## STAR Models

July 03, 2021

## Lagrange Multiplier Tests

Table 1: Lagrange Multiplier Tests

		SIGACT	ICEWS	GED
Half-year	Error	6.770 (0.009)	0.624 $(0.430)$	4.417 $(0.036)$
	Lag	$23.745 \\ (0.000)$	0.039 $(0.844)$	0.598 $(0.439)$
Month	Error	0.124 $(0.725)$	4.341 (0.037)	5.719 (0.017)
	Lag	7.461 (0.006)	$0.008 \\ (0.930)$	5.749 $(0.016)$

Note: Robust Lagrange multiplier tests. P-values in parentheses.

Linear Regression Models Spatial Regression Models Table 2: Linear Models

	Half-year		Month			
	SIGACT	ICEWS	GED	SIGACT	ICEWS	GED
Phi	0.17***	-0.16***	-0.39***	-0.12***	-0.44***	-0.46***
	(0.03)	(0.02)	(0.03)	(0.01)	(0.01)	(0.01)
Condolence spending	-0.74***	$0.99^{***}$	-0.13	-0.26	-0.16	-0.32**
	(0.20)	(0.23)	(0.11)	(1.58)	(0.29)	(0.11)
Ruzicka spending	-0.67	3.36**	1.20	-40.78***	-1.92	-0.22
	(1.07)	(1.29)	(0.62)	(7.74)	(1.40)	(0.55)
Coalition collateral damage	$0.06^{***}$	0.09***	0.03***	0.23***	$0.02^{**}$	0.00
	(0.01)	(0.01)	(0.01)	(0.04)	(0.01)	(0.00)
Insurgent collateral damage	0.00	-0.00	$0.01^{*}$	-0.02	$0.01^*$	0.01***
	(0.01)	(0.01)	(0.01)	(0.03)	(0.01)	(0.00)
Other small CERP spending	$0.29^{*}$	-0.27	-0.00	$-3.07^{*}$	-0.27	-0.27**
	(0.12)	(0.14)	(0.07)	(1.25)	(0.23)	(0.09)
Other USAID spending	-1.16**	-0.33	-0.04	-0.00	0.00	0.00
	(0.35)	(0.42)	(0.20)	(0.00)	(0.00)	(0.00)
Coalition troop strength	0.08	0.05	-0.03	-0.12	$0.07^{*}$	0.00
	(0.07)	(0.08)	(0.04)	(0.17)	(0.03)	(0.01)
CMOC presence	-0.04	$-0.40^{***}$	-0.08	-0.03	0.00	-0.00
	(0.10)	(0.12)	(0.06)	(0.10)	(0.02)	(0.01)
PRT presence	-0.09	-0.10	-0.03	-0.12	-0.02	-0.00
	(0.12)	(0.14)	(0.07)	(0.12)	(0.02)	(0.01)
Intercept	-0.02	$-0.10^*$	0.01	0.03	-0.00	0.00
	(0.04)	(0.05)	(0.02)	(0.04)	(0.01)	(0.00)
Num. obs.	832	832	832	6032	6032	6032

\*\*\* p < 0.001; \*\* p < 0.01; \* p < 0.05. Phi - temporal lag

Table 3: Spatio-Temporal Models

	Half-year		Month			
	SIGACT	ICEWS	GED	SIGACT	ICEWS	GED
Phi	0.16***	-0.16***	-0.40***	-0.11***	-0.44***	-0.45***
	(0.03)	(0.02)	(0.03)	(0.01)	(0.01)	(0.01)
Rho	0.37***	$0.12^*$	0.16***	0.28***	0.07***	0.22***
	(0.04)	(0.05)	(0.05)	(0.02)	(0.02)	(0.02)
Condolence spending	$-0.61^{***}$	1.01***	-0.10	-0.34	-0.15	-0.34**
	(0.18)	(0.23)	(0.11)	(1.53)	(0.29)	(0.11)
Ruzicka spending	-0.26	3.24*	0.95	-36.19***	-2.02	0.02
	(1.01)	(1.28)	(0.61)	(7.52)	(1.39)	(0.54)
Coalition collateral damage	0.05***	0.09***	0.03***	0.24***	0.02**	0.00
	(0.01)	(0.01)	(0.01)	(0.04)	(0.01)	(0.00)
Insurgent collateral damage	-0.00	-0.00	$0.01^*$	-0.02	$0.01^{*}$	0.01***
	(0.01)	(0.01)	(0.01)	(0.03)	(0.01)	(0.00)
Other small CERP spending	$0.26^*$	-0.24	0.00	-3.15**	-0.29	-0.28**
	(0.11)	(0.14)	(0.07)	(1.21)	(0.22)	(0.09)
Other USAID spending	-0.91**	-0.27	-0.04	-0.00	0.00	-0.00
	(0.33)	(0.42)	(0.20)	(0.00)	(0.00)	(0.00)
Coalition troop strength	0.07	0.06	-0.03	-0.11	$0.08^{*}$	0.00
	(0.07)	(0.08)	(0.04)	(0.17)	(0.03)	(0.01)
CMOC presence	-0.00	-0.39***	-0.08	-0.02	0.00	-0.00
	(0.09)	(0.12)	(0.06)	(0.10)	(0.02)	(0.01)
PRT presence	-0.07	-0.10	-0.03	-0.10	-0.01	-0.00
	(0.11)	(0.14)	(0.07)	(0.12)	(0.02)	(0.01)
Intercept	-0.02	-0.08	0.01	0.02	-0.00	0.00
	(0.04)	(0.05)	(0.02)	(0.04)	(0.01)	(0.00)
Num. obs.	832.00	832.00	832.00	6032.00	6032.00	6032.00

<sup>\*\*\*</sup> p < 0.001; \*\* p < 0.01; \* p < 0.05. Rho - spatial lag Phi - temporal lag