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Article

**Data and Decentralization: Measuring the Performance of Legal Institutions in Multilevel Systems of Governance**

**Kevin E. Davis<sup>†</sup>**

INTRODUCTION

In the waning days of Barack Obama's presidency, his opponents took every possible opportunity to criticize his performance. One of the more interesting attacks condemned the Obama Administration for allowing the United States to drop in the World Bank's Doing Business rankings. A columnist at the *Wall Street Journal* lamented that after President Obama took office the United States fell from third to eighth place in the overall rankings.<sup>1</sup> He went on to complain, "Eight years ago, 40 days were needed to get a construction permit. Now it's 81. When President Bush left office, it took 300 days to enforce a contract. Today: 420. As for registering property, the cost has nearly quintupled since 2009, to 2.4% of property value from 0.5%."<sup>2</sup>

The World Bank's Doing Business indicators have many virtues, but they clearly are not good measures of the performance of the U.S. federal government, regardless of who is president. This is because the United States has a multilevel system of governance of which the President forms only a part, and the Doing Business indicators mainly capture the performance of other parts of the system. Specifically, the Doing Business indicators

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1. Bret Stephens, *Doomed to Stagnate?*, WALL ST. J., Dec. 20, 2016, at A21.  
2. *Id.*

are based on data from one or two of each country's largest business cities.<sup>3</sup> In the case of the United States, two cities are used: New York City and Los Angeles.<sup>4</sup> The President of the United States is responsible for many things, but he does not control how long it takes to get a construction permit in New York City or Los Angeles. Nor does the President control how much it costs to register property in either of those cities, or how long it takes to enforce a contract in either the New York Supreme Court or the Superior Court of California. Construction permits are the responsibility of the respective city governments. Enforcing contracts is the responsibility of the courts. As for the cost of registering property, in New York City that depends on fees, taxes, and charges set by three different levels of government: the county, city, and state.<sup>5</sup> Of the ten country-level indicators produced by the Doing Business project, only three relate to matters mainly controlled by the federal government of the United States: paying taxes, trading across borders, and resolving insolvency.<sup>6</sup> Of these three, the paying taxes indicator still is not fully controlled by the federal government as it encompasses payment of city, state, and federal taxes.<sup>7</sup>

Although the Doing Business indicators do not fit the part, measures that accurately capture the performance of individual governmental units within a multilevel system of governance play critically important roles in holding those units accountable and, ultimately, maintaining and enhancing their performance. Without accurate performance measures, it is difficult for stakeholders to claim with authority that any individual governmental unit, or even a class of units, is in need of reform or replacement. This applies to internal as well as external actors—if they do not know how well they are doing, then even the most highly motivated government officials will have no rational basis for deciding how to do their jobs better.

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3. WORLD BANK GRP., DOING BUSINESS 2017: EQUAL OPPORTUNITY FOR ALL 13 (2017), <http://www.doingbusiness.org/~media/WBG/DoingBusiness/Documents/Annual-Reports/English/DB17-Report.pdf>.

4. *Id.* at 163.

5. WORLD BANK GRP., DOING BUSINESS 2017: EQUAL OPPORTUNITY FOR ALL, ECONOMY PROFILE 2017 UNITED STATES 34–45, 65–68, 103 (2017) (showing data on processes for construction permits, registering property, and enforcing contracts), <https://openknowledge.worldbank.org/bitstream/handle/10986/25643/WP-DB17-PUBLIC-United-States.pdf?sequence=1&isAllowed=y>.

6. *See id.* at 86–99, 109–15.

7. *Id.* at 90–92.

Measures of the performance of legal institutions—namely, institutions involved in promulgating and administering norms—within multilevel systems of governance are especially important. But, for the reasons set out below, accurate measures may not be easy to find. This is particularly true of legal institutions situated at the lower levels of hierarchical systems, far removed from the national legislatures and constitutional courts that capture most of the attention directed toward legal systems.<sup>8</sup>

Two factors are likely to limit the availability of performance measures for legal institutions. First, it is difficult to distinguish the influence of low-level legal institutions from that of institutions at other levels of governance. Second, market forces will not necessarily prompt anyone to go through the trouble of producing measures that isolate the performance of these institutions. The costs of producing disaggregated measures may be as high as, or higher than, the costs of producing more highly aggregated measures, and the demand for the more precise measures is typically more limited.

If these claims are right, there are important drawbacks to certain forms of multilevel governance and legal decentralization. Many justifications for multilevel governance assume that it is possible for various kinds of stakeholders to measure the performance of individual governmental units, whether those stakeholders are voters, potential residents, potential investors, officials in higher levels of government, or members of government officials' professional networks. Without access to adequate performance measures, none of those stakeholders will be in a position to exert a positive influence on government officials. The academic literature on decentralization in governance has paid considerable attention to other factors that might limit the accountability of lower levels of government in multilevel systems of governance.<sup>9</sup> However, relatively little attention has been paid to either the availability of performance measures or issues specific to legal institutions. There is also extensive literature on the challenges inherent in producing performance measures for legal institutions, but to date that literature has

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8. For a notable exception, see Todd Mitton, *The Wealth of Subnations: Geography, Institutions, and Within-Country Development*, 118 J. DEV. ECON. 88 (2016) (studying data covering subnational regions from 101 countries).

9. See generally Dilip Mookherjee, *Political Decentralization*, 7 ANN. REV. ECON. 231 (2015) (providing an overview of the literature on political decentralization).

not focused on institutions at the lower levels of multilevel systems of governance.<sup>10</sup>

The next part of this Article summarizes the standard reasons for believing that people might use measures of the performance of legal institutions to maintain and enhance the performance of those institutions. Part II describes several existing performance measures. Part III explains why it can be difficult to produce suitable performance measures in complex multilevel systems of governance. Part IV discusses the reasons why profit-oriented actors are unlikely to produce these sorts of measures and why support from not-for-profit or public agencies is likely to be required.

### I. THE VALUE OF PERFORMANCE MEASURES FOR LEGAL INSTITUTIONS

Most people in the world are subject to multiple levels of governance, by both governmental and nongovernmental actors. In China, for example, in addition to the national government, there are governments at the level of provinces, prefectures, counties, townships, and villages.<sup>11</sup> In the European Union, individual member states typically have fewer levels of government than in China, but there is also a supranational level of governance to consider.<sup>12</sup> Virtually everywhere in the world, people's lives are influenced in material ways by the actions of international organizations and foreign governments regulating extraterritorially.<sup>13</sup> Organizations beyond the nation-state play a particularly important role in governance of smaller, poorer countries, especially those with limited internal capacity for governance. Consider, for example, the role that the World Bank

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10. See, e.g., Kevin E. Davis, *Legal Indicators: The Power of Quantitative Measures of Law*, 10 ANN. REV. L. & SOC. SCI. 37 (2014) (discussing key issues related to legal indicators measuring aspects of a legal system). On the general importance of studying political phenomena at the appropriate geographic level, see Clark C. Gibson et al., *The Concept of Scale and the Human Dimensions of Global Change: A Survey*, 32 ECOLOGICAL ECON. 217, 233–36 (2000).

11. SEBASTIAN HEILMANN ET AL., CHINA'S POLITICAL SYSTEM 59–60, 76–104 (Sebastian Heilmann ed., 2017).

12. See *Countries*, EUROPA, [https://europa.eu/european-union/about-eu/countries\\_en](https://europa.eu/european-union/about-eu/countries_en) (last visited Apr. 26, 2018); *The EU in Brief*, EUROPA, [https://europa.eu/european-union/about-eu/eu-in-brief\\_en](https://europa.eu/european-union/about-eu/eu-in-brief_en) (last visited Apr. 26, 2018).

13. For a discussion of how international organizations have impacted international law, see JOSÉ E. ALVAREZ, INTERNATIONAL ORGANIZATIONS AS LAWMAKERS (2005).

plays in setting social and environmental standards for infrastructure projects.<sup>14</sup>

Legal institutions—meaning institutions that promulgate, administer, or enforce norms—are certainly among the governmental units that operate at multiple levels. The typical multi-level system has law-making bodies at more than one level. In India, for instance, in addition to the national parliament, each state has its own elected legislature and, at least in rural areas, up to three levels (district, intermediate, and village) of government known as *Panchayats*.<sup>15</sup> Considerable authority is devolved to the village-level *Panchayats*, which comprise elected assemblies.<sup>16</sup> Laws are enforced and administered by police forces at the national and state levels, as well as administrative agencies at all of the levels.<sup>17</sup> As for adjudication, India has a hierarchical judicial system with the Supreme Court situated above both the High Courts of the various states and District Courts.<sup>18</sup> Relatively informal tribunals, known as *lok adalats*, also resolve disputes as part of a parallel system of dispute resolution.<sup>19</sup>

What does it mean to measure the performance of one of these legal institutions? For the purposes of this Article, it means observing, evaluating, and reporting the extent to which the norms, capabilities, or actions of legal officials are either intrinsically desirable (for example, because they discourage torture of suspects) or tend to lead to desirable outcomes (such as

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14. Benedict Kingsbury, *Operational Policies of International Institutions as Part of the Law-Making Process: The World Bank and Indigenous Peoples*, in *THE REALITY OF INTERNATIONAL LAW* 323, 325 (Guy S. Goodwin-Gill & Stefan Talmon eds., 1999); see also ALVAREZ, *supra* note 13, at 235–41.

15. See INDIA CONST. art. 243-O, *amended by* The Constitution (Seventy-Third Amendment) Act, 1992; M. GOVINDA RAO & NIRVIKAR SINGH, *POLITICAL ECONOMY OF FEDERALISM IN INDIA* 41–61, 93–119, 253–79 (2005).

16. INDIA CONST. art. 243-O, *amended by* The Constitution (Seventy-Third Amendment) Act, 1992; RAO & SINGH, *supra* note 15.

17. RAO & SINGH, *supra* note 15, at 111–14.

18. *Id.* at 105–11; Rakesh Kumar Shrivastava, *UPDATE: A Guide to India's Legal Research and Legal System*, N.Y. UNIV. L. GLOBAL (Apr. 2014), [http://www.nyulawglobal.org/globalex/India\\_Legal\\_Research1.html](http://www.nyulawglobal.org/globalex/India_Legal_Research1.html).

19. See Marc Galanter & Jayanth K. Krishnan, *Debased Informalism: Lok Adalats and Legal Rights in Modern India*, in *BEYOND COMMON KNOWLEDGE: EMPIRICAL APPROACHES TO THE RULE OF LAW* 96, 108–10 (Erik G. Jensen & Thomas C. Heller eds., 2003).

reduced bribery or lower levels of pollution or, perhaps, increased land values).<sup>20</sup> This Article also assumes that performance is reported in the form of an indicator: a collection of rank-ordered data that purports to capture a specified aspect of performance in a simple form.<sup>21</sup> In other words, this Article focuses on legal indicators.

Performance measures are of practical significance mainly because of how they influence the performance of legal officials. Influence in this context can mean either inducing officials to choose particular norms, capabilities, or actions, or replacing them with officials who will. One way of classifying the different channels of influence is in terms of the mechanisms through which they affect officials.<sup>22</sup> Incentive-based mechanisms—meaning those which attempt to induce desirable future behavior by distributing rewards or punishments based on past performance—obviously depend on performance evaluations. Systems that assign future governmental responsibilities for preventive reasons based on past performance might rely on performance data. Other mechanisms of influence, such as peer pressure, rational persuasion, or government officials' internal motivations, also may rely on performance data.

Another way to classify the different channels through which performance measures influence the performance of legal

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20. See Roderick M. Hills, Jr. & Shitong Qiao, *Voice and Exit as Accountability Mechanisms: Can Foot-Voting Be Made Safe for the Chinese Communist Party?*, 48 COLUM. HUM. RTS. L. REV. 158, 180–83 (2017) (arguing that land desirability is “influenced by local officials’ decisions about education, traffic regulation, crime control, and overall governmental efficiency, which are reflected . . . in real estate prices”). Land is not the only good whose value might be highly sensitive to performance of legal institutions. For instance, the prices of illicit drugs might be influenced by drug control laws and how they are enforced. See Jonathan P. Caulkins & Peter Reuter, *How Drug Enforcement Affects Drug Prices*, 39 CRIME & JUST. 213 (2010). In theory, the prices of contracts that pay out when an illegal act occurs—for example a terrorist attack—could convey similar information about law enforcement, but such markets would create perverse incentives.

21. See generally Kevin E. Davis et al., *Indicators as a Technology of Global Governance*, 46 LAW & SOC’Y REV. 71 (2012) (defining and analyzing indicators in the context of global governance); Davis, *supra* note 10.

22. Cf. WOUTER VAN DOOREN ET AL., PERFORMANCE MANAGEMENT IN THE PUBLIC SECTOR 118–22 (2015) (classifying uses of performance information as learning, steering and control, and accountability and explaining that accountability for performance exerts reputational, market and political pressure on people in organizations); Gerhard Hammerschmid et al., *Internal and External Use of Performance Information in Public Organizations: Results from an International Survey*, 33 PUB. MONEY & MGMT. 261, 262 (2013) (describing internal and external uses of performance information).

institutions is by distinguishing potential users of the measures.<sup>23</sup> In democratic systems, the most obvious potential users are voters, who both incentivize good behavior and prevent bad behavior through their decisions at the ballot box. In hierarchical multilevel systems of government, officials at higher levels of government use information about the performance of lower-level governments in deciding how to exercise their powers of oversight.<sup>24</sup> Government officials' peers might also rely on performance data in deciding whether to deliver praise or criticism.<sup>25</sup> Self-motivated governments will use the same data to determine whether and how to improve their performance.<sup>26</sup> Governments' creditors might use fiscally-relevant performance data to assess creditworthiness.<sup>27</sup> Last, but not least, prospective residents and investors trying to decide whether to submit themselves to the jurisdiction of a particular government—prospec-

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23. See generally VAN DOOREN ET AL., *supra* note 22, at 96–115 (describing public managers, politicians, members of Parliament, and citizens/customers as users of performance information).

24. See, e.g., Manuele Citi & Martin Rhodes, *New Modes of Governance in the European Union: A Critical Survey and Analysis*, in HANDBOOK OF EUROPEAN POLITICS 463, 466–67 (Knud Erik Jørgensen ed., 2007) (describing use of indicators to monitor European Union member states' pursuit of objectives established at the European level); Jie Gao, *Pernicious Manipulation of Performance Measures in China's Cadre Evaluation System*, 223 CHINA Q. 618 (2015) (documenting use of performance measures to motivate local officials by Chinese central authorities as well as various ways of gaming of the measures); Jie Gao, *Governing by Goals and Numbers: A Case Study in the Use of Performance Measurement to Build State Capacity in China*, 29 PUB. ADMIN. & DEV. 21 (2009) (documenting use of performance measures to motivate local officials by Chinese central authorities); Jonathan Zeitlin, *Conclusion: The Open Method of Co-ordination in Action: Theoretical Promise, Empirical Realities, Reform Strategy*, in THE OPEN METHOD OF CO-ORDINATION IN ACTION: THE EUROPEAN EMPLOYMENT AND SOCIAL INCLUSION STRATEGIES 447 (Jonathan Zeitlin et al. eds., 2005) (same).

25. See, e.g., Citi & Rhodes, *supra* note 24, at 469–72 (discussing peer review and peer pressure within the European Union).

26. See, e.g., U. S. GOV'T ACCOUNTABILITY OFFICE, GAO-14-747, MANAGING FOR RESULTS: AGENCIES' TRENDS IN THE USE OF PERFORMANCE INFORMATION TO MAKE DECISIONS (2014) (presenting survey data on use of performance measures within US federal government agencies); VAN DOOREN ET AL., *supra* note 22 (use by public managers, politicians and members of Parliament); Pedro Rubim Borges Fortes, *How Legal Indicators Influence A Justice System and Judicial Behavior: The Brazilian National Council of Justice and "Justice in Numbers"*, 47 J. LEGAL PLURALISM & UNOFFICIAL L. 39 (2015) (describing use of performance measures by Brazil's National Council of Justice).

27. Ruoying Chen, *Preserving Decentralization with Chinese-Style Markets* 10–11 (Mar. 5, 2017) (working paper) (on file with *Minnesota Law Review*).

tive residents whom government officials have incentives to attract—might use data about past performance in order to predict future performance.<sup>28</sup>

No matter how or by whom performance measures are used, there will be a premium on comparative data: data which permit a governmental unit to be analyzed in relation to either its own past performance or the performance of other units.<sup>29</sup> By serving as a yardstick, comparative data can provide insight into the merits of outcomes that are difficult to evaluate in isolation.<sup>30</sup> A New Yorker who has never been to Hong Kong might have no idea that it is possible for a subway system to be cleaner, safer, and more reliable than the New York subway system. Comparative data can also help to evaluate governments' actions. For instance, a comparison of policing tactics and crime rates, whether over time or across jurisdictions, can be used to figure out which tactics work better than others—as well as which governments have chosen those actions.

Different categories of potential users will tend to be interested in different types of performance measures. Members of the general public, such as voters and prospective residents, typically will have limited time or expertise to devote to analyzing governmental performance. Those users will tend to seek out indicators that report relatively large quantities of information in a highly simplified form. The World Bank's Ease of Doing Business Index is a good example of a highly simplified measure, as it purports to use a single number to capture the performance of all the portions of the legal system that bear on the ease of doing business in an entire country.<sup>31</sup>

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28. ILYA SOMIN, DEMOCRACY AND POLITICAL IGNORANCE: WHY SMALLER GOVERNMENT IS SMARTER 119–20 (2013) (discussing how mobile individuals and firms—"foot voters"—have incentives to shop around among governments for the best combination of public services); Hills & Qiao, *supra* note 20, 173–79 (2015) (surveying literature on foot voters); Charles Tiebout, *A Pure Theory of Public Expenditures*, 64 J. POL. ECON. 416 (1956) (seminal article arguing that governments respond to foot voters).

29. See Timothy Besley & Anne Case, *Incumbent Behavior: Vote-Seeking, Tax-Setting, and Yardstick Competition*, 85 AM. ECON. REV. 25, 25 (1995) (discussing "yardstick competition" and how comparative data works in politics); Pierre Salmon, *Decentralisation as an Incentive Scheme*, 3 OXFORD REV. ECON. POLY 24, 30–32 (1987) (discussing value of comparative data in evaluating performance of governments).

30. *Id.*

31. *Economy Rankings*, DOING BUSINESS, <http://www.doingbusiness.org/rankings> (last visited Apr. 26, 2018).

## II. EXISTING SUBNATIONAL PERFORMANCE MEASURES

The focus of this Article is upon measures that can be used to evaluate the performance of individual legal institutions within multilevel systems of governance, particularly at the subnational level. There has been a proliferation of legal indicators since the turn of the 20th century. The best-known examples, however, report only a single score for each country, and therefore are obviously unsuitable for evaluating the performance of subnational institutions. Take for instance the World Bank's Ease of Doing Business Index and the individual indicators used to construct it. The individual indicators measure the ability of domestic small and medium-size firms to complete eleven tasks, including registering a business or property, getting construction permits, enforcing contracts, and paying taxes.<sup>32</sup> The focus is on measuring the time and cost required to complete the task, although for some tasks the indicators include measures of the quality of the applicable legal institutions.<sup>33</sup> The Doing Business indicators used to calculate the Ease of Doing Business Index usually report only a single score for each country based on data pertaining to "the largest business city."<sup>34</sup> To be fair, however, in eleven of the larger countries (which include the United States) the indicators are based on the population-weighted average of data from the two largest business cities.<sup>35</sup>

Another well-known legal indicator is the World Justice Project (WJP) Rule of Law Index.<sup>36</sup> The index is designed to measure "the rule of law as experienced by ordinary people."<sup>37</sup> It is based on data from two sources: (1) a survey of the general population in each country and; (2) a questionnaire sent to "in-country professionals with expertise in civil and commercial law, criminal justice, labor law, and public health."<sup>38</sup> The population surveys

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32. WORLD BANK GRP., *supra* note 3, at 13–14.

33. *Id.* at 14.

34. *Id.* at 13.

35. *Id.* at 168.

36. See WORLD JUSTICE PROJECT, RULE OF LAW INDEX 2017–2018, [https://www.worldjusticeproject.org/sites/default/files/documents/WJP\\_ROLI\\_2017-18\\_Online-Edition\\_0.pdf](https://www.worldjusticeproject.org/sites/default/files/documents/WJP_ROLI_2017-18_Online-Edition_0.pdf).

37. *Id.* at 156.

38. *Id.* at 157.

are distributed in the three largest cities of each country, but the locations of the in-country professionals are not specified.<sup>39</sup>

The Doing Business indicators and the WJP Rule of Law Index at least specify which parts of each country are being portrayed. Other legal indicators are less transparent. For instance, the World Bank produces a set of six country-level indicators known as the Worldwide Governance Indicators (WGIs).<sup>40</sup> Several of the dimensions of governance measured by these indicators—namely, government effectiveness, regulatory quality, and rule of law—appear to relate directly to the performance of legal institutions.<sup>41</sup> These evaluations are undoubtedly influenced by both national and subnational governments. However, the producers of the WGIs do not specify which subnational governments are portrayed by each source, almost certainly because they do not know. The WGIs are composite indicators based on over thirty underlying data sources, including surveys of households or firms, as well as assessments of experts.<sup>42</sup> The firms and experts whose perceptions are captured are not always located inside the country being assessed.<sup>43</sup> It is quite possible that different sources underlying the WGIs either measure perceptions of different subnational institutions—for example, courts which hear cases involving large foreign firms as opposed to small domestic firms—or aggregate perceptions of multiple institutions. Under these circumstances, it is impossible for the producers of the WGIs to say which institutions their indicators portray.

There are a few examples of multicountry indicators that report scores for different locations in a single country.<sup>44</sup> The most

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39. *Id.* at 157–58 (stating that the population survey is a sample from 1000 people in the “three largest cities of each country” while the in-country professionals are selected through directories and referrals and vetted by the World Justice Project).

40. Daniel Kaufmann et al., *The Worldwide Governance Indicators: Methodology and Analytical Issues*, 3 HAGUE J. ON RULE L. 220, 220 (2011) (stating that the Worldwide Governance Indicators measure “six dimensions of governance”).

41. *See id.* at 239 (discussing the use of perception data).

42. *WGI Data Sources*, WORLD BANK GRP., <http://info.worldbank.org/governance/wgi/#doc-sources> (last visited Apr. 26, 2018) (stating “The WGI compile and summarize information from over 30 existing data sources” including households, firms, and experts).

43. *See* Kevin E. Davis, *What Can the Rule of Law Variable Tell Us About Rule of Law Reforms?*, 26 MICH. J. INT’L L. 141, 150 (2004) (stating that sometimes certain indicators contain subjective assessments “made by individuals who are not necessarily resident[s] in the society to which their assessments pertain”).

44. *See generally* Mitton, *supra* note 8 (collecting datasets).

prominent indicators of this sort are actually produced by the World Bank's Doing Business Project, alongside its country-level indicators. Since 2005, the Doing Business Project has produced subnational reports that cover 438 locations in sixty-five different countries.<sup>45</sup> These subnational reports typically cover three to six topics.<sup>46</sup> They always include indicators for starting a business, dealing with construction permits, and registering property.<sup>47</sup> The other indicators reported are: enforcing contracts, getting electricity, paying taxes, or trading across borders.<sup>48</sup> Unlike the country-level indicators, which are produced annually, the subnational Doing Business indicators for each country are produced at irregular intervals.<sup>49</sup>

Indicators for subnational territories are also produced by domestic actors. In Brazil, Fundação Getulio Vargas, an educational institution, sponsors ICJBrasil, an indicator designed to measure public trust in the court system.<sup>50</sup> ICJBrasil encompasses two subindicators: one which measures general perceptions of the court system and another which measures beliefs about how the courts will resolve specific types of disputes.<sup>51</sup> The indicator is based on data from surveys of individuals living in the metropolitan areas of seven Brazilian states (Amazonas, Pernambuco, Bahia, Minas Gerais, Rio de Janeiro, São Paulo and Rio Grande do Sul), plus the Federal District, and the data are

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45. See *Subnational Reports*, DOING BUSINESS, <http://www.doingbusiness.org/reports/subnational-reports> (last visited Apr. 26, 2018).

46. In India, seven topics were covered; "Closing a business" was added to the list of topics frequently covered in other subnational reports. See WORLD BANK GRP., DOING BUSINESS IN INDIA 2009 1 (2009), <http://www.doingbusiness.org/~media/WBG/DoingBusiness/Documents/Subnational-Reports/DB09-Sub-India.pdf>.

47. See, e.g., WORLD BANK GRP., DOING BUSINESS IN KAZAKHSTAN 2017 at 4 tbl.1.1 (2017), <http://www.doingbusiness.org/~media/WBG/DoingBusiness/Documents/Subnational-Reports/DB17-Sub-Kazakhstan.pdf>.

48. See *id.* at 15 tbl.2.1.

49. There is nothing to prevent anyone from producing their own indicators using the Doing Business methodology. In 2016, the Jiangsu province in China "began to evaluate its 96 counties in 13 cities on their implementation of administrative reform and business environment in 2016, according to the ease of doing business index set by the World Bank." *Premier Li Urges Nationwide Efforts to Deepen Administrative Reform*, THE BEIJING NEWS (May 29, 2017), [http://english.gov.cn/premier/news/2017/05/29/content\\_281475670291580.htm](http://english.gov.cn/premier/news/2017/05/29/content_281475670291580.htm).

50. LUCIANA GROSS CUNHA ET AL., RELATÓRIO ICJBRASIL: 1º SEMESTRE 2016 [Report ICJBrasil: First Half 2016] 2 (2016), [http://bibliotecadigital.fgv.br/dspace/bitstream/handle/10438/17204/Relatorio-ICJBrasil\\_1\\_sem\\_2016.pdf?sequence=1&isAllowed=y](http://bibliotecadigital.fgv.br/dspace/bitstream/handle/10438/17204/Relatorio-ICJBrasil_1_sem_2016.pdf?sequence=1&isAllowed=y).

51. *Id.* at 3.

reported separately for each state or district.<sup>52</sup> Similar rule of law indicators are produced in China, including by a think tank called the China Rule of Law Research Institute.<sup>53</sup>

Another important example of an indicator that covers sub-national territories is Vietnam's Provincial Competitiveness Index, produced by the Vietnam Chamber of Commerce and Industry together with the United States Agency for International Development.<sup>54</sup> This index reports scores for each of Vietnam's sixty-three provinces and municipalities.<sup>55</sup> In addition to the overall competitiveness index, there are ten subindicators that cover both legal and non-legal topics.<sup>56</sup> Some of the legally oriented subindicators cover topics similar to those covered by the Doing Business indicators, including entry costs for new firms, access to land and security of tenure, and the amount of time devoted to complying with regulations or accommodating inspections.<sup>57</sup> There are also indicators of overall confidence in legal institutions and bias in favor of state-owned entities.<sup>58</sup> The indicators are constructed using data from separate surveys of domestic and foreign-owned firms in each province.<sup>59</sup>

Virtually all of the performance measures described above rely on survey data. In principle, they could rely on data from other sources. Most notably, they could rely on official data, including data derived from audits. A model might be the audits of Brazilian municipalities conducted by the Controladoria Geral da União (CGU), an agency of the federal government responsible for overseeing the use of public resources.<sup>60</sup> Each year the

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52. *Id.* at 4–5.

53. *See China Rule of Law Government Index System Research Project*, CHINA RULE OF LAW RESEARCH INST., <http://www.ruleoflawchina.com/project-researches/china-rule-of-law-government-index-system-research-project> (last visited Apr. 26, 2018).

54. EDMUND MALESKY ET AL., VIETNAM CHAMBER OF COMMERCE AND INDUSTRY & USAID, *THE VIETNAM PROVINCIAL COMPETITIVENESS INDEX 2016* (2017).

55. *Id.* at 15.

56. *Id.* at 17 (listing indicators).

57. *Id.*

58. *Id.*

59. *Id.* at 16 (stating that 10,037 domestic private firms and 1550 foreign firms responded to the PCI survey); *see also* Trang (Mae) Nguyen, *Grading Regulators: The Impact of Global and Local Indicators on Vietnam's Business Governance*, 88 N.Y.U. L. REV. 2254, 2272–85 (2013) (discussing the impact of the Provincial Competitiveness Index).

60. *See* Claudio Ferraz & Frederico Finan, *Exposing Corrupt Politicians: The Effects of Brazil's Publicly Released Audits on Electoral Outcomes*, 123 Q.J. ECON. 703, 707 (2008).

CGU audits the expenditures of several randomly selected municipalities and publishes the results online.<sup>61</sup> The CGU's audits have been very effective in detecting waste and corruption, though not typically in connection with the operation of legal institutions.<sup>62</sup> In India, "social audits" aimed at individual poverty alleviation programs are conducted in collaboration with non-governmental organizations.<sup>63</sup> There is no particular reason not to use comparable audits to obtain information about legal institutions.

### III. THE CHALLENGES OF CREATING PERFORMANCE MEASURES FOR COMPLEX LEGAL SYSTEMS

Although there are several examples of legal performance measures that cover subnational territories, they are not necessarily good measures of the performance of any particular subnational legal institution. In fact, few of the existing measures adequately respond to the special challenges that arise in constructing performance measures for legal institutions in the context of multilevel systems of governance. The remainder of this Part documents those challenges.

#### A. TWO TYPES OF LEGAL PERFORMANCE MEASURES

Legal performance measures can be divided into two broad categories: (1) those which measure legal institutions directly; and (2) those which measure outcomes likely to be influenced by legal institutions.<sup>64</sup> Direct measures are those which report on issues such as: Does the law permit all kinds of commercial disputes to be submitted to arbitration? How many judges are there at each level of court and what are their qualifications? Is a university degree in architecture or engineering required for people responsible for reviewing building plans? What qualifications do those reviewers actually possess?<sup>65</sup> Examples of outcome measures are: How long does it take to obtain a construction permit? What percentage of firms report paying bribes to public officials? What proportion of violent criminals is apprehended by

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61. *Id.*

62. *See id.* (looking at how publicly released audits have affected elections in Brazil).

63. *See, e.g.,* Nidhi Vij, *Collaborative Governance: Analysing Social Audits in MGNREGA in India*, 42 *IDS BULL.* 28, 30–32 (2011).

64. Davis, *supra* note 10, at 39, 42.

65. *Id.* at 41–42.

the police? How many complaints are filed against the police? How good is air quality?

These examples demonstrate that legal performance measures can relate to very different types of legal institutions and outcomes. Direct measures of legal institutions include measures pertaining to both legal norms (e.g., Does the law permit . . . ?) and legal officials (e.g., How many judges are there?).<sup>66</sup> Similarly, some outcome measures focus on the behavior of legal officials while others focus on the behavior of nonlegal actors and still others, such as measures of bribery, capture what can only be described as joint behavior.<sup>67</sup>

The Sections which follow discuss several challenges associated with each of our two broad categories of performance measures. Issues that relate exclusively to measures of specific types of legal institutions or legal outcomes are left for future analysis.

#### B. MEASURES OF LEGAL INSTITUTIONS

It often is relatively straightforward to generate measures that capture legal norms or the capabilities or actions of legal officials. This is especially true when the required information has already been recorded. Legal norms are frequently embodied in and recorded as statutes, regulations, or decrees. The number of legal officials and their educational qualifications are often recorded for administrative purposes.<sup>68</sup> And the practices of licensing and enforcement agencies are often governed by written rules set out in handbooks, manuals, and guidelines.<sup>69</sup>

Naturally, it is relatively difficult to produce performance measures based on categories of legal information that are not recorded. For instance, sometimes legal officials refer to written norms—statutes, regulations, guidelines, etc.—to decide what

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66. *Id.*

67. *Id.* at 43.

68. See, e.g., *About California Courts*, CAL. COURTS., <http://www.courts.ca.gov/2113.htm> (last visited Apr. 26, 2018) (providing information about California courts); *Judicial Directories*, N.Y. COURTS, <http://www.nycourts.gov/judges/directory.shtml> (last visited Apr. 26, 2018) (providing information about judges of the New York State Unified Court System).

69. See *generally Legal Division*, CAL. DEP'T OF BUS. OVERSIGHT, [http://www.dbo.ca.gov/Laws\\_&\\_Regs/default.asp](http://www.dbo.ca.gov/Laws_&_Regs/default.asp) (last visited Apr. 26, 2018) (detailing various guidelines and opinion letters for corporations and financial institutions in California); *Private Investigator*, N.Y. STATE, <https://www.dos.ny.gov/licensing/privateinvest/privatei.html> (last visited Apr. 26, 2018) (describing licensing requirements for private investigators in New York).

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legal consequences to assign to a particular kind of behavior. However, on other occasions they make decisions on a case-by-case basis or by referring to the norms implicit in past decisions. In fact, this is exactly how judges in common law systems are supposed to decide cases, and there are good reasons to believe that judges in civil law jurisdictions and other kinds of adjudicators operate in the same way.<sup>70</sup> It may be possible to extract the norms that explain past decisions and predict future decisions by going to the effort of reviewing large numbers of past decisions, but, at least given the current state of technology, this requires considerable effort. Moreover, the results of this kind of analysis are open to disagreement. An additional complication is that officials charged with licensing and enforcement may be reluctant to disclose information about their capabilities and practices in order to preserve strategic advantages over regulated actors.

Leaving aside the practical issues associated with measuring the characteristics of legal institutions, there is the challenge of knowing which characteristics ought to be measured. Is it desirable, in any sense, to allow all sorts of commercial disputes to be submitted to arbitration? To insist that building plans be inspected by licensed architects or engineers? To assign judges to cases randomly rather than according to expertise? These sorts of legal norms, capabilities, and practices are only desirable to the extent they lead to desirable outcomes, not because they are intrinsically desirable. Consequently, the only way to determine whether they are good performance measures is to study whether they are correlated with desirable outcomes. Ultimately, therefore, it is necessary to formulate outcome-based performance measures.

### C. MEASURES OF LEGAL OUTCOMES

Measures that focus on outcomes only qualify as useful measures of the performance of specific legal institutions when it is clear which institutions are responsible for the outcomes in question. In particular, if the hope is that performance measures will promote desirable actions, governments should be given credit or assigned blame for outcomes caused by their actions, not for outcomes beyond their control. Discreditable actions that

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70. JOHN MERRYMAN & ROGELIO PÉREZ-PERDOMO, *THE CIVIL LAW TRADITION: AN INTRODUCTION TO THE LEGAL SYSTEMS OF EUROPE AND LATIN AMERICA* 39–55 (3d ed. 2007) (comparing use of statutes and prior judicial decisions by judges in common law and civil law systems).

happen to coincide with desirable outcomes generally should not be encouraged, and vice versa.

Identifying the institutions responsible for any given outcome presents two challenges. First, it is necessary to determine whether any legal institutions at all influence the behavior in question. Second, when more than one institution has an impact, it is necessary to figure out the influence of each. We will focus here on the second of these challenges.<sup>71</sup>

In the simplest possible world, each outcome would be linked to a single legal institution at a single level of government. A world with multiple levels of government might satisfy this condition if the governments' areas of responsibility are divided into watertight compartments so that each is exclusively capable of influencing a specified set of outcomes. Imagine, for instance, a world in which the municipal government is responsible for construction, the provincial government is responsible for security, and the national government is responsible for air pollution. Much of the literature on decentralization assumes that governmental functions are allocated in this fashion.<sup>72</sup>

The real world often is more complex than this: outcomes are influenced by institutions located at multiple levels of government and variations in outcomes have to be explained by variations in combinations of institutions. This frequently occurs in the case of laws that call for prior approval of an activity by public officials. For example, registering a business may involve registration with a national agency and a permit from the municipal government. Multiple governments may also be involved in regulation that involves imposing sanctions after the fact. For instance, laws enacted by one level of government might be enforced by other levels of government. Brazil is a case in point. Prohibitions found in national laws, such as anticorruption laws, can be investigated either by state or federal police forces, a variety of independent agencies, or federal or state public prosecutors.<sup>73</sup> Those investigations can lead to administrative, civil, or

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71. For a recent discussion of the first challenge, see LAWRENCE M. FRIEDMAN, *IMPACT: HOW LAW AFFECTS BEHAVIOR* 1–6 (2016).

72. See Marcelin Joanis, *Shared Accountability and Partial Decentralization in Local Public Good Provision*, 107 J. DEV. ECON. 28 (2014) (exploring the theoretical implications of blurred accountability); Mookherjee, *supra* note 9, at 235 (noting that few empirical studies have examined the implications of partially decentralized service provision).

73. See Mariana Mota Prado & Lindsey Carson, *Brazilian Anti-Corruption Legislation and Its Enforcement: Potential Lessons for Institutional Design*, 4 J.

criminal proceedings initiated by either an independent agency or the federal or state public prosecutor.<sup>74</sup> Judicial proceedings can take place in either state or federal courts.<sup>75</sup> In complex cases, it is not uncommon for multiple agencies to be involved, with varying levels of coordination.<sup>76</sup>

The mere fact that outcomes are generated by multiple legal institutions does not necessarily mean that it is impossible to trace the roles of individual units. For any individual outcome, a sufficiently in-depth historical analysis might reveal its root causes—for example, which emissions standards are too lax, which government agency failed to inspect a factory's pollution controls, or which court delayed the prosecution of an embezzler.<sup>77</sup> This kind of analysis might be a practical way of identifying the causes of small numbers of outcomes, but it quickly becomes impractical as the number of outcomes increases.

With enough data, it is possible to compare the outcomes associated with different combinations of legal institutions and draw inferences about the roles of individual institutions. This kind of comparative analysis is especially straightforward when three conditions are satisfied. First, institutions' areas of influence are defined exclusively in geographic terms. Second, each institution's operations uniformly affect all of the people located within its territory. Third, in the case of multilevel systems, the areas of influence of several lower-level institutions are completely encompassed within the area of influence of the institution at the next higher level. When these conditions hold, all the outcomes in a given geographic area are influenced in the same way by the same combination of institutions. Furthermore, there

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SELF-GOVERNANCE & MGMT. ECON. 34, 47–49 (2016) (discussing institutional multiplicity in corruption investigations in Brazil).

74. See *id.* at 49–52.

75. See Lucas Dotto Borges et al., *Bribery and Corruption 2018: Brazil*, GLOBAL LEGAL INSIGHTS, <https://www.globallegalinsights.com/practice-areas/bribery-and-corruption-laws-and-regulations/brazil> (last visited Apr. 26, 2018) (explaining that “[t]he judicial branch (divided into Federal and State jurisdictions according to the nature of the matters being discussed) is formed by first instance courts, appellate courts, and Superior courts”).

76. See Prado & Carson, *supra* note 73 (discussing the various Brazilian institutions investigating corrupt actions). For a discussion of a particularly complex case, see Kevin E. Davis et al., *Transnational Anticorruption Law in Action: Cases from Argentina and Brazil*, 40 L. & SOC. INQUIRY 664 (2015).

77. On process tracing, see ALEXANDER L. GEORGE & ANDREW BENNETT, CASE STUDIES AND THEORY DEVELOPMENT IN THE SOCIAL SCIENCES 205–32 (2004); David Collier, *Understanding Process Tracing*, 44 PS: POL. SCI. & POL. 823 (2011); James Mahoney, *The Logic of Process Tracing Tests in the Social Sciences*, 41 SOC. METHODS & RES. 570 (2012).

are contiguous areas in which outcomes are influenced by different lower-level institutions but the same higher-level institutions. As a result, comparisons of outcomes across contiguous geographic areas will reveal information about the impact of variations in lower-level institutions. So, for instance, one might conclude that even though the time it takes to start a business is influenced by both national and municipal governments, variations across cities can be explained entirely by differences in the performance of the municipal governments since they are all influenced in the same way by the national government.

Unfortunately, many real-world situations fail to satisfy the conditions necessary to make it possible to use inferences from comparisons across territorial units to identify the performance of specific legal institutions. The fundamental problem is that the scope of legal institutions need not be defined in territorial terms. The most obvious examples are laws that apply extraterritorially.<sup>78</sup> Prominent among these are laws on bribery of public officials. Virtually every country criminalizes, or has committed itself to criminalize, bribery of its public officials.<sup>79</sup> In addition, a growing number of countries, including all of the members of the Organisation for Economic Co-Operation and Development (OECD), make it a criminal offense for their nationals to bribe a foreign public official, even when the offense is committed abroad.<sup>80</sup> As a result, whenever a public official is bribed by a person that is the national of a foreign country that is a member of the OECD, at least two countries' laws have been violated.

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78. Other examples, not discussed in this Article, involve legal institutions which apply exclusively to actors within a specific territory but which regulate phenomena with extraterritorial effects, such as migratory species or pollutants that move across borders. Scholars have devoted considerable attention to determining the appropriate geographic level at which to study and regulate these kinds of phenomena. See, e.g., ORAN R. YOUNG, *THE INSTITUTIONAL DIMENSIONS OF ENVIRONMENTAL CHANGE: FIT, INTERPLAY, AND SCALE* (2003); David W. Cash et al., *Scale and Cross-Scale Dynamics: Governance and Information in a Multilevel World*, 11 *ECOLOGY & SOC'Y* 81 (2006). The discussion in the text also ignores the complications that can arise when multiple legal institutions operate collaboratively across territorial boundaries. See Donald P. Moynihan et al., *Performance Regimes Amidst Governance Complexity*, 21 *J. PUB. ADMIN. RES. & THEORY*, 141, 145–47 (2007) (describing challenge of formulating performance measures for government agencies that engage in collaborative governance).

79. G.A. Res. 58/4, ch. 3, art. 15 (Oct. 31, 2003) (adopting the Convention against Corruption which requires the 183 state parties to criminalize bribery of national public officials).

80. This kind of legislation is required by international law. See Convention on Combating the Bribery of Foreign Public Officials in International Business Transactions, OECD, art. 4, Nov. 21, 1997.

This has to be taken into account when using data on the prevalence of bribery to assess the performance of anticorruption laws.

Aside from laws that apply on the basis of nationality rather than territory, some laws apply exclusively to members of particular religious groups. India's inheritance law is a prime example: Hindus, Buddhists, Jains, and Sikhs are subject to one law, while people of other religions, such as Muslims, Christians, Parsis, and Jews, are governed by other laws.<sup>81</sup> As a result, it is impossible to measure, say, the restrictiveness of inheritance law at the country level.<sup>82</sup>

Another type of complication arises when people can choose which legal institutions will govern their activities. Some governments permit people located within their territory to subject themselves to legal institutions created by another government. For instance, within the United States or the European Union, business people have considerable freedom to choose which jurisdiction's corporate laws will apply to their organization.<sup>83</sup> Similarly, in contractual relationships, parties regularly choose to have their relationship governed by the law of a major commercial center such as New York State or England.<sup>84</sup> Contract-

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81. See Hindu Succession Act, No. 30 of 1956, <http://indiacode.nic.in> (outlining application of the Act in Chapter 2).

82. Andrew Ellul et al., *Inheritance Law and Investment in Family Firms*, 100 AM. ECON. REV. 2414, 2426 n.16 (2010) (analyzing the effect of inheritance law on corporate governance, but reporting that in some countries, inheritance law is too complex to capture in a simple indicator).

83. See Zoe Adams & Simon Deakin, *Freedom of Establishment and Regulatory Competition*, in THE OXFORD HANDBOOK OF EUROPEAN UNION LAW 537, 538 (Anthony Arnall & Damian Chalmers eds., 2015). For recent empirical studies, see Ofer Eldar & Lorenzo Magnolfi, *Regulatory Competition and the Market for Corporate Law* (Yale Law & Econ., Research Paper No. 528), <https://ssrn.com/abstract=2685969> (describing the incorporation choices within the United States); Carsten Gerner-Beuerle et al., *Why Do Businesses Incorporate in Other EU Member States? An Empirical Analysis of the Role of Conflict of Laws Rules* (ECGI, Working Paper No. 361/2017), <https://ssrn.com/abstract=3012139> (discussing the incorporation choices within the European Union).

84. See Gilles Cuniberti, *The International Market for Contracts: The Most Attractive Contract Laws*, 34 NW. J. INT'L L. & BUS. 455 (2014) (describing and explaining attractiveness of English and Swiss law among parties to international agreements providing for arbitration); Theodore Eisenberg & Geoffrey P. Miller, *The Flight to New York: An Empirical Study of Choice of Law and Choice of Forum Clauses in Publicly-Held Companies' Contracts*, 30 CARDOZO L. REV. 1475 (2008) (finding that major commercial contracts frequently designate New York law and explaining why).

ing parties are often also able to choose to have any disputes resolved in the courts of a foreign state.<sup>85</sup>

Even when it is possible to determine which government is responsible for governing a particular activity, it can be difficult to identify the specific legal institutions involved. Governments sometimes adopt legal norms that discriminate between subjects. Important examples are national governments that establish special economic zones in which, for example, laws that permit employees to unionize and strike are abrogated.<sup>86</sup> National governments also sometimes create special legal regimes for foreign investors, either pursuant to the terms of investment agreements with individual foreign firms, or by concluding an investment treaty with the firm's home country.<sup>87</sup> Higher-level governments can also adopt narrower types of discriminatory norms. For example, in China, the central government sometimes adopts legal reforms in selected pilot cities as a form of experimentation.<sup>88</sup> A recent article argues that many of the reforms that led to the emergence of a market-based housing system in urban areas started as experiments initiated by the central government.<sup>89</sup>

Even ostensibly neutral legal norms can have differential effects if they are not administered uniformly. For example, in Kenya, as of September 2015, the national Companies Law sets out the procedures required to start a business anywhere in the

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85. See generally REGULATORY COMPETITION IN CONTRACT LAW AND DISPUTE RESOLUTION 427–31 (Horst Eidenmüller ed., 2013).

86. See GOKHAN AKINCI & JAMES CRITTLE, SPECIAL ECONOMIC ZONES: PERFORMANCE, LESSONS LEARNED, AND IMPLICATIONS FOR ZONE DEVELOPMENT, FOREIGN INVESTMENT ADVISORY SERVICE 40 (2008), <http://documents.worldbank.org/curated/en/343901468330977533/Special-economic-zone-performance-lessons-learned-and-implication-for-zone-development> (describing labor standards issues documented by the International Labour Organization and the International Confederation of Trade Unions).

87. See, e.g., Keith Molkner, *A Comparison of the Legal Regimes for Foreign Investment in Russia, Kazakhstan, and Kyrgyzstan*, 11 INT'L TAX & BUS. L. 71 (1993) (providing an overview and comparison of legal regimes for foreign investment).

88. See Ciqi Mei & Zhilin Liu, *Experiment-Based Policy Making or Conscious Policy Design? The Case of Urban Housing Reform in China*, 47 POLY SCI. 321, 329 (2014).

89. See *id.* at 327–29 (2014). Other commentators suggest that these experiments are driven by subnational governments. See, e.g., Chenggang Xu, *The Fundamental Institutions of China's Reforms and Development*, 49 J. ECON. LIT. 1076, 1079 (2011). Xu also reports that each level of subnational government negotiates performance targets with subordinate levels of government, implying that different subordinate governments might owe different obligations to the higher-level government. See *id.* at 1093.

country.<sup>90</sup> Most aspects of the process are handled at the county level of government.<sup>91</sup> According to the Doing Business subnational report on Kenya, in 2015, variations in time and cost across counties were explained largely by differences across county-level agencies in the time required to obtain a business permit and the fees charged.<sup>92</sup> Some of the variation was attributable though to a national agency.<sup>93</sup> The application to register the company had to be submitted to the Registrar of Companies, whose only office was in Nairobi.<sup>94</sup> Submitting the application in person saved one to two weeks.<sup>95</sup> As a result, the cost of company registration varied from county to county depending on the cost of travel to Nairobi.<sup>96</sup>

For all these reasons, the physical location of behavior is not necessarily an indication of which legal institutions have influenced it. This means that comparisons of outcomes in different locations will not be a reliable way of isolating the influence of individual legal institutions. Variations in outcomes across locations might be caused by differences in the institutions nominally responsible for those locations, but they might also be caused by differences in the overall mix of applicable institutions that stem from extraterritorial regulation, voluntary choice of laws, or discriminatory treatment by common higher-level governments. So, for instance, differences between cities in the time it takes to start a business might be explained either by differences between municipal governments or differences in national laws. Differences between provinces in how many firms report paying bribes might be explained by differences between provincial governments in enforcement of antibribery laws or by differences in the proportions of firms subject to foreign antibribery laws that apply extraterritorially.

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90. See WORLD BANK GRP., *DOING BUSINESS IN KENYA 2016 21* (2016), <http://www.doingbusiness.org/~media/WBG/DoingBusiness/Documents/Subnational-Reports/DB16-Sub-Kenya.pdf>.

91. See *id.* at 5.

92. See *id.* at 7.

93. See *id.* at 30.

94. See *id.* at 21.

95. See *id.* at 24.

96. See *id.* at 24–25.

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#### IV. THE MARKET FOR LEGAL PERFORMANCE MEASURES

For all the reasons given in Part III above, it can be challenging to create performance measures for legal institutions that operate within multilevel systems of governance. In some cases, those challenges will be insurmountable, no matter how many resources are devoted to the task. In other cases, the question is whether anyone will choose to invest the resources required to produce good performance measures. The next two Sections in this Part examine whether ordinary market forces, meaning the self-interested choices of private actors, will call good performance measures into existence. The final Section considers whether we should expect not-for-profit organizations or public actors to fill gaps in the market for legal performance measures.

##### A. DEMAND FROM USERS OF PERFORMANCE MEASURES

To understand whether self-interested actors will produce performance measures we have to begin by calculating the level of demand for those measures. Producers benefit to the extent they satisfy demand, so the level of demand will determine the strength of producers' incentives.

As noted in Part I, demand for legal performance measures can come from a variety of types of potential users. The list begins with people interested in understanding how legal institutions affect their lives, particularly as they make critical decisions such as where to live, or whether, where and how to operate a business. Those people will be deeply interested in information about how long it takes to start a business, whether it is necessary to pay a bribe to obtain a building permit, or how safe the neighborhood is at night. In other words, they will be interested in information about the outcomes generated by governments' actions, including the outcomes associated with different combinations of legal institutions.

People who are motivated by these sorts of self-interested considerations will not necessarily need information that isolates the contributions of specific legal institutions to the outcomes about which they care. Why should a prospective entrepreneur or resident care whether the national or the municipal government is responsible for regulating business entry, corruption, or preventing crime? In principle, information about the outcomes should be sufficient. Information about the performance of specific legal institutions might be of practical value,

however, in predicting future outcomes. Suppose there is likely to be a change in the government of a province in which it recently has been exceptionally easy to do business. Will the change in provincial government affect the business environment? To answer that question, it will be important to know whether past outcomes should be credited to the provincial government or the national government.

Demand for measures of the performance of legal institutions also comes from people who exercise authority over legal officials, namely, voters and officials at higher levels in the political hierarchy.<sup>97</sup> These users will typically be interested in measures that isolate the performance of the specific legal institutions they oversee.<sup>98</sup> Public officials' peers also may be interested in monitoring their performance. For instance, police officers may monitor the performance of peers in neighboring jurisdictions for the purposes of benchmarking their own performance, or as part of the process of identifying new people to recruit or practices to adopt. They too will want fairly precise information about specific legal institutions.

The total demand for legal performance measures will depend on how valuable the information is to each potential user as well as the total number of users.<sup>99</sup> The value to each user will depend on how informative the measure is relative to the person's existing knowledge base. This will depend on several factors, including perceived accuracy, how frequently the measure has been used to score the performance of potentially interesting institutions, and the identity of the producer.<sup>100</sup> The value of accuracy is self-evident. The number of available scores is relevant in cases where the indicator is being used for comparative purposes. The greater the number of scores, the greater the number of possible comparisons. Finally, it is likely that users of performance measures will use the pedigree and reputation of the producer to draw inferences about the quality of the measures.<sup>101</sup>

The value of institution-specific performance measures will depend on the availability of substitutes.<sup>102</sup> In a pinch, users

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97. See, e.g., Davis et al., *supra* note 21, at 92–95 (discussing how the Doing Business indicators are used in decision making).

98. See *id.*

99. See, e.g., KEVIN E. DAVIS & BENEDICT KINGSBURY, INDICATORS AS INTERVENTIONS: PITFALLS AND PROSPECTS IN SUPPORTING DEVELOPMENT INITIATIVES 17–18 (2011) (discussing determinants of the demand for indicators).

100. See *id.* at vii.

101. See *id.* at 27–29.

102. See *id.* at 28.

might be willing to extrapolate about the performance of an institution from what they know, or think they know, about the performance of similar institutions. This strategy will lead to large errors when members of the class of similar institutions vary widely in performance.<sup>103</sup> For example, a businessperson considering an investment in Mexico might be perfectly happy to rely on the World Bank's national indicators to estimate the ease of doing business in the country, on the theory that the variations within a country like Mexico are likely to be small in relation to the variations across countries. If the plan is to build a warehouse though, the national figure could be misleading. When it comes to obtaining a construction permit, in 2016, Colima, a small state on the Pacific coast, performed on par with the best cities in the world while Mexico as a whole, whose rankings were based on data from Mexico City and Monterrey, ranked eighty-seventh in the world.<sup>104</sup>

Finally, the aggregate demand for a particular performance measure will increase with the number of users. That number will in turn depend on the number of people who are affected by the relevant institution, who are charged with its oversight, or who consider themselves members of its officials' professional community. Among users motivated by self-interested considerations, demand will be highest in relation to legal institutions that affect decisions with higher stakes. This generally means that demand will be highest for measures relating to influential institutions. As a corollary, at least among these self-interested users, the greater the number of institutions that influence a given decision, the less demand there will be for information about each individual institution.<sup>105</sup>

Demand for performance measures will not necessarily translate into willingness to pay for them. Once released, scores on performance measures can be copied and shared at little additional cost. Many potential users will be reluctant to pay for information when they can rely on cheap copies. This means that

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103. See Richard Snyder, *Scaling Down: The Subnational Comparative Method*, 36 *STUD. COMP. INT'L DEV.* 93, 98 (2001) (discussing risks of "mean-spirited analysis").

104. See WORLD BANK GRP., *DOING BUSINESS IN MEXICO* 5 (2016); see also *Ease of Doing Business in Mexico*, *DOING BUSINESS*, <http://www.doingbusiness.org/data/exploreconomies/mexico> (last visited Apr. 26, 2018).

105. See, e.g., CHRISTOPHER R. BERRY, *IMPERFECT UNION: REPRESENTATION AND TAXATION IN MULTILEVEL GOVERNMENTS* 57–61 (2009) (explaining that most voters in multilevel governments have little incentive to pay attention to institutions with narrow policy functions).

from the perspective of potential profit-seeking producers, the effective demand for performance measures will be relatively low.

#### B. SUPPLY OF PERFORMANCE MEASURES

The next step in analyzing the market for legal performance measures is to consider the supply side of the equation. The production process for these measures entails the following steps: (1) design or conceptualization of the measure; (2) collection of relevant data; (3) analysis of the data to generate scores; and (4) dissemination of the scores.<sup>106</sup> Each of these steps is potentially costly. The costs include the time of the skilled professionals who design performance measures and analyze data; the expense required either to purchase data from existing sources or collect data directly from people familiar with the form or effects of legal institutions; and the expenses entailed in marketing and publishing any sort of informational product.<sup>107</sup>

In many cases, it is reasonable to presume that the cost of producing a performance measure will be a fixed cost, meaning it will not vary with the value of the measure. To begin with, in general, the costs of designing and disseminating a performance measure seem unlikely to vary in relation to the influence or prominence of the institution being measured. Moreover, when it comes to data about legal institutions themselves, there is no particular reason to expect the costs of collecting data about codified norms and practices to vary with the influence or prominence of the institution. Larger jurisdictions do not necessarily have longer laws: Indonesia has more than eight times the population of Malaysia, but Malaysia's constitution is more than ten times as long as Indonesia's.<sup>108</sup> It is unlikely to cost more to read and code the Constitution of Indonesia than the Constitution of Malaysia.

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106. See Kevin E. Davis et al., *Introduction: The Local-Global Life of Indicators: Law, Power, and Resistance*, in *THE QUIET POWER OF INDICATORS: MEASURING GOVERNANCE, CORRUPTION, AND RULE OF LAW* 1, 10–17 (Sally Engle Merry et al. eds., 2015).

107. See *id.*

108. *Constitution Rankings*, COMPARATIVE CONSTITUTIONS PROJECT, <http://comparativeconstitutionsproject.org/ccp-rankings> (last visited Apr. 26, 2018) (reporting the length of Indonesia's and Malaysia's constitutions as 5915 words and 64,080 words, respectively); *Open Data: Population*, WORLD BANK, [https://data.worldbank.org/indicator/SP.POP.TOTL?locations=ID-MY&name\\_desc=false](https://data.worldbank.org/indicator/SP.POP.TOTL?locations=ID-MY&name_desc=false) (last visited Apr. 26, 2018) (reporting total populations of Indonesia and Malaysia in 2016 as 261,115,465 and 31,187,265, respectively).

The cost of collecting and analyzing data about either uncodified practices or legal outcomes will typically depend, roughly, on the number of actions or outcomes to be measured. It is plausible, therefore, that the cost of data collection will be greater for measures of relatively influential institutions. In general, the more actions or outcomes for which data must be collected and analyzed, the greater are the costs.<sup>109</sup> It is plausible, therefore, that the cost of data collection will be greater for measures of relatively influential institutions. The costs of data collection do not, however, necessarily rise in proportion to the number of outcomes. For example, the cost of obtaining survey data about the prevalence of bribery increases with the size of the relevant population because the larger the population, the larger the sample required to estimate the prevalence of bribery with a given level of confidence. However, the size of the required sample does not necessarily increase in proportion to the size of the population. For instance, a sample of seven hundred people may be required to obtain a satisfactory estimate of the mean outcome for a population of five million people, while a sample of one thousand people is required for a population of ten million people. The situation might be different, however if the larger population is also more heterogeneous and it is important to measure not only typical outcomes but how outcomes vary within the population.<sup>110</sup>

To the extent data are analyzed with the aid of computers, the incremental costs of analyzing additional data may be small.<sup>111</sup> Again though, if the outcomes are heterogeneous, a larger dataset will require more effort to analyze. The key factor in determining costs is likely to be heterogeneity among the institutions to be measured.

For all these reasons, producers who try to produce the most valuable performance measures at the lowest cost typically will find it attractive to supply measures relating to relatively influential legal institutions, meaning those which affect large numbers of people or activities in a significant and similar way. The aggregate value of these measures will be relatively high, and their costs of production may not be significantly higher than the

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109. This is true to the extent that data are collected through interviews or surveys, since these methods of data collection require effort on the part of each respondent, and sometimes an interviewer as well. See FLOYD J. FOWLER, SURVEY RESEARCH METHODS 69–85 (4th ed. 2009) (describing costs per respondent for different modes of survey research).

110. See Snyder, *supra* note 103, at 94.

111. See Davis et al., *supra* note 21, at 85.

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costs of producing measures of other institutions. This suggests that market forces will not lead to the production of performance measures for institutions at the lowest level of multilevel governance. And even when low-level institutions are measured, only the most influential and prominent examples might be covered, because potential users are willing to extrapolate from the performance of a small number of institutions to estimate the performance of similar institutions.

### C. NOT-FOR-PROFIT AND PUBLIC ACTORS

So far, we have considered whether self-interested profit-maximizing actors are likely to produce legal performance measures. These are not the only possible providers. In fact, not-for-profit organizations or public sector entities play a role in producing most existing measures of the performance of legal institutions.<sup>112</sup> The World Bank (which produces the Doing Business reports) is an international organization; Fundação Getulio Vargas (which produces ICJBrasil) is a private foundation;<sup>113</sup> and the Vietnam Chamber of Commerce and United States Agency for International Development (which produce the Provincial Competitiveness Index) are, respectively, a not-for-profit trade association and a government agency.<sup>114</sup> These kinds of entities might be motivated by concern for public welfare, or the desire to promote themselves, but typically they are not concerned with maximizing profits. Without the intervention of these sorts of actors it is unclear whether any performance measures for subnational institutions would ever be produced.

## CONCLUSION

Performance measures are important tools for maintaining and enhancing the performance of legal institutions. Through a variety of channels, including voting, incentive-based pay, and meritocratic hiring processes, performance measures can be used either to induce officials to do good work or to replace them with officials who will. In most contexts, comparative measures

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112. For an analysis of entities playing a role in producing performance measures, see Tim Büthe, *Beyond Supply and Demand: A Political-Economic Conceptual Model*, in GOVERNANCE BY INDICATORS: GLOBAL POWER THROUGH QUANTIFICATION AND RANKINGS 29, 37–40 (Kevin E. Davis et al. eds., 2012).

113. See *Mission and History of FGV*, FGV, <http://portal.fgv.br/en/institutional#> (last visited Apr. 26, 2018).

114. See PROVINCIAL COMPETITIVENESS INDEX, <http://eng.pcivietnam.org> (last visited Apr. 26, 2018).

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that compress large amounts of data into a single indicator are likely to be particularly valuable.

Most existing legal performance measures are legal indicators that drastically simplify at least one aspect of the phenomenon they measure: they ignore the fact that legal institutions typically operate within multilevel systems of governance that comprise multiple legal institutions at each level. Many indicators purport to measure the performance of legal institutions at the national level of government, but few either consider how national institutions' performance is affected by subnational institutions or purport to measure the performance of subnational institutions themselves.

This lacuna in the existing set of legal indicators is an important shortcoming. In order to realize their potential value, legal performance measures must isolate the performance of individual legal institutions within systems of governance that involve multiple legal institutions. It is often difficult to create these sorts of performance measures, especially if they depend on evaluations of social or economic outcomes generated by the relevant institutions. The main challenge arises in matching specific legal institutions with specific outcomes. Contrary to popular belief, there is no straightforward correspondence between physical location and the applicable set of laws. The scope of some laws is determined—either in whole or in part—by non-territorial factors such as nationality, religion, or consent, and even within their ostensible scope of application laws might be applied unevenly.

Even when it is possible to create adequate legal performance measures there is no guarantee that they will come into existence through the operation of ordinary market forces. On one side of the market, the demand for performance measures can be large. Voters, investors, creditors, supervisors, peers—all have reason to value information about the performance of legal institutions. Demand is likely to be particularly high for measures relating to institutions that affect large numbers of people or very valuable activities. Turning to the supply side of the market, the costs of producing measures for these highly influential institutions are likely to be similar to those of producing measures for less influential institutions. This means that profit-oriented producers will tend to focus on creating measures for the more influential institutions. However, the demand for measures of less influential institutions will be satisfied only by

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not-for-profits or public actors, which means that there is no guarantee that demand will be satisfied at all.

The upshot of this analysis is that the potential producers may be either unable or unwilling to supply performance measures for certain legal institutions. This conclusion has significant implications for debates about the performance implications of alternative forms of multilevel governance, which in turn bear on important questions of institutional design. In legal contexts, the classic debates revolve around the distribution of powers among supranational, federal, state, and municipal institutions. It is well understood that the performance of various institutions will depend in part on the availability of mechanisms for holding them accountable. Now we can see that their performance will also depend on the availability of performance measures.

Finally, this discussion also has implications for the burgeoning literature on the production and use of legal indicators.<sup>115</sup> It suggests that greater attention ought to be paid to the special challenges associated with producing legal indicators that capture the performance of legal institutions within multi-level systems of governance.

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115. See generally Davis, *supra* note 10 (surveying the literature on the production and use of legal indicators).