

## Online Appendix II: Replication of Results from Bueno de Mesquita et. al., 2003

Bueno de Mesquita et. al. 2003 diverge substantially from their original empirical model. Here they utilize a parametric event history models, weibull and exponential, and only utilize  $W$  for most models. They also assume a time dependent relationship. In the appendix, I replicate their 2003 findings and demonstrate that these models show the same patterns as those in my study. (Note: Bueno de Mesquita et. al. 2003 only give analysis on the effects of  $W$  on leadership tenure. Thus, the models on military regimes and time dependence are omitted here.)

**Table A.II.1: Replication**

		Model 1	Model 2	Model 3
X $\beta$	W	-.059 (.256)	-.085 (.202)	.059 (.262)
	S	---	-.073 (.148)	---
	ln(years+1)	---	---	-.588 (.000)
	W*ln(years+1)	---	---	.278 (.000)
	Constant	-1.01 (.000)	-.889 (.000)	-1.034 (.000)
Ancillary				
Parameter ln(p)	W	.355 (.000)	.356 (.000)	Exponential
	S	---	---	---
	Constant	-.494 (.000)	-.492 (.000)	---
Summary Statistics	Observations	N = 16,004	N = 13,382	N = 16,004
		Leaders = 2,885	Leaders = 2,689	Leaders = 2,885
	Log Likelihood	-5227.6876	-4631.3649	-5237.7883
	Wald-Test	.43 (.512)	2.80 (.246)	619.95 (.000)

**Table A.II.2: Model 1 Replication Controlling for Democracy/Election Measures**

		Model 1	Model 2	Model 3	Model 4	Model 5
X $\beta$	W	.100 (.139)	-1.052 (.000)	-.171 (.133)	.599 (.037)	-389 (.069)
	WS:DemRes	.074 (.000)	---	---	---	---
	Polity2	---	.065 (.000)	---	---	---
	Election	---	---	.130 (.101)	---	---
	FHPR	---	---	---	.163 (.019)	---
	FHCL	---	---	---	-.018 (.406)	---
	ACLP	---	---	---	---	-.151 (.201)
	Constant	-1.178 (.000)	-.566 (.000)	-.979 (.000)	-2.135 (.000)	-.926 (.000)
Ancillary						
Parameter ln(p)	W	.256 (.000)	-.044 (.293)	.063 (.235)	-.513 (.001)	-.172 (.094)
	WS:DemRes	.023 (.000)	---	---	---	---
	Polity2	---	.019 (.000)	---	---	---
	Election	---	---	.252 (.000)	---	---
	FHPR	---	---	---	-.103 (.004)	---
	FHCL	---	---	---	-.087 (.016)	---
	ACLP	---	---	---	---	-.464 (.000)
	Constant	-.386 (.000)	-.226 (.000)	-.408 (.000)	.794 (.000)	.146 (.103)
Summary Statistics	Observations	N = 12,520	N = 14,148	N = 14,148	N = 4,698	N = 4,823
		L = 2,570	L = 2,723	L = 2,723	L = 881	L = 924
	Log Likelihood	-4203.788	-4651.103	-4795.009	-1305.893	-1424.264
	Wald Test	70.18 (.000)	64.32 (.000)	1.66 (.436)	10.32 (.016)	2.39 (.303)

**Table A.II.3: Model 2 Replication Controlling for Democracy/Election Measures**

		Model 1	Model 2	Model 3	Model 4	Model 5
Xβ	W	.125 (.107)	-1.268 (.000)	-.361 (.021)	1.193 (.001)	.705 (.010)
	S	-.046 (.264)	-.048 (.257)	-.006 (.468)	-.677 (.000)	-1.163 (.000)
	WS:DemRes	.074 (.000)	---	---	---	---
	Polity2	---	.074 (.000)	---	---	---
	Election	---	---	.229 (.019)	---	---
	FHPR	---	---	---	.122 (.064)	---
	FHCL	---	---	---	.035 (.323)	---
	ACLP	---	---	---	---	-.173 (.192)
	Constant	-1.153 (.000)	-.386 (.000)	-.882 (.000)	-2.014 (.000)	-.741 (.002)
Ancillary Parameter ln(p)	W	.256 (.000)	-.174 (.027)	-.010 (.461)	-.638 (.000)	-.285 (.016)
	WS:DemRes	.023 (.000)	---	---	---	---
	Polity2	---	.023 (.000)	---	---	---
	Election	---	---	.278 (.000)	---	---
	FHPR	---	---	---	-.109 (.003)	---
	FHCL	---	---	---	-.088 (.014)	---
	ACLP	---	---	---	---	-.446 (.000)
	Constant	-.386 (.000)	-.150 (.001)	-.378 (.000)	.919 (.000)	.255 (.018)
Summary Statistics	Observations	N = 12,520 L = 2,570	N = 12,520 L = 2,570	N = 12,520 L = 2,570	N = 4,619 L = 873	N = 4,793 L = 919
	Log Likelihood Wald Test	-4203.589 70.58 (.000)	-4203.598 70.62 (.000)	-4360.731 5.09 (.166)	-1279.887 31.08 (.000)	-1383.369 70.73 (.000)

**Table A.II.4: Model 3 Replication Controlling for Democracy/Election Measures**

		Model 1	Model 2	Model 3	Model 4	Model 5
Xβ	W	.215 (.014)	-1.051 (.000)	-.015 (.463)	.624 (.044)	.035 (.452)
	W * ln(t+1)	.210 (.002)	-.070 (.268)	-.103 (.197)	-.605 (.004)	-.612 (.001)
	WS:DemRes	.079 (.000)	---	---	---	---
	WS:DemRes * ln(t+1)	.025 (.000)	---	---	---	---
	Polity2	---	.069 (.000)	---	---	---
	Polity2 * ln(t+1)	---	.020 (.000)	---	---	---
	Election	---	---	.054 (.309)	---	---
	Election * ln(t+1)	---	---	.396 (.000)	---	---
	FHPR	---	---	---	.159 (.030)	---
	FHPR * ln(t+1)	---	---	---	-.116 (.019)	---
	FHCL	---	---	---	-.064 (.207)	---
	FHCL * ln(t+1)	---	---	---	-.076 (.085)	---
	ACLP	---	---	---	---	-.096 (.312)
	ACLP * ln(t+1)	---	---	---	---	-.662 (.000)
	ln(t+1)	-.430 (.000)	-.289 (.000)	-.487 (.000)	.821 (.001)	.463 (.006)
	Constant	-1.265 (.000)	-.581 (.000)	-1.011 (.000)	-1.944 (.000)	-1.231 (.000)
Summary Statistics	Observations	N = 12,520 L = 2,570	N = 14,148 L = 2,723	N = 14,148 L = 2,723	N = 4,698 L = 881	N = 4,823 L = 924
	Log Likelihood Wald Test	-4228.163 849.80 (.000)	-4677.293 901.42 (.000)	-4812.739 630.53 (.000)	-1333.161 180.50 (.000)	-1435.097 188.29 (.000)

**Table A.II.5: Replication of Model 1 Accounting for Elections**

		Model 1	Model 1
X $\beta$	W	-.199 (.132)	-.027 (.464)
	Election	Election = 0	Election = 1
Ancillary Parameter ln(p)	W	-.025 (.404)	.254 (.059)
	Election	Election = 0	Election = 1
Summary Statistics	Observations	N = 9,403	N = 4,745
		L = 1,572	L = 1,325
	Log Likelihood	-2789.684	-2001.842
	Wald-Test	1.26 (.262)	0.01 (.928)

**Table A.II.6: Replication of Model 2 Accounting for Elections**

		Model 1	Model 2
X $\beta$	W	-.438 (.018)	-.053 (.438)
	S	.137 (.041)	-.925 (.000)
	Election	Election = 0	Election = 1
Ancillary Parameter ln(p)	W	-.232 (.029)	.333 (.030)
	Election	Election = 0	Election = 1
Summary Statistics	Observations	N = 8,098	N = 4,422
		L = 1,460	L = 1,270
	Log Likelihood	-2467.150	-1877.110
	Wald-Test	5.77 (.056)	14.87 (.001)

**Table A.II.7: Replication of Model 3 Accounting for Elections**

		Model 1	Model 2	Model 3
X $\beta$	W	-.499 (.000)	-.227 (.113)	.578 (.041)
	W*ln(years+1)	.375 (.000)	-.038 (.391)	-.288 (.145)
	ln(years+1)	-.593 (.000)	-.508 (.000)	.074 (.380)
	Election	stratified	Election = 0	Election = 1
Summary Statistics	Observations	N = 14,148	N = 9,403	N = 4,745
		L = 2,885	L = 1,572	L = 1,325
	Log Likelihood	-4824.149	-2808.632	-2001.072
	Wald-Test	607.71 (.000)	381.15 (.000)	27.55 (.000)