
16. Global indicators

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1 INTRODUCTION

In recent years, global indicators have come to the fore in a variety of fields. Today, a plethora of global indicators are published by many international, hybrid and non-governmental organizations, national agencies, advocacy groups, scientists' networks and interested individuals on issues as diverse as child health, quality of education, water sanitation, the ease of starting a business, countries' democratic fragility and rates of corruption.

Some of these indicators are meant to help international and national policy-makers evaluate priorities for their policy agendas. Other indicators provide investors with information for framing their economic strategies, or donors with an instrument to decide funding allocations and conditions. Yet other global indicators serve purely information purposes and seek to document circumstances that would otherwise remain underappreciated, and to shed light on these circumstances' causes, effects and possible remedies.

Whatever their purpose, the booming production of indicators has had an impact that exceeds by far their intended goals. The rise of global indicators has contributed to a change in the place and style of policy-making. Indicators have fostered the emergence of new institutions, markets, professions, and communities of researchers and practitioners. They have affected the value, expectations and behaviours of many actors at various levels of society. They have modified how international organizations work and how studies in social sciences are performed. Indicators have permeated public discourse and mass culture, effecting invisible but substantial shifts in how things are described and conceived.

Reflecting their growing importance, indicators have recently become the subject of intense research, driven by different approaches and objectives. The aim of this chapter is to survey the main issues raised by global indicators, and to critically review the state of the art of the field's literature. For this purpose, the chapter will begin by defining global indicators (Section 2) and by placing their historical rise (Section 3) in the wider cultural context of the increasing power of quantitative knowledge over the past two centuries (Section 4). This analysis will enable appreciation of the turn to indicators as an outcome and as a stage of development, and of the increasing trust in technocracy (Section 5). Then there will be further detailed investigation of the entities making global indicators (Section 6), how these indicators are made (Section 7), for what purposes (Section 8), and with what effects (Section 9). This examination will lead to some observations on the potential dangers posed by global indicators (Section 10) and to the proposal of some possible solutions (Section 11).

2 WHAT ARE GLOBAL INDICATORS?

There is no consensus on the definition of a ‘global indicator’, partly due to the relatively short history of (the research on) global indicators, and partly due to the great variety of shapes and sizes that indicators may take. Therefore, definitions vary depending on the background, sensitivities and experience of those who propose them, embodying and fostering underlying assumptions about who should make global indicators and how, against whom, and for what goals.

For the purpose of this chapter, the widely accepted description given by Davis, Kingsbury and Engle Merry in their reference book *Governance by Indicators*¹ will be adopted. According to this definition, an indicator is

a named collection of rank-ordered data that purports to represent the past or projected performance of different units. The data are generated through a process that simplifies raw data about a complex social phenomenon. The data, in this simplified and processed form, are capable of being used to compare particular units of analysis (such as countries or institutions or corporations), synchronically or over time, and to evaluate their performance by reference to one or more standards. ... Indicators often take the form of, or can readily be transformed into, numerical data.²

This description certainly has the merit of capturing in a few lines the main features of indicators. However, for the purposes of this chapter, some further specifications are necessary.

Indeed, the definition proposed by Davis et al does not encompass indicators that do not rank and compare the units analysed, while some indicators – typically those concerning human rights, which often assess countries individually for monitoring purposes – are no more than a one-to-one measurement of given situations.³

Furthermore, the above definition does not emphasize two features of global indicators that are instead worth specifying in the context of this chapter. First, a recurring – albeit not universal – trait of global indicators is that they tend to combine technical complexity with a user-friendly, captivating format and free accessibility of their results on the web: traits that have contributed immensely to their global diffusion. Second, indicators are rarely conceived as one-shot games. They are often short-term, repeated exercises, to be replicated at given intervals. This compressed and circular time span explains the capacity of indicators to trigger processes of learning and adapting within both their makers and their users.

Finally, the indicators in question are ‘global’. In this chapter, ‘global’ indicators will refer not only to indicators published by international actors, but also to those published by domestic actors, provided that their effect transcends the mere regional or international scale. For example, an indicator drafted by a national authority, for its

¹ Kevin E Davis, Benedict Kingsbury and Sally Engle Merry, ‘Introduction: Global Governance by Indicators’, in Kevin E Davis et al (eds), *Governance by Indicators. Global Power through Quantification and Rankings* (Oxford University Press 2012) 3, 6.

² Ibid.

³ Marta Infantino, ‘The Law of Indicators on Women’s Human Rights: Unmet Promises and Global Challenges’, (2012) IRPA Working Paper GAL Series n 9, 1, 17–19.

own purposes and according to its own law – such as the ‘Trafficking in Persons’ ranking prepared by the US Department of State pursuant to the US Trafficking Victims Protection Act – may qualify as a ‘global’ indicator due to the global reach of its consequences.⁴

3 A BRIEF HISTORY OF GLOBAL INDICATORS

Individuals and non-governmental organizations (NGOs) having an interest in global affairs began to experiment with indicators between the 1970s and the 1980s. In the 1970s, researchers involved in the Stanford-based SLADE (Studies in Law and Development) project carried out a massive amount of empirical data research on the countries surveyed.⁵ In 1973, the New York-based NGO Freedom House published its first Freedom in the World report.⁶ In 1983, the British campaigner Charles Humana distributed the first edition of his World Human Rights Guide.⁷ In 1987, the *US News & World Report* magazine disclosed its first ranking of US graduate and professional schools, which quickly became the magazine’s most lucrative publication.⁸

From the 1990s onwards, a number of factors – from the declining cost of information technology to the worldwide dissemination of statistical techniques, from the diffusion of applied economic and political studies to the thawing of international relations in the post-Cold War era – boosted the global trend towards ‘indicatorization’.

In 1990, the United Nations Development Programme released its first Human Rights Development Report.⁹ Under the aegis of the World Bank, the Governance Indicators were first published in 1996.¹⁰ In 2003, the International Finance Corporation (a member of the World Bank Group) launched the first Doing Business report.¹¹ In the same year, the UN Statistics Division established the Millennium Development Goals Indicators.¹² In 2012, the Office of the United Nations High Commissioner for

⁴ Anne T Gallagher and Janie Chuang, ‘The Use of Indicators to Measure Government Responses to Human Trafficking’, in Davis et al (n 1) 317, 327–331, 335–339. Other indicators published by domestic actors may be of great significance in a local context, but produce no or few consequences outside it: see, for example, the indicators on women’s welfare and on displaced persons examined by Lina Fernanda Buchely Ibarra, ‘Indicators as a Form of Resistance’ (2014) 25 *International Law Journal* (Universidad Javeriana) 225.

⁵ As may be known, the project was discontinued in the mid-1970s: David M Trubek, ‘Law and Development: 40 Years after Scholars in Self-Estrangement – A Preliminary Review’ (2014) University of Wisconsin Legal Studies Research Paper 1255/2014, <<http://ssrn.com/2435190>> accessed 10 January 2015.

⁶ See <<http://freedomhouse.org/content/our-history>> accessed 10 January 2015.

⁷ Charles Humana, *World Human Rights Guide* (Hutchinson 1983).

⁸ Wendy Nelson Espeland and Michael Sauder, ‘Rankings and Reactivity: How Public Measures Recreate Social Worlds’ (2007) 113 *American Journal of Sociology* 1, 9–10.

⁹ See <<http://hdr.undp.org/en/data>> accessed 10 January 2015.

¹⁰ At <<http://brookings.edu/research/opinions/2009/06/29-governance-indicators-kaufmann>> accessed 10 January 2015.

¹¹ See <<http://doingbusiness.org/about-us>> accessed 10 January 2015.

¹² More information at <<http://mdgs.un.org/unsd/mdg/Host.aspx?Content=Indicators/About.htm>> accessed 10 January 2015.

Human Rights issued a volume on ‘Human Rights Indicators – A Guide to Measurement and Implementation’.¹³ All these indicators (like any others) are accompanied by abundant literature – manuals, reports, handbooks, background papers, raw data, etc. – that explains the indicators’ sources, methodology, contents and objectives.

Since the 2000s, the rising prominence of indicators in the global arena has attracted the attention of several social scientists, who have critically explored their modes of production and consequences. The anthropologist Sally Engle Merry has investigated the impact of technologies for measurement upon human rights law, especially on areas relating to gender.¹⁴ In 2013, two political scientists, Nehal Bhuta and Gaby Umbach, began a project on ‘Global Governance by Indicators’ to study how the very production and use of indicators affects the global interrelations between policies, politics and polities.¹⁵ In the legal sphere, some law and development scholars have engaged in a critique of the ethnocentric assumptions and weak empirical bases of development indicators,¹⁶ while private comparative lawyers have focused on questioning the methodology, and the very utility, of the World Bank’s Doing Business reports.¹⁷ Furthermore, Global Administrative Law (GAL) studies on indicators, channelled since 2010 into a GAL sub-project entitled ‘Indicators as a Global Technology/Governance by Information Project’,¹⁸ have examined the entire range of global indicators in an effort to perform a systematic comparative study of the implications, possibilities and pitfalls of the universal shift towards indicators.

¹³ Office of the High Commissioner for Human Rights (OHCHR), *Human Rights Indicators – A Guide to Measurement and Implementation* (UN 2012). See also Tim Büthe, ‘Beyond Supply and Demand: A Political-Economic Conceptual Model’, in Davis et al (n 1) 37–43 (explaining why global indicators are set up in certain contexts).

¹⁴ Sally Engle Merry, ‘Human Rights Monitoring and the Question of Indicators’, in Mark Goodale (ed), *Human Rights at the Crossroads* (Oxford University Press 2012) 140–150; Id, *The Seduction of Quantification: Human Rights and the Rise of Indicator Culture* (University of Chicago Press forthcoming 2016).

¹⁵ See <<http://globalgovernanceprogramme.eui.eu/research-projects/>> accessed 10 January 2015.

¹⁶ Trubek (n 5); Tor Krever, ‘Quantifying Law: Legal Indicator Projects and the Reproduction of Neo-Liberal Common Sense’ (2013) 34 *Third World Quarterly* 131–150; Amanda Perry-Kessaris, ‘Prepare Your Indicators: Economics Imperialism on the Shores of Law and Development’ (2011) 7 *International Journal of Law in Context* 401–421; Kerry Rittich, ‘Governing by Measuring: the Millennium Development Goals in Global Governance’, in Hélène Ruiz Fabri, Rüdiger Wolfrum and Jana Gogolin (eds), *Select Proceedings of the European Society of International Law* (II, Hart 2010) 463–487.

¹⁷ See the proceedings of two conferences held on these issues, respectively in (2009) 57(4) *American Journal of Comparative Law* and in (2012) 3 *Annuario di diritto comparato*. See also Association Henri Capitant des amis de la culture juridique française, *Les droits de tradition civiliste en question. A propos des Rapports Doing Business de la Banque Mondiale* (2 vols, Société de législation comparée 2006), and Mathias M Siems, ‘Numerical Comparative Law: Do We Need Statistical Evidence in Law in Order to Reduce Complexity?’ (2005) 13 *Cardozo Journal of International & Comparative Law* 521.

¹⁸ See <<http://iilj.org/research/indicatorsproject.asp>> accessed 10 January 2015. As per the results of the research, see – in addition to the book edited by Davis et al (n 1) – Sally Engle Merry et al (eds), *The Quiet Power of Indicators. Measuring Development, Corruption, and the Rule of Law* (Cambridge University Press 2015).

4 THE RISE OF QUANTIFICATION AND STATISTICS

In the relevant literature, the exponential growth of global indicators over the past few decades is linked to the rise, in the late eighteenth century, of governance by numbers and its quantitative form of expression. With regard to this rise, indicators are considered both enabling instruments and outcomes.¹⁹

Several historians, philosophers, anthropologists, sociologists and lawyers engaged in ‘Science and Technology Studies’ (STS) whose works are regularly cited in connection with indicators have explored the reasons underlying the faith of modern societies in, and their reliance upon, numerical measurements and governance by experts.

Some researchers have investigated the relationship between the growing prestige of quantitative methodologies and the birth of modern nation states, with their land registries, censuses, centralized bureaucracies and overseas colonies. Nation states had to classify and quantify (the wealth of) their subjects, including those who lived in colonies and were thus distant from the central government.²⁰ Statistics and quantification techniques offered a new technology for classification and counting, and also gave rise to a new rank of bureaucrats endowed with the expertise and the authority to deploy that technology. Rules for collecting and manipulating numbers were easily transferred across continents, shared among élites of similarly minded people, and applied without any need for intimate knowledge and personal trust between the subjects involved. These rules enabled communication and governance beyond the boundaries of locality and community, and fostered the establishment of political and bureaucratic systems based on distant powers and on strategies of impersonality.²¹

Other lines of research have focused on the fundamental culture shifts that the above needs, technologies and bureaucrats brought about in contemporary societies. Several research projects emphasize how quantitative knowledge (and the related practices of measuring and testing performances through numbers) shape and sometimes even create the objects being measured.²² Quantitative knowledge and audit practices give rise to adaptive processes in which the measured object changes, both to become more easily measurable and to better conform to the expectations of the measuring entity.²³ On this view, far from being tools to objectively describe reality, counting, classifying and auditing often *enter* the so-called ‘reality’, redefine it, alter the stakes affecting it, and thus modify what they aim to represent. Through these iterative mechanisms, statistical technologies and societies simultaneously co-produce one another, through

¹⁹ Davis, Kingsbury and Engle Merry (n 1) 3–28.

²⁰ Alain Desrosières, *La politique des grands nombres. Histoire de la raison statistique* (2nd edn, La Découverte 2000) 26–59; Theodore M Porter, *Trust in Numbers: The Pursuit of Objectivity in Science and Public Life* (Princeton University Press 1995) ix–xi; Ian Hacking, *The Taming of Chance* (Cambridge University Press 1990) 2.

²¹ Porter (n 20) ix–xi.

²² Michael Power, *The Audit Society: Rituals of Verification* (Oxford University Press 1997) 10; Marilyn Strathern, ‘From Improvement to Enhancement: An Anthropological Comment on the Audit Culture’ (1996/7) 19 *Cambridge Anthropology* 1–21.

²³ Power (n 22) 12, 36–37; Strathern (n 22) 1–21.

complex interactions that are mutually constitutive and that are not captured in top-to-bottom processes.²⁴

5 TECHNOCRATIC POWERS

The implications of the above-mentioned studies for the field of indicators are clear. Over the past few decades, indicators have reproduced at global level the functions that statistics performed in rising nation states two centuries ago.

Like statistics in the nineteenth century, global indicators enable certain parties to count, classify and map a large number of geographically dispersed subjects, contributing to reach across distances, beyond the state. By deciding what should be measured and how, indicators create clusters of subjects and objects, suppressing or emphasizing the differences between them. By defining notions such as development, poverty, health, hunger, human rights, human trafficking, good governance, rule of law, states and fragility, indicators normalize particular interpretations of these notions in the public discourse, and at the same time strengthen their own authority to provide such interpretations.

Similar to the branch of statistics in the nineteenth century, global indicators claim to be based on ‘scientific’ and ‘objective’ considerations. As such, they provide distant governors with tools for a demonstrable impartiality that enables the mitigation of political mistrust. As highly sophisticated technical endeavours, indicators have contributed to the circulation of a new form of expertise and new tasks and professions, thus giving rise to ranks of bureaucrats with their own ethos and agenda.²⁵ They have shaped the identities of those who work with and produce indicators, since they have become a core part of the activity and of the business models of several institutions whose global prominence is now based on the indicators themselves.²⁶ In several

²⁴ Ann Rudinow Sætnan, Heidi Mork Lomell and Svein Hammer, ‘Introduction. By the Very Act of Counting: The Mutual Construction of Statistics and Society’, in Ann Rudinow Sætnan, Heidi Mork Lomell and Svein Hammer (eds), *The Mutual Construction of Statistics and Society* (Routledge 2011); Martha Lampland and Susan Leigh Star (eds), *Standards and Their Stories. How Quantifying, Classifying, and Formalizing Practices Shape Everyday Life* (Cornell University Press 2009); Wendy Nelson Espeland and Mitchell L Stevens, ‘A Sociology of Quantification’ (2008) 49 *European Journal of Society* 401, 405–431.

²⁵ Armin von Bogdandy and Matthias Goldmann, ‘Taming and Framing Indicators: A Legal Reconstruction of the OECD’s Programme for International Student Assessment (PISA)’, in Davis et al (n 1) 53, 77–79 (on the ‘bureaucratic entrapment’ of the OECD’s PISA assessments); Terence Halliday, ‘Legal Yardsticks: International Financial Institutions as Diagnosticians and Designers of the Law of Nations’, in Davis et al (n 1) 180, 206–208 (on the role that international financial institutions’ legal departments had in framing indicators for corporate insolvency). On supranational bureaucracy as a global law actor, see Antoine Vauchez, ‘The disputed field of global lawyering’ and Lorenzo Casini, ‘The expansion of the material scope of global law’, respectively Ch 25 and Ch 1 of this Handbook.

²⁶ There are innumerable examples in this respect. It was noted above that US law school rankings rapidly became the best-selling (and then the only) service offered by the *US News & World Report* magazine (Wendy Nelson Espeland and Michael Sauder, ‘The Dynamism of Indicators’, in Davis et al (n 1) 86, 88–90). Some companies offer their indicators for a fee: for

sectors, indicators have constituted a battleground on which different actors compete for resources, ascendancy and privileged status in the development of global norms and values. Indicators have thus affected the ecology of global actors, giving rise to relationships of cooperation, mutual reinforcement, mimicry, competition and counter-hegemonic moves.²⁷

Another similarity between global indicators and nineteenth-century statistics is their capacity to influence their audiences. Indicators can cement or challenge the vocabulary, ideas and mindsets of their users, as well as the causal theories upon which the latter rely. They can induce changes in the behaviour and the identity of their users; orient users' priorities and attribution of resources; and suggest new divisions of labour, power and responsibility. As in the case of statistics, these processes are not unidirectional: the ways in which indicators' audiences reframe and develop the content of indicators affect what and to which parties indicators communicate.²⁸

6 THE ACTORS

Who makes global indicators? The answer to this question is much less straightforward than may be expected at first glance. The factors mentioned above – the increasing commercialization of global indicators, the linkages and competition between their publishers, the circularity of processes of knowledge production – multiply and blur the boundaries between the subjects that participate in indicator-related activities.

The distinction between those who publish an indicator from those who call or provide material support for its establishment, those who measure it, and those who use it is only theoretical.²⁹ As mentioned above, the entity that actually publishes the indicator often acts as 'the "manufacturer" of a consumer product, whose main contribution is to lend its brand name and perhaps its design and marketing expertise and quality control power to the collective product of a global supply chain'.³⁰

Under this 'brand name', a complex network of actors contributes more or less actively to the production of indicators. The forms of this contribution may vary, ranging from consultation with third parties during data collection, to straightforward reliance on data collected by other actors, to the subcontracting of all or individual

example, the Global Impact Investing Rating System evaluates the social and environmental benefits created by the paying corporations on a fee basis (Sarah Dadush, 'Impact Investment Indicators: A Critical Assessment', in Davis et al (n 1) 392, 409). Other companies participate in making the indicators, providing their publishers with data or other related services: this is the case with, for example, the Business Environment Risk Intelligence and the Global Insight Global Risk Service, two commercial business information providers who work on the World Bank's World Governance Indicators (Krever (n 16) 143–144).

²⁷ René Urueña, 'Global Indicators – Introductory Remarks' (2015) 12 *International Organizations Law Review* (forthcoming).

²⁸ Davis, Kingsbury and Engle Merry (n 1) 10.

²⁹ Büthe (n 13) 29–51; Sabino Cassese and Lorenzo Casini, 'The Regulation of Global Indicators', in Davis et al (n 1) 465, 467–471.

³⁰ Davis, Kingsbury and Engle Merry (n 1) 14.

parts of the indicator to independent contractors or leading figures in the field.³¹ In extreme cases, the boundaries between the indicator's 'manufacturer', the entities providing the measures and those being measured become completely blurred. In the context of human rights, for example, the organization that places its brand on an indicator often does nothing more than set draft guidelines for preparing the indicator. On the basis of these guidelines, the indicators are then prepared and published by states – i.e. the target of the indicator itself. This division of labour is meant to promote the development of a culture of compliance with human rights norms, to foster collaboration between the requesting institutions and states, and to socialize the latter in the human rights practices promoted by the former.³²

Whatever the forms of interaction between the elements of the networks that contribute to the production of indicators, it remains true that the above processes nurture (and depend upon) an intricate web of relationships – of overlapping mandates, coordination, competition, disjunction, and so on – between the subjects involved. The concrete forms of these relationships shape, and are often shaped by, the methodology adopted to formulate the indicators.

7 THE METHODOLOGIES

Innumerable methodological assumptions and choices underlie the making of a global indicator. All indicators imply a definition of what should be measured (and why), be it health, corruption or democracy. At the basis of some indicators, a particular scientific theory – such as the 'Legal Origins' theory³³ for the Doing Business reports – provides a background hypothesis, literature and framework for data collection and analysis.

Besides definitions, those who create indicators must agree upon how to measure the objects in question. Since many objects cannot be counted easily, the designers must usually establish proxies for the objects to be measured. Proxies are deemed to provide approximate measures for these objects, and are chosen because of their ability to be converted into numerical terms. For example, one of the proxies to measure the fight

³¹ Some examples are set out in Section 7 below.

³² AnnJanette Rosga and Margaret L Satterthwaite, 'The Trust in Indicators: Measuring Human Rights' (2009) 27 *Berkeley Journal of International Law* 253, 280–281; Sally Engle Merry, 'Measuring the World: Indicators, Human Rights, and Global Governance' (2011) 52 *Current Anthropology* 83, 88; Judith V Welling, 'International Indicators and Economic, Social, and Cultural Rights' (2008) 30 *Human Rights Quarterly* 933, 957; more generally, on the many forms that processes of State socialization may take, see Ryan Goodman and Derek Jinks, *Promoting Human Rights through International Law* (Oxford University Press 2013). Examples of these indicators are the OHCHR's Human Rights Indicators Guide mentioned above, n 13, and the indicators on the right to development proposed by the Human Rights Council's High Level Task Force on the implementation of the right to development (High-level task force on the implementation of the right to development, 'Right to development criteria and sub-criteria', <A/HRC/15/WG.2/TF/2/Add.2, <http://ohchr.org/EN/Issues/Development/Pages/HLTFSession6th.aspx>>).

³³ See, for all, Edward L Glaeser and Andrei Shleifer, 'Legal Origins' (2002) 117 *Quarterly Journal of Economics* 1193–1229.

against malaria in Millennium Development Goals Indicator n. 6.7 concerns the 'proportion of children under 5 sleeping under insecticide-treated bed nets'. The availability of insecticide-treated bed nets *per se* does not provide much information on the diffusion of malaria, but bed nets are easier to measure than other elements that may be more closely connected to the actual rates of malaria infection. Moreover, reliance on data from countries that distribute bed nets makes it easier to track the efforts made to eradicate malaria and thus to measure the degree of one's commitment to the fight against the disease (rather than the effectiveness of the activities undertaken). In addition to proxies, indicators often set benchmarks, i.e. thresholds defining the average, maximum or minimum requirements for certain values.

Once proxies and benchmarks are selected, data should be gathered, converted into numbers, weighted, aggregated and transformed into the final 'score' that will appear in the indicators. This requires the designers of indicators to decide: (a) the indicator's focus on 'objective' situations, efforts, performances, results and predictions; (b) the indicator's timespan and the frequency of measurement; (c) the type of data to be gathered (e.g. quantitative or qualitative data); (d) the methodology for collection (through official statistics, household surveys, experts interviews, etc.); (e) the external sources; and (f) the extent of the involvement of third parties in making the indicator. Furthermore, the designers should make decisions on: (g) the correlations between the data gathered; (h) the weightings and other devices to perform regression analysis, limit double-counting, filter out noisy information, and smooth over data unavailability; and (i) the coding techniques, i.e. how the gathered information is interpreted and given a number according to a predefined scale of values.

Finally, those who formulate indicators must determine how to present the data – as global rankings of the performing element in descending order, as individual ratings on a scale of limited value, as booklets with individual case studies, as world maps coded by different colours, etc.

Of course, the above choices are not made in a vacuum. They are often prompted by economic constraints, by the collaborative network between those who establish and work on indicators, by the mission they believe to be conferred upon them, and by the strategies through which they aim to fulfil it. Whatever the reasons, it remains true that these choices profoundly affect the results obtained by the indicator, since each methodology has pros and cons. For example, using the data gathered by an authoritative organization may enable the designers to save time and resources, and to benefit from the authoritativeness enjoyed by the lending organization. However, employing third-party data may also produce some inconsistencies, and may require the designers to make adjustments to fit the borrowed data into the indicators' framework. Similarly, exclusive reliance on in-house experts might ensure a high degree of commonality in the selection and interpretation of the data, but the distance of those experts from their object of study may increase the risk of inaccuracies and misunderstandings about the contexts under examination. This is why much of the approval and concern raised by global indicators are related to the methodologies adopted to make them, as will see in the following sections.

8 THE PROMISES OF GLOBAL INDICATORS

The supporters of global indicators emphasize their many benefits. Global indicators, it is stressed, provide knowledge as a public good. They transform complex information into numbers, make data easily intelligible, facilitate inter-temporal and inter-unit comparisons, and outline occurrences, correlations and patterns that would otherwise go unperceived. As knowledge providers, indicators might reduce policymakers' burden of processing information in the course of decision-making, and help them in carrying out diagnostic analyses and planning of economic, fiscal and policy programmes. Indicators may streamline decision-making processes, insofar as solutions based on indicators can be presented as efficient, scientific and impartial, and can be approved without needing to take much more complicated political steps, which would require voting, diplomatic bargaining or the exercise of power. Since indicators reduce the information asymmetry between parties who have had no or little previous interaction with one another, they can build a platform for dialogue between distant decision-makers and thus enable communication across regimes, and the construction of universally applicable definitions and standards. As user-friendly tools to test and control the performance of various actors, indicators can provide carrot-and-stick incentives with which to enforce commitments, especially in contexts with a traditionally low enforcement capacity, such as the international arena. Along the same lines, it is emphasized that indicators – by identifying quantifiable targets, monitoring progress and diffusing best practices – are capable of stabilizing and enforcing normative standards in a more straightforward and self-compliant manner than traditional legal measures, such as hard norms, recommendations, soft laws or conditionality. The potential of indicators for promoting change is often strengthened by their capacity to capture media attention, trigger social mobilization, support requests against duty-bearers, and promote naming and shaming mechanisms and pressure for the accountability of states and non-state actors.³⁴

The many promises of global indicators explain the great variety of uses to which they have been put in recent years: documentation, compliance assessment, guidance for investing, regulatory reforms, fundraising, aid distribution, and evaluation of campaigns, programmes or efforts. Section 9 below will examine whether and if so how global indicators have actually fulfilled those promises.

9 THE ACTUAL IMPACT OF INDICATORS

It is difficult to evaluate whether and to what extent global indicators have given rise to the benefits mentioned above. Tracking the overall magnitude and effects of the recent

³⁴ For a survey of indicators' alleged benefits, see Davis, Kingsbury and Engle Merry (n 1) 3–28; Mauro Bussani, 'Global Indicators: Actors and Methods, Promises and Dangers', paper presented at the University of Macao, China, on 27 November 2014, on file with the author.

trend towards ‘indicatorization’ is by no means a simple process. Aside from celebratory statements by certain designers, to date very little empirical research has been carried out on the effects of indicators.³⁵

This is partly due to the difficulties in measuring indicators’ performances and of drawing correlations between the publication of the indicators and external changes. Only a small number of indicators produce clearly measurable results (such as the amount of money allocated by an international organization on the basis of a given indicator). Much of the impact of indicators remains invisible, insofar as it involves imperceptible shifts in the vocabulary of policy-making, in how problems are defined and responses elicited, and in the identity, role and powers of the technocrats engaged in producing and using indicators. A further complication in evaluating indicators’ effects derives from the indicators’ inherent reactivity.³⁶ Indeed, the ability of indicators to influence the ‘real’ world depends not only upon their inner features (e.g. their technical quality or simplicity, or the rewards associated with them), but also upon ‘external’ factors, such as the perceived prestige of their designers, the number of people who notice or ignore them, their media coverage, and the accumulation of new audiences and uses. Studying the consequences of global indicators would thus require investigating how these collective processes of appropriation and contestation of contents take place over time – an effort that has been made, to date, only on a fragmentary and limited basis.

Among the few effects of indicators that have been explored, one of the most significant is their impact on lending, investment and aid-allocation decisions. Interviews with banks, investors and donors confirm the recent increase in reference to indicators when determining the beneficiaries, the amount and the conditions of their funding.³⁷ Whether or not the referred indicators were originally designed for that purpose is irrelevant: indicators may thus circulate from one community to another, and be appropriated for reasons other than those envisaged by their publishers (often with no or little further interpretation of the data).³⁸ For example, the US aid agency Millennium Challenge Corporation (MCC) relies upon the Freedom House’s Freedom in the World reports when allocating its funds.³⁹ The hybrid organization Global Alliance for Vaccines and Immunization (GAVI) makes use of the WHO/UNESCO indicators on vaccine coverage to determine priority areas for funding.⁴⁰ Indicators

³⁵ Katharina Pistor, ‘Re-Construction of Private Indicators for Public Purposes’, in Davis et al (n 1) 165, 168.

³⁶ Among many, see Espeland and Sauder (n 26) 91–109; id (n 8) 10–24.

³⁷ Christiane Arndt and Charles P Oman, *Uses and Abuses of Governance Indicators* (OECD 2006) 38–39 (talking about governance indicators).

³⁸ Pistor (n 35) 177.

³⁹ Nikhil Dhutta, ‘Accountability in the Generation of Governance Indicators’, in Davis et al (n 1) 437, 440–443.

⁴⁰ In the absence of an authoritative overall indicator for the quality of health systems, the WHO/UNESCO indicators on vaccine coverage are used by the International Development Association as a performance indicator in its funding programmes and by the International Monetary Fund as a requirement for eligibility and an indicator of progress in the Heavily Indebted Poor Countries debt relief initiative. The use of indicators on vaccine coverage as a performance indicator in development financing *de facto* leads states to prioritize immunization

created as diagnostic tools may thus transform into means of intervention that influence national policies.⁴¹ This use of indicators also affects the behaviour of prospective beneficiaries, as anecdotally reported by a researcher who, while conducting a field study in a Colombian NGO, heard a member of the NGO staff shout ‘Hooray! We are a failed State!’;⁴² the staff member was celebrating the fact that Colombia qualified as a failed state in the Fund for Peace’s Fragile States Index, because this would have ensured that the NGO could continue to seek funds at international level.

Another advertised effect of indicators concerns the regulatory influence that some indicators have at the domestic level. Indicators often replace conventional law-making processes, as they are much more effective than traditional legal tools in pressuring their targets to adopt reforms. The World Bank’s Doing Business reports claim to have informed, in 12 years, more than 600 reforms to promote business and foreign investment in several countries.⁴³ The World Bank has rewarded the countries that adopted these reforms with financial aid, technical assistance, skyrocketing scores in the reports and specific case studies.⁴⁴ In a similar fashion, the US State Department’s Trafficking in Persons Report alleged that it fostered the enactment of anti-trafficking legislation around the world.⁴⁵ In the education sector, PISA evaluations and university rankings are said to have had a huge impact on educational policy and reforms in the participating states.⁴⁶

All that glitters, however, is not gold. Many observers doubt that the national reforms carried out under the Doing Business reports’ auspices have produced long-term growth and sustainable development for all.⁴⁷ In the urgency to improve their ranking, states often adopt shallow rules that only nominally comply with indicators’ standards. For example, in 2010, the US Department of State’s ‘Human Trafficking in Persons’ report praised Belarus for its approval of measures to prevent human trafficking.⁴⁸ However, behind the guise of official compliance with international human rights law, Belarus’s authoritarian government seized the opportunity to limit freedom of speech, freedom of

over other health initiatives, and may negatively affect non-vaccine interventions and compromise the overall quality of health care. See Angelina Fisher, ‘From Diagnosing Under-Immunization to Evaluating Health Care Systems. Immunization Coverage Indicators as a Technology of Global Governance’, in Davis et al (n 1) 217, 232–237.

⁴¹ Fisher (n 40) 237.

⁴² Ibarra (n 4) 2.

⁴³ World Bank, *Doing Business in 2015: Going Beyond Efficiency* (World Bank 2014) 21–22.

⁴⁴ On these reforms, see Krever (n 16) 149 (Georgia); Michael Riegner, ‘Measuring the Good Governance State: A Legal Reconstruction of the World Bank’s “Country Policy and Institutional Assessment”’ (2012) IRPA Working Papers n 6, 4 (Georgia); Ralf Michaels, ‘Legal Origins Thesis, Doing Business Reports, and the Silence of Traditional Comparative Law’ (2009) 57 *American Journal of Comparative Law* 765, 772–773 (Rwanda and Dubai).

⁴⁵ Davis, Kingsbury and Engle Merry (n 1) 16; Gallagher and Chuang (n 4) 331.

⁴⁶ von Bogdandy and Goldmann (n 25) 53, 68–70 (discussing the reforms prompted in Germany by PISA evaluations); Espeland and Sauder (n 26) 86; id (n 8) 10–24.

⁴⁷ For all, see Perry-Kessarlis (n 16) 401–421.

⁴⁸ US Department of State, ‘Trafficking in Persons Report 2010, Country Narratives A Through F’, 14 June 2010, <<http://state.gov/g/tip/rls/tiprpt/2010/142759.htm>> accessed 10 January 2015.

labour and citizens' mobility at domestic level.⁴⁹ Further cases in which rank-seeking strategies may produce perverse effects are rife. In recent years, many governments have diverted their education funding to their country's élite, top-tier universities to increase their position in global education rankings – at the expense of all the other universities.⁵⁰ Again in the education field, it has long been noted that indicators for gender equality that focus on the ratio of girls to boys enrolled in primary education provide states with a built-in incentive to document the enrolment of female students, and to cast aside other long-term objectives such as the elimination of sexual segregation, the improvement of girls' rates of school attendance, and the reduction of the gap between female and male dropout rates.⁵¹

It is true that not all global indicators produce such wide-ranging consequences. Many indicators have received very little attention outside specialist circles. However, even indicators that are not (yet) used to direct funding or establish regulatory reforms may be said to have had some cognizable impact, at least on those who make and use them.

In previous years, global indicators have determined the agenda and influenced the working procedures of a variety of subjects. The proliferation of indicators has led many actors to strengthen their data collection and management capacities to devote substantial time, personnel, energy and resources to create, participate in or market indicators that (for internal purposes or vis-à-vis third parties, such as states and donors) keep track of their activities or measure given situations and contexts. Resort to indicators has thus transformed the very way in which these actors manage and perform their work.⁵²

Furthermore, global indicators have affected the ecology of their own field. Through mutual learning, competition, collaborations, linkages, transplants, imitation, cross-fertilization and institutional isomorphism, many global indicators have shown a remarkable tendency to reproduce themselves, often inspiring the construction of other

⁴⁹ Marina Zaloznaya and John Hagan, 'Fighting Human Trafficking or Instituting Authoritarian Control? The Political Co-Optation of Human Rights Protection in Belarus', in Davis et al (n 1) 344, 351–357.

⁵⁰ Espeland and Sauder (n 26) 103–106. On the many side-effects produced by indicators of the quality of higher education systems, see also PT Mmantseta Marope, Peter Wells and Ellen Hazelkorn, *Rankings and Accountability in Higher Education. Uses and Misuses* (UNESCO 2013).

⁵¹ Rosga and Satterthwaite (n 32) 285–286; see also Espeland and Sauder (n 26) 88, 103–106 (on the perverse effects arising from the *US News & World Report's* ranking of US law schools).

⁵² Uruña (n 27); Marta Infantino, 'International Organizations and Human Rights Indicators: Exploring Pluralism across Institutional Regimes' (2015) 12 *International Organizations Law Review* (forthcoming); Margaret Satterthwaite, 'Rights-Based Humanitarian Indicators in Post-Earthquake Haiti', in Davis et al (n 1) 365, 368–374; Michael Ignatieff and Kate Desormeau, 'Introduction', in Carr Center (ed), *Measurement and Human Rights: Tracking Progress, Assessing Impact. A Carr Center Project Report* (2005), <http://hks.harvard.edu/cchrp/pdf/Measurement_2005Report.pdf> accessed 10 January 2015, 8.

indicators. Some indicators have become hegemonic with respect to others.⁵³ Some indicators have led different institutions to combine their efforts in designing new quantitative tools,⁵⁴ or have prompted critical responses that triggered the establishment of alternative initiatives.⁵⁵ In some cases, these critiques resulted in the suppression of the indicators concerned: suffice to recall that the WHO renounced ranking the world's healthcare systems after one of its major funders – the US – reacted negatively to the publication of the World Health Report 2000, in which the US health system ranked only 37th in the world.⁵⁶ In 2009, the Doing Business team had to drop its sub-index on 'employing workers' after the International Trade Unions Confederation and the International Labour Organization denounced the Index as encouraging a 'race to the bottom' in social standards.⁵⁷ After the publication of the World Bank's Investing Across Borders Index, China lobbied against it, with the result that the Index never reached its second edition, programmed for 2012.⁵⁸ These instances, however, remain rare. Reputational constraints and network externalities (i.e. the high costs associated with challenging a practice shared by a large group of people) often create incentives to accept an indicator's results, despite dissatisfaction with its poor design or objectionable uses.⁵⁹ Furthermore, to be successful, direct contestation requires a great deal of resources and high bargaining power, neither of which is at all parties' disposal.

10 ZONES OF DANGER

As may be clear from the critical reactions described above, the spread of global indicators has not been universally welcomed. In recent years, several strands of

⁵³ This hegemony is often sustained by self-reinforcing practices, whereby the greater the authoritativeness of an indicator, the more often will it be cited by other indicators, which will make it increasingly robust and reliable.

⁵⁴ See, for example, the collaboration established by the UN and the Council of Europe with UNESCO to learn from the latter's experience with the UNESCO Indicators for Media Development: <<http://unesdoc.unesco.org/images/0016/001631/163102e.pdf>> accessed 10 January 2015, and <<http://www.unesco.org/new/en/communication-and-information/resources/news-and-in-focus-articles/all-news/news/>> accessed 10 January 2015.

⁵⁵ For example, in response to the alleged flaws of the World Bank's Doing Business reports, the French Fondation pour le droit continental has announced the publication of its own 'Index de la sécurité juridique': see <http://fondation-droitcontinental.org/jcms/c_5810/index-de-la-securite-juridique> accessed 10 January 2015.

⁵⁶ WHO, *The World Health Report 2000. Health Systems: Improving Performance* (WHO 2000) 152–157.

⁵⁷ Riegner (n 44) 4.

⁵⁸ Michael Riegner, "'Doing Business in the Arab World': Measuring law and economic development in Islamic countries", paper presented at the IGLP Collaborative Research Group, Indicators as Political Spaces, on 2 June 2014, at Harvard Law School, on file with the author. On the fallacies of the Investing Across Borders indicator, see Araya K Araya and David T Hofisi, 'The Ease of Doing Business and Land Grabbing: Critique of the Investing-Across-Borders Indicators' (2012) IRPA Working Papers Series n 8.

⁵⁹ Büthe (n 13) 42; Espeland and Sauder (n 26) 89.

literature have focused on dampening the enthusiasm for all or certain specific indicators.

According to these views, global indicators often reflect their designers' implicit homeward and ethnocentric biases. As a technology mostly developed by people from or educated in the Global North, many of these biases affect the understanding of the Global South.⁶⁰ Biases may taint all the steps underlying the construction of an indicator: the definition of the proxies, the selection of the data providers, the interpretation of the information gathered, their transformation into numbers, and their gap-filling techniques. Because of these biases, those who work on indicators may often underestimate or neglect those features of societies that, although pervasive, do not fit their assumptions.⁶¹ The bias in, and the superficiality and de-contextualization of, data may be further aggravated by the (limited or non-existent transparency on the) many discretionary choices required in making a global indicator. Raw data must be manipulated, simplified and edited – a process that often removes evidence of caveats and ambiguity accompanying those data, thus making the resulting information appear to be much more robust and uncontested than it actually is.⁶² Gaming strategies and rank-seeking behaviour may exacerbate these effects.⁶³ Furthermore, the usually brief time span considered by indicators and the compressed intervals between measurements naturally tend to exclude or in any case de-emphasize issues that may have only a long-term and inter-generational impact.⁶⁴

The above methodological weaknesses are important because, once information is translated into measurements, controversy over the objects of measurement tend to be substituted with debates on how to best measure them. Measurements replace judgments on complex social realities and tie in with beliefs, common sense notions, and

⁶⁰ On the Global North/Global South dynamics in the context of the indicators, see Ibarra (n 4); Dadush (n 26) 432–434; María Angélica Prada Uribe, 'Development through data? A case study on the World Bank's performance indicators and their impact on development in the Global South' (2012) IRPA Working Papers Series n 5.

⁶¹ Catherine Powell, 'Gender Indicators as Global Governance: This is Not Your Father's World Bank', in Kumar Jayasuriya (ed), *Big Data, Big Challenges in Evidence-Based Policy Making* (forthcoming, West 2016) available at <<http://ssrn.com/abstract=2429456>> accessed 10 January 2015, 6–12; Merry (n 32) 84 ('Numerical measures produce a world knowable without the detailed particulars of context and history'). Many indicators display some bias. Other than the well-documented predilection of the designers of 'Doing Business' indicators for common law jurisdictions, another clear example comes from the (US-based) Freedom House's 'Freedom on the Net' 2014, in which the United States – despite the disclosure of the global surveillance programmes carried out by the US National Security Agency – still ranks in the first tier, that of countries with 'zero key internet controls': Freedom House, 'Freedom on the Net 2014 – Tightening the Net: Governments Expand Online Controls', 2014, <https://freedomhouse.org/sites/default/files/resources/FOTN_2014_Summary_of_Findings.pdf> accessed 10 January 2015, 14.

⁶² Espeland and Stevens (n 26) 421–22; Arndt and Oman (n 37) 51–90.

⁶³ Linn Hammergren, 'Indices, Indicators and Statistics: A View from the Project Side as to their Utility and Pitfalls' (2011) 8 Hague Journal of the Rule of Law 305, 311–312.

⁶⁴ Siobhan Airey, 'The Taming of the Shrimp – From Indicators to Indicatorisation' (2015) 12 International Organization Law Review (forthcoming).

normative claims about problems and how they can be overcome. Through measurement practices, those who design indicators validate concepts and policy visions that might otherwise be sensitive, disputed or deserving of political confrontation.⁶⁵ Bypassing political processes and conventional regulatory procedures, indicators solidify specific frameworks and objects, turning them into bases for understanding, action and debate, and discouraging their readers from appreciating that which is not captured by the measurements, the data excluded, the assumptions underlying what has been included, and the operations performed to produce those measurements.

Thanks to their simplicity and alleged scientific superiority, global indicators easily enter public debates, vocabulary and agendas. They can silently (yet effectively) modify the behaviour of their target audiences, pressuring them to improve their score or ranking, often at the expense of other priorities.⁶⁶ The scientific brilliance and incontestability of indicators' allegedly scientific data make them both persuasive and difficult to break down, let alone contest. In other words, simplicity and technical complexity empower and protect indicators' designers from external intrusion. They help to institutionalize the privilege of a particular set of actors to produce knowledge, common sense and values. Close and (numerically) limited communities of technocrats (for example, the team working on the International Finance Corporation's Doing Business reports is composed of 35 people)⁶⁷ become entrusted with regulatory functions without bearing any political responsibility.

⁶⁵ Tom Ginsburg, 'Pitfalls of Measuring the Rule of Law' (2011) 3 Hague Journal of the Rule of Law 269–280, and, more generally, David Kennedy, 'The "Rule of Law", Political Choices, and Development Common Sense', in David M Trubek and Alvaro Santos (eds), *The New Law and Development. A Critical Appraisal* (Cambridge University Press 2006) 95–173 (on the creation of common sense in international discourses). For example: the Fragile States Index aims to measure the fragility of political institutions. By means of its measurements, however, it achieves much more than that. It embodies and corroborates a chain of concepts (on what an 'ideal' state is, and on how to define the fragility of political institutions) that are deeply controversial and could in principle be governed by a wide range of alternative, plausible definitions (Nehal Bhuta, 'Governmentalizing Sovereignty: Indexes of State Fragility and the Calculability of Political Order', in Davis et al (n 24) 132, 138–139). The World Bank's Women, Business, and Law indicator measures gender equality as a factor contributing to economic efficiency. In doing so, the indicator embraces a very specific vision of gender equality (gender equality is good because – and to the extent that – it enhances productivity) and its priorities (i.e. enhancing the role of women in markets), while contributing to obscure forms of gender inequality (such as gender-based violence) that are not easily quantified (Powell (n 61) 9).

⁶⁶ There are many examples. Suffice to recall here Goodhart's law as mentioned by Strathern (n 22) 4, fn 6: 'when a measure becomes a target it ceases to be a good measure'.

⁶⁷ The World Bank Group, 'Answers to frequently asked questions', <<http://doingbusiness.org/about-us/~media/GIAWB/Doing%20Business/Documents/Methodology/Doing-Business-FAQs-answered-2013.pdf>> accessed 10 January 2015, 8.

11 GATEKEEPING GLOBAL INDICATORS

The growing awareness of global indicators' flaws has had some impact on the field. As seen above, in some cases, critiques backed by powerful actors have led to the discontinuation of certain indicators. In other cases, criticism has prompted indicators' designers to improve their creations. For example, in 2006 the World Bank disclosed its internal reports for the preparation of the Country Performance and Institutional Assessments (CPIAs, the quantitative indicators that guide the International Development Association in allocating development funds).⁶⁸ In response to the 2008 recommendations of the World Bank's Independent Evaluation Group,⁶⁹ the teams working on CPIAs and Doing Business Reports have significantly increased the number of participants contributing to the indicators' surveys.⁷⁰ Today, many global indicators, including those published by the World Bank, carefully list their metadata (the information on the indicator's rationale, methods of computation, data sources, disaggregation levels, periodicity and limitations) to explain and support their findings.

The above self-initiated reforms may be applauded as a form of spontaneous internalization of social expectations concerning indicators, or as the result of a virtuous competition for legitimacy and authority between the generators of global indicators.⁷¹ However, the prevailing opinion in the literature is that these processes are not sufficient to meet the demands for greater accountability that have arisen from many quarters.

Boosted by the recent economic crisis, these demands have recently grown stronger vis-à-vis credit rating agencies (CRAs). In this field, widespread dissatisfaction with the activities of CRAs has urged domestic lawmakers around the world to enact regulations to supervise CRAs, and, in some cases, to hold these rating-producers accountable before national courts and under national laws.⁷² Further proposals in the sector have included the transformation of CRAs into public bodies,⁷³ or their subjection to the control of a new International Public Rating Agency.⁷⁴

⁶⁸ See <<http://web.worldbank.org>> accessed 10 January 2015, under 'Country Policy and Institutional Assessment', FAQs.

⁶⁹ World Bank Independent Evaluation Group, 'Doing Business: An Independent Evaluation/Taking the Measure of the World Bank-IFC Doing Business Indicators' (World Bank 2008). A new external review carried out by the World Bank in 2013 resulted in the recommendation to move the Doing Business unit from the Bank's operational section to the research department: World Bank, 'Independent Panel Review of the Doing Business Report' (World Bank 2013).

⁷⁰ The World Bank Group, 'Answers to frequently asked questions' (n 67) 10–11; Riegner (n 44) 16–17.

⁷¹ Cassese and Casini (n 29) 468; Davis, Kingsbury, Engle Merry (n 1) 20; Dhutta (n 39) 455 ff; Halliday (n 25) 180, 182–202.

⁷² On these reforms, see Mauro Bussani, 'Credit Rating Agencies' Accountability: Short Notes on a Global Issue' (2010) 10 *Global Jurist – Advances*, Issue 1 (revised in 2011 and available at <<http://ssrn.com/1515285>> accessed 10 January 2015).

⁷³ See, for example, Milosz Gudowski, 'Mortgage Credit Ratings and the Financial Crisis: The Need for a State-Run Mortgage Security Credit Rating Agency' (2010) *Columbia Business Law Review* 245 ff.

⁷⁴ Bussani (n 72) 11–14.

In other sectors, more timid proposals have been advanced. Some researchers have expressed the wish that users of governance indicators should only reward indicators that meet higher standards of transparency regarding the methods and criteria used to calculate countries' rates of good governance.⁷⁵ Others have designed an indicator to measure the reliability of indicators on public service performance,⁷⁶ while others have called for an opening of the market for university rankings, to promote a 'race to the top' in the quality of indicators⁷⁷ (although, as noted above, a multiplication of indicators that are not clearly aligned may overburden their targets with conflicting objectives).⁷⁸ In the health sector, suggestions have been made to challenge national policies based on indicators on constitutional grounds before national courts.⁷⁹ Other voices – in the context of the OECD's PISA – have argued that indicators exert a form of public authority, and as such should be subjected to international public law requirements, such as those requiring, for the adoption of an indicator, a legitimate legal basis, a multi-stakeholder process, and a fair geographical representation of the experts called to participate in it.⁸⁰ According to another view, those who design legal indicators may have to meet procedural and substantive obligations – reliability, precision, transparency, participation and accountability – under the external supervision of national or international courts and organizations.⁸¹

The most articulated and general project for gatekeeping indicators has ensued from the GAL network. Since 2010, scholars gathered around the NYU-based GAL sub-project on 'Indicators as a Technology of Global Governance' have investigated whether and how indicators can be scrutinized against the GAL principles of transparency, reason-giving, participation, review and accountability.⁸² Indeed, from the GAL perspective, those who participate in indicators' endeavours are global administrative bodies that are involved in a governance-by-knowledge activity and entrusted with *de facto* regulatory power.⁸³ As such, they should comply with fundamental GAL standards: they should be transparent about their methodology, give reasons and provide effective review for their choices, allow interested parties to participate in the designing process, and accept accountability for their effects on external actors.

⁷⁵ Arndt and Oman (n 37) 98–99.

⁷⁶ Christopher Hood, Ruth Dixon and Craig Beeston, 'Rating the Rankings: Assessing International Rankings of Public Service Performance' (2008) 11 *International Public Management Journal* 298–328.

⁷⁷ Along this line of reasoning, see Espeland and Sauder (n 26) 99–100.

⁷⁸ Christopher Stone, 'Problems of Power in the Design of Indicators of Safety and Justice in the Global South', in Davis et al (n 1) 281, 289.

⁷⁹ Fisher (n 40) 244.

⁸⁰ von Bogdandy and Goldmann (n 25) 52–86, esp. 83–86; for a similar claim in the field of debt restructuring, see Michael Riegner, 'Legal Frameworks and General Principles for Indicators in Sovereign Debt Restructuring', 1 May 2014, on file with the author.

⁸¹ Kevin Davis, 'Legal Indicators: Potential and Perils', paper presented at the 8th Global Administrative Law Seminar, held in Rome on 14–15 June 2012, 13, on file with the author.

⁸² Davis, Kingsbury and Engle Merry (n 1) 20.

⁸³ See the chapters by Sabino Cassese, Richard B Stewart and Stefano Battini in this Handbook, respectively on 'The development of Global Administrative Law', 'Global standards for national societies' and 'The proliferation of global regulatory regimes'.

To date, indicator designers have largely ignored the above suggestions and warnings. However, in evaluating the prospects of reform in indicators, it should be kept in mind (yet, many indicator designers tend to forget) that paradigm shifts do not take place overnight, but are rather prepared by long-term, subtle yet pervasive changes in ideas, attitudes and practices. In this light, the GAL project and the other proposals mentioned are working to provide a cultural basis for taming global indicators. What the result will be, only time will tell.

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