



## Measuring real (*de facto*) transparency by a new index

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This is a methodological note preceding a longer academic paper explaining the rationale and method behind the new Computer Mediated Transparency Index (T-Index) produced by ERCAS. This brief follows the logic of index construction to explain concept, steps, method of aggregation and basic tests of the index<sup>1</sup>. The longer academic version will follow with a longer discussion and reference list.

### Why a new measurement of transparency?

The first international NGO which assumed the task to advocate against corruption adopted the title of 'Transparency International' at its creation in 1993 and thus branded transparency in relation with anti-corruption. However, its very famous measurement, the [Corruption Perceptions Index](#) (CPI), an average of expert scores produced by a variety of agencies, measures corruption at the national level as perceived by experts and businesspeople. A long academic dispute surrounds the index, but it suffices for our purpose here to state that there is no claim that this aggregate of corruption risk indicators measures transparency<sup>2</sup>. Of course, a relationship between corruption and transparency is presumed, and thus by measuring one of them the other may also be indirectly captured. However, if we want to study this relationship and the claim that transparency helps to reduce corruption, we need far more direct and fact-based measurements of both. And this is our goal: transparency has many functions, and we are interested in the role of transparency in controlling corruption and supply a tool to measure it.

A measurement of actual transparency, surprisingly, remains elusive. A [UN Survey](#) on e-government and measures based on the existence of a freedom of information ([FOI](#)) law are the most used proxies. They differ at first sight, but in fact they belong to the same category of legal or *de jure* transparency measurements (the existence of laws instituting freedom of information or the existence of specific obligations and provisions to this effect).

The UN survey measures e-government, which looks at the ICT government infrastructure as well as the human capital, and 'e-participation' (transparency and openness). It consists solely in self-reports by governments through the [METEP questionnaire](#), based exclusively on regulation and organization (laws and decisions) and no independent assessment. The e-participation index (EPI) covers the regulation of online services to facilitate the provision of information by governments to citizens ("e-information sharing"), interaction with stakeholders ("e-consultation"), and engagement in decision-making processes ("e-decision making"). EPI is, in other words, a self-report about legal and logistical provisions of transparency.

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<sup>1</sup> <https://www.oecd.org/sdd/42495745.pdf>.

<sup>2</sup> Andersson, S., & Heywood, P. M. (2009). The politics of perception: use and abuse of Transparency International's approach to measuring corruption. *Political Studies*, 57(4), 746-767.



On the other hand, international ‘transparency’ policy indices (ITPIS) used in the aid industry to assess governance are generally aggregates of governance expert scores, frequently non-transparent and non-specific themselves. Furthermore, academic literature has proven that “In many countries of the global East and South, there is an old and deep split between the *pays reel* and the *pays legal*”<sup>3</sup>. A real divorce can exist between formal (*de jure*) laws and concrete policy (*de facto*) practices, as ERCAS has shown in our previous research. Is the *existence* of an Ombudsman for Information, for instance, a guarantee that a country is more transparent? Some of the most transparent countries in the world do not have one, although the more recent FOI acts have included this organization as a presumed better guarantee of implementation. There is no guarantee, however. Chile has long enjoyed the best control of corruption in a Latin American context without even so much as a freedom of information law; when one was eventually introduced, the Ombudsman office complained it had very little work, as people did not resort to it<sup>4</sup>.

The attempts to measure *real* transparency have come in general by sector: [statistical data](#) available to the World Bank, pharmaceutical sector data, party finance data, procurement data. Such measurements have the advantage of specificity and actionability. The [European Public Procurement Scoreboard](#), for instance, publishes permanently how transparent the bidding process is by member state, thus offering both benchmarks and policy warnings. Case studies from countries also count the number of FOI requests and how the government handled them, and several web apps exist to this effect. But measures of real (*de facto*) transparency are not easy to come by in a comprehensive comparative format. The obstacles are obvious: a practically infinite variety exists of government information which should be made public - by contrast, classified information has become the exception presently, related to defense or privacy. Many countries have organizations responsible for collecting and storing data, but they may not be sharing it transparently. The only way to assess *de facto* transparency then is to observe directly the existence of such data, its accessibility and coverage, *the practice of transparency rather than just the legal provision of it or its formal presence*.

The existence of such a measurement would bring important advantages for public policy and good governance. It would allow establishing benchmarks of transparency, and thus inform a very specific reform agenda. It would offer an international ranking based on facts, not perceptions, which would not only incentivize countries to progress (as CPI is used mostly for naming and shaming) but also offer specific policy targets. Finally, it would allow policy relevant research, as the resulting measurement can be tested in relation with curbing corruption. This is what we propose in this exercise.

## What concept do we measure?

Government transparency is defined as disclosure of data which provides citizens and other public stakeholders “with the information needed for judging the propriety and effectiveness of the conduct of the government”<sup>5</sup>. Building on this definition, we define **transparency as the available and accessible (free of cost) minimal public information required to deter corruption and enable public accountability in a society**. What our definition includes on top of the earlier World Bank one is the possibility, often

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<sup>3</sup> O'Donnell, G.A. (1996). Illusions About Consolidation. *Journal of Democracy* 7(2), 34-51, p. 42.

<sup>4</sup> Interview by the author, 2014.

<sup>5</sup> Bovens, M. (2007). Analysing and Assessing Accountability: A Conceptual Framework. *European Law Journal* 13, 447-468.



ignored, that corruption is deterred to a great extent not by offensive actions against it, but by the capacity of every individual to defend him/herself from being abused and discriminated. Corruption in a democracy often results in discrimination, as few states dispose of unlimited resources, where favors granted to some individuals or companies would not result in the deprivation of others of similar merit<sup>6</sup>. If citizens are able to defend their own interest, this is in itself a major contribution to anti-corruption.

However, we need to distinguish government transparency, even if the society has a large role in demanding it, from freedom of the press and civil society activism. In other words, we need to distinguish supply from demand in good governance. While we agree with the literature arguing that the role of society is crucial in creating accountability by using transparency, as well as in constraining a government to be transparent, these are distinct concepts, not just different actors. Distinguishing them conceptually as well as measuring them separately is therefore the only way forward for our understanding on how transparency helps corruption control.

Government transparency thus implies that reliable, relevant, and timely information about the activities of government is available to the public, enabling it to defend itself from discrimination resulting from governance based on favouritism and abuse of power (either due to connections or monetary inducements). The most familiar legal instrument of governmental transparency is “freedom of information” (FOI), which implies the right of citizens to request information, and an obligation of governments to either provide that information or explain why they will not. Nevertheless, in the age of Internet and e-government, transparency often becomes computer-mediated - with the generalization of smartphones raising access to unprecedented levels. Evidence exists that technology enables transparency<sup>7</sup>. The advantage is that Internet-based transparency is easier to observe than classic transparency requiring paperwork and having significant time lags. This is the transparency that we measure.

### How does transparency enable control of corruption?

Even with this clear, limited definition - step one of a sound measurement -, we still need to select the information to observe from the practical infinite data that a government can share with the public. Bounding transparency to what is most relevant for anti-corruption may be a highly arbitrary act if we do not understand the mechanism by which transparency enables control of corruption and miss significant benchmarks. Every individual can be favored (or discriminated) in a variety of ways: fortunately, enough corruption theory exists to guide us<sup>8</sup>. Transparency is influential on both sides of the control of corruption equilibrium<sup>9</sup>. Transparency automatically decreases resources for corruption, as it eliminates the

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<sup>6</sup> E. Warren, M. (2004). What does corruption mean in a democracy?. *American Journal of Political Science*, 48(2), 328-343.

<sup>7</sup> For a review of the vast empirical literature on the contribution of Internet and e-government on good governance see Kossow, N. (2020). Digital anti-corruption: hopes and challenges. In *A Research Agenda for Studies of Corruption*. Edward Elgar Publishing.

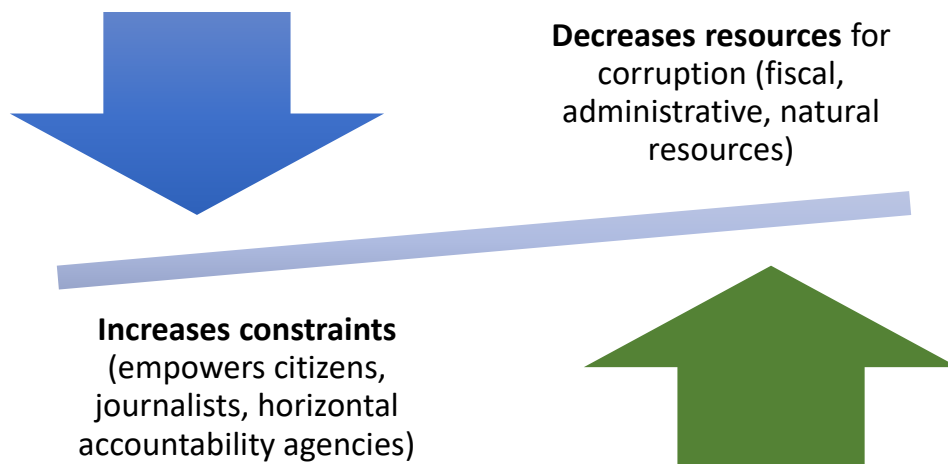
<sup>8</sup> See for a review Daniel Treisman, "What Have We Learned about the Causes of Corruption from Ten Years of Cross-National Empirical Research?" *Annual Review of Political Science* 10 [2007]: 211—1.

<sup>9</sup> For an ample discussion and evidence on corruption as an equilibrium see Mungiu-Pippidi, *A Quest for Good Governance. How Societies Build Control of Corruption* (Cambridge University Press 2015).

monopoly of information that officials exploit as a rent in itself or as a means to other rents<sup>10</sup>. One of the first major landmarks in actionable corruption measurements was the World Bank *Public Expenditure Tracking Survey (PETS)*, which tracked the education money from central budget down to the last school: once the allocation of money is public (fiscal transparency), no more special surveys are needed and it becomes far more difficult for embezzlers to make money disappear on the way, since everybody can monitor where the money is going.

A similar logic led to the establishment of a transparency system related to extractive industry. The publication of government data, from basic demographic and property data to health or environment data ends the monopoly over such information and enables citizens to both pursue their daily interests with reduced costs (and without the need to solicit such information) and control their government. Transparency can thus reduce power asymmetries, opportunities for rent seeking and improve access to public services.

On the side of constraints, transparency is also of invaluable help to magistrates, auditors, journalists, and ordinary citizens to assemble information against potential public office abusers with low cost, to diagnose practices and create benchmarks. If corruption investigations and trials are public, it is more difficult to hush them up. Scandals about corruption in the media can prompt the judiciary to act even against less tangible officials in a state; and citizens and NGOs can themselves use public information to rally against corrupt behavior, bring lawsuits or vote the corrupt out of office, as information enables them to assign responsibilities for performance of the government and administration and assess them objectively. Transparency enables collective action, facilitates mass protests, and empowers the citizenry<sup>11</sup>.



<sup>10</sup> See, for instance, Stiglitz, Joseph, E. 2002. "Information and the Change in the Paradigm in Economics ." *American Economic Review*, 92(3):460-501; KLITGAARD, R. (1998). International Cooperation Against Corruption, *Finance & Development*, 0035(001), A002.

<sup>11</sup> Hollyer, J. R., Rosendorff, B. P., & Vreeland, J. R. (2015). Transparency, protest, and autocratic instability. *American Political Science Review*, 764-784.



Transparency should by no means be seen as a panacea, and indeed in countries enjoying a good control of corruption it can be manipulated to lead to paradoxical effects. Its outstanding role is in countries where control of corruption has not been reached yet, and where citizens cannot rely on the autonomy and fairness of law enforcement, the judiciary and the bureaucracy and therefore need to act as principals themselves and control the agents. Entire forms of corruption can disappear with the introduction of transparency: if the list of teachers in a school is published on a website there could be no 'ghost teachers' on the payroll, for instance.

### How do we select the indicators?

The main procedure for building a transparency index includes selecting appropriate transparency indicators and then weighting and aggregating them into a composite index. To start with, even if narrowed down to transparency for corruption prevention, transparency can hardly be seen as a unidimensional concept. At least two distinctive categories can be conceived, namely legal (*de jure*) and in practice (*de facto*, real) transparency. This distinction seems to be significant in relation with rule of law, where apparently little correlation exists between formal rules (constitutional arrangements) and informal norms (independence of the judiciary or lack thereof), as well as in anti-corruption, where the evidence also shows that the most corrupt countries also tend to have the most comprehensive anti-corruption regulation<sup>12</sup>. It is very likely that transparency is no exception. The weak effect of FOI laws reported in more recent literature may be explained by their mere formal nature, since we have no information as to how well such laws are implemented. To measure transparency and its effect on corruption we would then need two sets of indicators: one for *de jure* transparency and the other on *de facto* transparency. The advantage of collecting both is that we can also test to what extent regulation produces the expected outcome, i.e. delivers actual transparency.

Can this be achieved? Nothing is easier than *de jure* measurements: the most used transparency measures relied on adopted FOI acts, from simpler to more complex measures. The [EUROPAM project](#), for instance, assesses the comprehensiveness of transparency legislation for 35 European countries, resulting in a numerical score which allows both country ranking and institutional specificity, indicating individual provisions that a law contains or misses. Other relevant rules and conventions with key transparency provisions exist and are broader than just Europe in focus: the Extractive Industry Transparency Initiative (EITI), the United Nations Convention against Corruption (references to transparency in practically every chapter), the Anti-Money Laundering Convention and the OECD anti-bribery convention. Countries pledge for transparency also when joining the Open Government Partnership. While international treaties have weak enforcement in general, all the above do have clear monitoring mechanisms, unlike other pledges for transparency that countries make (for instance, associated to free trade agreements). They can help therefore to assess *de jure* transparency and provide the national and international transparency benchmarks that a country adheres to.

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<sup>12</sup> Gutmann, J., & Voigt, S. (2020). Judicial independence in the EU: a puzzle. *European Journal of Law and Economics*, 49(1), 83-100; Mungiu-Pippidi, A., & Dadašov, R. (2017). When do anti-corruption laws matter? The evidence on public integrity enabling contexts. *Crime, Law and Social Change*, 68(4), 387-402.



Transparency features prominently in the United Nations Convention against Corruption ([UNCAC](#), 2004), and is explicitly mentioned among the ‘outcome targets’ list of United Nations [Sustainable Development Goal 16](#) as in ‘developing effective, accountable and transparent institutions’; and ‘ensuring public access to information’, although it is implicit in the other targets as well. UNCAC is the only legally binding universal anti-corruption instrument. Transparency is covered under preventive measures, one of the five areas included in the treaty. The Convention specifies from Article 1 the obligation of all the state parties to govern on the basis of transparency, and goes on to spell out transparency as a key principle of public sector organization and function (Article 7, § 1a), political finance (Article 3), conflict of interest prevention (Article 4), public procurement (Article 9, § 1), public finance management (9, §§ 2 and 3), public reporting and proactive disclosure of information, including on policy formulation (Article 10), ownership of private entities (Article 12, § 2c) and any information enabling oversight, and “the freedom to seek, receive, publish and disseminate information concerning corruption” (Article 13, § 1d).

UNCAC and the SDG 16 criteria thus offer a shortlist of transparency functions to prevent corruption and abuse for office. The resources needed to enable these functions are observable and we monitor them in the *de facto* index. They fall into three categories:

- a) Rule of law transparency (availability of all laws and regulation in online searchable form, online court hearing schedules and motivations in their decisions), enabling participation and monitoring of corruption trials, aside the general public oversight of the judicial process;
- b) Transparency as a tool to reduce opportunities for corruption, thus enabling prevention: this category includes the disclosures of fiscal and public procurement data, natural resources and land data, company ownership and construction permits (assessed for the capital city, as the most observable). On top of this we add international aid, which is a complement to fiscal transparency - UNCAC asks for ‘transparency in promoting development’ in the concluding remarks;
- c) Transparency as an accountability enabler: conflict of interest and assets data of public officials should be transparent, allowing the public to monitor undue profit; also, as UNCAC specifies, data on corruption should be public, starting with detailed national auditor reports on corruption.

Although this list covers the essentials of public participation to anti-corruption, it is a limited list, and any limitation is an act of discretion. We eliminate non-universal categories which could impend comparison across a large number of countries (for instance, websites which disclose party finances, important only for democracies). All the other elements required by the Convention are captured.

However, transparency is difficult to limit somewhere (it can be improved almost *ad infinitum*). The list could grow endlessly, as transparency is not a finite concept. Environment data, food safety data, health and education data, various kinds of archival data all may prove important to preventing corruption in one situation or another. However, by assessing financial and public procurement transparency we cut across these sectors to some extent in the highest risk areas, while preserving the feasibility of observing these indicators for as many countries as possible. The *de facto* T-index thus has 14 dimensions, grouped in three meta dimensions which capture basic transparency provisions for effective anti-corruption, i.e. what any nation should have to enable control of corruption, a minimal core of Internet based resources. The anti-corruption international agreements and treaties compiled in the *de jure* index, on the other side, include six legal documents (see Table 1).

We code our observations of *de facto* transparency in a trichotomous way:

- the resource is publicly and freely accessible with all essential information - criteria satisfied in full (1 point);
- the resource exists, but information is either partial (in content or coverage) or access is restricted in some form (e.g. payment required, only certain categories of users can access) - criteria satisfied in part (0.5 point);
- the resource does not exist or is clearly insufficient in substance to enable citizens in a meaningful way (e.g. available data is too general or outdated) - criteria not fulfilled (0 points).

Although we code the presence (or absence) of these resources, they remain nominal categories: transparency of land property, of judicial proceedings, of mineral resources concessions, etc. Should we weight them to create a composite indicator, and on what criteria? Our total repertory represents the basic transparency menu for preventing corruption, but it cannot capture all transparency; each category has its separate theoretical importance which cannot be statistically tested against the whole.

While equal weighting is the most common scheme appearing in the development of composite indicators<sup>13</sup>, in our case there is not much choice. In order to fit our purpose, we use a qualitative method similar to building an index of qualitative variation (IQV). The availability of the 14 resources in full is considered the ‘anti-corruption transparency’ target, and each component adds up equally to fulfill it to 100%, which is the equivalent of the maximum score of 14 points. A country’s score represents the percentage to which the target is fulfilled. The same logic is applied to the *de jure* and the total T-Index scores. Expanding the scale with more items will make it more refined and reduce the individual contribution of each item.

Furthermore, a more detailed scaling within each item (separating access, for instance the presence of paywalls, from absence of information and creating a longer scale than the trichotomous one we use) is also possible in the future. However, having worked for 18 months at this version for 128 countries with 14 *de facto* and 6 *de jure* items, and comparing our work with other data repositories of OGP and the UN Survey we can warn that collecting and reviewing such data is extremely time and human resource intensive. The T-Index we built should serve the research and actionable purpose it was designed for and allow updates on reasonable effort: any extension in depth and breadth will require far more resources.

Table 1. Components of T-Index *de jure* and *de facto* dimensions

| <i>De jure</i>                                  | <i>De facto</i>   |
|---|---|
| Judicial anti-corruption and rule of law        |   |
| UNCAC ratification                              | Online information about Supreme Courts’ hearing schedules and agenda, enabling participation to public sessions    |
| Membership to Open Government Partnership (OGP) | Online Supreme Courts’ decisions with motivations of sentences (including abuse of service or corruption sentences) |
| FOI act present in national legislation         | Online searchable database of legislation (official gazette or legal repository)                                    |

<sup>13</sup> Bandura, R. (2008). *A survey of composite indices measuring country performance: 2008 update*. Technical report, Office of Development Studies, United Nations Development Programme (UNDP), New York; OECD. (2008). *Handbook on constructing composite indicators: Methodology and user guide*. Paris: OECD Publishing.

| Corruption prevention (reducing opportunities)                                 |   |
|--|---|
|  | Online detailed publication of past expenditures (from previous fiscal year)  |
|  | Online detailed publication of current public expenditures (budget tracker)   |
|  | Online public procurement portal including tender announcements and award notices                                       |
|  | Online disclosure of international aid (ODA) allocation (either as recipient or donor, or both)                         |
| Membership to Extractive Industry Transparency initiative (EITI)               | Online disclosure of existing mining concessions  |
|  | Online disclosure of building permits at least for the country's capital city   |
|  | Online searchable land register with ownership information for all properties   |
|  | Online searchable register of commerce with public shareholder information  |
| Accountability enablers  |   |
| Ratification of the OECD Convention against Bribery of International Officials | Online disclosure of financial declarations for public officials  |
| Part of the Financial Action Task Force against Money Laundering.              | Online disclosure of conflict of interest declarations for public officials   |
|  | Online reports of the Supreme Audit Institution (at least annual report) offering detailed information on audit results |

### How do we validate the results?

Table 2 displays basic summary statistics for both T-Index dimensions and the total score, in the original scoring as well as the final scoring system of 100 points. We also display a “transparency gap” metric, i.e. the difference between *de jure* and *de facto* scores. We can easily observe that overall transparency fulfillment for both dimensions and, consequently, for the aggregate index lands on the upper half of the respective scales.

Table 2. Summary statistics

| Variable  | Obs | Mean     | Std. Dev. | Min | Max |
|---|-----|----------|-----------|-----|-----|
| <i>Original values</i>                                |     |          |           |     |     |
| T-Index <i>de facto</i> (0-14)                        | 128 | 7.46875  | 3.011624  | 0   | 14  |
| T-Index <i>de jure</i> (0-6)                          | 128 | 4.125    | 1.143279  | 1   | 6   |
| T-Index total score (0-20)                            | 128 | 11.59375 | 3.863696  | 2   | 20  |
| <i>Fulfillment values</i>                             |     |          |           |     |     |
| T-Index <i>de facto</i> (0-100)                       | 128 | 53.76563 | 21.53389  | 0   | 100 |
| T-Index <i>de jure</i> (0-100)                        | 128 | 69.16406 | 19.08199  | 17  | 100 |
| T-Index total score (0-100)                           | 128 | 58.1875  | 19.32594  | 10  | 100 |
| Transparency gap ( <i>de jure</i> - <i>de facto</i> ) | 128 | 15.39844 | 16.85806  | -16 | 66  |



The two dimensions of transparency, *de facto* and *de jure*, correlate at 0.66. This reveals that there is a gap between formal transparency and the actual practice. *De jure* transparency outperforms *de facto* transparency by a mean value of roughly 15 points in the 100-point scale. Indeed, fulfillment in the *de jure* dimension is higher than in the *de facto* dimension for 101 out of the 128 countries for which the T-Index was computed. Furthermore, *de jure* transparency predicts only 44% of *de facto* transparency in a bivariate regression analysis.

Another important validation aspect is to observe how well the T-Index correlates with other variables that we can expect to be strongly associated with the supply of government transparency, such as democracy and development levels. In table 3 we can see that both T-Index dimensions and the composite final score show a strong positive correlation with two established indicators of democracy, one published by Freedom House and the other by the V-Dem Institute, and with strikingly similar coefficients in the case of both indicators. A positive association of similar magnitude is observed between the *de facto* dimension and the total T-Index score and the Human Development Index (HDI). Interestingly, *de jure* transparency appears to be somewhat less strongly associated with democracy, and even more so with development, which is rather intuitive, as adopting formal transparency is certainly less costly politically and materially than implementing real online transparency.

Table 3. Pairwise correlations of T-Index and indicators of democracy and development

|  | T-Index <i>de facto</i><br>(0 – 100) | T-Index <i>de jure</i><br>(0 – 100) | T-Index total score<br>(0 – 100) |
|--|--------------------------------------|-------------------------------------|----------------------------------|
| <b>Freedom in the World total score (2020)</b> | 0.6205*                              | 0.5807*                             | 0.6548*                          |
|  | 128                                  | 128                                 | 128                              |
| <b>V-Dem electoral democracy score (2019)</b>  | 0.6067*                              | 0.5895*                             | 0.6466*                          |
|  | 128                                  | 128                                 | 128                              |
| <b>HDI (2019)</b>                              | 0.6266*                              | 0.4559*                             | 0.6218*                          |
|  | 126                                  | 126                                 | 126                              |

\* 95% statistical significance

Finally, as we are particularly interested in the relevance of transparency for anti-corruption, in Table 4 we look at the association between the T-Index dimensions and final score and selected indicators of corruption, as well as other indices that aim to capture government transparency. Estimated correlations between the T-Index and Transparency International’s CPI, the World Bank’s Control of Corruption indicator and V-Dem’s corruption measure (scaled differently than the other two, hence the negative coefficients) all show a very similar picture of a moderate, but statistically significant association between stronger transparency and lower corruption. Also here we can clearly see a difference between the *de facto* and *de jure* dimensions, with the latter displaying a weaker association with corruption than the former.

As to how the T-Index performs regarding its correlation with other indicators that capture government transparency, we see a strong positive association with the IPI, which includes fiscal transparency as one of its six components, and with the UN E-Participation Index, that also takes e-transparency into account.

Table 4. Pairwise correlations of T-Index and indicators of corruption and transparency

|                                  | T-Index <i>de facto</i> (0 - 100) | T-Index <i>de jure</i> (0 - 100) | T-Index total score (0 - 100) |
|----------------------------------|-----------------------------------|----------------------------------|-------------------------------|
| CPI (2020)                       | 0.4872*                           | 0.3818*                          | 0.4912*                       |
|                                  | 128                               | 128                              | 128                           |
| WGI Control of Corruption (2019) | 0.4862*                           | 0.3844*                          | 0.4910*                       |
|                                  | 128                               | 128                              | 128                           |
| V-Dem Corruption index (2020)    | -0.4764*                          | -0.3681*                         | -0.4788*                      |
|                                  | 128                               | 128                              | 128                           |
| IPI (2019)                       | 0.6480*                           | 0.5935*                          | 0.6856*                       |
|                                  | 115                               | 115                              | 115                           |
| UN E-Participation Index (2020)  | 0.6617*                           | 0.5738*                          | 0.6867*                       |
|                                  | 127                               | 127                              | 127                           |

\* 95% statistical significance

### Why and how should you use this index?

As any other similar aggregated index at the country level, the T-Index can also serve a “naming and shaming” purpose, identifying good and bad performers in the field of government transparency, giving visibility to best practices and (hopefully) producing incentives for laggards to improve transparency standards.

But more importantly, by capturing real instead of just formal transparency the novel *de facto* T-Index and its disaggregated components offer a unique and valuable diagnosis tool especially for international donors, as well as practitioners and activists in the field of government transparency, helping to identify benchmarks and concrete gaps in the availability of public information in each individual area assessed by the index. This can be useful for better targeted local advocacy efforts demanding increased transparency where it is most lacking.

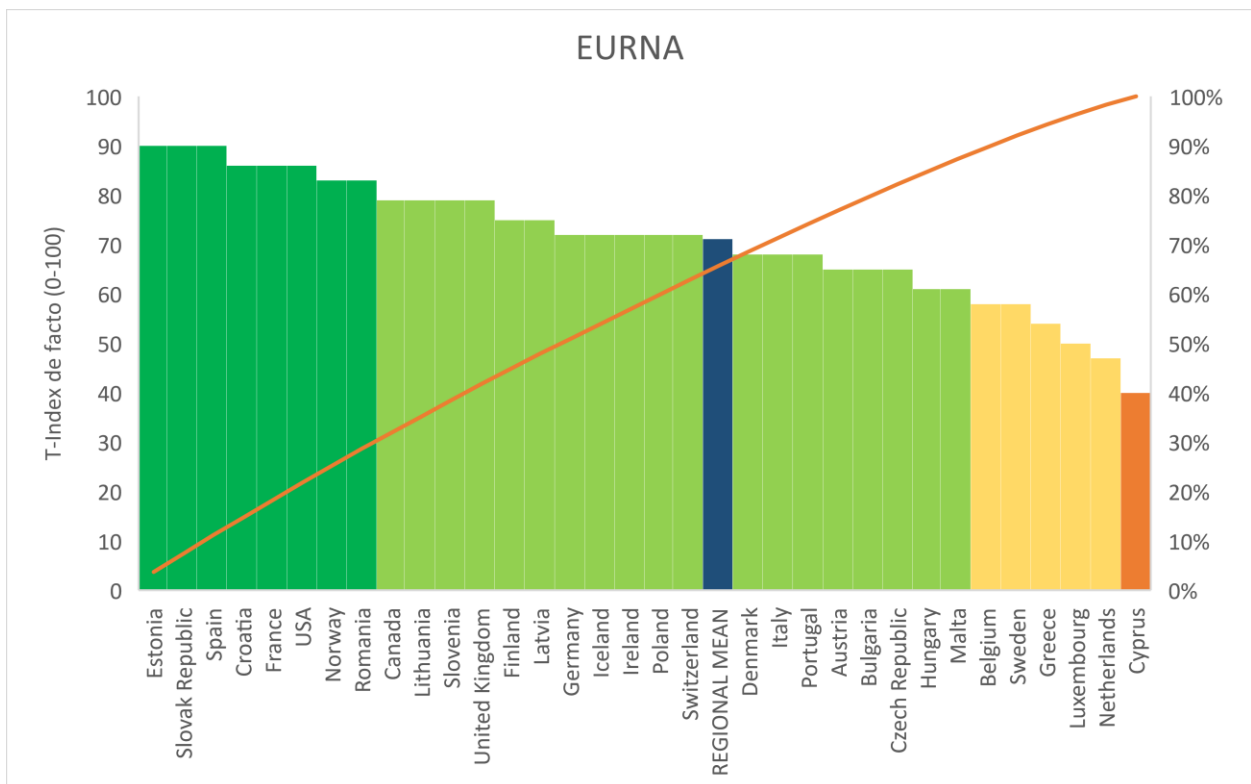
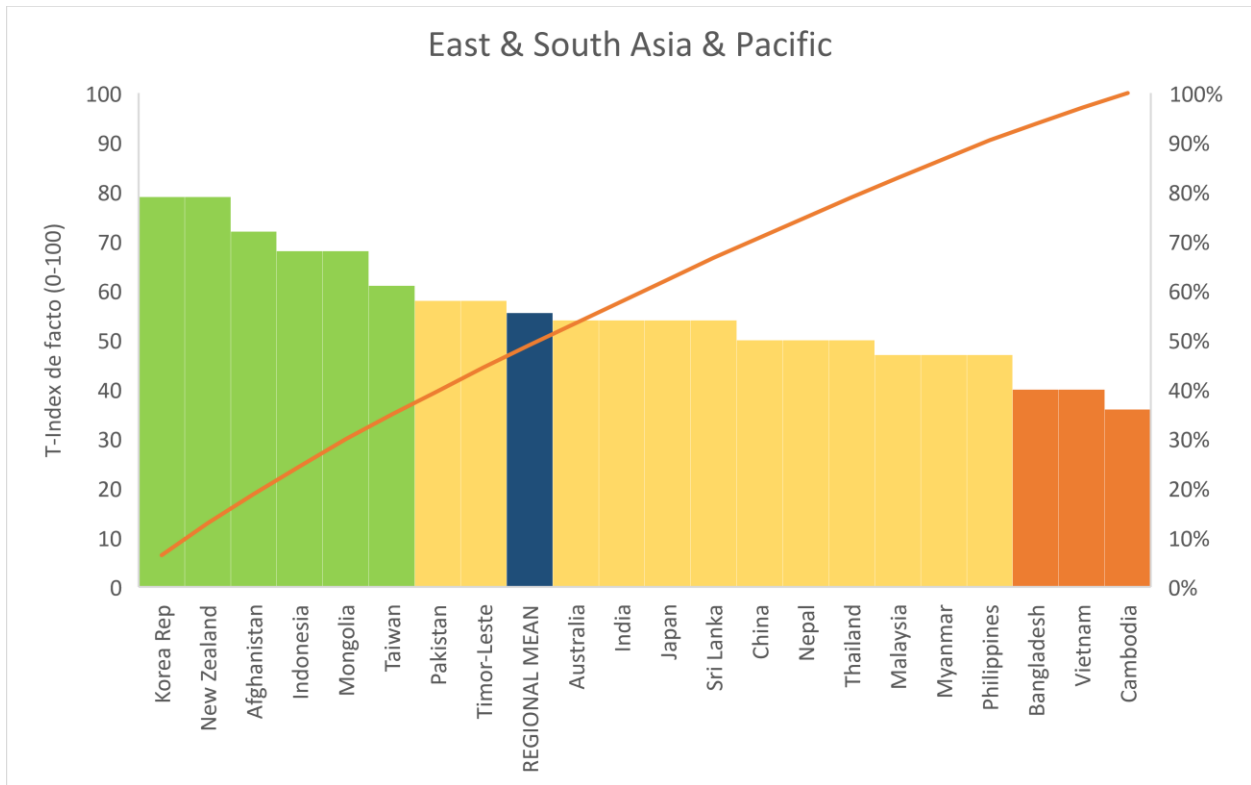
Additionally, for the academic community the T-Index may serve as a better and more valid measure of government transparency, filling an important gap in the measurement of this phenomenon.

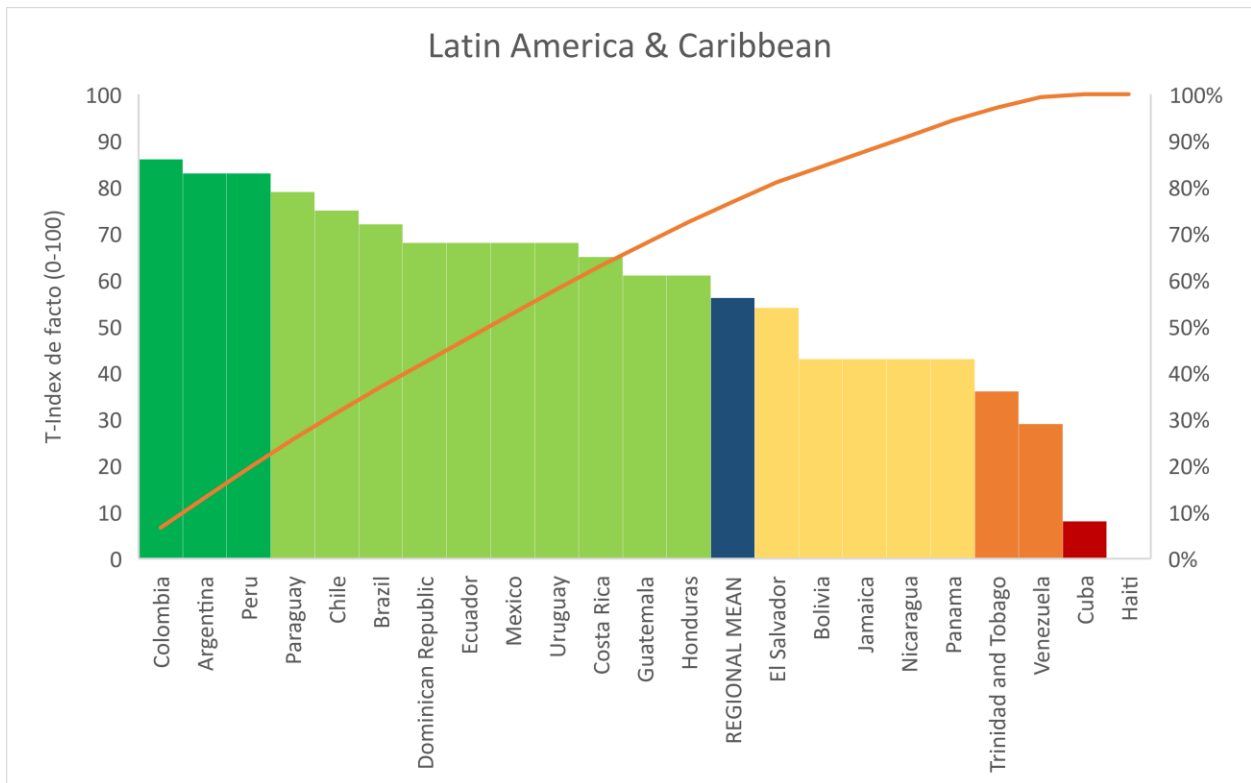
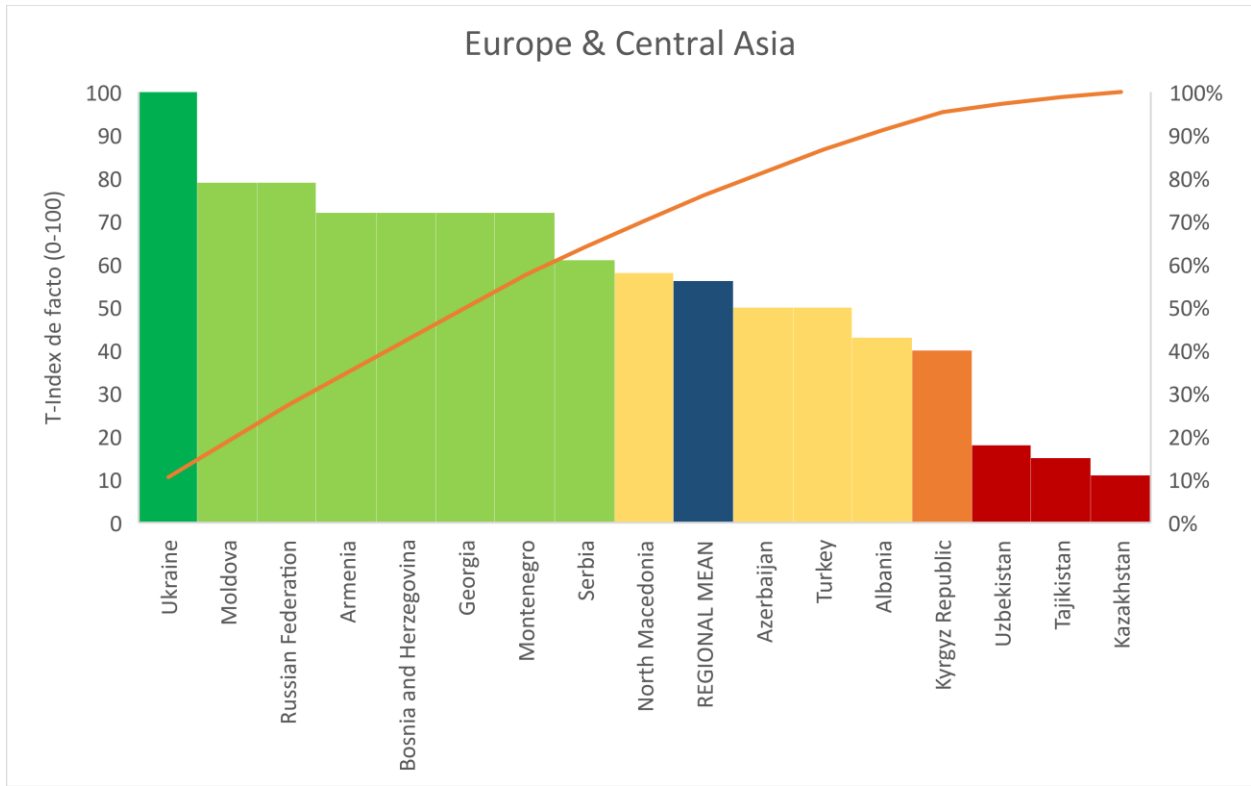
## Annex A – Additional descriptive statistics

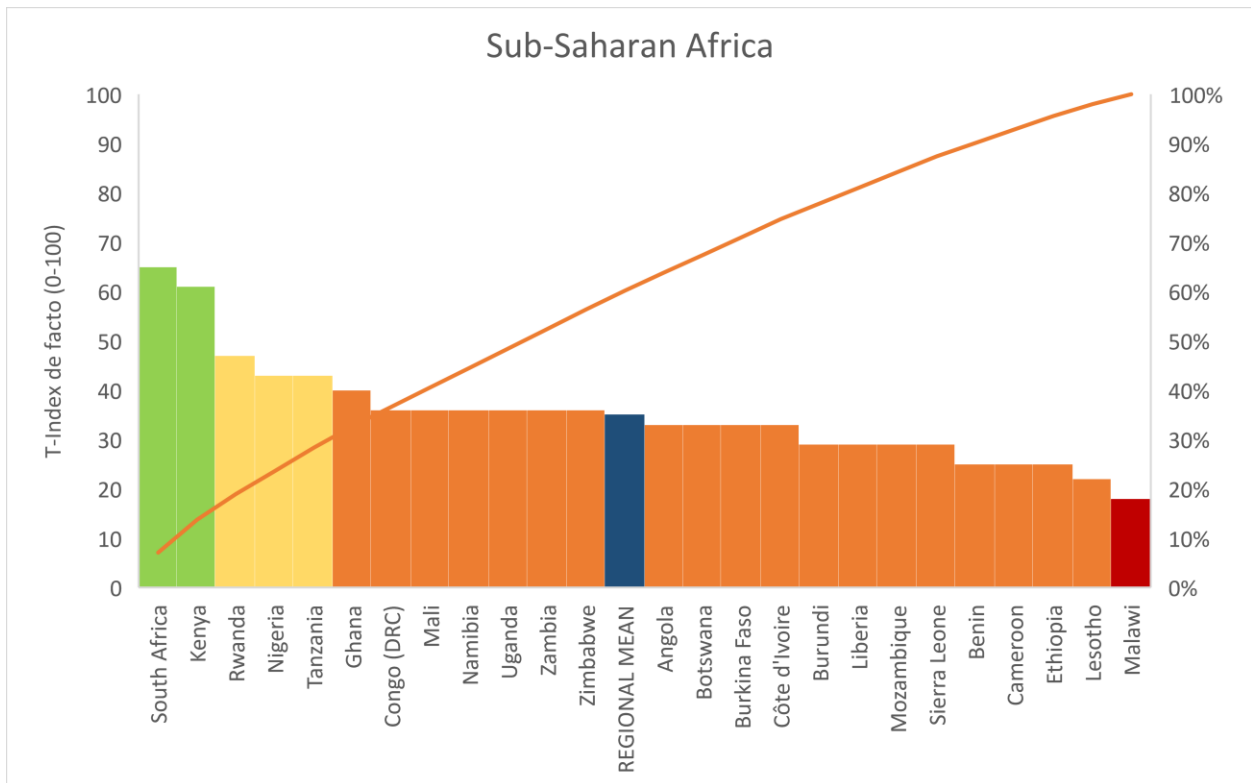
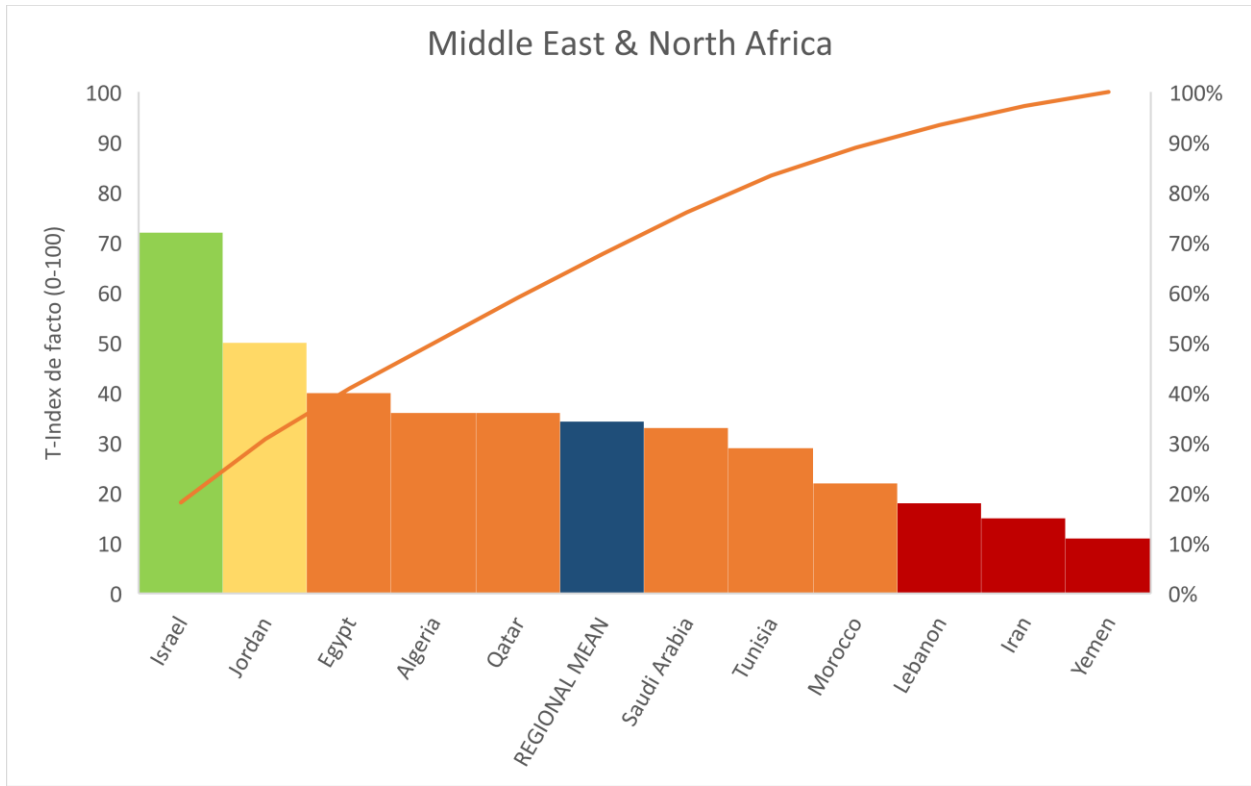
Table 5. Score frequencies for each of T-Index de facto components

|            | No fulfillment (0) |        | Partial fulfillment (0.5) |        | Complete fulfillment (1) |        | Total |         |
|------------|--------------------|--------|---------------------------|--------|--------------------------|--------|-------|---------|
|            | N                  | %      | N                         | %      | N                        | %      | N     | %       |
| <b>Q1</b>  | 28                 | 21.88% | 43                        | 33.59% | 57                       | 44.53% | 128   | 100.00% |
| <b>Q2</b>  | 76                 | 59.38% | 45                        | 35.16% | 7                        | 5.47%  | 128   | 100.00% |
| <b>Q3</b>  | 21                 | 16.41% | 35                        | 27.34% | 72                       | 56.25% | 128   | 100.00% |
| <b>Q4</b>  | 41                 | 32.03% | 69                        | 53.91% | 18                       | 14.06% | 128   | 100.00% |
| <b>Q5</b>  | 23                 | 17.97% | 71                        | 55.47% | 34                       | 26.56% | 128   | 100.00% |
| <b>Q6</b>  | 34                 | 26.56% | 30                        | 23.44% | 64                       | 50.00% | 128   | 100.00% |
| <b>Q7</b>  | 49                 | 38.28% | 14                        | 10.94% | 65                       | 50.78% | 128   | 100.00% |
| <b>Q8</b>  | 18                 | 14.06% | 14                        | 10.94% | 96                       | 75.00% | 128   | 100.00% |
| <b>Q9</b>  | 77                 | 60.16% | 25                        | 19.53% | 26                       | 20.31% | 128   | 100.00% |
| <b>Q10</b> | 78                 | 60.94% | 19                        | 14.84% | 31                       | 24.22% | 128   | 100.00% |
| <b>Q11</b> | 23                 | 17.97% | 34                        | 26.56% | 71                       | 55.47% | 128   | 100.00% |
| <b>Q12</b> | 42                 | 32.81% | 19                        | 14.84% | 67                       | 52.34% | 128   | 100.00% |
| <b>Q13</b> | 87                 | 67.97% | 15                        | 11.72% | 26                       | 20.31% | 128   | 100.00% |
| <b>Q14</b> | 16                 | 12.50% | 13                        | 10.16% | 99                       | 77.34% | 128   | 100.00% |

Graphs 1 - 6. T-Index de facto scores by region









## Annex B - Codebook

### An explanation of the questions and response options

This questionnaire seeks to determine whether a country's government provides certain types of information to the public. Answers to each question must be based on the provision of one or multiple official sources (a website run by or commissioned by the government), and researchers are required to provide evidence as to why they have selected a particular answer/score.

It is important for researchers to note that:

- The questionnaire seeks to discover what occurs in practice, rather than what the law requires.
- The questionnaire is specifically intended to evaluate the information available to the public during a particular phase of the budget year, not the past years.
- The questionnaire focuses on the activities of central government and does not address the role of state and local governments (exception: question 13).

The questions have three possible responses. The first response (letter "A") is the most positive answer, reflecting best practice for the subject matter of that question. It corresponds to a full point score. The second response (letter "B") is intended to reflect a partial good practice. It corresponds to a half-point score. A response "C" reflects poor or no practice and is the most negative. It corresponds to a zero score.

The score gradation from response A (1 point) to response C (zero) aims at assessing the accessibility, the coverage, and the searchability of the information sought. **Generally, criteria are satisfied in full and shall be graded a 1 if the information is: (a) publicly available; (b) comprehensive (apparently has full coverage of the information in question); (c) searchable; and (d) accessible for free (even if registration is required). Criteria are partially satisfied (0.5 point) when coverage is limited, information is incomplete or not easily searchable, payment is required, or access is limited to certain users. Criteria are not satisfied (0 score) if the information is not available or just provides generic information or aggregate statistics that do not allow citizens to check individual items of interest.** Likewise, in general if the information asked for is only available until a certain year in the past, which is not the most recent finished calendar year (2019 or 2020), it should be considered as not available, and zero points should be given. Detailed explanations of appropriate answer choices are provided individually in the guidelines following each of the survey's questions.

Researchers should include an Internet address/URL for each document cited and each question answered. Reviewers are asked to check the sources (links/URLs) and assess if (1) the links lead to where they should and (2) if the score chosen corresponds to the information provided in the links.

## Questions

|                  |   |
|------------------|---|
| <p><b>Q1</b></p> | <p><b>Are <i>past</i> public expenditures published online? (1 point)</b></p> <p>A) Last fiscal year expenditure report is accessible online in its detailed form = 1<br/>         B) Last fiscal year expenditure report is accessible online with limited detail = 0.5<br/>         C) Not available online or too generic (only aggregated data) = 0</p> <p>Note: Expenditure reports are considered as fully detailed if they are at least disaggregated by agency AND object of expenditure, allowing citizens to understand <i>how</i> money was spent and not just <i>how much</i> money was spent in a specific domain. Reports are considered as having limited detail if they are disaggregated in other forms but not by expenditure object. The time frame for analysis adopts the same criteria as the Open Budget Survey, and reporting on the last fiscal year is considered timely when information is made available within 12 months of the end of the fiscal year.</p> |
| <p><b>Q2</b></p> | <p><b>Are <i>current</i> public expenditures published online? (1 point)</b></p> <p>A) Data is available through an online tracking system with itemized expenditures (e.g. copy machine) = 1<br/>         B) Data is available through an online tracking system that is not itemized OR through fairly detailed budget execution reports = 0.5<br/>         C) Not available online or too generic (only aggregated data) = 0</p> <p>Note: For response B, reports are considered to be fairly detailed when they include data disaggregated by agency AND object of expenditure. Current public expenditures should be published online within maximum 6 months of their occurrence for a country to score in this question.</p>   |
| <p><b>Q3</b></p> | <p><b>Is there a centralized public procurement portal where both tenders and contract awards are posted? (1 point)</b></p> <p>A) Calls for bids AND award notices are published = 1<br/>         B) Only call for bids OR award notices are published = 0.5<br/>         C) No procurement portal exists OR information published is minimal (selected procedures only) = 0</p> <p>Note: A full score requires that award notices include at least the winner's name and contract value.</p>   |
| <p><b>Q4</b></p> | <p><b>Is there an online land cadaster where property ownership is disclosed? (1 point)</b></p> <p>A) Cadaster data is fully accessible online = 1<br/>         B) Cadaster data is partial OR limited in geographic coverage OR access requires payment = 0.5<br/>         C) Not available online = 0</p>   |
| <p><b>Q5</b></p> | <p><b>Is there a register of commerce where shareholders and main data of companies is published? (1 point)</b></p> <p>A) Business registry is fully and freely available online = 1<br/>         1 point also when the register is run by a private company.<br/>         B) Information is partial or access to relevant information is paid = 0.5<br/>         C) Not available online = 0</p>   |



|                   |   |
|-------------------|---|
| <p><b>Q6</b></p>  | <p><b>Is the annual report of the Supreme Audit Institution public? (1 point)</b></p> <p>A) Annual report is available online with detailed information on individual audit results = 1<br/>Cases where the report is not comprehensive, but all individual reports are easily accessible are granted a full point as well.</p> <p>B) Annual report has information on selected audits (and audit results are not available elsewhere) = 0.5</p> <p>C) No (current) report is available online = 0</p>  |
| <p><b>Q7</b></p>  | <p><b>Are supreme court <i>hearing schedules</i> public and accessible online? (1 point)</b></p> <p>A) All court information available online = 1</p> <p>B) Not all information public, politically sensitive cases not available = 0.5</p> <p>C) Not available online = 0</p> <p>Note: For countries where multiple superior courts exist, the court considered is the highest court of appeal. The schedule is considered public when published at least one day in advance to the court's session. If the ruling dates are provided only on a case-basis (no full schedule available), the score is 0.5 point. If there is information on the dates in which the court will have its sessions but without listing the cases that will be decided, the information is considered insufficient, and the score is zero.</p> |
| <p><b>Q8</b></p>  | <p><b>Are supreme court <i>sentences</i> published online? (1 point)</b></p> <p>A) All court sentences available online = 1</p> <p>B) Not all information public, politically sensitive cases not available = 0.5</p> <p>C) Not available online = 0</p> <p>Note: For countries where multiple superior courts exist, the court considered is the highest court of appeal. Sentences are considered published when accompanied by their reasoning / justification. A full point is also given if sentences are visible via case-search with public access.</p>  |
| <p><b>Q9</b></p>  | <p><b>Are financial disclosures of officials publicly available? (1 point)</b></p> <p>A) Available for all officials required to declare = 1</p> <p>B) Available only for part of the officials required to declare (e.g. top officials) = 0.5</p> <p>C) Not available online (or only upon request) = 0</p>  |
| <p><b>Q10</b></p> | <p><b>Are conflict of interest disclosures of officials publicly available? (1 point)</b></p> <p>A) Available for all officials required to declare = 1</p> <p>B) Available only for part of the officials required to declare (e.g. top officials) = 0.5</p> <p>C) Not available online (or only upon request) = 0</p> <p>Note: In cases where no specific interest disclosure is required but relevant information is included in the financial disclosures (e.g. shares in companies, financial disclosure of relatives) AND those are public, criteria for this question are also considered as fulfilled.</p>  |

|                   |   |
|-------------------|---|
| <p><b>Q11</b></p> | <p><b>Are incoming and outcoming donor funds' allocations published? (1 point)</b></p> <p>A) Incoming/outcoming donor funds (or both whenever applicable) are available = 1<br/>         B) Only incoming OR outcoming donor funds are available in a situation when there should be both = 0.5<br/>         A half point is also given if information is partial.<br/>         C) Not available online = 0</p> <p>Note: A full score requires that aid allocations specify amounts disaggregated at least by donor/recipient country.</p>  |
| <p><b>Q12</b></p> | <p><b>Are mining concessions public? (1 point)</b></p> <p>A) Information on mining concessions/licenses/titles is fully available = 1<br/>         B) Information on mining concessions/licenses/titles is partially available or access is paid = 0.5<br/>         C) Not available online = 0</p> <p>Note: A full score requires that data on mining concessions specify at least location, beneficiary, and time frame of the concession. Cases in which the information is available but not fully up to date are granted a 0.5 point – given the usual long timeframe of mining concessions, the information is still considered of relevance to the public.</p> |
| <p><b>Q13</b></p> | <p><b>Are construction permits in the country's capital city public? (1 point)</b></p> <p>A) Information on issued construction permits is fully available = 1<br/>         B) Information on issued construction permits is partially available OR access is paid = 0.5<br/>         C) Not available online = 0</p> <p>Note: A full score is given when at least the address and the name of the applicant are published. In case there is an electronic portal for applying for construction permits but it does not publish the awarded permits, the information is considered insufficient, and the score is zero.</p>   |
| <p><b>Q14</b></p> | <p><b>Is there an online gazette or a government portal which publishes official legislation for everybody to access? (1 point)</b></p> <p>A) Yes = 1<br/>         B) Yes, but the access is paid OR the information is only partially provided = 0.5<br/>         C) No = 0</p>  |