Annex D: State Size and Democracy Analysis on Microstates

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1 Introduction

The sample examined in this annex is that of microstates. As explained in Annex C, the V-Dem dataset does not collect any data on microstates, including the Clientelism and Participatory Democracy indices. As such, the only causal mechanism to be studied here is the constraints on coercive capacity mechanism. The *Islamic* variable is omitted as well since none of the microstates recorded are Muslim-majority states.

2 Empirical Strategy 1: Regression

Table D1: Relationship between Logged Population and Democracy (Freedom House Index)

| | fh_total_reversed | | | |
| | Exposure-Outcome, Pooled | Pooled (No Interaction) | Panel FE (No Interaction) | Pooled (Interaction) |
	Model 1	Model 2	Model 3	Model 4
Population (Logged)	0.0085	0.0966	−0.2730	−1.5558***
	(0.1218)	(0.1371)	(0.9510)	(0.3373)
	p = 0.9445	p = 0.4809	p = 0.7741	p = 0.000004
Military Participation Rate		−0.2165*	−0.1825	−0.3507
		(0.1093)	(0.1560)	(0.2795)
		p = 0.0478	p = 0.2422	p = 0.2097
Urbanisation (% of Population)	2.7275***	2.8925***	−0.6295	−27.1018***
	(0.5121)	(0.5285)	(1.5355)	(5.8177)
	p = 0.0000002	p = 0.0000001	p = 0.6819	p = 0.000004
Per Capita GDP (Logged)	−0.4422*	−0.3499	−0.2824	−0.5655**
	(0.1990)	(0.2062)	(0.6043)	(0.2194)
	p = 0.0263	p = 0.0898	p = 0.6403	p = 0.0100
Government Expenditure (% of GDP)	−0.0791	0.1667	−1.7313*	−0.7925
	(0.6855)	(0.6999)	(0.8048)	(0.7384)
	p = 0.9082	p = 0.8118	p = 0.0315	p = 0.2832
Foreign Aid Received (% of GNI)	−0.3518	−0.2901	−0.2139	0.3881
	(0.6746)	(0.6945)	(0.4941)	(0.5983)
	p = 0.6020	p = 0.6761	p = 0.6651	p = 0.5167
Resource Dependence	−0.0664**	−0.0482*	−0.1005***	−0.0399*
	(0.0245)	(0.0215)	(0.0323)	(0.0202)
	p = 0.0067	p = 0.0252	p = 0.0019	p = 0.0489
Ethnic Fractionalization	1.4391*	1.4214*		1.9474***
	(0.5680)	(0.5724)		(0.4503)
	p = 0.0113	p = 0.0131		p = 0.00002
Population × Urbanization				2.6333***
				(0.5236)
				p = 0.0000005
MPR × Urbanization				0.0277
				(0.4267)
				p = 0.9482
Constant	12.9559***	10.7713***	−0.6742	31.6285***
	(2.6291)	(3.0507)	(0.7080)	(5.2091)
	p = 0.000001	p = 0.0005	p = 0.3410	p = 0.0000
Year FE	Yes	Yes	Yes	Yes
Country FE	No	No	Yes	No
N	546	546	546	546
R-squared	0.3464	0.3559	0.5736	0.4221
Adj. R-squared	0.2760	0.2851	0.5129	0.3560
Residual Std. Error	1.4277 (df = 492)	1.4188 (df = 491)	0.9447 (df = 477)	1.3466 (df = 489)
F Statistic	4.9206*** (df = 53; 492)	5.0246*** (df = 54; 491)	9.4379*** (df = 68; 477)	6.3791*** (df = 56; 489)

***p < .005; **p < .01; *p < .05

Table D2: Relationship between Logged Population and Military Participation Rate

| | milrate | | |
| | Pooled (No Interaction) | Panel FE (No Interaction) | Pooled (Interaction) |
	Model 1	Model 2	Model 3
Population (Logged)	0.4071***	0.2997	−0.1915
	(0.0831)	(0.6759)	(0.1286)
	p = 0.000001	p = 0.6576	p = 0.1365
Urbanisation (% of Population)	0.7623***	−1.0939	−9.8454***
	(0.2547)	(1.0435)	(2.4598)
	p = 0.0028	p = 0.2946	p = 0.0001
Per Capita GDP (Logged)	0.4263***	−0.4345	0.3330***
	(0.1104)	(0.3459)	(0.1105)
	p = 0.0002	p = 0.2092	p = 0.0026
Government Expenditure (% of GDP)	1.1356**	−0.9193	0.7524
	(0.4050)	(0.5383)	(0.4152)
	p = 0.0051	p = 0.0877	p = 0.0700
Foreign Aid Received (% of GNI)	0.2849	0.3805	0.5112
	(0.4240)	(0.3417)	(0.3878)
	p = 0.5016	p = 0.2655	p = 0.1875
Resource Dependence	0.0840***	0.0834**	0.0833***
	(0.0212)	(0.0320)	(0.0219)
	p = 0.0001	p = 0.0091	p = 0.0002
Ethnic Fractionalization	−0.0817		0.1081
	(0.1913)		(0.1874)
	p = 0.6695		p = 0.5640
Population × Urbanization			0.9288***
			(0.2234)
			p = 0.00004
Constant	−10.0930***	−1.9416***	−2.3392
	(1.9908)	(0.5504)	(2.3244)
	p = 0.0000004	p = 0.0005	p = 0.3143
Year FE	Yes	Yes	Yes
Country FE	No	Yes	No
N	546	546	546
R-squared	0.5705	0.5248	0.5886
Adj. R-squared	0.5243	0.4582	0.5434
Residual Std. Error	0.7946 (df = 492)	0.7407 (df = 478)	0.7785 (df = 491)
F Statistic	12.3314*** (df = 53; 492)	7.8802*** (df = 67; 478)	13.0110*** (df = 54; 491)

***p < .005; **p < .01; *p < .05

3 Empirical Strategy 2: Causal Mediation Analysis

3.1 H_3: The long-term operation of coercive capacity

Figure D1 shows the effect of state size (population) on democracy which is operated by coercive capacity, denoted by the ACME. As the ACME is not significant, we cannot reject the null hypothesis that the effect of population size on democracy is not operated by clientelism. We will return to this in section 3.3 on the conditional operation of clientelism since I suspect heterogeneity in the ACME conditioned by the urban share of the population.
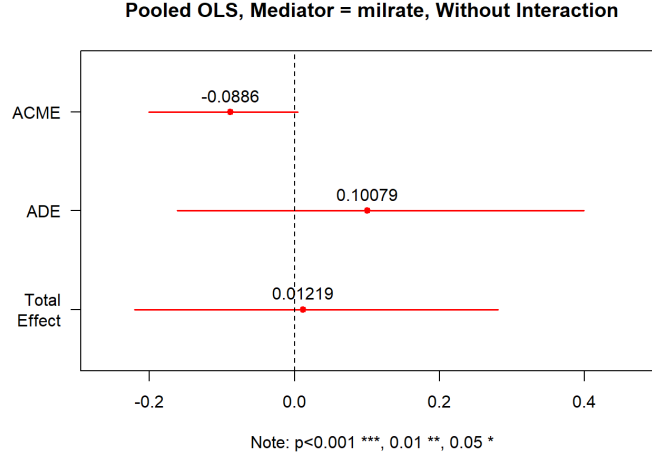
Pooled OLS, Mediator = milrate, Without Interaction

Figure D1: Long-term operation of coercive capacity.

3.2 H_{3a}: The short-term operation of coercive capacity

Through the ACME, which is not significant, Figure D2 shows that there is no evidence that the effect of population size on democracy is operated by coercive capacity. Two potential explanations may account for this observation. Firstly, the size of coercive institutions may not change by very much among microstates year-on-year. This thus leads to a negligible effect that is being generated by population size on democracy through changes in the size of the military. The next explanation, as covered in the thesis, surrounds the idea that military culture may negate any short-term effect of population size on democracy, especially given that microstates tend to be very democratic in the first place. We should expect that, given the strength of institutionalisation of democratic reforms or length of time of democratic reformation, coercive institutions may come to accept their role in espousing and upholding democratic norms and values doctrinally (Burk, 2002; Fitch, 2016).
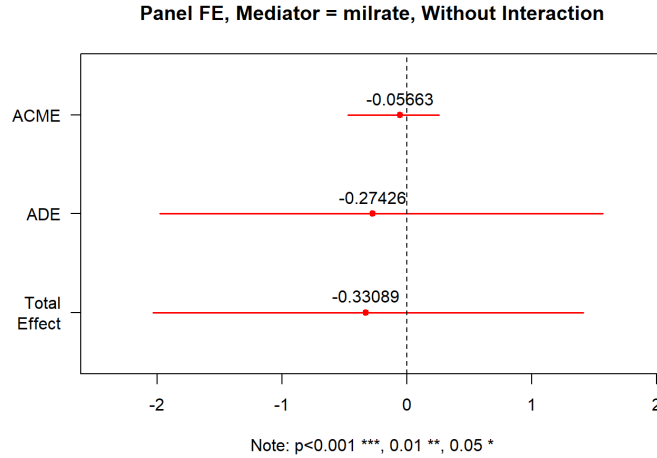
Panel FE, Mediator = milrate, Without Interaction

Figure D2: Short-term operation of coercive capacity.

3.3 H_{3b}: The conditional operation of coercive capacity

Unlike their larger counterparts in the V-Dem sample, among microstates, we observe that there is a stronger negative effect of state size on democracy among the more urbanised states (see Fig. D5). Since more urbanised states tend to be more economically developed, they may have access to greater amounts of resources to establish a larger standing force as the size of the population increases from state to state. We would thus expect that larger microstates tend to be more economically developed

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and are able to draft a standing military. We also observe that among the less urban states, the effect of state size on democracy ebbs to insignificance (see Fig. D4). This is likely because less urban states tend to not be able to draft a standing military, or are only able to eke out a small one even relative to its population size. In all, among the more urban states, a 10% increase in population size is associated with, on average, a decrease in the Freedom House democracy score by 0.0135 units.
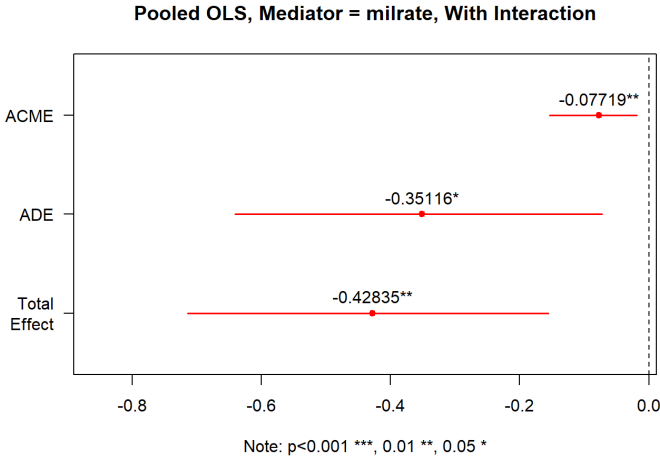
Pooled OLS, Mediator = milrate, With Interaction

Figure D3: Conditional operation of coercive capacity.

Pooled OLS, Mediator = milrate, With Interaction (Less Urban)
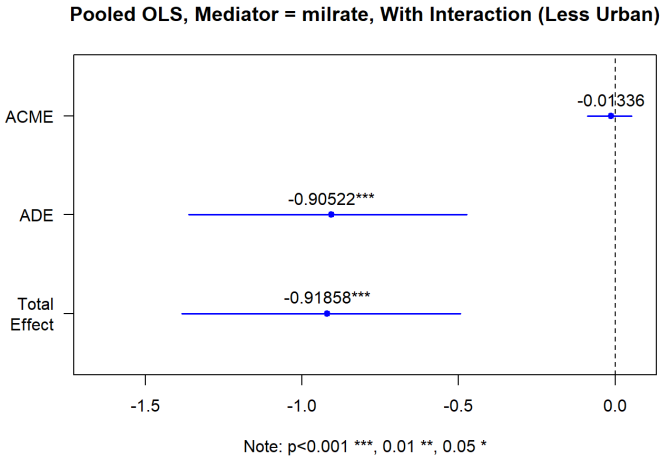
Figure D4: Conditional operation of coercive capacity in less urban states.

Pooled OLS, Mediator = milrate, With Interaction (More Urban)
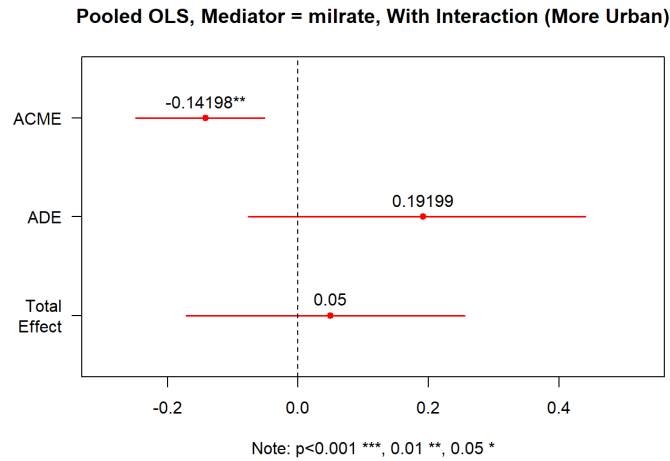
Note: p<0.001 ***, 0.01 **, 0.05 *

Figure D5: Conditional operation of coercive capacity in more urban states.

References

Burk, J. (2002). Theories of Democratic Civil-Military Relations. *Armed Forces & Society*, *29*(1), 7–29. https://doi.org/10.1177/0095327X0202900102

Fitch, J. S. (2016). Military Attitudes toward Democracy in Latin America: How Do We Know If Anything Has Changed? In D. Pion-Berlin (Ed.), *Myth and Narrative in International Politics: Interpretive Approaches to the Study of IR* (pp. 59–88). The University of North Carolina Press.