Johnson, Jaclyn, and Clayton L. Thyne. "Squeaky Wheels and Troop Loyalty: How Domestic Protests Influence Coups d'état, 1952-2005." *Journal of Conflict Resolution*.

ONLINE APPENDIX

The manuscript provides references to many tests used to assure the robustness of our results. This appendix provides the results of these robustness tests. To save space, we report only the results mentioned specifically in the manuscript. All robustness checks can be easily replicated with our replication files, which are available at http://www.uky.edu/~clthyn2/research.htm.

In Footnote 5 of the manuscript, we note that our results are consistent when we remove 18 non-military coups from the dataset. Below we present the results after recoding the non-military coups to zero.

<u> </u>	Model 1	Model 2	Model 3
Domestic protests	0.060*		
1	(0.020)		
Protests near capital (H1)	()	0.426*	
1 ()		(0.125)	
Protests away from cap. (H1)		0.058*	
		(0.020)	
$\Pr(\beta_{near} = \beta_{away})$.004*	
Violent protests (H2)			0.050*
, F			(0.022)
Peaceful protests (H2)			0.205*
1			(0.046)
$Pr(\beta_{viol} = \beta_{peace})$			<.001*
GDP/capita	-0.181+	-0.185+	-0.183+
I	(0.110)	(0.110)	(0.110)
Democracy	-0.553*	-0.559*	-0.562*
	(0.197)	(0.197)	(0.199)
Authoritarian	-0.422*	-0.427*	-0.427*
	(0.110)	(0.109)	(0.110)
Military regime	0.365*	0.368*	0.366*
, ,	(0.113)	(0.113)	(0.113)
Civil conflict	0.424*	0.417*	0.423*
	(0.146)	(0.146)	(0.145)
Middle East	1.366*	1.374*	1.372*
	(0.474)	(0.473)	(0.472)
Africa	1.263*	1.266*	1.266*
	(0.485)	(0.484)	(0.484)
Asia	0.898	0.898	0.886
	(0.481)	(0.479)	(0.479)
Americas	1.698*	1.692*	1.676*
	(0.463)	(0.459)	(0.462)
Constant	-3.782*	-3.761*	-3.782*
	(1.012)	(1.011)	(1.010)
Observations	79,404	79,404	79,404
Pseudo R-squared	0.106	0.107	0.107
LR chi^2	249.2*	251.8*	287.9*

Appendix Table 1. Results Excluding Non-military Coups

Note: Robust standard errors clustered by country in parentheses. Coup months, coup months 2 and coup months 3 not shown. +p<.10; *p<.05 (two-tailed).

In footnote 5, we indicate that our results change little when we limit our analyses to successful coups only. Below we present these results.

.		Model 1	Model 2	Model 3	
Protest events	0.086*				
	(0.020)				
Protests near capital (H1)		0.504	*		
		(0.181	.)		
Protests away from cap. (H1)		0.086	*		
		(0.020))		
$Pr(\beta_{near} = \beta_{away})$		<.021	*		
Violent protests (H2)			0.07	8*	
			(0.02	21)	
Peaceful protests (H2)			0.24	0*	
			(0.04	48)	
$Pr(\beta_{viol} = \beta_{peace})$			<.00	1*	
GDP/capita	-0.420*	-0.425	5* -0.42	27*	
	(0.125)	(0.124	l) (0.12	25)	
Democracy	-0.598-	-0.599	-0.60)8*	
	(0.306)	(0.307	(0.30)8)	
Authoritarian	-0.627*	• -0.630)* -0.63	30*	
	(0.150)	(0.149	0) (0.14	49)	
Military regime	0.435*	0.437	* 0.43	5*	
	(0.154)	(0.154	l) (0.15	55)	
Civil conflict	0.196	0.187	0.19	5	
	(0.171)	(0.171	.) (0.16	59)	
Middle East	2.058*	2.069	* 2.06	1*	
	(0.738)	(0.736	6) (0.73	38)	
Africa	1.761*	1.771°	* 1.76	1*	
	(0.740)	(0.738	3) (0.73	39)	
Asia	1.391+	1.394-	+ 1.37	2+	
	(0.733)	(0.730) (0.73	32)	
Americas	2.189*	2.187	* 2.16	4*	
	(0.716)	(0.710) (0.72	15)	
Constant	-3.251*	-3.238	3* -3.2	15*	
	(1.229)	(1.222	2) (1.22	23)	
Observations	79,404	79,404	4 79,4	04	
Pseudo R-squared	0.099	0.101	0.10	1	
LR chi^2	174.2*	181.2	* 180.	0*	

Appendix Table 2. Influence of Domestic Protests on Successful Coups

Note: Robust standard errors clustered by country in parentheses. Coup months, coup months 2 and coup months 3 not shown. +p<.10; *p<.05 (two-tailed).

In Footnote 7 (page 16) of the manuscript, we note that our results are similar to our primary findings when we use the Social Conflict Analysis Database (SCAD). To do this, we first limited events to organization or spontaneous demonstration (etype=1-4) against the central government (cgovtarget=1). Second, we calculated the distance from each event to the capital city. Third, we eliminated events that came after the coup, lagged the events by one day, and then collapsed to measure the sum of total, peaceful/violent, and near/far events for each state month. Our final measures are consistent with how we produced the primary independent variables using the SPEED dataset, which we describe in the main manuscript. Below we present the results from the manuscript alongside the SCAD results. Though SCAD limits our analyses both temporally (1990-2014) and geographically (Africa and Latin America only), the results are similar to our primary findings. Though the difference in coefficients is not significant, we see that only protests near the capital and peaceful protests significantly increase the likelihood of coup attempts, while distant and violent protests both have smaller coefficients and are insignificant.

	Model 1		Moo	del 2	Model 3	
	SPEED	SCAD	SPEED	SCAD	SPEED	SCAD
Domestic protests	0.059*	0.131+				
•	(0.020)	(0.079)				
Protests near capital (H1)		~ /	0.417*	0.447*		
			(0.126)	(0.216)		
Protests away from cap. (H1)			0.057*	0.099		
			(0.020)	(0.101)		
$Pr(\beta_{near}=\beta_{away})$.005*	0.147		
Violent protests (H2)					0.049*	0.084
1 ()					(0.022)	(0.116)
Peaceful protests (H2)					0.200*	0.197*
1					(0.046)	(0.087)
$\Pr(\beta_{viol} = \beta_{peace})$					<.001*	0.380
GDP/capita	-0.193+	-0.207	-0.197+	-0.201	-0.195+	-0.207
1 I	(0.109)	(0.176)	(0.109)	(0.176)	(0.109)	(0.176)
Democracy	-0.561*	-0.097	-0.566*	-0.102	-0.568*	-0.092
5	(0.194)	(0.388)	(0.194)	(0.387)	(0.195)	(0.388)
Authoritarian	-0.436*	0.110	-0.441*	0.133	-0.441*	0.118
	(0.108)	(0.383)	(0.107)	(0.385)	(0.108)	(0.380)
Military regime	0.357*	0.740*	0.360*	0.749*	0.358*	0.747*
	(0.111)	(0.290)	(0.111)	(0.288)	(0.111)	(0.291)
Civil conflict	0.387*	0.060	0.379*	0.061	0.385*	0.060
	(0.147)	(0.323)	(0.147)	(0.319)	(0.146)	(0.323)
Constant	-3.669*	-3.766*	-3.648*	-3.875*	-3.672*	-3.766*
	(1.003)	(1.402)	(1.002)	(1.388)	(1.001)	(1.402)
Observations	79,404	14,964	79,404	14,964	79,404	14,964
Pseudo R-squared	0.105	0.0795	0.106	0.0812	0.107	0.0800
LR chi ²	254.2*	85.41*	256.7*	85.25*	295.7*	98.03*

Appendix Table 3: SPEED versus SCAD results

Note: Robust standard errors clustered by country in parentheses. Regional dummies, coup months, coup months 2 and coup months 3 not shown. +p<.10; *p<.05 (two-tailed).

In Footnote 7, we indicate that our results are consistent after removing verbal/written expression as potential protest events. We present our results with this reduced protest measure below.

	Model 1	Model 2	Model 3
Domestic protests	0.076*		
	(0.023)		
Protests near capital (H1)		0.671*	
		(0.122)	
Protests away from cap. (H1)		0.069*	
		(0.024)	
$Pr(\beta_{near} = \beta_{away})$		<.001*	
Violent protests (H2)			0.059*
			(0.025)
Peaceful protests (H2)			0.260*
			(0.056)
$Pr(\beta_{viol} = \beta_{peace})$			<.001*
GDP/capita	-0.190	-0.196	-0.192
-	(0.109)	(0.108)	(0.108)
Democracy	-0.559*	-0.569*	-0.577*
	(0.193)	(0.195)	(0.194)
Authoritarian	-0.436*	-0.446*	-0.443*
	(0.108)	(0.107)	(0.108)
Military regime	0.357*	0.356*	0.353*
	(0.111)	(0.110)	(0.111)
Civil conflict	0.389*	0.384*	0.392*
	(0.146)	(0.146)	(0.145)
Middle East	1.406*	1.409*	1.401*
	(0.472)	(0.470)	(0.471)
Africa	1.303*	1.309*	1.306*
	(0.481)	(0.480)	(0.481)
Asia	0.899	0.885	0.880
	(0.481)	(0.477)	(0.480)
Americas	1.713*	1.691*	1.692*
	(0.462)	(0.457)	(0.461)
Constant	-3.688*	-3.657*	-3.686*
	(0.998)	(0.996)	(0.991)
Observations	79,404	79,404	79,404
Pseudo R-squared	0.106	0.109	0.108
LR chi ²	252.7*	392.0*	297.4*
Protests away from cap. (H1) $Pr(\beta_{near}=\beta_{away})$ Violent protests (H2) Peaceful protests (H2) $Pr(\beta_{viol}=\beta_{peace})$ GDP/capita Democracy Authoritarian Military regime Civil conflict Middle East Africa Asia Americas Constant Observations Pseudo R-squared LR chi^2	$\begin{array}{c} -0.190\\ (0.109)\\ -0.559*\\ (0.193)\\ -0.436*\\ (0.108)\\ 0.357*\\ (0.111)\\ 0.389*\\ (0.146)\\ 1.406*\\ (0.472)\\ 1.303*\\ (0.481)\\ 0.899\\ (0.481)\\ 1.713*\\ (0.462)\\ -3.688*\\ (0.998)\\ 79,404\\ 0.106\\ 252.7*\\ \end{array}$	0.069* (0.024) <.001* -0.196 (0.108) -0.569* (0.195) -0.446* (0.107) 0.356* (0.110) 0.384* (0.146) 1.409* (0.470) 1.309* (0.480) 0.885 (0.477) 1.691* (0.457) -3.657* (0.996) 79,404 0.109 392.0*	0.059^* (0.025) 0.260^* (0.056) $<.001^*$ -0.192 (0.108) -0.577^* (0.194) -0.443^* (0.108) 0.353^* (0.111) 0.392^* (0.145) 1.401^* (0.471) 1.306^* (0.481) 0.880 (0.480) 1.692^* (0.461) -3.686^* (0.991) 79,404 0.108 297.4^*

Appendix Table 4. Influence of Domestic Protests on Coup Attempts: Reduced Protest Measure

Note: Robust standard errors clustered by country in parentheses. Coup months, coup months 2 and coup months 3 not shown. +p<.10; *p<.05 (two-tailed).

In Footnote 9, we discuss various alternative ways to capture protests. We present additional analyses here. Models 1-3 use the log of the number of protests events. Models 4-6 use protests divided by population (ln). Models 7-9 replicate our primary findings after removing potential outliers (where hat values exceed .05 or dfbetas exceed .3).

	Logged			Protests/population			Outlier Removal		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
Domestic protests	0.540*			0.568*			0.061*		
1	(0.118)			(0.206)			(0.022)		
Protests near capital (H1)	~ /	0.957*			3.967*			0.431*	
		(0.262)			(1.203)			(0.138)	
Protests away from cap. (H1)		0.517*			0.551*			0.059*	
		(0.122)			(0.206)			(0.022)	
$Pr(\beta_{near} = \beta_{away})$		<.111			<.005			<.007	
Violent protests (H2)			0.496*			0.490*			0.048*
• • • •			(0.139)			(0.212)			(0.022)
Peaceful protests (H2)			0.643*			2.211*			0.227*
			(0.140)			(0.459)			(0.053)
$Pr(\beta_{viol} = \beta_{peace})$			<.365			<.001			<.001
Democracy	-0.559*	-0.564*	-0.559*	-0.550*	-0.553*	-0.554*	-0.535*	-0.541*	-0.541*
2	(0.198)	(0.198)	(0.198)	(0.193)	(0.193)	(0.195)	(0.190)	(0.190)	(0.191)
Authoritarian	-0.434*	-0.440*	-0.437*	-0.431*	-0.435*	-0.435*	-0.448*	-0.453*	-0.451*
	(0.109)	(0.108)	(0.108)	(0.108)	(0.107)	(0.107)	(0.108)	(0.107)	(0.108)
GDP/capita	-0.179	-0.183	-0.179	-0.190+	-0.194+	-0.191+	-0.194+	-0.197+	-0.194+
	(0.113)	(0.113)	(0.112)	(0.109)	(0.109)	(0.109)	(0.110)	(0.110)	(0.110)
Military regime	0.365*	0.366*	0.365*	0.359*	0.364*	0.363*	0.343*	0.346*	0.344*
	(0.112)	(0.112)	(0.113)	(0.111)	(0.111)	(0.111)	(0.108)	(0.109)	(0.109)
Civil conflict	0.290 +	0.290 +	0.298 +	0.380*	0.373*	0.375*	0.375*	0.367*	0.373*
	(0.158)	(0.158)	(0.159)	(0.149)	(0.149)	(0.147)	(0.145)	(0.146)	(0.144)
Constant	-3.861*	-3.834*	-3.877*	-3.701*	-3.673*	-3.722*	-3.724*	-3.708*	-3.747*
	(1.025)	(1.020)	(1.019)	(0.999)	(0.997)	(0.996)	(1.043)	(1.042)	(1.038)
Observations	79,404	79,404	79,404	79,404	79,404	79,404	79,395	79,394	79,394
Pseudo R-squared	0.110	0.110	0.110	0.106	0.107	0.107	0.113	0.114	0.115
LR chi^2	278.3*	288.8*	325.7*	243.2*	246.7*	313.4*	239.3*	245.4*	281.1*

Appendix Table 5. Variations in Protests and Outlier Removal

Robust standard errors clustered by country in parentheses. Regional dummies, coup months, coup months 2 and coup months 3 not shown. +p<.10; *p<.05 (two-tailed).

In Footnote 9 (page 17), we discuss the distribution of the protest variable and how the positive skew might influence our findings. Below we present the bivariate relationship between coups and protest events. Though protest events show a strong, positive skew, these events are not related to coups (i.e., we have zero instances where protests are unreasonably high that coincide with coup attempts).



Appendix Figure 1. Descriptive Statistics of the Protest/Coup Relationship

Note: The figure above shows the frequency that coups and protest events appear in the dataset for each protest level. For example, "A" above marks the 74 coups (left Y axis) that happened when there was a single protest event in the state/year/month (X axis); this appeared 8782 times in the dataset (right Y axis). Likewise, "B" above reveals 16 coups that happened when the state/year/month experienced 3 protest events; this happened 1080 times in the dataset. Everything to the right of "C" reveals state/year/months with large numbers of protest events. These are infrequent and none coincide with a coup.

In Footnote 11, we indicate that our results are generally stronger when we alter the near/far threshold to be closer to the capital and weaker as we move away from the capital. Below we present the marginal effects for several distance measures.



Appendix Figure 2. Influence of Protest Distance as Near/Far Threshold Varies

Note: The main results in the manuscript use a threshold of 3 miles to differentiate between protests "Near to" and "Away from" the capital. The figure above replicates the results from Table 1, Model 2 with varying thresholds to differentiate near/away.