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APPENDIX 1

Empirical Methodology: Data, Methodology, and Additional Results

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A. Data

Our database merges data from multiple sources (refs 1-9, corresponding, in same order, to references 23-31 in the article) to create an unbalanced panel of country-level data for 178 countries (small country outliers or countries with too little data were removed) spanning 2000 to 2017. Some variables cover the whole time period with yearly data, others are more limited. The number of countries effectively represented in the different regressions is reported in result tables. Some variables, in particular environmental performance variables and Government/politics variables required significant preparatory work described in Table A1.1 (with additional information in section B2). Table A1.1 describes the variables and their construction, including the number of countries with data (N), data frequency (Freq), source variables and references. Dummy variables are used for regions using the WHO standard classification (Africa, Americas, Eastern Mediterranean, Europe, South-East Asia and Western Pacific). For more information on the source variables, the reader is directed to the data source provided in the reference list.

Table A1.1 Variables and Data Sources

Model variable	**Empirical Model**	**N[(a)]**	**Freq**	**Source variables descriptions and weights (when applicable)**		**Data Source (ref. #)**	**Additional Information**
				<u>Dependent variables</u>			
Per capita public health expenditure (PPP$)	A (all)	174	Yearly 2000-2015	-Total government schemes and compulsory contributory health care financing schemes (includes domestic and external funding) -Population		GHED (2)	Based on SHA 2011.
Env.Health Outcomes (ENVH) (0-100)	B1	178	2000, 2005, 2010, 2016	<u>EPI sub-index</u> Household Solid Fuels Sanitation Drinking Water Lead Exposure	<u>%</u> 65 15 15 5	EPI (1) Raw data from IHME (6)	Backcasted [(b)]
Ambient Air Quality – AIR (Index 0-100)	B2	178	Yearly 2008-2015	<u>EPI Sub-index</u> PM2.5 Exposure PM2.5 Exceedance	<u>%</u> 50 50	EPI (1)	Backcasted [(b)]
Biodiversity & Habitat – BDH (Index 0-100)	B3	162	Yearly 2000-2017	<u>EPI Sub-index</u> Marine Protected Areas Biome Protection National Biome Protection Global Representativeness (PAR) Species Protection (SPI) Species Habitat (SHI)	<u>%</u> 20 20 20 10 20 10	EPI (1)	Backcasted [(b)] SPI and SHI: until 2014 PAR: 2000 and 2016
Climate Change and Energy - CCE (Index 0-100)	B4	173	2006 and 2014	<u>EPI Sub-index</u> CO2 Emissions – Total CO2 Emissions – Power Methane Emissions N2O Emissions Black Carbon Emissions	<u>%</u> 50 20 20 5 5	EPI (1) using data from multiples sources	Raw data not available in EPI – No backcasting. All indices based on expectations given GDP CO2
Air Pollution (Index 0-100)	B5	173	2005 and 2010	<u>EPI Sub-index</u> SO2 Emissions NOX Emissions	<u>%</u> 50 50		
Fish Index	No significant	115/ 133		<u>EPI Sub-index</u> Fish Stock Status	<u>%</u> 50	EPI (1) using data	Backcasted; Imputed

Model variable	Empirical Model	N[a]	Freq	Source variables descriptions and weights (when applicable)		Data Source (ref. #)	Additional Information
	results to report			Regional Marine Trophic Index	50	from Sea Around Us	values for 26 countries [b] [c]
Forest Index	No significant results to report	151	2005-2016	Tree-Cover Loss Index (countries with ≥200km2 of forest cover) 5 year moving averages, raw data from 2000. Forest cover: 2000 data Annual tree cover loss: yearly 2001-2016		EPI (1) using data from Global Forest Watch	Backcasted[b]
<u>Independent Variables</u>							
GDP Per Capita (PPP$)	Regressor/ All models	174	Yearly 2000-2017	Gross Domestic Product in current international dollars		IMF: IFS (4) World Bank (3)	2016-17 values are estimates
SDG achievement index (0-100)	Instrument/ EM-A2	177	Yearly 2000-2017	Annualized geometric mean of all health–related Sustainable Development Goals		IHME, GBD database (6)	
Adult Literacy rate (%)	Instrument EM-B	146	Yearly 2000-2017[d]	Adult literacy rate, population 15+ years, both sexes (%)		UIS (7)	
Gov Exp. on Env. Protection Per Capita (PPP$)	Regressor/ EM-A1	22	Yearly 2000-2013 [d]	Environmental protection expenditure evaluated according to *abater principle* in million 2010 PPP prices [e] (Population in million from IMF)		OEDC (5)	Limited data, Most data (20-21 countries) in 2006-9);
EPI-Ecosystem Vitality Index (0-100)	Regressor/ EM-A (all)	162	Yearly 2000-2017	<u>EPI index</u> Biodiversity & Habitat Forests Fisheries Climate & Energy Air Pollution Wastewater treatment (WWT)	<u>%</u> 25 10 10 30 10 10	EPI (1) using data from multiple sources	Backcasted [b] WWT and SNM are constant over time based on 2016 data for WWT

Model variable	Empirical Model	N[(a)]	Freq	Source variables descriptions and weights (when applicable)	Data Source (ref. #)	Additional Information
				Agriculture: Sustainable Nitrogen Mngt (SNM) 5		and 2010 for SNM
Size of government (Gov.Exp in % of GDP)	Regressor/ EM-A (all)	172	Yearly 2000-2017	General Government total expenditure in % of GDP	IMF: IFS (4) Compiled by World Bank (3)	160-170 countries 2000-2004; 172 after 2005;
Private share in health spending (%)	Regressor/ EM-A (all)	175	Yearly 2000-2015	Domestic Private Current Health Expenditure in % of CHE	WHO: GHED (2)	SHA 2011 methodology
Governance index (factor 1) (f)	Regressor EM-B All	178	Yearly 2000-2016	Indicators included / Score Gov. Effectiveness 0.33 Rule of Law 0.43 Regulatory Quality 0.11 Control of Corruption 0.13	World Bank WGI (8)	Mean:0 St. dev:0.99 [-2.20;2.24]
Politics index (factor 1) (f)	Regressor EM-B All	163	Yearly 2000-2017	Indicators included / Score Voice and accountability 0.48 Polity IV score 0.48	WGI (8) and Polity IV (9)	Mean:0 St. dev:0.92 [-2.04;1.37]
Government stability index	Regressor EM-B All	178	Yearly 2000-2016	Political Stability and Absence of Violence	World Bank WGI (8)	Mean:-0.14 St. dev:0.99 [-3.06;1.70]
Country size	Regressor/ All models	174	Yearly 2000-2017	Total area of the country in square km (original data from FAO)	WHO (2)	
Total population	Regressor EM-B (all except B1)	178	Yearly 2000-2016	Total Population in millions	World Bank: HNP (3)	
Urban share of population (%)	Regressor EM-B (all)	178	Yearly 2000-2016	Urban population % of total	World Bank: HNP (3)	
Population over 65 (%)	Regressor EM-A (all)	177	Yearly 2000-	Population of age 65 years and older	World Bank: HNP	

Model variable	**Empirical Model**	**N[(a)]**	**Freq**	**Source variables descriptions and weights (when applicable)**	**Data Source (ref. #)**	**Additional Information**
	and EM-B1		2016		(3)	
Other tested [(f)] Macro aggregate % of GDP Export Investment Natural resource rents % of GDP Oil Coal Forest Total	Regressor Various models as relevant	 176 172 141 175 177 177	 2000- 2016 2000- 2015	 Exports of goods and services Gross capital Formation Natural resource rents (World Bank estimates)	Word Bank (3) National Accounts data (with IMF) and WDI	Insignificant results. Removing the regressors did not affect results on other variables using same sample.

[(a)] Number of countries included in the database after small country outliers are removed.

[(b)] EPI methodology is applied to all historical raw data series published on their website (see ref. 1, particularly the technical appendix: https://epi.envirocenter.yale.edu/downloads/epi2018technicalappendixv02.pdf - accessed June 28, 2019). Aggregate indices are calculated as in EPI, except for the treatment of missing values for sub-indices: countries are dropped if data is missing, unless justified by a forest or sea filter. In EPI 2018, missing data, particularly on the climate change variable is "ignored", effectively assuming that the country perform on this missing dimension as it does on average for others. In order to calculate past values of the composite indices and deal with data of different frequency, we intrapolate values for variables with clear time trends and keep values constant outside the range for variables that are fluctuating or constant over time.

[(c)] Imputed values for non-filtered countries are calculated based on the regional average (using EPI regions)

[(d)] The frequency of data for this variable is highly imbalanced across countries and not regular within countries.

[(e)] The OECD also publishes public expenditure on environmental protection evaluated according to the financing principle (Expenditure II); for public expenditure the correlation between the two variables (constructed using abater or financing principle) is 0.998, so either can be used.

[(f)] Factor analysis results are presented in the method section below

B. Statistical methodology

B1. Factor Analysis-Governance and Politics variables

The governance and politics variables --please refer to table A1.1 for a list of variables used; construction of these variables is described in the source, refs. 8 and 9-- are highly correlated with each other (table A1.2). Factor analysis is used to reduce the number of variables.

The analysis identifies three variables with sufficiently distinct information: Governance, Politics, and Stability. The WGI indicators of rule of law, government effectiveness, regulatory quality and control of corruption are highly correlated with each other (corr>0.9) and a single factor captures 95 percent or more of the variance of each individual variable, we therefore use one factor score to describe these 4 variables as "governance". The "Politics" variable is constructed using two variables: the WGI-voice and accountability index (ref 8) and the Polity IV score (ref 9). The Politics variable captures more than 90 percent of the variation of the two underlying variables. Finally, the WGI Government stability variable, although it is also positively correlated with the others (corr=0.7 with the new Governance variable (factor) and 0.5 with Politics), clearly stands alone with sufficient independent variance. Summary results of the factor analysis are presented in tables A1.3-4.

Table A1.2 Pair-wise correlation coefficients, governance and politics variables

	Effective ness	Rule of Law	Regul. Quality	Control of corruption	Stability	Voice
Gov. Effectiveness	1					
Rule of Law	***0.95***	1				
Regulatory Quality	***0.93***	***0.92***	1			
Control of corruption	***0.93***	***0.95***	***0.87***	1		
Stability and absence of violence	0.71	0.77	0.67	0.75	1	
Voice & Accountability	0.79	0.82	0.82	0.78	0.65	1
Polity IV Score	0.47	0.48	0.56	0.44	0.31	***0.85***

Table A1.3 Factor analysis, Governance variable

	Correlation with factor 1	Uniqueness	Scoring coefficient (factor 1)
Gov. Effectiveness	0.98	0.042	0.33
Rule of Law	0.98	0.032	0.43
Regulatory Quality	0.95	0.089	0.11
Control of corruption	0.96	0.066	0.13

Method: Principal Factor
Number of observations: 709; number of parameters: 6; retained factors: 2
Proportion of variance accounted for by factor 1: 1.00
LR test (Independent vs saturated): chi2(6) = 5196.15 Prob>chi2 = 0.0000

Note: The table reports results using the -period data set. We obtain the same factor analysis results using the 2-period data (used for the CCE and APE regressions), although the number of observations is reduced to 355.

Table A1.4 Factor analysis, Politics variable

	Correlation with factor 1	Unique Variance	Scoring coefficients (factor 1)
Voice and Accountability	0.89	0.021	0.48
Polity IV score	0.89	0.021	0.48

Method: Principal Factor
Number of observations: 646; number of parameters: 1; retained factors: 1
LR test (Independent vs saturated): chi2(1) = 838.02 Prob>chi2 = 0.0000

Note: The table reports results using the 4-period data set. We obtain the same factor analysis results using the 2-period data (used for the CCE and APE regressions), although the number of observations is reduced to 325.

B2. Panel regressions: methods, specification and validity tests

The panel data statistical method used (random-effects estimation) captures both within and between country variations. [10] The method allows heterogeneity across countries, as the unexplained country-specific variation is captured by the country-specific random effect. Instrumental variables (IV) methods are used to evaluate and address endogeneity issues. [11] The two methods combined, associated with robust variance calculations, allow an unbiased estimation of relationships and minimize the risk of type I errors (finding statistically significant relationships when in fact there is none). The analyses are exploratory and, as such, we do not present theoretical models with testable hypotheses, but the explanatory variables are chosen to capture the most salient, measurable, and internationally comparable dimensions that could affect the size of health expenditure (EM-A) and environmental performance (EM-B).

The following models are estimated (prior to testing for endogeneity)

$$Ln(y_{it}) = \alpha + ln(\mathbf{x'}_{it})\beta + \mathbf{d'}_{i}\gamma + u_i + e_{it}$$

Where u_i are country-specific random effects specific and e_{it} are the classical error terms for each observation in country i and time t; **x** is a vector of explanatory variables that may vary across country and time; **d** is a vector of time-invariant structural variables and 0-1 categorical variables. Log linear relationships and normality are assumed (percentage shares and 0-100 indices are not logged). The model is first estimated using Generalized Least squares. Breusch &Pagan Lagrange multiplier tests were run for all models presented, p-values for null hypothesis (no random effects) were all less than 0.0001 (variance of random effects is null).

The presence of endogeneity bias is diagnosed using augmented regression tests (Durbin-WU-Hausman) on all models for all suspected variables.[12] All models excepting A1 show some degree of endogeneity bias for the income variable (log of GDP per capita); other variables do not show endogeneity issues. Panel data random-effects instrumental variable (IV) estimation is used to treat the endogeneity bias. The method involves a 2-stage generalized least square procedure (G2SLS or 2SGLS) based on Balestra and Varadharajan-Krishnakumar.[11] The first stage involves regressing the endogenous variable (log of GDP/c) on all other regressors included in the model plus an instrument not included in the original regression. Selection of the instrument is based on 4 criteria:

1. High correlation with GDP/c (the higher the better)

2. The variable is not a significant predictor if included in the original non-instrumented model
3. No correlation with the error term of the original model
4. Largest possible sample size (some variables more widely available than others)

The exogeneity of the potential instrument (item 3 above) is tested by regressing the instrument on residuals of the non-instrumented GLS estimation. P-values of the two-tailed z statistic (null hypothesis) are reported in table A 1.5. The SDG performance index produced by IHME (see table A1.1 above) is found to be a valid instrument for the health expenditure regressions (EM-A) with a correlation coefficient of 0.85 with GDP/c (the endogenous variable) and no correlation with the error term in the original regressions. The UIS adult literacy rate also satisfies the first 3 conditions but reduces the sample too much (only 6 countries included literacy data in the OECD sample and 30 countries had to be removed from model A3) so it was not retained for the first set of models. The Adult Literacy rate is found to be a valid instrument for all the environmental performance regressions (EM-B) with a correlation coefficient of 0.75 with GDP per capita and no correlation with the error terms in all regressions . The IHME SDG index, while it allowed a larger sample, presented signs of potential endogeneity in model B1 (the ENVH variable is indeed constructed using IHME GBD data, as the SDG index).

Table A1.5 Validity test results for variables used as instruments

p-values test of H0: error term of original regression is uncorrelated with potential instrument						
	Health SDG index			**Adult Literacy**		
Error term considered [a]	**RE: ue**	**RE: e**	**FE: e**	**RE: ue**	**RE: e**	**FE: e**
Health expenditure models A						
A1- includes env. exp. (OECD)	0.94	0.69	0.70	0.37	0.084	0.078
A2- excludes env. exp. (OECD)	0.96	0.68	0.61	0.19	0.12	0.11
A3- excludes env. exp. (World)	0.39	0.29	0.32	0.35	0.31	0.30
Environmental CGH models B						
B1 – ENVH (health outcome)	0.004**	0.67	0.29	0.27	0.17	0.16
B2 – AIR (environmental outcome)	0.42	0.76	0.79	0.85	0.24	0.40
B3 – BDH (env. outcome)	0.92	0.88	0.98	0.96	0.84	0.97
B4 – CCE (env. outcome)	0.98	0.95	0.92	0.89	0.90	0.89
B5 – APE (env. outcome)	0.89	0.78	0.42	0.79	0.64	0.48

(a) The random effects specification includes 2 error terms (residuals), u is a country specific random effect (within variation) and e is the common error term (between variation); eu combine the between and within variations.

Davidson MacKinnon tests of endogeneity are used to verify that the 2-stage GLS estimation effectively removes the endogneity bias (or that any endogeneity left does not yield biased coefficient estimates).[13] Probability values of the F-statistic for all IV models are reported below (table A1.5). The null hypothesis (exogeneity) cannot be rejected in all cases but we note that confidence levels are lower for models A3 and B1.

Table A1.6 Davidson-MacKinnon test of exogeneity, p-values

IV Model using fixed effect	A1	A2	A3	B1	B2	B3	B4	B4
p-value F-statistic	0.44	0.37	0.10	0.16	0.83	0.99	0.55	0.60

Finally, Hausman[12] tests are used to verify consistency of the random effect model using fixed effects as the consistent but less efficient alternative to the random effects specification. We find no systematic difference in estimated coefficients in models A1 and A2 (with higher confidence levels when using G2SLQ) and all B models. The test is inconclusive for A3 but coefficients estimated with the fixed effect models are very similar in all models so interpretation of results is not affected. In order to keep the invariant country characteristics in the model, we keep the random effects specification.

Periodicity: Models A are estimated using yearly data. Models B1 to B3 are estimated on a reduced panel with 4 periods of 5-year averages (3 for the last period): 2000-2004; 2005-2009; 2010-2014; and 2015-2017. Models B4 and B5 are estimated for 2 periods (2000-2008 and 2009-2017) only to match the EPI current and baseline years. Collapsing the data into 4 (or 2) periods instead of using yearly data is necessary because some EPI variables are based on raw data that are not available yearly. Even though we lose some variation, the data is of better quality (the method reduces measurement errors) and regressions should be more reliable. In fact, despite fewer data points, statistics of fits are generally better, although results are overall similar.

B3. Panel regressions: In-sample summary statistics

Table A1.7. In sample summary statistics – Health expenditure regressions

Models a1-a2: 22 countries, n=200	Mean	Std. Dev.	Min	Max
Public health expenditure/capita (in log)	7.43	0.66	5.58	8.56
GDP p.c. PPP (in log)	10.40	0.40	9.59	11.49
Gov. Exp. on Env. Protection (in log)	64.83	7.72	41.03	75.74
EPI-Ecosystem Vitality (0-100 index)	4.88	1.22	1.22	7.91
Size of government (Gov. Exp. in % of GDP)	42.91	9.72	16.96	57.96
Private share in health spending (% current)	25.49	10.43	0.00	58.49
Population over 65 (% of total population)	14.60	3.53	5.23	20.29

Table A1.8. Summary statistics– Environmental CGH regressions – Dependent variables

Variable	Mean	Std. dev.	Min	Max
B1 : Environmental Health Outcomes - ENVH	31	25	1.2	99
B2 : Ambient Air Quality – AIR	83	23	0	100
B3: Biodiversity & Habitat– BDH	65	23	13	100
B4: Climate Change and Energy - CCE	47	16	6.4	88
B5: Air Pollution -APE	48	21	0.1	100

Table A1.9 Summary statistics– Environmental CGH regressions – Explanatory variables.

Model		B1 and B2	B3	B4 and B5
GDP p.c. in constant PPP (log)	Mean	8.7	8.7	8.8
	St. Dev	(1.2)	(1.1)	(1.2)
Governance index (factor)	Mean	-0.27	-0.30	-0.27
	St. Dev	(0.70)	(0.66)	(0.72)
Politics index (factor)	Mean	-0.10	-0.092	-0.10
	St. Dev	(0.80)	(0.80)	(0.82)
Government stability index	Mean	-0.38	-0.39	-0.35
	St. Dev	(0.82)	(0.81)	(0.82)
Urban share of population (%)	Mean	51	51	52
	St. Dev	(22)	(22)	(21)
Population over 65(%)	Mean	6.1		
	St. Dev	(4.3)		
Total population (log)	Mean	16.3	16.4	16.2
	St. Dev	(1.6)	(1.6)	(1.59)

B4. Additional results: sensitivity analysis using alternative instruments (Models B)

After considering issues related to sample size and potential endogeneity of variables, the article reports the empirical specification most likely to yield unbiased estimates. Nevertheless, it is useful to check results using alternative specifications. In this section we report results for model B using the health SDG index as instrument for GDP as well as both the literacy rate (EDU) and the SDG variable. Results are reported in Table A1.10 for the 4-period models (B1 to B3) and Table A1.11 for the 2-period models (B4 and B5). The first column for each model repeat the estimation results reported in the text to facilitate comparison. Some differences can be noted, indicating that further exploration of the estimation methods would be useful in further research. Nevertheless, the main conclusions reported in the text remain valid

Table A1.10 Sensitivity Analysis: Alternate Instruments for Models B1 to B3 (4-period data)

Model	B1: ENVH outcomes			B2:Ambient Air quality			B3: Biodiversity		
Instrument(s) used [a]	EDU	SDG[b, c]	EDU+ SDG [c]	EDU	SDG [b]	EDU+ SDG	EDU	SDG [b]	EDU+ SDG
GDP p.c. PPP (ln)	10**	23***	26***	3.2	7.3	13	6.6	6.1	8.9
	(3.2)	(4.7)	(4.9)	(12)	(4.9)	(7.6)	(14)	(6.8)	(10)
Governance (factor)	6.3	-3.7	-4.9	-6.8	-6.3*	-11**	-1.5	1.1	-3.0
	(2.5)	(2.9)	(2.9)	(5.6)	(2.8)	(4.2)	(8.0)	(4.7)	(6.4)
Politics (factor)	-2.3	1.02	1.12	5.2**	3.4**	5.84**	6.6**	2.7	6.8**
	(1.6)	(1.2)	(1.4)	(1.7)	(1.3)	(2.1)	(2.2)	(1.6)	(2.1)
Government Stability (WGI)	-4.3**	-3.0***	-3.4**	-1.3	-0.76	-2.0	-3.1*	-1.5**	-3.3**
	(1.5)	(0.8)	(1.2)	(1.4)	(0.8)	(1.1)	(1.4)	(0.9)	(1.2)
Urban share of population (%)	0.25**	-0.03	-0.15	-0.01	-0.04	-0.25	-0.08	-0.12	-0.16
	(0.09)	(0.1)	(0.13)	(0.29)	(0.12)	(0.19)	(0.33)	(0.2)	(0.23)
% population over 65	1.54***	0.44	0.91*						
	(0.4)	(0.3)	(0.4)						
Total population (log)				-4.55*	-0.74	-3.53	0.40	2.41	0.57
				(2.05)	(2.08)	(2.04)	(2.42)	(2.0)	(2.33)
Country size (ln)	-1.14*	-0.70	-1.30	1.27	-0.65	0.57	0.91	-0.26	0.72
	(0.48)	(0.6)	(0.74)	(1.25)	(1.11)	(1.21)	(2.26)	(1.7)	(2.1)
Time trend (4 periods)	1.4**	0.68	-0.03	-1.6	-2.4***	-2.6*	0.91	0.78	0.65
	(0.5)	(0.5)	(0.6)	(1.4)	(0.5)	(1.0)	(1.6)	(0.7)	(1.17)

NB. Constant terms including regional effect (WHO regions) – not reported

Regression Statistics									
Number of countries	131	156	130	131	156	130	128	153	127
N (all periods)	322	616	320	322	616	320	317	602	315
R-squared - within	0.66	0.59	0.55	0.15	0.17	0.12	0.14	0.12	0.13
R-squared - between	0.85	0.80	0.73	0.37	0.24	0.27	0.27	0.33	0.25
R-squared - overall	0.86	0.79	0.73	0.38	0.24	0.31	0.21	0.30	0.20
Chi2 (Wald)	1,039	--	--	90	100	75	112	188	109
Sargan-Hansen Chi2(1) p-value			0.34			0.36			0.86

* p<.05; ** p<.01; *** p<.001; robust standard errors in parentheses
(a) EDU = Adult Literacy Rate (UIS) SDG=Health SDG Index (IHME)
(b) Note that the sample is significantly larger when using the SDG index variable only.
(c) The SDG variable could be endogenous in the ENVH regression and was therefore not retained for the paper.

Table A1.11 Sensitivity Analysis: Alternate Instruments for Models B4 and B5 (2-period data)

Model	B4 - Climate			B4: Air Pollution		
Instrument(s) used [(a)]	EDU	SDG [(b)]	EDU+SDG	EDU	SDG [(b)]	EDU+SDG
GDP p.c. PPP (ln)	11**	-2.1	9.5*	5.1	-0.14	2.8
	(4.5)	(4.1)	(4.7)	(8.2)	(7.1)	(8.1)
Governance (factor)	-5.24	4.19	-4.01	-3.31	3.18	-3.08
	(3.6)	(3.1)	(3.5)	(6.4)	(5.0)	(6.1)
Politics (factor)	-2.11	-5.04*	-3.05	-2.82	-4.26	-3.35
	(2.4)	(2.1)	(2.4)	(3.2)	(3.0)	(3.2)
Government Stability (WGI)	2.06	4.23*	2.95	2.17	3.06	3.92
	(2.1)	(1.9)	(2.0)	(2.8)	(2.4)	(2.7)
Urban share of population (%)	-0.34*	-0.04	-0.30*	-0.06	0.00	-0.01
	(0.1)	(0.1)	(0.1)	(0.2)	(0.2)	(0.2)
Total population (log)	1.44	1.68*	1.68	3.61*	6.12***	4.16*
	(1.1)	(0.9)	(1.0)	(1.6)	(1.4)	(1.6)
Country size (ln)	-1.60	-1.25	-1.63	-1.63	-2.94	-1.76
	(1.0)	(0.7)	(0.9)	(1.6)	(1.2)	(1.6)
Time trend (2 periods)	1.14	4.30	1.38	-0.78	0.71	-0.57
	(2.0)	(1.6)	(2.0)	(2.4)	(1.9)	(2.4)

NB. Constant terms including regional effect (WHO regions) – not reported

Regression Statistics

Number of countries	130	155	129	130	155	129
N (all periods)	230	310	229	230	310	229
R-squared - within	0.02	0.09	0.02	0.05	0.03	0.07
R-squared - between	0.30	0.32	0.33	0.29	0.40	0.29
R-squared - overall	0.20	0.24	0.23	0.25	0.35	0.25
Chi2 (Wald)	68	106	73	56	109	57
Sargan-Hansen Chi2(1) p-value			0.12			0.31

* p<.05; ** p<.01; *** p<.001; robust standard errors in parentheses
(a) EDU = Adult Literacy Rate (UIS) SDG=Health SDG Index (IHME)
(b) Note that the sample is significantly larger when using the SDG index variable only.
(b) Note that the sample is significantly larger when using the SDG index variable only.

References for Appendix 1 (correspond to references 31-35 in article, same order)

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