Results

2022-02-10

Note: Table 1 shows full panel results with the imputed dataset. Table 2 shows full panel results with the non-imputed dataset. Tables 3-5 show OLS, IV, and Lewbel IV estimates by region, respectively, for the imputed dataset. Tables 6-8 show the same with the non-imputed dataset.

	Ta	able 1: Mode	el Estimates		
	OLS	ML Tobit	Selection (ML logit)	Level (OLS)	IV Lag
Coverage (lag)	0.72^{*}	1.49***	0.21***	0.10	
	(0.31)	(0.42)	(0.05)	(0.14)	
Coverage (in-year)					0.78*
					(0.35)
Diplomatic Visits (lag)	0.91^{**}	1.46°	0.20**	0.31^{*}	
	(0.35)	(0.83)	(0.07)	(0.15)	
Diplomatic Visits (in-year)					1.05^{*}
					(0.41)
Polity	-0.10	-0.10	-0.02^{\cdot}	-0.06*	-0.10
v	(0.07)	(0.11)	(0.01)	(0.02)	(0.07)
GDP	-2.82***	-4.95^{***}	-0.80^{***}	-0.01	-2.84****
	(0.36)	(0.50)	(0.06)	(0.16)	(0.36)
Population	2.60***	5.33***	0.70***	0.28^{-}	2.59***
1	(0.32)	(0.74)	(0.06)	(0.16)	(0.32)
Unemployment	0.18	$0.62^{'}$	$0.12^{'}$	-0.06	0.18
r	(0.47)	(0.95)	(0.08)	(0.19)	(0.47)
Disaster Deaths	0.19	0.17	0.04	0.03	0.20
Disaster Deaths	(0.16)	(0.26)	(0.03)	(0.05)	(0.16)
Civil War	-1.49	-2.57^*	-0.35^{*}	-0.68	-1.49
	(0.91)	(1.25)	(0.15)	(0.40)	(0.92)
Trade	0.13	-0.22	0.04	0.04	0.12
11000	(0.14)	(0.21)	(0.03)	(0.05)	(0.15)
Alliance	0.39	1.96	0.27	-0.60	0.10
Tilliance	(0.93)	(2.81)	(0.23)	(0.48)	(0.94)
Distance	1.94^*	3.73^{-}	0.49***	0.51	2.04^*
Distance	(0.80)	(2.25)	(0.14)	(0.38)	(0.83)
\mathbb{R}^2	0.20	(2.20)	0.14)	0.14	0.21
$Adj. R^2$	0.20 0.19		0.13	0.14	0.21 0.20
Num. obs.	1932	1932	1932	982	1932
RMSE	8.26	1332	1332	$\frac{362}{2.53}$	8.24
N Clusters	138			$\frac{2.53}{129}$	138
AIC	130	9182.56	2324.79	129	130
BIC		9332.85	2463.96		
Log Likelihood		-4564.28			
0			-1137.39		
Left-censored		950			
Uncensored		982			
Right-censored		0	2274.70		
Deviance			2274.79		
Deviance explained			0.15		
Dispersion			1.00		
GCV score			1170.36		
Num. smooth terms			1		

^{***}p < 0.001; **p < 0.01; *p < 0.05; 'p < 0.1

	Table 2:	: Model Estimates		
	OLS	Selection (ML logit)	Level (OLS)	IV Lag
Coverage (lag)	0.70	0.15	0.42**	
	(0.46)	(0.10)	(0.13)	
Coverage (in-year)				0.79
				(0.56)
Diplomatic Visits (lag)	0.64	0.14	0.36^{*}	
	(0.40)	(0.11)	(0.17)	
Diplomatic Visits (in-year)				0.78
				(0.49)
Polity	-0.09	-0.01	-0.10***	-0.09
	(0.08)	(0.01)	(0.03)	(0.08)
GDP	-3.38***	-0.91^{***}	-0.17	-3.42***
	(0.62)	(0.13)	(0.23)	(0.63)
Population	3.00***	0.79^{***}	0.22	2.97***
	(0.51)	(0.11)	(0.26)	(0.51)
Unemployment	0.72	0.22^{\cdot}	0.22	0.74
	(0.58)	(0.11)	(0.24)	(0.58)
Disaster Deaths	0.06	0.02	0.00	0.06
	(0.21)	(0.05)	(0.07)	(0.20)
Civil War	-1.19	-0.35	0.04	-1.13
	(1.19)	(0.22)	(0.44)	(1.19)
Trade	0.34	0.07	0.08	0.34
	(0.55)	(0.10)	(0.17)	(0.55)
Alliance	0.39	0.28	-0.66	0.08
	(1.35)	(0.35)	(0.54)	(1.38)
Distance	1.15	0.28	0.60	1.27
	(1.01)	(0.23)	(0.44)	(1.05)
\mathbb{R}^2	0.21	0.18	0.19	0.22
$Adj. R^2$	0.20		0.16	0.20
Num. obs.	838	838	460	838
RMSE	8.17		2.39	8.16
N Clusters	106		97	106
AIC		1010.11		
BIC		1100.00		
Log Likelihood		-486.05		
Deviance		972.10		
Deviance explained		0.16		
Dispersion		1.00		
GCV score		507.41		
Num. smooth terms		1		

^{***}p < 0.001; **p < 0.01; *p < 0.05; *p < 0.1

	East Asia + Pacific	Europe + Central Asia	Latin America + Caribbean	Middle East + North Africa	South Asia	Sub-Saharan A
Coverage (lag)	0.15	0.61	-0.38	-0.17	4.32	1.71***
	(0.49)	(0.30)	(0.99)	(0.83)	(3.04)	(0.39)
Diplomatic Visits (lag)	1.59*	0.16			-0.23	
	(0.66)	(1.17)			(1.43)	
Polity	0.10	-0.30°	-0.00	0.09	-0.07	-0.21°
	(0.14)	(0.17)	(0.22)	(0.12)	(0.13)	(0.11)
GDP	-2.73*	-2.71***	-1.49	-1.49	-1.55	-1.68**
	(1.30)	(0.50)	(1.47)	(1.32)	(4.30)	(0.62)
Population	2.08	2.66***	1.10	1.48	-1.84	1.28*
	(1.34)	(0.65)	(1.26)	(1.14)	(4.88)	(0.61)
Unemployment	-1.97	-0.27	-1.22	1.60	-1.71	0.59
	(2.97)	(1.06)	(1.45)	(1.57)	(1.04)	(0.82)
Disaster Deaths	0.51	1.07**	-0.39	0.47	-0.01	0.21
	(0.29)	(0.34)	(0.38)	(0.29)	(0.41)	(0.21)
Civil War	-0.79	-0.58	0.25	-5.16^*	-4.78*	-1.83
	(1.26)	(1.69)	(1.48)	(2.01)	(1.44)	(1.18)
Γ	0.02	-0.04	0.92	0.14	2.01	0.83**
	(0.17)	(0.14)	(0.48)	(0.87)	(2.31)	(0.29)
Alliance	1.95				-3.48	
	(1.28)				(3.03)	
Distance	0.39	1.49	12.59	-2.05	-0.39	0.04
	(1.18)	(2.15)	(7.21)	(4.02)	(17.27)	(3.53)
$ m R^2$	0.33	0.21	0.23	0.21	0.36	0.24
$Adj. R^2$	0.28	0.14	0.17	0.14	0.15	0.21
Num. obs.	322	294	336	252	86	630
RMSE	7.64	8.48	7.99	7.15	7.87	7.79
N Clusters	23	21	24	18	7	45
*** $p < 0.001$; ** $p < 0.01$; * $p < 0.01$; * $p < 0.05$; ` $p < 0.1$	< 0.05; 'p < 0.1					

Table 3: OLS Estimates by Region

	East Asia + Pacific	Europe + Central Asia	Latin America + Caribbean	Middle East + North Africa	South Asia	Sub-Sahar
Coverage (in-year)	-0.24	0.64	-0.58	-0.21	8.52	1.90
	(0.49)	(0.32)	(1.52)	(1.03)	(7.03)	(0.4
Diplomatic Visits (in-year)	3.08*	0.18			3.22	
	(1.18)	(1.23)			(17.63)	
Polity	0.00	-0.30	-0.01	0.10	-0.06	-0.2
	(0.15)	(0.17)	(0.22)	(0.12)	(0.40)	(0.1)
GDP	-2.87*	-2.73***	-1.44	-1.47	-2.00	-1.7
	(1.25)	(0.51)	(1.55)	(1.37)	(3.34)	(0.6
Population	2.29	2.64***	1.17	1.49	-4.41	1.2
	(1.39)	(0.66)	(1.27)	(1.11)	(6.23)	(0.6
Unemployment	-1.23	-0.30	-1.23	1.61	-0.62	0.6
	(2.93)	(1.05)	(1.46)	(1.59)	(2.96)	(0.8
Disaster Deaths	0.52	1.08**	-0.40	0.47	-0.11	0.2
	(0.28)	(0.33)	(0.39)	(0.30)	(0.30)	(0.2
Civil War	-0.32	-0.40	0.22	-5.16^*	+99.9-	-1.
	(1.17)	(1.81)	(1.45)	(2.02)	(2.34)	(1.1
Trade	0.00	-0.04	0.94	0.14	3.13	0.82
	(0.18)	(0.14)	(0.48)	(0.87)	(3.70)	(0.2
Alliance	0.92				-0.96	
	(1.27)				(6.42)	
Distance	0.46	1.57	12.89	-2.17	-6.31	0.1
	(1.20)	(2.29)	(7.52)	(4.32)	(18.33)	(3.6)
$ m R^2$	0.35	0.21	0.22	0.21	0.31	0.2
$Adj. R^2$	0.30	0.14	0.17	0.14	0.09	0.2
Num. obs.	322	294	336	252	86	63
RMSE	7.56	8.47	8.02	7.15	8.17	7.8
N Clusters	23	21	24	18	7	45
$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	5; p < 0.1					

Table 4: IV Lag Estimates by Region

	East Asia + Pacific	Europe + Central Asia	Latin America + Caribbean	Middle East + North Africa	South Asia	Sub-Saharan Africa
Coverage (in-year)	-0.41	0.32	0.83	1.97	5.67	1.63***
	(0.74)	(0.28)	(1.30)	(1.34)	(3.77)	(0.31)
Diplomatic Visits	2.14	-1.15			0.50	
	(1.10)	(1.42)			(1.41)	
Polity	0.11	-0.33°	0.04	0.03	-0.03	-0.22°
	(0.15)	(0.17)	(0.20)	(0.13)	(0.14)	(0.11)
GDP	-2.58°	-2.78***	-1.75	-2.12	-1.78	-1.65^{*}
	(1.25)	(0.64)	(1.28)	(1.41)	(3.90)	(0.61)
Population	2.09	2.81**	0.68	0.54	-2.32	1.30^{*}
	(1.36)	(0.77)	(1.50)	(1.36)	(4.12)	(0.62)
Unemployment	-2.15	-0.47	-1.15	1.22	-1.52°	0.57
	(2.90)	(1.11)	(1.43)	(1.66)	(0.75)	(0.82)
Disaster Deaths	0.51°	1.16**	-0.38	0.83	-0.00	0.23
	(0.29)	(0.34)	(0.38)	(0.40)	(0.46)	(0.21)
Civil War	-0.47	-1.69	0.21	-5.92^{**}	-5.72*	-1.81
	(1.33)	(1.79)	(1.45)	(1.95)	(2.04)	(1.21)
Trade	0.04	-0.01	0.85	0.46	2.12	0.83**
	(0.17)	(0.18)	(0.49)	(0.87)	(1.57)	(0.29)
Alliance	2.08				-2.70	
	(1.12)				(1.93)	
Distance	0.50	-1.60	11.04	4.58	-1.32	0.24
	(1.31)	(3.16)	(6.88)	(3.93)	(15.81)	(3.70)
$ m R^2$	0.33	0.20	0.23	0.20	0.36	0.24
$Adj. R^2$	0.27	0.13	0.18	0.12	0.15	0.21
Num. obs.	322	294	336	252	86	630
RMSE	7.68	8.53	7.98	7.23	7.90	7.80
N Clusters	23	21	24	18	2	45
$^{***}p < 0.001; ^{**}p < 0.01; ^{*}p < 0.01; ^{*}p < 0.05; ^{*}p < 0.1$	1; $^*p < 0.05$; $^*p < 0.1$					

Table 5: Lewbel IV Estimates by Region

	East Asia + Pacific	Europe + Central Asia	Latin America + Caribbean	Middle East + North Africa	South Asia	Sub-Saharan A
Coverage (lag)	2.58	0.58	-0.39	1.34	4.65	1.20
	(2.11)	(0.37)	(2.05)	(0.82)	(5.66)	(0.81)
Diplomatic Visits (lag)	0.85	-0.61			-0.93	•
	(1.15)	(1.82)			(3.55)	
Polity	0.01	-0.28	0.33	0.15	-0.44	-0.10
	(0.14)	(0.24)	(0.19)	(0.21)	(0.26)	(0.11)
GDP	-7.82***	-1.89	0.16	-3.17*	-5.36	-0.68
	(1.49)	(1.61)	(2.44)	(1.10)	(22.08)	(0.88)
Population	6.93***	1.62	2.93	2.78	1.46	-0.20
	(0.82)	(1.04)	(1.81)	(1.40)	(17.68)	(0.89)
${ m Unemployment}$	4.46**	-0.19	-2.72	0.04	-0.51	0.50
	(1.21)	(0.95)	(2.10)	(1.22)	(4.22)	(0.91)
Disaster Deaths	-0.25	1.31^{**}	-1.14*	0.42	-0.29	0.31
	(0.26)	(0.42)	(0.46)	(0.53)	(0.56)	(0.32)
Civil War	0.03	-0.30	2.86	-7.76**	-0.20	-1.89
	(1.68)	(3.73)	(2.47)	(2.25)	(3.50)	(1.58)
Trade	0.30	-0.13	-2.17	0.92	2.57	1.05*
	(1.43)	(1.78)	(1.24)	(0.99)	(8.28)	(0.51)
Alliance	1.23				-7.16	
	(2.42)				(7.38)	
Distance	5.40**	-2.98	8.19	1.56	12.70	-8.53*
	(1.50)	(8.16)	(7.57)	(4.75)	(40.69)	(3.95)
$ m R^2$	0.54	0.22	0.26	0.43	0.62	0.20
Adj. \mathbb{R}^2	0.45	0.10	0.16	0.32	0.30	0.15
Num. obs.	112	136	136	102	40	312
RMSE	97.9	8.50	7.70	6.37	7.57	7.59
N Clusters	14	17	17	14	ಬ	39
$^{***}p < 0.001; ^{**}p < 0.01; ^{*}p < 0.01; ^{*}p < 0.05; ^{*}p < 0.1$	$< 0.05; \ p < 0.1$					

Table 6: OLS Estimates by Region

	East Asia + Pacific	Europe + Central Asia	Latin America + Caribbean	Middle East + North Africa	South Asia	Sub-Sahar
Coverage (in-year)	-0.45	0.62	-0.73	1.53	-80.66	1.6
	(6.83)	(0.42)	(3.84)	(0.93)	(369.99)	(1.0
Diplomatic Visits (in-year)	99.9	-0.61			-28.17	
	(10.48)	(2.17)			(126.74)	
Polity	-0.16	-0.28	0.32	0.14	-1.49	-0.
	(0.39)	(0.24)	(0.22)	(0.22)	(4.73)	(0.1
GDP	-9.34^{**}	-1.93	0.25	-3.23^*	-142.42	-0.
	(2.81)	(1.62)	(2.78)	(1.15)	(645.00)	(0.9)
Population	7.53***	1.61	3.03	2.63	216.67	-0.
	(1.65)	(1.07)	(1.79)	(1.43)	(975.52)	(0.0)
${ m Unemployment}$	6.35	-0.16	-2.75	-0.02	-6.81	0.4
	(3.66)	(0.99)	(2.17)	(1.25)	(22.49)	(0.9
Disaster Deaths	-0.20	1.29*	-1.16^*	0.47	-0.34	0.3
	(0.35)	(0.46)	(0.50)	(0.55)	(2.02)	(0.3
Civil War	1.27	-0.03	2.85	-7.81**	-2.97	-1.
	(3.29)	(3.85)	(2.46)	(2.25)	(14.08)	(1.5
Trade	2.14	-0.11	-2.14	0.98	-35.75	1.0
	(3.63)	(1.76)	(1.24)	(1.00)	(159.97)	(0.5
Alliance	0.82				-45.04	
	(2.59)				(164.99)	
Distance	6.31*	-2.89	8.58	2.63	547.22	-8.0
	(2.59)	(89.6)	(8.83)	(4.86)	(2423.44)	(4.0
$ m -R^2$	0.44	0.21	0.26	0.42	-1.89	0.2
$Adj. R^2$	0.33	0.10	0.16	0.31	-4.37	0.1
Num. obs.	112	136	136	102	40	31
RMSE	7.44	8.50	7.70	6.42	20.94	7.5
N Clusters	14	17	17	14	5	36
$^{***}p < 0.001; ^{**}p < 0.01; ^{*}p < 0.01; ^{*}p < 0.05; ^{"}p$	5; $p < 0.1$					

Table 7: IV Lag Estimates by Region

	East Asia + Pacific	Europe + Central Asia	Latin America + Caribbean	Middle East + North Africa	South Asia	Sub-Saharan Africa
Coverage (in-year)	7.84	0.43	-0.41	0.28	16.72*	-1.48
	(5.57)	(0.61)	(2.38)	(1.71)	(4.53)	(2.49)
Diplomatic Visits	1.04	-2.40			-1.11	
	(1.98)	(5.06)			(4.58)	
Polity	0.07	-0.31	0.33	0.24	-0.29	-0.10
	(0.13)	(0.28)	(0.20)	(0.20)	(0.28)	(0.13)
GDP	-7.98**	-2.16	0.17	-2.71.	14.26	-0.10
	(2.52)	(1.61)	(2.48)	(1.32)	(27.59)	(1.13)
Population	6.03***	1.29	2.96	3.15	-26.42	1.03
	(1.19)	(1.37)	(1.96)	(1.65)	(25.87)	(1.07)
Unemployment	4.91*	0.29	-2.72	0.02	0.68	0.91
	(1.68)	(1.29)	(2.10)	(1.36)	(2.68)	(1.03)
Disaster Deaths	-0.11	1.26*	-1.15*	0.23	-0.65	0.29
	(0.27)	(0.46)	(0.46)	(0.58)	(0.45)	(0.36)
Civil War	-0.38	-0.88	2.79	-7.81^{**}	-1.08	-1.61
	(2.29)	(3.61)	(2.26)	(2.18)	(3.95)	(1.83)
Trade	-1.65	0.53	-2.18°	0.75	6.07	1.16
	(2.04)	(2.08)	(1.25)	(1.07)	(5.47)	(0.64)
Alliance	1.89				-2.89	
	(2.57)				(7.21)	
Distance	4.56*	-10.90	8.13	-0.88	-57.25	-11.17*
	(2.08)	(21.62)	(7.99)	(6.02)	(62.51)	(4.94)
$ m R^2$	0.52	0.21	0.26	0.42	69.0	0.16
$Adj. R^2$	0.43	0.09	0.16	0.31	0.42	0.11
Num. obs.	112	136	136	102	40	312
\mathbf{RMSE}	98.9	8.53	7.70	6.41	6.91	7.78
N Clusters	14	17	17	14	2	39
$^{***}p < 0.001; ^{**}p < 0.01; ^{*}p < 0.01; ^{*}p < 0.05; ^{"}p < 0.1$	1; $^*p < 0.05$; $^*p < 0.1$					

Table 8: Lewbel IV Estimates by Region