Coup Agency and Prospects for Democracy

Online Appendix: Reanalysis of Existing Models

Powell & Thyne (2016) and Derpanoupoulos et al. (2016)

As additional robustness checks, we re-analyzed some of the most prominent models in the literature on the regime-level effects of military coups. To begin with, Clayton Thyne and Jonathan Powell (2016)—TP16 in the following—argue that coups can open up avenues for democratization, particularly if they occur in repressive regimes. They find empirical support for their argument, demonstrating that both successful and failed coups increase the predicted probability of democratization by more than 100 percent (Thyne and Powell 2016, 213).

By contrast, George Derpanopoulos, Erica Frantz, Joseph Wright and Barbara Geddes (2016)—henceforth DFWG—argue that "the perpetrators of coups tend to oust dictators only to impose new ones" and that post-coup dictatorships tend to be more repressive than their predecessors (Derpanopoulos et al. 2016, 6). Empirically, they find that coups are not significantly related to democratization, but that successful coups increase the likelihood of transitions from one authoritarian regime to another both during the Cold War (+19 percent) as well as after (+27 percent) (Derpanopoulos et al. 2016, 3). These different findings are at least to some extent due to the fact that DFWG include regime-case fixed effects in their models, an empirical strategy which might bias their results (Miller 2016).

TP16 use a binary measure of democratization which is coded 1 if a country moves up to +6 or above on the polity scale in any given year (Thyne and Powell 2016, 200). Reflecting the notion that post-coup democratization is particularly relevant if military interventions overthrow non-democratic regimes, they restrict their universe of cases to non-democracies (i.e. <6 on the

polity scale). DFWG are also interested in understanding the effects of coups on democratization, and consequently also restrict their sample to non-democracies. In contrast to TP16, however, they rely on the Geddes et al. (2014) data to operationalize democratization, arguing that this operationalization is superior to a measurement strategy which establishes a cut-off on a continuous indicator of regime characteristics since it is not sensitive to cosmetic reforms which do not fundamentally alter the distribution of power (Derpanopoulos et al. 2016, fn.5).

Both studies base their observations on the same dataset of coup events (Powell and Thyne 2011), and all use a measure of recent coups which is coded 1 for each year in which a coup occurs, as well as for the two subsequent years (Derpanopoulos et al. 2016, 3; Thyne and Powell 2016, 200). The extension of the coup measure reflects the fact that the effects of coups on the level of political regimes should not be expected to be instantaneous. The extended coup measure allows for such delayed effects of military coups to be captured. Drawing on these variables as well as a number of controls, TP16 specify logistic regression models to analyze the effects of coups and coup attempts on democratization in autocratic regimes, while DFWG use linear probability models with regime-case fixed effects. Moreover, DFWG differentiate between coups during and after the Cold War and include separate variables for coups in each period, while TP16 merely control for potential Cold War-effects with a dummy control variable.

We reanalyze the models presented by these authors without major changes, merely running separate models capturing the effects of coups staged by elite officers and combat officers, respectively. In our reanalysis of DFWG we also differentiate between Cold War and post-Cold War coups. The number of observations varies slightly from the originals since we were unable to

ascertain coup agency in all cases, but the results of the models including all coup agents are substantially similar to the original.[1]

Table OA1: Reanalysis of Thyne & Powell (2016)

	(1)	(2)	(3)
All coups	1.971**		
	(0.536)		
Elite officer coups		1.178	
		(0.728)	
Combat officer coups			2.164*
			(0.969)
Prior democracy	2.466***	2.589***	2.616***
	(0.628)	(0.662)	(0.671)
British colony	0.890	0.858	0.857
	(0.261)	(0.256)	(0.256)
Year of independence	0.992***	0.992***	0.992***
	(0.002)	(0.002)	(0.002)
Cold War	0.226***	0.222***	0.222***
	(0.062)	(0.062)	(0.062)
GDP/capita	1.789**	1.727**	1.779**
	(0.451)	(0.431)	(0.448)
Change GDP/capita	0.826	0.666	0.720
	(0.837)	(0.627)	(0.717)
Time	0.998	0.995	0.996
	(0.016)	(0.016)	(0.016)
$Time^2$	1.000	1.000	1.000
	(0.000)	(0.000)	(0.000)
$Time^3$	1.000	1.000	1.000
	(0.000)	(0.000)	(0.000)
Observations	4,838	4,719	4,719
Chi^2	91.27***	88.08***	90.50***

Standard errors in parentheses, cell entries are odds ratios
*** p<0.01, ** p<0.05, * p<0.1

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[1] See Table A1 in the appendix to the original article for coding differences between the Powell & Thyne (2011) and the CAM data.

Table OA2: Reanalysis of Derpanopoulos et al. (2016)

	(1)	(2)	(3)
All coups (Cold War)	0.008		
	(0.012)		
All coups (post-Cold War)	0.057		
	(0.037)		
Elite officer coups (Cold War)		-0.004	
		(0.017)	
Elite officer coups (post-Cold War)		0.046	
		(0.076)	
Combat officer coups (Cold War)			0.031*
			(0.017)
Combat officer coups (post-Cold War)			0.066
			(0.052)
Leader duration	-0.007	-0.007*	-0.006
	(0.004)	(0.004)	(0.004)
Constant	-0.200**	-0.195**	-0.205**
	(0.085)	(0.084)	(0.085)
Observations	4,629	4,629	4,629
R^2	0.284	0.283	0.285

Linear probability models, regime-case fixed effects included.
Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Two conclusions emerge from this reanalysis. First, the democratizing effect of coups found by TP16 is due exclusively to combat-officer coups. Just as TP16, we find that coups double the odds of democratization (+97 percent for all coups). Adding to TP16, however, we also show that this effect is driven by combat-officer coups. Combat-officer coups increase the odds of democratization by 116 percent. Elite officer coups, by contrast, do not significantly affect the probability of democratization. Their point estimate is closer to 1[2] and the effect does not reach statistical significance.

Second, differentiating between elite- and combat-officer coups also recovers some effects in the DFWG models, albeit not consistently across all specifications. As can be seen in Table

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[2] Since we are dealing with odds ratios, a ratio of 1 represents no effect.

OA2, we find a significant effect of combat-officer coups during the Cold War (just about significant at p<.1). Again, elite officer coups are not significant.

Marinov & Goemans (2014)

Nikolay Marinov and Hein Goemans (2014)—MG in the following—do not focus on democratization, but rather on competitive elections after coups d'état. In justifying this choice they suggest that "elections are a well-defined, measurable events" (Marinov and Goemans 2014, 811), while regime change is more difficult to ascertain. Their theory suggests that, in the post-Cold War period, regimes which are particularly dependent on foreign assistance should revert to competitive elections more quickly than regimes which are more autonomous from international pressure. In line with this argument, MG find that an increase in aid dependence from the 25th to the 75th percentile increases the likelihood that a post-coup regime will hold competitive elections by 17 points (+130 percent) in the post-Cold War period (2014, 814). From a more general perspective, this argument can thus be read as suggesting a particular mechanism linking coups to democratization (or at least political opening).

The original models estimated by MG are not directly comparable to the analyses discussed thus far since they operate with a different conceptualization and database of coup events. Drawing on the Archigos data (Goemans, Gleditsch, and Chiozza 2009), MG propose a broad operationalization of coups which does not distinguish between coups staged by military actors or by other types of regime insiders (Marinov and Goemans 2014, 808–9). Rather, they include an additional variable to control for whether or not a coup was staged by military officers and find that this control variable actually exerts a significant negative effect on the probability of a post-coup elections (Marinov and Goemans 2014, 816). In effect, the original finding that aid

dependence increases the probability of competitive post-coup elections thus applies to irregular regime change, while military coups in the strict sense show a negative effect.

Since the CAM data only include military coups (as opposed to coups staged by other types of actors), our reanalysis of MG is limited to instances in which coup agents are military officers. Following the original set-up, the unit of analysis is coup spells initiated either by combat-officer or elite officer coups. The dependent variable is coded 1 if such a spell ends in a competitive election in a specific year and 0 otherwise, with the operationalization of competitive elections based on the NELDA data (Marinov and Goemans 2014; Hyde and Marinov 2012).[3] Again following MG, we specify probit models controlling for the duration of the spell (time since coup) and run separate analyses for the Cold War and post-Cold War periods. Since we only cover military coups, we omit the military actors control included in the original model. The main independent variable of theoretical interest is a measure of aid dependence, defined as the ratio of aid receipts reported by the OECD to a country's GDP. The variable is lagged by one year (Marinov and Goemans 2014, 812).

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[3] In particular, a competitive election is defined as a contest in which (1) opposition is allowed and more than one candidate competes for office, (2) multiple parties are legal, and (3) the office of the incumbent is at stake (Marinov and Goemans 2014, 810)

Table OA3: Reanalysis of Marinov & Goemans (2014)

VARIABLES	(1) Elite officer coup spells (pre-1990)	(2) Combat officer coup spells (pre-1990)	(3) Elite officer coup spells (post-1989)	(4) Combat officer coup spells (post-1989)
Aid dependence	-2.403	-0.060	0.550	3.825**
	(1.629)	(1.047)	(0.655)	(1.697)
GDP/capita	0.059	0.070	-0.154	-0.103
	(0.097)	(0.132)	(0.112)	(0.254)
Growth	-4.368***	-4.266***	0.944	-0.988
	(1.201)	(1.409)	(1.355)	(1.060)
French colony	0.009	0.032	0.512*	0.501
	(0.223)	(0.301)	(0.278)	(0.357)
Prior electoral democracy	0.426**	0.608**	0.037	0.272
	(0.211)	(0.264)	(0.370)	(0.437)
Time since coup	-0.056***	-0.012	-0.034**	-0.020
	(0.017)	(0.016)	(0.016)	(0.019)
Constant	-1.534**	-2.092**	-0.027	-0.767
	(0.688)	(0.911)	(0.791)	(1.599)
Observations	573	397	168	95
	39.73***	17.23***	12.37*	20.79***

Robust standard errors in parentheses
*** $p<0.01$, ** $p<0.05$, * $p<0.1$

As can be seen in Table OA3, we can reproduce the effect reported by MG only for combat-officer coups during the post-Cold War period. In fact, we find that varying the aid dependence variable from the 25th to the 75th percentile more than triples the probability of a post-coup election (from 0.05 to 0.14) in the case of combat-officer coups (results obtained using Clarify; King, Tomz, and Wittenberg 2000), while the aid dependence variable does not reach statistical significance in any of the other models. The results thus support our hypothesis on the differential effects of coup agency on the probability of post-coup democratization.

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