

DEMOCRACY BAROMETER

zde
Zentrum für
Demokratie
Aarau

WZB

nccr
democracy

FNSNF

METHODOLOGY

Blueprint Sample

Data for 30 countries from 1995 to 2005

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Notes

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(3) Please have a look at the extensive Codebook for a description of all indicators at www.democracybarometer.org.

(4) Visit us on:

<http://www.democracybarometer.org>

<http://www.zdaarau.ch>

<http://www.wzb.eu>

<http://www.nccr-democracy.uzh.ch>

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1 Introduction

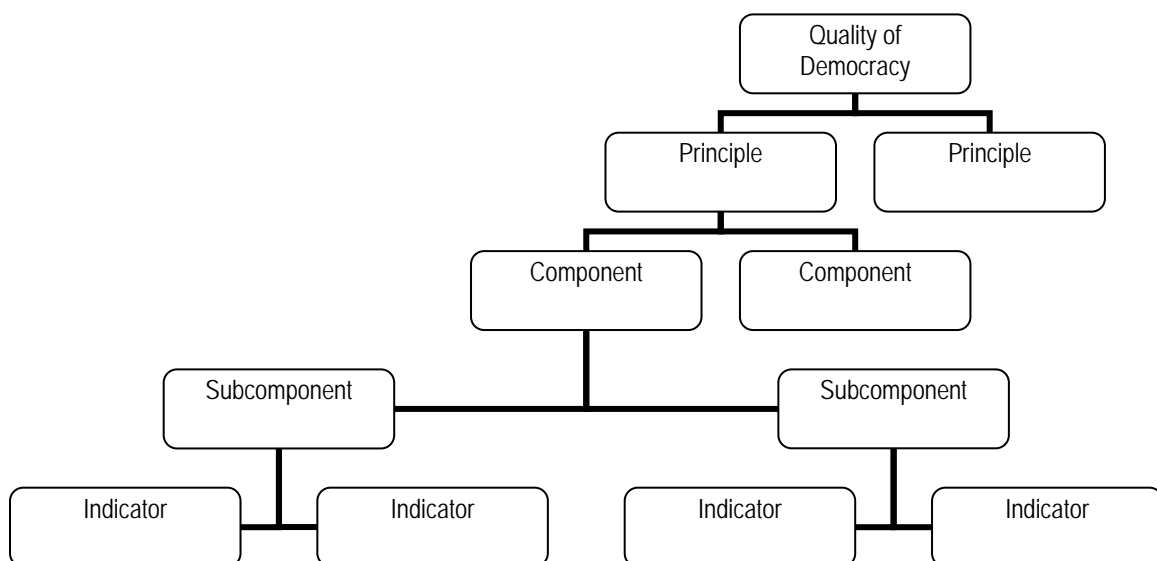
Based on our theoretical concept of democracy, it is feasible to measure a country's quality of democracy for a given point in time. Nevertheless, the quality of the whole endeavor is not only the result of an adequate theoretical concept but equally depends on the quality of the measurement itself (Bollen 1990). As Blalock (1982: 31) puts it: "If either process [conceptualization or measurement] lags too far behind the other, we shall find ourselves stymied."

Using Munck and Verkuilen (2002) as a starting point, there are three critical tasks to accomplish: (1) Appropriate indicators have to be collected. (2) The scaling of the indicators as well as the (sub)components, functions, and principles needs to be determined carefully, especially when it comes to the identification of the lowest and highest possible values. (3) The aggregation of values from each level of the concept tree to the next higher level should be in line with the theoretical assumptions of the concept. Obviously, all those tasks are related to the core concepts of measurement theory: validity and reliability. As other studies show (e.g. Bollen 1990; Bollen and Paxton 1998; Elkins 2000; Coppedge et al. 2008; Treier and Jackman 2008), both have rarely been assigned high importance in contemporary approaches to democracy measurement. The Democracy Barometer project aims at providing not only a sound and transparent theoretical concept but also a convincing measurement strategy.

2 Selection of Indicators

Overall, about 300 indicators were collected from existing datasets as well as produced or calculated by the project team on the basis of various types of documents and information. From this collection 100 indicators were selected to build the Democracy Barometer. The indicators constitute the lowest level of a concept tree that mirrors the theoretical framework of the Democracy Barometer, i.e. the stepwise deduction of principles, components, subcomponents, and indicators (see figure 1 and the paper on the theoretical framework on democracy-barometer.org).

Figure 1: Concept tree of the Democracy Barometer (schematically)



The selection of the indicators as well as their assignment to subcomponents was basically theory-driven to ensure content validity and to prevent concept overstretching as described by Sartori (1970). The necessary reduction from 300 to 100 was structured by the following guidelines:

1. The Democracy Barometer tries not to rely too heavily on data produced by expert judgments. As Bollen and Paxton (1998, 2000) or Steenbergen and Marks (2007) have pointed out, the reliability of expert ratings is sometimes questionable. In lieu of or in addition to expert judgments, the Democracy Barometer uses – whenever possible – ‘hard’ data and aggregated survey data. That is a decisive difference to other democracy indices such as Freedom House (FH), the Polity Project or the Bertelsmann Transformation Index (BTI), which are all purely based on expert judgments.
2. Measurement errors pose a serious problem, though to a certain degree they are inevitable (Zeller and Carmines 1980). However, some approaches may help to scale down their number. On the one hand, data was collected from a wide variety of sources. This should reduce the amount of systematic error. On the other hand, to minimize random error, subcomponents are composed – if data availability allows for it – of two different indicators which capture similar concepts, but do so in a different fashion or originate from different sources. Studies on democracy measurement have shown that these are very effective strategies to increase the measurement quality (Bollen 1993; Munck and Verkuilen 2002; Kaufmann and Kraay 2008).
3. The focus on the mere existence of democratic institutions is one of the major shortcomings of existing indices. This is even more problematic if a project aims at measuring the quality of democracy. Therefore, the Democracy Barometer takes into account both a country’s institutional setting (rules in law) as well as the effectiveness of those institutions in practice (rules in use). Each component consists of at least one subcomponent that measures rules in law and one that measures rules in use.
4. Last but not least, the chosen indicators have to fulfill a pragmatic condition: they should be available at least for all countries and all years in our blueprint-sample (see below) and – if possible – also for further countries and years.

As mentioned above, 100 indicators fulfill these necessary criteria. They are used to calculate the values of 51 subcomponents, which again constitute 18 components, two for each of the nine functions. Precise information about all these indicators can be found in the codebook. Below you will find a more detailed overview for each function (appendix 1).

3 Scaling

In order to aggregate the indicators to subcomponents and further levels of the concept tree, they need to have the same scales. This, however, is not such a straightforward task. Scaling is crucial for the quality of a measurement instrument. It is not only important to choose between dichotomous, ordinal, or metric scales but also to identify appropriate minimum and maximum values of an index. For example, as Elkins (2000) points out the choice between a dichotomous or continuous scale for democracy has a substantive impact not only on the degree of measurement error but also on the causal relationships with other indicators.¹

In general, three different rules could be applied to define the extremes of a scale for a measurement instrument like the Democracy Barometer and its elements:

1. The scaling could be based on theory-driven decisions. In other words, we could define theoretical minimum and maximum values for each indicator. However and as stated in our conceptual paper, there is no universal theory of democracy. Therefore, no such thresholds can be identified. For instance, whereas the Schumpeterian democratic theory would not assume a very low electoral turnout to be particularly problematic, participatory democracy would plea for a much higher threshold.²
2. Another option is to scale our indicators according to impartial and globally accepted standards. For the quality of democracy one might think of the Universal Declaration of Human Rights as a reference. Unfortunately, only a very small number of the relevant 100 indicators could be rescaled on such a basis. This makes this second rule inappropriate for our project.
3. The third possibility is based on the ideal of empirical minima and maxima. For each indicator, or whenever necessary on a higher stage of aggregation, the best and worst practice in established democracies can be identified. Hence, for each indicator, the lowest value is recoded into 0 while the highest value receives the new value 100. All other values are assigned in relation to these two references.

The Democracy Barometer project has opted for the third rule to produce adequate scales. To accomplish this task, a set of 'blueprint' countries, i.e., established democracies, was identified, against which all other countries (i.e. country-years) can be compared. The selection of blueprint countries is tremendously important. To prevent any bias while determining best and worst practices, it must be ensured that every established democracy in the world is included. For the definition of such a 'universe of established democracies' we rely on existing indices of democracy, which are useful to distinguish between democracies and autocracies, or between democracies and *established* democracies in our case. More specifically, we have based our country selection on the Polity and Freedom House Index: a country is included into the blueprint sample if it can be described as highly democratic

¹ Freedom House provides an example: The Civil Liberties Index and the Political Rights Index both have a categorical scale from 1 to 7, despite the fact that they are originally based on quasi-continuous scales from 0-40 and 0-60 respectively. The consequences of the widely used scales from 1 to 7 instead of the underlying quasi-continuous scales are very substantive. For example, the rescaling leads to an artificial reduction of variance. In 2008, 57 countries were assigned the highest possible value for Political Rights. This group includes a wide range of countries like Sweden, Estonia, Ghana and Israel. It must be noted that Freedom House does not provide the data for those quasi-continuous scales before 2006.

² Two further examples shall show the difficulties of this approach: What is the optimal number of parties? How many strikes per year are too much for a high quality of democracy? One could argue that such problems could be solved if only the existence of institutions was measured. It is relatively easy to apply theoretical minima and maxima when the question is whether a necessary institution is established (1) or not (0). However, we argue that the quality of a democracy should comprise more than only a sound institutional setting. Of course, we invite the research community to use our indicators in an alternative manner.

over a substantive period of time. Thus, it needs to have a value of 1.5 or below on the combined Freedom House Scores *and* a Polity IV Score of 9 or above during the whole time span between 1995 and 2005.³ Thus, a country qualifies as an established democracy (and a blueprint country) if it appears to be a stable (at least between 1995 and 2005) democracy. Additionally and due to problems of data availability, we have limited our selection to countries with more than 250,000 inhabitants.

All in all, 34 countries meet these criteria. However, four countries, namely the Bahamas, Barbados, Cape Verde and Mauritius, had to be excluded due to the high proportion of missing data. Our blueprint sample thus includes the following 30 countries: Australia, Austria, Belgium, Canada, Costa Rica, Cyprus, the Czech Republic, Denmark, Finland, France, Germany, Hungary, Iceland, Ireland, Italy, Japan, Luxembourg, Malta, the Netherlands, New Zealand, Norway, Poland, Portugal, Slovenia, South Africa, Spain, Sweden, Switzerland, the United Kingdom and the United States (see appendix 2 for more details). Hence, the blueprint sample consists of 330 country-years (30 countries multiplied by eleven years analyzed)

Following the 'best/worst-practice' scaling option, all indicators were standardized in accordance with the following procedure: the lowest empirical value within the blueprint sample (330 country-years) was rescaled to 0 and the highest empirical value was rescaled to 100.

We argue that 'best/worst-practice' is most appropriate for our endeavor for at least three reasons:

- We define democracy as a political system that continuously redefines and alters itself, depending on ongoing political as well as societal deliberation (Beetham, 2004). Consequently, each given democracy weights the principles and functions differently. What we should measure is therefore the actually existing maximum, i.e. best practice for each function. Furthermore, best practice can be empirically adjusted when it becomes necessary. This is a great advantage compared to other longitudinal data. With a defined and fixed maximum developments and progress cannot be appropriately measured. Contrarily, the best practice measurement is flexible concerning its minimum and its maximum.⁴
- The Democracy Barometer will be applied to a bigger country sample. In fact, the period of study will be extended to cover at least 1990 to date. Furthermore, data for about 45 additional countries is currently being collected. The values of these additional countries will be standardized in relation to the best and to worst practice of the blueprint countries. This may lead to values below 0 and maybe even above 100, which might seem problematic at first sight. But this is not the case. To the contrary: values below 0 simply indicate a democratic performance that is poorer than the poorest performance within the blueprint sample with regard to the respective indicator, (sub)component, function etc., while values above 100 indicate a better performance. The aim of the Democracy Barometer is not to define whether a country is a democracy or not but to compare the quality of different established democracies. The rela-

³ There is a pragmatic as well as a theoretical reason for the choice of this time span. First, data availability increases significantly after 1995. Second, to avoid a Western bias, we also wanted to include still relatively new but nevertheless established democracies (foremost Eastern European countries). However, in most of these countries democratization took place in the mid 1990s after the collapse of the Soviet Union.

⁴ Thus, the Democracy Barometer can be enlarged and improved with new and better indicators (indeed, the market of good indicators grows). In this case, best and worst practice can be quite easily re-calibrated. We invite the research community to enhance the quality of our measure by providing us with new indicators that meet the necessary conditions described above and that are available for all countries in our sample (also see www.democracybarometer.org).

tive scale without fixed minima and maxima makes the Democracy Barometer a very powerful tool for time series and large-N studies.⁵

- Another important aim of the project is the comparison of different types of established democracies. Best practice is most appropriate for this purpose (Beetham 2004) because it allows us to analyze different trade-offs between principles or functions. Thus, we can analyse empirically existing varieties of democracy.

⁵ We will provide interested researchers with the raw (unstandardized indicators) as well as the standardized data (standardized indicators, subcomponents, components, functions, principles and overall quality score; see www.democracybarometer.org). Hence, we explicitly invite the research community to try other scaling and aggregation procedures.

4 Aggregation

4.1 Fundamentals

The conceptualization of the Democracy Barometer with its different levels of abstraction further requires the definition of aggregation rules. How should the indicators be aggregated to subcomponents, components, functions, principles and, in the end, to an overall index of democratic quality? Moreover, are all elements on the same level equally important? After much testing and comparing of different approaches, we have decided to adopt a procedure that mirrors our conceptual idea. We proceed stepwise up the concept tree from indicators back to subcomponents, components, functions and principles to the overall index of the quality of democracy.

The level of principles defines necessary and sufficient conditions for democracy. If the three principles are realized the respective polity is an established/full democracy. The same applies to the level of functions. They are theoretically carefully deduced as functional pre-requisites. However, since we assume for theoretical reasons, that blueprints of democracy vary, we assume that different types of democracy promote some functions more strongly than others. A democracy with a tradition of majority representation and a strong government will emphasize different functions than a democracy with a tradition of proportional representation, for example. However, only those polities are regarded as democratic, which fulfill *all* functions to a democratic minimum. Above this minimum, everything is a matter of degree. Thus, we assume that the quality of democracy differs between democratic countries.

In order to measure variation in the quality of democracy properly, the relationships between principles, functions, components, and sub-components have to be translated into aggregation rules which fit the hierarchical concept of our theory. The core points and propositions of our concept are the following:

1. Our concept is based on the assumption of necessary and sufficient conditions for being a member of the category 'established/full democracy';
2. We assume variation in the quality of democracy between polities, resulting from different balances between elements of democratic quality;
3. We assume that functions and principles each have equal weight within their group.
4. Thus, necessary and sufficient conditions define the "membership" in the group of established/full democracies.
5. In case of "membership", partial compensation can be at work. This is in line with the theoretical consideration that different types of democracy show different balances or even trade-offs between principles or functions.
6. We do not only claim that the quality of democracy can differ once the (minimum) level of democracy is reached. We also claim that there are different levels of non-democracy, from autocratic to slightly defective democracies, i.e. polities, which almost reach the quality of a full democracy.
7. Thus, the compensation rule claimed within the group of fully democratic countries extends to combinations with less than democratic qualities.

4.2 Possible Performance Variations

Defining the appropriate aggregation rules is not as easy as one might think when taking into account necessary and sufficient conditions, compensation in contrast to substitution, and the extension the measure beyond full democracies.

The traditional way to deal with necessary and sufficient conditions is to apply what is known from set theory (QCA). In set theory applying necessary and sufficient condition implies AND, i.e. the minimum. Since we will go beyond established democracies and want to measure degrees of democratic qualities even in not fully-fledged democracies, necessary and sufficient condition rules can only be applied to define “membership” in the group of our blueprint democracies.

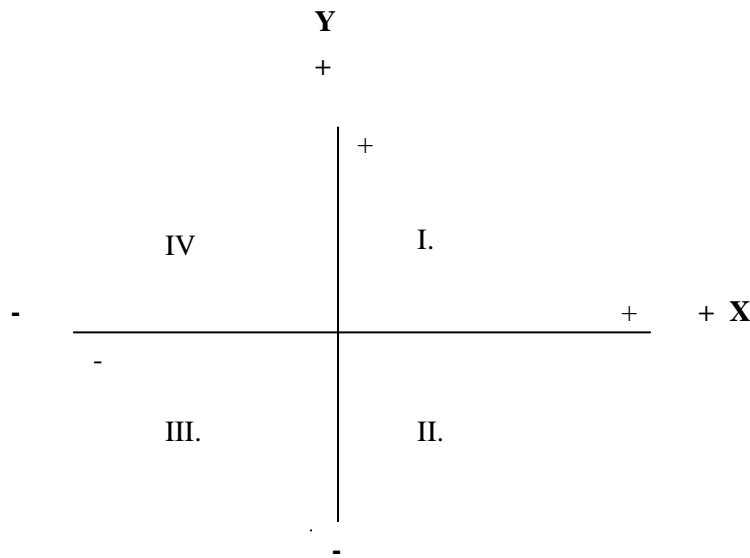
As already mentioned, we further assume that balancing takes place between functions, not substitution. A polity which performs very well on function x but poor on function y would – according to the set theoretical approach of family resemblance – receive the maximum score realized, i.e. the score of x. In contrast to substitution, balancing implies that there are costs for the low y, which can – if only partially – be compensated by x. Hence, the AND-condition from set theory, i.e. using the minimum score, is not appropriate either. These considerations have to be taken into account in the aggregation rule.

Furthermore, the measure should also apply to countries which are not yet established democracies. Thus, any score of zero or higher on our two hypothetical functions x and y indicates at least a minimal quality of an established democracy. Any score lower than zero indicates a negative deviation from a minimum of democratic quality in established (i.e. blueprint) democracies. These two functions open a two-dimensional space,⁶ defining four possible quadrants (see figure 2):

- I. Polities which are fully democratic, i.e. zero or larger on both axes;
- II. Polities which are fully democratic with regard to function x, but not with regard to function y;
- III. Polities which do not perform fully democratically on both functions;
- IV. Polities which perform fully democratically on function y, but not on function x. The result is four quadrants I, II, III, and IV (see figure 2):

⁶ Notice that the term dimensions is used here only in spatial terms and does not relate to the conceptual considerations where we talk of principles, functions, and components.

Figure 2: Quadrants of democratic quality in a two-dimensional space



The implication is that we have polities with positive scores on both functions, polities with mixed scores (+ and -), and polities which score negatively on both.

4.3 Basic Assumptions

In sum, our aggregation rule is based on the following four basic assumptions:

1. Equilibrium is regarded as a positive feature. It indicates that (at a certain level), the elements of quality of democracy are in balance. Because according to the underlying theory the best democracy is one, in which all its elements show a maximum performance and the worst is one where all its elements show a minimum of performance, this is justified.
2. Since we deal in the framework of the blueprint countries we deal with established democracies, we cannot apply the simple and strict rule of necessary condition. Instead, a modification, which allows for compensation of poor quality in one element by better quality in another element, is introduced.
3. Compensation, however, is not full compensation (substitutability). The larger the disequilibrium, the smaller is the compensation. Thus, disequilibrium has to be punished relative to equilibrium and more so, the larger the disequilibrium. This implies a growing punishment of increasing imbalances between elements.
4. From this follows, that punishment is disproportional and that the measure does follow the rule of progression instead of linearity.
5. Increase in quality is progressive but with diminishing marginal returns. We assume that increase in quality in one or more elements boosts the quality of democracy, but above a certain quality, increase in quality is smaller.

Compensation of qualities is, according to our concept, possible between any combinations of scores. Assuming compensation, the simplest way to do this is summation.

Furthermore, our theoretical consideration about compensation suggests having "costs" implied if elements are not in equilibrium. In other words, a democracy is the better the more quality elements score *evenly* high and the worse the more deviation there is between qualities of elements (or the more quality elements score evenly low or negatively)

These considerations imply that our measure is progressive, not linear. It should produce higher values in the middle-range of values in equilibrium, and increasing punishment in disequilibrium.

4.4 Translation into calculation

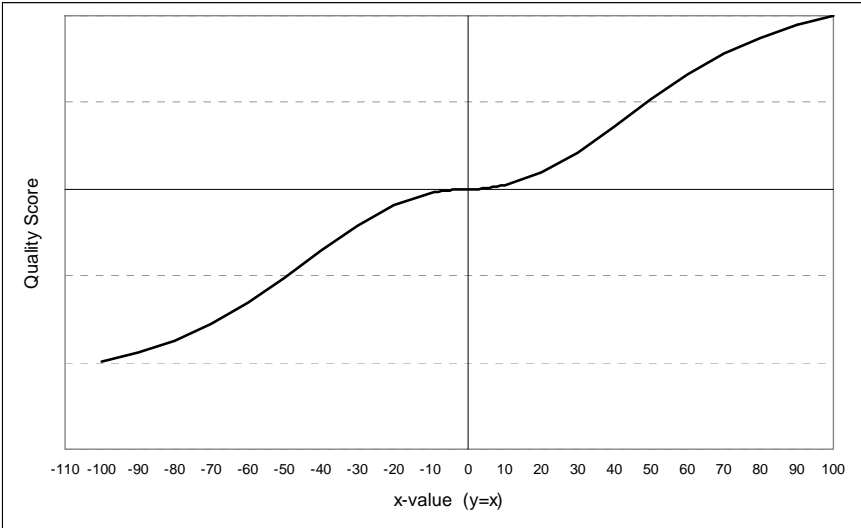
Referring to the discussion of the two-dimensional space (see figure 2), we distinguish between two different situations. A: the element scores have the same directions (i.e. signs), and B: the element scores have opposite directions (i.e. signs).

A Elements scores with the same direction (signs)

The measure should be progressive with diminishing marginal utility in the increase of quality of democracy when a higher level is reached. In order to achieve progression, multiplication has been applied, and in order to achieve diminished marginal returns, we apply an Arctan function.

The standard function for elements with the same sign looks like follows (for the formula see appendix III):

Figure 3: The standard function in two-dimensional space in congruent sectors

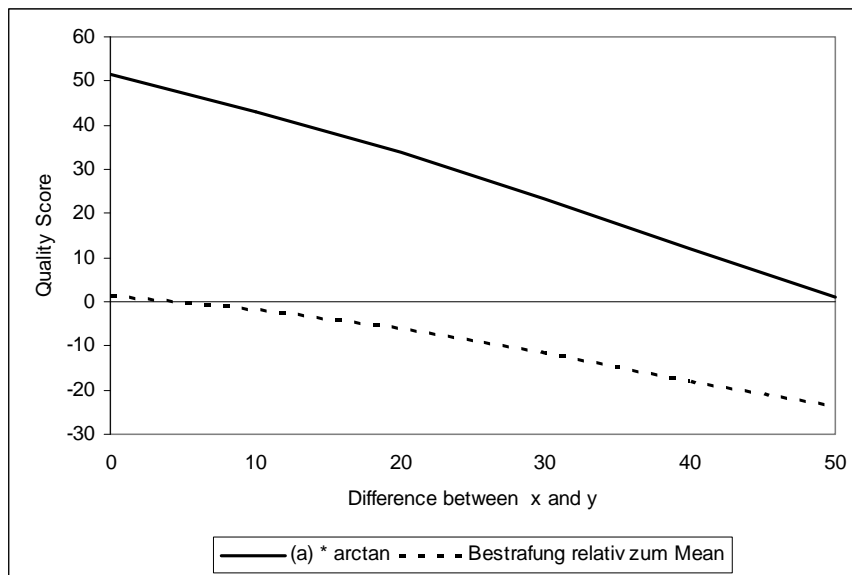


The standard function punishes disequilibrium as long as both elements have the same sign. In this case, punishment is progressive with larger differences between elements. This can be observed in

figure 4. The dashed line indicates the extent of additional punishment of the Arctan function compared to a simple arithmetic mean.

For example, if x is 50 and y 20, the mean is 35. The Arctan function, by contrast, produces a score of 23,3. Punishment is thus 11,7 points; for $x = 50$ and $y = 10$ punishment is 18,1 points (democracy quality score = 11,9 compared to a mean of 30).

Figure 4: Punishment in congruent sectors

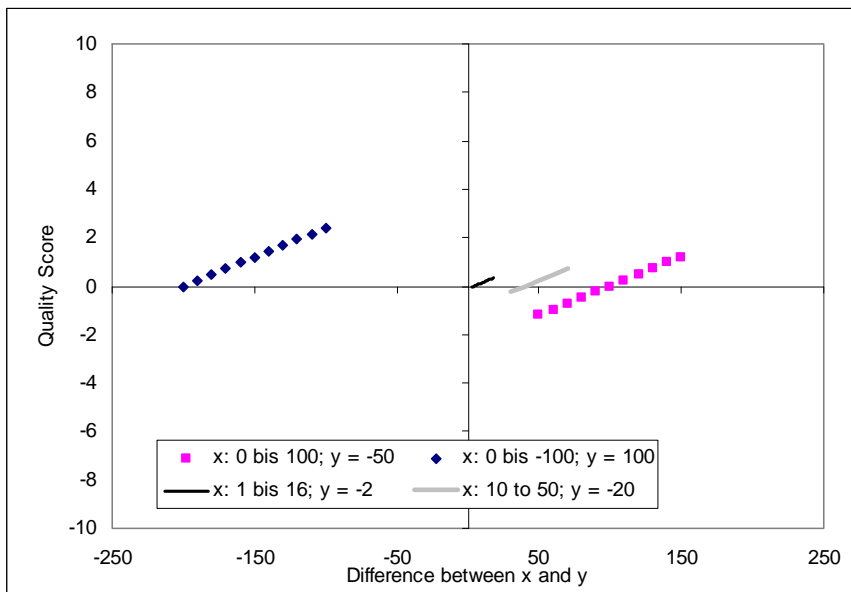


B Elements scores with opposite direction (signs)

In case of sectors II and IV, x and y have opposite signs. In these cases, a different function needs to be applied. One reason is that, because of the multiplication (?), the negative sign always overrules the positive one. A second reason is that a difference produced by a combination of positive and negative qualities must be punished more than one produced in a situation of equal signs, progressively positively in the positive sector, negatively in the negative sector. For this reason, not multiplication is applied but the sum. The sum indicates the (im-)balance between the two dimensions.

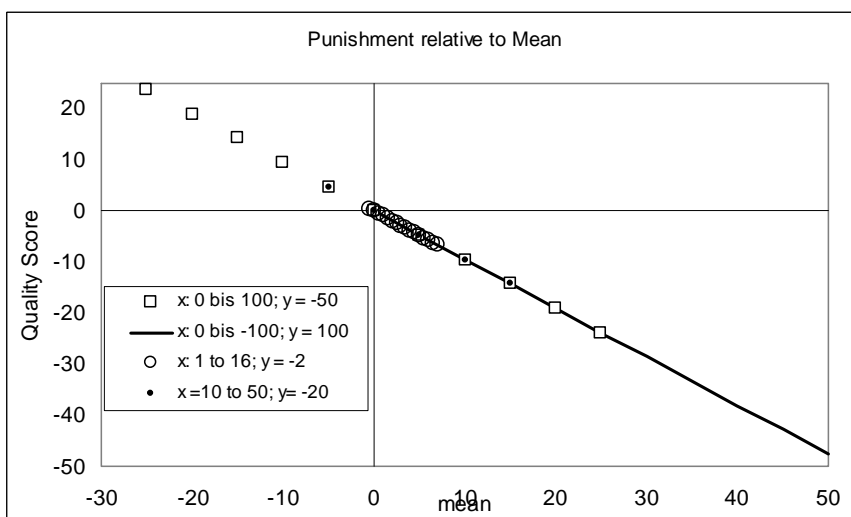
Except for replacing the product by the sum, the function remains the same. It produces strong punishment for differences produced by different signs, because not reaching the level of blueprint democracies in one dimension should be punished. The outcome is low scores, regardless of the sum being positive or negative (see figure 5).

Figure 5: Quality in case of scores of opposite signs



The degree of punishment compared to the mean is shown in the next figure (see figure 6). Because only a slight adaptation of the standard function is applied, punishment is the same when the difference is the same regardless of the sector (figure 6).

Figure 6: Punishment in case of scores of opposite signs



4.5 Aggregation procedure

The Democracy Barometer is a complex measure, which starts from indicators, which are aggregated to sub-components, components, functions, principles, and finally the overall-score (see figure 1, page 3). Since the the

sub-components and components are not considered necessary and sufficient conditions, the aggregation rule is applied at the stage of functions and above. Thus, we apply – stepwise – the following aggregation procedure:

1. As discussed above, all indicators are first standardized to a 0 (worst practice) to 100 (best practice) scale.
2. The first level of aggregation – from indicators to sub-components – is based on arithmetic means of the standardized indicators. The ‘simple’ average of the indicators corresponds to the idea that the indicators within a subcomponent must measure the same phenomenon and that they can thus compensate each other.
3. The same procedure and the same underlying idea are adopted for the second step of aggregation from subcomponents to components: thus, the components are the means of the subcomponents.
4. Functions are measured by applying the Arctan-formula to components.
5. Principles are measured by applying the Arctan formula to functions.
6. Democratic quality is measured by applying the Arctan formula to principles

There is one caveat, or complication. The proposed calculation only suffices as long as two elements have to be combined. For the combination of more than two elements, an aggregation rule which is consistent with the theoretical concept has to be found.

The two-element solution applied to more than two elements could mean multiple multiplications. This, however, would result in possibly inflating or deflating the quality score. This is illustrated by the following example.

Let us assume:

$$X = 30; Y = 20; Z = 50$$

If we take the product of XYZ and apply the standard function, the result is the following:

$$f(X*Y*Z)/3 = 38,9$$

Every singly pair produces scores smaller than the one above:

$$X*Y = 14,3$$

$$X*Z = 33,8$$

$$Y*Z = 23,3$$

Thus, it would not be appropriate to inflate the score by including all three elements in the product and applying the function to it. The three pair-wise products, on the other hand, cannot be further reduced except for putting them all into one term. The most appropriate solution thus is the mean of the products. The mean of these products is:

$$\text{Mean } f(xy; xz; yz) = 23,8$$

In the case of three elements, we therefore adopt the Arctan formula to all three pairs of elements and then take the mean of the results.

Upon its release the Democracy Barometer will provide scholars with access to the full dataset and therefore many opportunities to create other indices if they like. It will for example be possible to measure an entirely different concept of democracy with the data at hand. Researchers supporting a more minimalist concept might consider the functions 'Competition', 'Individual Liberties' and 'Participation' as more important than the other six functions. Others might want to set other aggregation rules. The scientific community is explicitly encouraged to test different ways of scaling, aggregating and/or weighting. Of course, researchers should always make sure to theoretically justify their choices.

Appendix 1: Overview

The following pages give a short overview of the functions (concept tree, indicators). Additionally, tables with first results were presented. For detailed information about the indicators and their sources, please refer to the codebook (available at www.democracybarometer.org).

The colors in the conceptual trees have the following meanings:

dark blue: Overall quality of democracy score (QOD)

mint: principles

light blue: functions

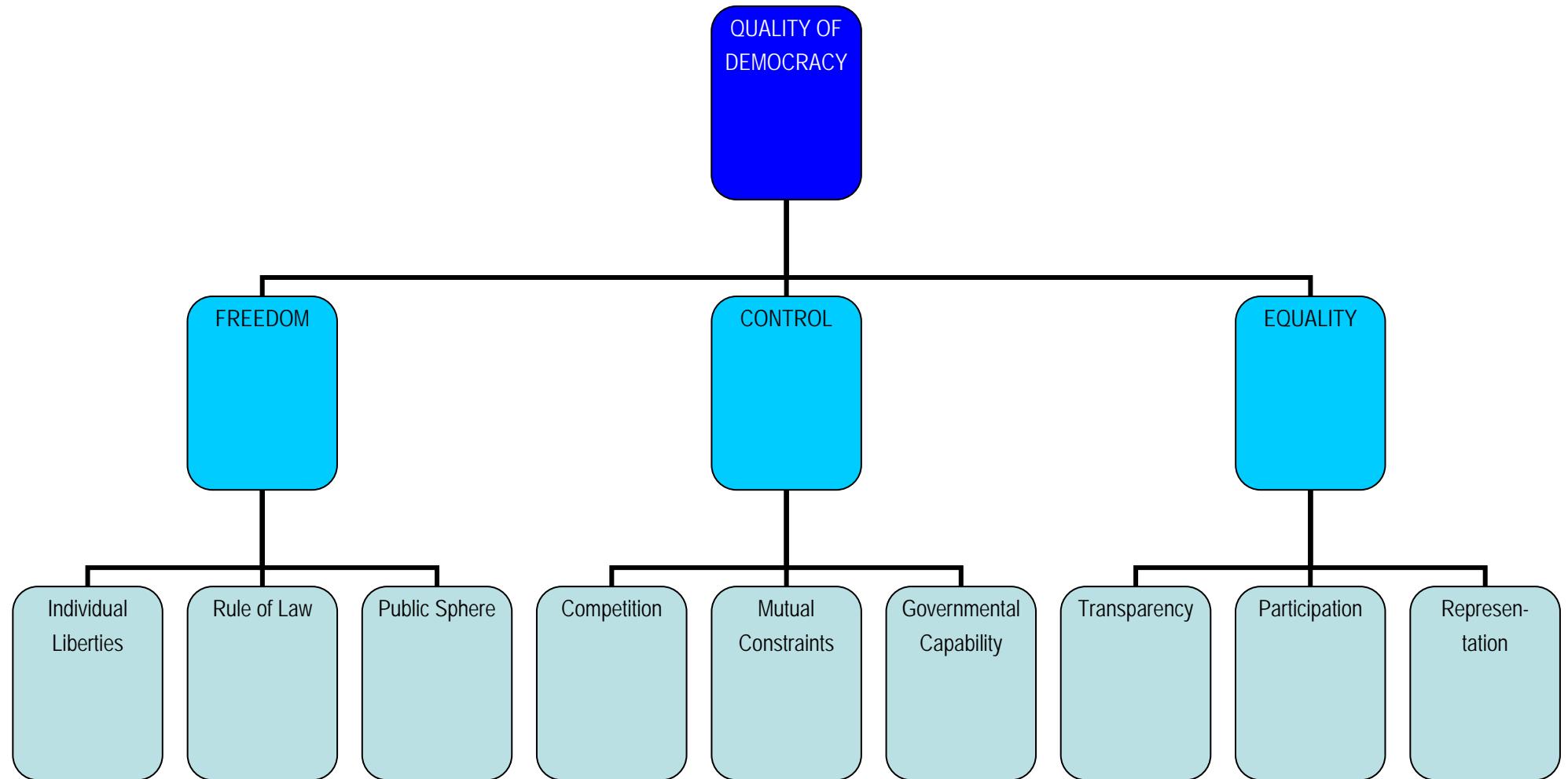
yellow: components

orange: subcomponents measuring effective impact (rules in use)

pink: subcomponents measuring constitutional settings (rules in law)

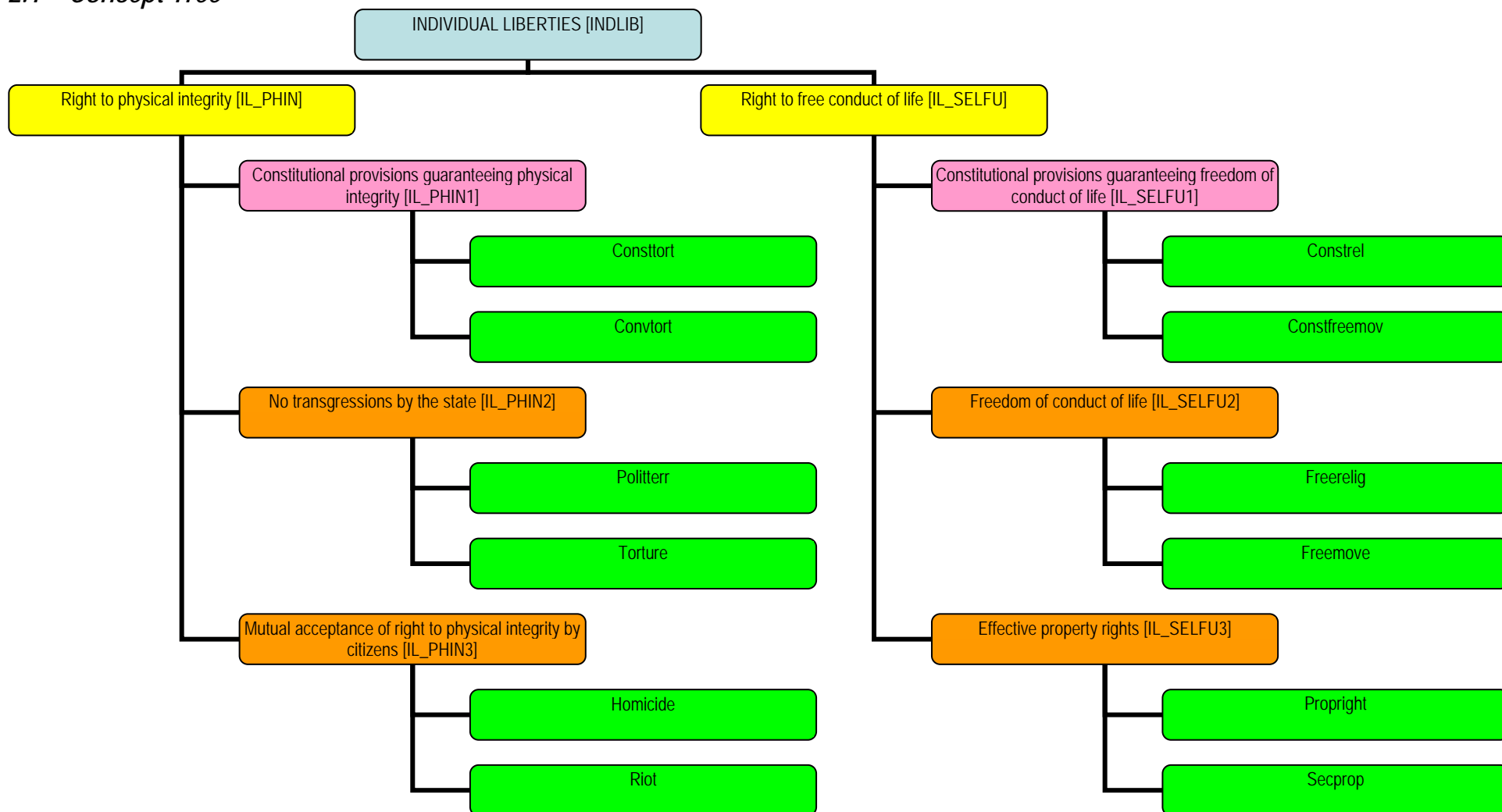
green: indicators

1 OVERALL QUALITY OF DEMOCRACY, PRINCIPLES, FUNCTIONS - CONCEPT TREE



2 INDIVIDUAL LIBERTIES

2.1 Concept Tree



2.2 Individual Liberties: Description of Indicators

Component	Subcomponent	Indicator	Short Description	Source
Right to physical integrity	Constitutional provisions guaranteeing physical integrity	Consttort	Existence of constitutional provisions banning torture or inhumane treatment.	DAP
		Conv TORT	Ratification of Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment.	HDR
	No transgressions by the state	Politterr	Political Terror Scale; degree of political terror by government.	PTS
		Torture	Torture and other cruel, inhumane, or degrading treatment or punishment.	CIRI
	Mutual acceptance of right to physical integrity by citizens	Homicide	Number of homicides per 100'000 capita (multiplied with -1).	EUROSTAT, WHO, PHO, UNO
		Riot	Number of violent demonstrations or clashes of more than 100 citizens involving the use of physical force (multiplied with -1).	Banks
Right to free conduct of life	Constitutional provisions guaranteeing right to freedom of conduct of life	Constrel	Existence of constitutional provisions protecting religious freedom.	DAP
		Constfreemov	Existence of constitutional provisions guaranteeing freedom of movement.	Div. constitutions
	Freedom of conduct of life	Freerelig	Extent to which the freedom of citizens to exercise and practice their religious beliefs is subject to actual government restrictions. 0 = government restricted some religious practices; 1 = no restrictions.	CIRI
		Freemove	Citizens' freedom to travel within their own country and to leave and return to that country. 0 = restricted in a given year; 1 = generally unrestricted.	CIRI
	Effective property rights	Propright	Measures the degree to which a country's laws protect private property rights and the degree to which its government enforces those laws.	HF
		Secprop	Personal security and private property are adequately protected.	IMD

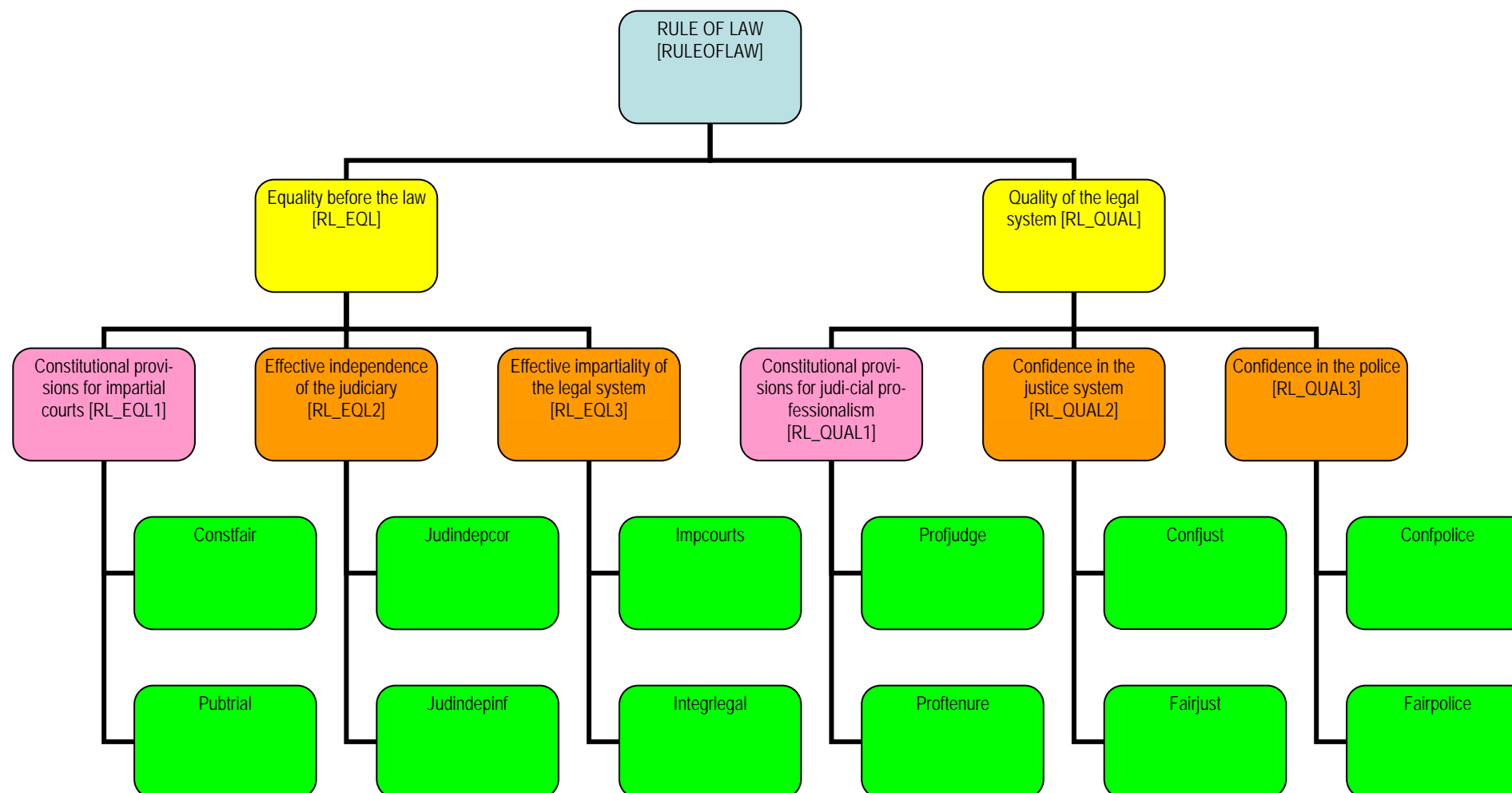
2.3 Individual Liberties: Country Scores

Descriptives: Countries (ranked according to mean)

Country	Right to physical integrity		Right to free conduct of life		INDIVIDUAL LIBERTIES		
	1995	2005	1995	2005	1995	2005	MEAN
Finland	99.3	99.5	98.1	99.1	99.3	99.6	99.37
Sweden	99.7	96.4	89.8	95.2	97.1	97.8	97.40
Switzerland	78.1	89.2	83.3	90.4	87.8	94.3	93.64
Hungary	93.7	85.7	81.0	89.1	92.6	92.7	93.14
Slovenia	99.4	94.7	65.3	72.9	87.7	89.7	90.42
New Zealand	91.4	84.6	78.9	78.5	91.0	88.5	90.33
Japan	70.9	91.4	89.0	80.8	86.8	91.8	90.15
Germany	77.4	74.2	93.5	81.8	91.2	85.5	90.14
Canada	82.9	74.5	87.4	89.6	91.1	88.6	90.00
Malta	83.1	77.7	68.6	87.9	83.3	89.3	87.80
Luxembourg	83.2	91.4	67.3	72.0	82.7	88.2	86.76
Norway	99.8	99.8	62.3	63.9	86.3	87.1	85.99
Spain	77.6	77.5	79.1	80.5	85.9	86.4	85.09
Iceland	66.7	83.1	71.3	71.3	76.7	84.6	83.94
Netherlands	82.9	83.0	66.6	71.2	82.2	84.6	83.72
Cyprus	85.8	85.7	35.2	87.9	58.9	92.3	82.20
United States	73.0	54.1	74.8	79.7	81.8	73.0	81.11
Denmark	83.0	83.0	63.5	65.6	80.6	81.7	80.73
Austria	74.7	69.3	81.5	82.5	85.6	83.4	80.33
Poland	74.4	70.8	64.8	66.7	77.3	76.5	79.64
United Kingdom	62.1	67.8	70.6	70.7	73.7	77.0	79.49
Czech Republic	69.0	72.5	63.9	70.8	73.9	79.6	79.37
Portugal	74.4	77.5	62.3	64.6	75.8	78.6	78.79
Belgium	66.3	77.4	67.3	69.7	74.3	81.4	78.37
Costa Rica	71.5	73.2	68.6	68.6	77.9	78.7	77.98
Ireland	66.4	78.1	67.5	70.7	74.5	82.2	77.92
Australia	82.9	65.7	62.8	65.0	80.1	72.7	76.45
Italy	60.7	69.2	59.8	61.4	66.2	72.5	71.56
France	70.6	59.1	54.2	57.2	68.3	63.4	64.53
South Africa	25.0	57.7	65.8	67.6	36.7	69.1	60.49

3 RULE OF LAW

3.1 Concept Tree



3.2 Rule of Law: Description of Indicators

Component	Subcomponent	Indicator	Short Description	Source
Equality before the law	Constitutional provisions for impartial courts	Constfair	Constitutional provisions for fair organization of the court system (no exceptional courts and hierarchical judicial system).	DAP
		Pubtrial	Constitutional provisions guaranteeing a public trial.	DAP
	Effective independence of the judiciary	Judindepcor	Level of independence of the judiciary (no inside corruption or outside influence).	AHR
		Judindepinf	Level of independence of the judiciary from political influences of members of government, citizens, or firms.	WEF
	Effective impartiality of the legal system	Impcourts	Legal framework is not inefficient and subject to manipulation.	WEF
		Intgrlegal	Integrity of the legal system.	Fraser
Quality of the legal system	Constitutional provisions for judicial professionalism	Profjudge	Professionalism (law degree, professional experience) is a precondition for appointment of judges to highest courts.	Kritzer
		Proftenure	Professionalism of judges concerning length of tenure. Professionalism is high, if tenure is not constricted, i.e. it is lifelong.	Kritzer
	Confidence in the justice system	Confjust	Share of citizens with confidence in the legal system.	WVS, LB, AsB, AFB
		Fairjust	Assessment of the confidence in the fair administration of justice in the society.	IMD
	Confidence in the police	Confpolice	Share of citizens with confidence in the police.	WVS, LB, AsB, AFB
		Fairpolice	Assessment of reliability/effectiveness of the police services	WEF

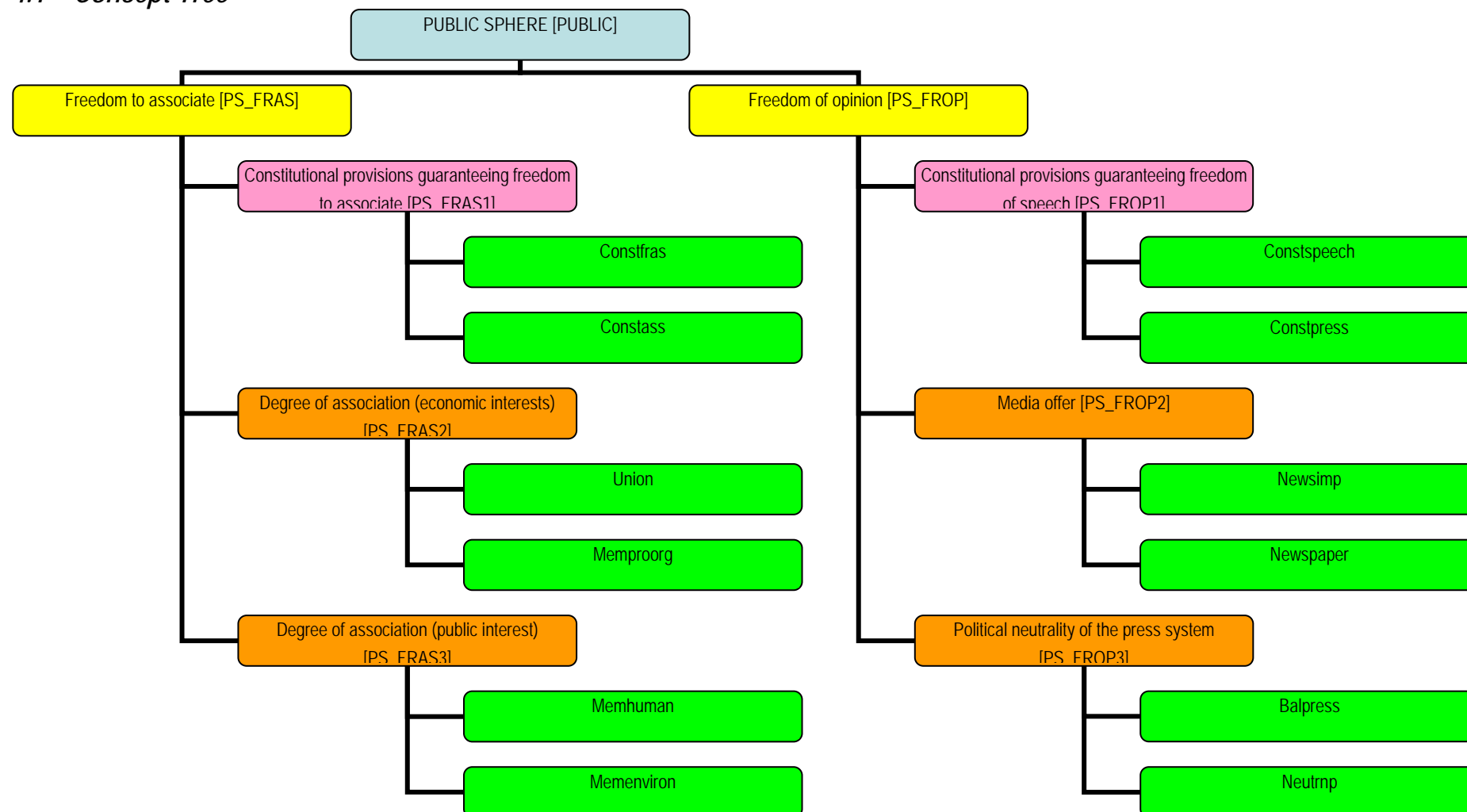
3.3 Rule of Law: Country Scores

Descriptives: Countries (ranked according to mean)

Country	Equality before the law		Quality of legal system		RULE OF LAW		
	1995	2005	1995	2005	1995	2005	MEAN
Denmark	92.5	91.5	94.1	97.3	96.4	97.0	96.98
Sweden	95.1	87.6	80.6	81.8	92.9	90.8	93.04
Finland	95.0	88.3	78.0	84.2	91.9	92.0	92.81
Austria	79.7	79.5	82.1	87.7	88.0	90.0	89.48
Luxembourg	88.0	81.8	77.4	79.0	89.2	87.6	89.08
Canada	88.7	79.4	75.9	73.3	88.9	84.0	87.50
United States	84.4	73.7	74.9	73.8	86.8	81.6	85.11
New Zealand	80.8	74.4	72.4	69.8	84.3	80.0	83.65
Netherlands	79.7	77.1	74.0	68.5	84.5	80.6	82.55
Australia	79.4	75.6	69.6	69.1	82.2	80.2	82.09
Norway	63.6	60.2	94.9	89.5	85.3	81.4	81.96
Ireland	75.7	68.9	73.5	73.4	82.5	79.0	80.34
Japan	78.6	74.0	73.9	70.0	83.9	79.9	79.95
Germany	74.9	70.4	64.5	69.7	77.3	77.9	76.51
Portugal	80.1	70.5	62.0	61.7	78.4	73.4	75.31
United Kingdom	70.0	63.3	63.0	57.5	73.9	66.4	71.54
Switzerland	69.3	81.0	52.3	51.9	66.2	72.0	69.81
Iceland	57.3	60.1	62.2	64.9	65.5	69.1	67.70
Belgium	72.0	70.6	55.2	54.8	69.8	68.8	67.65
Hungary	67.1	51.8	59.4	61.7	69.9	61.2	64.69
Slovenia	71.9	59.0	51.8	50.2	67.2	58.1	63.76
Cyprus	61.5	72.2	45.5	46.1	55.8	62.8	58.59
Spain	66.9	53.4	47.8	49.4	61.2	53.6	56.49
Czech Republic	66.0	44.6	49.0	45.7	61.7	43.9	54.48
France	47.2	46.7	58.3	55.8	55.2	53.1	53.20
South Africa	56.6	57.3	48.2	44.1	54.8	51.9	52.56
Malta	60.9	53.9	31.3	42.3	41.6	48.0	46.71
Poland	55.2	37.8	48.0	53.9	53.7	43.9	44.19
Italy	43.6	27.1	41.6	42.1	39.9	26.4	39.15
Costa Rica	50.8	58.6	16.1	18.1	19.3	24.7	22.50

4 PUBLIC SPHERE

4.1 Concept Tree



4.2 Public Sphere: Description of Indicators

Component	Subcomponent	Indicator	Short Description	Source
Freedom to associate	Constitutional provisions guaranteeing freedom to associate	Constfras	Existence of constitutional provisions guaranteeing freedom of association.	DAP
		Constass	Existence of constitutional provisions guaranteeing freedom of assembly.	DAP
	Degree of association (economic interests)	Union	Trade union density.	ILO
		Memproorg	Membership in professional organizations (share of respondents).	WVS, LB, AsB, AfB
	Degree of association (public interests)	Memhuman	Membership in humanitarian organizations (share of respondents).	WVS, LB, AsB, AfB
Memenviron		Membership in environmental/animal rights organizations (share of respondents).	WVS, LB, AsB, AfB	
Freedom of opinion	Freedom of speech	Constspeech	Existence of constitutional provisions guaranteeing freedom of speech.	DAP
		Constpress	Existence of constitutional provisions guaranteeing freedom of press.	DAP
	Media offer	Newsimp	Import of newspapers, journals and periodicals as a % of GDP.	CD, OECD
		Newspaper	Number of daily newspapers per 1 million inhabitants.	WPT
	Political neutrality of press system	Balpress	Ideological balance of the press system.	BPHW
Neutrnpr		Share of neutral / independent newspapers' circulation.	BPHW	

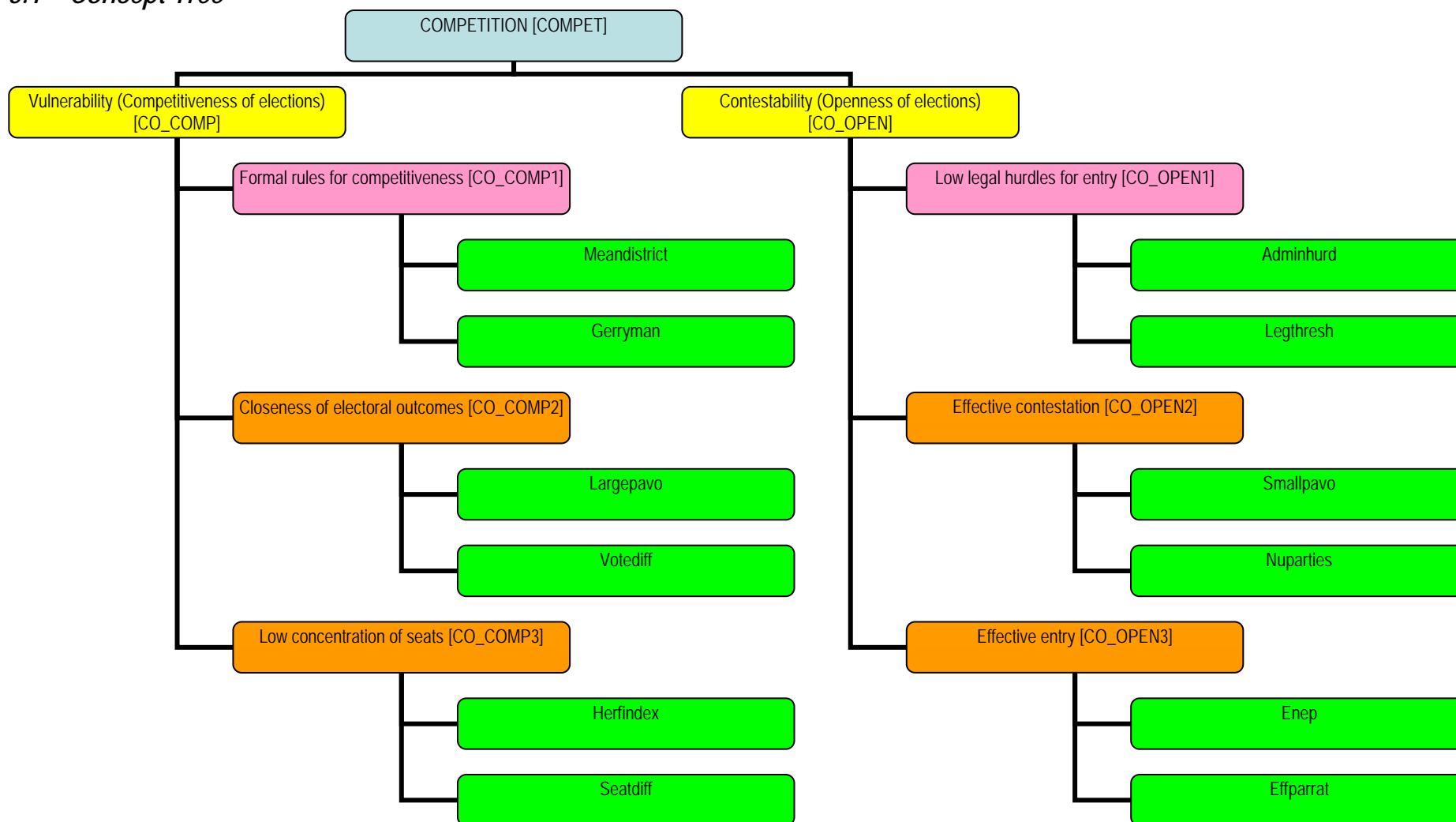
4.3 Public Sphere: Country Scores

Descriptives: Countries (ranked according to mean)

Country	Freedom to associate		Freedom of opinion		PUBLIC SPHERE		MEAN
	1995	2005	1995	2005	1995	2005	
United States	45.8	45.6	59.5	61.4	54.8	55.9	56.79
Luxembourg	48.3	48.0	51.6	48.6	51.4	48.8	50.54
Belgium	48.8	47.2	47.2	53.7	48.4	52.0	49.62
Finland	43.2	40.5	59.1	59.4	52.3	50.0	49.07
Hungary	41.9	37.1	55.5	56.9	48.7	45.2	45.64
Cyprus	39.3	40.6	54.7	60.9	45.8	51.1	45.40
Sweden	49.4	50.6	33.7	42.8	37.0	46.1	42.04
Switzerland	21.2	37.1	55.3	64.8	27.1	50.0	41.01
Netherlands	47.9	55.6	32.7	38.9	35.2	46.1	40.97
Iceland	42.0	44.3	43.4	51.4	40.1	47.9	40.01
Denmark	41.5	40.3	36.4	36.3	34.1	33.0	33.74
Norway	19.3	31.6	63.2	61.0	28.1	41.9	32.58
Canada	34.6	35.1	40.2	37.5	31.6	30.1	30.09
Malta	28.6	30.8	36.5	45.3	24.3	31.7	29.17
Slovenia	27.7	31.3	46.1	45.6	29.3	32.4	28.43
New Zealand	40.7	36.4	29.5	31.0	27.7	26.1	28.21
South Africa	31.7	27.7	32.2	41.6	23.7	26.7	26.72
Czech Republic	33.9	24.6	34.1	44.2	26.7	25.2	25.16
Germany	28.1	23.0	39.6	36.8	25.8	19.9	22.98
Italy	26.5	27.8	32.0	31.4	19.9	20.5	20.51
Poland	26.5	19.1	39.1	35.7	24.1	16.1	18.37
Portugal	22.3	20.6	35.0	34.6	18.4	16.9	17.17
Japan	23.0	23.0	29.9	31.2	16.3	17.0	16.02
Costa Rica	29.9	25.4	15.4	24.0	11.0	14.4	15.27
Ireland	19.6	18.5	33.9	33.1	15.8	14.5	14.96
Spain	22.4	21.7	26.6	28.7	14.2	14.8	14.17
United Kingdom	21.0	22.6	20.0	18.6	10.0	10.0	9.88
Austria	11.7	12.7	27.7	23.2	7.8	7.1	7.43
Australia	24.2	20.0	9.5	5.9	5.5	2.8	4.11
France	5.8	2.5	25.6	26.9	3.6	1.6	2.14

5 Competition

5.1 Concept Tree



5.2 Competition: Description of Indicators

Component	Subcomponent	Indicator	Short Description	Source
Vulnerability (Competitiveness of elections)	Formal rules for competitiveness	Meandistrict	Mean district magnitude	Keefer
		Gerryman	Possibilities to delimit electoral districts; categories: 3 = no possibility; 2 = body responsible for drawing the boundaries is NOT executive or legislative; 1 = legislative is responsible for drawing the boundaries; 0 = executive is responsible for drawing the boundaries.	ACE
	Closeness of electoral outcomes	Largpavo	Margin of electoral concentration of votes; $Comp = 100\% - p_{strongest}$, where $p_{strongest}$ = percentage of votes obtained by strongest party.	ACEA, AED, EEA, IPU, WZB.
		Votediff	100-Difference between largest and second largest lower house party in % of all votes.	ACEA, AED, EEA, IPU, WZB.
	Low concentration of seats	Herfindex	Herfindahl index: the sum of the squared seat shares of all parties in parliament. Measures the degree of concentration (multiplied with -1).	Keefer
		Seatdiff	100-Difference between largest and second largest lower house party in % of all seats.	ACEA, AED, EEA, IPU, WZB.
Contestability (Openness of elections)	Low legal hurdles for entry	Adminhurd	Low administrative hurdles to become a competitor.	Bischoff, Hug, ACE, IPU, Bowler et al., CoE, Tavits, Elklit/Reynolds
		Legthresh	No or low legal electoral threshold; $100 - \text{legal threshold}$; when no legal threshold = 100	Keefer; Norris
	Effective contestation	Smallpavo	Chance for small parties to win a seat: share of votes of smallest party in national parliament (multiplied with -1).	WZB, IPU, Psephos, ACEA, AED, EEA, IPU, WZB.
		Nuparties	Number of important parties (>1% of votes) running for elections.	WZB, IPU, Psephos, ACEA, AED, EEA, IPU, WZB.
	Effective entry	Enep	Effective number of parties at the electoral level.	Gallagher
		Effparrat	Ratio of effective number of parties at the parliamentary level and the effective number of parties at the electoral level.	Gallagher

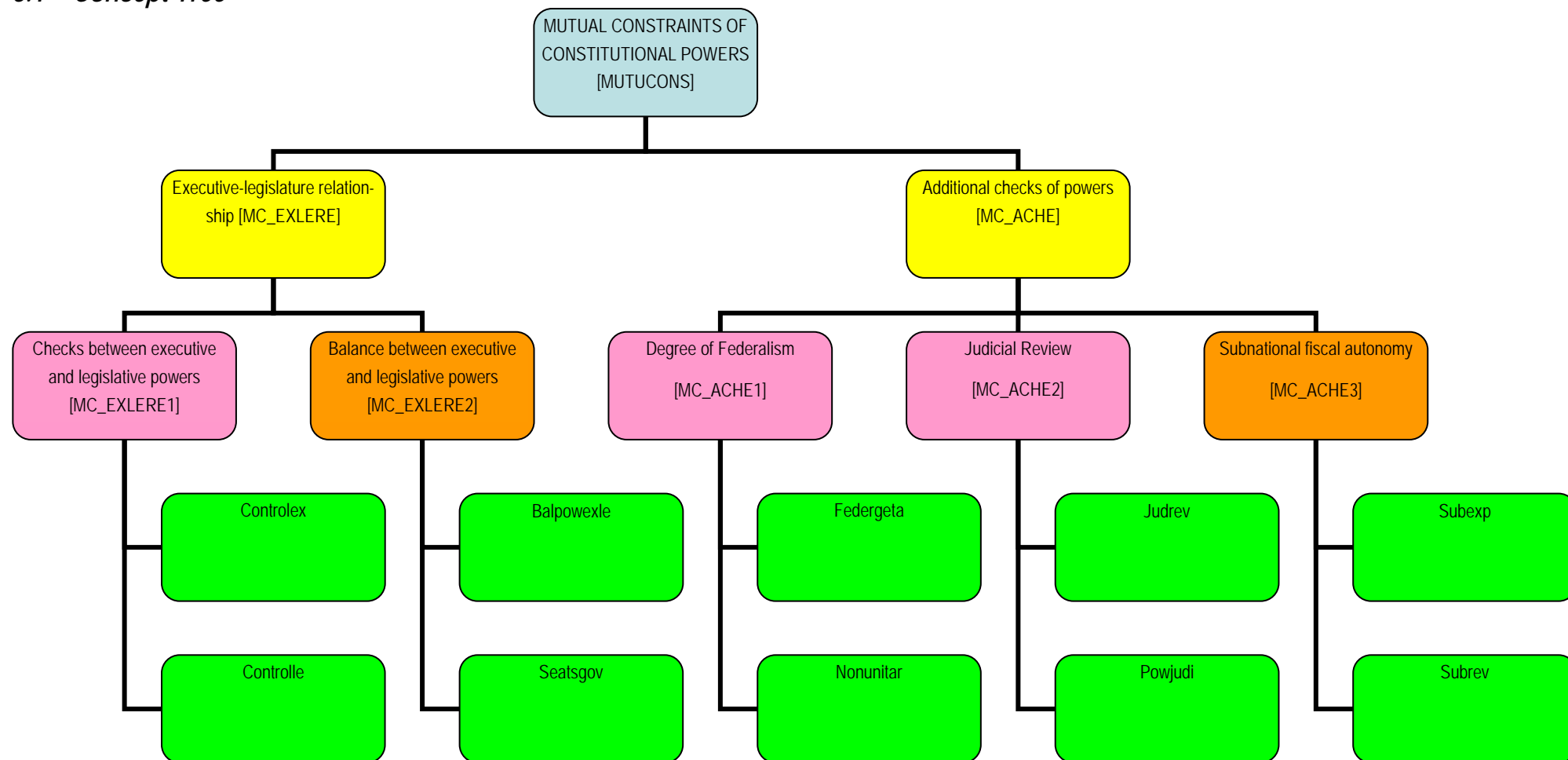
5.3 Competition: Country Scores

Descriptives: Countries (ranked according to mean)

Country	Vulnerability (Competitiveness)		Contestability (Openness)		COMPETITION		
	1995	2005	1995	2005	1995	2005	MEAN
Netherlands	93.0	91.0	69.8	66.1	87.7	85.2	85.82
Switzerland	78.3	73.6	85.1	78.1	88.6	83.6	85.80
Belgium	69.1	71.6	79.2	63.3	81.9	74.9	81.38
Denmark	67.2	73.6	72.5	70.6	77.7	80.1	78.73
Finland	61.1	66.4	72.2	70.1	73.9	75.9	75.49
Luxembourg	59.6	52.4	70.4	69.0	71.9	66.0	71.94
Slovenia	62.7	61.3	71.9	73.2	74.8	74.5	71.10
Cyprus	56.1	59.8	59.2	66.2	62.7	69.7	67.53
Norway	60.1	68.7	55.1	53.4	62.6	66.7	66.81
Iceland	55.3	58.9	69.0	66.8	68.2	69.5	66.61
Portugal	55.4	54.1	58.6	59.9	61.7	61.7	64.83
Spain	63.0	60.7	55.7	56.9	64.8	64.3	63.63
Italy	55.4	46.9	68.8	65.3	68.2	59.5	63.25
Japan	43.0	48.7	67.7	63.4	57.4	59.7	62.51
Costa Rica	53.8	65.5	52.5	53.1	56.2	64.5	59.56
Austria	66.1	64.0	46.9	41.6	59.9	53.9	57.59
New Zealand	47.4	53.7	46.6	60.1	46.9	61.6	56.80
Sweden	43.7	45.9	59.7	58.8	53.1	54.5	56.37
Australia	36.2	42.4	63.5	65.5	48.3	55.6	55.51
Ireland	44.0	36.9	69.0	66.9	59.1	51.0	55.39
France	59.0	39.0	52.1	56.3	59.6	46.6	55.04
Germany	55.3	57.4	50.0	50.9	55.4	57.5	54.61
Czech Republic	50.7	58.8	51.8	40.3	53.4	49.5	53.12
Poland	62.2	60.7	47.1	54.4	57.6	62.5	52.51
United Kingdom	45.2	43.3	59.2	59.9	54.1	52.9	46.79
Hungary	49.3	49.2	40.0	37.4	42.7	40.4	45.13
United States	35.6	37.3	55.0	54.3	42.5	43.7	44.53
Malta	47.9	47.2	41.8	40.2	43.2	41.4	42.59
Canada	26.7	45.4	50.6	58.9	30.8	54.0	40.49
South Africa	34.7	21.5	38.4	39.7	30.4	20.1	24.97

6 Mutual Constraints

6.1 Concept Tree



6.2 Mutual Constraints: Description of Indicators

Component	Subcomponent	Indicator	Short Description	Source
Executive-legislature relationship	Checks between executive and legislative powers	Controlle	Possibility for executive branch for veto power over laws passed by the legislature and for dissolving the legislature.	IAEP
		Controlex	Possibility for legislative branch to remove executive from office (instruments such as vote of no confidence / impeachment as well as difficulty to proceed).	IPU, Ismayr
	Balance between executive and legislative powers	Balpowexle	Balance of powers (opposition vs. government) according to Altman/Perez-Liñan 2002.	ACEA, AED, EEA, IPU, WZB.
		Seatsgov	100- Proportion of parliamentary seats belonging to governing parties.	ACEA, AED, EEA, IPU, WZB.
Additional checks of powers	Judicial review	Judrev	The extent to which judges (either Supreme Court or constitutional court) have the power to review the constitutionality of laws in a given country (from 2: full review of constitutionality of laws; 1: limited review of constitutionality; 0 no review).	La Porta et al.
		Powjudi	Power of judiciary. Possibility to control political decisions.	DAP
	Degree of Federalism	Ferdergeta	Federalism index as developed by Geering-Thacker (6 - unitarism); 1 = unitarian state; 5 = strong federal state	GETA
		Nonunitar	Average of Nonfederalism and Nonbicameralism (2-unitar);	QOG
	Subnational fiscal autonomy	Subexp	Subnational expenditures as a percentage of total expenditures	WB / IMF(GFS)
		Subrev	Subnational revenues as a percentage of GDP	WB / IMF(GFS)

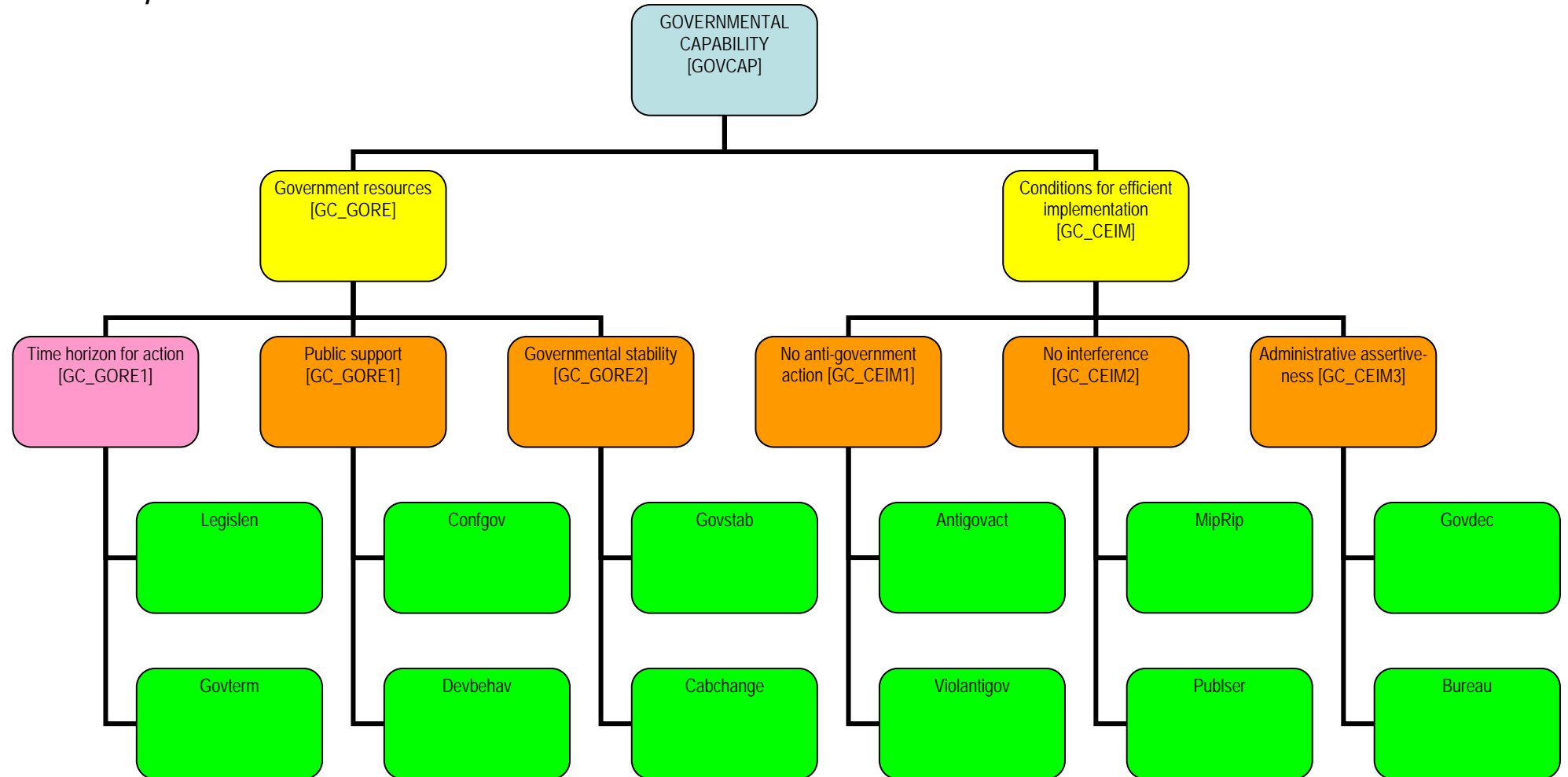
6.3 Mutual Constraints: Country Scores

Descriptives: Countries (ranked according to mean)

Country	Executive-legislature relationship		Additional checks of powers		MUTUAL CONSTRAINTS		
	1995	2005	1995	2005	1995	2005	MEAN
Australia	60.5	68.1	87.7	85.1	80.8	83.9	84.09
Germany	65.3	50.1	87.3	87.6	83.3	73.7	82.89
Canada	68.7	84.1	73.9	74.7	79.2	86.6	81.70
United States	59.4	57.1	83.9	84.6	78.5	77.3	78.38
Italy	86.0	83.4	50.0	55.0	72.9	75.4	74.99
Denmark	86.6	90.3	46.6	49.3	70.5	74.2	72.26
Czech Republic	67.4	80.8	51.9	52.9	64.7	72.7	70.98
South Africa	46.5	49.1	76.3	79.2	65.3	69.0	68.67
Belgium	77.8	74.4	41.6	47.1	61.7	64.8	64.55
Ireland	74.2	75.5	42.2	40.7	60.4	59.6	63.40
Austria	77.7	86.9	40.5	39.3	60.5	63.8	62.72
Iceland	82.9	86.5	37.8	40.4	60.4	64.7	62.46
Hungary	64.8	78.0	42.3	43.8	55.1	63.8	61.75
Spain	77.3	77.4	37.8	47.0	57.6	66.3	61.01
Portugal	74.4	69.0	37.5	38.7	55.7	54.0	57.04
Norway	52.9	55.4	48.6	45.1	52.6	51.5	56.41
Finland	72.7	73.8	34.0	34.3	51.0	51.9	51.63
Japan	58.9	42.5	48.5	48.5	56.7	44.3	50.96
Poland	57.2	73.2	32.8	36.8	41.0	54.4	49.32
Costa Rica	64.9	70.9	34.4	35.6	47.2	51.8	48.58
Cyprus	66.4	57.2	35.1	35.2	48.8	43.5	45.39
Sweden	57.0	59.1	34.3	35.3	42.5	44.7	45.23
France	48.5	50.9	33.5	34.6	36.2	38.9	42.07
Malta	53.9	52.1	33.4	33.3	39.6	38.5	39.00
Slovenia	73.8	74.2	21.7	24.2	35.8	39.5	37.03
Luxembourg	65.8	64.5	23.7	21.7	35.0	31.8	34.35
Switzerland	21.8	20.1	59.9	64.4	29.9	29.6	29.08
Netherlands	83.4	87.1	14.5	15.3	27.9	30.4	28.47
New Zealand	82.7	84.7	13.3	13.1	25.6	25.6	25.31
United Kingdom	66.3	58.5	12.3	13.3	19.3	18.4	16.37

7 Governmental Capability

7.1 Concept Tree



7.2 Governmental Capability: Description of Indicators

Component	Subcomponent	Indicator	Short Description	Source
Government resources	Time horizon for action	Legislen	Length of legislative period (if no given rule in constitution the maximum length is taken).	Con
		Govterm	Length of government term.	CIA
	Public support	Confgov	Share of citizens with high confidence in the government.	WVS, LB, AsB, AfB
		Devbehav	Share of citizens which do not endorse behavior and attitudes that are directed against the democratic society.	WVS, LB, AsB, AfB
	Governmental stability	Govstab	Stability of government; A cabinet is seen as stable if it is able to stay in government during the whole legislation.	IPU, WZB
		Cabchange	Number of major cabinet changes (multiplied with -1).	Banks
Conditions for efficient implementation	No anti-government action	Antigovact	Legitimate anti-government action (such as strikes aimed at national government policies or authority or peaceful gatherings for the primary purpose of displaying or voicing their opposition to government policies or authority; multiplied by -1).	Banks
		Violantigov	Illegitimate anti-government action (such as armed activity, sabotage, or bombings carried out by independent bands of citizens or irregular forces and aimed at the overthrow of the present regime or illegal or forced change in the top government elite, any attempt at such a change, or any successful or unsuccessful armed rebellion whose aim is independence from the central government; multiplied by -1).	Banks
	No interference	MipRip	No political interference by military and religion.	ICRG
		Publser	Independence of public service of political interference.	IMD
	Administrative assertiveness	Govdec	Government decisions are effectively implemented.	IMD
		Bureau	Bureaucracy has the strength and expertise to govern without drastic changes in policy or interruptions in government services.	ICRG

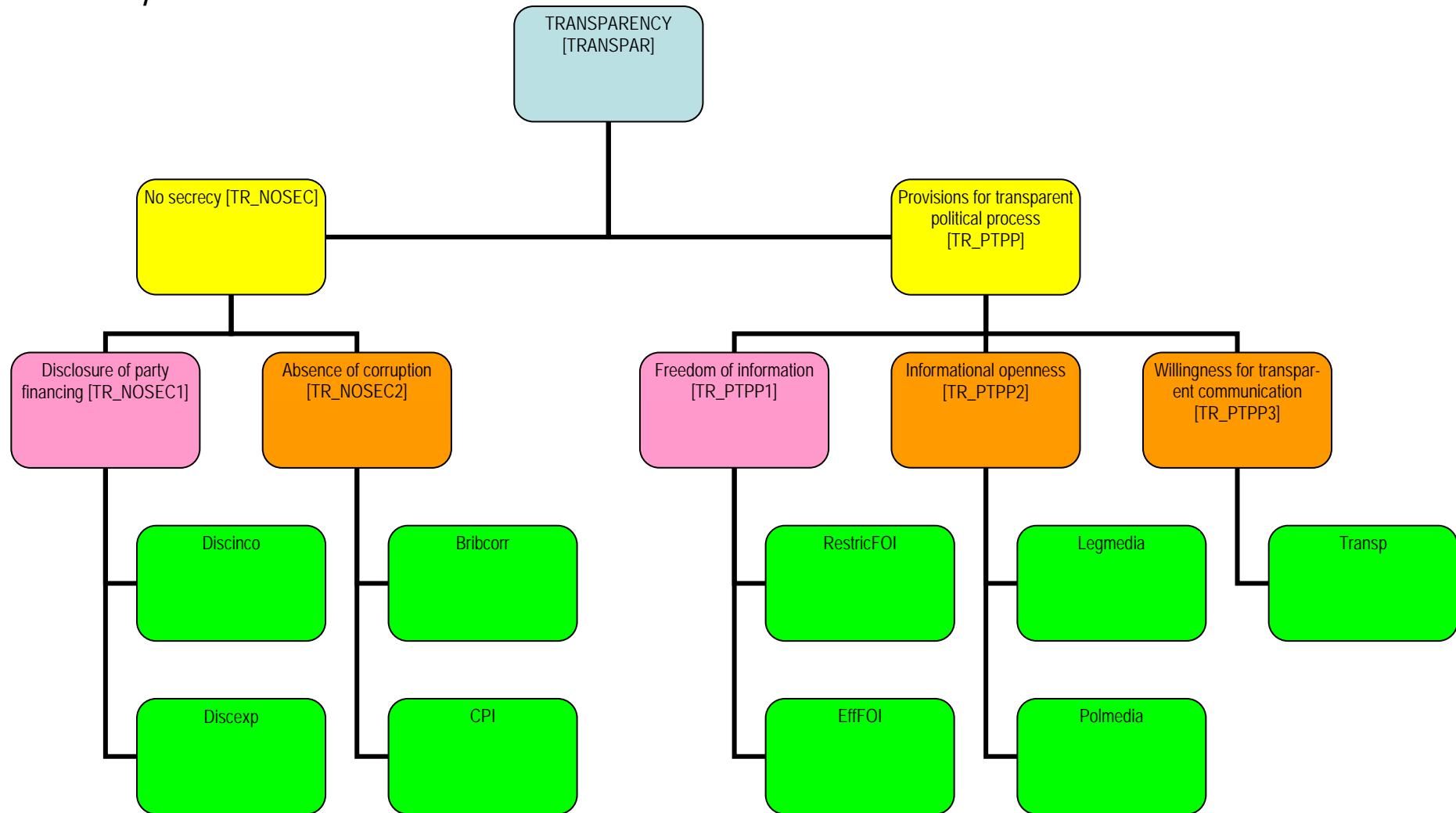
7.3 Governmental Capability: Country Scores

Descriptives: Countries (ranked according to mean)

Country	Government resources		Conditions for efficient implementation		GOVERNMENTAL CAPABILITY		
	1995	2005	1995	2005	1995	2005	MEAN
Luxembourg	75.9	85.7	88.0	86.3	88.6	91.8	91.99
Denmark	76.4	80.7	91.6	96.6	90.1	93.3	91.43
Ireland	80.5	90.0	88.7	80.2	90.7	91.0	91.39
Switzerland	81.7	78.1	89.6	90.1	91.5	90.2	90.97
Canada	82.6	74.9	93.9	85.5	93.2	87.3	90.79
Finland	58.6	83.6	95.3	94.3	82.6	93.7	89.91
Norway	79.7	75.8	89.9	82.4	90.8	86.5	87.79
Iceland	77.2	68.7	86.7	84.6	88.7	84.0	87.15
Netherlands	74.6	74.7	92.3	82.9	89.6	86.2	86.61
United Kingdom	79.8	74.3	68.0	76.3	81.6	83.1	86.06
Sweden	67.0	76.6	83.9	79.0	82.9	85.4	85.51
Australia	69.3	65.8	89.0	93.0	86.0	85.8	85.27
Germany	73.9	65.0	80.2	81.7	84.7	80.8	83.94
Austria	64.1	74.2	80.6	86.8	79.8	87.5	82.51
Malta	93.2	90.7	48.2	62.9	74.6	83.4	80.65
New Zealand	64.4	56.9	93.0	90.7	85.0	79.8	80.44
United States	68.3	66.1	84.5	69.7	83.8	75.6	80.28
Belgium	62.1	72.8	71.2	69.8	74.0	79.2	78.69
Spain	68.7	79.7	68.8	52.0	76.6	71.5	77.25
Cyprus	81.3	82.7	62.6	65.9	79.3	81.7	77.14
Hungary	69.2	50.8	77.0	73.0	80.9	67.1	74.53
Japan	60.2	55.2	77.6	76.8	76.0	72.4	74.19
Czech Republic	82.2	49.8	69.7	68.3	83.5	63.7	73.95
Italy	61.0	84.2	67.6	53.3	71.3	74.6	73.28
South Africa	76.9	74.7	60.6	47.4	76.0	65.2	72.19
France	52.3	52.4	63.9	59.5	62.9	60.1	71.09
Poland	53.9	47.0	63.0	56.4	63.6	53.7	66.71
Portugal	53.8	52.4	66.1	64.7	65.4	63.5	65.55
Slovenia	65.2	67.2	57.5	59.8	67.5	70.2	65.43
Costa Rica	53.6	57.5	45.0	50.4	50.1	57.2	53.99

8 Transparency

8.1 Concept Tree



8.2 Transparency: Description of Indicators

Component	Subcomponent	Indicator	Short Description	Source
No secrecy	Disclosure of party financing	Discinco	Existence of provision for disclosure of income by political parties.	ACE, Casas-Zamora, IDEA-F, ODG, Toplak
		Discexp	Existence of provision for public disclosure of expenditure by political parties.	ACE, Casas-Zamora, IDEA-F, ODG, Toplak.
	Absence of corruption	Bribcorr	Assessment of the prevalence of bribery and corruption.	IMD
		CPI	Corruption Perception Index, ranging from 0 (high) to 10 (low) and measuring the overall extent of corruption (frequency and/or size of bribes) in the public and political sectors.	TI
Provisions for transparent political process	Freedom of information	RestricFOI	Restriction of freedom of information / barriers for access to official information.	Banisar, Tromp
		EffFOI	Effectiveness of Freedom of Information laws.	Banisar, Tromp
	Willingness for transparent communication	Transp	Assessment of the transparency of government policy.	IMD
	Informational openness	Legmedia	Examination of both the laws and regulations that could influence media content and the government's inclination to use these laws and legal institutions to restrict the media's ability to operate.	FH
Polmedia		Evaluation of the degree of political control over the content of news media.	FH	

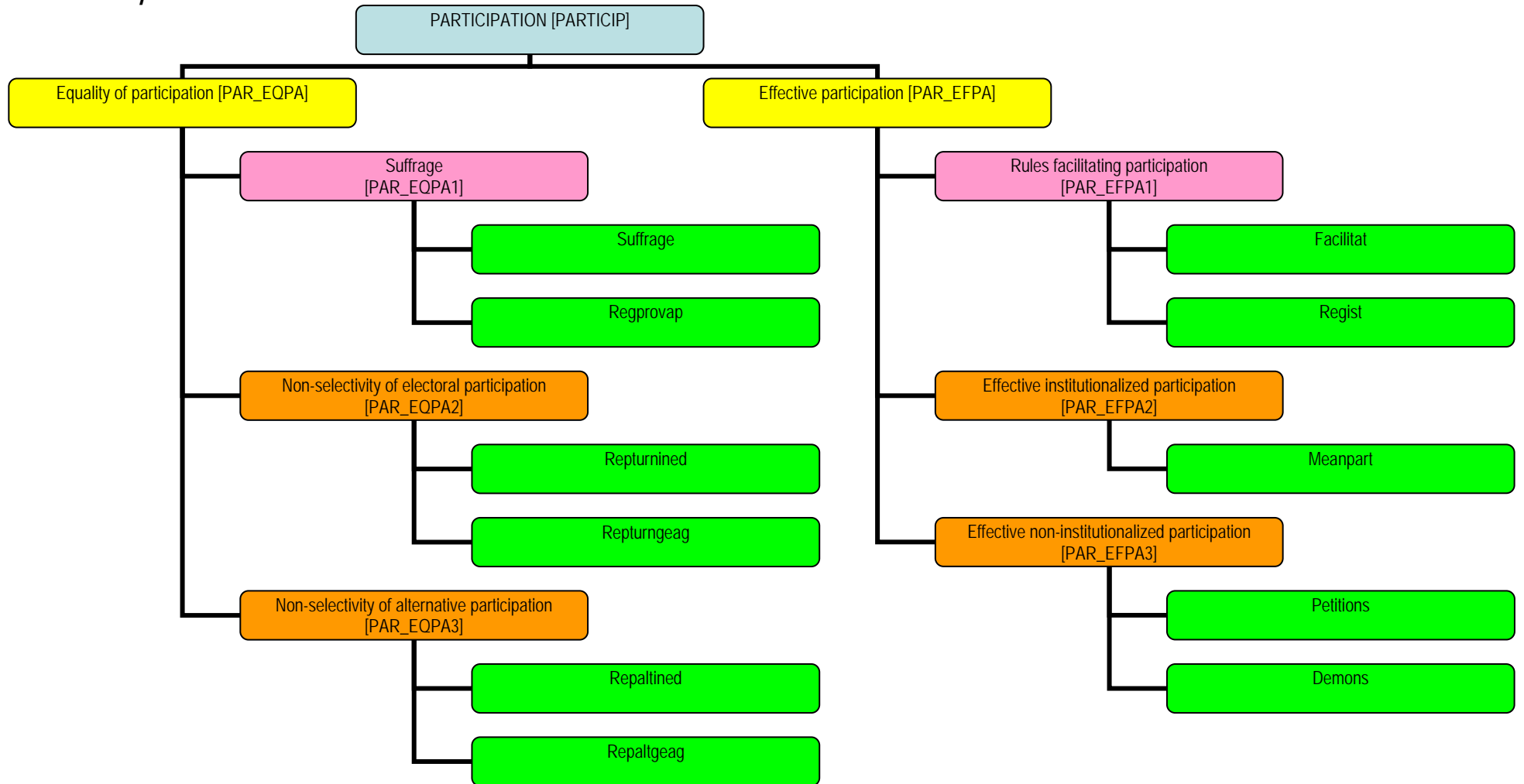
8.3 Transparency: Country Scores

Descriptives: Countries (ranked according to mean)

Country	No secrecy		Provisions for transparent process		TRANSPARENCY		
	1995	2005	1995	2005	1995	2005	MEAN
New Zealand	81.5	78.6	72.0	78.1	84.3	85.9	85.65
Denmark	67.4	67.3	73.7	83.4	78.4	82.8	80.97
Canada	76.0	70.1	59.1	63.6	74.6	74.3	78.56
Australia	68.6	66.9	70.6	69.6	77.4	76.0	77.06
Finland	56.6	60.4	66.8	81.2	67.8	77.9	75.33
Belgium	66.5	72.5	66.0	63.3	73.7	75.4	73.02
Portugal	65.5	67.4	57.5	60.2	67.7	70.6	71.83
United States	64.7	61.1	62.6	61.6	70.6	67.7	71.31
France	67.2	72.5	53.4	54.9	65.8	69.9	67.86
Spain	51.5	68.8	48.0	45.9	51.1	60.7	66.20
Ireland	75.3	62.6	41.8	60.2	60.6	67.7	65.89
Norway	50.2	46.4	74.0	72.3	67.1	63.1	65.66
Netherlands	49.4	45.8	59.9	70.0	58.1	61.2	62.54
United Kingdom	78.6	74.3	24.1	52.0	41.3	68.7	61.85
Iceland	44.1	47.1	48.2	77.3	45.4	66.4	61.09
Sweden	44.2	41.5	71.0	69.8	60.4	57.3	59.00
Slovenia	56.8	54.7	40.9	60.5	48.7	62.5	58.12
Italy	50.3	58.4	44.1	40.4	47.0	49.3	54.29
Germany	56.3	55.2	39.1	36.1	46.7	43.1	44.65
Switzerland	41.6	41.2	47.0	52.8	42.4	46.3	42.90
Austria	32.7	38.6	50.9	55.4	37.0	45.6	42.14
Japan	55.5	57.7	30.4	45.2	37.5	53.1	41.45
Luxembourg	24.9	35.4	41.6	48.6	24.1	38.1	41.32
Hungary	31.6	34.0	40.4	57.1	29.3	42.3	39.35
Poland	55.4	43.5	11.8	48.2	15.5	44.9	33.67
Czech Republic	35.3	30.3	35.0	37.2	28.4	26.1	26.99
Malta	36.6	36.6	29.0	32.1	24.7	27.1	26.73
Costa Rica	39.8	24.0	33.0	30.7	30.0	17.4	25.68
South Africa	18.2	11.0	52.2	64.4	22.2	16.7	18.33
Cyprus	20.7	18.3	34.6	30.9	16.9	13.4	17.09

9 Participation

9.1 Concept Tree



9.2 Participation: Description of Indicators

Component	Subcomponent	Indicator	Short Description	Source
Equality of participation	Suffrage	Suffrage	Extent of universal active suffrage.	Paxton et al., IPU
		Regprovap	Registered voters as a percentage of voting age population.	IDEA
	Non-selectivity of electoral participation	Repturnined	Representative voter turnout in terms of resources (no participation gap in terms of education and income).	WVS, LB, AsB, AfB
		Repturngeag	Representative voter turnout in terms of gender and age (no participation gap).	WVS, LB, AsB, AfB
	Non-selectivity of alternative participation	Repaltined	Representative alternative participation (signing petitions, attending lawful demonstrations) in terms of resources (no participation gap).	WVS, LB, AsB, AfB
Repaltgeag		Representative alternative participation (signing petition and attending lawful demonstrations) in terms of gender and age (no participation gap).	WVS, LB, AsB, AfB	
Effective participation	Rules facilitating participation	Facilitat	Facilitation of electoral participation.	ACE; Blais and Dobrzynska 2007
		Regist	Voter registration is not compulsory.	ACE, IPU, CON
	Effective institutionalized participation	Meanpart	Mean participation rate in % of registered electorate in legislative election and/or presidential elections (copied to all years) and/or national referenda (calculated into mean in corresponding year).	UCI, IDEA, IAEP, C2D
	Effective non-institutionalized participation	Petitions	Practice of non-institutionalized participation: share of survey respondents who indicate having signed petitions.	WVS, LB, AsB, AfB
		Demons	Practice of non-institutionalized participation: share of survey respondents who indicate having attended lawful demonstrations.	WVS, LB, AsB, AfB

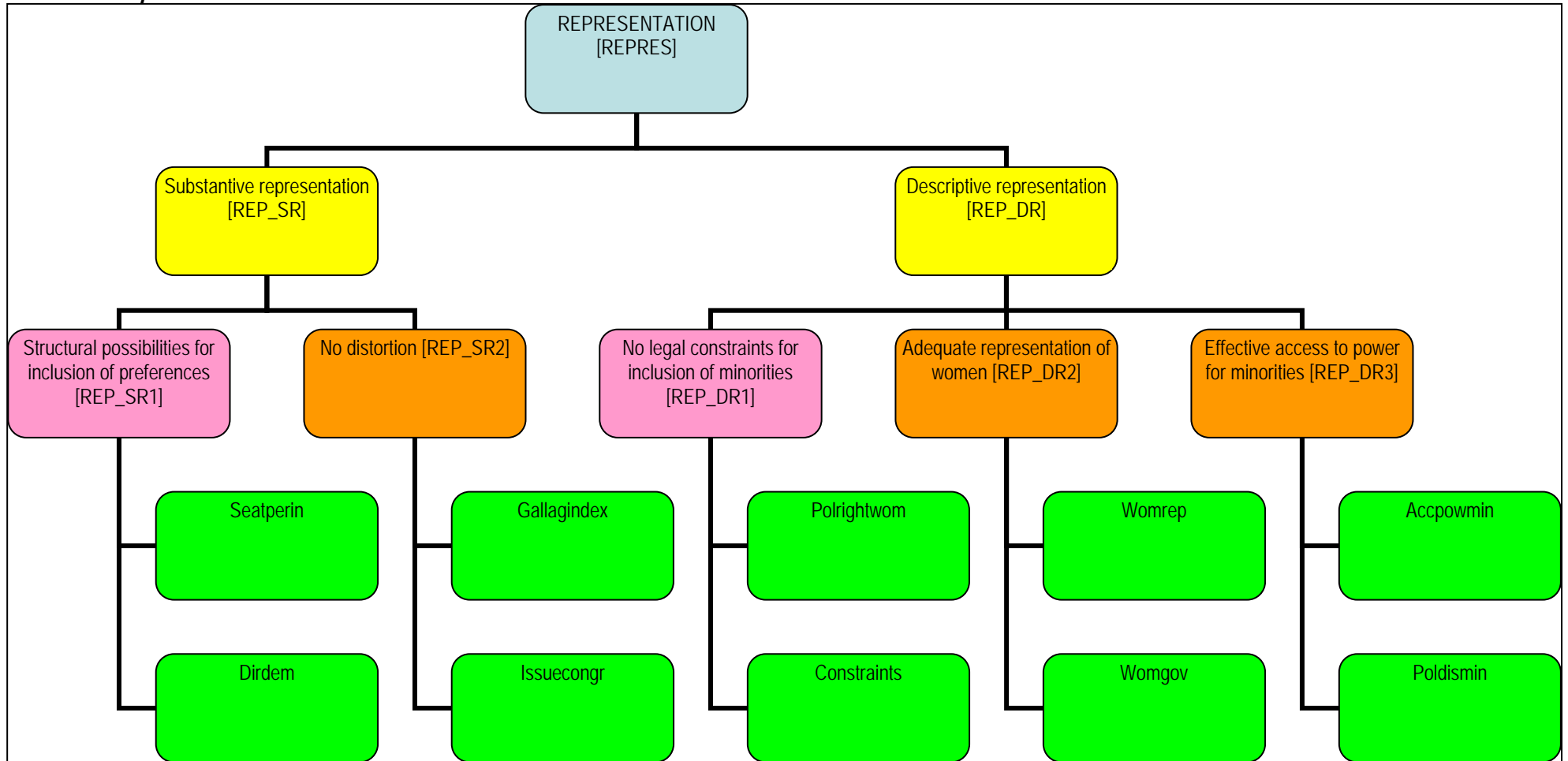
9.3 Participation: Country Scores

Descriptives: Countries (ranked according to mean)

Country	Equality of participation		Effective participation		PARTICIPATION		
	1995	2005	1995	2005	1995	2005	MEAN
Sweden	85.0	82.0	72.7	77.5	86.1	87.0	85.86
Germany	78.5	77.3	70.0	67.6	82.0	80.3	81.68
New Zealand	83.3	78.9	51.6	65.1	72.9	79.6	80.06
Denmark	77.4	79.2	65.0	67.2	78.9	80.9	80.01
Australia	73.1	78.0	66.2	65.4	77.4	79.4	78.84
Iceland	73.4	84.2	63.7	57.1	76.1	77.2	77.52
Belgium	67.7	73.9	64.3	73.5	73.4	81.6	77.00
Norway	72.7	68.2	61.9	66.8	74.7	75.1	75.50
Netherlands	73.8	76.3	60.3	61.0	74.3	75.9	75.38
Czech Republic	74.7	61.5	71.7	55.2	81.1	63.5	73.26
France	63.3	67.7	62.0	66.3	69.3	74.6	71.95
United Kingdom	69.9	68.4	63.4	54.9	74.0	67.6	69.81
Finland	84.1	66.3	49.9	50.3	72.0	62.9	68.80
Italy	67.9	69.4	59.9	51.9	70.8	65.9	67.80
Austria	73.7	66.9	53.7	57.5	69.6	68.5	66.38
Canada	69.8	77.9	52.5	46.2	66.6	65.8	65.43
Spain	51.3	63.0	55.6	48.8	56.6	59.6	63.00
Luxembourg	53.3	46.6	64.8	66.4	64.3	59.9	62.26
Malta	67.4	73.2	44.6	44.4	58.7	61.8	61.30
Slovenia	54.0	67.0	53.9	39.0	57.5	53.2	60.28
Cyprus	49.9	50.2	62.1	60.6	59.9	59.2	59.45
Portugal	62.2	52.7	50.8	40.8	60.7	45.8	53.96
Switzerland	44.1	61.8	43.7	47.8	42.0	58.1	48.08
South Africa	41.5	59.3	42.1	35.2	38.7	44.7	46.41
Ireland	74.1	75.0	33.6	33.3	51.3	51.4	46.38
Japan	59.2	71.0	24.6	37.9	33.0	54.4	45.43
United States	64.4	58.3	32.4	40.0	44.7	48.8	44.16
Costa Rica	70.4	58.5	36.7	19.4	52.8	26.3	42.12
Poland	49.2	53.3	43.3	32.1	45.5	37.9	40.58
Hungary	53.1	43.8	38.2	40.1	43.7	38.9	38.33

10 Representation

10.1 Concept Tree



10.2 Representation: Descriptive of Indicators

Component	Subcomponent	Indicator	Short Description	Source
Substantive representation	Structural possibilities for inclusion of preferences	Seatperin	Number of seats (lower house) per inhabitants.	Keefer; QoG
		Dirdem	Opportunities for direct influence on political decisions. Availability of mandatory and facultative referenda.	BANKS, C2D, ACE
	No distortion	Gallagindex	Index of proportionality according to Gallagher (vote-seat congruence).	ACEA, AED, EEA, IPU, WZB
		Issuecongr	Congruence between left-right positions of voters and left-right positions of parliamentarians (measured by party positions).	Manifestos, WVS, LB, AsB, AfB
Descriptive representation	No legal constraints for inclusion of minorities	Polrightwom	Measures women's political rights, including the right to vote, the right to run for political office, the right to hold elected and appointed government positions, the right to join political parties, and the right to petition government officials.	CIRI, DAP
		Constraints	Measures the existence of constraints regarding passive suffrage.	IPU
	Adequate representation of women	Womrep	Proportion of female representatives in the lower house of parliament in % of all seats.	IPU
		Womgov	Proportion of female representatives in the government (incl. ministers)	IPU; UNECE
	Effective access to power for minorities	Accpowmin	Access to power for minority groups.	MAR
		Poldismin	Index of political discrimination of minority groups concerning their unequal representation.	MAR

10.3 Representation: Country Scores

Descriptives: Countries (ranked according to mean)

Country	Substantive representation		Descriptive representation		REPRESENTATION		
	1995	2005	1995	2005	1995	2005	MEAN
Iceland	88.3	86.7	70.5	78.0	86.3	89.0	89.79
Denmark	65.8	61.8	80.4	85.7	80.7	80.7	82.23
Sweden	60.1	60.9	84.7	90.9	79.3	82.3	79.22
Norway	57.3	49.6	91.1	90.5	80.2	74.6	77.79
Austria	72.8	69.9	61.7	85.8	74.5	85.1	76.60
Slovenia	66.9	68.9	65.8	62.4	73.8	72.9	75.89
Finland	46.1	57.2	84.3	88.5	68.9	79.1	74.61
Netherlands	55.4	56.5	72.8	84.6	70.4	76.9	71.53
Malta	68.4	81.7	44.4	60.0	59.1	77.9	71.34
Spain	61.6	54.8	64.0	89.4	69.5	77.8	69.66
Belgium	55.4	50.9	57.4	77.5	60.9	69.5	67.68
New Zealand	38.5	51.2	67.2	75.6	52.8	68.8	66.99
Ireland	71.6	58.2	52.5	55.0	67.6	61.2	65.19
South Africa	48.7	50.5	63.0	78.3	59.5	69.6	63.63
Luxembourg	69.7	68.4	47.3	45.3	62.4	59.9	62.80
Costa Rica	52.3	51.0	54.0	73.2	56.2	67.3	60.08
Switzerland	68.1	68.1	41.2	43.8	55.9	58.4	59.61
Portugal	51.0	45.2	62.2	63.9	60.9	57.1	59.24
Canada	39.9	46.5	60.5	71.5	50.2	62.7	58.78
Australia	48.4	52.2	53.3	60.7	52.7	60.8	58.33
Hungary	52.8	53.9	49.6	52.1	53.3	56.0	57.01
Germany	37.1	37.6	47.8	79.6	39.1	58.5	52.10
Poland	40.3	51.2	51.3	53.3	44.5	54.9	49.88
Czech Republic	46.9	53.5	40.7	49.3	41.6	53.5	48.04
Cyprus	52.4	45.8	45.9	43.9	50.0	43.5	46.12
United States	43.5	38.6	46.5	48.1	43.7	40.7	41.02
United Kingdom	22.3	36.5	46.8	56.9	24.2	44.6	40.79
Italy	47.7	30.0	43.8	41.2	44.8	28.4	40.27
France	31.2	32.5	42.8	56.6	30.5	40.4	37.75
Japan	42.6	44.4	16.1	20.7	16.3	21.5	20.92

11 Democracy Barometer - Overall Scores

Descriptives: Countries (ranked according to mean)

Country	FREEDOM		CONTROL		EQUALITY		QOD		
	1995	2005	1995	2005	1995	2005	1995	2005	MEAN
Denmark	70.2	69.8	86.3	88.9	86.7	88.4	87.7	88.6	88.30
Finland	84.9	83.9	75.2	79.2	77.4	80.7	86.4	88.3	87.77
Belgium	69.7	73.5	79.9	80.6	76.8	83.2	83.2	86.4	85.12
Iceland	63.9	72.4	79.2	80.1	73.9	84.5	80.0	86.3	83.51
Sweden	75.8	81.2	62.1	64.9	82.1	81.9	80.7	83.3	82.92
Norway	64.0	73.6	74.1	74.0	81.7	78.6	80.8	83.2	82.12
Canada	69.1	66.0	66.3	81.7	69.6	75.1	76.1	81.8	79.41
Netherlands	68.4	75.2	65.2	65.9	74.7	78.8	77.1	81.0	78.97
Luxembourg	79.8	79.6	66.3	62.6	46.3	53.9	69.0	71.6	75.21
United States	80.6	77.0	72.2	70.0	54.3	53.6	75.6	73.4	74.88
Germany	60.9	53.7	80.8	77.7	56.6	64.1	72.5	71.5	73.19
New Zealand	64.5	61.2	47.9	52.5	76.3	85.3	68.1	72.0	72.08
Slovenia	59.9	59.5	61.1	64.6	64.7	68.9	68.4	71.3	69.59
Switzerland	57.6	77.2	67.7	65.9	45.9	57.5	61.0	73.7	67.77
Ireland	47.6	47.3	76.2	72.2	65.1	65.6	68.2	66.8	67.02
Portugal	49.7	47.5	67.0	65.4	69.8	61.8	67.8	62.7	66.73
Spain	42.9	41.2	73.2	74.9	64.0	72.8	63.9	66.7	66.61
Australia	36.5	31.5	76.8	81.3	75.6	79.4	65.1	63.8	65.47
Hungary	75.3	70.2	62.6	60.0	37.7	44.1	60.7	61.9	63.16
Austria	41.4	40.4	73.5	74.4	62.7	71.1	62.6	65.5	63.07
Czech Republic	51.5	44.6	73.3	67.4	46.3	44.1	60.4	53.2	58.25
Italy	34.1	29.4	78.7	77.1	56.2	44.9	56.7	47.4	56.98
Cyprus	56.4	73.9	68.8	69.2	34.0	28.4	53.2	55.7	55.45
Malta	43.9	54.5	52.5	53.7	43.4	53.2	46.0	57.2	54.20
Japan	51.5	52.5	69.5	62.7	18.6	36.8	39.2	50.9	45.78
United Kingdom	38.9	37.8	44.5	43.6	40.8	64.7	37.9	47.9	44.61
France	26.1	22.6	53.8	48.2	54.6	65.1	40.7	39.6	42.82
Poland	47.3	36.1	56.3	61.4	25.6	44.4	38.1	45.9	41.98
South Africa	31.2	45.9	56.6	45.4	32.9	34.9	34.5	38.6	39.83
Costa Rica	19.6	25.7	53.1	62.7	43.7	25.7	31.0	29.2	32.70

11.1 Overall: Ranking

Descriptives: Countries (ranked according to mean rank)

Country	QUALITY OF DEMOCRACY											
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	MEAN
Denmark	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.27
Finland	2.00	2.00	2.00	2.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	1.73
Belgium	3.00	3.00	4.00	5.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.27
Iceland	6.00	4.00	3.00	4.00	5.00	4.00	5.00	4.00	4.00	4.00	4.00	4.27
Sweden	5.00	6.00	6.00	3.00	4.00	5.00	4.00	5.00	5.00	5.00	5.00	4.82
Norway	4.00	5.00	5.00	6.00	7.00	6.00	6.00	6.00	6.00	6.00	6.00	5.73
Canada	8.00	9.00	7.00	7.00	6.00	7.00	8.00	8.00	8.00	7.00	7.00	7.45
Netherlands	7.00	7.00	8.00	8.00	8.00	8.00	7.00	7.00	7.00	8.00	8.00	7.55
Luxembourg	11.00	8.00	10.00	9.00	9.00	9.00	9.00	9.00	9.00	10.00	12.00	9.55
United States	9.00	10.00	9.00	10.00	11.00	10.00	10.00	11.00	11.00	9.00	10.00	10.00
Germany	10.00	11.00	12.00	12.00	10.00	12.00	11.00	10.00	12.00	12.00	13.00	11.36
New Zealand	14.00	12.00	11.00	11.00	12.00	11.00	12.00	13.00	13.00	14.00	11.00	12.18
Slovenia	12.00	14.00	14.00	13.00	13.00	15.00	14.00	14.00	14.00	13.00	14.00	13.64
Switzerland	19.00	21.00	21.00	21.00	15.00	13.00	13.00	12.00	10.00	11.00	9.00	15.00
Ireland	13.00	16.00	17.00	14.00	17.00	14.00	15.00	16.00	16.00	16.00	15.00	15.36
Spain	17.00	17.00	15.00	16.00	16.00	18.00	17.00	15.00	17.00	15.00	16.00	16.27
Portugal	15.00	13.00	13.00	15.00	18.00	17.00	20.00	19.00	15.00	18.00	19.00	16.55
Australia	16.00	15.00	16.00	17.00	19.00	19.00	18.00	17.00	18.00	19.00	18.00	17.45
Hungary	20.00	20.00	19.00	19.00	14.00	16.00	16.00	20.00	20.00	21.00	20.00	18.64
Austria	18.00	19.00	18.00	20.00	21.00	21.00	19.00	18.00	19.00	17.00	17.00	18.82
Czech Republic	21.00	18.00	22.00	22.00	22.00	22.00	21.00	24.00	22.00	23.00	23.00	21.82
Italy	22.00	22.00	20.00	18.00	20.00	20.00	23.00	23.00	25.00	25.00	26.00	22.18
Malta	24.00	24.00	24.00	24.00	24.00	24.00	22.00	21.00	21.00	20.00	21.00	22.64
Cyprus	23.00	23.00	23.00	23.00	23.00	23.00	24.00	22.00	23.00	22.00	22.00	22.82
Japan	26.00	29.00	28.00	29.00	27.00	27.00	25.00	25.00	24.00	24.00	24.00	26.18
United Kingdom	28.00	28.00	26.00	26.00	25.00	26.00	27.00	26.00	26.00	26.00	25.00	26.27
France	25.00	26.00	25.00	25.00	26.00	25.00	26.00	29.00	29.00	29.00	28.00	26.64
Poland	27.00	25.00	27.00	27.00	28.00	29.00	29.00	27.00	27.00	27.00	27.00	27.27
South Africa	29.00	27.00	30.00	28.00	29.00	28.00	28.00	28.00	28.00	28.00	29.00	28.36
Costa Rica	30.00	30.00	29.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	29.91

Sources:

- ACE** ACE Electoral Knowledge Network.
<http://aceproject.org>
- ACEA** Adam Carr's Election Archive.
<http://psephos.adma-carr.net>
- AED** African Election Database.
<http://africanelections.tripod.com>
- AfB** Afrobarometer.
<http://www.afrobarometer.org>
- AHR** Annual Human Rights Reports of the U.S. Department of State.
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- ANU** Australian National University.
<http://www.anu.edu.au>
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- AsB** Asiabarometer.
<https://www.asiabarometer.org>
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BCNTS	Banks Cross-National Time-Series Data Archive. http://www.databanksinternational.com
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BPHW	Banks' Political Handbooks of the World.
C2D	Centre for Research on Direct Democracy. http://www.c2d.ch
Casas-Zamora (2005)	Casas-Zamora, Kevin (2005). Paying for Democracy: Political finance and state funding for parties. Essex: ECPR press.
CD	Comtrade Database (UN). http://comtrade.un.org
CDA	CentralAmericaData. http://www.centralamericadata.com/es/article/home/Costa_Rica_y_El_Salvador_sin_Ley_de_Acceso_a_Informacion
CIA	CIA World Factbook.
CIRI	The Cingranelli-Richards (CIRI) Human Rights Dataset. http://ciri.binghamton.edu/index.asp
CMP	Comparative Manifestos Project Data Set. http://www.wzb.eu/zkd/dsl/Projekte/projekte-manifesto.en.htm

CoE	Council of Europe (1998). Prohibition of political parties and analogous measures report. http://www.venice.coe.int/docs/1998/CDL-INF(1998)014-e.asp
CON	Specific constitution of every country. http://confinder.richmond.edu
Coppedge (1997)	Coppedge, Michael (1997). "A Classification of Latin American Political Parties", Kellogg Institute for International Studies Working Paper #244. http://lasa.international.pitt.edu/members/congress-papers/lasa2004/files/CoppedgeMichael.pdf
CSD	Center for the Study of Democracy. UC Irvine. http://www.democ.uci.edu/resources/archive.php
CSES	Comparative Study of Electoral Systems. http://www.cses.org
CTS	United Nations Surveys on Crime Trends and the Operations of Criminal Justice Systems. http://www.unodc.org/unodc/en/data-and-analysis/United-Nations-Surveys-on-Crime-Trends-and-the-Operations-of-Criminal-Justice-Systems.html
DAP	Democracy Assistance Project - Phase II. Steven E. Finkel, Anibal Perez-Liñan, Mitchell A. Seligson and C. Neal Tate http://www.pitt.edu/~politics/democracy/democracy.html
DPI	Database of Political Institutions 2009. Thorsten Beck , Philip E. Keefer, George R. Clarke, Thorsten Beck and Philip E. Keefer . Development Research Group. The World Bank. http://siteresources.worldbank.org/INTRES/Resources/DPI2009_corrected_April2010.dta
EEA	Essex Election Archive. Political Transformation and the Electoral Process in Post-Communist Europe. http://www.essex.ac.uk/elections/
EED	European Election Database. http://www.nsd.uib.no/european_election_database
EFWP	Economic Freedom of the World Project. Fraser Institute. http://www.freetheworld.com
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ESS	European Social Survey. http://www.europeansocialsurvey.org
Eurofound	European Foundation for the Improvement of Living and Working Conditions. http://www.eurofound.europa.eu
EUROSTAT	European Commission. Eurostat – key to European statistics. http://epp-eurostat.ec.europa.eu/portal/page/portal/eurostat/home
EV	Early Voting. United States. http://www.earlyvoting.net/blog/2010/05/balloting-busy
FH	Freedom House. Freedom of the Press. http://www.freedomhouse.org/template.cfm?page=16
GALLAGHER	Election indices (www.tcd.ie/Political_Science/staff/michael_gallagher/E Systems/Docts/ElectionIndices.pdf); also see: Gallagher, Michael (1991). Proportionality, disproportionality and electoral systems. Comparative Electoral Studies 10(1): 33-51. Gallagher, Michael and Paul Mitchell (2008; eds). The Politics of Electoral Systems. Oxford: Oxford University Press.
GALLUP	Gallup Organization. http://www.gallup.com
GCR	Global Competitiveness Report World Economic Forum. http://www.weforum.org/en/initiatives/gcp/Global%20Competitiveness%20Report/index.htm
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GFS	Government Finance Statistics CD-ROM. International Monetary Fund.
GURN	Global Union Research Network. http://www.gurn.info
HBI	Hans-Bredow-Institut. http://www.hans-bredow-institut.de

HDR	Human Development Reports. http://hdrstats.undp.org/indicators/indicators_table.cfm
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IAEP	Institutions and Elections Project Dataset. http://cdp.binghamton.edu/IAEP.htm
ICRG	International Country Risk Guide. http://www.prsgroup.com/ICRG.aspx
IDEA-F	Political Finance Database. International IDEA. http://www.idea.int/parties/finance/db/
IDEA-T	Voter turnout. International IDEA. http://www.idea.int/vt
IEF	Index of Economic Freedom. Heritage Foundation. http://www.heritage.org/index
IEFA	European health for all database. http://data.euro.who.int/IEFadb
ILO	International Labour Organization. http://www.ilo.org
IMD	Institute for Management Development, Lausanne. The World Competitiveness Yearbook / Report. Executive Opinion Survey.
IPU	International Parliamentary Union. Parline database. http://www.ipu.org/parline
IRI	Initiative and Referendum Institute. http://www.iandrinstitute.org/
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LAPOP	Latin American Public Opinion Project. Vanderbilt University. http://www.vanderbilt.edu/lapop
LB	Latinobarometro. http://www.latinobarometro.org
MAR	Minorities at Risk Project. http://www.cidcm.umd.edu/mar/data.asp
Mozaffar/Schedler (2002)	Mozaffar, Shaheen/Andreas Schedler (2002): The Comparative Study of Electoral Governance—Introduction, in: International Political Science Review 23: p. 5-27
MT	Mondo Times. The Worldwide News Media Guide. http://www.mondotimes.com
Nohlen et al. (2001)	Nohlen, Dieter, Florian Grotz and Christof Hartmann (2001). Elections in Asia and the Pacific. A Data Handbook. Vol. I+II. Oxford and London: Oxford University Press.
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OECD	Information and Communications Technologies OECD Communications Outlook (different issues). http://www.oecd.org/topic/0,3373,en_2649_37441_1_1_1_1_37441,00.html
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PaHO	Panamerican Health Organization. http://new.paho.org

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PELA	Elites Parlamentarias de América Latina. http://americo.usal.es/oir/Elites/bases_de_datos.htm
PTS	Political Terror Scale. http://www.politicalterrorsscale.org
QoG	The Quality of Government Institute. http://www.qog.pol.gu.se
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UCI	University of California: The Election Turnout Database. http://www.democ.uci.edu/resources/archive.php
UNECE	United Nations Economic Commission for Europe. http://www.unece.org
UNSTATS	United Nations Statistics Division. http://unstats.un.org

USEP	United States Elections Project. http://elections.gmu.edu
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WB	World Bank Statistics. http://data.worldbank.org
WGI	Worldwide Governance Indicators. World Bank. http://info.worldbank.org/governance/wgi/index.asp
WHO	World Health Organization: SDR, homicide and intentional injury (different issues). http://www.who.int/research/en
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Wikipedia	The Free Encyclopedia. http://www.wikipedia.org
WP	Worldpress. http://www.worldpress.org
WPT	World Press Trends. Different issues. Paris: Zenithmedia.
WVS	World Values Survey.
WZB	Wissenschaftszentrum Berlin.

Appendix 2: Selection of the Blueprint-Countries

The 30 countries that constitute our blueprint sample are chosen according to their Freedom House and Polity scores between 1995 and 2005. The following list illustrates our selection process.

Country	FREEDOM HOUSE (mean score of civil liberties and political rights)											POLITY										
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Australia	1	1	1	1	1	1	1	1	1	1	1	10	10	10	10	10	10	10	10	10	10	10
Austria	1	1	1	1	1	1	1	1	1	1	1	10	10	10	10	10	10	10	10	10	10	10
Belgium	1	1.5	1.5	1.5	1.5	1.5	1.5	1	1	1	1	10	10	10	10	10	10	10	10	10	10	10
Canada	1	1	1	1	1	1	1	1	1	1	1	10	10	10	10	10	10	10	10	10	10	10
Costa Rica	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1	1	10	10	10	10	10	10	10	10	10	10	10
Cyprus	1	1	1	1	1	1	1	1	1	1	1	10	10	10	10	10	10	10	10	10	10	10
Czech Republic	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1	1	10	10	10	10	10	10	10	10	10	10	10
Denmark	1	1	1	1	1	1	1	1	1	1	1	10	10	10	10	10	10	10	10	10	10	10
Finland	1	1	1	1	1	1	1	1	1	1	1	10	10	10	10	10	10	10	10	10	10	10
France	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1	1	1	1	9	9	9	9	9	9	9	9	9	9	9
Germany	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1	1	1	1	10	10	10	10	10	10	10	10	10	10	10
Hungary	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1	1	10	10	10	10	10	10	10	10	10	10	10
Iceland	1	1	1	1	1	1	1	1	1	1	1	*	*	*	*	*	*	*	*	*	*	*
Ireland	1	1	1	1	1	1	1	1	1	1	1	10	10	10	10	10	10	10	10	10	10	10
Italy	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1	1	1	1	10	10	10	10	10	10	10	10	10	10	10
Japan	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	10	10	10	10	10	10	10	10	10	10	10
Luxembourg	1	1	1	1	1	1	1	1	1	1	1	*	*	*	*	*	*	*	*	*	*	*
Malta	1	1	1	1	1	1	1	1	1	1	1	*	*	*	*	*	*	*	*	*	*	*
Netherlands	1	1	1	1	1	1	1	1	1	1	1	10	10	10	10	10	10	10	10	10	10	10
New Zealand	1	1	1	1	1	1	1	1	1	1	1	10	10	10	10	10	10	10	10	10	10	10
Norway	1	1	1	1	1	1	1	1	1	1	1	10	10	10	10	10	10	10	10	10	10	10
Poland	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1	1	9	9	9	9	9	9	9	10	10	10	10
Portugal	1	1	1	1	1	1	1	1	1	1	1	10	10	10	10	10	10	10	10	10	10	10
Slovenia	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1	1	1	1	10	10	10	10	10	10	10	10	10	10	10
South Africa	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	9	9	9	9	9	9	9	9	9	9	9
Spain	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1	1	1	1	10	10	10	10	10	10	10	10	10	10	10
Sweden	1	1	1	1	1	1	1	1	1	1	1	10	10	10	10	10	10	10	10	10	10	10
Switzerland	1	1	1	1	1	1	1	1	1	1	1	10	10	10	10	10	10	10	10	10	10	10
United Kingdom	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1	1	1	1	10	10	10	10	10	10	10	10	10	10	10
United States	1	1	1	1	1	1	1	1	1	1	1	10	10	10	10	10	10	10	10	10	10	10

* country is missing in Polity

Appendix 3:

The Democracy Barometer Aggregation Formula

A. Standard function ($x > 0, y > 0$ or $x \leq 0, y \leq 0$)

$$DQ = a * \arctan ((x*y)^b/c) * \text{Sign} \quad \text{Sign} = -1 \text{ if } (x,y < 0)$$

a: weighting value for calibration (i.e. $x,y (0,0) = 0$; $x,y (100,100) = 100$)

b: multiplier, steering progression

c: divisor, steering progression

B. Function for scores with opposite signs ($x > 0, y \leq 0$; $x \leq 0, y > 0$)

$$DQ = a * \arctan ((x+y)^b/c)$$

a: weighting value for calibration (i.e. $x,y (0,0) = 0$; $x,y(100,100) = 100$)

b: multiplier, steering progression

c: divisor, steering progression

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C. Standard functions with three elements ($x > 0, y > 0, z > 0$)

$$DQ = \{[a * \arctan ((x*y)^b/c) * \text{Sign}] + [a * \arctan ((x*z)^b/c) * \text{Sign}] + [a * \arctan ((y*z)^b/c) * \text{Sign}]\} / 3$$

Sign = -1 if $(x,y < 0)$

a: weighting value for calibration (i.e. $x,y,z (0,0,0) = 0$; $x,y,z (100,100,100) = 100$)

b: multiplier, steering progression

c: divisor, steering progression

D. Standard functions with three elements ($x \leq 0, y \leq 0, z \leq 0$)

$$DQ = \{[a * \arctan ((x+y)^b/c)] + [a * \arctan ((x+z)^b/c)] + [a * \arctan ((y+z)^b/c)]\} / 3 \quad \text{Sign} = -1 \text{ if } (x,y < 0)$$

$a * \arctan ((x+y)^b/c)$

a: weighting value for calibration (i.e. $x,y (0,0) = 0$; $x,y(100,100) = 100$)

b: multiplier, steering progression

c: divisor, steering progression

E. Application:⁷

$$a = 80; * b = 1.2; * c = 4000$$

$$d = b/c = 1.2/4000$$

Two elements X, Y defined, then:

- $Q = X*Y$, if $X, Y > 0$
- $Q = X*Y^{-1}$, if $X, Y < 0$
- $Q = X+Y$, if $X < 1$ and $Y > 0$, or $Y < 1$ and $X > 0$

$$* A = Q * d$$

$$* DBvalue = \arctan(A) * a$$

Three elements X, Y, Z defined, then:

- $Q_1 = X*Y$, if $X, Y > 0$
- $Q_1 = X*Y^{-1}$, if $X, Y < 0$
- $Q_1 = X+Y$, if $X < 1$ and $Y > 0$, or $Y < 1$ and $X > 0$
- $Q_2 = X*Z$, if $X, Z > 0$
- $Q_2 = X*Z^{-1}$, if $X, Z < 0$
- $Q_2 = X+Z$, if $X < 1$ and $Z > 0$, or $Z < 1$ and $X > 0$
- $Q_3 = Y*Z$, if $Y, Z > 0$
- $Q_3 = Y*Z^{-1}$, if $Y, Z < 0$
- $Q_3 = Y+Z$, if $Y < 1$ and $Z > 0$, or $Z < 1$ and $Y > 0$

$$* A_1 = Q_1 * d$$

$$* A_2 = Q_2 * d$$

$$* A_3 = Q_3 * d$$

$$* DBvalue = \{ [\arctan(A_1) * a] + [\arctan(A_2) * a] + [\arctan(A_3) * a] \} / 3$$

⁷ We use $a=80$, $b=1.2$, and $c=4000$ because with these calibration and steering factors, our formula produces the value 100 for two elements that both have the value of 100.

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