

State Capacity, Politicization, and Why it Matters in Brazil

(with some very tentative comparison to the US federal government)

Matthew M. Taylor, School of International Service, American University

The centrality of Brazil in the literature on islands of excellence and state capacity

I Capacity and Autonomy

Cardoso 1975 | Evans 1992 | Haggard and Kaufman 1992

I Islands of excellence in a sea of patronage and clientelism

Martins 1985 | Willis 1986 | Schneider 1987 | Geddes 1994 | Evans 1995 | Whitehead 2006

I 'The politician's dilemma'

Geddes 1994

Concept and Data: Mapping the Archipelago of Excellence in Brazil



A professional bureaucracy able to implement policy without undue external influence.”

MEASURES OF AGENCY CAPACITY AND POLITICAL AUTONOMY

Database

300,000 federal civil servants.

Data source

crossing individual civil service data with electoral court data.

Scope

95 most significant federal agencies.

Aggregation

Bayesian latent variable analysis.

Indicators of Capacity and Political Autonomy

I Capacity

“the degree to which core state agencies are characterized by meritocratic recruitment and offer predictable, rewarding longterm careers.”

Career strength: Proportion of civil servants in either core or expert careers

Career specialization A: Average longevity in civil service

Career specialization B: Civil servants requisitioned from other agencies

Career specialization C: Average salary for civil servants within agency

I Autonomy

“the extent to which they have their own interests and values distinguishable from those of other institutions and social forces.”

Proportion of low-level DAS appointments filled by party members

Proportion of high-level DAS appointments filled by party members

Proportion of regular civil servants that are party members

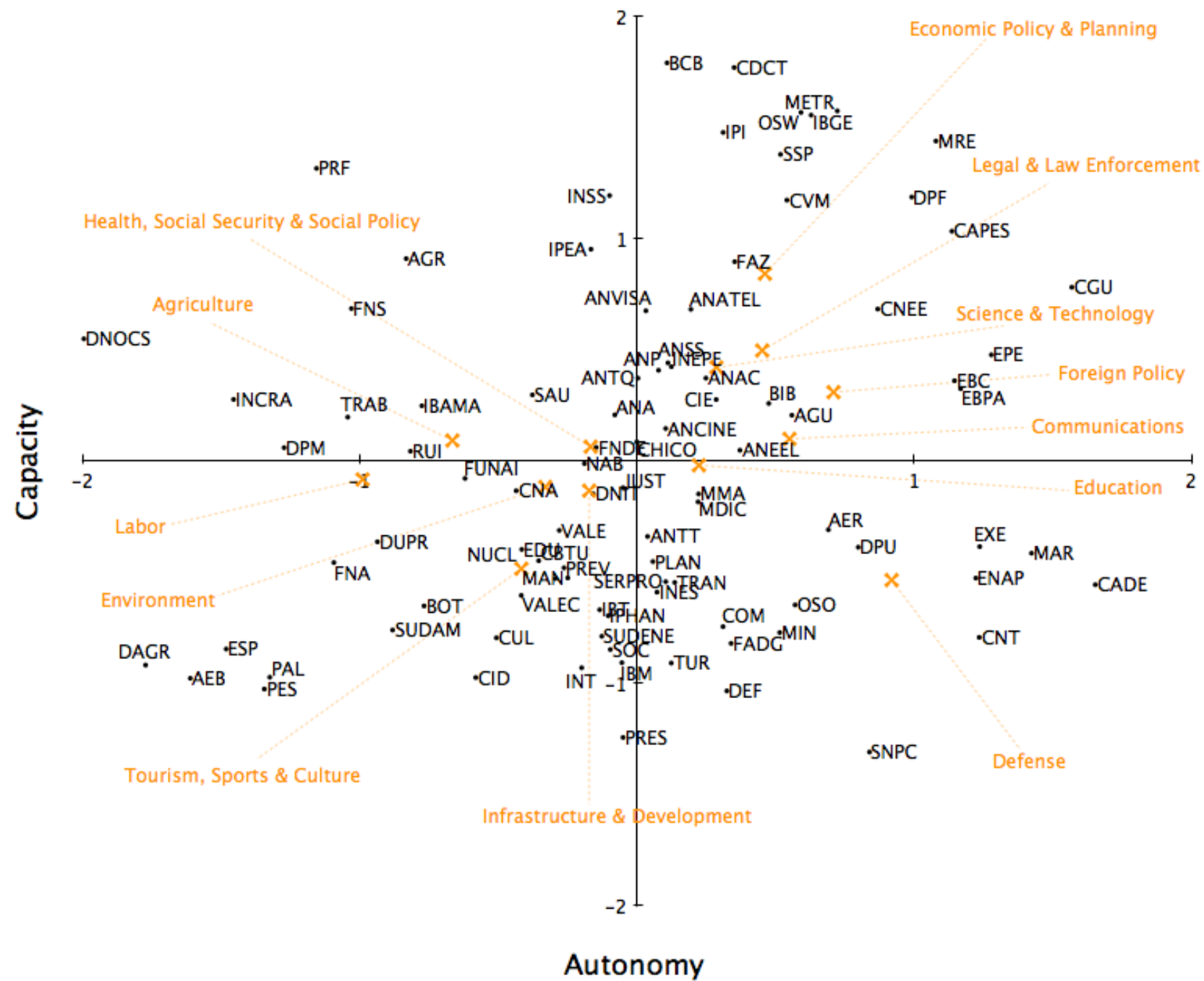
State Capacity *and* Political Autonomy

Confirmatory factor analysis confirms that capacity and autonomy are empirically distinct dimensions.

Bayesian latent variable approach (Treier & Jackman 2008)

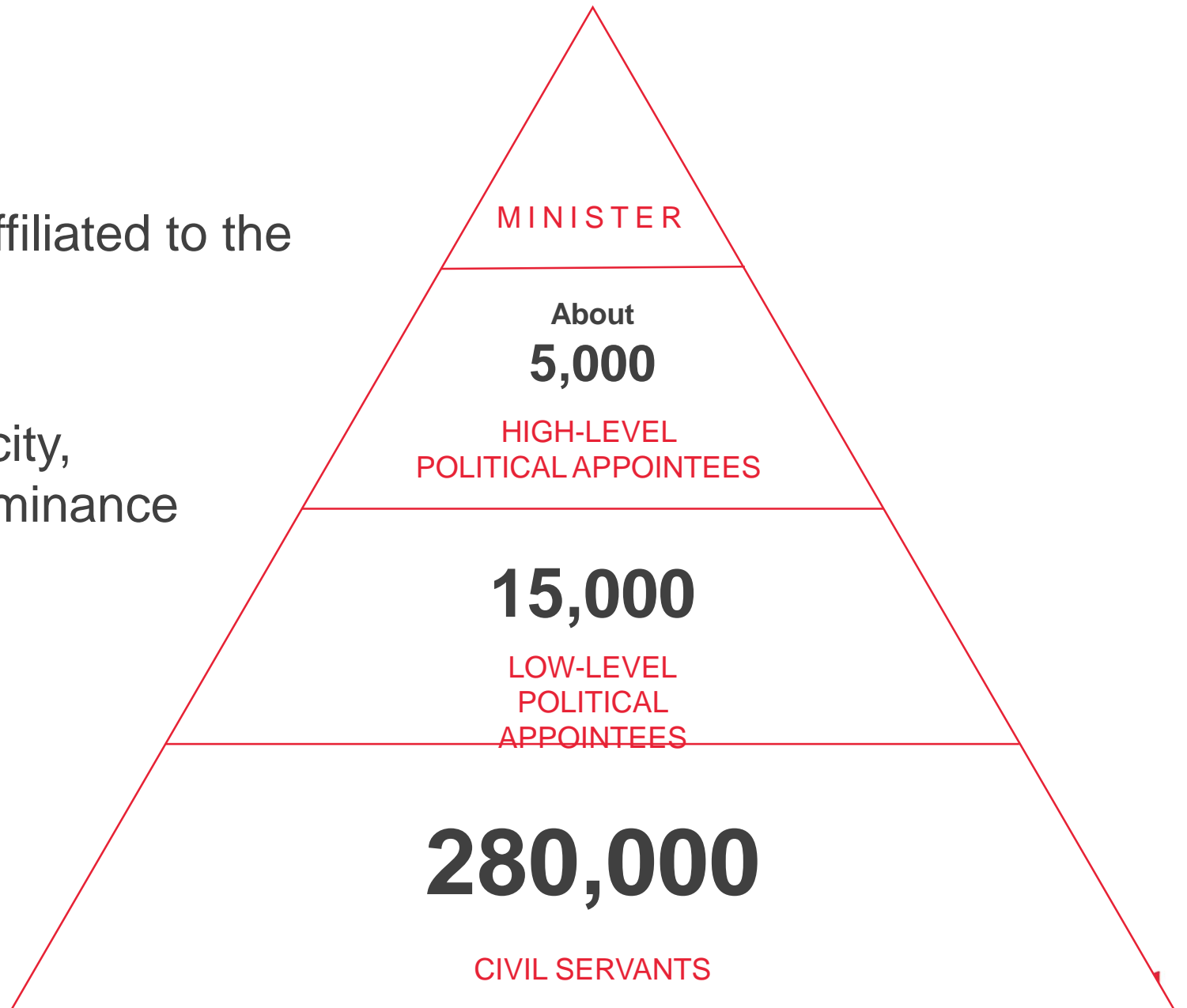
1. Agnostic as to normative preferences
2. Resolves indexation problem

“attempts to express each variable as the sum of common and unique portions, attempting to find the solution that maximizes the portion explained by the common factor.”



Partisan Dominance

- Percentage of employees affiliated to the dominant party
- Correlations between Capacity, Autonomy, and Partisan Dominance are low



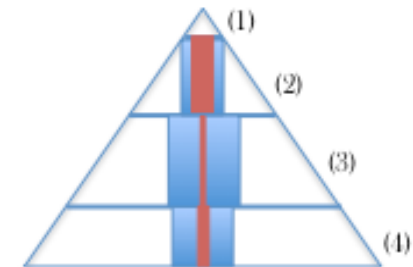
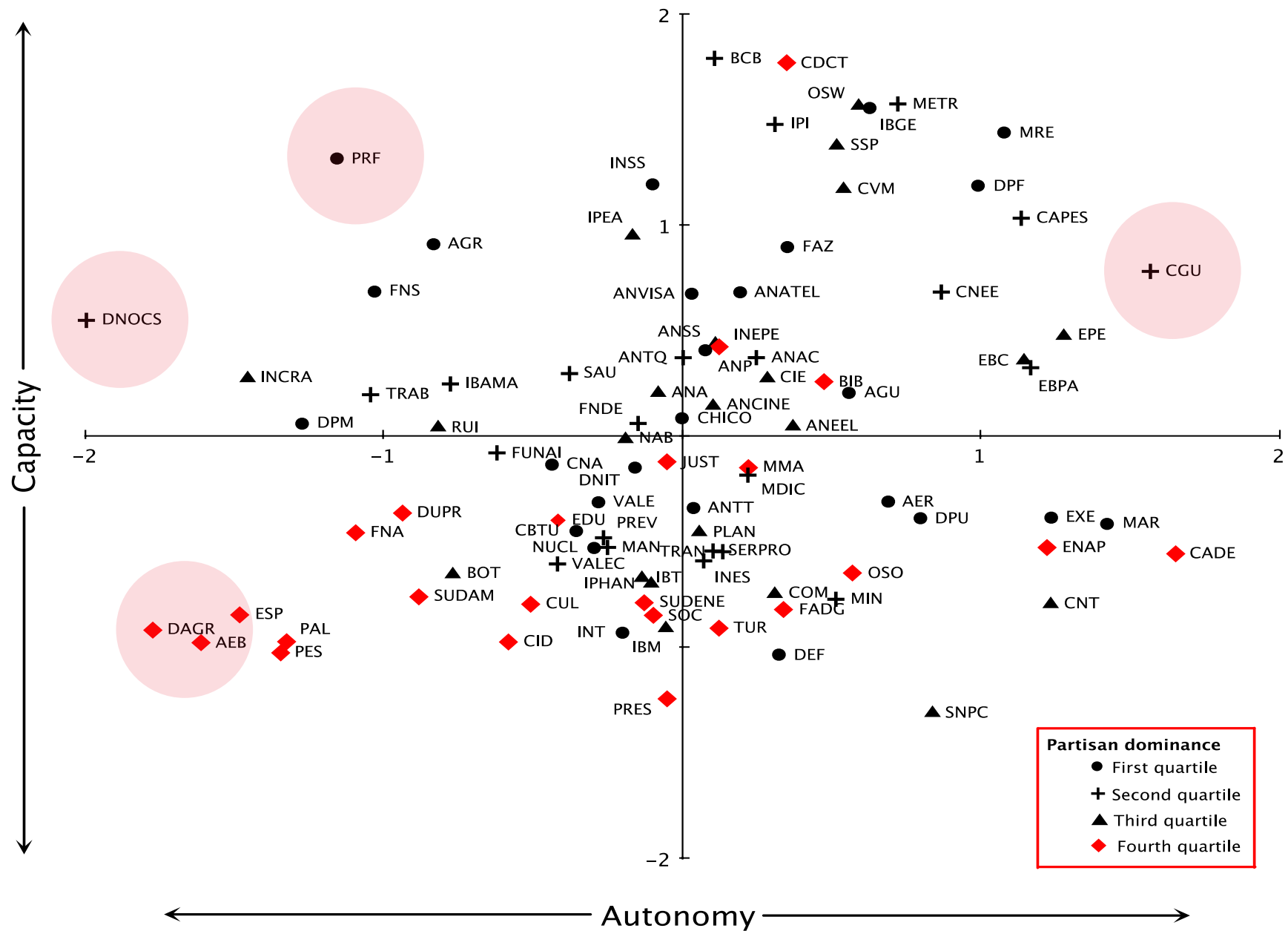


Fig. 2: DNOCS
[Lowest autonomy score]

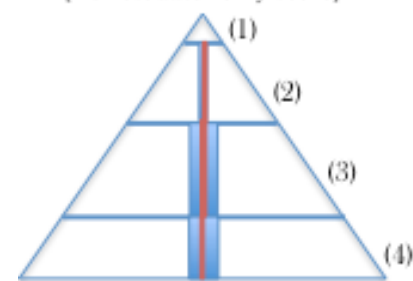


Fig. 3: CGU
[Highest autonomy score]

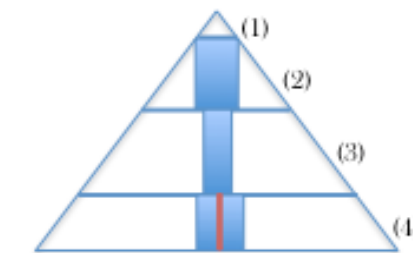


Fig. 4: PRF
[Lowest political dominance score]

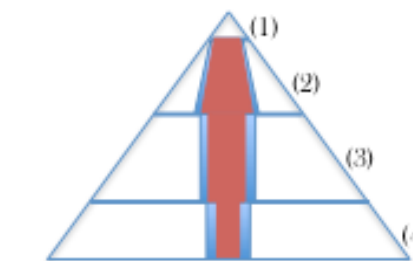


Fig. 5: DAGR
[Highest political dominance score]

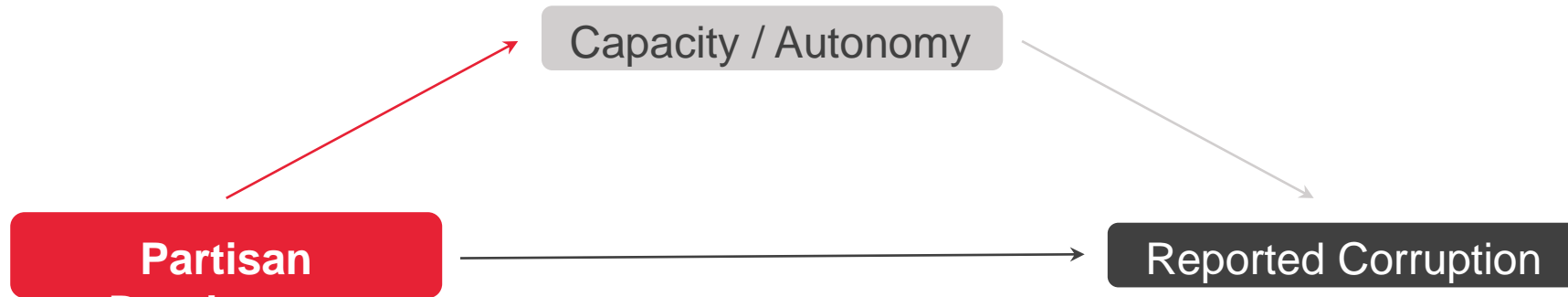
Reported Corruption: Media Mentions of Corruption

I Media Mentions of Corruption in the O Estado de S. Paulo newspaper

Reported Corruption: count of newspaper stories on corruption within each agency appearing in the O Estado de S. Paulo newspaper over the decade beginning in 2002.



Core Variables and Reported Corruption



- Core variables are each associated with higher levels of corruption and are statistically significant.
- Capacity mediates the effect of Partisan Dominance on Reported Corruption
- Fewer political employees decreases Reported Corruption, but a strongly dominant party weakens that effect.

Findings

I A “proof of concept” about the utility of agency-level measures

- + Objective, not subjective
- + Individual rather than institutional characteristics
- + Differentiation between autonomy and capacity
- + Within-country comparative measure – and inexpensive, too!

I Key Findings

Politicization of the bureaucracy has detrimental effects on governance.

Building up the capacity and autonomy of the bureaucracy may provide a partial antidote (policy legacies matter!).

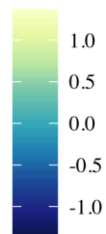
Competition between political parties within an agency may serve to check the worst impulses of a dominant party.

I Next steps

Longitudinal

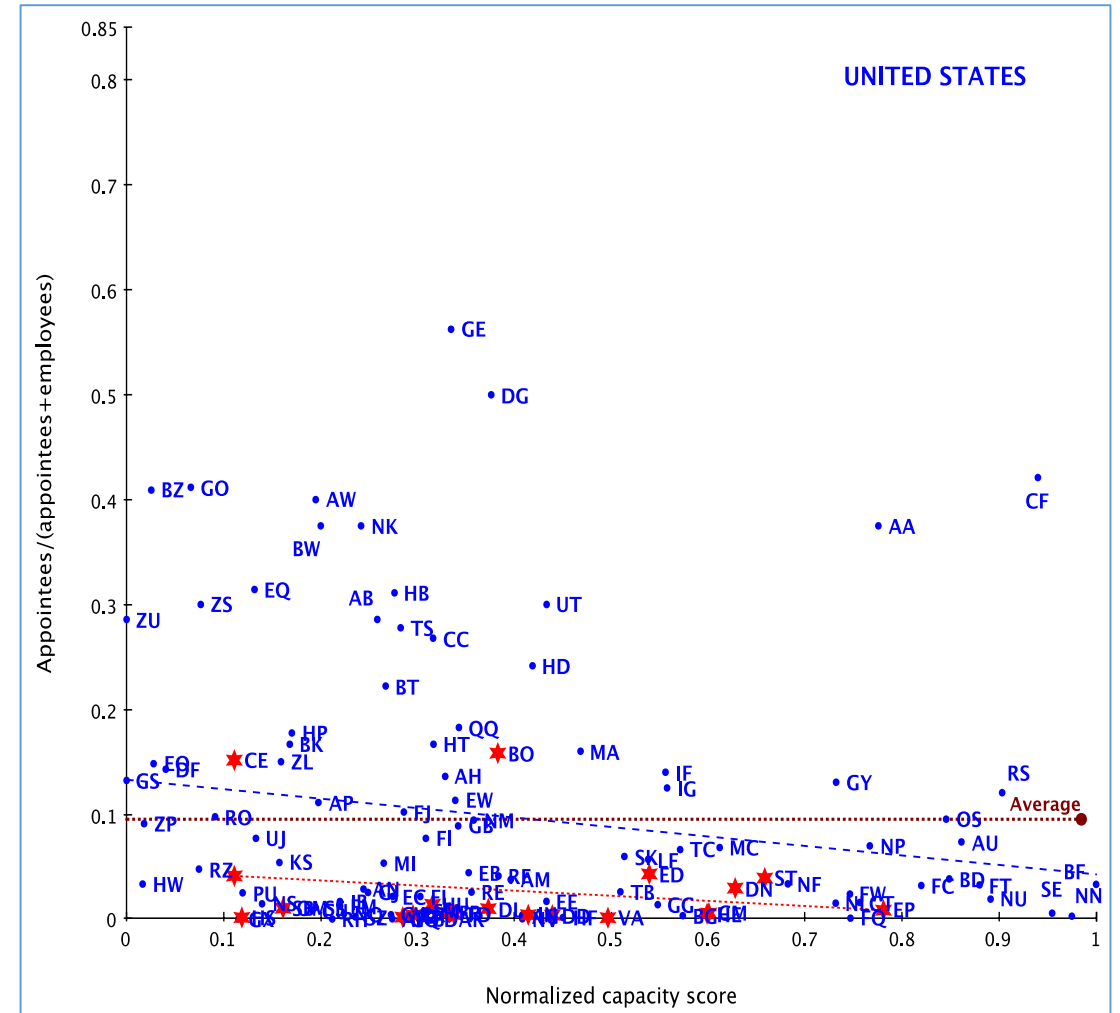
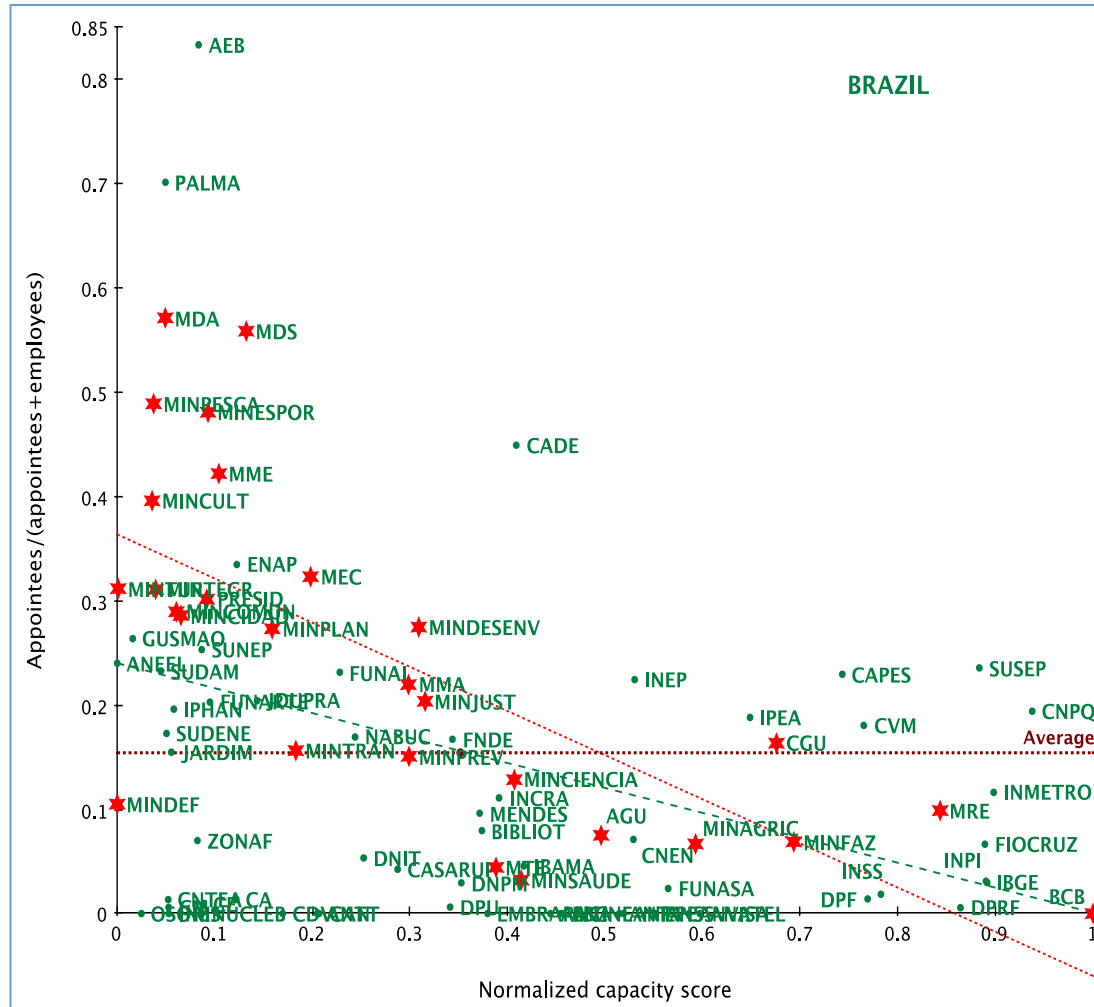
Cross-national

Longitudinal: Political Autonomy by Policy Area (2011-2017)



Foreign Policy	1.39	1.23	1.3	1.34
Economic Policy	0.57	0.44	0.69	0.83
Legal Policy	0.42	0.71	0.55	0.32
Regulatory Agencies	0.42	0.42	0.43	0.38
Defense	0.52	0.39	0.28	-0.02
Science and Technology	-0.2	0.57	0.39	0.38
Information Policy	0.38	-0.07	0.26	0.32
Education	0.16	0.17	0.32	0.15
Culture	-0.07	0.02	0.21	0.31
Environment	0.18	0.14	-0.15	-0.29
Public Administration	-0.1	0.11	-0.13	-0.38
Infrastructure	-0.32	-0.22	-0.21	-0.22
Other	-0.43	-0.3	-0.14	-0.13
Social Policy	-0.38	-0.36	-0.14	-0.21
Agriculture	-0.99	-1.01	-1.02	-0.75
Labor Policy/Social Policy	-0.96	-1.52	-2.08	-1.07
	2011	2013	2015	2017

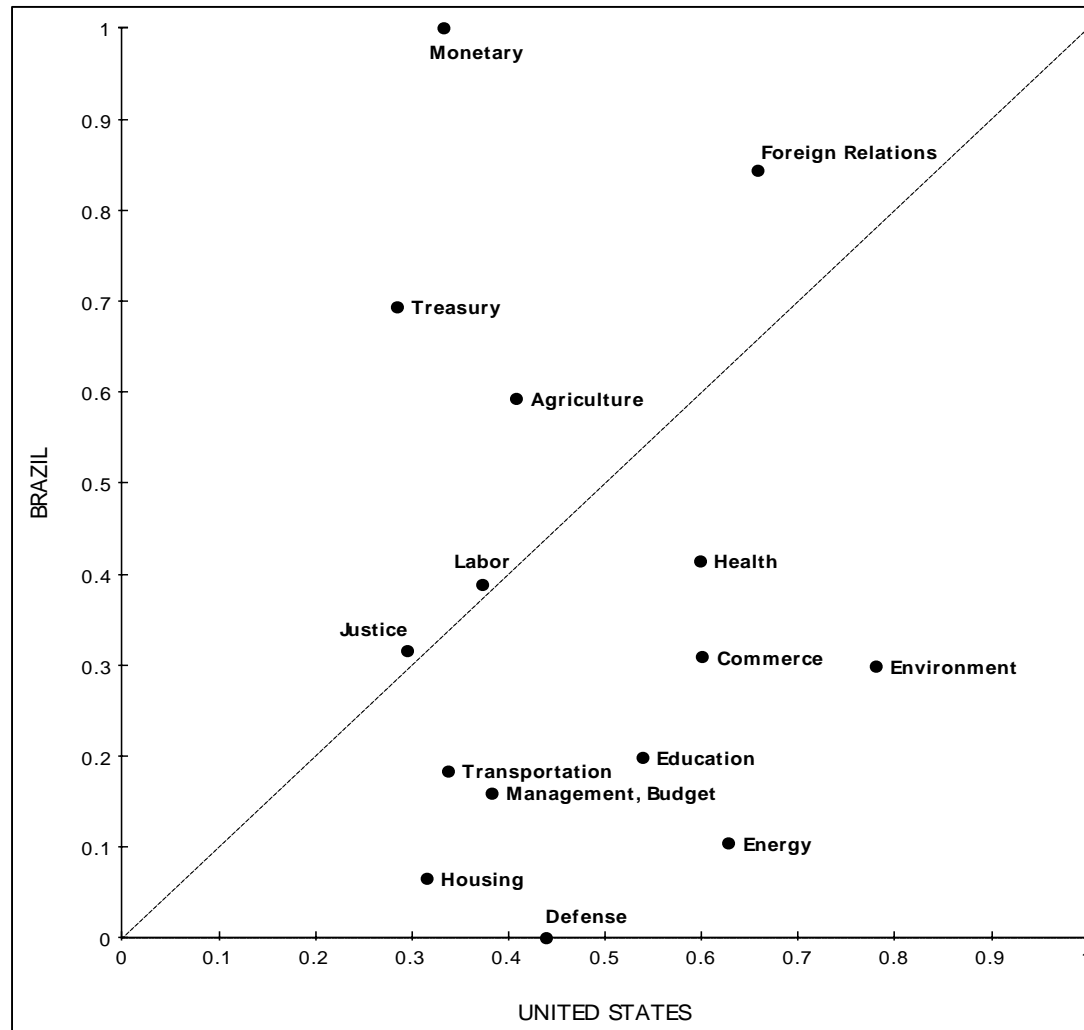
Cross-national: Appointments and Capacity



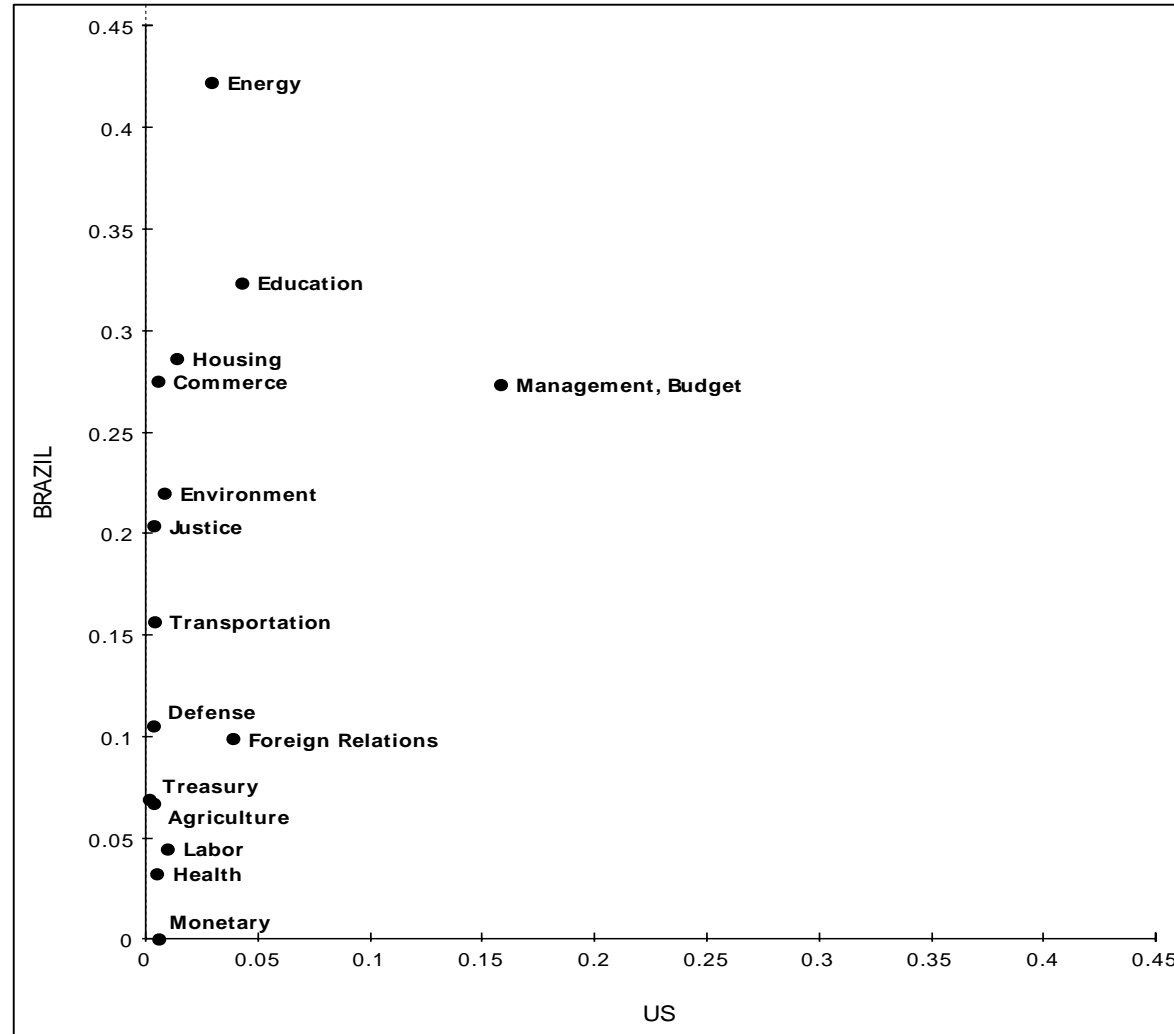
Thank you.

| mtaylor@american.edu

Normalized cabinet pairings



Appointments, proportionally



Different logics of capacity building and appointment

- Education
- Sources of innovation
- Wages and bureaucratic expertise
- Incentives of the political organizational context

1 of 3

Table 2: Effect of Core Independent Variables on Reported Corruption

	(1)	(2)	(3)	(4)
(Intercept)	-6.20*	-4.24 [†]	-3.84	-4.02 [†]
	(2.58)	(2.39)	(2.37)	(2.36)
Partisan Dominance	3.50*			0.47
	(1.70)			(1.69)
Capacity		-0.94***		-0.63*
		(0.27)		(0.28)
Autonomy			-1.21***	-0.98***
			(0.25)	(0.25)
Budget (logged)	0.31**	0.26*	0.25*	0.25*
	(0.12)	(0.11)	(0.11)	(0.11)
Employees (thousands)	0.04	0.06 [†]	0.02	0.04
	(0.04)	(0.04)	(0.03)	(0.03)
Leadership Turnover	0.81	0.45	-0.04	0.14
	(0.83)	(0.81)	(0.78)	(0.77)
Theta	0.30***	0.32***	0.36***	0.38***
	(0.05)	(0.06)	(0.07)	(0.07)
N	91	91	91	91
AIC	467.54	462.61	456.57	455.95
BIC	527.81	522.87	516.83	536.30
$\log L$	-209.77	-207.30	-204.28	-195.97

Standard errors in parentheses

[†] significant at $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

2 of 3

Partisan
dominance

Capacity

Reported
Corruption

Table 3: Testing Relationships Between Core Independent Variables

	Assessing Capacity as an Intervening Variable			Interactions	
	Capacity	Reported Corruption		Reported Corruption	
	(5)	(6)	(7)	(8)	(9)
(Intercept)	0.33 (0.96)	-6.20* (2.58)	-4.88* (2.49)	-4.94† (2.57)	-5.70* (2.56)
Partisan Dominance	-2.28*** (0.63)	3.50* (1.70)	1.20 (1.76)	1.40 (2.37)	2.76 (1.93)
Capacity			-0.85** (0.29)	-1.13 (0.75)	
Partisan Dom. x Capacity				1.08 (2.78)	
Autonomy					-2.42*** (0.57)
Partisan Dom. x Autonomy					4.59** (1.77)
Budget (logged)	0.00 (0.04)	0.31** (0.12)	0.28* (0.11)	0.28* (0.11)	0.30** (0.11)
Employees (thousands)	0.03* (0.01)	0.04 (0.04)	0.07† (0.04)	0.07† (0.04)	0.02 (0.03)
Leadership Turnover	0.28 (0.30)	0.81 (0.83)	0.53 (0.81)	0.60 (0.82)	0.43 (0.77)
Theta		0.30*** (0.05)	0.32*** (0.06)	0.33*** (0.06)	0.38*** (0.07)
<i>N</i>	94	91	91	91	91
<i>R</i> ²	0.24				
adj. <i>R</i> ²	0.20				
Resid. sd	0.70				
AIC		467.54	464.29	466.17	457.31
BIC		527.81	534.59	546.52	537.66
log <i>L</i>		-209.77	-204.15	-201.08	-196.66

Standard errors in parentheses

† significant at $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

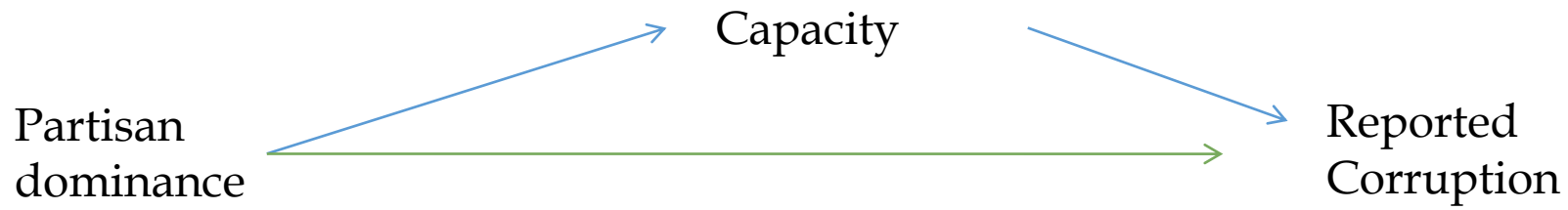


Table 3: Testing Relationships Between Core Independent Variables

	Assessing Capacity as an Intervening Variable			Interactions	
	Capacity	Reported Corruption		Reported Corruption	
	(5)	(6)	(7)	(8)	(9)
(Intercept)	0.33 (0.96)	-6.20* (2.58)	-4.88* (2.49)	-4.94† (2.57)	-5.70* (2.56)
Partisan Dominance	-2.28*** (0.63)	3.50* (1.70)	1.20 (1.76)	1.40 (2.37)	2.76 (1.93)
Capacity			-0.85** (0.29)	-1.13 (0.75)	
Partisan Dom. x Capacity				1.08 (2.78)	
Autonomy					-2.42*** (0.57)
Partisan Dom. x Autonomy					4.59** (1.77)
Budget (logged)	0.00 (0.04)	0.31** (0.12)	0.28* (0.11)	0.28* (0.11)	0.30** (0.11)
Employees (thousands)	0.03* (0.01)	0.04 (0.04)	0.07† (0.04)	0.07† (0.04)	0.02 (0.03)
Leadership Turnover	0.28 (0.30)	0.81 (0.83)	0.53 (0.81)	0.60 (0.82)	0.43 (0.77)
Theta		0.30*** (0.05)	0.32*** (0.06)	0.33*** (0.06)	0.38*** (0.07)
<i>N</i>	94	91	91	91	91
<i>R</i> ²	0.24				
adj. <i>R</i> ²	0.20				
Resid. sd	0.70				
AIC		467.54	464.29	466.17	457.31
BIC		527.81	534.59	546.52	537.66
log <i>L</i>		-209.77	-204.15	-201.08	-196.66

Standard errors in parentheses

† significant at $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

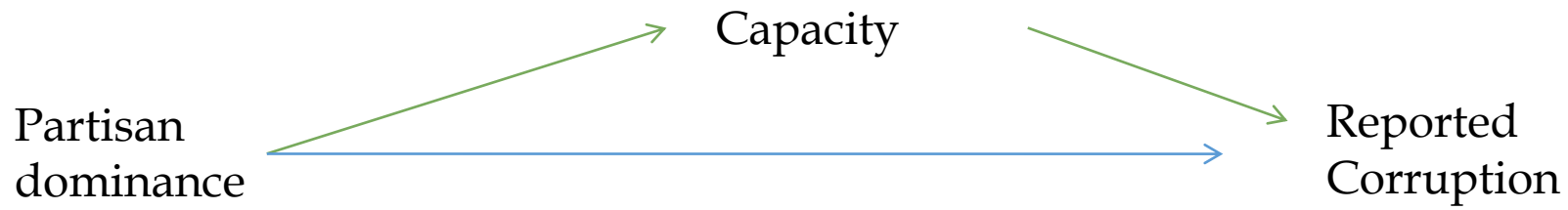


Table 3: Testing Relationships Between Core Independent Variables

	Assessing Capacity as an Intervening Variable			Interactions	
	Capacity	Reported Corruption		Reported Corruption	
	(5)	(6)	(7)	(8)	(9)
(Intercept)	0.33 (0.96)	−6.20* (2.58)	−4.88* (2.49)	−4.94† (2.57)	−5.70* (2.56)
Partisan Dominance	−2.28*** (0.63)	3.50* (1.70)	1.20 (1.76)	1.40 (2.37)	2.76 (1.93)
Capacity			−0.85** (0.29)	−1.13 (0.75)	
Partisan Dom. x Capacity				1.08 (2.78)	
Autonomy					−2.42*** (0.57)
Partisan Dom. x Autonomy					4.59** (1.77)
Budget (logged)	0.00 (0.04)	0.31** (0.12)	0.28* (0.11)	0.28* (0.11)	0.30** (0.11)
Employees (thousands)	0.03* (0.01)	0.04 (0.04)	0.07† (0.04)	0.07† (0.04)	0.02 (0.03)
Leadership Turnover	0.28 (0.30)	0.81 (0.83)	0.53 (0.81)	0.60 (0.82)	0.43 (0.77)
Theta		0.30*** (0.05)	0.32*** (0.06)	0.33*** (0.06)	0.38*** (0.07)
<i>N</i>	94	91	91	91	91
<i>R</i> ²	0.24				
adj. <i>R</i> ²	0.20				
Resid. sd	0.70				
AIC		467.54	464.29	466.17	457.31
BIC		527.81	534.59	546.52	537.66
log <i>L</i>		−209.77	−204.15	−201.08	−196.66

Standard errors in parentheses

† significant at $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

3 of 3

Partisan Dominance x Autonomy

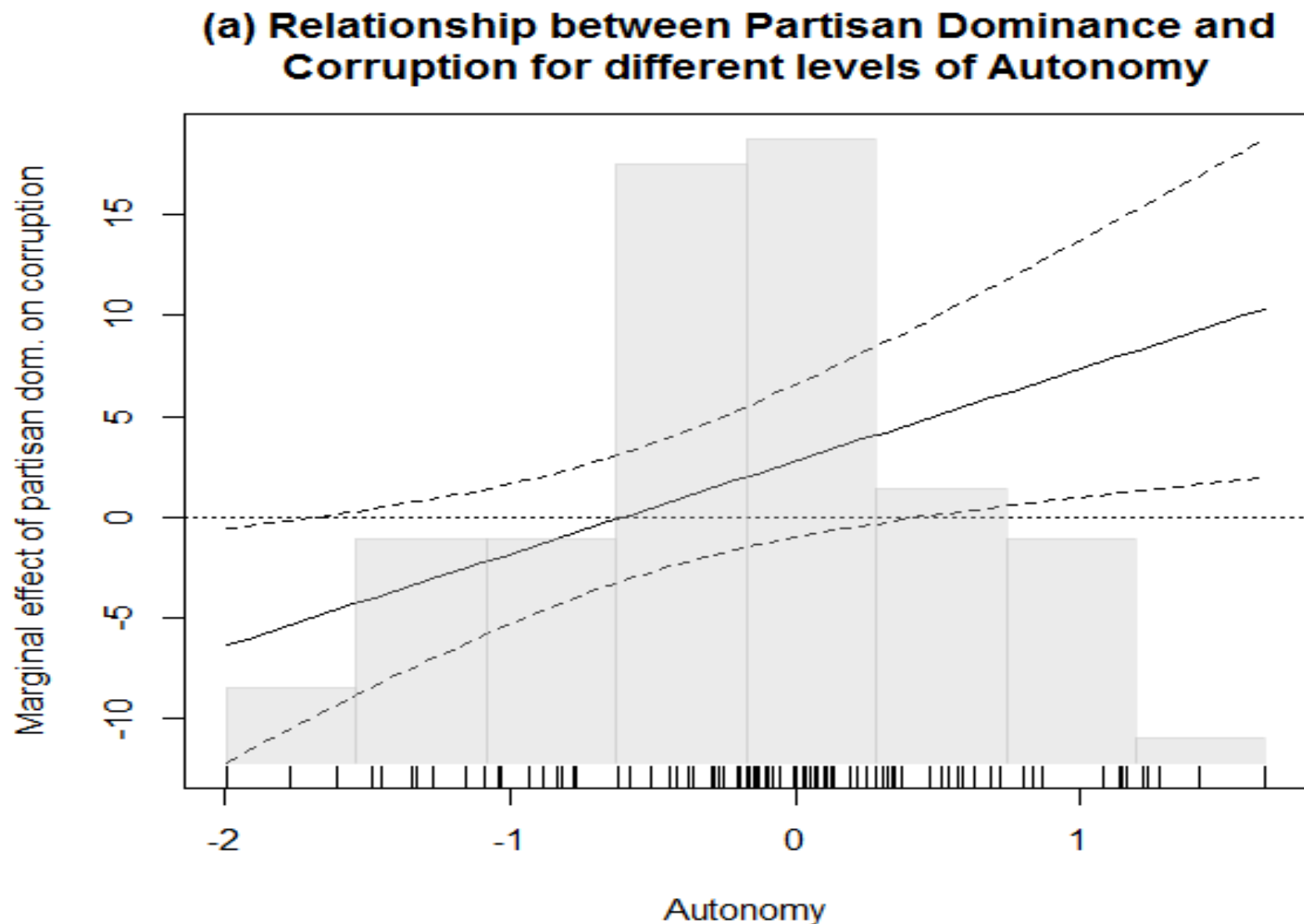
Table 3: Testing Relationships Between Core Independent Variables

	Assessing Capacity as an Intervening Variable			Interactions	
	Capacity	Reported Corruption		Reported Corruption	
	(5)	(6)	(7)	(8)	(9)
(Intercept)	0.33	-6.20*	-4.88*	-4.94†	-5.70*
	(0.96)	(2.58)	(2.49)	(2.57)	(2.56)
Partisan Dominance	-2.28***	3.50*	1.20	1.40	2.76
	(0.63)	(1.70)	(1.76)	(2.37)	(1.93)
Capacity			-0.85**	-1.13	
			(0.29)	(0.75)	
Partisan Dom. x Capacity				1.08	
				(2.78)	
Autonomy					-2.42***
					(0.57)
Partisan Dom. x Autonomy					4.59**
					(1.77)
Budget (logged)	0.00	0.31**	0.28*	0.28*	0.30**
	(0.04)	(0.12)	(0.11)	(0.11)	(0.11)
Employees (thousands)	0.03*	0.04	0.07†	0.07†	0.02
	(0.01)	(0.04)	(0.04)	(0.04)	(0.03)
Leadership Turnover	0.28	0.81	0.53	0.60	0.43
	(0.30)	(0.83)	(0.81)	(0.82)	(0.77)
Theta		0.30***	0.32***	0.33***	0.38***
		(0.05)	(0.06)	(0.06)	(0.07)
<i>N</i>	94	91	91	91	91
<i>R</i> ²	0.24				
adj. <i>R</i> ²	0.20				
Resid. sd	0.70				
AIC		467.54	464.29	466.17	457.31
BIC		527.81	534.59	546.52	537.66
log <i>L</i>		-209.77	-204.15	-201.08	-196.66

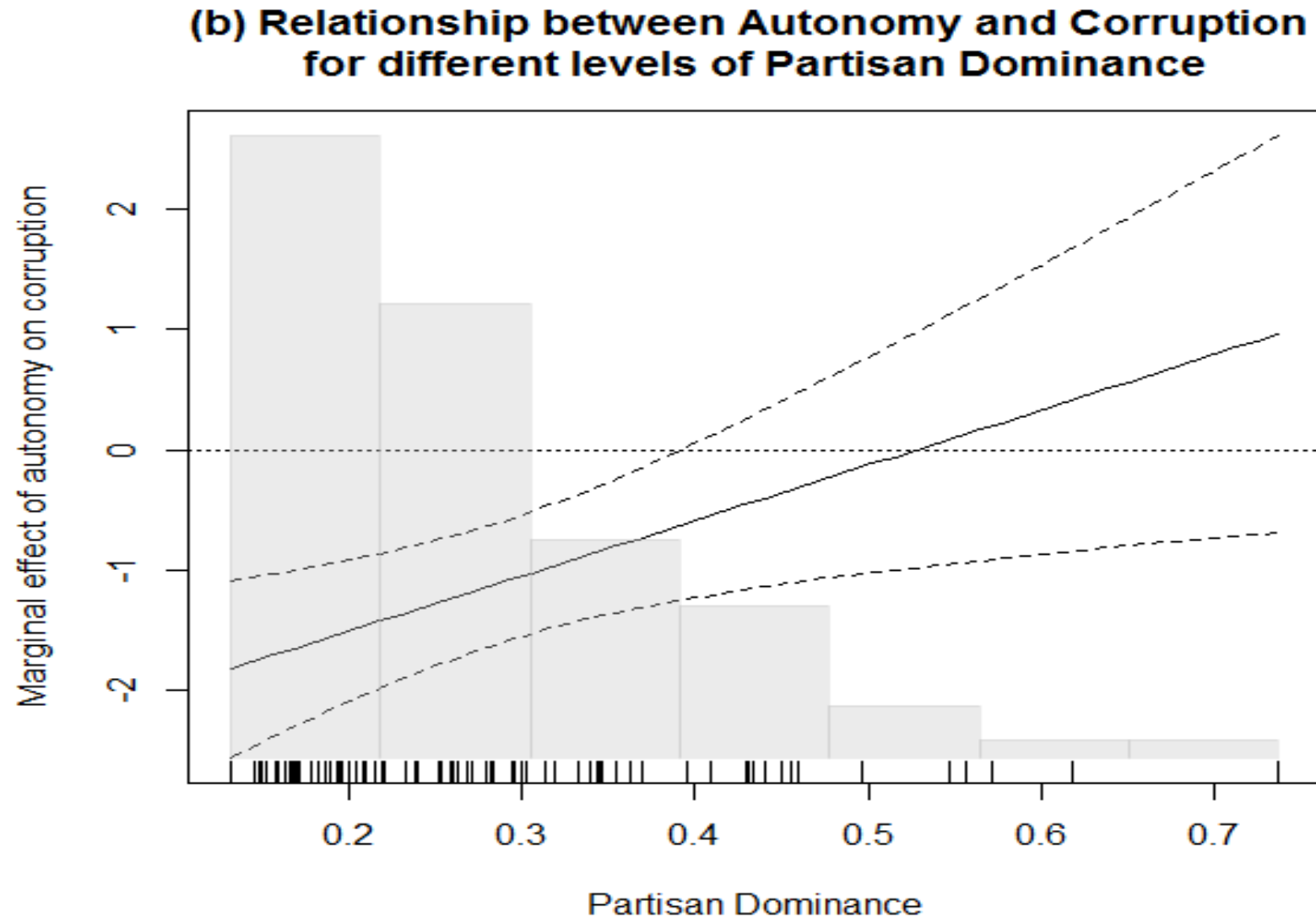
Standard errors in parentheses

† significant at $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

$H_{Partisan | Autonomy}$: The marginal effect of Partisan Dominance on Reported Corruption will be positive at all values of Autonomy; this effect will be weakest, though, when Autonomy is at its lowest and strengthens in magnitude as Autonomy increases.



$H_{Autonomy|Partisan}$: The marginal effect of Autonomy on Corruption is negative at all levels of Partisan Dominance. This negative effect is strongest when Partisan Dominance is low and weakens as Partisan Dominance increases.



Partisan Dominance x Autonomy

- *Partisan Dominance* is associated with higher *Reported Corruption*, but only when agencies have fewer political employees overall (high *Autonomy*).
- Having fewer political employees (greater *Autonomy*) decreases *Reported Corruption*, but a strongly dominant party weakens that effect.

Key Findings 1: Core variables and Reported Corruption

Low capacity, low autonomy, and high partisan dominance are each associated with higher levels of corruption and are statistically significant.

Table 2: Effect of Core Independent Variables on Reported Corruption

	(1)	(2)	(3)	(4)
(Intercept)	-6.20*	-4.24 [†]	-3.84	-4.02 [†]
	(2.58)	(2.39)	(2.37)	(2.36)
Partisan Dominance	3.50*			0.47
	(1.70)			(1.69)
Capacity		-0.94***		-0.63*
		(0.27)		(0.28)
Autonomy			-1.21***	-0.98***
			(0.25)	(0.25)
Budget (logged)	0.31**	0.26*	0.25*	0.25*
	(0.12)	(0.11)	(0.11)	(0.11)
Employees (thousands)	0.04	0.06 [†]	0.02	0.04
	(0.04)	(0.04)	(0.03)	(0.03)
Leadership Turnover	0.81	0.45	-0.04	0.14
	(0.83)	(0.81)	(0.78)	(0.77)
Theta	0.30***	0.32***	0.36***	0.38***
	(0.05)	(0.06)	(0.07)	(0.07)
N	91	91	91	91
AIC	467.54	462.61	456.57	455.95
BIC	527.81	522.87	516.83	536.30
log L	-209.77	-207.30	-204.28	-195.97

Standard errors in parentheses

[†] significant at $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

The Model

Let $i=1, \dots, n$ index agencies and $j=1, \dots, m$ index the state capacity indicators (i.e. A1-C3). The equation and prior take the form:

$$\mu_{ij} = \gamma_{j0} + \gamma_{j1} * x_i$$

$$y_{ij} \sim N(\mu_{ij}, \sigma^2)$$

$$x_i^* \sim N(0, 1)$$

$$\gamma_{j0} \ \gamma_{j1} \sim N(0, 100)$$

$$\sigma \sim U(0, 100)$$

where x_i is the latent level of agency capacity in agency i and y_{ij} is the i -th agency's score on indicator j . We specify vague priors for γ_{j0} and γ_{j1} , to reflect the absence of prior information about these indicators. Following Gelman's (2006) recommendation, we put a uniform prior on the standard deviation over a large range, 0-100. Further, in order to estimate this model and to prevent shifts in location and scale for the latent traits, we constrain x_i to have mean zero and a variance of 1.