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State Legitimacy: A Multidimensional Approach

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State Legitimacy: A Multidimensional Approach

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Abstract

This paper intends to develop a multidimensional measure of state legitimacy that provides original information on the interaction between a country's polity and its social fabric. An index of state legitimacy is presented, stressing the institutional and political conditions for human dignity and human development, through the level of adherence (the legitimation process) of the people. Our approach strives to combine a universalist standpoint and a particularist view. An initial minimal threshold — related to elementary (fundamental) legitimacy — is the implementation of the “do no harm” principle by state power: how the physical integrity of all citizens is respected. Two dimensions are then considered: inherited legitimacy looks at the historical evolution of the relationship between state and society and is related to procedural fairness criteria: ways of access to power, existence of shared norms and values in society (concerning the political culture), and existence of a common language. Acquired legitimacy is related to the quality of public goods and institutions that help shape the recognition of a state by the population and deals with substantial fairness criteria: access to basic public goods (water, health, education, environment), respect of diversity/minority rights, quality of law enforcement (and fight against corruption).

Keywords: Legitimacy, Legitimation, Welfare, Social Cohesion, Relational Capabilities

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Introduction

This paper intends to develop a multidimensional measurement of state legitimacy providing original information on the interaction between a country's polity and its social fabric. An index of state legitimacy is presented, stressing the institutional and political conditions for human dignity and human development, through the level of adherence (the legitimation process) of the people.

Our index is based on three complementary empirical approaches. The first approach is based on international standards of legitimacy, basically respect for human rights. The second is a survey-based approach: we want our index to reflect an agreement on the state legitimacy. However, such an approach is fragile when used alone: the observed state support might be misleadingly interpreted as legitimacy, as it could embrace other forms of support for politics and policies. Hence, we add a third approach, based on quantitative measurement of improvement in social welfare. This approach reflects the legitimation process. The State Legitimacy Index (SLI) is mostly based on the Gallup World Poll, on which we relied to construct a panel dataset of 76 countries over 4 years of observations (from 2010 to 2013). Other variables used come from the Political Terror Scale, the Polity IV Project, and the World Bank.

I. Our definition of state legitimacy

State legitimacy is conceived as a way to assess the quality of the relationship between state and society: the degree to which public authorities as well as political institutions are recognized as fair by the population (the political community). This question raises sharp debates in our contemporary world, where democracy is challenged. Democracy is sometimes viewed in developing countries as a Western concept of political participation that may not suit all societies; in Western countries as well, it shows signs of weakness (low electoral turnout, etc.). Moreover, we cannot rely only on rankings based on one criterion, such as the type of regime, in order to assess how institutions and government contribute to the development and stability of their political society. Thus, questioning the quality of the relation between state and society—and between government, public institutions and civil society—is crucial when reflecting on the conditions for fair societies in different cultural contexts.

This perspective can be related to the capability approach framework in two complementary ways: it is consistent with the emphasis several scholars (e.g. Drèze and Sen, 1989, 2002; Nussbaum, 2006; Deneulin et al., 2006) place on the institutional/statal conditions for capabilities enhancement, through entitlements and resources provided by the state to enable individuals and groups to translate formal capabilities into real functioning. Secondly, it questions the ability of individuals and groups to react when facing poor public services delivery and injustices (such as corruption and violation of people's rights). Individuals and groups can find ways to promote political and collective capabilities and thus contribute to moving towards more legitimate states.

In this regard, Alkire speaks of the possible role of “affected persons,” “compassionate bystanders,” “committed activists,” and “partially decisive powerbrokers” in order to redress structural injustice (Alkire, 2006; Renouard, 2015).

Our approach strives to combine a universalist standpoint and a particularist view. An initial minimal threshold—related to elementary (fundamental) legitimacy—is the implementation of the “do no harm” principle by state power: is physical integrity of all citizens respected? Three dimensions are then considered. Inherited legitimacy looks at the historical evolution of the relationship between state and society. It is related to procedural fairness criteria: ways of access to power, existence of shared norms and values in society (concerning the political culture), and existence of a common language.¹ Acquired legitimacy questions the quality of public goods and institutions that contributes to shaping recognition of the state by the population; it deals with substantial fairness criteria: access to basic public goods (water, health, education, and environment), respect of diversity/minority rights, and quality of law enforcement (and fight against corruption). The third dimension, durable legitimacy, deals with the sustainability issue: making sure that the existence of future generations will not be endangered by ecological degradation or anthropogenic disasters. As this third aspect raises many measurement issues, we haven’t included it in the following presentation of our index, and we leave it for further investigation.

Our perspective is clearly normative: it is rooted in the human rights and capability approach frameworks, which promote respect of the dignity of every human being (Nussbaum, 2000). In this regard, contrary to other conceptions of state legitimacy (Englebert, 2000), we consider that state legitimacy cannot be claimed if public authorities and political institutions don’t respect the physical integrity of the whole population and don’t attempt to provide equal and universal access to basic human entitlements. Thus, our conception of legitimacy is related to procedural and substantial fairness criteria: we defend a “thick and thin” (Walzer, 1994) or “thick vague” (Nussbaum, 1990) conception of fair institutions and public authorities. The “thin” or “vague” aspect consists in defending central capabilities and rights in a general and fundamental way, as minimal requirements that give rise to an international consensus across states. The “thick” aspect is related to the specific context of the political community: it acknowledges the national trait, and the particular way norms, attitudes, and values are discussed and shaped (Lemay-Herbert 2009). At the same time, we adopt a dynamic approach that looks at the evolution of the procedural conditions for fair institutions and public policies on the one hand, and of their achievements on the other.

¹ This is a tricky issue. We consider that the existence of shared norms and values concerning the political culture (the decision making process, the relation to authority, etc.) and of a common language are components of a procedural approach: we do not consider here the content of all shared norms and values (moreover, we claim that they can evolve, and we favor a pluralistic perspective); we just point out that a certain level of common understanding is necessary in order to take part in a political community.

II. Comparison with other approaches of state legitimacy

Literature on the measurement of state legitimacy is rather scarce. As far as we know, this literature is mostly based on a Weberian tradition, although another perspective focusing on historical and ethnic grounds has been promoted recently.

Weber (1919) defines the state as any “human community that successfully claims the monopoly of the legitimate use of physical force within a given territory.” This analysis provides a framework for many papers. For instance, Bonnell and Breslauer (2001) argue that “a political order, institution or actor is legitimate to the extent that people regard it as satisfactory and believe that no available alternative would be vastly superior.” OECD (2010) refers to this definition to discuss state legitimacy in a context of fragile states.

An extension of this discussion goes beyond this binary approach, thereby allowing different degrees of legitimacy. Hence, according to Beetham (1991), legitimacy is “an endorsement of the state by citizens at a moral or normative level.” Legitimacy is an aggregate of three subtypes: views of legality, views of justification and acts of consent. Only one of these dimensions refers to Weber’s definition of legitimacy through rule abidingness. Building on this view, Gilley (2006) allows intensity in legitimacy: “a state is more legitimate the more that it is treated by its citizens as rightfully holding and exercising political power.”

Englebert (2000) provides an alternative framework, using the historical and ethnic backgrounds of a country to define its legitimacy. Two dimensions are highlighted. Vertical legitimacy refers to the co-building of state and society, which gives form to state consistency. The second dimension, horizontal legitimacy, refers to the ethnic fragmentation within the country (i.e. an index of the consistency of border definition).

These two conceptions of legitimacy (Weberian and historical/ethnic) can be seen, at least somewhat, as problematic. On the one hand, the Weberian state may be considered as a Western conception based on “namely the clear distinction between public and private spheres” (OECD, 2010). In this regard, this concept wouldn’t apply to non-Western political orders.

On the other hand, according to Englebert, a state has a vertical legitimacy “when its structure has evolved endogenously to its own society and there is some level of historical continuity to its institutions”: this perspective doesn’t prevent state power from being discriminatory and violent. The horizontal legitimacy which is related to ethnic non-fragmentation is also related to a fixed and homogeneous conception of the nation that may lead to intolerance and disadvantages.

In this regard, we aim at defining an index that reflects both legitimation processes and moral legitimacy.

a. A matter of intensity and dynamics (i.e. the legitimation process)

To our knowledge, no paper displays an empirical measurement of legitimacy using a dynamic approach. We want to show that durability is a key aspect of the legitimation process.

First, our index should reflect the opportunity for political institutions to improve legitimacy. It should thus focus on the legitimation process. This approach is consistent with Weber's definition of legitimacy. As an empiricist, Weber focuses on legitimacy as "a process that is real however constantly shifting"² (McFalls, 2005). Gaus (2011) calls for an "empirical turn" in the study of legitimacy. He reviews the limits of empirical legitimacy research (see pp. 17 for a detailed list), stressing the fact that they only rely on a static perspective.

Our approach stresses the complementarity between statics and dynamics. It is based both on inherited legitimacy and on acquired legitimacy through a legitimation process, as the efforts developed to build or to preserve legitimacy.

This conception is in line with Fessard (1942)³: we consider that legitimacy is connected to sustainability. Indeed, according to the philosopher, a seizure of power can be legitimate if a group takes over from a government that violates fundamental rights of the people. State legitimacy after a takeover is ensured over time if state authority is exercised in a lasting and undisputed manner. Three levels of legitimacy correspond to the three levels of the common good, and to three levels of recognition by the people: A *de facto* legitimacy exists when the origin of authority is not unfair and when the existence and security of the people is ensured; a *de jure* legitimacy exists when the power is exercised under the law (in conformity with fairness principles); a value legitimacy is related to a lasting undisputed exercise of power, sign of the implementation of shared values in the political community.

b. A complementary approach

Our index is built on three approaches. First, legitimacy as defined by international standards, i.e. respect of fundamental human rights. Second, a survey-based approach. Following Walzer (2002), we stress the "local legitimacy" defined for an institution as having "sufficient popular

² "Par contre, c'est le processus constamment mouvant mais réel de la légitimation qui attire son attention de scientifique empirique" (McFalls, 2005, translation by the authors).

³ Fessard analyses the problem of power legitimacy, building on the case of the Vichy Regime in France during the Second World War. According to him, power (state) legitimacy is closely dependent on adherence by the people. This adherence is needed even in non-democratic states: it is related to the common good that any political power has to look for (in order to become legitimate). The common good admits three levels: the elementary or inferior one deals with the existence and the security of the people, the intermediate one is constituted by the rule of law (rules and institutions enabling social cohesion and every citizen's development); the superior one deals with the values adopted by a political community.

support.” We want our index to reflect an agreement on state legitimacy: agreement on common rules and acceptance of social and political institutions. However, such an approach is fragile when used alone: the observed support might be misleadingly interpreted as legitimacy, as it could embrace other forms of support for politics and policies. Hence, we add a third approach, based on quantitative measurement of improvements in social welfare: the legitimation process. These approaches are complementary because they refer to different viewpoints, from the local to the international outlook. Second, these approaches allow the combining of quantitative and qualitative data, with both types enriching the measurement of legitimacy.

In this perspective, our index assesses the evolution of the contribution of political institutions and authorities to the well-being and stability of a political community. It defends and shows the importance of democratic principles (as defined by Rawls in *The Law of Peoples*, 1999, in terms of political and voting control by the people and defense of the basic interests and rights of the people). It also acknowledges the importance of the dynamic process that leads to development.

In a way, our approach to state legitimacy can impart the moral and social acceptability of states that do not necessarily fulfill all the conditions of democratic Western states. It also helps refine the understanding of the complementary aspects of a fair regime in enhancing the diverse capabilities of all its citizens.

III. Towards a State Legitimacy Index

a. Choice of dimensions

To give form to the legitimation process, we distinguish three dimensions of legitimacy:

- elementary legitimacy;
- inherited legitimacy;
- acquired legitimacy.

The first dimension is exclusive, whereas the following two are complementary. All three are necessary but insufficient conditions for legitimacy.

To facilitate the computation of the index, in this paper we excluded the fourth dimension, related to ecological sustainability.

b. Elementary legitimacy

Elementary legitimacy is the first dimension of our index. It refers to the respect of citizens' physical integrity. An agreement on such an elementary legitimacy is the first step towards a legitimization process. It is a prerequisite, a minimum threshold, empirically nested in a binary variable: no legitimacy is recognized if the state does not guarantee the security of its citizens.

To assess this elementary legitimacy, we do not refer to a legal framework—for instance human rights—but to a scale of security guarantee. The Political Terror Scale is a yearly report measuring physical integrity rights violations. It reports levels of political violence and terror that a country experiences in a particular year, based on a 5-level “terror scale.” A higher score represents a higher level of political violence (see Wood and Gibney (2010) for a detailed presentation). The data used for compiling this index comes from two different sources: the yearly country reports of Amnesty International and the U.S. State Department Country Reports on Human Rights Practices.

A state lacks in elementary legitimacy if it receives a score of “5” from at least one of these two institutions. Even though some discrepancies exist in the diagnosis, the differences between the two assessments are never higher than “1” when the highest score is established. This relative consensus leads us to consider this variable as fairly reliable. As for our empirical strategy, an average score higher than 4.5 leads to the assignment of a 0 to this dimension (1 otherwise), excluding this country from being considered as legitimate.

c. Inherited legitimacy

In the second dimension of our index, inherited legitimacy, we aim at capturing the legitimacy of the procedure that gives access to power.

Inherited legitimacy is the basis of the legitimization process. It refers to the consistency of the political power vis-à-vis the society. It also reflects the fact that part of legitimacy is based on political inheritance. As already mentioned, Englebert (2000), for example, develops a concept of legitimacy based on the review of the socio-historical context of each country.

Inherited legitimacy is measured through four components that are equally weighted.

With the first component, Shared political beliefs, we assume that similar views on political governance shared by citizens tend to improve state legitimacy. To evaluate it, we use, as a proxy, answers to the Gallup World Poll (GWP) probing confidence in the local police. We assume that the more homogenous the answers, the more homogenous political culture tends to be.

The second component, inherited legitimacy is evaluated through people's trust in the institutions that enable access to power (designation system, constitution, etc.). A state is considered

legitimate when citizens have faith in the voting system, which can be represented by voter turnout. Higher voter turnout improves inherited legitimacy. We rely on data from the International Institute for Democracy and Electoral Assistance (IDEA), which provides voter turnout data for national elections.

Third and related to the previous component, the acknowledgment of the right to widespread participation in policy-making also measures inherited legitimacy. Elections, by allowing the citizen's voice to be heard, also reinforce inherited legitimacy. Authoritarian regimes, by disempowering citizens and denying their participation in the decision-making process, hinder state legitimacy. A measurement of regime authoritarianism is provided by the Polity IV project.⁴ The higher the score, the more democratic the regime and the more legitimate the state when accessing to power.

The perceived trust in the "honesty of elections" is the fourth component of inherited legitimacy. It aims at fine-tuning the diagnosis of the two previous ones. The GWP provides this information as the percentage of people having confidence in the honesty of the previous election.

d. Acquired legitimacy

Acquired legitimacy is the third dimension of the legitimacy index. It accounts for welfare and justice, i.e. the legitimation process. This dimension is designed to allow states to improve their legitimacy score when conditions for social development are met. Its weight is the highest in our index, as it reflects the dynamic aspect of legitimacy. Acquired legitimacy also has four main dimensions.

The improvement of public goods, especially those that meet basic needs, is the first component of acquired legitimacy. We conceive it as the main channel of the legitimation process, as it reflects the concern for social welfare. This is measured through four subcomponents. First, health concern is approached through under-five mortality rate. Second is sanitation as the percentage of population with access to improved sanitation facilities. Third, to reflect service delivery in terms of education, we use the pupil-teacher ratio. Fourth, to evaluate the capacity of the state to deliver basic services and to protect the environment, we use the percentage of satisfaction with the quality of water. The World Bank provides the first three subcomponents; the last is provided by the GWP.

Respect for minority rights is the second component of acquired legitimacy. It reflects a Rawlsian conception of justice. Our conception is that state legitimacy implies that a state must be

⁴ Polity IV is a project on political regime characteristics, founded by Ted Gurr and directed by Monty G. Marshall (see Marshall, Jagers and Gurr (2011) for an exhaustive presentation).

inclusive. Ethnic origin, sexual orientation, intellectual ability and displacement are taken into account to assess state inclusiveness. Gallup surveys provide information on this topic (as a percentage of positive answer to the following: “Is the city or area where you live a good place to live for concerned minorities?”).

Third, administration performance refers to the quality of the link between a state and society. It is measured as population perceptions regarding the reliability of different legal and political institutions, as described in Table 1. For this component, data also come from the GWP.

Our last component evaluates the human rights respect. It refers to building peace and tranquility within a country. Reduction of state violence is computed from the Political Terror Scale (PTS), as the inverse of the PTS country score.

Table 1. The dimensions and components of the SLI

Dimension	Weight	Component	Measurement
Elementary legitimacy – Cutoff 0/1			
	1	Political terror scale	Human rights threshold
Inherited legitimacy - Total weight: 4/16			
	1/16	Shared political beliefs	Standard deviation of confidence in the local police
	1/16	Voter turnout	Voter turnout (%)
	1/16	Regime authority	From democracy to autocracy
	1/16	Honesty of election	% yes to the question “In this country, do you have confidence in honesty of elections?”
Acquired Legitimacy – Total weight: 12 /16			
Public goods	3/64	Health	Under-5 mortality rate
	3/64	Sanitation	% of population with access to improved sanitation facilities
	3/64	Education	Pupil-teacher ratio
	3/64	Environment	% satisfied with quality of water
Respect for minority rights	3/64	Ethnic minorities	Is the city or area where you live a good place or not a good place to live for racial and ethnic minorities? % Good
	3/64	Sexual orientation	Is the city or area where you live a good place or not a good place to live for gay or lesbian people? %good
	3/64	Intellectually disable	Is the city or area where you live a good place or not a good place to live for people with intellectual disabilities? %good

	3/64	Immigrants	Is the city or area where you live a good place or not a good place to live for immigrants from other countries? %good
Administration performance	1/16	Confidence in Judiciary system	In this country, do you have confidence in judicial system and courts? %yes
	1/16	Political corruption	Is corruption widespread throughout the government in this country, or not? %yes
	1/16	Civil servants corruption	% of population saying the public official and civil servant are corrupted
Human Rights	3/16	Peace and tranquility	Inverse PTS score

e. The attrition issue

The SLI is computed on the basis of 218 countries, using data from 2010 to 2013. Out of the 1089 data points of the panel, attrition is high: 372 missing values for elementary legitimacy, 973 missing values for inherited legitimacy, and 994 missing values for acquired legitimacy. As a result of data scarcity, we were able to compute the index for only 26 countries. In order to mitigate this limitation, we also propose a version of the index in which missing values are filled using linear interpolation. (A robustness check is presented in Section 3).

IV. Results

In this section we present the results of the computation of the SLI. First, the mean index for 2010 to 2013 was computed and tested for robustness; its evolution between 2010 and 2013 is presented in Part 1, followed by the computation. Finally, case studies are presented. Full tables are available in the annex.

a. The index computation tested as robust when subject to linear interpolation and to component removal

Figure 1 presents the mean value of the SLI, computed with the linear interpolation method. A striking fact is the apparent homogeneity of the scores by continent. The scores of the top ten countries (all European) are very similar according to our index (Table 2). However, heterogeneity prevails for the ten following countries (see table in annex for full results). This result might have occurred due to the level of attrition, which is spatially concentrated.

The SLI holds up robustly to linear interpolation. Indeed, the ranking obtained using linear interpolation is close to the one resulting from the SLI computed with solely available data. Two exceptions are Colombia and Sri Lanka, whose index values go up from 0 to 0.44 (Colombia) and

to 0.21 (Sri Lanka). The 0 value is computed from 2010 data, as the latter are computed using a certain amount of partially available data from 2010 to 2013.

Table 3 presents the robustness check. First, an index is computed excluding voter turnout: differences might come from different voting systems and could bias the diagnosis of legitimacy. For instance, the voter turnout is close to 100% in countries where voting is compulsory: Ecuador, Belgium, and Egypt, for example, get a higher score in this component. Overall, the index varies very little when voter turnout is excluded. A second robustness check consists in the exclusion of two variables that are particularly subject to attrition: honesty of election and civil servant corruption. The difference between the resulting two versions of the legitimacy index is never higher than 0.05. Hence, the legitimacy index seems robust in the case of exclusion of dimensions.

Figure 1. Mean value of SLI, between 2010 and 2013, by country

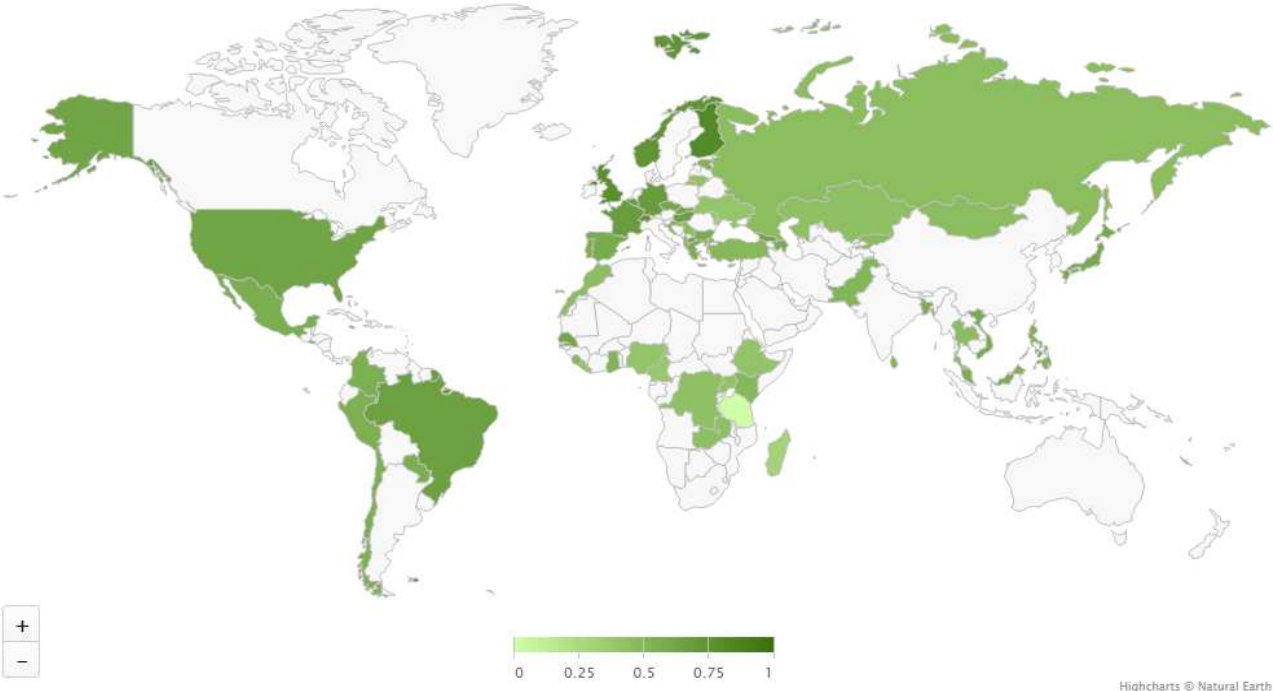


Table 2: Mean index, by rank and without linear interpolation. Ten first and last ten countries.

Rank	Country	Mean index	Mean index, no interpolation (rank in brackets)
1	Finland	0.81	0.82 (1)
2	Luxembourg	0.81	na
3	Norway	0.80	na
4	Switzerland	0.78	na
5	United Kingdom	0.78	0.75 (2)
6	Germany	0.73	na
7	Spain	0.72	na
8	Belgium	0.70	0.73 (3)
9	France	0.69	0.69 (4)
10	Hungary	0.64	0.64 (6)
52	Liberia	0.41	na
53	Russian Federation	0.41	0.34 (20)
54	Ukraine	0.41	0.39 (19)
55	Madagascar	0.38	na
56	Cameroon	0.38	na
57	Uganda	0.38	na
58	Nigeria	0.32	na
59	Tanzania	0.24	0.42 (18)
60	Sri Lanka	0.21	0 (23)
61	Pakistan	0.21	na
62	Congo, Dem. Rep.	0.18	na

Table 3: Mean index, by rank and robustness check. Ten first and last ten countries.

Rank	Country	Mean index	Mean index, excluding voter turnout	Mean index, excluding the 2 variables subject to attrition*
1	Finland	0.81	0.82 (2)	0.79 (3)
2	Luxembourg	0.81	0.83 (1)	0.81 (1)
3	Norway	0.80	0.8 (4)	0.79 (5)
4	Switzerland	0.78	0.82 (3)	0.77 (7)
5	United Kingdom	0.78	0.79 (6)	0.78 (6)
6	Germany	0.73	0.73 (7)	0.73 (8)
7	Spain	0.72	0.67 (10)	0.65 (12)
8	Belgium	0.70	0.69 (9)	0.71 (9)
9	France	0.69	0.7 (8)	0.68 (10)
10	Hungary	0.64	0.64 (12)	0.63 (17)

52	Liberia	0.41	0.41 (60)	0.41 (75)
53	Russian Federation	0.41	0.4 (64)	0.44 (69)
54	Ukraine	0.41	0.4 (62)	0.43 (73)
55	Madagascar	0.38	0.4 (63)	0.39 (77)
56	Cameroon	0.38	0.37 (65)	0.37 (80)
57	Uganda	0.38	0.37 (66)	0.38 (79)
58	Nigeria	0.32	0.33 (67)	0.33 (83)
59	Tanzania	0.24	0.24 (68)	0.23 (84)
60	Sri Lanka	0.21	0.2 (70)	0.21 (86)
61	Pakistan	0.21	0.21 (69)	0.22 (85)
62	Congo, Dem. Rep.	0.18	0.17 (71)	0.19 (87)

* This variant is computed without two variables that are particularly subject to attrition: honesty of election and civil servant corruption. See Annex for full results.

b. The dynamics between 2010 and 2013 are asymmetrical: the less legitimate the state, the higher score gain is between 2010 and 2013

Table 4 represents the evolution of the SLI between 2010 and 2013. A salient fact is the asymmetry between average loss and average gain in legitimacy. Among countries whose legitimacy scores are lower in 2013 than in 2010, the average score loss is -0.07 point and almost equally distributed from the first-rank to the lower-rank countries. The average gain among countries gaining legitimacy is higher: 0.13 point. Moreover, gain is not equally distributed. It is concentrated in the bottom of the ranking: among the 20 last countries, those gaining legitimacy improve their score by an average 0.26 point, whereas the first 20 go up only by 0.03 point. For instance, Pakistan, which is the 61st country according to the index, improved its score by 0.43 point between 2010 and 2013, due to improvement in elementary legitimacy in 2013. The story is the same for the two other countries at the bottom: Sri Lanka in 2011 and Democratic Republic of Congo in 2012.

Table 4: Evolution of the legitimacy index between 2010 and 2013. Ten first and ten last countries.

Rank	Country	Mean index	Evolution between 2010 and 2013
1	Finland	0.81	0.01
2	Luxembourg	0.81	-0.07
3	Norway	0.80	-0.12
4	Switzerland	0.78	-0.09
5	United Kingdom	0.78	0.02
6	Germany	0.73	-0.08
7	Spain	0.72	-0.01
8	Belgium	0.70	-0.04
9	France	0.69	-0.03
10	Hungary	0.64	0.02

52	Liberia	0.41	-0.03
53	Russian Federation	0.41	0.12
54	Ukraine	0.41	0
55	Madagascar	0.38	-0.26
56	Cameroon	0.38	-0.01
57	Uganda	0.38	0.02
58	Nigeria	0.32	0.4
59	Tanzania	0.24	-0.43
60	Sri Lanka	0.21	0.51
61	Pakistan	0.21	0.51
62	Congo, Dem. Rep.	0.18	0.43

See Annex for full results.

c. The dimensions of the index are complementary

Table 5 presents the mean value of the three dimensions of the legitimacy index, and their ranking. It provides complementary diagnosis of country legitimacy.

Elementary legitimacy is discriminant when under 1. Overall, a country with low elementary legitimacy is more likely to get a low score in both inherited and acquired legitimacy. The only notable exception is Colombia, whose elementary legitimacy is 0.83 and whose legitimacy ranking is 45, due to a higher score in inherited and acquired legitimacy.

Inherited legitimacy provides a more heterogeneous diagnosis of legitimacy. However, the correlation between rankings in this dimension and the SLI remains strong (The higher the inherited legitimacy, the higher the SLI). Acquired legitimacy rankings are also consistent with the SLAs for inherited legitimacy, and its components are complementary, allowing a nuanced diagnosis on legitimacy. For instance, Spain's score of 0.65 reflects its overall results in the SLI (0.67). However, inside this dimension, the score varies significantly among components. Spain gets a higher score in respect of minority rights (mean score of 0.87, rank of 5), whereas the score in administrative performance appears modest (score of 0.35, rank of 42).

Table 5: Mean index, mean value of the three dimensions, and their ranking. Ten first and ten last.

Rank	Country	Mean index	Elementary legitimacy	Inherited legitimacy	Acquired legitimacy
1	Finland	0.81	1 (1)	0.78 (7)	0.82 (2)
2	Luxembourg	0.81	1 (1)	0.72 (13)	0.84 (1)
3	Norway	0.80	1 (1)	0.86 (1)	0.77 (6)
4	Switzerland	0.78	1 (1)	0.76 (10)	0.79 (5)
5	United Kingdom	0.78	1 (1)	0.71 (19)	0.8 (3)
6	Germany	0.73	1 (1)	0.73 (11)	0.72 (7)
7	Spain	0.72	1 (1)	0.72 (11)	0.72 (7)
8	Belgium	0.70	1 (1)	0.72 (14)	0.72 (7)
9	France	0.69	1 (1)	0.77 (8)	0.67 (10)
10	Hungary	0.64	1 (1)	0.63 (42)	0.64 (13)
52	Liberia	0.41	1 (1)	0.54 (68)	0.36 (66)
53	Russian Federation	0.41	1 (1)	0.54 (69)	0.35 (68)
54	Ukraine	0.41	1 (1)	0.5 (83)	0.37 (65)
55	Madagascar	0.38	1 (1)	0.5 (85)	0.34 (72)
56	Cameroon	0.38	1 (1)	0.32 (108)	0.39 (62)
57	Uganda	0.38	1 (1)	0.44 (97)	0.35 (70)
58	Nigeria	0.32	0.8 (182)	0.48 (90)	0.34 (71)
59	Tanzania	0.24	0.6 (186)	0.37 (103)	0.32 (73)
60	Sri Lanka	0.21	0.4 (194)	0.56 (63)	0.48 (42)
61	Pakistan	0.21	0.4 (194)	0.48 (88)	0.36 (67)
62	Congo, Dem. Rep.	0.18	0.4 (194)	0.47 (92)	0.29 (74)

See Annex for full results.

d. A case study: Nigeria

Nigeria gets one of the highest improvements in the SLI between 2010 and 2013. In 2011, the political terror scale went down to 4 (average), enough for the country to get a score of 1 for elementary legitimacy. Acquired legitimacy grew constantly during the period. The Nigerian presidential election of 2011 coincided with a striking improvement in confidence in the honesty of elections (from nearly 0 to 0.5 point in 2011). Shared political beliefs rose during the same period. Finally, the stability of acquired legitimacy during the period hides an improvement in human rights dimension.

The anti-corruption measures adopted by the recently elected president Buhari may have enhanced the favorable perception by the population of positive steps forward. However, the insecurity and human rights violations related to Boko Haram terrorist attacks in the northern part of the country show the frailty of these results and the need to follow up the evolution on a regular and long-term basis.

V. Comparison with Relational Capability Index (RCI) and other indices, and implications for further research

Further investigations are needed to explore the complementarity between the SLI and other sets of data describing the development of a country.

The SLI provides information about the quality of institutions, with a multidimensional view. Hence, it might shed light on the correlation between the income of a country and its institutions. There is abundant literature on this correlation, exploring both causality links: on better institutions promoting higher income and on higher income improving institutions (see Acemoglu and Robinson (2008) for a review). The comparison of the SLI to mean GDP growth during the 2010-2013 period (Table 6) leads to weak conclusions. The correlation is close to 0.6, but no regional pattern emerges.

The SLI might also bring new information on the correlation between institutions and poverty. Olusegun (2015) stresses the relevancy of this topic, assessing that “there exists a convergence in income poverty levels as better governance and infrastructure improvement are pursued even when GDP levels differ across countries.” The SLI is compared to the Multidimensional Poverty Index (MPI) and to intensity of deprivation, computed by UNDP following the seminal paper of Alkire and Foster (2008). The correlation is slightly negative (almost -0.6): the higher the state legitimacy, the lower the MPI and the lower intensity of deprivation. Further work is required to explore this correlation: change in time of this relation, causality relationship and/or regional patterns.

Table 6. State Legitimacy Index and other indicators. Mean by world regions, 2010-2013.

Regions	SLI	Annual GDP	MPI	Intensity of	RCI
Arab states	0.47	4.4	0.02	38.8	0.46
East Asia & the Pacific	0.58	5.3	0.13	46.5	0.59
Europe & Central Asia	0.60	2.7	0.03	38.9	0.54
Latin America & the Caribbean	0.51	3.0	0.06	42.5	0.52
South Asia	0.31	5.6	0.16	45.8	0.55
Sub-Saharan Africa	0.39	4.5	0.33	52.7	0.44
Pearson correlation		0.56	-0.55	-0.48	0.40

The SLI looks at the institutional and political conditions for human dignity and human development, through the level of adherence of the people (the legitimation process). Therefore, it can be interestingly compared to the Relational Capability Index (RCI), which focuses on the quality of social bonds within society, at a local level: integration into networks, private relations, and civic commitment (Renouard, 2011; Giraud et al, 2013). The SLI could be used to study whether a legitimate state (according to our definition) contributes to the enhancement of relational capabilities, i.e. to social cohesion.

The correlation at the aggregate level is low (0.4, Table 6). We thus decided to focus on the disaggregate level. For instance, as acquired legitimacy scrutinizes the quality of public services, we expect this dimension to be correlated with the first one of the RCI (integration into networks: access to communication and information, etc.).

We assume that the quality of the relationship between the state and society fosters a level of trust within society (and particularly towards unknown people and strangers) and the commitment of individuals to public-interest activities (i.e. the third dimension of RCI). Concerning the links between state legitimacy and private relations, what we could expect is less clear: we might observe an increase of private ties in case of low state legitimacy (people tend to get closer to friends and relatives they can rely on), but there could also be a positive effect of strong state legitimacy on private bonds (people feel free to get new friends, etc.)... As the second and third dimensions of the RCI measure the levels of intra-group as well as inter-group cohesion (bonding and bridging) respectively, our index of state legitimacy will help analyze how public institutions contribute more or less to strengthen these complementary aspects of social cohesion.

Furthermore, a comparison between the State Legitimacy Index and democratic institutions is welcome: Western analysts often consider at the same time two different dimensions of democracy: a) population sovereignty (as a whole, as a political body) against oppression, and b) the expression of diverse views in the public debate, ensuring human rights and minority rights.

These two aspects can be related to our first threshold (respect for human integrity, freedom from oppression) (a) and to our two other dimensions (b). In this regard, we could consider our index as a way to assess the level of democratic commitment of countries, from a minimal view (a) to a maximal view (b).

Conclusion

In this paper, we develop a conceptual framework and measurement of state legitimacy, which is conceived as a way to assess the quality of the relationship between state and society. Our approach strives to combine a universalist standpoint and a particularist view.

The SLI provides complementary information on the societal and political situation of a country: the first dimension—related to elementary (fundamental) legitimacy—provides crucial elements concerning the level of utter violations of the integrity of people within a state, which can reflect the complete illegitimacy of such a state. The second and third dimensions can show whether the political institutions are rooted in procedural rules that work well and whether they contribute to improvement in access by all citizens to basic goods and services (not only material). Inherited legitimacy looks at the historical evolution of the relationship between state and society and is related to the procedural fairness criteria. Acquired legitimacy questions the quality of public goods and institutions, which contributes to shaping the recognition of the state by the population and deals with substantial fairness criteria.

Our main results are the following:

The index computation is robust when subject to linear interpolation and to component removal. The SLI is robust when subject to linear interpolation. Indeed, the ranking obtained using linear interpolation is close to the one resulting from the SLI computed with solely available data.

The dynamics between 2010 and 2013 are asymmetrical: the less legitimate the state, the higher score gain between 2010 and 2013.

The dimensions of the index are complementary.

Therefore, further investigation would be worthwhile in the following directions: exploring the correlation of the SLI with other development indices and developing a new dimension of ecological sustainability for our index.

References:

- Acemoglu, D. and J. Robinson (2008), *The Role of Institutions in Growth and Development*, World Bank, Washington DC.
- Alkire, S. (2006), "Structural Injustice and Democratic Practice", p.47-61, in Deneulin S., M. Nebel and N. Sagovsky (ed.), *Transforming Unjust Structures: The Capability Approach*, Springer, Dordrecht.
- Alkire, S. and J. Foster (2008), "Counting and Multidimensional Poverty Measurement", OPHI Working Paper.
- Beetham, D. (1991), *The Legitimation of Power*, Macmillan, London.
- Bonnel, V. and G. Breslauer (ed.) (2001), *Russia in the New Century: Stability or Disorder?*, Westview Press, Boulder.
- Deneulin, S., M. Nebel, and N. Sagovsky (ed.) (2006), *Transforming Unjust Structures: The Capability Approach*, Springer, Dordrecht.
- Drèze, J. and A. Sen (1989), *Hunger and Public Action*, Clarendon Press, Oxford.
- Drèze, J. and A. Sen (2002), *India: Development and Participation*, Oxford University Press, Oxford.
- Englebert, P (2000), *State Legitimacy and Development in Africa*, Lynne Rienner Publishers, Boulder.
- Fessard, G. (1942), *Collaboration et résistance au pouvoir du Prince-Esclave*, in Louzeau, F. (2008), *L'anthropologie sociale du père Gaston Fessard*, PUF, Paris.
- Gaus, D. (2011), "The Dynamics of Legitimation: Why the study of political legitimacy needs more realism", Working paper No. p0336, ARENA.
- Gilley, B. (2006), "The Meaning and Measure of State Legitimacy: Results for 72 Countries", *European Journal of Political Research*, 45: 499-525.
- Giraud, G., C. Renouard, H. Lhuillier, R. de la Martiniere, and C. Sutter (2013), "Relational Capability: a Multidimensional Approach", *ESSEC Working Paper* 1306.
- Lemay-Herbert, N. (2009), "Statebuilding without Nation-building? Legitimacy, State Failure and the Limits of the Institutional Approach", *Journal of Intervention and State Building*, vol. 3 (1), March, p.21-45.
- Marshall, M., K. Jagers, and T. Gurr (2011), *Polity IV Project: Dataset Users' Manual*, Center for Systemic Peace: Polity IV Project.
- McFalls, L., "L'État bâtard : Légitimité et légitimation chez Max Weber revisitée", in Rocer, G. and M. Coutu (2005), *La légitimité du droit et de l'État*, p. 47-60, Presses de l'Université Laval, Quebec City.
- Nussbaum, M. (2006), *Frontiers of Justice*, Harvard University Press.

- Nussbaum, M. (2000), *Women and Human Development*, Oxford University Press.
- Nussbaum, M. (1990), “Aristotelian Social Democracy”, in *Liberalism and the Good*, Douglass R, G. Maraet, and H. Richardson (ed.), Routledge, New York.
- OECD (2010), *The State’s Legitimacy in Fragile Situations*, OECD Press.
- Akanbi, O. (2015), “Structural and Institutional Determinants of Poverty in Sub-Saharan African Countries”, *Journal of Human Development and Capabilities*, 16:1, 122-141.
- Rawls, J. (1999), *The Law of Peoples*, Harvard University Press, Cambridge.
- Renouard, C. (forthcoming), “Multinationales et développement local : du mythe du gagnant-gagnant à l’irresponsabilité politique. Le cas des compagnies pétrolières au Nigeria”, in Pierron (J-P.) (dir.), *Les philosophies environnementales européennes, Europeana*, n°6, Autumn 2015.
- Renouard, C. (2011), “CSR, Utilitarianism and the Capabilities Approach”, *Journal of Business Ethics*, vol. 98 (1), p85-97.
- Walzer, M. (1994), *Thick and Thin*, Notre Dame University Press, 1994.
- Walzer, M. (2002), “The argument about humanitarian intervention”, *Dissent* 49: 29–37.
- Weber, M. (1919), *Politics as a Vocation*, Facet Books (reprinted 1965).
- Wood, R. and M. Gibney (2010), “The Political Terror Scale (PTS): A re-introduction and a comparison to CIRI”, *Human Rights Quarterly* 32.2: 367-400.

Annex 1: Full tables of results

1. Full results: mean index and mean index with no interpolation

Rank	Country	Mean index	Mean index, no interpolation (rank in brackets)
1	Finland	0.81	0.82 (1)
2	Luxembourg	0.81	na
3	Norway	0.80	na
4	Switzerland	0.78	na
5	United Kingdom	0.78	0.75 (2)
6	Germany	0.73	na
7	Spain	0.72	na
8	Belgium	0.70	0.73 (3)
9	France	0.69	0.69 (4)
10	Hungary	0.64	0.64 (6)
11	United States	0.64	0.63 (7)
12	Georgia	0.63	na
13	Slovak Republic	0.62	0.61 (9)
14	Japan	0.61	na
15	Portugal	0.61	na
16	Czech Republic	0.61	0.62 (8)
17	Cyprus	0.61	na
18	Brazil	0.59	na
19	Estonia	0.59	na
20	Chile	0.58	0.66 (5)
21	Vietnam	0.57	na
22	Macedonia	0.57	na
23	Bangladesh	0.56	na
24	Greece	0.56	0.58 (10)
25	Malaysia	0.56	na
26	Croatia	0.56	na
27	Senegal	0.56	0.53 (11)
28	Albania	0.55	na
29	Paraguay	0.54	na
30	Peru	0.54	na
31	Bulgaria	0.52	na
32	Jamaica	0.52	na
33	Turkey	0.52	na
34	Thailand	0.52	na
35	Azerbaijan	0.51	0.45 (15)
36	Philippines	0.51	na
37	El Salvador	0.51	na
38	Ghana	0.51	0.52 (12)
39	Mexico	0.50	0.43 (17)
40	Serbia	0.49	na
41	Sierra Leone	0.49	na
42	Kenya	0.47	na
43	Lithuania	0.46	0.5 (13)

44	Morocco	0.45	na
45	Colombia	0.44	0 (22)
46	Kazakhstan	0.44	na
47	Kyrgyz Republic	0.43	0.29 (21)
48	Zambia	0.43	na
49	Ethiopia	0.42	na
50	Moldova	0.42	0.44 (16)
51	Mongolia	0.42	0.49 (14)
52	Liberia	0.41	na
53	Russian Federation	0.41	0.34 (20)
54	Ukraine	0.41	0.39 (19)
55	Madagascar	0.38	na
56	Cameroon	0.38	na
57	Uganda	0.38	na
58	Nigeria	0.32	na
59	Tanzania	0.24	0.42 (18)
60	Sri Lanka	0.21	0 (23)
61	Pakistan	0.21	na
62	Congo, Dem. Rep.	0.18	na

2. Full results: mean index and variant computation

Rank	Country	Mean index	Mean index, excluding voter turnout	Mean index, excluding the 2 variables subject to attrition*
1	Finland	0.81	0.82 (2)	0.79 (3)
2	Luxembourg	0.81	0.83 (1)	0.81 (1)
3	Norway	0.80	0.8 (4)	0.79 (5)
4	Switzerland	0.78	0.82 (3)	0.77 (7)
5	United Kingdom	0.78	0.79 (6)	0.78 (6)
6	Germany	0.73	0.73 (7)	0.73 (8)
7	Spain	0.72	0.67 (10)	0.65 (12)
8	Belgium	0.70	0.69 (9)	0.71 (9)
9	France	0.69	0.7 (8)	0.68 (10)
10	Hungary	0.64	0.64 (12)	0.63 (17)
11	United States	0.64	0.65 (11)	0.65 (13)
12	Georgia	0.63	0.63 (14)	0.62 (21)
13	Slovak Republic	0.62	0.62 (15)	0.62 (20)
14	Japan	0.61	0.62 (17)	0.63 (18)
15	Portugal	0.61	0.62 (16)	0.59 (26)
16	Czech Republic	0.61	0.61 (18)	0.61 (23)
17	Cyprus	0.61	0.63 (13)	0.6 (24)
18	Brazil	0.59	0.57 (24)	0.6 (25)
19	Estonia	0.59	0.59 (19)	0.59 (27)
20	Chile	0.58	0.58 (20)	0.58 (30)
21	Vietnam	0.57	0.54 (30)	0.57 (31)
22	Macedonia	0.57	0.55 (26)	0.58 (28)
23	Bangladesh	0.56	0.57 (23)	0.53 (45)

24	Greece	0.56	0.55 (27)	0.56 (33)
25	Malaysia	0.56	0.56 (25)	0.55 (38)
26	Croatia	0.56	0.55 (28)	0.57 (32)
27	Senegal	0.56	0.58 (22)	0.55 (37)
28	Albania	0.55	0.54 (29)	0.56 (34)
29	Paraguay	0.54	0.54 (31)	0.55 (39)
30	Peru	0.54	0.52 (35)	0.56 (35)
31	Bulgaria	0.52	0.52 (33)	0.55 (40)
32	Jamaica	0.52	0.53 (32)	0.52 (48)
33	Turkey	0.52	0.5 (39)	0.52 (46)
34	Thailand	0.52	0.52 (34)	0.52 (47)
35	Azerbaijan	0.51	0.51 (37)	0.49 (55)
36	Philippines	0.51	0.51 (36)	0.52 (49)
37	El Salvador	0.51	0.49 (43)	0.53 (44)
38	Ghana	0.51	0.5 (41)	0.51 (51)
39	Mexico	0.50	0.49 (42)	0.54 (42)
40	Serbia	0.49	0.48 (44)	0.52 (50)
41	Sierra Leone	0.49	0.47 (47)	0.48 (56)
42	Kenya	0.47	0.47 (48)	0.48 (58)
43	Lithuania	0.46	0.48 (45)	0.48 (57)
44	Morocco	0.45	0.45 (49)	0.45 (64)
45	Colombia	0.44	0.44 (50)	0.46 (63)
46	Kazakhstan	0.44	0.43 (55)	0.43 (74)
47	Kyrgyz Republic	0.43	0.42 (58)	0.46 (60)
48	Zambia	0.43	0.44 (53)	0.44 (72)
49	Ethiopia	0.42	0.4 (61)	0.39 (78)
50	Moldova	0.42	0.43 (54)	0.44 (70)
51	Mongolia	0.42	0.41 (59)	0.45 (65)
52	Liberia	0.41	0.41 (60)	0.41 (75)
53	Russian Federation	0.41	0.4 (64)	0.44 (69)
54	Ukraine	0.41	0.4 (62)	0.43 (73)
55	Madagascar	0.38	0.4 (63)	0.39 (77)
56	Cameroon	0.38	0.37 (65)	0.37 (80)
57	Uganda	0.38	0.37 (66)	0.38 (79)
58	Nigeria	0.32	0.33 (67)	0.33 (83)
59	Tanzania	0.24	0.24 (68)	0.23 (84)
60	Sri Lanka	0.21	0.2 (70)	0.21 (86)
61	Pakistan	0.21	0.21 (69)	0.22 (85)
62	Congo, Dem. Rep.	0.18	0.17 (71)	0.19 (87)
	Burkina Faso	na	0.79 (5)	0.45 (66)
	Nepal	na	0.58 (21)	na
	Palau	na	0.5 (38)	na
	Sudan	na	0.5 (40)	na
	Mali	na	0.48 (46)	0.5 (53)
	Canada	na	0.44 (51)	na
	Eritrea	na	0.44 (52)	na
	Central African	na	0.42 (56)	0.14 (88)

	Republic			
	Papua New Guinea	na	0.42 (57)	na
	Sweden	na	na	0.8 (2)
	Netherlands	na	na	0.79 (4)
	Mauritius	na	na	0.67 (11)
	Montenegro	na	na	0.65 (14)
	Suriname	na	na	0.64 (15)
	Ecuador	na	na	0.64 (16)
	Bhutan	na	na	0.63 (19)
	Costa Rica	na	na	0.62 (22)
	Nicaragua	na	na	0.58 (29)
	Guatemala	na	na	0.55 (36)
	Niger	na	na	0.54 (41)
	Belarus	na	na	0.54 (43)
	Djibouti	na	na	0.51 (52)
	Gabon	na	na	0.49 (54)
	Dominican Republic	na	na	0.47 (59)
	Ireland	na	na	0.46 (61)
	Guinea	na	na	0.46 (62)
	Mauritania	na	na	0.45 (67)
	Comoros	na	na	0.44 (68)
	Lesotho	na	na	0.44 (71)
	Togo	na	na	0.41 (76)
	Angola	na	na	0.35 (81)
	Cote d'Ivoire	na	na	0.35 (82)

* This variant is computed without two variables that are particularly subject to attrition: honesty of elections and civil servant corruption.

3. Full results: mean index and its evolution between 2010 and 2013

Rank	Country	Mean index	Evolution between 2010 and 2013
1	Finland	0.81	0.01
2	Luxembourg	0.81	-0.07
3	Norway	0.80	-0.12
4	Switzerland	0.78	-0.09
5	United Kingdom	0.78	0.02
6	Germany	0.73	-0.08
7	Spain	0.72	-0.01
8	Belgium	0.70	-0.04
9	France	0.69	-0.03
10	Hungary	0.64	0.02
11	United States	0.64	-0.01
12	Georgia	0.63	0.02
13	Slovak Republic	0.62	0
14	Japan	0.61	-0.05
15	Portugal	0.61	-0.1
16	Czech Republic	0.61	-0.01

17	Cyprus	0.61	-0.09
18	Brazil	0.59	0.11
19	Estonia	0.59	-0.09
20	Chile	0.58	-0.12
21	Vietnam	0.57	0
22	Macedonia, FYR	0.57	0.12
23	Bangladesh	0.56	0.03
24	Greece	0.56	-0.03
25	Malaysia	0.56	-0.01
26	Croatia	0.56	-0.08
27	Senegal	0.56	0.11
28	Albania	0.55	-0.1
29	Paraguay	0.54	0.02
30	Peru	0.54	0.02
31	Bulgaria	0.52	0.06
32	Jamaica	0.52	0.04
33	Turkey	0.52	-0.06
34	Thailand	0.52	0.02
35	Azerbaijan	0.51	0.12
36	Philippines	0.51	0.08
37	El Salvador	0.51	0
38	Ghana	0.51	-0.03
39	Mexico	0.50	0.13
40	Serbia	0.49	-0.04
41	Sierra Leone	0.49	0.04
42	Kenya	0.47	0.11
43	Lithuania	0.46	-0.1
44	Morocco	0.45	-0.02
45	Colombia	0.44	0.55
46	Kazakhstan	0.44	-0.01
47	Kyrgyz Republic	0.43	0.17
48	Zambia	0.43	0.06
49	Ethiopia	0.42	-0.05
50	Moldova	0.42	-0.07
51	Mongolia	0.42	0.02
52	Liberia	0.41	-0.03
53	Russian Federation	0.41	0.12
54	Ukraine	0.41	0
55	Madagascar	0.38	-0.26
56	Cameroon	0.38	-0.01
57	Uganda	0.38	0.02
58	Nigeria	0.32	0.4
59	Tanzania	0.24	-0.43
60	Sri Lanka	0.21	0.51
61	Pakistan	0.21	0.51
62	Congo, Dem. Rep.	0.18	0.43

4. Mean index rank and dimensions

Rank	Country	Mean index	Elementary legitimacy	Inherited legitimacy	Acquired legitimacy
1	Finland	0.81	1 (1)	0.78 (7)	0.82 (2)
2	Luxembourg	0.81	1 (1)	0.72 (13)	0.84 (1)
3	Norway	0.80	1 (1)	0.86 (1)	0.77 (6)
4	Switzerland	0.78	1 (1)	0.76 (10)	0.79 (5)
5	United Kingdom	0.78	1 (1)	0.71 (19)	0.8 (3)
6	Germany	0.73	1 (1)	0.73 (11)	0.72 (7)
7	Spain	0.72	1 (1)	0.72 (11)	0.72 (7)
8	Belgium	0.70	1 (1)	0.72 (14)	0.72 (7)
9	France	0.69	1 (1)	0.77 (8)	0.67 (10)
10	Hungary	0.64	1 (1)	0.63 (42)	0.64 (13)
11	United States	0.64	1 (1)	0.64 (39)	0.63 (13)
12	Georgia	0.63	1 (1)	0.6 (50)	0.63 (14)
13	Slovak Republic	0.62	1 (1)	0.66 (34)	0.6 (16)
14	Japan	0.61	1 (1)	0.67 (26)	0.59 (18)
15	Portugal	0.61	1 (1)	0.67 (29)	0.59 (19)
16	Czech Republic	0.61	1 (1)	0.61 (47)	0.6 (15)
17	Cyprus	0.61	1 (1)	0.71 (18)	0.57 (22)
18	Brazil	0.59	1 (1)	0.56 (64)	0.59 (17)
19	Estonia	0.59	1 (1)	0.63 (41)	0.56 (23)
20	Chile	0.58	1 (1)	0.58 (56)	0.57 (20)
21	Vietnam	0.57	1 (1)	0.69 (22)	0.52 (29)
22	Macedonia, FYR	0.57	1 (1)	0.57 (59)	0.56 (24)
23	Bangladesh	0.56	1 (1)	0.53 (72)	0.57 (21)
24	Greece	0.56	1 (1)	0.65 (36)	0.52 (31)
25	Malaysia	0.56	1 (1)	0.67 (31)	0.51 (35)
26	Croatia	0.56	1 (1)	0.6 (49)	0.53 (26)
27	Senegal	0.56	1 (1)	0.62 (45)	0.53 (28)
28	Albania	0.55	1 (1)	0.67 (27)	0.5 (37)
29	Paraguay	0.54	1 (1)	0.5 (81)	0.55 (25)
30	Peru	0.54	1 (1)	0.65 (37)	0.49 (39)
31	Bulgaria	0.52	1 (1)	0.55 (66)	0.51 (36)
32	Jamaica	0.52	1 (1)	0.51 (79)	0.52 (32)
33	Turkey	0.52	1 (1)	0.66 (35)	0.47 (46)
34	Thailand	0.52	1 (1)	0.57 (60)	0.49 (41)
35	Azerbaijan	0.51	1 (1)	0.45 (95)	0.53 (27)
36	Philippines	0.51	1 (1)	0.59 (52)	0.48 (45)
37	El Salvador	0.51	1 (1)	0.62 (44)	0.47 (47)
38	Ghana	0.51	1 (1)	0.7 (20)	0.44 (52)
39	Mexico	0.50	1 (1)	0.58 (55)	0.46 (49)
40	Serbia	0.49	1 (1)	0.52 (76)	0.48 (44)
41	Sierra Leone	0.49	1 (1)	0.71 (17)	0.4 (58)
42	Kenya	0.47	1 (1)	0.58 (57)	0.43 (54)
43	Lithuania	0.46	1 (1)	0.52 (75)	0.44 (51)

44	Morocco	0.45	1 (1)	0.34 (106)	0.48 (43)
45	Colombia	0.44	0.83 (181)	0.5 (84)	0.52 (33)
46	Kazakhstan	0.44	1 (1)	0.37 (102)	0.46 (50)
47	Kyrgyz Republic	0.43	1 (1)	0.46 (93)	0.41 (56)
48	Zambia	0.43	1 (1)	0.5 (82)	0.4 (60)
49	Ethiopia	0.42	1 (1)	0.49 (87)	0.4 (61)
50	Moldova	0.42	1 (1)	0.54 (67)	0.38 (63)
51	Mongolia	0.42	1 (1)	0.52 (78)	0.38 (64)
52	Liberia	0.41	1 (1)	0.54 (68)	0.36 (66)
53	Russian Federation	0.41	1 (1)	0.54 (69)	0.35 (68)
54	Ukraine	0.41	1 (1)	0.5 (83)	0.37 (65)
55	Madagascar	0.38	1 (1)	0.5 (85)	0.34 (72)
56	Cameroon	0.38	1 (1)	0.32 (108)	0.39 (62)
57	Uganda	0.38	1 (1)	0.44 (97)	0.35 (70)
58	Nigeria	0.32	0.8 (182)	0.48 (90)	0.34 (71)
59	Tanzania	0.24	0.6 (186)	0.37 (103)	0.32 (73)
60	Sri Lanka	0.21	0.4 (194)	0.56 (63)	0.48 (42)
61	Pakistan	0.21	0.4 (194)	0.48 (88)	0.36 (67)
62	Congo, Dem. Rep.	0.18	0.4 (194)	0.47 (92)	0.29 (74)
	Burkina Faso	na	1 (1)	0.43 (98)	na
	Nepal	na	1 (1)	na	0.41 (55)
	Palau	na	1 (1)	na	na
	Sudan	na	0 (203)	na	na
	Mali	na	1 (1)	0.51 (80)	na
	Canada	na	1 (1)	0.69 (23)	na
	Eritrea	na	0.8 (182)	na	na
	Central African Republic	na	0.4 (194)	0.44 (96)	na
	Papua New Guinea	na	1 (1)	na	na
	Sweden	na	1 (1)	0.83 (3)	na
	Netherlands	na	1 (1)	0.83 (2)	na
	Mauritius	na	1 (1)	0.72 (15)	na
	Montenegro	na	1 (1)	0.59 (51)	na
	Suriname	na	1 (1)	0.76 (9)	na
	Ecuador	na	1 (1)	0.67 (28)	na
	Bhutan	na	1 (1)	0.73 (12)	na
	Costa Rica	na	1 (1)	0.72 (16)	na
	Nicaragua	na	1 (1)	0.61 (46)	na
	Guatemala	na	1 (1)	0.58 (58)	na
	Niger	na	1 (1)	0.59 (53)	na
	Belarus	na	1 (1)	0.45 (94)	na
	Djibouti	na	1 (1)	0.49 (86)	na
	Gabon	na	1 (1)	0.35 (105)	na
	Dominican Republic	na	1 (1)	0.54 (71)	na
	Ireland	na	0.6 (186)	0.68 (25)	na
	Guinea	na	1 (1)	0.61 (48)	na

	Mauritania	na	1 (1)	0.4 (101)	na
	Comoros	na	1 (1)	0.52 (77)	na
	Lesotho	na	1 (1)	0.57 (61)	na
	Togo	na	1 (1)	0.34 (107)	na
	Angola	na	1 (1)	0.36 (104)	na
	Cote d'Ivoire	na	0.8 (182)	0.4 (100)	na
	American Samoa	na	na	na	na
	Andorra	na	na	na	na
	Antigua and Barbuda	na	na	na	na
	Greenland	na	na	na	na
	Guam	na	na	na	na
	Micronesia, Fed. Sts.	na	na	na	na
	Monaco	na	na	na	na
	Nauru	na	na	na	na
	St. Martin (French part)	na	na	na	na
	Tonga	na	na	na	na
	Turks and Caicos Islands	na	na	na	na
	Tuvalu	na	na	na	na
	Virgin Islands (U.S.)	na	na	na	na
	West Bank and Gaza	na	na	na	na
	Aruba	na	1 (1)	na	na
	Austria	na	1 (1)	na	na
	Bahamas, The	na	1 (1)	na	na
	Bahrain	na	1 (1)	na	na
	Barbados	na	1 (1)	na	na
	Belize	na	1 (1)	na	na
	Benin	na	1 (1)	na	na
	Bermuda	na	1 (1)	na	na
	Bolivia	na	1 (1)	na	na
	Botswana	na	1 (1)	na	na
	Brunei Darussalam	na	1 (1)	na	na
	Burundi	na	1 (1)	na	na
	Cambodia	na	1 (1)	na	na
	Cape Verde	na	1 (1)	na	na
	Cayman Islands	na	1 (1)	na	na
	Channel Islands	na	1 (1)	na	na
	China	na	1 (1)	na	na
	Congo, Rep.	na	1 (1)	na	na
	Cuba	na	1 (1)	na	na
	Curacao	na	1 (1)	na	na
	Dominica	na	1 (1)	na	na

	Equatorial Guinea	na	1 (1)	na	na
	Faeroe Islands	na	1 (1)	na	na
	Fiji	na	1 (1)	na	na
	French Polynesia	na	1 (1)	na	na
	Gambia, The	na	1 (1)	na	na
	Gibraltar	na	1 (1)	na	na
	Grenada	na	1 (1)	na	na
	Guinea-Bissau	na	1 (1)	na	na
	Guyana	na	1 (1)	na	na
	Haiti	na	1 (1)	na	na
	Hong Kong SAR, China	na	1 (1)	na	na
	Iceland	na	1 (1)	na	na
	Iran, Islamic Rep.	na	1 (1)	na	na
	Isle of Man	na	1 (1)	na	na
	Jordan	na	1 (1)	na	na
	Kiribati	na	1 (1)	na	na
	Kuwait	na	1 (1)	na	na
	Lao PDR	na	1 (1)	na	na
	Lebanon	na	1 (1)	na	na
	Liechtenstein	na	1 (1)	na	na
	Macao SAR, China	na	1 (1)	na	na
	Maldives	na	1 (1)	na	na
	Malta	na	1 (1)	na	na
	Marshall Islands	na	1 (1)	na	na
	Mayotte	na	1 (1)	na	na
	Namibia	na	1 (1)	na	na
	New Caledonia	na	1 (1)	na	na
	Northern Mariana Islands	na	1 (1)	na	na
	Oman	na	1 (1)	na	na
	Puerto Rico	na	1 (1)	na	na
	Qatar	na	1 (1)	na	na
	Rwanda	na	1 (1)	na	na
	Samoa	na	1 (1)	na	na
	San Marino	na	1 (1)	na	na
	Sao Tome and Principe	na	1 (1)	na	na
	Saudi Arabia	na	1 (1)	na	na
	Seychelles	na	1 (1)	na	na
	Sint Maarten (Dutch part)	na	1 (1)	na	na
	Solomon Islands	na	1 (1)	na	na
	St. Kitts and Nevis	na	1 (1)	na	na
	St. Lucia	na	1 (1)	na	na
	St. Vincent and the Grenadines	na	1 (1)	na	na

	Tajikistan	na	1 (1)	na	na
	Timor-Leste	na	1 (1)	na	na
	Turkmenistan	na	1 (1)	na	na
	United Arab Emirates	na	1 (1)	na	na
	Uzbekistan	na	1 (1)	na	na
	Vanuatu	na	1 (1)	na	na
	Iraq	na	0.8 (182)	na	na
	Chad	na	0.6 (186)	na	na
	Libya	na	0.6 (186)	na	na
	Panama	na	0.6 (186)	na	na
	Swaziland	na	0.6 (186)	na	na
	Syrian Arab Republic	na	0.6 (186)	na	na
	Myanmar	na	0.4 (194)	na	na
	Somalia	na	0.4 (194)	na	na
	South Sudan	na	0.2 (201)	na	na
	Korea, Dem. Rep.	na	0 (203)	na	na
	New Zealand	na	1 (1)	0.82 (4)	na
	Australia	na	1 (1)	0.82 (5)	na
	Denmark	na	1 (1)	0.79 (6)	na
	Trinidad and Tobago	na	1 (1)	0.68 (24)	na
	Taiwan, Province of China	na	1 (1)	0.67 (30)	na
	Singapore	na	1 (1)	0.66 (32)	na
	Italy	na	1 (1)	0.66 (33)	na
	Poland	na	1 (1)	0.65 (38)	na
	Kosovo	na	1 (1)	0.64 (40)	na
	Israel	na	na	0.62 (43)	na
	Argentina	na	1 (1)	0.58 (54)	na
	Latvia	na	1 (1)	0.57 (62)	na
	Venezuela, RB	na	1 (1)	0.56 (65)	na
	Romania	na	1 (1)	0.54 (70)	na
	Egypt, Arab Rep.	na	1 (1)	0.52 (73)	na
	Armenia	na	1 (1)	0.52 (74)	na
	Honduras	na	1 (1)	0.48 (89)	na
	Algeria	na	1 (1)	0.48 (91)	na
	Yemen, Rep.	na	0.4 (194)	0.41 (99)	na
	Slovenia	na	1 (1)	na	0.67 (10)
	Bosnia and Herzegovina	na	1 (1)	na	0.52 (34)
	Korea, Rep.	na	0.6 (186)	na	0.5 (38)
	Afghanistan	na	0.2 (202)	na	0.27 (75)
	Uruguay	na	1 (1)	na	0.79 (4)
	South Africa	na	1 (1)	na	0.52 (30)
	India	na	1 (1)	na	0.43 (53)

	Mozambique	na	1 (1)	na	0.47 (48)
	Tunisia	na	1 (1)	na	0.49 (40)
	Malawi	na	1 (1)	na	0.4 (59)
	Zimbabwe	na	1 (1)	na	0.41 (57)
	Indonesia	na	1 (1)	na	0.35 (69)

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