Online Appendix for
The Justice Dilemma: Leaders and Exile in an Era of Accountability

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Appendix for Chapter 3

This section of the appendix contains additional data, summary statistics, and models/figures referenced in chapter 3. Unless otherwise stated, robustness checks are performed on the main interaction model of exile reported in the book (model 3 of table 2).

Table 1. Summary statistics for variables in the exile models

Variable	Mean	Std. Dev.	Min.	Max.
Culpable Leader	.21	.41	0	1
Conflict Intensity	.23	.54	0	2
Revolutionary Activity	.23	.56	0	9
Leader Tenure	6.34	7.57	0	49
Western Affinity	-.03	.93	-2.49	3.01
Democracy	.41	.49	0	1

Table 2. Rare events. This model uses a penalized maximum likelihood regression (Firth 1993) to account for rare events bias. My results are consistent.

	(1)
Culpable Leader x Post-1998	-1.845**
	(0.880)
Post-1998	-0.028
	(0.277)
Culpable Leader	-0.014
	(0.285)
Conflict Intensity	0.308*
	(0.170)
Revolutionary Activity	0.962**
	(0.116)
Leader Tenure	0.020
	(0.013)
Western Affinity	0.085
	(0.131)
Democracy	-0.351
	(0.267)
Constant	-4.648**
	(0.213)
βCulpable Leader + βCulpable×Post-1998	-1.859**
	(.863)
N	7278
AIC	997.47
BIC	1059.50

Standard errors clustered by leader in parentheses
* $p < 0.10$, ** $p < 0.05$ (two-tailed)

Table 3. Post–Cold War only. To parse out the effect of the justice cascade from the end of the Cold War, I limit my impunity era sample to the post–Cold War period (1989–1997). Since the sample size for these nine years is relatively small (thus possibly biasing the results in favor of a null finding), I compare it to a reduced accountability era sample that includes only the nine years immediately after 1998 (1998–2006). My results are consistent.

	(1)
Culpable Leader x Post-1998	-2.847**
	(1.144)
Post-1998	0.584
	(0.477)
Culpable Leader	0.241
	(0.563)
Conflict Intensity	0.835**
	(0.291)
Revolutionary Activity	0.490**
	(0.156)
Leader Tenure	0.022
	(0.022)
Western Affinity	-0.313
	(0.211)
Democracy	-0.207
	(0.486)
Constant	-5.263**
	(0.501)
β*Culpable Leader* + β*Culpable×Post-1998*	-2.607**
	(1.185)
N	2969
AIC	390.11
BIC	444.08

Standard errors clustered by leader in parentheses
* $p < 0.10$, ** $p < 0.05$ (two-tailed)

Table 4. Alternative definition of leader culpability. This model uses an alternative leader culpability variable. Specifically, this leader culpability variable indicates whether leaders presided over a genocide or politicide as defined by the Political Instability Task Force (Marshall, Gurr, and Harff 2014). When using this alternative definition, not a single culpable leader goes into exile in the post-1998 accountability era. While this makes it impossible to estimate a coefficient and standard error for the interaction term, the perfect prediction of zero cases of exile for culpable leaders after 1998 strongly supports my theoretical claims.

	(1)
Culpable Leader x Post-1998	(.)
	(.)
Post-1998	-0.285
	(0.261)
Culpable Leader	0.356
	(0.309)
Conflict Intensity	0.199
	(0.226)
Revolutionary Activity	0.957**
	(0.275)
Leader Tenure	0.018
	(0.013)
Western Affinity	0.127
	(0.104)
Democracy	-0.360
	(0.298)
Constant	-4.654**
	(0.241)
N	7254
AIC	1035.97
BIC	1091.09

Standard errors clustered by leader in parentheses
$^{*} p < 0.10$, $^{**} p < 0.05$ (two-tailed)

Table 5. Bivariate probit model. This model simultaneously estimates a selection equation (whether leaders select into culpability by engaging in mass killing) and an outcome equation (whether leaders go into exile) while controlling for the correlation in errors between the two equations. It covers 1998–2010 because this is the only period in which an endogenous relationship might threaten my inferences. In the selection equation, I model leader culpability using the covariates from the main mass killing model in chapter 5. The outcome equation is identical to model 2 of table 2 in chapter 3. My results are consistent.

	(1)
Outcome Equation (Exile)	
Culpable Leader	-1.583**
	(0.533)
Conflict Intensity	-0.034
	(0.205)
Revolutionary Activity	0.984**
	(0.172)
Leader Tenure	0.018
	(0.015)
Western Affinity	-0.194
	(0.189)
Democracy	0.323
	(0.277)
Constant	-2.897**
	(0.312)
Selection Equation (Leader Culpability)	
Conflict Intensity	0.589**
	(0.152)
Political Stability	0.014**
	(0.005)
Democracy	0.588**
	(0.294)
Ethnic Polarization	0.994
	(0.754)
Exclusionary Ideology	2.654**
	(0.329)
Trade Openness	-0.001
	(0.004)
Development	-1.027**
	(0.183)
Constant	3.443**
	(1.204)
Rho	-.950
	(6.053)
N	1569
AIC	342.68
BIC	428.41

Standard errors in parentheses
* $p < 0.10$, ** $p < 0.05$ (two-tailed)

Table 6. Do other variables affect punishment expectations? In figure 4 in the book, I reported the first difference associated with Major Power Ally, Africa, CINC Score, and Personalist rather than a large regression table. Below, I report the regression models on which the first differences were based. Consistent with the first differences, none of these additional variables are significant.

	(1)	(2)	(3)	(4)
Major Power Ally	0.783			
	(0.538)			
Africa		0.263		
		(0.575)		
CINC Score			-145.744	
			(121.380)	
Personalist				0.493
				(0.695)
Culpable Leader	-2.213**	-2.955**	-2.778**	-2.848**
	(0.911)	(1.120)	(1.159)	(1.006)
Conflict Intensity	-0.109	-0.538	-0.387	-0.498
	(0.670)	(0.844)	(0.745)	(0.843)
Revolutionary Activity	2.000**	2.180**	2.186**	2.019**
	(0.467)	(0.482)	(0.510)	(0.520)
Leader Tenure	0.031	0.019	0.019	-0.000
	(0.030)	(0.033)	(0.036)	(0.031)
Democracy	0.072	0.611	0.716	
	(0.595)	(0.656)	(0.655)	
Western Affinity		-0.454*	-0.465*	-0.351*
		(0.265)	(0.254)	(0.213)
Constant	-5.880**	-5.852**	-5.504**	-5.314**
	(0.569)	(0.690)	(0.664)	(0.380)
N	2243	2184	2184	2184
AIC	209.96	198.42	194.93	196.97
BIC	249.96	243.93	240.44	236.80

Standard errors clustered by leader in parentheses
* $p < 0.10$, ** $p < 0.05$ (two-tailed)

Appendix for Chapter 4

This section of the appendix contains additional data, summary statistics, and models/figures referenced in chapter 4. Unless otherwise stated, robustness checks are performed on the split sample models of war duration reported in the book (models 1 and 2 of table 3).

Table 7. Summary statistics for variables in the civil war duration models

Variable	Mean	Std. Dev.	Min.	Max.
Culpable Leader	.62	.49	0	1
Multiparty War	.76	.43	0	1
Mountains	25.6	23.3	0	82.20
Development	.75	1.00	-1.07	3.77
Gov't. External Support	.59	.49	0	1
Rebel External Support	.52	.50	0	1
Rebel Strength	.62	.64	0	3

Table 8. Cox models. These regressions use the Cox proportional hazards model instead of the Weibull model. My results are consistent.

	(1) Pre-1998	(2) Post-1998
Culpable Leader	-0.235	-0.818**
	(0.208)	(0.268)
Multiparty War	0.016	-0.650*
	(0.246)	(0.343)
Mountains	-0.005	-0.004
	(0.004)	(0.005)
Development	-0.057	-0.331**
	(0.113)	(0.123)
Gov't. External Support	0.002	0.008
	(0.195)	(0.233)
Rebel External Support	-0.527**	-0.313
	(0.174)	(0.228)
Rebel Strength	0.189*	-0.049
	(0.112)	(0.241)
N	1076	337
Subjects	200	97
Log lik.	-726.114	-236.331

Standard errors clustered by UCDP/PRIO war code in parentheses
* $p < 0.10$, ** $p < 0.05$ (two-tailed)

Table 9. Post–Cold War only. To parse out the effect of the justice cascade from the end of the Cold War, I limit my impunity era sample to the post–Cold War period (1989–1997). For this model, I use data on conflicts that begin anytime between the start 1989 and the end of 1997. The dyads enter the data when the conflict starts and exit when the conflict ends. Dyads are right censored at the end of 1997 if the conflict is still ongoing. Since the sample size for these nine years is relatively small (thus possibly biasing the results in favor of a null finding), I compare it to a reduced accountability era sample that includes only the nine years immediately after 1998. For that model, I use data on conflicts that begin anytime between the start 1998 and the end of 2006. The dyads enter the data when the conflict starts and exit when the conflict ends. Dyads are right censored at the end of 2006 if the conflict is still ongoing.

	(1) Pre-1998	(2) Post-1998
Culpable Leader	-0.445	-1.538**
	(0.278)	(0.321)
Multiparty War	-0.115	-0.167
	(0.373)	(0.402)
Mountains	-0.004	-0.006
	(0.006)	(0.007)
Development	-0.015	-0.078**
	(0.050)	(0.030)
Gov't. External Support	-0.445	-0.166
	(0.304)	(0.270)
Rebel External Support	-0.249	-0.165
	(0.190)	(0.243)
Rebel Strength	0.249	0.174
	(0.183)	(0.229)
Constant	-4.381**	-5.082**
	(0.663)	(0.785)
N	322	243
Subjects	107	75
Log lik.	-126.781	-79.319

Standard errors clustered by UCDP/PRIO war code in parentheses
$^*p < 0.10$, $^{**}p < 0.05$ (two-tailed)

Table 10. Alternative definition of leader culpability. This model uses an alternative leader culpability variable. Specifically, this leader culpability variable indicates whether leaders presided over a genocide or politicide as defined by the Political Instability Task Force (Marshall, Gurr, and Harff 2014). My results are consistent.

	(1) *Pre-1998*	(2) *Post-1998*
Culpable Leader	-0.167	-0.627**
	(0.227)	(0.250)
Multiparty War	0.048	-0.884**
	(0.261)	(0.335)
Mountains	-0.004	-0.005
	(0.004)	(0.005)
Development	-0.072	-0.340**
	(0.127)	(0.116)
Gov't. External Support	-0.092	-0.134
	(0.201)	(0.286)
Rebel External Support	-0.476**	-0.273
	(0.168)	(0.198)
Rebel Strength	0.175	-0.099
	(0.138)	(0.240)
Constant	-5.063**	-4.440**
N	1093	348
Subjects	203	102
Log lik.	-357.911	-130.682

Standard errors clustered by UCDP/PRIO war code in parentheses
* $p < 0.10$, ** $p < 0.05$ (two-tailed)

Appendix for Chapter 5

This section of the appendix contains additional data, summary statistics, and models/figures referenced in chapter 5. Unless otherwise stated, robustness checks are performed on the main logit model of mass killing onset reported in the book (model 1 of table 4).

Table 11. Summary statistics for variables in the mass killing onset models

Variable	Mean	Std. Dev.	Min.	Max.
Post-1998	.29	.45	0	1
Conflict Intensity	.21	.51	0	2
Political Stability	27.78	33.51	1	269
Democracy	.40	.49	0	1
Ethnic Polarization	.52	.24	.02	.98
Exclusionary Ideology	.23	.42	0	1
Trade Openness	58.47	48.53	4.53	986.65
Development	1.37	1.16	-1.77	4.44
Years w/o Mass Killing	24.97	16.54	0	64

Table 12. Rare events. This model uses a penalized maximum likelihood regression (Firth 1993) to account for rare events bias. My results are consistent.

	(1)
Post-1998	-1.712**
	(0.518)
Conflict Intensity	1.558**
	(0.199)
Political Stability	-0.011
	(0.010)
Democracy	0.082
	(0.343)
Ethnic Polarization	-0.214
	(0.684)
Exclusionary Ideology	0.035
	(0.311)
Trade Openness	0.001
	(0.003)
Development	-0.459**
	(0.175)
Years w/o Mass Killing	-0.062
	(0.079)
Constant	-4.462**
	(0.586)
N	4970
AIC	447.73
BIC	532.38

Standard errors clustered by country in parentheses
Cubic splines included but not reported
$^{*} p < 0.10$, $^{**} p < 0.05$ (two-tailed)

Table 13. Post–Cold War only. To parse out the effect of the justice cascade from the end of the Cold War, I limit my sample to the post–Cold War period. Specifically, I examine how the likelihood of mass killing onset changes from the last nine years of the impunity era (1989–1997) to the first nine years of the accountability era (1998–2006). My results are consistent.

	(1)
Post-1998	-2.018**
	(0.603)
Conflict Intensity	1.919**
	(0.482)
Political Stability	-0.019
	(0.019)
Democracy	-0.487
	(0.573)
Ethnic Polarization	-1.184
	(1.263)
Exclusionary Ideology	0.034
	(0.499)
Trade Openness	0.001
	(0.001)
Development	-0.838**
	(0.397)
Years w/o Mass Killing	0.038
	(0.152)
Constant	-4.774**
	(0.866)
N	1893
AIC	192.63
BIC	264.73

Standard errors clustered by country in parentheses
Cubic splines included but not reported
$^{*} p < 0.10$, $^{**} p < 0.05$ (two-tailed)

Table 14. Alternative definition of state-sponsored mass atrocities. This model uses the onset of a genocide or politicide identified by the Political Instability Task Force (Marshall, Gurr, and Harff 2014) as an alternative dependent variable. My results are consistent.

	(1)
Post-1998	-0.980**
	(0.466)
Conflict Intensity	1.596**
	(0.356)
Political Stability	-0.020
	(0.016)
Democracy	0.035
	(0.509)
Ethnic Polarization	-0.508
	(0.739)
Exclusionary Ideology	0.564
	(0.404)
Trade Openness	0.003
	(0.002)
Development	-0.344
	(0.216)
Years w/o Mass Killing	-0.147
	(0.137)
Constant	-4.945**
	(0.912)
N	4970
AIC	287.89
BIC	372.53

Standard errors clustered by country in parentheses
Cubic splines included but not reported
$^*\,p < 0.10, ^{**}\,p < 0.05$ (two-tailed)

Table 15. Temporal dependence. This model uses the time polynomials approach (Carter and Signorino 2010) to model temporal dependencies associated with mass killing instead of the cubic splines approach (Beck, Katz, and Tucker 1998) that was used in the book. My results are consistent.

	(1)
Post-1998	-1.808**
	(0.510)
Conflict Intensity	1.577**
	(0.205)
Political Stability	-0.013
	(0.010)
Democracy	0.032
	(0.332)
Ethnic Polarization	-0.204
	(0.637)
Exclusionary Ideology	0.012
	(0.278)
Trade Openness	-0.001
	(0.003)
Development	-0.443**
	(0.171)
Years w/o Mass Killing	-0.126
	(0.102)
Years w/o Mass Killing^2	0.009
	(0.006)
Years w/o Mass Killing^3	-0.000
	(0.000)
Constant	-4.398**
	(0.529)
N	4970
AIC	548.20
BIC	626.34

Standard errors clustered by country in parentheses
* $p < 0.10$, ** $p < 0.05$ (two-tailed)