

Appendices

Appendix 1: Linear Restrictions

We are interested in testing several linear restrictions for the effect of disasters and disaster related deaths when $W=0$ and $W=1$. For instance, for the effect of one lag of disasters we test: H_0 : $Disasters_t + Disasters_{t-1} + (W)(Disasters_t + Disasters_{t-1}) = 0$. If $W=0$ we test the first two components and if $W=1$ we test all four components of the restriction. The same applies for disaster related casualties.

Table 1: Anti-Government Demonstrations Joint Hypotheses

Model	Sum Covariates=0	P-Value (W=0)	P-Value (W=1)
Model 3	Disasters	0.013 (+)	0.776 (-)
	Deaths	0.981 (-)	0.096 (+)
Model 4	Disasters	0.019 (+)	0.622 (-)
	Deaths	0.925 (-)	0.013 (+)
Model 5	Disasters	0.001 (+)	0.052 (-)
	Deaths	0.250 (-)	0.063 (+)
Model 6	Disasters	0.001 (+)	0.009 (-)
	Deaths	0.101 (-)	0.009 (+)
Model 7	Disasters	0.021 (+)	0.062 (-)
	Deaths	0.307 (+)	0.807 (+)
Model 8	Disasters	0.014 (+)	0.048 (-)
	Deaths	0.325 (+)	0.813 (+)

Table 2: Leader Survival Joint Hypotheses

Model	Sum Covariates=0	P-Value (W=0)	P-Value (W=1)
Model 9	Disasters	0.014 (+)	0.135 (-)
	Deaths	0.823 (+)	0.002 (+)
Model 10	Disasters	0.004 (+)	0.027 (-)
	Deaths	0.568 (+)	0.0000 (+)
Model 11	Disasters	0.006 (+)	0.136 (-)
	Deaths	0.810 (+)	0.002 (+)
Model 12	Disasters	0.001 (+)	0.028 (-)
	Deaths	0.473 (+)	0.0000 (+)

Appendix 2: Models with Demaut

The variable *Demaut* is derived from Polity's Democracy and Autocracy scores. More specifically, $Demaut = (Democracy\ Score - Autocracy\ Score + 10) / 20$. The variable has a minimum of 0 and a maximum of 1 with intervals of .05. The mean of *Demaut* is .5550 and its variance is .143 for 5157 observations.

Table 3: Dependent Variable: ln(Deaths)

	Model 1a	Model 2a
Demaut	-1.4847 (1.009)	1.7259 (3.313)
Disasters	0.1091*** (0.024)	0.1320* (0.072)
(Disasters)(Demaut)	0.0045 (0.026)	-0.0266 (0.095)
ln(GDPPC)	-0.0207 (0.042)	-0.3489 (0.215)
ln(GDPPC)(Demaut)	-0.2350*** (0.058)	0.0669 (0.150)
ln(Population)	0.6029*** (0.050)	2.1967*** (0.268)
ln(Population)(Demaut)	0.2316*** (0.065)	-0.0907 (0.219)
Intercept	-7.8509*** (0.853)	-31.0650*** (3.982)
N	5157	5157
FE	321 reg-years	150 countries

Unit: Country-Year.

* p<0.10, ** p<0.05, *** p<0.01

Table 4: Dependent Variable: Anti-Government Demonstrations

	Model 3a	Model 4a	Model 5a	Model 6a	Model 7a	Model 8a
L.(ln)AntiGov	0.3237*** (0.023)	0.3233*** (0.023)	0.2181*** (0.028)	0.2155*** (0.027)		
LAntiGov					0.0968*** (0.022)	0.0903*** (0.021)
Demaut	-0.3571 (0.293)	-0.2368 (0.310)	-0.0253 (0.558)	0.0132 (0.597)	4.2183* (2.459)	2.8289 (2.655)
Disasters	0.0139*** (0.004)	0.0227** (0.009)	0.0170*** (0.003)	0.0197** (0.009)	0.0226*** (0.008)	0.0206** (0.008)
(Disasters)(Demaut)	-0.0147*** (0.006)	-0.0202* (0.011)	-0.0301*** (0.008)	-0.0230* (0.012)	-0.0478*** (0.015)	-0.0467*** (0.015)
L.Disasters		-0.0098 (0.009)		-0.0029 (0.012)		
L.(Disasters)(Demaut)		0.0053 (0.011)		-0.0110 (0.013)		
ln(Deaths)	0.0022 (0.007)	0.0005 (0.008)	-0.0001 (0.008)	-0.0009 (0.007)	0.0543 (0.037)	0.0448 (0.039)
ln(Deaths)(Demaut)	0.0085 (0.011)	0.0068 (0.012)	0.0088 (0.012)	0.0060 (0.011)	-0.0579 (0.053)	-0.0466 (0.054)
L.ln(Deaths)		0.0020 (0.007)		-0.0029 (0.007)		
L.ln(Deaths)(Demaut)		0.0112 (0.012)		0.0179 (0.012)		
GDPPC	0.0375*** (0.011)	0.0386*** (0.011)	-0.0178 (0.034)	-0.0052 (0.035)	-0.1120 (0.212)	-0.1792 (0.220)
(GDPPC)(Demaut)	-0.0544*** (0.015)	-0.0542*** (0.015)	-0.0473* (0.028)	-0.0489* (0.029)	-0.4880*** (0.136)	-0.4349*** (0.138)
ln(Population)	0.0282** (0.012)	0.0293** (0.012)	0.1496*** (0.039)	0.1470*** (0.042)	1.4658*** (0.247)	1.4606*** (0.240)
ln(Population)(Demaut)	0.0506*** (0.018)	0.0423** (0.020)	0.0246 (0.035)	0.0214 (0.038)	-0.0384 (0.141)	-0.0037 (0.147)
Growth	-0.0038** (0.002)	-0.0034* (0.002)	-0.0028 (0.002)	-0.0027 (0.002)	-0.0503*** (0.017)	-0.0508*** (0.019)
(Growth)(Demaut)	-0.0011 (0.004)	-0.0020 (0.004)	-0.0036 (0.004)	-0.0041 (0.004)	0.0219 (0.025)	0.0240 (0.027)
Intercept	-0.5884*** (0.213)	-0.6181*** (0.221)	-2.0510*** (0.587)	-2.0929*** (0.625)	-24.2233*** (4.070)	-23.2080*** (4.072)
Inflation Equation						
Demaut						-3.7369*** (1.147)
Intercept						-0.3836 (0.448)
ln(alpha)					0.4477*** (0.101)	0.2261* (0.131)
N	4918	4854	4918	4854	4918	4918
FE	300 reg-years	300 reg-years	149 countries	148 countries	149 countries	149 countries

Unit: Country-Year.

* p<0.10, ** p<0.05, *** p<0.01

Table 5: Dependent Variable: Tenure in Office

	Model 9a	Model 10a	Model 11a	Model 12a
Demaut	0.9645 (1.539)	1.2423 (1.635)	-0.2637 (1.471)	-0.1562 (1.566)
S	-1.2965*** (0.148)	-1.3449*** (0.155)	-1.1299*** (0.148)	-1.1619*** (0.157)
Age	0.0308*** (0.007)	0.0319*** (0.007)	0.0420*** (0.006)	0.0428*** (0.006)
(Age)(Demaut)	-0.0224** (0.009)	-0.0225** (0.009)	-0.0377*** (0.009)	-0.0371*** (0.009)
Disasters	0.0200** (0.008)	-0.0198 (0.037)	0.0192*** (0.007)	-0.0274 (0.036)
(Disasters)(Demaut)	-0.0253* (0.013)	0.0282 (0.046)	-0.0248* (0.013)	0.0356 (0.045)
L.Disasters		0.0414 (0.037)		0.0499 (0.037)
L.(Disasters)(Demaut)		-0.0604 (0.045)		-0.0686 (0.045)
ln(Deaths)	0.0341 (0.035)	0.0352 (0.039)	0.0349 (0.035)	0.0390 (0.038)
ln(Deaths)(Demaut)	-0.0065 (0.046)	-0.0293 (0.051)	-0.0082 (0.046)	-0.0318 (0.051)
L.ln(Deaths)		0.0284 (0.035)		0.0260 (0.036)
L.ln(Deaths)(Demaut)		0.0277 (0.048)		0.0243 (0.049)
GDPPC	-0.0126 (0.064)	0.0132 (0.065)	-0.0160 (0.059)	0.0088 (0.060)
(GDPPC)(Demaut)	-0.0063 (0.075)	-0.0159 (0.078)	0.0085 (0.072)	0.0028 (0.074)
ln(Population)	-0.0945 (0.069)	-0.1089 (0.075)	-0.1424** (0.065)	-0.1608** (0.071)
ln(Population)(Demaut)	0.1242 (0.091)	0.1147 (0.099)	0.1889** (0.015)	0.1860* (0.016)
Growth	-0.0393*** (0.010)	-0.0430*** (0.010)	-0.0315*** (0.010)	-0.0353*** (0.010)
(Growth)(Demaut)	0.0355** (0.015)	0.0318** (0.015)	0.0250 (0.015)	0.0218 (0.016)
Intercept			-0.7007 (1.082)	-0.7232 (1.156)
Ancillary parameter				
Demaut			0.4666*** (0.078)	0.4479*** (0.081)
Intercept			-0.4357*** (0.062)	-0.4133*** (0.066)
N	5729	5586	5729	5586
Subjects	1111	1075	1111	1075
LogLikelihood	-6.14e+03	-5.83e+03	-1.66e+03	-1.56e+03

Unit: Leader-Year.

* p<0.10, ** p<0.05, *** p<0.01