

## Supplemental Appendix

### List of Variables

#### *Dependent Variables*

**Corruption Index:** This is an index created from indicators of executive bribery, executive embezzlement, public sector bribery, public sector embezzlement, legislative corruption, and judicial corruption using Bayesian factor analysis. This index was rescaled to vary between 0 and 1 and to imply that higher values mean greater corruption. Source: V-Dem, Coppedge et al. 2016a; Coppedge et al. 2016c, (v2x\_corr)

**Executive Corruption:** This index is formed by taking the average of the point estimates from a Bayesian factor analysis model of indicators for executive bribery and executive embezzlement. This index was rescaled to vary between 0 and 1 and to imply that higher values mean greater corruption. Source: V-Dem, Coppedge et al. 2016a; Coppedge et al. 2016c, (v2x\_execorr)

**Judicial Corruption:** This indicator measures the frequency that individuals make undocumented extra payments or give bribes to judges to obtain a favorable judicial decision or affect the speed of the process. This indicator was rescaled to vary between 0 and 1 and to imply that higher values mean greater corruption. Source: V-Dem, Coppedge et al. 2016a; Coppedge et al. 2016c, (v2juccorr)

**Legislative Corruption:** This indicator measures the frequency that legislators abuse their positions for financial gain through a variety of techniques. This indicator was rescaled to vary between 0 and 1 and to imply that higher values mean greater corruption. Source: V-Dem, Coppedge et al. 2016a; Coppedge et al. 2016c, (v2lgcrrpt)

**Public Sector Corruption:** This index is formed by taking the average of the point estimates from a Bayesian factor analysis model of indicators for public sector bribery and public sector embezzlement. This index was rescaled to vary between 0 and 1 and to imply that higher values mean greater corruption. Source: V-Dem, Coppedge et al. 2016a; Coppedge et al. 2016c, (v2x\_pubcorr)

### *Independent Variables*

**Electoral Democracy:** This index of democracy takes into account the extent of freedom of association, suffrage, clean elections, the election of the executive, and freedom of expression using V-Dem data. Source: V-Dem, Coppedge et al. 2016a; Coppedge et al. 2016c, (v2x\_polyarchy)

**Electoral Regime:** A country-year is coded as 1 if regularly scheduled national elections are on course and 0 if either the national election of the executive or parliament has been interrupted or it is prior to the first election in a country's history. Source: V-Dem, Coppedge et al. 2016a; Coppedge et al. 2016c, (v2x\_elecreg)

**Freedom of Association:** The index is formed by taking the point estimates from a Bayesian factor analysis model of the indicators for civil society organization (CSO) entry and exit,

CSO repression, bans on parties, barriers to parties, opposition party autonomy, and the multiparty character of elections. Source: V-Dem, Coppedge et al. 2016a; Coppedge et al. 2016c, (v2x\_frassoc\_thick)

**Freedom of Expression:** This index is formed by taking the point estimates from a Bayesian factor analysis model of the indicators for freedom of discussion for men/women, print/broadcast censorship effort, internet censorship effort, harassment of journalists, media bias, media self-censorship, the level of critical discourse in print/broadcast media, the balance in perspectives in print/broadcast media, and freedom of academic and cultural expression. Source: V-Dem, Coppedge et al. 2016a; Coppedge et al. 2016c, (v2x\_freexp\_thick)

**Judicial Constraints on Executive:** This index is formed by taking the point estimates from a Bayesian factor analysis model of the indicators for high court independence, lower court independence, executive compliance with the judiciary, executive compliance with the high court, and executive respect for the constitution. Source: V-Dem, Coppedge et al. 2016a; Coppedge et al. 2016c, (v2x\_jucon)

**Legislative Constraints on Executive:** This index is formed by taking the point estimates from a Bayesian factor analysis model of the indicators for executive oversight, legislature questions officials in practice, legislature investigates in practice, and legislative opposition parties. Source: V-Dem, Coppedge et al. 2016a; Coppedge et al. 2016c, (v2xlg\_legcon)

**Free and Fair Elections:** This index is formed by taking the point estimates from a principal components factor analysis model of the indicators for election management body (EMB)

autonomy, EMB capacity, voter registry, government election intimidation, electoral violence, other voting irregularities, and whether or not the election was generally free and fair. Departing from the higher-level free and fair elections index produced in V-Dem, we exclude vote-buying. Source: V-Dem, Coppedge et al. 2016a; Coppedge et al. 2016c, (v2xel\_frefair with v2elvotbuy removed)

### ***Control Variables***

**GDP per Capita:** The natural log of gross domestic production divided by the population size. Source: Maddison 2010. (e\_migdppln)

**GINI Coefficient:** A measure of income inequality. Source: UNU-Wider 2008. (e\_peginiwi)

**Media Freedom:** This variable is scored, in paraphrased language, as follows: (0) Not possible to criticize the government or government officials; (1) Social, legal, or economic costs related to such criticisms; (2) Such criticisms are common. The original scale was reversed, and the original categories “0” (No effective media) and “8” (*Missing data or social/political disruption makes it impossible to code*) were set to missing. Source: Whitten-Woodring and Van Belle 2015. (e\_mefree)

**State Capacity:** This variable is produced using Bayesian latent variables analysis on 24 different indicators of state capacity. Source: Hanson and Sigman 2013.

**Stock of Democracy:** For this variable the value time  $t+1$  is equal to the sum of the value of *Electoral Democracy* at time  $t+1$  and time  $t$ , minus 10 percent of depreciation at time  $t$ .

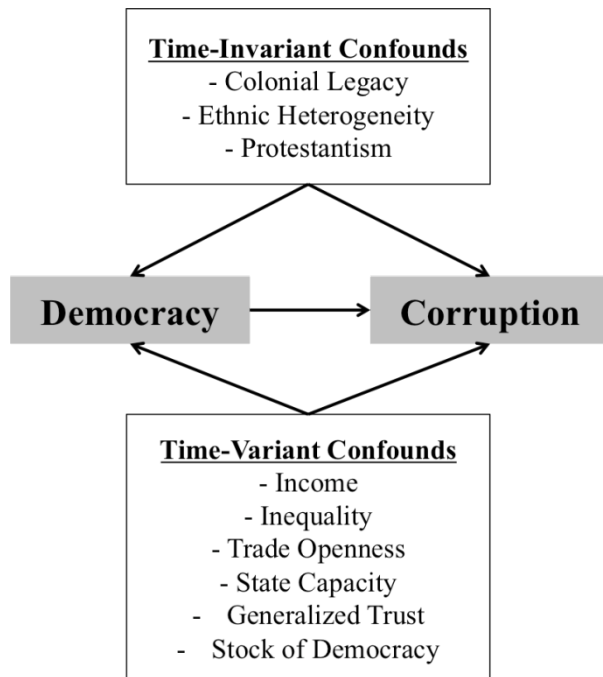
**Trade Openness:** Exports plus imports divided by real GDP per capita. Source: Barbier, Keshk, and Pollins 2009; Maddison 2010.

Note: Where applicable, names of variables as they appear in the V-Dem dataset are given at the end of each entry.

**Table 1A. Summary Statistics**

	<b>Mean</b>	<b>SD</b>	<b>Min.</b>	<b>Max.</b>
Corruption Index	0.439	0.264	0.009	0.946
Executive Corruption	0.450	0.300	0.011	0.979
Legislative Corruption	-0.148	1.338	-3.446	3.374
Judicial Corruption	-0.486	1.293	-3.263	2.801
Public Sector Corruption	0.439	0.290	0.005	0.974
Electoral Democracy	0.321	0.281	0.008	0.958
Freedom of Expression	0.466	0.315	0.013	0.989
Freedom of Association	0.468	0.332	0.022	0.968
Judicial Constraints on Executive	0.516	0.290	0.005	0.992
Legislative Constraints on Executive	0.467	0.304	0.023	0.987
Electoral Regime	0.607	0.488	0.000	1.000
Free and Fair Elections	0.293	0.335	0.000	0.989
Stock of Democracy	2.705	2.518	0.012	9.430
State Capacity, Hanson and Sigman	0.000	1.000	-3.512	2.862
GDP per Capita, Maddison Project	4.441	5.370	0.203	42.916
Gini Coefficient, UNU-WIDER	41.098	10.478	15.000	73.900
Trade Openness	0.159	0.310	0.000	6.383
Freedom House and Polity Index	5.389	3.454	0.000	10.000
Democracy, UDS Mean Score	0.004	0.979	-2.112	2.263
Democracy, Vanhanen	8.995	11.765	0.000	47.080
Democracy, Boix	0.364	0.481	0.000	1.000
Executive Electoral Competitiveness, DPI	5.209	2.154	1.000	7.000
Freedom of Speech, EQIO	2.212	0.681	1.000	3.000
Freedom of Association, EQIO	2.406	0.717	1.000	3.000
Media Freedom, Whitten-Woodring and Van Belle	0.741	0.846	0.000	2.000
Oversight Powers, CCP	2.569	1.230	1.000	4.000
Checks and Balances, Beck et al.	2.525	1.703	1.000	18.000
<i>Number of Observations</i>	<i>18834</i>			

**Figure 1A. Diagram of Control Variables**



**Table 2A. Controls** (next page)

This table considers the same models we present in the paper, adding the four control variables we mention in the paper but do not include in our main analyses: state capacity, GDP per capita, trade openness, GINI coefficient. Model 1 here is Model 4 from Table 1 in the paper with the control variables included. Model 2 here is that same model run without the control variables but on the same sample as in Model 1, showing that the loss of statistical significance is driven by the loss in observations, not by the introductions of control variables. The remaining models replicate the sequence of models in Tables 2-4 in the paper, with control variables included.



	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Corruption Index, Lagged (1 Year)	1.020*** (0.022)	1.023*** (0.022)	1.018*** (0.020)	1.017*** (0.020)			1.027*** (0.021)	1.020*** (0.022)
Corruption Index, Lagged (2 Years)	-0.100*** (0.020)	-0.100*** (0.020)	-0.100*** (0.019)	-0.100*** (0.019)			-0.100*** (0.020)	-0.100*** (0.020)
Executive Corruption, Lagged (1 Year)					1.022*** (0.021)	1.018*** (0.022)		
Executive Corruption, Lagged (2 Years)					-0.118*** (0.024)	-0.118*** (0.024)		
Electoral Democracy, Lagged (1 Year)	0.001 (0.020)	0.008 (0.019)			0.020 (0.027)	0.020 (0.027)		
Electoral Democracy^2	-0.024 (0.024)	-0.026 (0.022)			-0.037 (0.028)	-0.037 (0.028)		
Freedom of Expression, Lagged (1 Year)			0.024 (0.019)					
Freedom of Expression^2			-0.035* (0.019)					
Freedom of Association, Lagged (1 Year)				0.030 (0.020)				
Freedom of Association^2				-0.042** (0.0193)				
Judicial Constraints on Executive, Lagged (1 Year)					-0.007 (0.014)			
Legislative Constraints on Executive, Lagged (1 Year)						-0.028*** (0.009)		
Electoral Regime, Lagged (1 Year)							-0.003 (0.002)	0.002 (0.003)
Free and Fair Elections, Lagged (1 Year)								-0.017** (0.008)
Stock of Democracy, Lagged (1 Year)	0.002** (0.001)	0.002** (0.001)	0.002** (0.001)	0.002** (0.001)	0.003*** (0.001)	0.003*** (0.001)	0.000 (0.001)	0.002* (0.001)
GDP Per Capita, Lagged (1 Year)	-0.001 (0.001)		-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.001)	-0.000 (0.001)	-0.000 (0.000)	-0.000 (0.000)
GDP Per Capita x Electoral Democracy	0.001 (0.001)							
Trade Openness, Lagged (1 Year)	-0.005*** (0.001)		-0.004*** (0.001)	-0.004*** (0.001)	-0.004** (0.001)	-0.004** (0.001)	-0.005*** (0.001)	-0.005*** (0.001)
Gini Coefficient, Lagged (1 Year)	-0.000 (0.000)		-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
State Capacity, Lagged (1 Year)	-0.004* (0.002)		-0.004* (0.002)	-0.004 (0.002)	-0.002 (0.004)	-0.002 (0.004)	-0.004 (0.002)	-0.004* (0.002)
<i>R</i> <sup>2</sup>	0.890	0.889	0.890	0.890	0.852	0.853	0.889	0.890
<i>No. Observations</i>	4551	4551	4551	4551	4551	4549	4551	4550

Entries are regression coefficients, with standard errors clustered on countries, in parentheses. Country- and year-fixed effects included in regressions but omitted from the table. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

**Table 3A. Outliers**

Model 1 here is Model 4 in Table 1 in the paper. From this, we identified the points with high leverage and high squared residuals. This revealed five outliers: Vietnam in 1914, Tunisia in 2011, Georgia in 2004, Palestine in 2006, Palestine in 2007. To be conservative, we removed those in Model 2 here. The results are relatively unchanged.

	(1) Corruption Index	(2) Corruption Index
Corruption Index, Lagged (1 Year)	1.037*** (0.010)	1.039*** (0.001)
Corruption Index, Lagged (2 Years)	-0.081*** (0.010)	-0.082*** (0.020)
Electoral Democracy, Lagged (1 Year) Year)	0.015** (0.007)	0.014** (0.007)
Electoral Democracy^2 Years	-0.028*** (0.009)	-0.026*** (0.008)
Stock of Democracy, Lagged (1 Year)	0.002*** (0.001)	0.002*** (0.001)
GDP Per Capita, Lagged (1 Year)	-0.000 (0.000)	-0.000 (0.000)
GDP Per Capita x Electoral Democracy	0.000 (0.000)	0.000 (0.000)
$R^2$	0.988	0.989
<i>No. Observations</i>	10208	10203

Entries are regression coefficients, with standard errors clustered on countries, in parentheses. Country- and year-fixed effects included in regressions but omitted from the table.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

**Table 4A. Test of the S-curve with V-Dem Data**

	(1) Corruption Index
Corruption Index, Lagged (1 Year)	1.036*** (0.017)
Corruption Index, Lagged (2 Years)	-0.081*** (0.016)
Electoral Democracy, Lagged (1 Year)	0.039** (0.019)
Electoral Democracy^2	-0.095** (0.048)
Electoral Democracy^3	0.051 (0.035)
Stock of Democracy, Lagged (1 Year)	0.002*** (0.001)
GDP Per Capita, Lagged (1 Year)	-0.000 (0.000)
GDP Per Capita x Electoral Democracy	-0.000 (0.000)
<i>R</i> <sup>2</sup>	0.932
<i>No. Countries</i>	154
<i>Avg. Years per Country</i>	66.3
<i>No. Observations</i>	10208

Entries are regression coefficients, with standard errors clustered on countries, in parentheses. Country- and year-fixed effects included in regressions but omitted from the table.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

**Table 5A: Robustness Tests Disaggregating Corruption - Freedom of Association and Freedom of Expression, Executive Corruption**

	(1)	(2)	(3)
Executive Corruption, Lagged (1 Year)	1.033*** (0.016)	1.035*** (0.016)	1.021*** (0.018)
Executive Corruption, Lagged (2 Years)	-0.066*** (0.016)	-0.066*** (0.016)	-0.092*** (0.017)
Freedom of Expression, Lagged (1 Year)	0.025*** (0.008)		0.017 (0.016)
Freedom of Expression^2	-0.025*** (0.009)		-0.027 (0.017)
Media Freedom, Whitten-Woodring and Van Belle		0.027*** (0.008)	
Freedom of Association, Lagged (1 Year)		-0.025*** (0.009)	
Freedom of Association^2			-0.001 (0.002)
<i>R</i> <sup>2</sup>	0.936	0.937	0.882
<i>No. Countries</i>	173	173	169
<i>Avg. Years per Country</i>	89.7	91.4	50.7
<i>No. Observations</i>	15521	15818	8574

Entries are regression coefficients, with standard errors clustered on countries, in parentheses. Country- and year-fixed effects included in regressions but omitted from the table.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

**Table 6A: Robustness Tests Disaggregating Corruption - Freedom of Association and Freedom of Expression, Legislative Corruption**

	(1)	(2)	(3)
Legislative Corruption, Lagged (1 Year)	0.924*** (0.030)	0.923*** (0.030)	0.940*** (0.027)
Legislative Corruption, Lagged (2 Years)	0.043 (0.029)	0.044 (0.029)	0.018 (0.025)
Freedom of Expression, Lagged (1 Year)	0.119** (0.048)		0.154** (0.078)
Freedom of Expression <sup>2</sup>	-0.088* (0.045)		-0.125* (0.070)
Media Freedom, Whitten-Woodring and Van Belle		0.142*** (0.048)	
Freedom of Association, Lagged (1 Year)		-0.105** (0.045)	
Freedom of Association <sup>2</sup>			-0.002 (0.007)
<i>R</i> <sup>2</sup>	0.929	0.930	0.909
<i>No. Countries</i>	172	172	169
<i>Avg. Years per Country</i>	65.1	65.8	44.7
<i>No. Observations</i>	11204	11322	7556

Entries are regression coefficients, with standard errors clustered on countries, in parentheses. Country- and year-fixed effects included in regressions but omitted from the table.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

**Table 7A: Robustness Tests Disaggregating Corruption - Freedom of Association and Freedom of Expression, Judicial Corruption**

	(1)	(2)	(3)
Judicial Corruption, Lagged (1 Year)	1.015*** (0.017)	1.016*** (0.017)	0.976*** (0.019)
Judicial Corruption, Lagged (2 Years)	-0.048*** (0.018)	-0.047*** (0.017)	-0.041** (0.017)
Freedom of Expression, Lagged (1 Year)	0.102*** (0.030)		0.045 (0.055)
Freedom of Expression^2	-0.122*** (0.031)		-0.094* (0.053)
Media Freedom, Whitten-Woodring and Van Belle		0.120*** (0.032)	
Freedom of Association, Lagged (1 Year)		-0.128*** (0.033)	
Freedom of Association^2			0.002 (0.008)
<i>R</i> <sup>2</sup>	0.947	0.948	0.898
<i>No. Countries</i>	173	173	169
<i>Avg. Years per Country</i>	89.9	91.6	50.7
<i>No. Observations</i>	15546	15843	8574

Entries are regression coefficients, with standard errors clustered on countries, in parentheses. Country- and year-fixed effects included in regressions but omitted from the table.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

**Table 8A: Robustness Tests Disaggregating Corruption - Freedom of Association and Freedom of Expression, Public Sector Corruption**

	(1)	(2)	(3)
Public Sector Corruption, Lagged (1 Year)	1.032*** (0.017)	1.033*** (0.017)	1.006*** (0.021)
Public Sector Corruption, Lagged (2 Years)	-0.059*** (0.017)	-0.059*** (0.016)	-0.067*** (0.022)
Freedom of Expression, Lagged (1 Year)	0.023*** (0.007)		0.027** (0.012)
Freedom of Expression^2	-0.028*** (0.008)		-0.038*** (0.014)
Media Freedom, Whitten-Woodring and Van Belle		0.026*** (0.008)	
Freedom of Association, Lagged (1 Year)		-0.028*** (0.008)	
Freedom of Association^2			-0.001 (0.002)
<i>R</i> <sup>2</sup>	0.947	0.947	0.896
<i>No. Countries</i>	173	173	169
<i>Avg. Years per Country</i>	89.7	91.4	50.7
<i>No. Observations</i>	15521	15818	8574

Entries are regression coefficients, with standard errors clustered on countries, in parentheses. Country- and year-fixed effects included in regressions but omitted from the table.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

**Table 9A: Robustness Tests Disaggregating Corruption - Judicial and Legislative Constraints on the Executive, Legislative Corruption**

	(1)	(2)
Legislative Corruption, Lagged (1 Year)	0.923*** (0.030)	0.923*** (0.030)
Legislative Corruption, Lagged (2 Years)	0.043 (0.029)	0.043 (0.029)
Electoral Democracy, Lagged (1 Year)	0.171*** (0.057)	0.170*** (0.064)
Electoral Democracy^2	-0.163*** (0.050)	-0.162*** (0.052)
Judicial Constraints on Executive, Lagged (1 Year)	0.023 (0.023)	
Legislative Constraints on Executive, Lagged (1 Year)		0.016 (0.024)
<i>R</i> <sup>2</sup>	0.930	0.930
<i>No. Countries</i>	172	172
<i>Avg. Years per Country</i>	65.8	65.8
<i>No. Observations</i>	11321	11322

Entries are regression coefficients, with standard errors clustered on countries, in parentheses. Country- and year-fixed effects included in regressions but omitted from the table.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$



**Table 10A: Robustness Tests Disaggregating Corruption - Judicial and Legislative Constraints on the Executive, Judicial Corruption**

	(1)	(2)
Judicial Corruption, Lagged (1 Year)	1.012*** (0.017)	0.996*** (0.018)
Judicial Corruption, Lagged (2 Years)	-0.048*** (0.017)	-0.050*** (0.018)
Electoral Democracy, Lagged (1 Year)	0.136*** (0.034)	0.152*** (0.039)
Electoral Democracy^2	-0.183*** (0.033)	-0.205*** (0.038)
Judicial Constraints on Executive, Lagged (1 Year)	-0.031** (0.013)	
Legislative Constraints on Executive, Lagged (1 Year)		-0.038** (0.017)
<i>R</i> <sup>2</sup>	0.948	0.921
<i>No. Countries</i>	173	172
<i>Avg. Years per Country</i>	91.4	74.7
<i>No. Observations</i>	15819	12855

Entries are regression coefficients, with standard errors clustered on countries, in parentheses. Country- and year-fixed effects included in regressions but omitted from the table.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

**Table 11A: Robustness Tests Disaggregating Corruption - Judicial and Legislative Constraints on the Executive, Public Sector Corruption**

	(1)	(2)
Public Sector Corruption, Lagged (1 Year)	1.030*** (0.016)	1.014*** (0.018)
Public Sector Corruption, Lagged (2 Years)	-0.061*** (0.016)	-0.061*** (0.017)
Electoral Democracy, Lagged (1 Year)	0.034*** (0.007)	0.030*** (0.009)
Electoral Democracy^2	-0.040*** (0.008)	-0.039*** (0.010)
Judicial Constraints on Executive, Lagged (1 Year)	-0.009** (0.004)	
Legislative Constraints on Executive, Lagged (1 Year)		-0.008* (0.005)
<i>R</i> <sup>2</sup>	0.947	0.926
<i>No. Countries</i>	173	172
<i>Avg. Years per Country</i>	91.4	74.6
<i>No. Observations</i>	15818	12830

Entries are regression coefficients, with standard errors clustered on countries, in parentheses. Country- and year-fixed effects included in regressions but omitted from the table.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

**Table 12A: Robustness Tests Disaggregating Corruption - Presence and Quality of Elections, Executive Corruption**

	(1)	(2)
Executive Corruption, Lagged (1 Year)	1.036*** (0.016)	1.033*** (0.016)
Executive Corruption, Lagged (2 Years)	-0.066*** (0.016)	-0.066*** (0.016)
Electoral Regime, Lagged (1 Year)	0.003** (0.001)	0.005*** (0.002)
Free and Fair Elections, Lagged (1 Year)		-0.009** (0.004)
$R^2$	0.937	0.937
<i>No. Countries</i>	173	173
<i>Avg. Years per Country</i>	91.4	91.4
<i>No. Observations</i>	15818	15812

Entries are regression coefficients, with standard errors clustered on countries, in parentheses. Country- and year-fixed effects included in regressions but omitted from the table.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

**Table 13A: Robustness Tests Disaggregating Corruption - Presence and Quality of Elections, Legislative Corruption**

	(1)	(2)
Legislative Corruption, Lagged (1 Year)	0.925*** (0.030)	0.926*** (0.030)
Legislative Corruption, Lagged (2 Years)	0.044 (0.029)	0.044 (0.029)
Electoral Regime, Lagged (1 Year)	0.015 (0.009)	0.012 (0.010)
Free and Fair Elections, Lagged (1 Year)		0.010 (0.021)
$R^2$	0.929	0.929
<i>No. Countries</i>	172	172
<i>Avg. Years per Country</i>	65.8	65.8
<i>No. Observations</i>	11322	11316

Entries are regression coefficients, with standard errors clustered on countries, in parentheses. Country- and year-fixed effects included in regressions but omitted from the table.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

**Table 14A: Robustness Tests Disaggregating Corruption - Presence and Quality of Elections, Judicial Corruption**

	(1)	(2)
Judicial Corruption, Lagged (1 Year)	1.017*** (0.017)	1.016*** (0.017)
Judicial Corruption, Lagged (2 Years)	-0.047*** (0.017)	-0.048*** (0.017)
Electoral Regime, Lagged (1 Year)	0.012*** (0.004)	0.023*** (0.006)
Free and Fair Elections, Lagged (1 Year)		-0.041*** (0.013)
$R^2$	0.948	0.948
<i>No. Countries</i>	173	173
<i>Avg. Years per Country</i>	91.6	91.5
<i>No. Observations</i>	15843	15837

Entries are regression coefficients, with standard errors clustered on countries, in parentheses. Country- and year-fixed effects included in regressions but omitted from the table.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

**Table 15A: Robustness Tests Disaggregating Corruption - Presence and Quality of Elections, Public Sector Corruption**

	(1)	(2)
Public Sector Corruption, Lagged (1 Year)	1.035*** (0.016)	1.032*** (0.016)
Public Sector Corruption, Lagged (2 Years)	-0.060*** (0.016)	-0.060*** (0.016)
Electoral Regime, Lagged (1 Year)	0.003** (0.001)	0.006*** (0.001)
Free and Fair Elections, Lagged (1 Year)		-0.012*** (0.003)
$R^2$	0.947	0.947
<i>No. Countries</i>	173	173
<i>Avg. Years per Country</i>	91.4	91.4
<i>No. Observations</i>	15818	15812

Entries are regression coefficients, with standard errors clustered on countries, in parentheses. Country- and year-fixed effects included in regressions but omitted from the table.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

**Table 16A: Robustness Tests Using Non-V-Dem Data** (next page)

The table on the next page considers the same models we present in the paper, including non-V-Dem measures of the independent variables. Here, *Freedom House and Polity Index*, *Democracy UDS Mean Score*, *Democracy Vanhanen*, and *Democracy Boix* provide substitutes for The V-Dem *Electoral Democracy* index. *EQIO* provides a substitute for the V-Dem *Freedom of Expression* and *Freedom of Association* measures. *Checks and Balances, Beck et al.* provides a substitute for V-Dem's *Legislative Checks on Executive*. *Executive Electoral Competitiveness, DPI* provides a substitute for the V-Dem *Free and Fair Elections* index.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Corruption Index, Lagged (1 Year)	0.993*** (0.022)	1.021*** (0.019)	1.016*** (0.018)	1.026*** (0.017)	1.067*** (0.042)	1.065*** (0.040)			0.998*** (0.023)
Corruption Index, Lagged (2 Years)	-0.077*** (0.021)	-0.074*** (0.017)	-0.071*** (0.017)	-0.074*** (0.016)	-0.214*** (0.041)	-0.213*** (0.041)			-0.081*** (0.021)
Executive Corruption, Lagged (1 Year)							1.007*** (0.022)	1.007*** (0.022)	
Executive Corruption, Lagged (2 Years)							-0.109*** (0.023)	-0.109*** (0.023)	
Freedom House and Polity Index Lagged (1 Year)	0.005** (0.002)								
Freedom House and Polity Index^2	-0.000*** (0.000)								
Democracy, UDS Mean Score, Lagged (1 Year)		-0.002 (0.001)							
Democracy, UDS Mean Score^2		-0.001** (0.001)							
Democracy, Vanhanen, Lagged (1 Year)			-0.000 (0.000)						
Democracy, Vanhanen^2			-0.000 (0.000)						
Democracy, Boix, Lagged (1 Year)				-0.002** (0.001)					
Freedom of Speech, EQIO, Lagged (1 Year)					-0.008 (0.015)				
Freedom of Speech, EQIO^2					0.003 (0.004)				
Freedom of Association, EQIO, Lagged (1 Year)						0.012 (0.018)			
Freedom of Association, EQIO^2						-0.002 (0.004)			
Checks and Balances, Beck et al., Lagged (1 Year)							-0.001 (0.001)		
Oversight Powers, CCP								0.001 (0.001)	
Executive Electoral Competitiveness DPI, Lagged (1 Year)									-0.001** (0.001)
Stock of Democracy, Lagged (1 Year)	0.001 (0.001)	0.001 (0.001)	0.001* (0.001)	0.001 (0.000)	0.000 (0.002)	-0.000 (0.002)	0.002 (0.001)	0.002** (0.001)	0.001 (0.001)
<i>R</i> <sup>2</sup>	0.875	0.912	0.905	0.917	0.817	0.817	0.830	0.880	0.870
<i>No. Countries</i>	157	168	165	159	156	156	164	165	164
<i>Avg. Years per Country</i>	36.2	51.2	56.3	63.1	6.7	6.7	33.4	54.2	34.2
<i>No. Observations</i>	5680	8602	9288	10030	1051	1051	5475	8941	5615

Entries are regression coefficients, with standard errors clustered on countries, in parentheses. Country- and year-fixed effects included in regressions but omitted from the table. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$



### **List of Variables Appearing in Table 16A:**

**Freedom House and Polity Index:** To create this index the average of Freedom House's two scores are taken and are transformed to a scale 0-10 and Polity is transformed to a scale 0-10, and then these are averaged. The scale for this index ranges from 0-10 where 0 is least democratic and 10 most democratic. Source: Freedom House 2007; Marshall and Jaggers 2007 (e\_fh\_polity2)

**Democracy, UDS Mean Score:** The UDS are estimated using a Bayesian statistical measurement model and, therefore, can be used to make probabilistic statements about other useful quantities, such as the difference in democracy levels between two countries in a given year. The mean forming this measure is the posterior mean. Source: Pemstein, Meserve, and Melton 2010. (e\_uds\_mean)

**Democracy, Vanhanen:** This variable is created by multiplying Vanhanen's Competition and Participation scores and dividing the resulting product by 100. Vanhanen's Competition score measures opposition party vote shares. Vanhanen's Participation score measures the percentage of population participating in elections. The resulting democracy scale varies from 0 to 50. Source: Vanhanen 2000 (e\_mivanhan)

**Democracy, Boix:** This variable provides a dichotomous measure of democracy based on contestation and participation. Contestation is determined by whether political leaders are selected through free and fair elections. Participation is determined by a minimum level of suffrage. Values are coded as 1 for a democracy and 0 for a non-democracy. Source: Boix, Miller, and Rosato 2015 (e\_boix\_regime)

**Oversight Powers, CCP:** This variable provides an ordinal measure for executive oversight by the legislature. The main responses include: (1) the legislature can call on the executive to report as it sees fit; (2) the executive must report to the legislature at regular intervals; (3) both; and (4) neither. Source: Elkins, Ginsburg, and Melton 2012 (e\_ccp\_intexec)

**Executive Electoral Competitiveness, DPI:** This variable provides a dichotomous scale that measures if the executive is elected directly (1) or through an electoral college (2). Source: Beck et al. 2001 (e\_dpi\_eipc)

**Freedom of Association, EQIO:** This variable provides an ordinal scale with three possible values: (1) citizens do not have freedom of association, (2) freedom of association exists with some problems, (3) citizens have freedom of association. Source: Kelley and Kolev 2010 (e\_SF2)

**Freedom of Speech, EQIO:** This variable provides an ordinal scale with three possible values: (1) citizens do not have freedom of speech, (2) freedom of speech exists with some problems, or (3) citizens have freedom of speech. Source: Kelley and Kolev 2010 (e\_SF3)

**Checks and Balances, Beck et al.:** This variable provides a measure for the number of veto players in the government, adjusted for the level of independence of each branch, party affiliation, and electoral rules. The scale ranges from 0 to 18. Source: Beck et al. 2001 (e\_dpi\_checks)

Note: Names of variables as they appear in the V-Dem dataset are given at the end of each

entry.

References for Preceding List of Variables:

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## Consideration of Correlated Measurement Error

As mentioned in the manuscript, we consider whether correlated measurement error between V-Dem democratic institution variables and V-Dem measures of corruption are biasing the findings. We present four points for consideration against this concern. First, practically speaking, V-Dem's coverage is unparalleled, so we cannot run the analysis with any other data. Second, the V-Dem measurement model is designed to improve cross-country comparability through bridging, lateral coding, and the use of anchoring vignettes. As cross-country differences are a likely primary driver of correlated measurement error, reducing these differences makes the V-Dem data less likely to be plagued by this threat.

Third, it may not actually mitigate the issue to substitute in other expert survey data, as other experts may be subject to the same biases as V-Dem experts are, if not more so. For example, if we are concerned that the normative premium placed on democracy in the international community would bias coders to rate corruption in democratic countries lower, we do not necessarily think that V-Dem coders would be more subject to this bias than others. In fact, we suspect the opposite because most V-Dem coders study governance and politics and live in the countries they code, whereas other datasets on corruption and democracy rely heavily on foreigners, often businesspeople, rather than political experts. Nonetheless, we include models that use measures for our independent variables from data sources outside of V-Dem in Table 16A (preceding pages). The results for democracy overall are generally robust to the substitution of the variables for non-V-Dem data, as is the negative, linear, significant relationship between the quality of elections and corruption. The results for freedom of association, freedom of expression, judicial constraints on executive, and legislative constraints on executive are not robust when substituting non-V-Dem data, but this is likely due to the smaller sample size. Reductions in sample size range from approximately 40 percent to more than 90 percent.

Fourth, to directly deal with this concern in our analysis, we attempt to correct for this potential endogeneity bias by leveraging a special feature of the V-Dem data: the fact that, in most countries, different country-experts responded to different "surveys," i.e. thematically grouped sets of questions. To the extent that the indicators tapping into corruption appear in other such surveys than the indicators tapping into the constructs measuring our six hypotheses, we can accordingly eliminate country experts responding to questions on both sides of the equation. Four of the corruption indicators appear in the executive survey, one in the legislative and one in the judicial survey, whereas all freedom of expression, freedom of association and clean elections indicators appear in distinct surveys (on elections, parties, civil society, civil liberties and the media). When testing the effects of judicial and legislative constraints, we accordingly construct a measure of corruption without the indicator from these surveys, respectively. Table 17A below then replicates the results in Tables 2-4 in the manuscript, with one model per hypothesis (except the fifth model which tests H5 and H6 simultaneously), but on data where country experts appearing on both sides of the equation are being excluded. It should be noted, however, that these analyses preclude drawing on estimates from the V-Dem measurement model, which of course relies on data from *all* country experts responding to any indicator. We are instead forced to rely on simple averaging as the method of aggregating scores across country experts. No account is thus taken to potentially varying thresholds or lateral coding. With this caveat in mind, the results are fairly straight-forward. The most robust effects appear to be the ones for freedom of association (still significantly curvilinear) and free and fair elections (still significantly positive for holding elections, significantly linearly negative for freedom and fairness). The

squared term for freedom of expression is only marginally significant, and the additive term is not significant, so freedom of expression, when excluding coders appearing on both sides, mostly reduces corruption in a monotonically decreasing fashion. There is no significant result for judicial constraints, or for legislative constraints. So, overall, when taking the precaution of excluding coders appearing on both sides of the equation, we find strongest support for H2, H5 and H6.

### **Consideration of Coders Thinking of Corruption When Coding Free and Fair Elections Index Indicators, or Vice Versa**

One might be concerned that coders are considering corruption when coding the indicators constituting the Free and Fair Elections Index, or vice versa. There are three reasons we believe this concern is alleviated. First, McMann et al. (2016) find that the interaction between a coder's level of support for electoral democracy and the country-year observation's level of electoral democracy do not significantly predict coder ratings on corruption indicators. This indicates that coders who may be more biased towards electoral democracies are not systematically rating electoral democracies differently in terms of corruption. We also note that the models in which we include those coders that only code either the elections or the corruption questions (Table 17A) align with the findings presented in the main manuscript and, if anything, are more substantively and significantly significant. This is another piece of evidence indicating that coder ratings of these two concepts are independent. Finally, we note that the questions constituting both the Free and Fair Elections Index and the Corruption Index are deliberately narrowly worded so as to preclude coding skewed by the consideration of other factors. This evidence notwithstanding, there remains the possibility that corruption and free and fair elections are closely linked in a coder's mind.

**Table 17A: Robustness Tests Using Non-Overlapping Coders**

	(1) Testing H1	(2) Testing H2	(3) Testing H3	(4) Testing H4	(5) Testing H5-H6
Corruption Index, Lagged (1 Year)	0.945*** (0.040)	0.559*** (0.034)			0.604*** (0.021)
Corruption Index, Lagged (2 Years)	0.020 (0.039)	0.382*** (0.032)			0.327*** (0.019)
Executive Corruption, Lagged (1 Year)			3.927*** (0.061)	0.930*** (0.022)	
Executive Corruption, Lagged (2 Years)			-0.097 (0.063)	0.001 (0.021)	
Freedom of Expression, Lagged (1 Year)	0.021 (0.014)				
Freedom of Expression^2	-0.022* (0.013)				
Freedom of Association, Lagged (1 Year)		0.049*** (0.012)			
Freedom of Association^2		-0.049*** (0.013)			
Judicial Constraints on Executive, Lagged (1 Year)			0.022 (0.022)		
Legislative Constraints on Executive, Lagged (1 Year)				0.001 (0.010)	
Electoral Regime, Lagged (1 Year)					0.009*** (0.002)
Free and Fair Elections, Lagged (1 Year)					-0.021*** (0.004)
<i>R</i> <sup>2</sup>	0.926	0.844	0.918	0.868	0.839
<i>No. Countries</i>	132	169	170	95	169
<i>Avg. Years Per Country</i>	59.5	83.2	83.1	52.9	76.8
<i>No. Observations</i>	7859	14068	14133	5023	12983

Entries are regression coefficients, with standard errors clustered on countries, in parentheses. Country- and year-fixed effects included in regressions but omitted from the table.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

**Table 18A: Robustness Test with Time Trends** (next page)

	(1) Testing H1	(2) Testing H2	(3) Testing H3	(4) Testing H4	(5) Testing H5/H6
Corruption Index, Lagged (1 Year)	1.034*** (0.015)	1.034*** (0.015)			1.034*** (0.015)
Corruption Index, Lagged (2 Years)	-0.060*** (0.015)	-0.060*** (0.015)			-0.061*** (0.015)
Executive Corruption, Lagged (1 Year)			1.031*** (0.015)	1.015*** (0.017)	
Executive Corruption, Lagged (2 Years)			-0.066*** (0.016)	-0.069*** (0.016)	
Electoral Democracy, Lagged (1 Year)			0.044*** (0.008)	0.040*** (0.011)	
Electoral Democracy^2			-0.044*** (0.008)	-0.046*** (0.011)	
Freedom of Expression, Lagged (1 Year)	0.022*** (0.006)				
Freedom of Expression^2	-0.022*** (0.006)				
Freedom of Association, Lagged (1 Year)		0.026*** (0.006)			
Freedom of Association^2		-0.025*** (0.006)			
Judicial Constraints on Executive, Lagged (1 Year)			-0.001* (0.005)		
Legislative Constraints on Executive, Lagged (1 Year)				-0.012** (0.005)	
Electoral Regime, Lagged (1 Year)					0.005*** (0.001)
Free and Fair Elections, Lagged (1 Year)					-0.006** (0.003)
<i>R</i> <sup>2</sup>	0.953	0.953	0.937	0.911	0.953
<i>No. Countries</i>	173	173	173	172	173
<i>Avg. Years per Country</i>	89.7	91.4	91.4	74.6	91.4
<i>No. Observations</i>	15521	15818	15818	12830	15812

Entries are regression coefficients, with standard errors clustered on countries, in parentheses. Country- and year-fixed effects included in regressions but omitted from the table. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

**Table 19A: Robustness Test without Lagged Dependent Variables**

	(1) Testing H1	(2) Testing H2	(3) Testing H3	(4) Testing H4	(5) Testing H5/H6
Electoral Democracy, Lagged (1 Year)			.7090 <sup>***</sup> (.1182)	.3265 <sup>**</sup> (.1370)	
Electoral Democracy <sup>^2</sup>			-.8026 <sup>***</sup> (.1364)	-.6502 <sup>***</sup> (.1611)	
Freedom of Expression, Lagged (1 Year)	.5960 <sup>***</sup> (.1321)				
Freedom of Expression <sup>^2</sup>	-.7286 <sup>***</sup> (.1183)				
Freedom of Association, Lagged (1 Year)		.5000 <sup>***</sup> (.1199)			
Freedom of Association <sup>^2</sup>		-.5536 <sup>***</sup> (.1162)			
Judicial Constraints on Executive, Lagged (1 Year)			-.5494 <sup>***</sup> (.0705)		
Legislative Constraints on Executive, Lagged (1 Year)				-.1738 <sup>***</sup> (.0625)	
Electoral Regime, Lagged (1 Year)					.1490 <sup>***</sup> (.0192)
Free and Fair Elections, Lagged (1 Year)					-.3834 <sup>***</sup> (.0412)
<i>R</i> <sup>2</sup>	.202	.167	.271	.140	.250
<i>No. Countries</i>	173	173	173	172	173
<i>Avg. Years per Country</i>	90.6	92.4	92.4	75.0	92.3
<i>No. Observations</i>	15677	15981	15980	12899	15969

Entries are regression coefficients, with standard errors clustered on countries, in parentheses. Country- and year-fixed effects included in regressions but omitted from the table. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$