

Online Appendix

Varieties of Clientelism across Political Parties

A Descriptive statistics and regression tables

A.1 Descriptive statistics of Table 1

Variable	Mean	St.Dev.	N
Clientelistic mobilization	-0.202	1.429	6186
Saliency of clientelistic issues	0.173	0.261	6186
Local party offices	0.427	1.473	6186
Local party activists/personnels	0.406	1.413	6186
Informal use of state resources	0.197	0.302	6186
Funds raised by candidates	0.298	0.309	6186

A.2 Descriptive statistics of Figure 3/Appendix A.3 and Figure 4/Appendix A.4

Variable	Mean	St.Dev.	N
Relational clientelism	0.392	0.186	5747
Single-shot clientelism	0.359	0.168	5747
Government status	0.768	0.839	5747
ln GDP per cap.	9.148	1.089	5747
Democracy	5.151	5.941	5747
Federalism	0.428	0.495	5747
Growth	0.020	0.038	5747
Tenure	0.573	1.196	5747

A.3 Regression table for relational clientelism

	Model 1	Model 2	Model 3	Model 4	Model 5
Incumbency status	0.0239*** (0.00121)	0.0242*** (0.00121)	0.00877 (0.0767)	-0.0845 (0.0754)	0.0427 (0.0976)
lnGDPpc	0.0224*** (0.00454)	0.190*** (0.0285)	0.198*** (0.0327)	0.140*** (0.0323)	0.170*** (0.0389)
lnGDPpc ²		-0.00947*** (0.00159)	-0.00942*** (0.00182)	-0.00652*** (0.00180)	-0.00752*** (0.00219)
Incumbency * lnGDPpc			0.0170 (0.0172)	0.0336* (0.0169)	0.0117 (0.0225)
Incumbency * lnGDPpc ²			-0.00163 [†] (0.000954)	-0.00257** (0.000936)	-0.00146 (0.00128)
Democracy	0.00308*** (0.000326)	0.00274*** (0.000330)	0.00289*** (0.000327)	0.00332*** (0.000321)	0.00268*** (0.000329)
Federalism	-0.0201*** (0.00440)	-0.0201*** (0.00439)	-0.0210*** (0.00435)	-0.0169*** (0.00426)	0.899** (0.289)
Growth	0.143*** (0.0279)	0.122*** (0.0280)	0.119*** (0.0278)	0.0815** (0.0273)	0.110*** (0.0277)
Tenure				0.0357*** (0.00377)	
Tenure ²				-0.00324*** (0.000710)	
Federalism * lnGDPpc					-0.167** (0.0630)
Federalism * lnGDPpc ²					0.00734* (0.00342)
Federalism * Incumbency					-0.667*** (0.192)
Federalism * Incumbency * lnGDPpc					0.135** (0.0420)
Federalism * Incumbency * lnGDPpc ²					-0.00681** (0.00228)
Constant	0.125** (0.0431)	-0.614*** (0.131)	-0.696*** (0.150)	-0.392** (0.148)	-0.605*** (0.175)
Var.(country level)	0.089*** (0.007)	0.088*** (0.007)	0.089*** (0.007)	0.087*** (0.007)	0.088*** (0.007)
Var.(party level)	0.139*** (0.003)	0.139*** (0.003)	0.136*** (0.003)	0.132*** (0.003)	0.136*** (0.003)
Number of countries	158	158	158	158	158
Number of parties	1,773	1,773	1,773	1,773	1,773
Number of observations	5,747	5,747	5,747	5,747	5,747
Log likelihood	6000.5	6018.2	6083.1	6216.3	6111.8
AIC	-11875.1	-11908.4	-12034.2	-12296.7	-12081.7
BIC	-11455.7	-11482.4	-11594.9	-11844.0	-11609.1

Results of HLM. Standard errors in parentheses.

[†] $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

A.4 Regression table for single-shot clientelism

	Model 6	Model 7	Model 8	Model 9	Model 10
Incumbency status	-0.00405*** (0.000871)	-0.00366*** (0.000861)	-0.0118 (0.0552)	0.0118 (0.0554)	0.0555 (0.0703)
lnGDPpc	-0.00824* (0.00339)	0.205***	0.201*** (0.0237)	0.208*** (0.0239)	0.170*** (0.0282)
lnGDPpc ²		-0.0121*** (0.00114)	-0.0119*** (0.00132)	-0.0123*** (0.00133)	-0.0101*** (0.00159)
Incumbency * lnGDPpc			-0.00130 (0.0124)	-0.00530 (0.0124)	-0.0173 (0.0162)
Incumbency * lnGDPpc ²			0.000233 (0.000686)	0.000452 (0.000687)	0.00118 (0.000925)
Democracy	0.00222*** (0.000235)	0.00179*** (0.000236)	0.00175*** (0.000236)	0.00169*** (0.000237)	0.00156*** (0.000238)
Federalism	-0.00740* (0.00319)	-0.00746* (0.00315)	-0.00726* (0.00315)	-0.00792* (0.00316)	0.114 (0.209)
Growth	0.0648** (0.0201)	0.0374† (0.0200)	0.0380† (0.0200)	0.0470* (0.0201)	0.0313 (0.0200)
Tenure				-0.0111*** (0.00277)	
Tenure ²				0.00151** (0.000522)	
Federalism * lnGDPpc					-0.00945 (0.0455)
Federalism * lnGDPpc ²					-0.000371 (0.00247)
Federalism * Incumbency					-0.225 (0.138)
Federalism * Incumbency * lnGDPpc					0.0499† (0.0302)
Federalism * Incumbency * lnGDPpc ²					-0.00276† (0.00165)
Constant	0.434*** (0.0350)	-0.508*** (0.0958)	-0.478*** (0.110)	-0.521*** (0.111)	-0.357** (0.128)
Var.(country level)	0.101*** (0.007)	0.101*** (0.007)	0.101*** (0.007)	0.101*** (0.007)	0.101*** (0.007)
Var.(party level)	0.095*** (0.002)	0.095*** (0.002)	0.095*** (0.002)	0.094*** (0.002)	0.095*** (0.002)
Number of countries	158	158	158	158	158
Number of parties	1,773	1,773	1,773	1,773	1,773
Number of observations	5,747	5,747	5,747	5,747	5,747
Log likelihood	7901.0	7955.8	7962.6	7974.5	7981.4
AIC	-15676.1	-15783.7	-15793.3	-15813.0	-15820.7
BIC	-15256.7	-15357.7	-15353.9	-15360.3	-15348.1

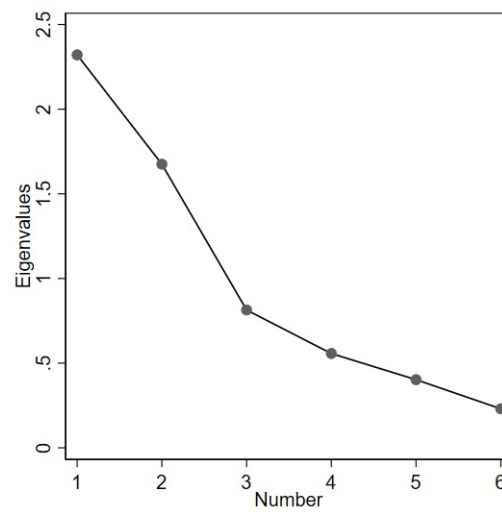
Results of HLM. Standard errors in parentheses.

† $p < 0.10$ * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

B Principal component analyses

B.1 Screeplot of eigenvalues for PCA using the V-Party data

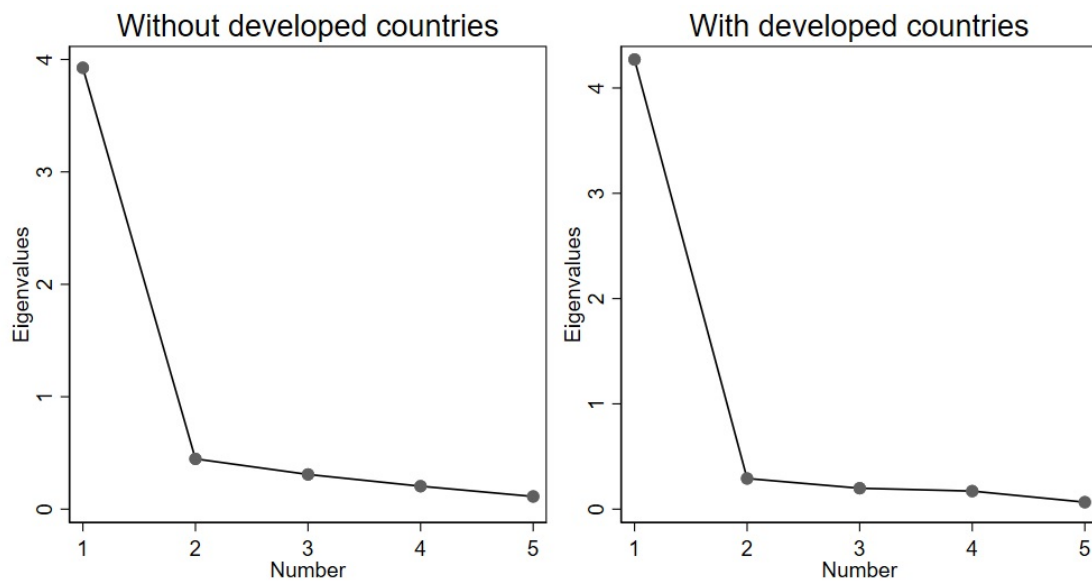
The screeplot shows that the first two principal components exceed the value of 1, the conventional threshold above which principal components are relevant latent variables well summarizing the data.



B.2 Results of principal component analysis using DALP data

	Without developed countries Dimension I	With developed countries Dimension I
b1 (Vote-buying)	0.839	0.895
b2 (Social benefits)	0.898	0.920
b3 (Patronage)	0.888	0.933
b4 (Procurement)	0.929	0.955
b5 (Arrangements)	0.883	0.919
Eigenvalue	3.926	4.271
Variance explained	0.785	0.854
Chronbach's alpha	0.929	0.955
Number of countries	66	88
Number of parties	371	506

B.3 Screeplot of PCA with the DALP data

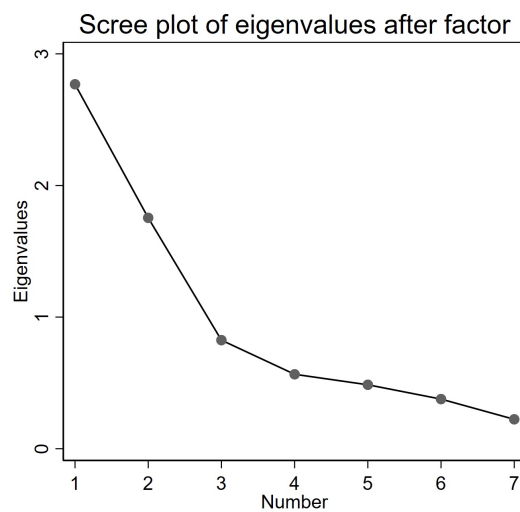


B.4 Results of principal component analysis: Alternative indicators (adding affiliate organizations)

	I	II
Clientelistic mobilization	0.5667	0.6339
Saliency of clientelistic issues	0.4829	0.6687
Local party offices	0.7784	-0.4022
Local party activists/personnels	0.7512	-0.4913
Affiliate organizations	0.7652	-0.2452
Informal use of state resources	0.6775	0.3024
Funds raised by candidates	-0.0282	0.5920
Eigenvalue	2.769	1.754
Variance explained	0.396	0.251

Note: N=6228. **Bold numbers**> |0.4|

B.5 Screeplot of PCA (adding affiliate organizations)



C List of political parties and patterns of clientelism

C.1 50 parties sorted by the relational clientelism index

Rank	Relational	Party / coalition	Country	Ele	Gov
1	0.942	PDGE (Democratic Party of Equatorial Guinea)	Equatorial Guinea	7	7
2	0.921	YAP (New Azerbaijan Party)	Azerbaijan	5	5
3	0.909	RPT (Rally of the Togolese People)	Togo	9	9
4	0.895	HHK (Republican Party of Armenia)	Armenia	6	5
5	0.885	PCT (Congolese Party of Labour)	Congo, Rep.	13	13
6	0.874	ANR-PC (National Republican Association-Colorado Party)	Paraguay	13	11
7	0.870	KPK (Cambodian Peoples' Party)	Cambodia	7	7
8	0.861	ZANU-PF (Zimbabwe African National Union-Patriotic Front)	Zimbabwe	9	9
9	0.856	CDP (Congress for Democracy and Progress)	Burkina Faso	6	5
10	0.856	DPS (Democratic Party of Socialists)	Montenegro	7	7
11	0.853	PRI (Institutional Revolutionary Party)	Mexico	17	12
12	0.845	RCD (Democratic Constitutional Rally)	Tunisia	5	5
13	0.842	MPR (Popular Movement of the Revolution)	Congo, Dem. Rep.	5	5
14	0.826	UMNO (United Malays National Organization)	Malaysia	11	10
15	0.823	UMP (Union for the Presidential Majority)	Djibouti	4	4
16	0.804	Golkar (Party of the Functional Groups)	Indonesia	11	10
17	0.800	NDP (National Democratic Party)	Egypt	9	9
18	0.794	RDPC (Cameroon People's Democratic Movement)	Cameroon	6	3
19	0.789	PSD (Social Democratic Party)	Romania	7	4
20	0.782	KMT (Nationalist Party)	Taiwan	17	13
21	0.781	NO (Nur Otan)	Kazakhstan	5	5
22	0.779	CCM (Party of the Revolution)	Zanzibar (Tanzania)	7	4
23	0.769	SWAPO (South West Africa People's Organization)	Namibia	7	7
24	0.763	SDP (Social Democratic Party)	Montenegro	7	6
25	0.753	PRDR (Democratic [and Social] Republican Party)	Mauritania	4	3
26	0.750	PDP (People's Democratic Party)	Nigeria	6	4
27	0.746	PZPR (Polish United Workers' Party)	Poland	5	5
28	0.737	DC (Christian Democrats)	Italy	6	6
29	0.728	MRNDD (National Republican Movement for Democracy)	Rwanda	4	4
30	0.724	CCM (Party of the Revolution)	Tanzania	8	8
31	0.722	PPP (Pakistan Peoples Party)	Pakistan	10	5
32	0.720	NRM (National Resistance Movement)	Uganda	7	7
33	0.718	PJ (Justicialist [Peronist] Party)	Argentina	12	7
34	0.718	ER (United Russia)	Russia	4	4
35	0.717	SPS (Socialist Party of Serbia)	Serbia	11	4
36	0.715	USDP (Union Solidarity and Development Party)	Myanmar	6	1
37	0.712	MSZMP (Hungarian Socialist Workers' Party)	Hungary	4	4
38	0.707	BSP (Bulgarian Socialist Party)	Bulgaria	10	1
39	0.707	FLN (National Liberation Front)	Algeria	8	8
40	0.706	PDPT (People's Democratic Party of Tajikistan)	Tajikistan	5	5
41	0.704	PSS (Socialist Party of Albania)	Albania	9	5
42	0.700	CPSU (Communist Party of the Soviet Union)	Soviet Union	5	5
43	0.699	PRSC (Social Christian Reformist Party)	Dominican, Rep.	9	6
44	0.696	PNH (National Party of Honduras)	Honduras	12	6
45	0.693	PAIS (PAIS Alliance)	Ecuador	4	4
46	0.689	MPLA (People's Movement for the Liberation of Angola)	Angola	7	6
47	0.688	LSI (Socialist Movement for Integration)	Albania	4	2
48	0.686	PSI (Italian Socialist Party)	Italy	6	3
49	0.686	PSD (Socialist Destourian Party)	Tunisia	4	4
50	0.686	RPP (People's Rally for Progress)	Djibouti	9	5

Note: Right columns represent the number of elections in the data and those of being incumbent parties or coalition partners.

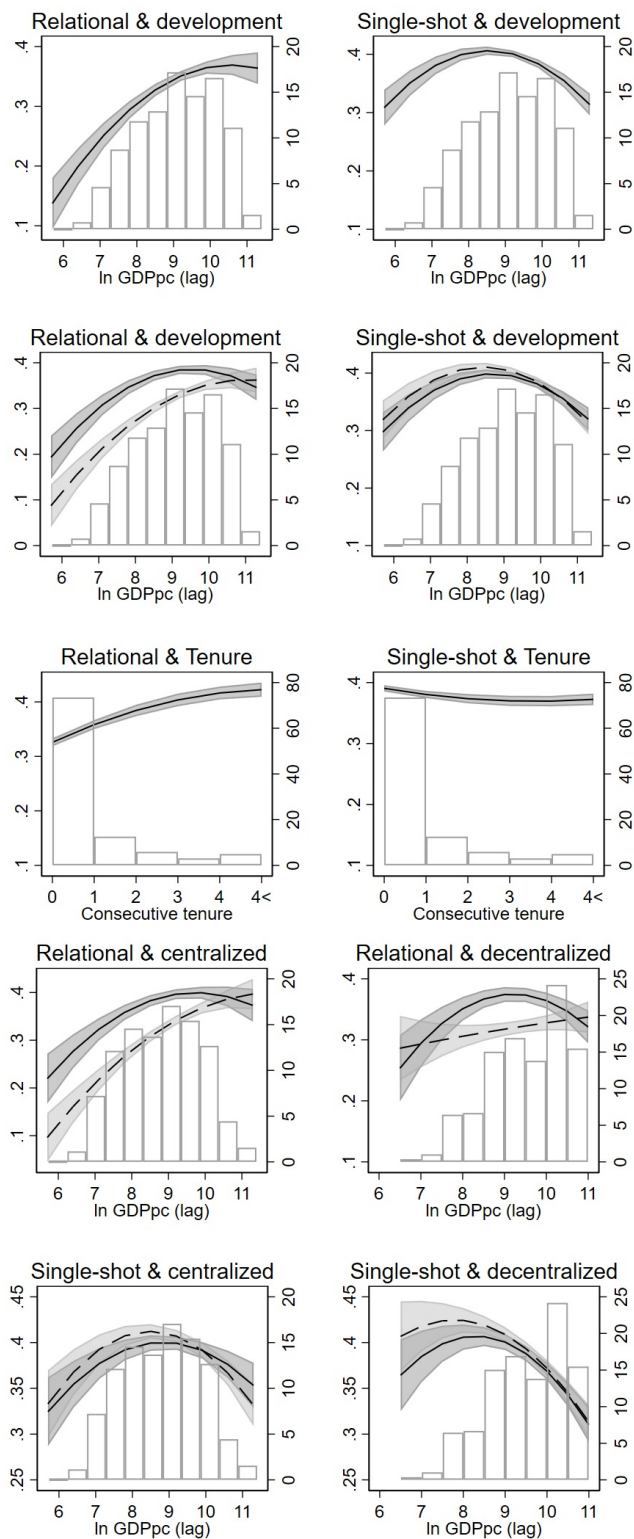
C.2 50 parties sorted by the single-shot clientelism index

Rank	Single-shot	Party / coalition / group	Country	Ele	Gov
1	0.915	NDP (National Development Party)	Thailand	4	2
2	0.832	PNP (Nacionalist Party)	Philippines	5	2
3	0.783	PKS (Social Action Party)	Thailand	8	6
4	0.781	LSI (Socialist Movement for Integration)	Albania	4	2
5	0.761	LDP (Fight of Democratic Filipinos)	Philippines	4	1
6	0.761	PCT (Thai Nation Party)	Thailand	12	8
7	0.749	(Sunni Religious (non-party))	Kuwait	7	0
8	0.749	(Pro-Government (non-party))	Kuwait	9	0
9	0.748	KMB (Nationalist People's Coalition)	Philippines	9	2
10	0.725	PRS (Republican Party of Albania)	Albania	5	1
11	0.724	NAP (New Aspiration Party)	Thailand	4	4
12	0.712	PP (Democrat Party)	Thailand	14	8
13	0.707	TCP (Thai Citizens' Party)	Thailand	4	3
14	0.700	UDNS (Union for Democracy and National Solidar)	Benin	4	0
15	0.695	PID (Democratic Institutional Party)	Guatemala	4	2
16	0.685	UNE (National Unity of Hope)	Guatemala	5	1
17	0.682	PR (Revolutionary Party)	Guatemala	6	1
18	0.682	CDP (Congress for Democracy and Progress)	Burkina Faso	6	5
19	0.676	PT (Labour Party)	Mauritius	10	1
20	0.674	Lakas-CMD (Christian Muslim Democra)	Philippines	8	5
21	0.665	PAN (National Advancement Party)	Guatemala	5	1
22	0.658	FRG (Guatemalan Republican Front)	Guatemala	6	1
23	0.658	MADEP (African Movement for Development and Progress)	Benin	5	2
24	0.650	MSM (Militant Socialist Movement)	Mauritius	9	2
25	0.646	ADF (Alliance for Democracy and Federation)	Burkina Faso	5	0
26	0.641	PCT (Congolese Party of Labour)	Congo, Rep.	13	13
27	0.635	UCN (National Center Union)	Guatemala	6	0
28	0.630	PCD (Democratic Convergence Party-Reflection)	Sao Tome & Principe	6	1
29	0.630	PMSD (Mauritian Social Democrat Party)	Mauritius	8	1
30	0.627	UPADS (Pan-African Union for Social Democracy)	Congo, Rep. (B)	5	2
31	0.623	MCDDI (Congolese Movement for Democracy and Integral Development)	Congo, Rep. (B)	4	2
32	0.622	PLP (Liberal Party)	Philippines	10	4
33	0.616	ARENA (Association for the Rebirth of Madagasca)	Madagascar	5	4
34	0.615	MLN (National Liberation Movement Party)	Guatemala	7	3
35	0.612	UDV-RDA (Voltaic Democratic Union / African Democratic Rally)	Burkina Faso	7	2
36	0.611	PPB (Progressive Party)	Brazil	7	4
37	0.608	SSU (Sudanese Socialist Union)	Sudan	4	4
38	0.606	SDPK (Social Democratic Party Kyrgyzstan)	Kyrgyzstan	4	2
39	0.600	PSD (Social Democratic Party)	Benin	7	2
40	0.599	PTB (Brazilian Labour Party)	Brazil	9	6
41	0.597	AP (Alliance Party)	Fiji	4	3
42	0.593	PRD (Democratic Renewal Party)	Benin	7	1
43	0.592	MP (Popular Movement)	Morocco	9	8
44	0.590	PML (Pakistan Muslim League (Nawaz))	Pakistan	6	2
45	0.589	RB (Benin Rebirth Party)	Benin	7	1
46	0.587	PPP (Pakistan Peoples Party)	Pakistan	10	5
47	0.581	ND (New Democracy)	Serbia	4	1
48	0.579	ADI (Independent Democratic Action)	Sao Tome & Principe	5	2
49	0.577	PBS (United Sabah Party)	Malaysia	4	4
50	0.575	NPP (National Patriotic Party)	Liberia	4	3

Note: Right columns represent the number of elections in the data and those of being incumbent parties or coalition partners.

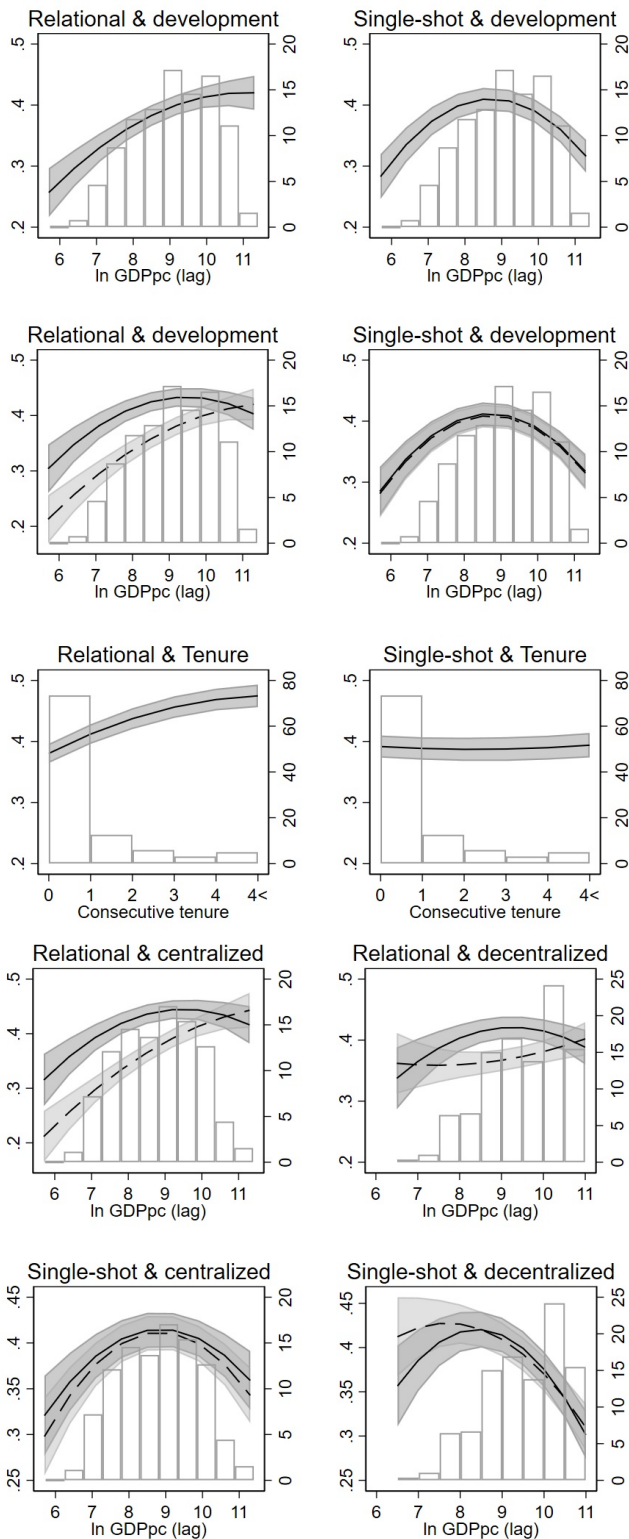
D Robustness checks

D.1 Estimation using country-fixed effects



Note: The straight lines stand for the incumbent and the dashed lines represent the opposition.

D.2 Estimation using alternative indicators



Note: The straight lines stand for the incumbent and the dashed lines represent the opposition. The results based on the alternative indicators based on Appendix B.4.