. Standard errors clustered at the district level in parentheses. Wild cluster bootstrapped p-values in square brackets.

TABLE A4—STOCKOUTS BALANCE

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		14 days				21 days		
	N	Post-Stockout Mean	Pre-Stockout Mean	p-value of Difference	N	Post-Stockout Mean	Pre-Stockout Mean	p-value of Difference
Female	2255	0.40	0.38	0.62	3539	0.40	0.40	0.90
Age (years)	2247	45.44	44.68	0.95	3529	45.70	45.44	0.95
Has diabetes	2255	0.04	0.02	0.78	3539	0.03	0.03	0.87
Has Cardiovascular Disease	2255	0.17	0.14	0.68	3539	0.17	0.15	0.76
Is pregnant	872	0.00	0.00	0.69	1410	0.00	0.02	0.67
Urban (residence)	2255	0.97	0.99	0.32	3539	0.98	0.97	0.90
Occupation:								
Healthcare	2255	0.09	0.07	0.48	3539	0.09	0.09	0.79
Ag and Fishing	2255	0.01	0.00	0.14	3539	0.01	0.00	0.11
Retail	2255	0.10	0.08	0.13	3539	0.10	0.09	0.18
Student	2255	0.04	0.04	0.18	3539	0.03	0.04	0.16
Teacher	2255	0.04	0.04	0.86	3539	0.04	0.04	0.10
Transport	2255	0.02	0.03	0.46	3539	0.03	0.03	0.63
Unemployed	2255	0.05	0.04	0.58	3539	0.04	0.06	0.64
Had Covid	2253	0.00	0.00	0.33	3537	0.00	0.00	0.06
Urban (residence)	2255	0.97	0.99	0.35	3539	0.98	0.97	0.89
Static Site	2255	0.98	0.95	0.05	3539	0.99	0.93	0.04

Notes: Each cell in Columns (4) and (8) provides the wild clustered bootstrapped p-value of the stockout variable from separate OLS regressions of each row variable on a binary indicator for stockout (equal to one if an individual's second dose is due during the stockout) and site fixed effects. Standard errors are clustered at the site level.