Constellations of State Fragility v2.0

Methodology update 2022

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31 January 2022

This document describes the methodology update 2022 to the "Constellations of State Fragility" data. The data was introduced in the article *Constellations of fragility: an empirical typology of states*, published in 2019 in *Studies in Comparative International Development*. This document provides details on the data update, including data used, model selection, results, comparison to the preceding version, as well as access to replication files.

Please cite the following works when using the data:

> Ziaja, Sebastian, Jörn Grävingholt, & Merle Kreibaum (2019): "Constellations of fragility: an empirical typology of states" in: *Studies in Comparative International Development* 54 (2), 299-321. DOI: 10.1007/s12116-019-09284-3

and

> Ziaja, Sebastian & Jörn Grävingholt (2022): Constellations of State Fragility v2.0. German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE). DOI: 10.23661/CSF2.0.0

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Contents

1 What is new?

This update makes two major additions to the data presented in Ziaja et al. (2019; referred to as 'ZGK' hereafter):

- A data update, consisting of
  - the inclusion of data for the years 2016-2020,
  - the replacement of the indicator measuring press freedom (the discontinued 'Freedom of the Press' by *Freedom House* is replaced by 'Government censorship effort' provided by *Varieties of Democracy*),
  - and minor changes for the years 2005-2015 deriving from original data updates provided by data providers.
- Based on these new data, new estimates of the nature of constellations of fragility. This results in eight instead of six typical constellations of state fragility. The six former constellations remain roughly the same. The two new constellations are
  - low-capacity-and-legitimacy states (referred to as 'low-cap-leg') that exhibit low levels of capacity and legitimacy, and average levels of authority,
  - and illiberal-functioning states that exhibit high levels of authority and capacity combined with average levels of legitimacy.

2 Concept

We conceptualize fragility as constituted of deficiencies in three dimensions: authority, capacity and legitimacy. Each dimension represents a particular type of state-society relation. We introduced our conceptualisation in Grävingholt et al. (2015: 1286-1287). In ZGK, we refer to these dimensions with more specific labels that inform about their operationalisation. Authority (or, in ZGK terminology, 'violence control') refers to the demonstrated ability of the state to manage the use of physical violence within its territory. Capacity ('implementation capacity') denotes the demonstrated ability of the state to provide basic services to its population. Legitimacy ('empirical legitimacy') refers to the degree to which the state enjoys the consent of the population to its holding and exercising political power. More detail

on how we derive these dimensions and how they relate to the literature can be found in Grävingholt et al. (2015) and in ZGK.

3 Data

3.1 Sources

Table 1 lists all indicators used and their sources. Some indicators were not obtained directly from the sources, but via the World Development Indicators (The World Bank 2021). To determine our universe of cases, we employ the list of independent states as defined by the CShapes package (Weidmann et al. 2010).

Table 1: Indicator sources

Dimension and indicator	Source name	Reference
Authority:		
- Battle deaths	Uppsala Conflict Data Program (UCDP)	Gleditsch et al. (2002) and Themnér and Wallensteen (2011)
- Homicides	United Nations Office on Drugs and Crime (UNODC)	UNODC (2019)
- Monopoly of violence	Bertelsmann Transformation Index (BTI)	BTI (2022)
Capacity:		
- Basic administration	BTI	BTI (2022)
- Child mortality	Institute for Health Metrics and Evaluation (IHME)	Vollset et al. (2020)
- Primary enrollment	UNESCO Institute for Statistics (UIS)	UIS (2020)
- Water access	World Health Organization (WHO) and UNICEF	WHO and UNICEF (2021)
Legitimacy:		
- Asylums granted	United Nations High Commissioner for Refugees (UNHCR)	UNHCR (2021)
- Censorship	Varieties of Democracy	Coppedge et al. (2021)
- Human rights	Human rights protection scores	Fariss et al. (2020)

Table 2 below provides information on the properties of the raw data before transformation. This includes data beyond the time period considered in the clustering exercise, as information from 1999 to 2020 is used to interpolate missing observations. The BTI variables are our only ordinal indicators, with 1 representing the lowest and 10 representing the highest performance. Since they come in ten levels that appear to be approximately equally spaced (BTI 2016: 12), we treat them as interval scores. As the collection of expert assessments ends early in the year preceding the nominal BTI issue year and is calibrated

and updated during that year (BTI 2016: 7), we lag all BTI data by one year.

3.2 Missing data

Our indicators exhibit varying levels of coverage and missingness. The indicators with most missing observations are those from the BTI, being collected only for about 125 countries and only every other year starting in 2005 (i.e., the 2006 publication). In ZGK, we imputed both BTI indicators for all OECD countries by assuming that they have perfect scores of 10. With the 2022 data update, we found this step unnecessary to maintain observations that would have otherwise been dropped. We thus abstain from this imputation step for the update.

Homicides and *primary school enrolment* have few reliable data points for many low-income countries. Within our period of investigation of 2005–2020, we keep all countries in our sample by imputing the remaining missing data based on conservative assumptions.

As their sources claim global coverage, we assume *battle deaths* and *asylums granted* to be zero where not otherwise reported, thus removing all missing observations in years covered by the source. The remaining missing observations between existing ones are interpolated linearly. For some indicators, we extrapolate both beyond the first and the last observation, using the score of the closest available observation – a more conservative estimate than linear extrapolation. We extrapolate only those indicators that are known to change slowly over time, and we extrapolate more years for those known to be most stable (see table 3). In the 2022 update, two variables that were previously not extrapolated are now extrapolated by one year to ensure sufficient data coverage in 2020: *monopoly of violence* and *human rights*.

Note that we maintain a temporal coverage from 1995 to 2020 during the interpolation step to reduce our reliance on backward extrapolation. If we abstained from extrapolating, the low availability of some data – particularly homicide – would severely reduce our sample.

Our approach results in 2,757 observations for the core sample, the sixteen-year period 2005 to 2020, or up to 173 countries per year.

Table 2: Summary statistics (raw data) and assignment of dimensions, 1995-2020

Dimension	Indicator	N	Mean	Std. dev.	Min.	Max.
Authority:	Battle deaths per 100,000 inh.	2762	1.30	13.66	0.00	364.45
	Homicides per 100,000 inh.	2976	7.80	12.42	0.00	141.72
	BTI monopoly of violence	1019	7.45	2.24	1.00	10.00
Capacity:	BTI basic administration	1019	6.56	2.23	1.00	10.00
	Child mortality per 1,000 births	4479	42.54	45.08	1.30	243.94
	Primary school enrollment rate	2557	0.88	0.14	0.22	1.00
	Access to improved water source rate	3555	0.84	0.19	0.18	1.00
Legitimacy:	Asylums granted per 100,000 inh.	3278	8.53	47.94	0.00	1330.30
	Government censorship effort	4401	0.68	1.54	-2.90	3.51
	Human rights protection score	4297	0.64	1.48	-2.40	5.50

Table 3: Imputation, truncation and transformation of the indicators

Indicator	Imputed	Years extrapol.	Lower	Upper	Logged	Inverted
Authority:						
- Battle deaths per 100,000 inh.	0%	0	0	20	yes	yes
- Homicides per 100,000 inh.	28%	7	0	90	yes	yes
- BTI monopoly of violence	38%	1	0	10	no	no
Capacity:						
- BTI basic administration	38%	3	0	10	no	no
- Child mortality per 1,000 births	0%	7	2	300	yes	yes
- Primary school enrollment rate	27%	3	0.3	1	no	no
- Access to improved water source rate	1%	3	0.3	1	no	no
Legitimacy:						
- Asylums granted per 100,000 inh.	0%	0	0	200	yes	yes
- Government censorship effort	0%	3	-3	3.5	no	no
- Human rights protection score	6%	1	-3	3	no	no

Formally, the linear interpolation for an indicator

$$x_{im} = x_{il} + (m-l)\frac{n-l}{x_{in}-x_{il}},$$

where i is the country indicator, m the year of the missing observation, l the year of the last available observation, and n the year of the next available observation.

The extrapolation sets

$$x_{im} = \begin{cases} x_l & if\ n = \varnothing\ \&\ e \geq m-l \\ x_n & if\ n = \varnothing\ \&\ e \leq m-n \end{cases},$$

where e is the extent of extrapolation as indicated above.

3.3 Replaced indicators

This update replaces the indicator for measuring the freedom to publicly express opinions as a proxy for the legitimacy of the state. In 2017, The publisher *Freedom House* discontinued their indicator 'Freedom of the Press' that we had employed in ZGK. We replace it with 'Government censorship effort', an indicator provided by the *Varieties of Democracy* (V-Dem) project. The indicator is generated by V-Dem asking about five experts per country-year to answer the question 'Does the government directly or indirectly attempt to censor the print or broadcast media?' It only refers to political censorship. Answers are recored on an ordinal scale with five levels ranging from 'Attempts to censor are direct and routine' to 'The government rarely attempts to censor major media in any way, and when such exceptional attempts are discovered, the responsible officials are usually punished'. The scores are then transformed into a continuous measure by the V-Dem measurement model.

Figure 1: Comparison of Freedom of the press and Government censorship scores

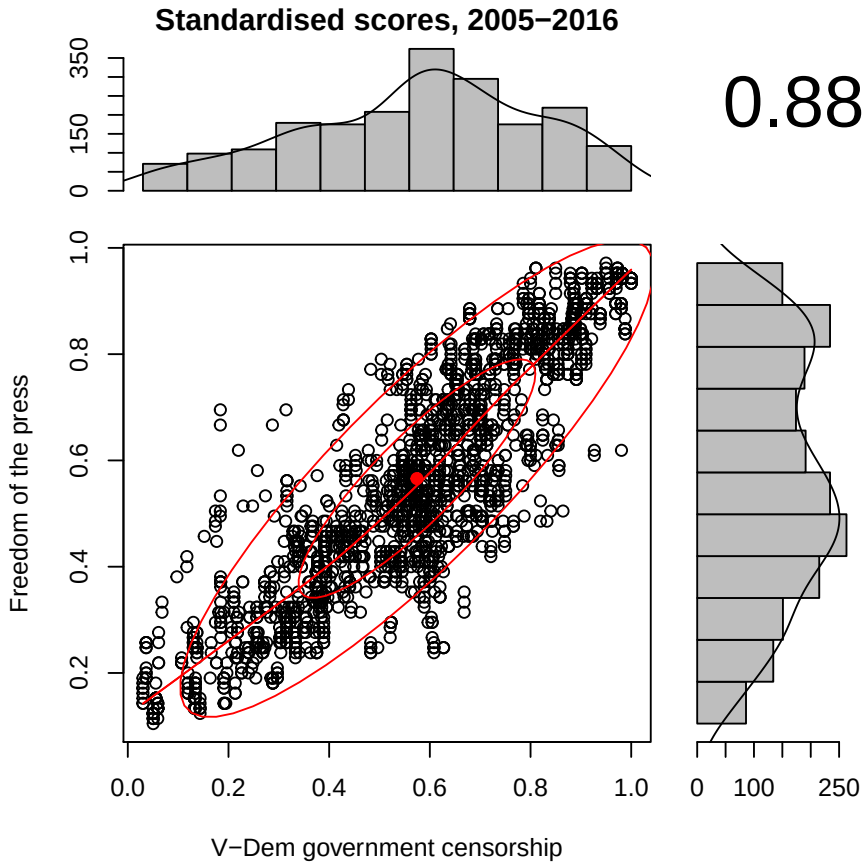

Figure 1 shows how the old and new indicators relate to each other when transformed to 0

to 1 ranges (details on this transformation in the next section). The majority of country years lies on or near the diagonal, indicating a mostly linear and highly correlated relationship. Pearson's R is .88.

As for the primary enrolment rate, the previously used indicator 'Adjusted net enrollment rate, primary (% of primary school age children)' (World Bank data id SE.PRM.TENR) was replaced by 'School enrollment, primary (% net)' (SE.PRM.NENR) due to availability issues of the former. These two alternatives correlate at .98. The replacement thus has little impact on the results other than increasing sample size.

3.4 Transformation of indicators

The following equations specify the transformations applied to the indicators. Further explication and justification can be found in ZGK.

First, we truncate the raw scores x^R:

$$x_q^{'} = \begin{cases} min_q & if\ x_q^R < min_q \\ x_q^R & if\ min_q \leq x_q^R \geq max_q \\ max_q & if\ x_q^R > max_q \end{cases},$$

where q identifies the indicator, min_q the lower cutoff and max_q the upper cutoff. Cutoff points are listed in table 3.

After truncation, all variables are normalized to adhere to a zero-to-one scale by setting

$$x_q^{''} = \frac{x_q' - min(x_q')}{max(x_q') - min(x_q')}.$$

Some variables are heavily skewed. We assume marginally decreasing effects for these variables and thus take their logarithms:

$$f(x_{qij}^{''}) = \frac{log_{10}(100 * x_{qij}'' + 1)}{log_{10}(100 + 1)}.$$

Some variables need to be inverted in order to adhere to a worst-to-best scale:

$$g(x^{''}_{qij}) = -x^{*}_{qij} + 1.$$

We obtain the final indicator scores x^{*}_{q} by applying logarithm and inversion as indicated in table 3:

$$x^{*}_{qij} = \begin{cases} x^{''}_{qij} & if \ \text{LOGGED} = 0 \ \& \ \text{INVERTED} = 0 \\ f(x^{''}_{qij}) & if \ \text{LOGGED} = 1 \ \& \ \text{INVERTED} = 0 \\ g(x^{''}_{qij}) & if \ \text{LOGGED} = 0 \ \& \ \text{INVERTED} = 1 \\ g(f(x^{''}_{qij}) & if \ \text{LOGGED} = 1 \ \& \ \text{INVERTED} = 1 \end{cases}$$

3.5 Dimension scores

The dimension scores are then produced with the 'weakest-link approach' described in ZGK. To describe the procedure more formally, let set

$$S_m = \left\{x^{*}_{m1}, \cdots, x^{*}_{mn}\right\},$$

where m is the fragility dimension and $\left\{x^{*}_{m1}, \cdots, x^{*}_{mn}\right\}$ are the transformed indicators that constitute the dimension. Then, the scores d for dimension m,

$$d_m = \begin{cases} min(S_m) & if \ |S_m| \geq 2 \\ \varnothing & if \ |S_m| < 2 \end{cases}.$$

Figure 2 presents the histograms of the resulting dimension variables as well as their correlations and bivariate scatterplots. The strong correlations of the dimension scores do not come as a surprise, since states that perform well in one dimension also tend to perform well in the other two. But this is not a deterministic relationship, and, as our clustering results show, pairs of states (and consequently fragility constellations) that exhibit rather opposing performances exist across all dimensions.

Figure 3 shows how the average dimension scores have changed over the now extended period under investigation 2005–2020. Authority sees a slow and significant increase. Capacity increases more quickly, also significantly, and even monotonously. Legitimacy, after a peak in 2011, has since then decreased continuously.

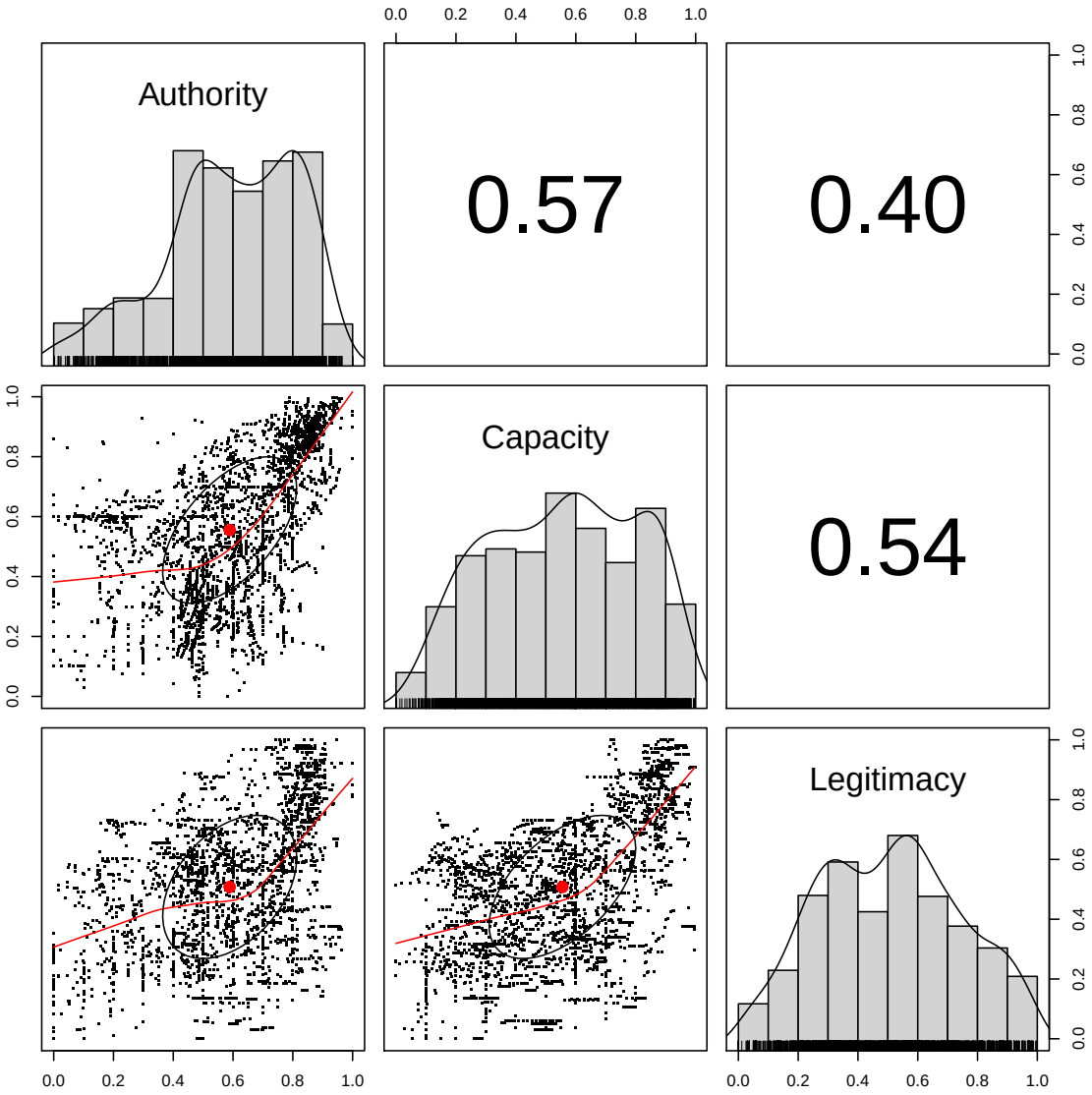

Figure 2: Densities and scatterplots of the dimension scores

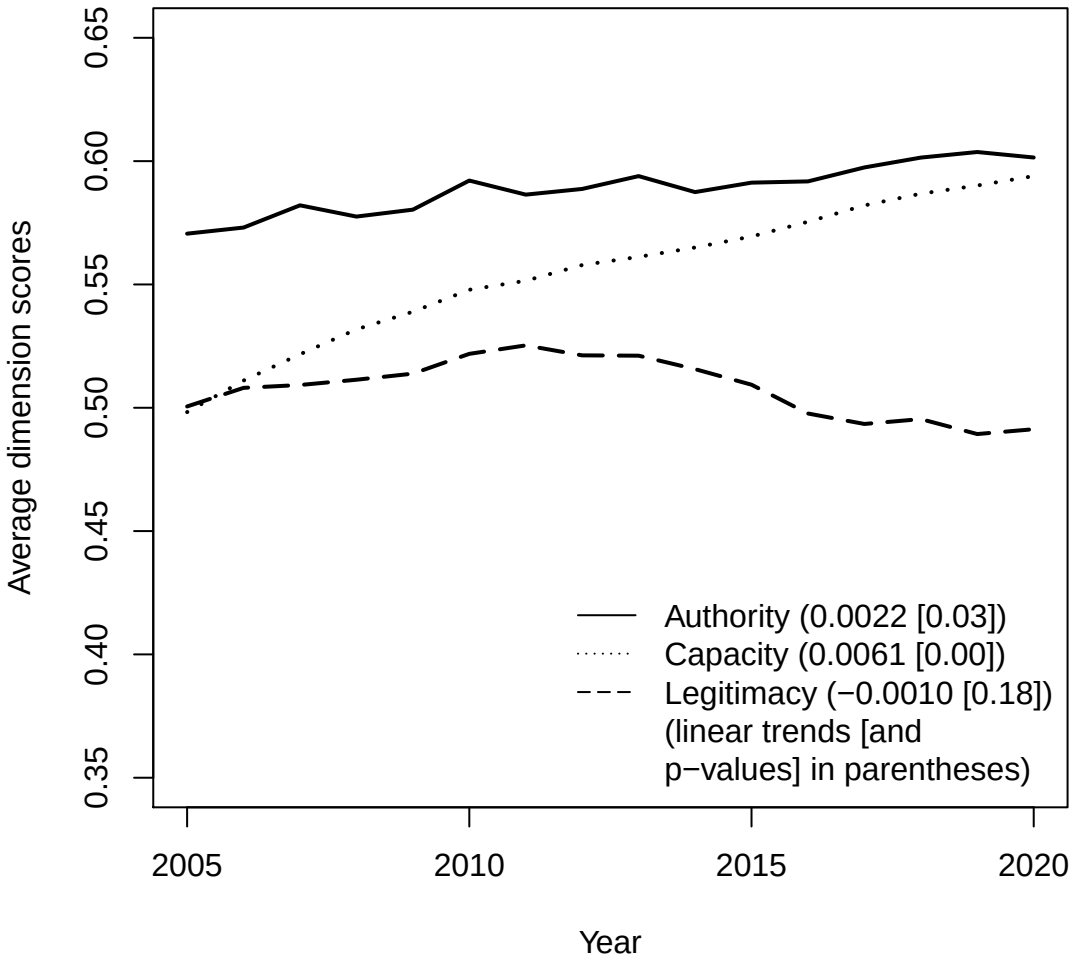

Figure 3: Time trends in the dimension scores

4 Model selection

Given the new data, we repeat the model selection step conducted in ZGK for this update.

4.1 Model specification

Following the notation of Scrucca et al. (2016b: 291), the equation we optimize to find the best clustering solution for a given number of mixture components G is

$$f(x_i;\Psi) = \sum_{k=1}^{G} \pi_k f_k(x_i;\theta_k),$$

where $x = \{x_1, x_2, ..., x_i, ..., x_n\}$ is a sample of n observations,[1] $\Psi = \{\pi_1, ..., \pi_{G-1}, \theta_1, ..., \theta_G\}$ are the parameters of the mixture model, $f_k(x_i;\theta_k)$ describes the kth component density for observation x_i with parameter vector θ_k, and $(\pi_1, ..., \pi_{G-1})$ are the mixing probabilities that add to 1. The model is estimated by applying the expectation-maximization algorithm – a common maximum-likelihood estimator – to the corresponding log-likelihood function. As most model-based clustering approaches, we assume that the components follow a multivariate Gaussian distribution: $f_k(x;\theta_k) \approx N(\mu_k, \Sigma_k)$, where μ are the mean vectors and Σ the covariance matrices that determine the permissible shapes of the components.

For this update, we only consider the model specification found to be preferential by ZGK: $\Sigma_{EII} = \lambda I$, where λ is a scalar and determines the volume of the tri-axial ellipsoids representing the clouds of data points that constitute the groups. Variable I represents the identity matrix, restricting the multivariate normal distributions that constitute the ellipsoids to have identical spread in all directions, resulting – in our three-dimensional application – in spherical group properties, or 'circular clouds.'

Thus, all groups are equally shaped, and of approximately equal size in terms of their standard deviations across all dimensions (but not necessarily equal in terms of the number of countries). This prevents that groups either spread widely over particular dimensions or that individual countries with rare score combinations are identified as separate groups.

[1] We obviously violate the assumption that our observations are independent and identically distributed by pooling the country years, but as we argue in ZGK, we find this decision reasonable for our application.

4.2 Model selection via integrated complete-data likelihood criterion (ICL)

In order to determine the most appropriate number of clusters to represent the variation in our updated data, we employ the integrated complete-data likelihood criterion Scrucca et al. (2016b: 297; ICL). As the more commonly used Bayesian Information Criterion (BIC), the ICL penalizes models for the number of parameters. In addition, the ICL also penalizes cluster overlap. It thus helps the researcher select a specification that fits the data well and identifies groups that are clearly distinguishable, and thus more useful. Fig. 4 shows the ICL scores for the substantively interesting range between two to eleven groups. Since extreme outliers may interfere with our normality assumption, we repeat the exercise with data sets where most extreme outliers have been removed. We define outliers as the one (and five) percent of observations with the highest Mahalanobis distance from the dimensions' means.

It shows that models based on all three data sets yield an absolute maximum in the ICL score within our range of interest at eight clusters. This strong agreement leads us to adjust the number of fragility constellations from six in ZGK to eight for the 2022 update.

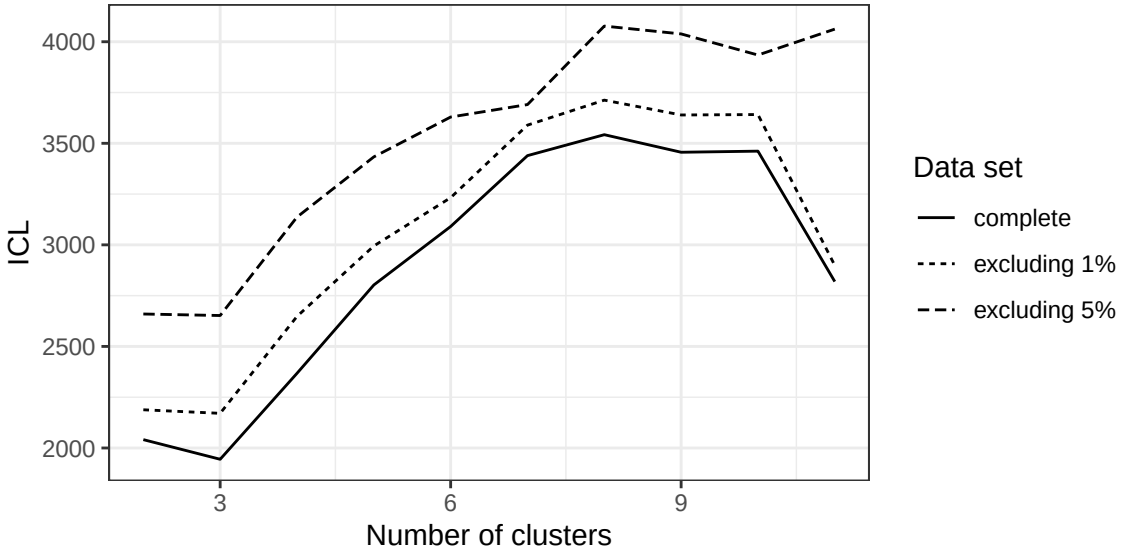

Figure 4: ICL scores for complete data set and data sets excluding outliers

5 Results

The following pages provide details about the results of the new eight-group clustering result. This includes cluster properties, regional and temporal distributions of the fragility constellations, and classifications of individual countries.

5.1 Group properties

Table 4 shows the group means and the bootstrapped standard errors for the three dimensions authority, capacity and legitimacy (1,000 samples). Figure 5 depicts the distribution of scores within the groups using boxplots. The six original group constellations from ZGK reappear; two new constellations emerge:

Table 4: Group parameters with bootstrapped standard deviations

Group	Probability	Auth. mean	Auth. SD	Cap. mean	Cap. SD	Leg. mean	Leg. SD
A: Dysfunctional	0.044	0.13	0.013	0.18	0.009	0.19	0.011
B: Low-cap-leg	0.126	0.48	0.009	0.30	0.009	0.26	0.008
C: Low-authority	0.089	0.22	0.009	0.55	0.008	0.47	0.015
D: Low-capacity	0.169	0.58	0.007	0.30	0.008	0.53	0.006
E: Low-legitimacy	0.141	0.69	0.011	0.60	0.010	0.26	0.013
F: Semi-functional	0.135	0.51	0.015	0.59	0.011	0.63	0.009
G: Illiberal-functioning	0.088	0.78	0.011	0.76	0.016	0.48	0.022
H: Well-functioning	0.208	0.82	0.004	0.86	0.003	0.83	0.006

SD = standard deviation.

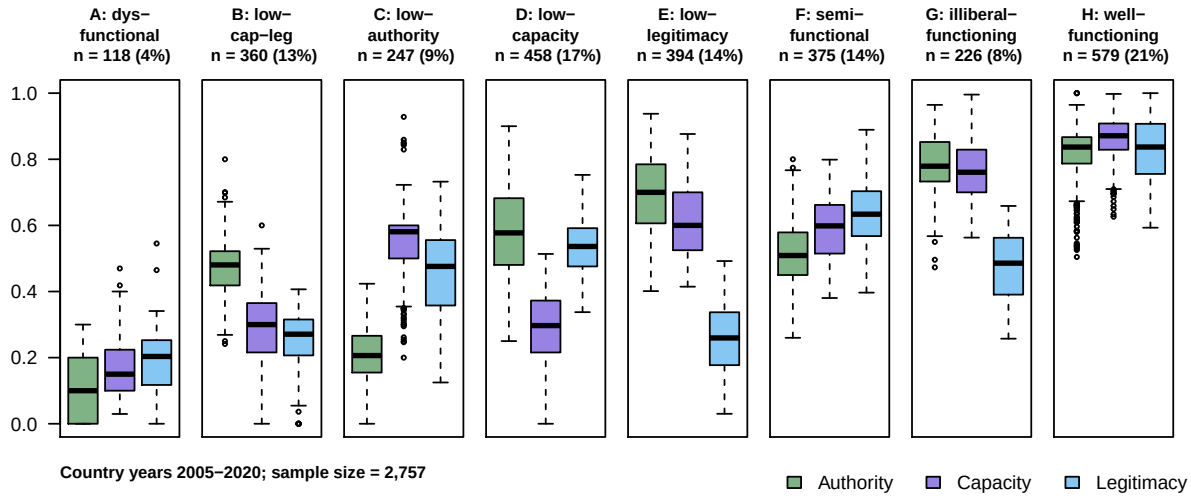

Figure 5: Distribution of dimension scores within fragility constellations

- Cluster 'A' performs badly on all dimensions and is labeled 'dysfunctional states.'

- Cluster 'B' is new and performs badly on capacity and legitimacy, similar to group 'A'. But authority scores are markedly better, achieving average scores around .5. We label this new group the 'low-capacity-and-legitimacy states' – or 'low-cap-leg'.
- Cluster 'C' (formerly 'B') performs badly on authority and achieves average scores on capacity and legitimacy. We label it 'low-authority states.'
- Cluster 'D' (formerly 'C') performs badly on capacity and achieves average scores on authority and legitimacy. We label it 'low-capacity states.'
- Cluster 'E' (formerly 'D') performs badly on legitimacy and achieves average scores on authority and capacity. We label it 'low-legitimacy states.'
- Cluster 'F' (formerly 'E') achieves medium scores on all dimensions. We label it 'semi-functional states.'
- Cluster 'G' is new and performs well on authority and capacity. However, legitimacy scores are only average. We label this new group the 'illiberal-functioning states'.
- Cluster 'H' (formerly 'F') achieves high scores on all dimensions. We label it 'well-functioning states.'

Tables 5 and 6 show the number of countries that were assigned to each group over the years. Tables 7 and 8 show the share of countries that each group covers within a year. Figure 6 provides a graphical representation on how the relative shares of the groups have developed during the period under investigation.

Tables 9 to 10 show how groups are distributed over world regions, both in frequencies and in region and group shares.

Table 5: Number of countries per group per year

Group	2005	2006	2007	2008	2009	2010	2011	2012	2013
A: Dysfunctional	8	7	6	6	5	5	5	8	6
B: Low-cap-leg	32	25	26	26	29	22	23	19	19
C: Low-authority	16	18	18	18	16	17	15	16	17
D: Low-capacity	29	33	32	31	27	30	30	30	30
E: Low-legitimacy	22	20	20	22	23	25	24	26	25
F: Semi-functional	21	23	22	20	25	22	27	24	25
G: Illiberal-functioning	10	11	12	12	10	12	10	12	14
H: Well-functioning	34	35	36	37	37	39	39	38	37
Countries	172	172	172	172	172	173	173	173	173

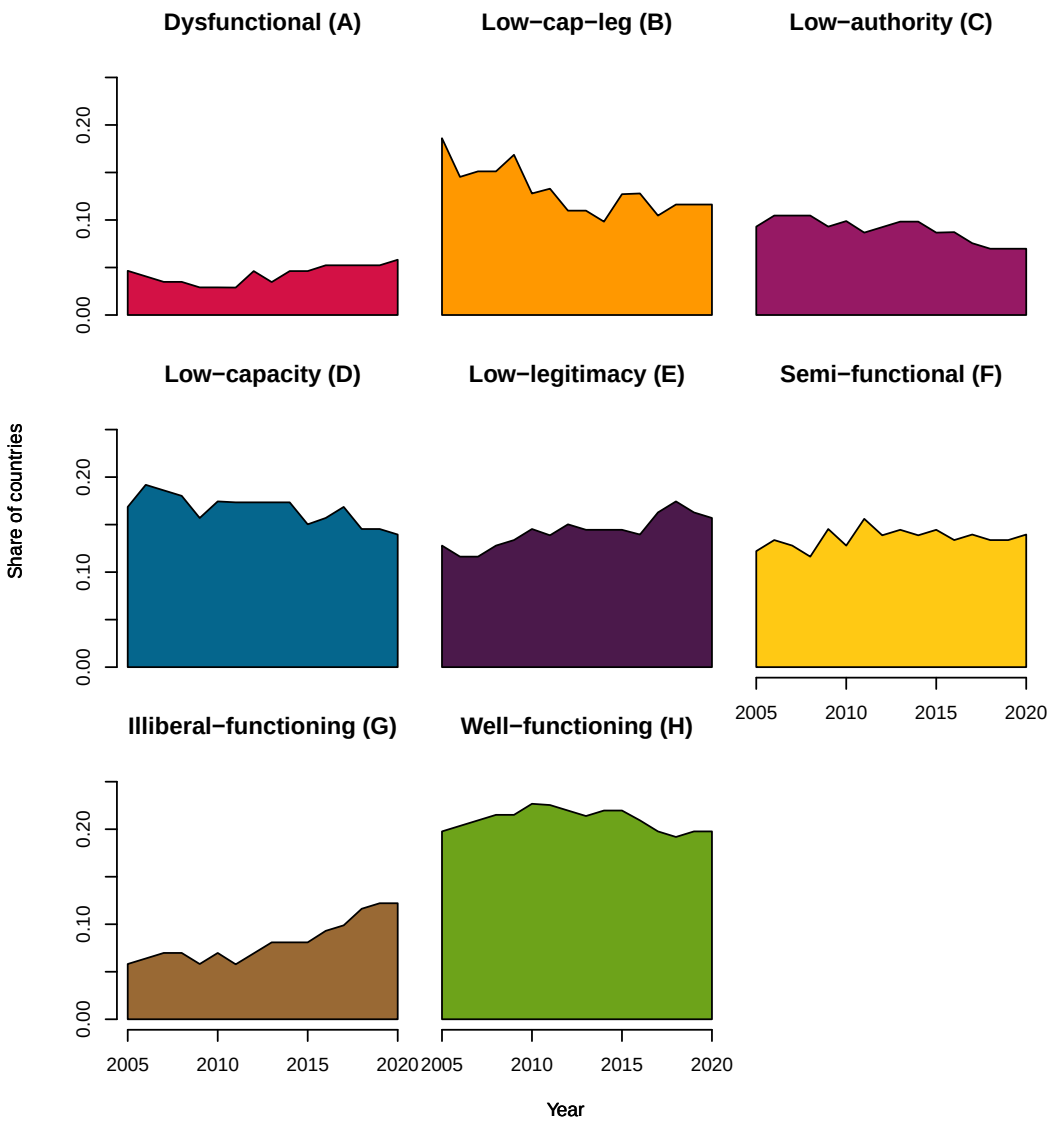

Figure 6: Proportions of fragility constellations over time

Table 6: Number of countries per group per year (ctd.)

Group	2014	2015	2016	2017	2018	2019	2020	Δ
A: Dysfunctional	8	8	9	9	9	9	10	25
B: Low-cap-leg	17	22	22	18	20	20	20	-38
C: Low-authority	17	15	15	13	12	12	12	-25
D: Low-capacity	30	26	27	29	25	25	24	-17
E: Low-legitimacy	25	25	24	28	30	28	27	23
F: Semi-functional	24	25	23	24	23	23	24	14
G: Illiberal-functioning	14	14	16	17	20	21	21	110
H: Well-functioning	38	38	36	34	33	34	34	0
Countries	173	172	172	172	172	172	92	
Δ: percentage change 2005 to 2020								

Table 7: Percentage of countries per group over years

Group	2005	2006	2007	2008	2009	2010	2011	2012	2013
A: Dysfunctional	0.05	0.04	0.03	0.03	0.03	0.03	0.03	0.05	0.03
B: Low-cap-leg	0.19	0.15	0.15	0.15	0.17	0.13	0.13	0.11	0.11
C: Low-authority	0.09	0.10	0.10	0.10	0.09	0.10	0.09	0.09	0.10
D: Low-capacity	0.17	0.19	0.19	0.18	0.16	0.17	0.17	0.17	0.17
E: Low-legitimacy	0.13	0.12	0.12	0.13	0.13	0.15	0.14	0.15	0.14
F: Semi-functional	0.12	0.13	0.13	0.12	0.15	0.13	0.16	0.14	0.14
G: Illiberal-functioning	0.06	0.06	0.07	0.07	0.06	0.07	0.06	0.07	0.08
H: Well-functioning	0.20	0.20	0.21	0.22	0.22	0.23	0.23	0.22	0.21

Table 8: Percentage of countries per group over years (ctd.)

Group	2014	2015	2016	2017	2018	2019	2020
A: Dysfunctional	0.05	0.05	0.05	0.05	0.05	0.05	0.06
B: Low-cap-leg	0.10	0.13	0.13	0.10	0.12	0.12	0.12
C: Low-authority	0.10	0.09	0.09	0.08	0.07	0.07	0.07
D: Low-capacity	0.17	0.15	0.16	0.17	0.15	0.15	0.14
E: Low-legitimacy	0.14	0.14	0.14	0.16	0.17	0.16	0.16
F: Semi-functional	0.14	0.14	0.13	0.14	0.13	0.13	0.14
G: Illiberal-functioning	0.08	0.08	0.09	0.10	0.12	0.12	0.12
H: Well-functioning	0.22	0.22	0.21	0.20	0.19	0.20	0.20

Table 9: Fragility constellations by region, number of country years

	A	B	C	D	E	F	G	H
East Asia & Pacific	0	44	0	48	93	34	34	94
Europe & Central Asia	1	24	12	3	117	60	118	433
Latin America & Caribbean	7	2	191	15	20	183	2	12
Middle East & North Africa	32	35	8	9	150	19	51	16
North America	0	0	0	0	0	13	3	16
South Asia	16	40	4	24	14	8	17	5
Sub-Saharan Africa	62	215	32	359	0	58	1	3

Table 10: Fragility constellations by region, region shares

	A	B	C	D	E	F	G	H
East Asia & Pacific	0	0.13	0	0.14	0.27	0.1	0.1	0.27
Europe & Central Asia	0	0.03	0.02	0	0.15	0.08	0.15	0.56
Latin America & Caribbean	0.02	0	0.44	0.03	0.05	0.42	0	0.03
Middle East & North Africa	0.1	0.11	0.03	0.03	0.47	0.06	0.16	0.05
North America	0	0	0	0	0	0.41	0.09	0.5
South Asia	0.12	0.31	0.03	0.19	0.11	0.06	0.13	0.04
Sub-Saharan Africa	0.08	0.29	0.04	0.49	0	0.08	0	0

Table 11: Fragility constellations by region, group shares

	A	B	C	D	E	F	G	H
East Asia & Pacific	0	0.12	0	0.1	0.24	0.09	0.15	0.16
Europe & Central Asia	0.01	0.07	0.05	0.01	0.3	0.16	0.52	0.75
Latin America & Caribbean	0.06	0.01	0.77	0.03	0.05	0.49	0.01	0.02
Middle East & North Africa	0.27	0.1	0.03	0.02	0.38	0.05	0.23	0.03
North America	0	0	0	0	0	0.03	0.01	0.03
South Asia	0.14	0.11	0.02	0.05	0.04	0.02	0.08	0.01
Sub-Saharan Africa	0.53	0.6	0.13	0.78	0	0.15	0	0.01

5.2 Country classifications

Tables 12, 13 and 14 list all countries with their classifications and the range of scores that each country covers between 2005 and 2020. Country years with a classification probability below .9 are listed in parentheses.

Note that some countries change their territory within our observation period, e.g., Sudan in 2012 when South Sudan becomes an independent country. The inclusion and extent of countries considered in this study is derived from the `CShapes` package (Weidmann et al. 2010).

Table 12: Country classifications, 2005–2020

Country	'05	'06	'07	'08	'09	'10	'11	'12	'13	'14	'15	'16	'17	'18	'19	'20
Afghanistan	A	->	->	->	->	->	->	->	->	->	->	->	->	->	->	A
Albania	E	(E)	(F)	->	->	F	->	(F)	->	(G)	->	->	->	(E)	E	(G)
Algeria	E	->	(E)	->	->	->	->	->	->	->	->	E	(E)	->	E	E
Angola	(B)	(D)	->	->	->	->	->	->	->	->	->	->	D	->	->	D
Argentina	F	->	->	->	->	->	->	->	->	->	->	->	->	->	->	F
Armenia	E	(E)	->	->	->	(G)	->	->	->	->	->	->	->	G	(G)	(G)
Australia	H	->	->	->	->	->	->	->	->	->	->	->	->	->	->	H
Austria	H	->	->	->	->	->	->	->	->	->	->	->	->	->	->	H
Azerbaijan	B	(B)	->	->	->	(E)	E	->	->	(E)	B	(B)	->	->	->	(A)
Bahamas	F	->	(F)	F	(F)	->	(C)	->	->	->	C	->	->	(C)	C	(F)
Bahrain	G	->	->	->	->	->	(E)	E	->	->	->	->	->	->	->	E
Bangladesh	(B)	->	->	->	->	->	->	(D)	(B)	->	->	->	(E)	->	E	E
Barbados	F	->	->	->	->	->	->	->	->	->	->	->	->	->	(F)	F
Belarus	E	->	->	->	->	->	->	->	->	->	->	->	->	->	->	E
Belgium	H	->	->	->	->	->	->	->	->	->	->	->	->	->	->	H
Belize	C	->	(C)	C	->	->	->	->	(C)	->	->	C	->	->	(C)	(F)
Benin	D	->	->	->	->	->	->	->	->	->	->	->	->	->	->	D
Bhutan	D	->	->	->	->	(D)	(F)	->	->	->	->	->	->	(G)	->	(F)
Bolivia	D	->	(D)	->	->	(F)	->	->	->	->	->	->	->	->	->	F
Bosnia & Herz.	(G)	G	->	->	->	->	->	->	->	->	->	->	->	->	->	G
Botswana	(D)	(F)	->	F	(F)	->	F	->	->	->	->	->	->	->	->	F
Brazil	(C)	C	->	->	->	->	->	->	->	->	->	->	->	->	->	C
Brunei	H	->	->	->	->	->	->	->	->	->	->	->	->	->	->	H
Bulgaria	(F)	(G)	->	(H)	->	->	->	->	(G)	->	->	->	->	->	->	(G)
Burkina Faso	D	->	->	->	->	->	->	->	->	->	->	->	->	B	->	B
Burundi	B	->	(B)	B	(B)	(D)	->	->	->	->	B	->	->	->	->	B
Cambodia	D	->	->	->	->	->	(D)	->	(E)	->	->	E	->	->	->	E
Cameroon	(D)	D	->	->	->	->	->	->	->	->	B	(B)	->	B	->	B
Canada	H	->	->	->	->	->	->	->	->	->	->	->	->	->	->	H
Cape Verde	(F)	->	F	->	->	->	->	->	->	->	->	->	->	->	->	F
Central Afr. Rep.	A	->	->	->	->	->	(B)	A	->	->	->	->	->	->	->	A
Chad	B	A	(B)	A	B	(B)	->	->	->	->	->	->	B	->	->	B
Chile	H	->	->	(H)	(F)	(H)	(F)	(H)	->	H	(H)	->	->	->	(G)	(G)
China	E	->	->	->	->	->	->	->	->	->	->	->	->	->	->	E
Colombia	(A)	(C)	C	->	->	->	->	->	->	->	->	->	->	->	->	C
Comoros	D	->	->	->	->	->	->	->	->	(D)	->	->	->	->	->	(D)
Congo - Brazzaville	B	->	->	->	->	->	->	->	->	->	->	->	->	->	->	B
Congo - Kinshasa	A	->	(A)	->	->	->	(B)	A	->	(A)	(B)	->	->	->	->	(B)
Costa Rica	F	->	->	->	->	->	->	->	->	->	->	->	->	->	->	F
Côte d'Ivoire	A	->	->	(B)	->	(A)	A	B	(D)	->	D	->	(D)	->	->	(D)
Croatia	H	->	->	->	->	->	->	->	->	->	->	(G)	G	->	(G)	(G)
Cuba	E	->	->	->	->	->	->	->	->	->	->	->	->	->	->	E
Cyprus	H	->	->	->	->	->	->	->	->	->	->	->	->	->	->	(H)
Czechia	H	->	->	->	->	->	->	->	->	->	->	->	->	->	(H)	(H)
Denmark	H	->	->	->	->	->	->	->	->	->	->	->	->	->	->	H
Djibouti	B	->	->	->	->	->	->	->	->	(B)	->	B	->	(B)	->	(B)
Dominican Rep.	C	->	->	->	->	->	->	->	->	(C)	->	->	(F)	->	->	(F)
Ecuador	(C)	->	->	->	(F)	(C)	(F)	F	(F)	->	->	->	(E)	F	->	F
Egypt	E	->	->	->	->	->	->	->	->	->	->	->	->	->	->	E
El Salvador	C	->	->	->	->	->	->	->	->	->	->	->	->	->	->	C
Equ. Guinea	(B)	->	->	->	->	->	->	->	->	->	->	->	->	->	->	(B)
Eritrea	B	->	->	->	->	->	->	->	->	->	->	->	->	->	->	B
Estonia	(F)	(H)	->	H	->	->	->	G	H	->	->	->	->	->	->	H
Eswatini	B	->	->	->	->	->	->	->	->	->	->	->	->	->	->	B
Ethiopia	B	->	->	->	->	->	->	->	->	->	->	->	->	->	->	B
Fiji	(D)	->	E	->	->	->	->	->	->	->	(E)	->	->	->	->	(E)
Finland	H	->	->	->	->	->	->	->	->	->	->	->	->	->	->	H
France	H	->	->	->	->	->	->	->	->	->	->	->	->	->	->	H
Gabon	D	->	->	->	->	->	->	->	->	->	(D)	->	->	->	->	(D)
Gambia	B	->	->	->	->	->	->	->	->	->	->	->	(D)	->	->	(D)

Arrows indicate that there was no change in the fragility constellation. Group label in parentheses when uncertainty >.2.

Table 13: Country classifications (cont.)

Country	'05	'06	'07	'08	'09	'10	'11	'12	'13	'14	'15	'16	'17	'18	'19	'20
Georgia	(B)	(F)	F	C	F	->	->	->	->	->	->	->	->	->	->	F
Germany	H	->	->	->	->	->	->	->	->	->	->	->	->	->	->	H
Ghana	D	->	->	->	->	->	->	->	->	->	->	->	->	->	->	D
Greece	H	(H)	->	->	->	H	->	->	->	->	->	(H)	(G)	->	H	(H)
Guatemala	C	->	->	->	->	->	->	->	->	->	->	->	->	->	(C)	(C)
Guinea	D	->	B	->	->	D	->	->	->	->	->	->	->	->	->	(D)
Guinea-Bissau	D	->	->	->	->	->	->	->	->	->	->	->	->	->	->	D
Guyana	(C)	C	(C)	C	(C)	->	->	->	->	->	(F)	->	F	->	(F)	(C)
Haiti	A	(B)	(D)	D	->	(B)	A	(A)	(C)	(D)	->	D	->	->	->	D
Honduras	C	->	->	->	->	->	->	->	->	->	->	->	->	->	->	C
Hungary	H	->	->	->	->	->	(H)	->	->	->	G	->	->	->	->	G
Iceland	H	->	->	->	->	->	->	->	->	->	->	->	->	->	->	H
India	(B)	->	->	->	->	->	->	->	(D)	->	->	->	->	(E)	->	(E)
Indonesia	(B)	(D)	->	->	->	->	->	->	->	(E)	->	(D)	->	(F)	->	(F)
Iran	E	->	->	->	->	->	->	->	->	->	->	->	->	->	->	E
Iraq	A	->	->	->	B	->	->	->	(B)	A	->	->	->	B	->	B
Ireland	H	->	->	->	->	->	->	->	->	->	->	->	->	->	->	H
Israel	E	C	(C)	C	->	G	(G)	(E)	G	C	G	->	->	(G)	->	C
Italy	H	->	->	->	->	->	->	->	->	->	->	->	->	->	->	H
Jamaica	C	->	->	->	->	->	->	->	->	->	->	->	->	->	->	C
Japan	H	->	->	->	->	->	->	->	->	->	->	->	->	->	->	H
Jordan	E	->	->	->	->	->	->	->	->	->	->	->	->	->	->	E
Kazakhstan	(C)	->	->	(B)	->	(E)	->	->	->	E	->	->	->	->	->	E
Kenya	(B)	->	B	->	(B)	(D)	D	(D)	->	->	(B)	->	B	->	->	B
Kuwait	G	->	->	->	->	->	->	->	->	->	->	->	->	->	->	G
Kyrgyzstan	(D)	->	->	(B)	->	(C)	(F)	->	->	->	->	->	->	(G)	->	(G)
Laos	B	->	->	->	->	->	->	->	->	->	->	->	->	->	->	B
Latvia	(F)	->	(H)	->	(F)	H	->	->	->	->	->	->	->	->	->	H
Lebanon	(F)	F	->	->	->	->	(F)	(C)	C	(F)	->	(D)	->	->	->	(D)
Lesotho	C	->	->	->	->	->	->	->	->	->	->	->	->	->	->	C
Liberia	(B)	D	->	->	->	->	->	->	->	->	->	->	->	->	->	D
Libya	E	->	->	->	->	->	A	E	B	(A)	A	->	->	->	->	A
Lithuania	F	(F)	->	->	(H)	->	->	H	(H)	H	->	->	->	->	->	H
Luxembourg	H	->	->	->	->	->	->	->	->	->	->	->	->	->	->	H
Madagascar	D	->	->	->	(B)	D	->	->	->	->	->	->	->	->	->	D
Malawi	D	->	->	->	->	->	->	->	->	->	->	->	->	->	->	D
Malaysia	(G)	->	->	->	->	G	->	(G)	G	(G)	->	->	->	G	->	G
Maldives	(G)	->	->	G	(H)	->	H	(G)	G	->	(G)	(E)	E	(E)	(H)	(H)
Mali	D	->	->	->	->	->	->	(B)	->	B	->	->	->	->	->	B
Malta	H	->	->	->	->	->	->	->	->	->	->	->	->	->	->	H
Mauritania	B	(D)	D	->	->	->	(D)	->	->	->	->	->	->	(F)	->	(F)
Mauritius	(F)	F	->	->	(F)	->	->	->	->	(H)	->	->	(F)	->	->	(G)
Mexico	(F)	->	->	(C)	C	->	->	->	->	(C)	C	->	->	->	->	C
Moldova	C	F	->	->	->	->	->	->	->	->	->	->	->	->	->	F
Mongolia	(D)	->	->	->	(F)	->	F	->	->	->	->	->	->	->	->	F
Montenegro	(G)	(F)	G	(G)	->	G	->	->	->	->	->	(G)	G	->	->	G
Morocco	(D)	->	->	->	(E)	->	->	->	->	->	->	->	->	->	->	(E)
Mozambique	D	->	->	->	->	->	->	->	->	->	->	->	->	->	->	(D)
Myanmar (Burma)	B	->	->	->	->	->	->	->	->	->	->	->	->	->	->	B
Namibia	(D)	->	->	->	(F)	->	->	->	->	->	->	F	(F)	->	->	(F)
Nepal	B	->	(B)	B	(D)	->	D	->	(D)	->	->	->	->	->	D	D
Netherlands	H	->	->	->	->	->	->	->	->	->	->	->	->	->	->	H
New Zealand	H	->	->	->	->	->	->	->	->	->	->	->	->	->	->	H
Nicaragua	F	->	->	(F)	->	(C)	(F)	->	F	->	->	->	(F)	E	->	E
Niger	D	->	->	->	->	->	->	->	->	->	->	->	->	(D)	->	(B)
Nigeria	B	->	->	->	->	->	->	->	->	->	->	A	->	->	->	A
North Korea	(E)	->	->	->	->	->	->	E	->	->	->	->	->	->	->	E
North Macedonia	(G)	->	G	->	->	->	->	(G)	G	->	->	->	->	(G)	->	(G)
Norway	H	->	->	->	->	->	->	->	->	->	->	->	->	->	->	H
Oman	E	->	->	->	->	->	->	->	->	(E)	->	->	(G)	->	->	(G)

Arrows indicate that there was no change in the fragility constellation. Group label in parentheses when uncertainty >.2.

Table 14: Country classifications (cont.)

Country	'05	'06	'07	'08	'09	'10	'11	'12	'13	'14	'15	'16	'17	'18	'19	'20
Pakistan	B	->	->	->	->	->	->	->	->	->	->	->	->	(B)	->	(B)
Panama	F	->	->	->	->	->	->	(F)	->	F	->	->	->	->	->	F
Papua N. G.	D	->	->	->	->	->	->	->	->	->	->	->	->	->	->	D
Paraguay	(F)	F	->	->	->	->	->	->	->	->	->	->	->	->	->	F
Peru	F	->	->	->	->	->	->	->	->	->	->	->	->	->	->	F
Philippines	(B)	->	->	(E)	(B)	->	->	->	->	->	->	->	(E)	->	->	(E)
Poland	H	->	->	->	->	->	->	->	->	->	->	(G)	G	->	->	G
Portugal	H	->	->	->	->	->	->	->	->	->	->	->	->	->	->	H
Qatar	(G)	->	->	->	->	G	->	->	->	(G)	->	G	->	->	->	G
Romania	(G)	->	->	G	->	(G)	(H)	->	H	->	->	->	(H)	G	->	H
Russia	C	->	->	(E)	->	->	->	->	->	E	->	->	->	->	->	E
Rwanda	D	->	->	->	A	D	->	->	->	->	->	(B)	(D)	->	->	(D)
Saudi Arabia	E	->	->	->	->	->	->	->	->	->	->	->	->	->	->	E
Senegal	D	->	->	->	->	->	->	->	->	->	->	(D)	->	->	->	(D)
Serbia	(E)	(G)	->	G	->	->	->	->	(G)	->	(E)	(G)	(E)	->	(G)	G
Sierra Leone	D	->	->	->	->	->	->	->	->	->	->	->	->	->	->	D
Singapore	G	->	->	->	->	->	->	->	->	->	->	->	->	->	->	G
Slovakia	H	->	->	->	->	->	->	->	->	->	->	->	->	->	->	H
Slovenia	(H)	->	H	->	->	->	->	->	->	->	->	->	->	->	->	G
Solomon Isl.	(F)	->	->	->	->	F	->	->	->	->	->					
Somalia	A	->	->	->	->	->	->	->	->	->	->	->	->	->	->	A
South Africa	C	->	(C)	C	->	->	->	->	->	->	->	->	->	->	->	C
South Korea	H	->	->	(H)	->	H	->	->	(G)	->	(H)	->	H	->	->	H
South Sudan							B	(A)	A	->	->	->	->	->	(A)	(A)
Spain	H	->	->	->	->	->	->	->	->	->	->	->	->	->	->	H
Sri Lanka	(B)	C	->	->	->	E	->	->	(E)	(G)	G	->	->	(G)	->	(G)
Sudan	(B)	->	->	B	->	->	->	->	->	->	(B)	B	->	->	->	B
Suriname	F	->	(F)	F	->	->	->	->	->	->	->	->	->	->	->	F
Sweden	H	->	->	->	->	->	->	->	->	->	->	->	->	->	->	H
Switzerland	H	->	->	->	->	->	->	->	->	->	->	->	->	->	->	H
Syria	E	->	->	->	->	->	(B)	A	->	->	->	->	->	->	->	A
Taiwan	H	->	->	->	->	->	->	->	->	->	->	->	->	->	->	(H)
Tajikistan	B	(B)	->	(E)	->	(B)	(E)	->	->	E	->	->	->	->	->	E
Tanzania	D	->	->	->	->	->	->	->	->	->	->	->	->	->	->	D
Thailand	E	->	->	->	->	->	(E)	->	E	->	->	->	->	->	(E)	(E)
Timor-Leste	D	->	->	->	->	(D)	->	->	(F)	->	->	->	->	->	F	(F)
Togo	B	D	->	->	->	->	->	->	->	->	->	->	->	(D)	->	D
Trinidad & Tob.	C	->	->	->	->	->	->	->	(C)	->	->	->	->	C	->	C
Tunisia	E	->	->	->	->	->	(F)	->	->	->	->	->	->	->	->	(F)
Turkey	(E)	->	->	->	->	->	->	->	->	E	->	(C)	E	->	->	E
Turkmenistan	B	(B)	->	->	->	(E)	->	->	E	->	->	->	->	->	->	E
Uganda	B	->	(B)	->	->	->	->	(D)	D	->	->	->	->	->	(D)	(D)
Ukraine	F	->	->	(F)	->	->	->	(G)	->	C	(C)	(E)	->	->	->	(E)
UAE	(E)	->	->	(G)	(E)	->	E	->	->	->	->	->	->	(E)	E	E
UK	H	->	->	->	->	->	->	->	->	->	->	->	->	->	->	H
United States	(F)	->	->	->	->	->	->	->	->	->	->	->	->	(G)	->	(G)
Uruguay	F	->	->	->	(F)	->	->	F	->	(F)	F	(F)	F	->	->	F
Uzbekistan	E	->	->	->	->	->	->	->	->	->	->	->	->	->	->	E
Venezuela	C	->	->	->	->	->	->	->	->	->	->	->	(C)	A	->	A
Vietnam	E	->	->	->	->	->	->	->	(E)	->	->	->	E	->	->	E
Yemen	B	->	->	(B)	->	B	->	(A)	B	(B)	A	->	->	->	->	A
Zambia	D	->	->	->	->	->	->	->	->	(D)	(B)	B	(B)	->	->	(B)
Zimbabwe	B	->	->	->	->	(B)	(D)	(B)	(D)	->	->	->	->	D	(D)	(D)

Arrows indicate that there was no change in the fragility constellation. Group label in parentheses when uncertainty >.2.

Table 15: Country dimension ranges, 2005–2020

Country	Authority	Capacity	Legitimacy
Afghanistan	0.00-0.20	0.09-0.36	0.11-0.31
Albania	0.58-0.75	0.55-0.69	0.31-0.58
Algeria	0.55-0.80	0.53-0.64	0.23-0.41
Angola	0.50-0.62	0.18-0.36	0.37-0.51
Argentina	0.51-0.59	0.63-0.71	0.60-0.74
Armenia	0.66-0.77	0.61-0.70	0.27-0.61
Australia	0.80-0.86	0.82-0.90	0.76-0.90
Austria	0.84-0.90	0.82-0.84	0.73-0.88
Azerbaijan	0.00-0.70	0.38-0.47	0.16-0.25
Bahamas	0.18-0.36	0.63-0.65	0.42-0.79
Bahrain	0.60-0.92	0.72-0.80	0.11-0.44
Bangladesh	0.60-0.70	0.29-0.47	0.31-0.35
Barbados	0.36-0.54	0.65-0.69	0.54-0.73
Belarus	0.49-0.72	0.60-0.80	0.12-0.25
Belgium	0.74-0.78	0.85-0.93	0.89-1.00
Belize	0.16-0.27	0.55-0.59	0.65-0.72
Benin	0.53-0.82	0.22-0.31	0.56-0.70
Bhutan	0.60-0.80	0.34-0.58	0.57-0.70
Bolivia	0.41-0.60	0.35-0.55	0.48-0.61
Bosnia & Herz.	0.75-0.80	0.70-0.80	0.43-0.58
Botswana	0.36-0.45	0.38-0.58	0.63-0.74
Brazil	0.23-0.31	0.50-0.64	0.26-0.36
Brunei	0.84-0.95	0.71-0.75	0.85-1.00
Bulgaria	0.71-0.84	0.67-0.79	0.59-0.69
Burkina Faso	0.44-0.90	0.16-0.25	0.21-0.61
Burundi	0.35-0.60	0.17-0.32	0.09-0.39
Cambodia	0.66-0.90	0.34-0.50	0.21-0.45
Cameroon	0.33-0.70	0.24-0.35	0.19-0.50
Canada	0.74-0.79	0.82-0.84	0.87-0.94
Cape Verde	0.41-0.56	0.42-0.56	0.58-0.73
Central Afr. Rep.	0.10-0.30	0.10-0.12	0.01-0.34
Chad	0.11-0.48	0.13-0.22	0.19-0.38
Chile	0.62-0.71	0.72-0.79	0.62-0.85
China	0.78-0.90	0.51-0.76	0.14-0.28
Colombia	0.16-0.29	0.40-0.60	0.23-0.45
Comoros	0.47-0.51	0.31-0.45	0.49-0.59
Congo - Brazzaville	0.44-0.46	0.27-0.40	0.17-0.32
Congo - Kinshasa	0.20-0.30	0.09-0.20	0.16-0.25
Costa Rica	0.42-0.51	0.70-0.77	0.73-0.84
Côte d'Ivoire	0.20-0.43	0.21-0.31	0.19-0.49
Croatia	0.77-0.89	0.80-0.84	0.56-0.75
Cuba	0.56-0.61	0.70-0.83	0.13-0.31
Cyprus	0.75-0.89	0.85-0.96	0.60-0.80
Czechia	0.81-0.89	0.83-0.85	0.65-0.94
Denmark	0.81-0.90	0.85-0.92	0.97-0.97
Djibouti	0.33-0.53	0.09-0.44	0.21-0.34
Dominican Rep.	0.26-0.48	0.45-0.53	0.40-0.52
Ecuador	0.34-0.57	0.52-0.63	0.41-0.68
Egypt	0.60-0.88	0.41-0.60	0.18-0.37
El Salvador	0.00-0.19	0.56-0.64	0.12-0.59
Equ. Guinea	0.66-0.67	0.19-0.29	0.29-0.30
Eritrea	0.48-0.52	0.26-0.30	0.00-0.07
Estonia	0.50-0.77	0.78-0.91	0.51-0.97
Eswatini	0.31-0.47	0.25-0.44	0.26-0.31
Ethiopia	0.49-0.58	0.00-0.28	0.19-0.26
Fiji	0.66-0.75	0.49-0.54	0.18-0.52
Finland	0.71-0.81	0.89-0.98	0.73-0.97
France	0.78-0.82	0.87-0.91	0.74-0.85
Gabon	0.44-0.48	0.35-0.42	0.49-0.53
Gambia	0.46-0.48	0.31-0.41	0.06-0.61

Table 16: Country dimension ranges (cont.)

Country	Authority	Capacity	Legitimacy
Georgia	0.05-0.51	0.40-0.70	0.37-0.70
Germany	0.81-0.87	0.81-0.86	0.89-0.98
Ghana	0.74-0.77	0.28-0.40	0.55-0.62
Greece	0.77-0.87	0.86-0.90	0.60-0.74
Guatemala	0.15-0.26	0.30-0.49	0.46-0.60
Guinea	0.46-0.49	0.15-0.27	0.22-0.57
Guinea-Bissau	0.44-0.82	0.18-0.30	0.49-0.57
Guyana	0.31-0.39	0.47-0.56	0.48-0.66
Haiti	0.20-0.50	0.10-0.20	0.25-0.56
Honduras	0.02-0.19	0.51-0.60	0.19-0.51
Hungary	0.71-0.88	0.78-0.87	0.48-0.79
Iceland	0.79-1.00	0.93-1.00	0.79-0.91
India	0.64-0.69	0.32-0.45	0.28-0.38
Indonesia	0.60-0.80	0.41-0.55	0.31-0.51
Iran	0.68-0.71	0.44-0.60	0.19-0.31
Iraq	0.00-0.46	0.10-0.40	0.03-0.34
Ireland	0.76-0.88	0.86-0.93	0.80-0.91
Israel	0.00-0.81	0.83-0.93	0.21-0.43
Italy	0.83-0.91	0.87-0.94	0.70-0.84
Jamaica	0.08-0.20	0.58-0.61	0.44-0.55
Japan	0.90-0.95	0.90-0.98	0.64-0.83
Jordan	0.70-0.80	0.52-0.61	0.32-0.34
Kazakhstan	0.40-0.67	0.51-0.67	0.24-0.38
Kenya	0.50-0.58	0.30-0.43	0.21-0.44
Kuwait	0.72-0.79	0.68-0.78	0.49-0.53
Kyrgyzstan	0.36-0.73	0.42-0.59	0.38-0.54
Laos	0.47-0.53	0.23-0.37	0.05-0.21
Latvia	0.57-0.72	0.72-0.88	0.77-0.90
Lebanon	0.30-0.50	0.40-0.60	0.50-0.55
Lesotho	0.15-0.22	0.25-0.38	0.51-0.63
Liberia	0.50-0.69	0.09-0.20	0.37-0.67
Libya	0.00-0.68	0.10-0.67	0.13-0.31
Lithuania	0.44-0.66	0.75-0.88	0.72-0.89
Luxembourg	0.75-1.00	0.89-0.94	0.92-0.92
Madagascar	0.60-0.80	0.14-0.32	0.26-0.49
Malawi	0.55-0.78	0.21-0.36	0.54-0.63
Malaysia	0.72-0.76	0.75-0.80	0.38-0.55
Maldives	0.53-0.89	0.59-0.80	0.30-0.73
Mali	0.29-0.44	0.14-0.22	0.23-0.75
Malta	0.69-1.00	0.79-0.83	0.69-0.82
Mauritania	0.42-0.46	0.27-0.45	0.35-0.62
Mauritius	0.63-0.79	0.62-0.66	0.57-0.75
Mexico	0.24-0.50	0.60-0.69	0.26-0.42
Moldova	0.30-0.60	0.50-0.64	0.48-0.63
Mongolia	0.37-0.56	0.38-0.54	0.59-0.69
Montenegro	0.61-0.78	0.72-0.92	0.51-0.56
Morocco	0.74-0.80	0.43-0.58	0.43-0.47
Mozambique	0.40-0.66	0.00-0.33	0.44-0.55
Myanmar (Burma)	0.40-0.50	0.20-0.30	0.14-0.25
Namibia	0.33-0.42	0.33-0.45	0.61-0.72
Nepal	0.30-0.70	0.34-0.40	0.22-0.62
Netherlands	0.83-0.90	0.82-0.91	0.88-0.96
New Zealand	0.70-0.87	0.79-0.88	0.89-0.89
Nicaragua	0.39-0.54	0.52-0.60	0.22-0.63
Niger	0.47-0.61	0.14-0.24	0.38-0.59
Nigeria	0.20-0.45	0.13-0.26	0.21-0.28
North Korea	0.59-0.62	0.46-0.53	0.05-0.05
North Macedonia	0.70-0.85	0.66-0.76	0.40-0.63
Norway	0.73-0.91	0.89-0.98	0.85-0.95
Oman	0.60-0.94	0.68-0.75	0.18-0.32

Table 17: Country dimension ranges (cont.)

Country	Authority	Capacity	Legitimacy
Pakistan	0.30-0.50	0.25-0.37	0.27-0.37
Panama	0.35-0.54	0.56-0.62	0.62-0.71
Papua N. G.	0.40-0.51	0.06-0.22	0.54-0.63
Paraguay	0.37-0.54	0.54-0.60	0.55-0.70
Peru	0.51-0.57	0.51-0.66	0.56-0.71
Philippines	0.44-0.55	0.46-0.54	0.25-0.33
Poland	0.79-0.88	0.78-0.90	0.51-0.88
Portugal	0.77-0.88	0.85-0.92	0.76-0.89
Qatar	0.86-0.96	0.71-0.82	0.31-0.34
Romania	0.74-0.84	0.60-0.75	0.56-0.76
Russia	0.27-0.52	0.60-0.72	0.21-0.33
Rwanda	0.02-0.79	0.23-0.43	0.21-0.52
Saudi Arabia	0.70-0.80	0.56-0.70	0.13-0.21
Senegal	0.47-0.70	0.27-0.43	0.52-0.71
Serbia	0.76-0.83	0.67-0.89	0.22-0.44
Sierra Leone	0.68-0.77	0.11-0.23	0.58-0.67
Singapore	0.89-0.96	0.96-1.00	0.30-0.38
Slovakia	0.77-0.86	0.75-0.78	0.71-0.84
Slovenia	0.82-0.91	0.87-0.98	0.44-0.84
Solomon Isl.	0.57-0.64	0.46-0.52	0.69-0.69
Somalia	0.00-0.10	0.03-0.10	0.00-0.22
South Africa	0.18-0.23	0.31-0.52	0.41-0.47
South Korea	0.83-0.89	0.83-0.93	0.58-0.84
South Sudan	0.05-0.38	0.07-0.16	0.06-0.28
Spain	0.82-0.89	0.86-0.94	0.66-0.77
Sri Lanka	0.00-0.73	0.50-0.70	0.25-0.57
Sudan	0.30-0.40	0.20-0.30	0.17-0.22
Suriname	0.39-0.59	0.43-0.51	0.58-0.72
Sweden	0.81-0.87	0.92-0.97	0.97-0.98
Switzerland	0.84-0.90	0.85-0.90	0.81-0.93
Syria	0.00-0.73	0.10-0.60	0.00-0.04
Taiwan	0.83-0.87	0.80-0.87	0.64-0.79
Tajikistan	0.40-0.85	0.30-0.45	0.16-0.33
Tanzania	0.48-0.54	0.08-0.37	0.45-0.56
Thailand	0.52-0.70	0.64-0.71	0.07-0.39
Timor-Leste	0.56-0.68	0.36-0.51	0.50-0.66
Togo	0.44-0.48	0.23-0.35	0.18-0.63
Trinidad & Tob.	0.16-0.26	0.55-0.61	0.60-0.73
Tunisia	0.60-0.72	0.58-0.70	0.30-0.60
Turkey	0.39-0.72	0.49-0.67	0.24-0.43
Turkmenistan	0.61-0.62	0.37-0.55	0.06-0.06
Uganda	0.40-0.48	0.04-0.37	0.28-0.51
Ukraine	0.16-0.62	0.60-0.75	0.36-0.54
UAE	0.81-0.91	0.61-0.67	0.23-0.37
UK	0.79-0.85	0.82-0.88	0.68-0.91
United States	0.55-0.62	0.76-0.80	0.50-0.62
Uruguay	0.42-0.57	0.64-0.76	0.77-0.87
Uzbekistan	0.66-0.82	0.46-0.57	0.03-0.32
Venezuela	0.08-0.19	0.30-0.63	0.08-0.39
Vietnam	0.78-0.81	0.58-0.70	0.26-0.33
Yemen	0.00-0.62	0.20-0.32	0.13-0.32
Zambia	0.55-0.58	0.21-0.38	0.18-0.53
Zimbabwe	0.44-0.57	0.27-0.38	0.20-0.45

5.3 Data access

The data set can be downloaded from http://statefragility.info/.

6 Statistical software employed

All calculations have been performed using the statistical environment R (R Core Team 2020). Within R, we employed the packages `Mclust` (Fraley & Raftery 2002; Scrucca et al. 2016a), `countrycode` (Arel-Bundock et al. 2018), `cshapes` (Weidmann & Gleditsch 2016; Weidmann et al. 2010), `diagram` (Soetaert 2017), `tidyverse`(Wickham et al. 2019), `foreach` (Calaway et al. 2014), `fpc` (Hennig 2015), `lattice` (Sarkar 2008), `psych` (Revelle 2020), `RColorBrewer` (Neuwirth 2014), `WDI` (Arel-Bundock 2020), `xtable` (Dahl et al. 2019), and some of their dependencies.

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