

The Authoritarian Dilemma

Explaining Strategies of Electoral Manipulation

Andreas Schedler

CIDE, Mexico City
Department of Political Studies
andreas.schedler@cide.edu

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Table 1
Explaining violations of physical integrity

	St.dev.	Model 1 Beta	Model 2 Beta	Model 3 Beta	Model 4 Beta	Model 5 Beta	Model 6 Beta	Model 7 Beta	Model 8 Beta
1. Societal structure									
GDP per capita (log constant PPP)	3.026	*.281							
Rural population (% tot. pop.)	19,61								
Total population (log)	40.807.924	***.467					*.359		
2. External dependence									
Official development assistance (% GNI)	7,93		°-.146						
Trade (% GDP)	32,61		***-.316						
Total external debt service (% GNI)	3,47								
3. Public finances									
Total expenditure (% GDP)	10,65			°-.340					
Non-tax revenue (% total revenue)	13,20			**-.500					°-.614
Military expenditure (% GDP)	1,83								
4. Auxiliary authoritarian strategies									
Violations of media freedom	.43				*.204				
Legislative disempowerment	.63								
Legislative exclusion	.50				***-.411				
Legislative fraud	.72								
5. Legislative competition									
Legislative fragmentation (Rae index) (lag)	.25					**_.531			
Effective number of legislative parties (lag)	5,59								
Effective number of opposition parties (lag)	14,16								
Regional dummies (B coefficients)									
Latin America		°.824			*1,329				
Eastern Europe									
Caucasus & Central Asia									
Middle East & Northern Africa				*2,530	*1,633				
South & East Asia			**1,426		*1,166				
N		148	141	63	117	59	78	63	30
Standard error		1,744	1,816	1,992	1,953	1,899	1,838	1,769	1,422
Adj. R ²		.275	.180	.143	.097	.084	.159	.159	.399

Notes: Estimation of linear effects, OLS regression analysis, SPSS 14.0. Dependent variable: CIRI violations of physical integrity (0–8), Standard deviation = 2,04. Reference category of fixed regional effects: Sub-Saharan Africa. Significance levels: ° p ≤ 0.1, * p ≤ 0.05, ** p ≤ 0.01, *** p ≤ 0.001. Table only reports significant coefficients. Shaded areas indicate included variables. Standard deviations of GDP per capita and population refer to original (not logged) values.

Table 2
Explaining violations of media freedom

	St.dev.	Model 1 Beta	Model 2 Beta	Model 3 Beta	Model 4 Beta	Model 5 Beta	Model 6 Beta	Model 7 Beta
1. Societal structure								
GDP per capita (log constant PPP)	3.026							
Rural population (% tot. pop.)	19,61							
Total population (log)	40.807.924							
2. External dependence								
Official development assistance (% GNI)	7,93							
Trade (% GDP)	32,61		***,310				*,193	
Total external debt service (% GNI)	3,47							
3. Public finances								
Total expenditure (% GDP)	10,65							
Non-tax revenue (% total revenue)	13,20							
Military expenditure (% GDP)	1,83							
4. Auxiliary authoritarian strategies								
Violations of physical integrity	2,04				*,164		*,205	
Legislative disempowerment	,63				°,148		°,170	
Legislative exclusion	,50				**-,348		**-,282	***-,513
Legislative fraud	,72							
6. Legislative competition								
Legislative fragmentation (Rae index) (lag)	,25							
Effective number of legislative parties (lag)	5,59					*,317		°,206
Effective number of opposition parties (lag)	14,16							
Regional dummies (B coefficients)								
Latin America		**-,326	**-,337		***-,456	**-,465	***-,410	***-,541
Eastern Europe			*-,337					°-,283
Caucasus & Central Asia								°-,344
Middle East & Northern Africa								*-,424
South & East Asia								*-,325
N		149	141	63	117	59	112	56
Standard error		,418	,400	,414	,353	,342	,351	,303
Adj. R ²		,081	,154	,020	,273	,242	,290	,425

Notes: Estimation of linear effects, OLS regression analysis, SPSS 14.0. Dependent variable: AS violations of media freedom (0–2), Standard deviation = ,43. Reference category of fixed regional effects: Sub-Saharan Africa. Significance levels: ° p ≤ 0.1, * p ≤ 0.05, ** p ≤ 0.01, *** p ≤ 0.001. Table only reports significant coefficients. Shaded areas indicate included variables. Standard deviations of GDP per capita and population refer to original (not logged) values.

Table 3
Explaining legislative disempowerment

	St.dev.	Model 1 Beta	Model 2 Beta	Model 3 Beta	Model 4 Beta	Model 5 Beta	Model 6 Beta
1. Societal structure							
GDP per capita (log constant PPP)	3,026						
Rural population (% tot. pop.)	19,61						
Total population (log)	40.807.924	*-,172					
2. External dependence							
Official development assistance (% GNI)	7,93						
Trade (% GDP)	32,61						
Total external debt service (% GNI)	3,47						
3. Public finances							
Total expenditure (% GDP)	10,65						
Non-tax revenue (% total revenue)	13,20						
Military expenditure (% GDP)	1,83						
4. Auxiliary authoritarian strategies							
Violations of physical integrity	2,04						
Violations of media freedom	,43				°,162		
Legislative exclusion	,50						
Legislative fraud	,72						
6. Legislative competition							
Legislative fragmentation (Rae index) (lag)	,25						
Effective number of legislative parties (lag)	5,59						
Effective number of opposition parties (lag)	14,16					°,271	
Regional dummies (B coefficients)							
Latin America		°,269	**-,460		**-,487	*-,546	*-,457
Eastern Europe		**-,518	***-,786		***-,641	**-,643	*-,558
Caucasus & Central Asia							
Middle East & Northern Africa					*-,430		
South & East Asia					**-,401		*-,411
N		148	140	63	117	58	58
Standard error		,557	,583	,594	,505	,490	,485
Adj. R ²		,219	,151	,125	,203	,131	,150

Notes: Estimation of linear effects, OLS regression analysis, SPSS 14.0. Dependent variable: CNTS legislative ineffectiveness (0–2), Standard deviation = ,63. Reference category of fixed regional effects: Sub-Saharan Africa. Significance levels: ° p ≤ 0.1, * p ≤ 0.05, ** p ≤ 0.01, *** p ≤ 0.001. Table only reports significant coefficients. Shaded areas indicate included variables. Standard deviations of GDP per capita and population refer to original (not logged) values.

Table 4
Explaining disproportionality

	St.dev.	Model 1 Beta	Model 2 Beta	Model 3 Beta	Model 4 Beta	Model 5 Beta	Model 6 Beta	Model 7 Beta	Model 8 Beta
1. Societal structure									
GDP per capita (log constant PPP)	3,026								
Rural population (% tot. pop.)	19,61								
Total population (log)	40.807.924	**-,356					*-,415		*-,1,278
2. External dependence									
Official development assistance (% GNI)	7,93								
Trade (% GDP)	32,61		°,224						
Total external debt service (% GNI)	3,47								
3. Public finances									
Total expenditure (% GDP)	10,65								
Non-tax revenue (% total revenue)	13,20				*-,428		°,275	*-,304	
Military expenditure (% GDP)	1,83								
4. Auxiliary authoritarian strategies									
Violations of physical integrity	2,04				**-,335				°,447
Violations of media freedom	,43								
Legislative disempowerment	,63				**-,315			*-,338	
Legislative exclusion	,50								
Legislative fraud	,72								
6. Legislative competition									
Legislative fragmentation (Rae index) (lag)	,25					**-,691			
Effective number of legislative parties (lag)	5,59					**-,539			
Effective number of opposition parties (lag)	14,16								
Regional dummies (B coefficients)									
Latin America									
Eastern Europe									
Caucasus & Central Asia						*9,006			
Middle East & Northern Africa									
South & East Asia			*-,6,952						
N		87	79	40		40	48	48	22
Standard error		8,677	9,017	9,834		9,096	8,447	7,941	5,787
Adj. R ²		,213	,105	,018		,244	,171	,276	,621

Notes: Estimation of linear effects, OLS regression analysis, SPSS 14.0. Dependent variable: AS disproportionality. Standard deviation = 9,77. Fixed regional effects: Reference category = Sub-Saharan Africa. Significance levels: ° p ≤ 0.1, * p ≤ 0.05, ** p ≤ 0.01, *** p ≤ 0.001. Table only reports significant coefficients. Shaded areas indicate included variables. Standard deviations of GDP per capita and population refer to original (not logged) values.

Table 5
Explaining legislative fraud

	St.dev.	Model 1 Beta	Model 2 Beta	Model 3 Beta	Model 4 Beta	Model 5 Beta	Model 6 Beta
1. Societal structure							
GDP per capita (log constant PPP)	3.026	*-,357					**-,494
Rural population (% tot. pop.)	19,61	°-,278					*-,414
Total population (log)	40.807.924	***,377					
2. External dependence							
Official development assistance (% GNI)	7,93						
Trade (% GDP)	32,61		**-,276				°-,196
Total external debt service (% GNI)	3,47		**-,322				**-,296
3. Public finances							
Total expenditure (% GDP)	10,65						
Non-tax revenue (% total revenue)	13,20						
Military expenditure (% GDP)	1,83						
4. Auxiliary authoritarian strategies							
Violations of physical integrity	2,04						
Violations of media freedom	,43						
Legislative disempowerment	,63						
Legislative exclusion	,50						
6. Legislative competition							
Legislative fragmentation (Rae index) (lag)	,25						
Effective number of legislative parties (lag)	5,59						
Effective number of opposition parties (lag)	14,16						
Regional dummies (B coefficients)							
Latin America							
Eastern Europe		*,553	**-,761		*,442		**-,879
Caucasus & Central Asia			*,551				
Middle East & Northern Africa							
South & East Asia							
N		119	111	50	117	59	111
Standard error		,669	,682	,654	,717	,716	,657
Adj. R ²		,146	,094	,071	,021	,078	,158

Notes: Estimation of linear effects, OLS regression analysis, SPSS 14.0. Dependent variable: AS Legislative fraud (0–2). Standard deviation = ,72. Reference category of fixed regional effects: Sub-Saharan Africa. Significance levels: ° p ≤ 0.1, * p ≤ 0.05, ** p ≤ 0.01, *** p ≤ 0.001. Table only reports significant coefficients. Shaded areas indicate included variables. Standard deviations of GDP per capita and population refer to original (not logged) values.

Table 6
Explaining presidential fraud

	St.dev.	Model 1 Beta	Model 2 Beta	Model 3 Beta	Model 4 Beta	Model 5 Beta	Model 6 Beta
1. Societal structure							
GDP per capita (log constant PPP)	3.026	°-,439				*-,517	
Rural population (% tot. pop.)	19,61	*-,497				*-,477	
Total population (log)	40.807.924						
2. External dependence							
Official development assistance (% GNI)	7,93						
Trade (% GDP)	32,61						
Total external debt service (% GNI)	3,47		°-,222				
3. Public finances							
Total expenditure (% GDP)	10,65						
Non-tax revenue (% total revenue)	13,20						
Military expenditure (% GDP)	1,83						
4. Auxiliary authoritarian strategies							
Violations of physical integrity	2,04						
Violations of media freedom	,43						
Legislative disempowerment	,63						
Regional dummies (B coefficients)							
Latin America							
Eastern Europe							
Caucasus & Central Asia			°-,487				
Middle East & Northern Africa							
South & East Asia							
N		71	70	32	71	70	
Standard error		,773	,745	,733	,774	,723	
Adj. R ²		,043	,024	-,081	-,046	,081	

Notes: Estimation of linear effects, OLS regression analysis, SPSS 14.0. Dependent variable: AS Presidential fraud (0–2), Standard deviation = ,75. Reference category of fixed regional effects: Sub-Saharan Africa. Significance levels: ° $p \leq 0.1$, * $p \leq 0.05$, ** $p \leq 0.01$, *** $p \leq 0.001$. Table only reports significant coefficients. Shaded areas indicate included variables. Standard deviations of GDP per capita and population refer to original (not logged) values.

Table 7
Explaining the cumulative intensity of authoritarian control

	St.dev.	Model 1 Beta	Model 2 Beta	Model 3 Beta	Model 5 Beta
1. Societal structure					
GDP per capita (log constant PPP)	3,026				
Rural population (% tot. pop.)	19,61				
Total population (log)	40.807.924				
2. External dependence					
Official development assistance (% GNI)	7,93				
Trade (% GDP)	32,61				
Total external debt service (% GNI)	3,47				
3. Public finances					
Total expenditure (% GDP)	10,65				
Non-tax revenue (% total revenue)	13,20				
Military expenditure (% GDP)	1,83				
4. Legislative competition					
Legislative fragmentation (Rae index) (lag)	,25				
Effective number of legislative parties (lag)	5,59				
Effective number of opposition parties (lag)	14,16				
Regional dummies (B coefficients)					
Latin America					
Eastern Europe				°,657	
Caucasus & Central Asia		***,853	***,846	**1,009	
Middle East & Northern Africa		*,606	*,465	***1,39	
South & East Asia				°,662	°,480
N		146	139	63	57
Standard error		,780	,784	,777	,769
Adj. R ²		,173	,138	,234	,114

Notes: Estimation of linear effects, OLS regression analysis, SPSS 14.0. Dependent variable: CIRI violations of physical integrity (0–8), Standard deviation = ,83. Reference category of fixed regional effects: Sub-Saharan Africa. Significance levels: ° p ≤ 0.1, * p ≤ 0.05, **p ≤ 0.01, *** p ≤ 0.001. Table only reports significant coefficients. Shaded areas indicate included variables. Standard deviations of GDP per capita and population refer to original (not logged) values.

Table 8
Descriptive statistics

<i>Dimensions & variables</i>	<i>Source</i>	<i>N</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Standard deviation</i>
Social structure						
GDP per capita (current PPP)	WDI	150	450	22.970	3.140,20	3.025,89
GDP per capita (log of current PPP)		150	2,65	4,36	3,36	,32
Rural population (% total population)	WDI	151	,00	86,49	53,81	19,61
Population UN Demographic Yearbook	UN	151	935.000	207.440.000	25.597.927,16	40.807.924,39
Population Log		151	5,97	8,32	7,04	,53
External dependence						
Official development assistance (% GNI)	WDI	150	,00	59,25	6,64	7,93
Trade (% GDP)	WDI	145	24,93	217,57	68,10	32,61
Total debt service (% GNI)	WDI	142	,00	13,70	4,95	3,47
Public finances						
Total expenditure (% GDP)	WDI	91	,00	63,90	23,48	10,65
Nontax revenue (% current revenue)	WDI	85	,25	66,28	17,00	13,20
Military expenditure (% GDP)	WDI	108	,30	9,80	2,69	1,83
Authoritarian strategies						
Violations of physical integrity	CIRI	150	0	8	4,38	2,04
Violations of media freedom	CIRI, FH	151	,0	2,0	1,35	,43
Legislative ineffectiveness	CNTS	150	0	3	1,55	,63
Legislative fraud	AS	120	0	2	,93	,72
Presidential fraud	AS	73	0	2	1,14	,75
Legislative exclusion	AS	120	0	1	,47	,50
Presidential exclusion	AS	73	0	1	,36	,48
Cumulative control	AS	148	1,25	4,88	2,93	,83
Disproportionality	AS	88	1,58	46,22	17,33	9,77
Interparty competition						
Legislative fragmentation (Rae index) (lag)	AS	63	,00	,98	,45	,25
Effective number of legislative parties (lag)	AS	63	1,00	41,14	3,23	5,59
Effective number of opposition parties (lag)	AS	60	,00	84,00	7,52	14,16

Source Abbreviations:

WDI = IBRD World Development Indicators 2004

CIRI = Cingranelli-Richards Dataset

CNTS = Tony Banks Cross-National Time Series

FH = Freedom House Freedom of the Press

AS = Author's Database

Table A
Authoritarian Elections in the World, 1980–2002

Region 1			1992 C	Region 5		Togo	1993 P
		Russia	1999 L				1994 L
Colombia	2002 C		2000 P	Burkina F.	1992 L		1998 P
El Salvador	1984 P				1997 L		1999 L
	1985 L	Region 3			1998 P		2002 L
Guatemala	1985 C				2002 L	Zambia	1996 C
	1990 C	Armenia	1995 L	Cameroon	1992 C		2001 C
	1994 L		1996 P		1997 C	Zimbabwe	1985 L
	1995 C		1998 P		2002 L		1990 C
Haiti	1990 P		1999 L	Chad	1996 P		1995 L
	1995 C	Azerbaijan	1993 P		1997 L		1996 P
	1997 L		1995 L		2001 P		2000 L
	2000 C		1998 P		2002 L		2002 P
Mexico	1985 L		2000 L	C. d'Ivoire	1990 C	Region 6	
	1988 C	Georgia	1992 L		1995 C	Cambodia	1993 L
	1991 L		1995 C		2000 C		1998 L
	1994 C		1999 L	Etiopía	1995 L	Indonesia	1982 L
Nicaragua	1984 C		2000 P	Etiopía	2000 L		1987 L
Panama	1984 C	Kazakhstan	1995 L	Gabon	1990 L		1992 L
	1989 P		1999 C		1993 P		1997 L
Paraguay	1983 C	Kyrgyztan	1995 C		1996 L		1999 L
	1988 C		2000 C		1998 P		1982 L
	1989 C	Tajikistan	1999 P		2001 L	Malaysia	1986 L
	1998 C		2000 L	Gambia	2001 P		1990 L
Perú	1995 P	Region 4		Ghana	1992 C		1995 L
	2000 C	Algeria	1995 P	Guinea	1993 P		1999 L
Region 2			1997 L		1995 L		1990 L
			1999 P		1998 P	Pakistan	1993 L
Albania	1991 L		2002 L	Kenya	2002 L		1997 L
	1992 L		1984 L		1997 C	Philippines	1981 P
	1996 L	Egypt	1987 L		2002 C		1984 L
	1997 L		1990 L	Mauritania	1996 L		1986 P
Belarus	1994 P		1995 L		1997 P	Singapore	1980 L
	1995 L		2000 L		2001 L		1984 L
	2000 L	Tunisia	1999 C	Niger	1996 C		1988 L
	2001 P	Turkey	1983 L		1999 C		1991 L
Croatia	1992 C		1995 L	Senegal	1983 C		1997 L
	1995 L		1999 L		1988 C		2001 L
	1997 P		1997 L		1993 C		
Macedonia	1994 C	Yemen	1999 P	Tanzania	1995 C		
Moldova	1994 L				2000 C		
Romania	1990 C						

P = Presidential elections

L = Legislative elections (Lower Chamber)

C = Concurrent elections (within same calendar year)

World Regions

1 Latin America & C.

2 Eastern Europe

3 Central Asia & Caucasus

4 Middle East & Northern Africa

5 Sub-Saharan Africa

6 South & East Asia

Table B
Distribution of Authoritarian Elections by World Regions, 1980–2002

	Legislative Elections	Presidential Elections	Total	%
1 Latin America & Caribbean	20	17	37	19.2
2 Eastern Europe	13	7	20	10.4
3 Central Asia & Caucasus	12	10	22	11.4
4 Northern Africa & Middle East	12	4	16	8.3
5 Sub-Saharan Africa	41	31	72	37.3
6 South & East Asia	23	3	26	13.4
Total	121	72	193	100.0

Source: Author's Database on Authoritarian Elections in the World.

Table C
Measuring Authoritarian Strategies: Description of Variables

<i>Strategies of norm violation</i>	<i>Level of measurement</i>	<i>Categories</i>	<i>Source</i>	<i>Variable name</i>
Repression				
Violation of physical integrity (extrajudicial killings, disappearance, torture, and political imprisonment) (personal integrity)	Ordinal	Range 0–8 0 = full respect for basic human rights 8 = gross violation of basic human rights	Cingranelli-Richards (CIRI) Human Rights Data Project: Physical Integrity Rights Index (inverted) http://ciri.binghampton.edu	VIOLINT
Restrictions on freedom of speech and mass media (civil liberties)	Ordinal	Range 0–2 CIRI (recoded): 0 = No violations 1 = Some violations 2 = Frequent violations FH: 0 = Free press 1 = Partly free 2 = Not free	Arithmetic mean of CIRI Freedom of Speech and Press (inverted) and FH Press Freedom (author calculation) http://ciri.binghampton.edu www.freedomhouse.org	VIOLMED
Legislative weakness				
Reserved domains: Limiting the jurisdiction of elective offices through weak legislatures (legislative disempowerment)	Ordinal	0 Effective legislature 1 Partially effective legislature 2 Ineffective (“rubber stamp”) legislature	Tony Banks Cross-National Time-Series (CNTS) Data Archive, Legislative Effectiveness, variable s22F4 (inverted scale) http://www.databanks.sit.ehosting.net/	LEGWEAK
Institutional bias				
Redistributive electoral rules: Vote-seat disproportionality (proxy)	Ratio	Loosemore-Hanby Disproportionality Index: $\sum V_i - S_i / 2$	Author’s Database on Authoritarian Elections in the World (1980–2002).	DISPRO

Electoral fraud

Redistributive election management (at either legislative or presidential elections)	Ordinal	0 No fraud 1 Irregularities 2 Fraud	Author's Database on Authoritarian Elections in the World (1980–2002).	FRAUDLEG: Legislative fraud FRAUDPRE: Presidential fraud
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Exclusion

Exclusion of parties and candidates from electoral competition (at either legislative or presidential elections)	Nominal	0 Openness 1 Exclusion	Author's Database on Authoritarian Elections in the World (1980–2002).	EXCLEG: Legislative Exclusion EXCPRE: Presidential exclusion
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