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Challenges and innovations to the rule of law measurement

Alina Mungiu-Pippidi¹

Abstract

While the process of digitalization offers new opportunities, politics gets in the way of the already notoriously difficult to measure rule of law. This paper briefly presents the challenges to rule of law measurement and argues that sound measurement is possible only if the measure is narrowed down, or its components are separately examined. It then offers two innovations of such separate measurements on transparency and national integrity at national level developed by the European Research Center for Anticorruption and State-building (ERCAS) in Berlin. Finally, the paper argues that the governance context greatly impacts the quality of data used in public policy evaluation and should be used as controls. For instance, higher transparency predicts higher COVID 19 fatality rates at national level with all relevant controls, while higher corruption predicts more excess deaths, using the new indicators. This shows that the data on COVID 19 fatalities outside the democratic developed countries is likely to be seriously flawed and that it is worth investing in facts and not perceptions when measuring governance. The working paper pleads for the use of directly observable digital tools to move to a generation of more transparent and specific governance indicators, able to provide the evidence needed in public policy evaluation.

Keywords: governance indicators, rule of law, transparency, corruption, COVID-19, public health evaluation.

¹ Hertie School of Governance. Ramin Dadasov, Roberto Martinez Kukutschka, Bianca Vaz Del Mondo, Aram Khaghaghordyan and Alvaro Lopez from ERCAS have contributed to the indicators reported in this paper in the 2015-2022 interval.

Introduction

A specter is haunting the West these days, when the Russian attack on Ukraine competes with the return of COVID 19 in the news: rule of law. The concept is invoked in nearly every situation, but very difficult to pin down and evaluate. European and US lawyers documents the war crimes in Ukraine, although the chances of bringing Russia to answer to the International Criminal Court (ICC) are anybody's guess. One day after the Hungarians endorsed one more time Viktor Orban, a known supporter of Vladimir Putin, the European Commission announced that Hungary's EU funds would be cut for preferring Orban against the EU rule of law. For the EU, the key battleground is the supremacy of EU treaty law against national constitutions, seen as a matter existential to European integration.

For the United States, the global rule of law and anti-corruption campaign is in the interest of its own security. The Sustainable Development Goals 16 also lists rule of law and corruption, alongside institutional quality, among its objectives. 'Institutional quality' is a concept grounded in economic institutionalist literature that refers to the quality of regulation, norms and behavior purporting to public integrity and rule-based behavior. Hence, measuring 'institutional quality' is central to track progress made towards achieving the UN's sustainable development commitments. The importance of measurement is also embedded in article 61 of United Nations Convention against Corruption, which requires States Parties to:

- analyze, in consultation with experts, trends in corruption in their territory, as well as the circumstances in which corruption offences are committed (para. 1),
- develop and share statistics, analytical expertise concerning corruption and information on best practices to prevent and combat it (para. 2), and
- monitor their policies and measures to combat corruption to assess their effectiveness and efficiency

Developing measurements of rule and law and institutional quality over time is a key step to diagnose and solve governance problems. A useful measurement framework should combine good specificity for actionability (i.e., the identification of key areas of intervention at the national level) with sufficient precision for monitoring and evaluation (i.e., how levels of corruption change over time and respond to specific interventions). In Europe, the European Commission has published in July 2022 the third annual Rule of Law Report. It monitors four key areas for the rule of law: justice systems, the anti-corruption framework, media pluralism and freedom, plus other institutional issues linked to checks and balances. The European Parliament has criticized the previous yearly editions and asked for more precise measurements to allow monitoring across time of evolutions and involutions.

There are clear benefits for public policy and international conditionalities in measuring changes over the years in rule of law. However, serious challenges exist for the development of reliable measurements, raising the question if qualitative methods are not better placed to both diagnose and trace change in rule of law, at least if the ambition is not to deconstruct rule of law into its components, but try to measure the whole. In this working paper I will briefly list the problems hindering such a measurement, before showing some innovative approaches and solutions to the challenge.

I. Challenges to rule of law measurement

This working paper does not propose to review the vast academic literature on this topic. Rather I outline briefly the problems before giving some examples on how we can go around them.

I.1. The definition is too broad and imprecise

While there is clarity enough in the academic definition of the rule of law as coined by Bingham², every policymaker striving to measure rule of law differs in purpose and interests, and current definitions, although overlapping to some extent, present so many differences that the legitimate question can be raised if this frame is indeed useful³. A first glance over issues and indicators needs to start with the question of the Harvard economist Dani Rodrik “Am I the only one guilty of using the term [rule of law] without having a good fix on what it really means?”. A notion that covers from the unprovoked invasion of another country to the decision of some municipal councils to prevent LGBT marriage is wide indeed. Even more problematic, it clearly means different things to different people. As the recent constitutional jurisprudence bears witness, it can cover both a lockdown and its infringement, both the secession of a region and its overruling by the central government. The ‘thick’ version of the rule of law concept is like a basket where various items are lumped together. The World Justice Project counts nine components. The Venice Commission of the Council of Europe counts six but adds also on top some ‘challenges’ like corruption and conflict of interest. The practical solution for monitoring rule of law has therefore been equally large baskets of indicators⁴. This works only if an evaluation focuses on the rule of law components and not the rule of law itself.

I.2. The internal consistency is poor

The broader and more imprecise the definition is, the more numerous the trade-offs or even the conflicts between the loosely connected components: between rule of law and electoral democracy (Hungary, Poland, Malta), between human rights and anti-corruption (Senegal, Romania) and – where the EU is concerned- between values in the center and values in the member states. The objective measurement on which sound monitoring and evaluation should be based also becomes quite problematic, as some components may go up when others go down if the concept is not internally consistent- in other words if rule of law is not a latent variable. For instance, between 2006-2016 Romania waged an extremely successful anti-corruption campaign with 18 ministers jailed but had the largest number of new cases accepted and sentences for undue process at the European Court of Human Rights, more than Russia and Turkey, despite being a democracy⁵.

² T Bingham, ‘The Rule of Law’ (Penguin Books, 2011), at page 8.

³ See discussion in Venice Commission, ‘Report on the Rule of Law’, 2011, CDL-AD(2011)003rev-e, at paras 34, 68–69, available at [www.venice.coe.int/webforms/documents/?pdf=CDL-AD\(2011\)003rev-e](http://www.venice.coe.int/webforms/documents/?pdf=CDL-AD(2011)003rev-e).

⁴ The Venice Commission offers a comprehensive list of benchmarks. The European Commission DG Justice focuses on four features for its much criticized ‘rule of law’ reports. The European Justice Scoreboard narrows down to the efficiency, quality and independence of justice.

⁵ See Mungiu-Pippidi, Europe’s Burden. Promoting Good Governance across Borders. Cambridge: Cambridge University Press, chapter 6.

Judicial review may be very important to some countries, while others manage to respect the rights of their citizens without it: quite a few different legal traditions exist, even within the European Union, which have led in the end to the same outcome: rule of law. Unlike control of corruption, whose components closely correlate, so they can be built into a single measurement, rule of law is too broad a mix unless it is reduced to its 'thin' minimalist version. But the contrary has happened in recent years, with rule of law stretched from the classic proceduralist definition ('bound by the law') or the basic political one offered by Francis Fukuyama (politicians not attempting to retrospectively change the law⁶) to a concept which includes social and even 'nature' rights. That makes sound measurement impossible.

I.3. De jure and de facto are loosely connected

The difficulty of measurement of rule of law across years is thus not only a technical matter but hides a conceptual problem. One of the variables credited to influence rule of law is the constitutional judicial framework. However, if one observes the public accountability regulation repository Europam.eu it becomes obvious that Hungary has better formal institutional arrangements in this area than Finland, which is quite under-regulated: yet it is Finland where rule of law and control of corruption are better. As Stefan Voigt argues, to assess if institutions matter, one needs a conceptual distinction between institutions and non-institutions: otherwise proving the importance of institutions becomes impossible⁷. Furthermore, Guillermo O'Donnell remarked the gap between formal constitutional arrangements and the real situation when rule of law is concerned: at "In many countries of the global East and South, there is an old and deep split between the *pays réel* and the *pays legal*"⁸. So, a real divorce can exist between formal (*de jure*) laws and informal (*de facto*) norms, and one should not presume that an institution is shaped only by formal constitutional factors, even in the European Union.

Quite to the contrary, there seems to be a poor correlation between formal rules (constitutional arrangements) and informal norm (independence of the judiciary or lack of)⁹. In anticorruption as well, the evidence shows that the most corrupt countries tend to have the most laws without any guarantee of their effectiveness¹⁰. This problem affects not only measurement, but also the qualitative judgement which dominates the rule of law policy field (due to the predominance of lawyers dealing with it), where the formal arrangement is by default presumed to have a decisive impact on the outcome.

Unless we measure the reality, the risk is that we end up with a Moldovan situation, where a self-styled oligarch leading a small party managed to capture precisely the new strong EU sponsored) anticorruption structures and use them to eliminate all rivals by blackmails or abusive arrests, thus building a majority in the Parliament and capture the entire government¹¹.

⁶ Fukuyama, F. (2010). Democracy's Past and Future: Transitions to the Rule of Law. *Journal of Democracy*, 21(1), 33-44.

⁷ Voigt, S. (2013). How (not) to measure institutions. *Journal of Institutional Economics*, 9(1), 1-26.

⁸ O'Donnell, G.A. (1996). Illusions About Consolidation. *Journal of Democracy* 7(2), 34-51, p. 42.

⁹ Gutmann, J., & Voigt, S. (2020). Judicial independence in the EU: a puzzle. *European Journal of Law and Economics*, 49(1), 83-100

¹⁰ See Mungiu-Pippidi, A., & Dadašov, R. (2017). When do anticorruption laws matter? The evidence on public integrity enabling contexts. *Crime, Law and Social Change*, 68(4), 387-402.

¹¹ See Mungiu-Pippidi, Europe's Burden, chapter 7.

I.4. Surveys are not precise enough to capture change over years

Finally, some reputed cross-country expert measurements, which try to quantify subjective judgment and experience exist, either by continent or global (like the World Justice Project Rule of Law Index)¹². The latter is based on a combined survey of experts and ordinary people, and while it does not cover judicial independence it includes most other rule of law dimensions, including corruption. While the concept is very broad, although carefully described the link between the direct reality observed and a measurement unit is difficult to reconstruct in such perception measurements in general, let alone from one year to another. Seeing the time to process information for such surveys, by the time they are published the data might be outdated as well¹³.

I. 5. Governance aggregates as derivatives

Another popular category of measurements aside from surveys comes from governance aggregates of already existing measures, like the popular World Bank World Governance Indicators, (including Rule of Law, Regulatory Quality and Control of Corruption). The aggregate indicators have the great merit of mapping 200 states and entities, but what they gain in width they lose in depth. The primary data collection in the field of governance is extremely scarce: because of problems with conceptualization and the inability to meet the real costs of quality data production. Consequently, aggregate governance indicators come close to the equivalent of ‘derivatives’ in finance. The aggregator packs a big package from some smaller packages which in their turn, like Russian dolls, contain some non-transparent and non-specific original expert scores computed without real data collection by some country risk analyst, usually sitting in a financial institution, who has never done a research *per se*. These original indicators are then standardized and normalized to fit together. Refined calculations try to separate the resulting statistical noise from the content and find noise often stronger than change across years¹⁴. Moreover, the content of most expert scores aggregated is strongly based on human judgement influenced by ideology or severely constrained by the limited opportunity to make direct observations. On top of the World Bank, the more recent Varieties of Democracy V-Dem project gained great popularity by going back two hundred years, with all the codes based on expert judgement on the basis of archives, whose quality or even existence varies dramatically across countries.

I.6. Influential measures are subject to considerable political influence

Good governance promotion is a political endeavor and having an intergovernmental organization where the council is formed by the countries it is supposed to monitor engaging in this exercise is bound to be problematic in itself. In this context, the Wilmer Hale auditors’ report – which found that the top management of the World Bank pressured the

¹² Evaluations can be found in M Versteeg and T Ginsburg, ‘Measuring the Rule of Law: A Comparison of Indicators’, *Law & Social Inquiry* 2017, Vol 42 No 1, 100–137. See also S Skaaning, ‘Measuring the Rule of Law’, *Political Research Quarterly* 2010, Vol 63 No 2, 449–460.

¹³ N Weinberg, ‘Chasing reality: Rule of Law measurement is lagging years behind current developments’, *Verfassungsblog*, 30 July 2020, available at <https://verfassungsblog.de/chasing-reality/>.

¹⁴ 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—

research team of doing business to change post factum the methodology and manipulate rankings to make some big funders (or potential big funders) of the likes of China or Saudi Arabia look better – was a severe blow to the credibility of the governance indicators. If one can manipulate such simple things (e.g. adding Hong Kong performance data to that of mainland China to upgrade the latter), what is the difference with the non-transparent expert scores captured in derivatives? Why invest in real data collection if the treatment of data cannot be trusted? And if the World Bank does not have the financial resources to fund such an exercise and guarantee its impartiality, who does? In the European Union, the process of elaborating rule of law reports is purely political, with various commission directorates intervening in the text of original experts, and the European Council and Parliament adopting it with their own comments. It is not a report produced by some independent authoritative source.

In the end, two options exist if we want to measure rule of law: the first is to define it less broadly on the basis of only correlated components (leaving, for instance, at least judicial review and rights other than physical aside, so without ‘values’). The second is to measure its different dimensions (which are not really components) separately and trace the evolution of time across each of them according to the interest in one issue or another, which is similar to saying that we evaluate judicial independence, freedom of the press or control of corruption, instead of one ‘rule of law’ concept.

Finally, regardless of the preferred option both *de jure* and *de facto* elements need to be included, after their relation is studied and understood. Rule of law is an outcome of a power equilibrium, where formal (constitutional arrangements) plays only a limited role.

II. Measuring public integrity based on a causal model

Control of corruption is an integral part of the rule of law concept. The dimension of corruption depends on the capability of a society to constrain people entrusted with power not to abuse it in their own interest and enforce public integrity. Where this capability is low, corruption risk is high. Measuring such concepts makes sense if it helps indicate how to reduce them: what are the buttons to press for an improvement in the quality of governance. Academic research by economists and political scientists has identified the reasons why country contexts differ where governance quality is concerned: a 30 years old literature exists on this topic¹⁵. While many factors exist, the bottom line is that corruption risk results from an equilibrium between opportunities for corruption (such as power discretion and material resources, e.g. oil or untransparent public money) and constraints that autonomous organizations (e.g. the judiciary, media), groups (civil society) and individuals (voters, whistleblowers) can use to prevent power holders from abusing office in their own interest.

Public integrity is the public good resulting from the behavior of most power holders and citizens. If they do not engage in corrupt acts and power abuse benefiting private parties.

¹⁵ See Mauro, P. (1998). Corruption: causes, consequences, and agenda for further research. *Finance & Development*, 35(001); Treisman, D. (2007). What have we learned about the causes of corruption from ten years of cross-national empirical research? *Annu. Rev. Polit. Sci.*, 10, 211-244; Mungiu-Pippidi, A. (2015) *A Quest for Good Governance. How Societies Develop Control of Corruption*. Cambridge: Cambridge University Press.

Corruption risk is low where public integrity is high. If this model works, econometric analysis should confirm that these factors interact and indeed cluster into one latent variable.

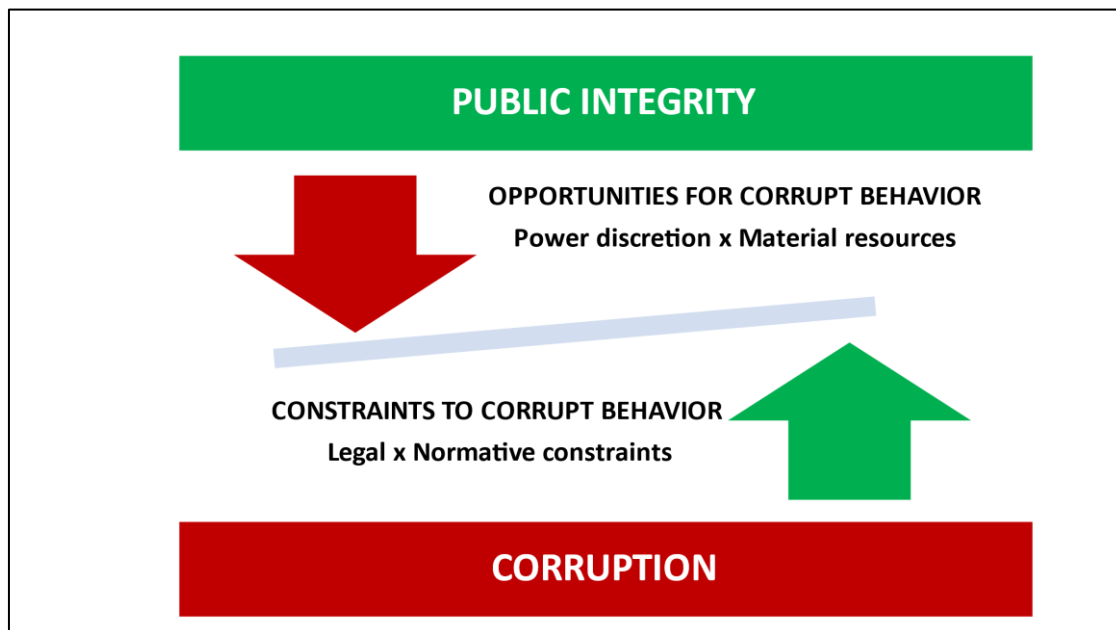


Figure 1. Modelling public integrity versus corruption at national level

We cannot easily measure either corruption or public integrity directly in ways comparable across countries (except by very expensive surveys), and the measurement tells us little about which factors are enabling corruption and discouraging public integrity.

Thus, we resort to measuring the different components of context which interact to create the capability (or lack) of a society to control corruption (the causes of corruption). The 2015 Index of Public Integrity (IPI) identified proximate measures for factors identified in research as impacting corruption risk for 115 countries¹⁶. It is a composite index consisting of six components.

They are:

For opportunities:

- administrative burden, trade openness and budget transparency (2015, 2017 and 2019 editions)

For constraints:

- judicial independence, e-citizenship and freedom of the press.

¹⁶ Mungiu-Pippidi, A., Dadašov, R. Measuring Control of Corruption by a New Index of Public Integrity. *European Journal on Criminal Policy Research* 22, 415–438 (2016). <https://doi.org/10.1007/s10610-016-9324-z>

Starting from the 2021 edition, administrative burden and trade openness have been replaced by administrative transparency and online services, due to unavailable alternative data to the original components (based on the World Bank Doing Business project, which closed in 2021 due to the scandal related to political intervention).

The presumption behind the IPI is that governance quality is a latent variable. In other words, by identifying and measuring these factors we can both indirectly measure governance quality and get a clear picture of its enablers/disablers. Not all factors identified by research can be modified by human action: for instance, multiethnicity or an abundance of mineral resources both multiply opportunities for corruption but are rather unchangeable by policy. Informal economy, on the other hand, is also a resource for corruption, as vulnerable workers frequently need to bribe if they want to access public services they do not subscribe to, but it is very difficult to measure. Factors that are regularly measured and can change by human action we can regularly measure are the components of IPI. They both cluster together (principal component analysis) and interact between them (e.g. judicial independence with administrative burden, e-citizens with fiscal transparency, press freedom with any form of transparency). A summary of the original 2015 IPI is shown in Figure 2.

Significance of the IPI components in affecting control of corruption						
	(1)	(2)	(3)	(4)	(5)	(6)
HDI	3.873*** (0.497)	2.973*** (0.542)	4.431*** (0.484)	2.436*** (0.336)	-0.291 (1.177)	3.031*** (0.378)
Administrative Burden	0.162*** (0.038)					
Trade Openness		0.188*** (0.034)				
Budget Transparency			0.051* (0.029)			
Judicial Independence				0.329*** (0.022)		
E-Citizenship					0.312*** (0.074)	
Freedom of the Press						0.194*** (0.025)
Constant	-4.087*** (0.345)	-3.470*** (0.336)	-3.560*** (0.391)	-3.576*** (0.221)	-1.442** (0.507)	-3.310*** (0.273)
Countries	105	105	105	105	105	105
Adj. R-squared	0.549	0.581	0.511	0.831	0.584	0.68

OLS regressions. The dependent variable is the WGI Control of Corruption 2014. Robust standard errors clustered by country are in parentheses: *p < 0.1; **p < 0.05; ***p < 0.01.

Figure 2. Components of the original Index for Public Integrity and their relation with corruption
Source: Mungiu-Pippidi and Dadasov 2016

In the current version, five of the components (budget transparency, administrative transparency, online services, judicial independence, freedom of the press) each rely on a single data source. Those components' scales were standardized by constructing the so-called z-score of the variable, in order to equalize their mean values and standard deviations. For budget transparency, the mean score for the individual items considered was extracted and then standardized; administrative transparency in turn consists of the sum of four individual components from the Transparency Index, which was then similarly standardized into z-scores. The final component, e-citizenship, is the only one based on different data sources. Its individual sub-components were standardized separately and then averaged.

Every final component score was then normalized to range between 1 and 10 using a min-max-transformation with higher values representing better performance in this issue area. The overall IPI was finally derived by the equally weighted average of all components. The decision to assign equal weights resulted from a replication of the original methodology in Mungiu-Pippidi and Dadasov 2016, when the index was first built by principal component analysis, then the impact (upload) of every component was measured. The new components, as well as the original ones contributed in very close (although not identical) proportions to the latent variable captured by the principal component. This determined the decision to assign equal weights and use a simpler average to build the index. The resulting aggregate correlates at 90% with the principal component in the latest (2021) version.

The standardization procedure described here ensures that the IPI does not depend strongly on the component with the greatest dispersion. A country can score badly for one component, but still do well on the overall IPI. Similarly, progress on just one component is insufficient for the positive evolution of public integrity. The components interact to determine a certain quality of governance.

The components of IPI strongly correlate despite measuring apparently different things. This shows that they all measure in fact a latent variable, the capacity of a society to control corruption and enable public integrity. The internal consistency of the index resulted from principal component analysis was and remains very high with a KMO index of 0.80. IPI also correlates at values between 60 and 80% with a variety of corruption measurements, either subjective (like Global Corruption Barometer “Most officials are corrupt”, Corruption Perception Index, Government Favoritism, Control of Corruption, but most importantly, objective, like Public Administration Corruption Index (PACI) or procurement red flags (for a correlation between subjective and objective indicators, see Mungiu-Pippidi and Martinez Kukutschka 2018)¹⁷.

Due to the nature of its components, IPI explain what exactly prevents a country from reaching control of corruption. The components are actionable so they can serve as an evidence basis for reform strategies. Due to accusations of data manipulation, China, Azerbaijan and Saudi Arabia were excluded from previous editions and were not included in the 2021 edition. Yemen had incomplete data for previous editions, but with the replacement of trade openness could now be added to the pool of countries, which totals 114.

¹⁷ See chapter 4 in *Governance Indicators: Approaches, Progress, Promise*

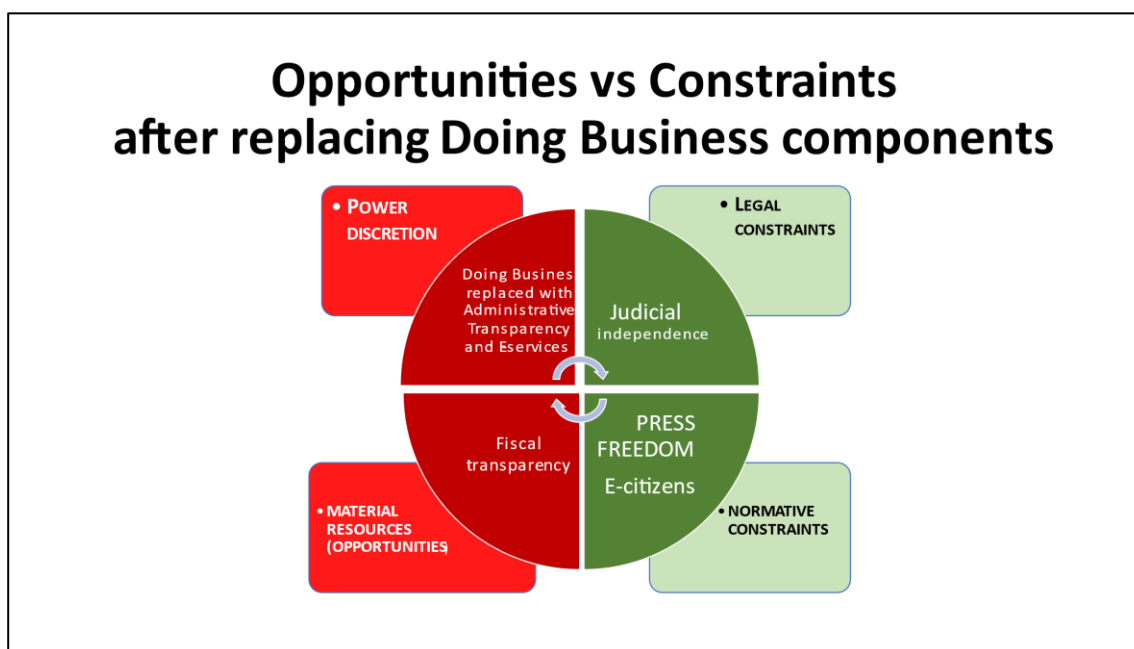


Figure 3. Index for Public Integrity after removing Doing Business components (2021)

Source: www.corruptionrisk.org

In the 2021 edition, the original components administrative burden and trade openness were replaced by new components: administrative transparency and online services. Due to the discontinuation of Freedom House's Freedom of the Press indicator, the source for the freedom of the press component was also changed for the Reporters without Borders' Press Freedom Index. IPI 2022 (due 1.10.2022) keeps the same methodology as IPI 2021. The disaggregated components are available for observation even prior to 2015 in the Trends resource of the webpage www.corruptionrisk.org, thus allowing an understanding not only of a country's progress or lack of control of corruption, but also of its causes.

III. Measuring de jure and de facto transparency

III.1. Why a new measurement of transparency?

Although transparency is at the core of governance reforms in relation with digitalization or separately a measurement of actual transparency, surprisingly, has remained elusive. The first international NGO which assumed the task to advocate against corruption assumed the title of 'Transparency International' at its creation in 1993 and thus branded transparency in relation with anticorruption. However, its very famous measurement, Corruption Perception Index, which belongs in the category of derivatives but has proven its worth especially for naming and shaming countries, does not claim that this aggregate of corruption risk indicators measures transparency. We introduce in this section the new Computer Mediated Transparency Index (T Index) produced by ERCAS in 2021-2022, following the logic of index construction to explain concept, steps, method of aggregation and basic tests of the index¹⁸.

¹⁸ <https://www.oecd.org/sdd/42495745.pdf>

Prior to the T-index, the most frequent transparency proxies were a UN Survey on e-government and measures based on the existence of a freedom of information (FOI).

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 attempts to measure *real* transparency, not just assess it have come in general by sector: statistical data available to the World Bank¹⁹, 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: 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, however, 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 offer specific policy targets. Finally, it would allow policy relevant research, as the resulting measurement can be tested in relation to curbing corruption. This is what the T index tries to offer.

III.2. Why a new measurement of transparency?

Government transparency was 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”²⁰. Building on this definition, this paper defines transparency as the available and accessible (cost free) 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 ignored, that corruption is deterred to a great extent not by offensive actions against it, but by the capacity of every individual to defend himself from being abused and discriminated against. 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

¹⁹ Hollyer, J. R., Rosendorff, B. P., & Vreeland, J. R. (2014). Measuring transparency. *Political analysis*, 413-434.

²⁰ Bovens, M.: Analysing and Assessing Accountability: A Conceptual Framework. *European Law Journal* 13, 447–468 (2007)

of similar merit. If citizens are able to defend their own interest, their defense in itself is 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 the freedom of the press and civil society activism: in other words, we need to distinguish supply from demand in good governance. So while we agree with the literature arguing that the role of the 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. Separating 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 favoritism 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 a 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 intermediated - with the generalization of smartphones raising access to unprecedented levels. Evidence exists that technology enables transparency²¹. 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.

III.3. How does transparency enable control of corruption?

Even with this clear limited definition, which is 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 the one used in anticorruption may be a highly arbitrary act if we do not understand the mechanism by which transparency enables control of corruption and we miss significant benchmarks. Every individual can be favored (or discriminated against) in a variety of ways: fortunately, enough corruption theory exists to guide us. Transparency is influential on both sides of the control of corruption equilibrium²². Transparency automatically decreases resources for corruption, as it eliminates the monopoly of information that officials exploit as a rent in itself or conducive to other rents (Klitgaard 1998; Stiglitz 2002). One of the first major landmarks in action-able 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 control them.

²¹ 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.

²² 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).

A similar logic led to the establishment of a transparency system related to the 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 both to pursue their daily interests with reduced costs (and 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 for 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 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 citizenry²³.

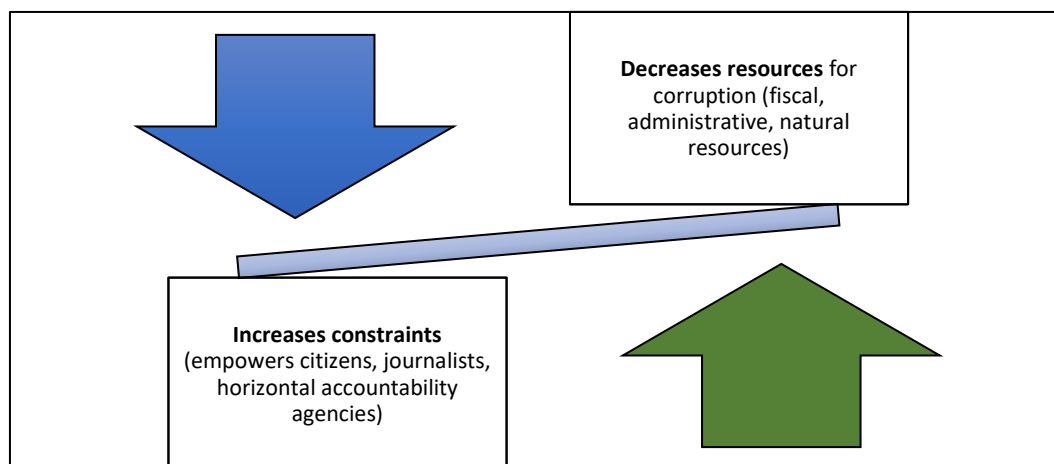


Figure 4. The relation between transparency and public integrity

Source: www.corruptionrisk.org

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 (developing countries), and where citizens cannot rely on the autonomy and fairness of law enforcement, 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

²³ Hollyer, J. R., Rosendorff, B. P., & Vreeland, J. R. (2015). Transparency, protest, and autocratic instability. *American Political Science Review*, 764-784.

the payroll, for instance, a pathology widely encountered in Sub-Saharan Africa and Latin America.

III.4. How are components selected

The main procedure for building a transparency index includes selecting appropriate transparency indicators, weighting the selected indicators, and aggregating those indicators into a composite index. To start with, at least two distinctive categories exist, of legal (*de jure*) and in practice (*de facto*, real) transparency. Transparency should be no exception from the general institutionalist argument presented earlier. The weak effect of the FOI laws reported in more recent literature may in fact be explained by their mere formal nature, since we have no information to what extent the law is 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*. The advantage of collecting both is that we can also test to what extent regulation produces the expected outcome, in this case: delivering 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 (for instance, the site Europam.eu assesses the comprehensiveness of transparency legislation for 35 European countries, resulting in a numerical score which allows both country ranking and institutional specificity- what does a law include 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 they provide the national and international transparency benchmarks that a country adheres to.

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. The United Nations Convention against Corruption 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 key principle of public sector organization and function (Article 7 para 1a), political finance (Article 3) conflict of interest prevention (Article 4), public procurement (Article 9 para 1), public finance management (9 para 2 and 3), public reporting and proactive disclosure of information, including on policy formulation (Article 10), ownership of private entities (Article 12 para 2c) and any information enabling oversight, (Article 13- the freedom to seek, receive, publish and disseminate information concerning corruption) UNCAC and the SDG 16 criteria thus offer short list of transparency functions to prevent corruption and abuse for office.

III.5. De jure and de facto components

In line with the institutionalist theoretical framework a measurement should capture both the *de jure* and de facto aspects, both the formal and the informal institution of transparency, both the rules and the practices. Table 1 shows the list of essential indicators to prevent corruption and abuse for office for both categories. All the elements required by UNCAC are captured in the de facto index, apart from non-universal categories, which could decrease country coverage too much (e.g. websites which disclose party finances, important only for democracies).

Although this list covers the essentials of the data that a government can share to enable public participation to anti-corruption, 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, even if UNCAC does not make explicit reference to them. However, by assessing financial and public procurement transparency the coverage of the highest risk areas is ensured, while preserving the feasibility of a large country coverage. The de facto T-index thus has 14 dimensions, which cover the main administrative, judicial and anticorruption areas²⁴. Coverage is limited to the countries covered by most comparable indicators needed for the validation and analysis of this measure: 130 cases, of which Afghanistan was dropped after the change of regime fall 2021. The documentation and review of the 14 de facto (1820 indicators) and 6 *de jure* items took 18 months, so a directly observed measure does not come cheap.

The reference links to each website observed is published alongside the index, so that any error or change can be publicly observable and feedback from public viewers, as well as officials can be integrated promptly. This can remove the kind of problems that the World Bank experienced with the Doing Business indicator in 2021. A transparency index should be published transparently with all sources, be action-able and open to feedback to users through crowdsourcing.

²⁴ 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). See the questionnaire for more details in Appendix 1.

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

De jure	De facto
Judicial anticorruption and rule of law	
UNCAC ratification	Online information about Courts' public hearings (such as location, agenda, time) enabling participation to public sessions
Membership to Open Government Partnership (OGP)	Online Courts decisions, including motivations of sentences (including abuse of service or corruption sentences)
FOI act present in national legislation	Online searchable database of legislation (Official Gazette or equivalent)
Corruption prevention (reducing opportunities)	
	Online detailed publication of the annual budget (previous year)
	Online disclosure of current public expenditures (budget tracker) on a monthly basis or more often
	Online public procurement portal (e-procurement) including essential information such as tender announcements, value, procedure and award
	Online disclosure of international aid (ODA) resources allocation as either a recipient or a donor nation, or both
Membership to Extractive Industry Transparency initiative (EITI)	Online disclosure of mining concessions
	Online disclosure of building permits at least for the country's capital city
	Online searchable land register for all properties
	Online searchable register of commerce
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 interests declarations for public officials
	Online detailed reports of the Supreme Audit Court or Controller (at least annual report) offering information on disclosed corruption

III.6. Aggregation and validation

Once the indicators relevant for corruption were identified for both these dimensions, they can be aggregated into a meaningful composite indicator under what OECD calls a fitness-for-purpose principle. How should they be weighted to create the composite indicator, and on what criteria? The total repertory represents the basic transparency menu for preventing corruption, with each category having 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 in this case there is no real alternative to it²⁵. Components are aggregated into an index of qualitative variation (IQV). The availability of the 14 resources in full is considered the *de facto* ‘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. The same logic is applied to the *de jure* and the total T-Index scores. A country’s T-index score represents the percentage to which the target (20 elements) is fulfilled. The resulting index is than a combination of a rule-based measurement with an outcome-based measurement, designed to eliminate the reported problem of implementation gap²⁶.

Table 2. Summary statistics of T-index major subcomponents

Variable	Obs	Mean	Std. Dev.	Min	Max
<i>Original values</i>					
T-Index <i>de facto</i> (0-14)	129	7	3	0	13
T-Index <i>de jure</i> (0-6)	129	4	1	1	6
T-Index total score (0-20)	129	11	4	2	19
<i>Fulfillment values</i>					
T-Index <i>de facto</i> (0-100)	129	53	22	0	89
T-Index <i>de jure</i> (0-100)	129	68	19	17	100
T-Index total score (0-100)	129	57	20	10	93
Transparency gap (<i>de jure</i> - <i>de facto</i>)	129	15	17	-17	65

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. The pairwise correlation between the *de facto* and *de jure* indicators returns a Pearson coefficient of 0.6623, showing a strong and statistically significant correlation (at the 95% confidence level). Obviously, some implementation gap remains between formal transparency and the actual practice.

²⁵ 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.

²⁶ (Kaufmann & Kraay, 2008, p. 5, 8).

The general pattern displayed by the transparency gap metric sheds further light on which side of the scale the imbalance lies: *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 100 out of the 129 countries for which the T-Index was computed. Sub-Saharan Africa and MENA countries show the largest implementation gap between transparency acts adopted and real transparency. Finally, *de jure* transparency predicts in a bivariate regression only 44% of the variation of the *de facto* transparency.

Various combinations of individual indicators show that some clusters of individual components are more cohesive than others (so subcomponents could be built for administrative transparency, judicial transparency, etc), but the total *de facto* index overperforms every other grouping with a Cronbach Alfa indicator of 83%, so can stand as an index on its own. An index including both *de jure* and *de facto* is still highly internally consistent with a Cronbach Alfa of 84%, but the *de jure* six components could not form an index by themselves, their Cronbach Alfa being just 35%, highly explainable seeing how diverse these items are. Table 2 also shows a “transparency gap” metric, i.e. the difference between *de jure* and *de facto* scores. On the average, 68% of countries fulfill the *de jure* transparency criteria, but only 53% fulfill the *de facto* criteria, with a global average of 7 (out of total 14) score for the *de facto* component, and 11 (of 20) for the total T-index.

Table 3. Pairwise correlations of T-Index and indicators of transparency and enablers

	T-Index total score (0 - 100)
UN Online Services N=128	0.69*
UN E-Participation Index (2020) N=127	0.6617*
Budget transparency 2019 Fraction of Open Budget Index and IPI N= 114	0.66*
Freedom of the press 2020 Reporters without Borders N=129	-0.52*
HDI, N=129	0.63*

* 95% statistical significance; Pearson coefficients

As discussed earlier in this paper, there are not many fact-based transparency measurements against which to validate the T-index. Table 3 shows the ones with the largest coverage. T-index correlates at 66% with the e-participation UN Survey indicator which measures transparency as feedback and consultation offered by government websites, at 69 % with the same Online Services UN survey indicator, which measures digitalization of public services and at 66% with Budget Transparency, a 12 items fraction of Open Budget Index used as a component of the Index for Public Integrity.

The T-index thus has very good internal and external validity: it is internally consistent without sacrificing any component of theoretical and action-able importance, and it displays a very high correlation with the other transparency measures, although the concepts do not overlap except in part.

While further components may be in principle added to the index, robustness tests were performed with different versions, showing that further additions or removals are unlikely to change much of the internal validity of T-index. Its two limitations are the trichotomous coding (none, partly, full fulfillment), when a more refined scale could extend the 'partly' (by separating features like accessibility from coverage, precision would grow), and the feasibility. Direct observation of websites in so many languages on a permanent basis is not cost free and is in fact the main justification of the trichotomous scoring chosen instead of a refined scale by Open Government Partnership criteria. A tradeoff exists between the number of countries observed and the further refinement of the scale.

As T-index measures computer mediated transparency, we find it strongly associated with Human Development Index (HDI), in particular by its *de facto* component, as the implementation of transparency requires both a certain level of income and a good level of education (both components of HDI). The reason why the T-index is not even closer to the HDI is that many developed countries, which have reached good control of corruption before the era of digitalization and Internet, do not invest much in digital transparency: such cases weaken the association. New member states of the European Union, for instance, have higher levels of transparency than older ones, despite the latter having a better control of corruption.

Finally, external validation measures are described in a forthcoming academic paper: it suffices to state here that T-index correlates at over 50% and is robust in multivariate regressions with democracy and corruption indicators produced by the World Bank, V-Dem, Transparency International CPI and Global Corruption Barometer. The index and the data behind it are available in full on www.corruptionrisk.org/transparency.

IV. How can new measures of evaluation and transparency help public policy evaluation

I present in this paper two indicators built by the ERCAS team over the last years largely dependent on a new generation of digital data, although one is an indirect measurement (IPI) and the other is based on direct observation (T-index). Both measurements are possible because -unlike the general rule of law concept- they measure clearly bounded (although by no means narrow) concepts. They both belong in the rule of law and governance category and should be part of any rule of law monitorization, allowing more granular and analytic monitoring and evaluations of progress or regress made by countries.

Beyond the use of such indicators for directly related reforms I argue that directly observable indicators of the last generation are indispensable controls for government produced data. If rule of law and governance really matter it is certainly naïve to presume that statistics produced across countries have equal accuracy. After all, the only directly observable transparency measurement (produced by the World Bank²⁷) prior to the T-index was based specifically on the quality of statistics that countries returned at the World Bank demand.

Let's take the example of the COVID 19 pandemics. Several evaluations exist of the effectiveness of the government response, for instance Oxford's tracker, covering a variety of government responses (regulations, tests' numbers, contact tracing). Research explaining the

²⁷ see Hollyer and all 2014 note 18.

fatality rate of COVID 19 (one of the three key dependent variables in the evaluation of government response, aside incidence and occupancy of intensive care beds) has focused so far on three key groups of determinants and the social and political factors that shape them: the baseline characteristics of the population and communities they live in; the response policies by governments; and the health care systems' capacity . But we do not know either the total number of confirmed cases (the number of tests vary wildly across countries, by a margin that we cannot know accurately) or the number of confirmed deaths. Belgium, for instance, has been on top of COVID deaths per 1 million population for quite a while, and they have defended themselves from the accusation that they lose more people than any other country by the comprehensiveness and transparency of their reporting. Dying with and dying from COVID-19 implies a thorough investigation into the cause of a death, beyond citing a positive SARS-CoV-2 test, which many countries do not do for lack of resources or fear to panic their population.

The most used measure for fatalities is the case fatality ratio (CFR). That is apparently simple, one just divides confirmed COVID 19 related deaths to COVID 19 confirmed cases. In the absence of hard evidence that some populations are genetically more vulnerable, the differences across countries, then, would allow us to calculate fatalities and map the effectiveness of the government response. A null hypothesis would imply that if all governments perform similarly in dealing with the infection, we would encounter similar CFR across countries, controlling for the number of months of the pandemics in each case and the age structure of the population. But alternative measurements have cast doubt over this simple measure of CFR and argued that it is not really useful to understand either the toll that countries paid to the pandemics, or the performance of health systems to control the sickness. The BBC together with researchers from the UN's Economic Commission for Africa (UNECA) surveyed the deaths' reporting on the occasion of this pandemics, to uncover the fact that except Albania and Monaco all European countries have one, but just over half of Asian countries and a minority of African countries have functioning, compulsory and universal civil registration systems - known as CRVS systems²⁸. Researchers developed the concept of excess mortality, a metric that involves comparing all deaths recorded with those expected to occur, reviewed by the leading scientific magazine *Nature*²⁹. That also has limitations, as statistics from more than 100 countries on expected or actual deaths are either not accessible or not reliable, so the number of cases declines. Such alternative figures (based on door-to-door surveys, machine-learning computer models and even satellite images of new graves) are computed as number of deaths per 100k³⁰ or % estimated deaths from presumed deaths (p-score³¹). The end results, for instance, are figures such as the widely cited *The Economist* magazine excess deaths dashboard, which are 2 and 4 times higher than the official ones. Seeing the wide variation in the quality of government

²⁸ <https://www.bbc.com/news/world-africa-55674139>

²⁹ Giuliana Viglione. How many people has the coronavirus killed? *Nature*. Vol 585: 3 September 2020, available at [How many people has the coronavirus killed? \(nature.com\)](https://www.nature.com/articles/d41585-020-00000-0), last accessed 20.03.2022

³⁰ Covid 19 Excess Deaths tracker, <https://www.economist.com/graphic-detail/coronavirus-excess-deaths-tracker>, last accessed 20.03.2022.

³¹ See Hannah Ritchie, Edouard Mathieu, Lucas Rodés-Guirao, Cameron Appel, Charlie Giattino, Esteban Ortiz-Ospina, Joe Hasell, Bobbie Macdonald, Diana Beltekian and Max Roser (2020) - "Coronavirus Pandemic (COVID-19)".

around the world, is it indeed not naïve to trust absolutely the figures reported by governments (such as Russia or China, on one hand, or low-capacity states in Africa, on the other)? The rule of law or the degree of informality which impacts hygiene may be strong intervening variables on the quality of public health data. If we can measure such governance context indicators, we could weigh down Belgium's casualties compared with a country which reports far less infections and deaths despite having in general a far worse life expectancy. And, of course, that would lead to a totally different assessment of the effectiveness of Belgium's response to the pandemic. Using the newly released T-index and the official fatality data reported by countries and published by WHO (where Belgium is on top of the world) we find indeed a strong significant association (60% correlation index, 40% variation explained by running a bivariate regression) between higher casualties and transparency. Belgium, with high transparency and high fatality, appears worse than Uzbekistan, where both fatality and transparency are very low, for instance. Countries in the higher upper right corner have high fatalities and high transparency, including Belgium, Estonia, France, Spain, many Central European countries, while those close to the line on the left (like Yemen or Venezuela) appear to have fewer deaths and low transparency. Unless we presume that government transparency kills people, the obvious explanation is that reported deaths depend to a very large extent on how transparent a government is and how well it reports its fatalities.

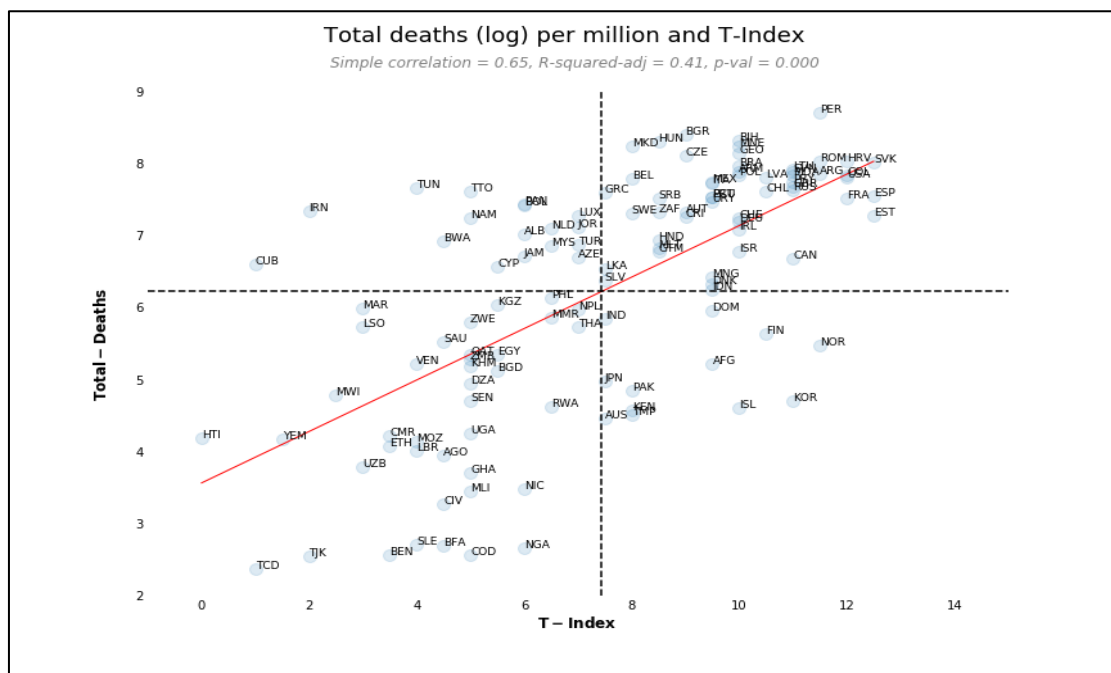


Figure 5. The association between transparency and official death figures

Source: World Mortality Dataset, *eLife*; *ERCAS*³². Legends: T-index scaled 0-14 with 14 maximum transparency³³; Total deaths (log) per million inhabitants

³² Karlinsky & Kobak, (2021), Tracking excess mortality across countries during the COVID-19 pandemic with the World Mortality Dataset, *eLife*; *ERCAS*, database available at Transparency Index.xlsx (live.com), both last accessed 20.03.2022.

³³ Mungiu-Pippidi, A. and B. Vaz Mondo, Measuring real (de facto) transparency by a new index, *ERCAS*, https://www.againstcorruption.eu/wp-content/uploads/2021/11/File-2-T-index-methodology-paper_final-151121.pdf, last accessed 20.03.2022.

It may be that this striking finding is only a coincidence, despite the magnitude of the association. I next introduce some minimal test controls to explain deaths: the age structure of the population, as COVID 19, unlike the Spanish flu targeted older and more vulnerable people, and health expenditure, the obvious control for the capacity of a health system (which largely explains number of hospital beds in intensive care, the diagnosis capacity, etc.). All determinants are highly significant, and remain so in the multivariate model, with transparency scores predicting the number of reported official deaths per 100k for at least 32% of the 127 countries we have the data for, slightly more than the second powerful predictor, number of people over 65 years of age as percentage of the total populations. In other words, even when countries are similar in age structure and health expenditure the countries with more transparency have a higher number of casualties due to COVID 19, which we interpret as indicating the higher accuracy and transparency of their deaths' reporting. This indicates also that using these figures without controlling for data accuracy is flawed and may lead to misinterpretations and erroneous conclusions by doctors and public health officials who rely on such data.

Table 4. Multivariate regression explaining the official death count as of February 2022

Total death count per million	level_1	Model 1	Model 2	Model 3	Model 4
T-Index de facto (0-14)	coef	158***	227***		
	std err	34.9	29.5		
Health expenditure	coef	-0.21***		0.13***	
	std err	0.06		0.05	
% of population above 65 years old	coef	99***			98***
	std err	20.7			14.1
Intercept	coef	-617	-513	939	192
	std err	220	236	140	168
	P> t	0.01	0.03	0.00	0.25
N		127	127	127	127
Adjusted R-squared		42%	32%	4%	28%

OLS regression with total deaths per million (log) as dependent variable³⁴.

So, the official fatality data cannot be trusted. But what about the alternative? Using excess deaths figures (per 100 k as well as the p-score) I test the t-index again to find it insignificant this time.

³⁴ Our world in data COVID 19 dataset, accessible at <https://github.com/owid/covid-19-data/tree/master/public/data>; T-index, accessible at https://www.againstcorruption.eu/wp-content/uploads/2021/11/File-3-T-Index-full-dataset_final-151121.xlsx ; Health expenditure per capita from World Bank, for the year 2018, accessible at <https://datos.bancomundial.org/indicador/SH.XPD.CHEX.GD.ZS> , All data sources last accessed 20.02.2022.

Excess deaths do not correlate with transparency, although they do correlate with other governance indicators (for instance, public integrity or corruption³⁵), which is normal, since they are, in fact, meant to adjust for the lack of accuracy of deaths' reports. The association between fatalities (excess deaths) and governance now looks more normal, with an inverse correlation (the more corrupt countries have higher casualties), with Tajikistan in the upper left-hand corner with more deaths and low transparency and New Zealand in the lower right-hand corner. Alongside a handful of other countries (Singapore, Taiwan, Australia, Lichtenstein...) New Zealand's excess deaths figures are in the negative- so accurate their reporting is and so good their management of the pandemics. The association between governance quality, proxied by corruption, and excess deaths holds with control for health expenditure, vaccination rate, HDI and religion. This is worth further in-depth study, as this pandemic made the issue of governance quality more salient than ever.

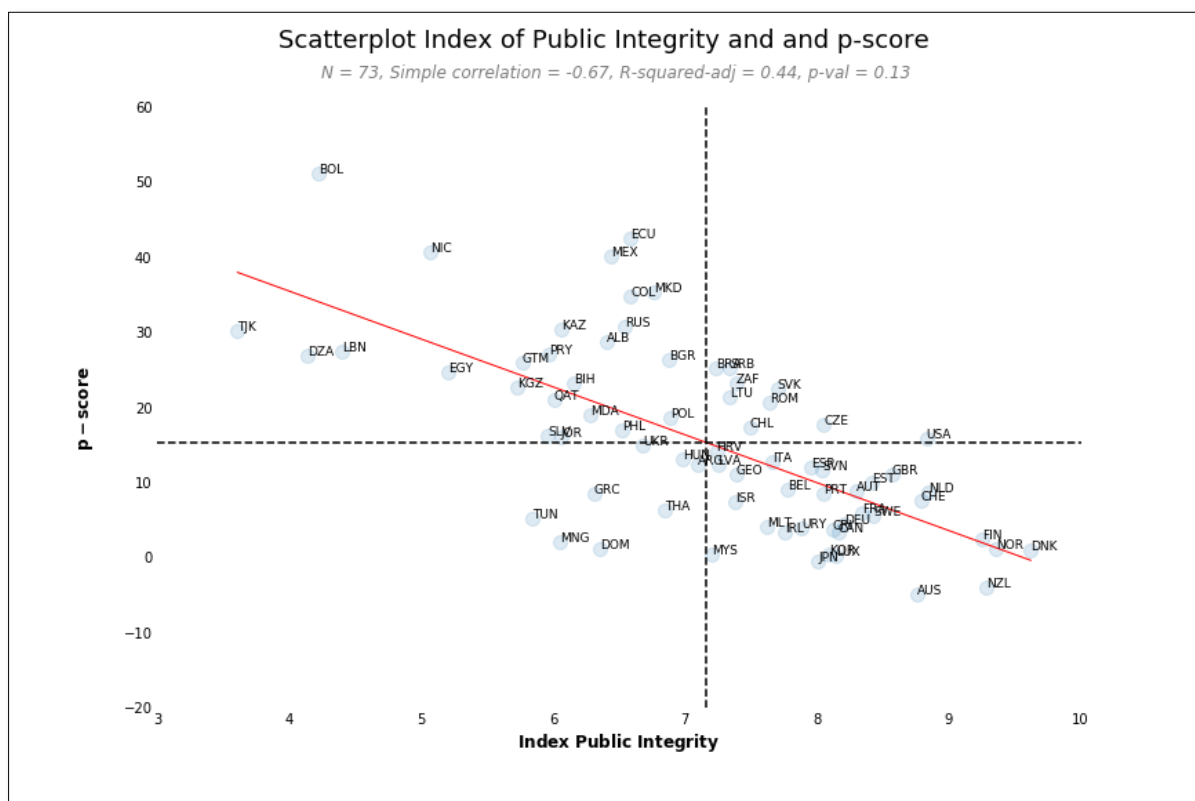


Figure 6. The association between public integrity and real ('excess') deaths figure

In conclusion, the more transparent a country is, the more COVID 19 fatalities it reports, and the more corrupt it is, the more real deaths it has. Surely then, some controls for data quality should be introduced in the academic and policy work evaluating the response to the pandemic. While indicators for transparency, integrity and rule of law are of great interest in themselves, their development on a more objective base (as opposed to earlier generations based on perception) may prove of great utility in many other areas of public policy evaluation. The informal and the 'de facto' should feature prominently at least as controls in any measurement if we are to trust the data by which we evaluate our governments.

³⁵ See Mungiu-Pippidi, Alina, and Ramin Dadašov. "Measuring control of corruption by a new index of public integrity."

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A methodological paper on the new T-index presented in this working paper in an earlier version has been meanwhile published by Alina Mungiu-Pippidi in the journal *Regulation and Governance* (<https://onlinelibrary.wiley.com/journal/17485991>). You can find it at DOI: 10.1111/rego.1250.

All indicators presented in this working paper are available for download and research here <https://www.corruptionrisk.org/datasets/>

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