The Power of Ranking?
The Ease of Doing Business as Soft Power

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I. Introduction

The world is increasingly governed not by force, but by information. Information moves markets, affects individual and corporate reputations, and impinges on national security. It is the necessary condition for exercising what some scholars have referred to as "soft power" (Nye 2004). The study of how information is created, packaged and deployed is becoming a central issue in international politics.

Over the past few decades, a range of private and public actors have experimented with new strategies to influence how others view the world and the states within it. They have deployed rating and ranking systems, or what we call Global Performance Indicators (GPIs), to define issues, influence users' perceptions, and ultimately to influence how state qualities and governmental behaviors. Today over 160 such global rating systems chart everything from gender equality to state fragility to happiness. Their variety reflects the diversity of actors and institutions attempting to influence policies across and among states (Avant, Finnemore, and Sell 2010, Hale and Held 2011, Hale and Roger 2014).

A growing literature conceptualizes GPIs as tools of global governance (Davis et al. 2012), involving de facto rule-making and the exercise of informational power on a global scale. By ranking states according to specific criteria, actors attempt to define goals and set states in competition with one another to achieve them. Some states respond by devoting significant resources to improving their scores. Rwanda, for example, has formed a bureaucracy to manage their GPI profile.[1] This suggests that GPIs may impact the decisions states make, from economic policies to electoral reforms. The proliferation of GPIs may therefore influence governance world-wide (Espeland and Sauder 2007, 2).

This paper defines global performance indicators, describes their features and demonstrates their growth. We have no doubt that *some* states have altered their priorities in *some* cases to perform better according to certain criteria. But is this a broader pattern? We aim to move beyond the curiosity of indicator proliferation to examine their policy impact. We focus specifically on the effect of *being publicly and comparatively rated.* We hypothesize that public rankings potentially engage state reputations as "strong performers" and their leaders as "competent decision-makers," at least by the criteria of the rankings. Politicians and bureaucrats may become concerned about the reactions of investors, aid granting agencies, peer professionals, transnational advocacy groups, and domestic publics to their performance in these systems. For this reason, rating systems are potential game changers. Under certain circumstances, they encourage states to take policy actions the raters will reward with a higher grade, thus exerting an informational influence on policy.

We test for the impact of GPIs using the case of the World Bank's Ease of Doing Business (EDB) rankings. The EDB clearly sparks media and policy attention. Because of the authority and resources of the World Bank, the rankings have the potential to be accepted as an indicator of the true underlying business environment. As such, they have the potential

[1] See http://www.rgb.rw/spip.php?page=rubrique&id_rubrique=15, last accessed August 22, 2014.

to define problems, set standards, reward compliant behavior; in short, they become an implicit yet powerful governance tool.

Both the Bank and commentators have made relatively strong claims about the influence of the EDB rankings (The Economist 2013), but the only evidence produced so far has been mini-case studies by the Bank as well as record-keeping of various relevant reforms. Our question is whether the EDB ranking system has contributed to these reforms? Our analysis leverages the fact that the use of full rankings was introduced several years after the EDB database itself, so that it is possible to compare policies taken once rankings are made public with baseline performance. We find some evidence that the Bank been able to use the rankings to spur reforms in directions encouraged by the index. The EDB thus exemplifies the use of rankings as a fairly influential global governance tool.

This paper proceeds as follows. The second section provides some evidence of the broader trends in GPIs discussed above, and places the EDB rankings in this context. The third section discusses three channels through which GPIs generally might influence state policy. The fourth section discusses the World Bank's motivation for creating this highly visible system and some anecdotal evidence of its 'effects.' The fifth section explains our methods and testing, and the sixth discusses our findings. Section seven concludes.

II. The Big Picture: GPIs as a rising governance technology

We define a global performance indicator (GPI) as *a public, comparative and cross-national indicator that governmental, intergovernmental and/or private actors use regularly to attract attention to the relative performance of countries in a given policy area*.[2] Because we are interested in the use of GPIs as tools of social pressures *on states*,[3] we focus specifically on those that are *public* (easily available for free),[4] *comparative* (either through numerical assignments – e.g., ranks – or the use of clear labels that designate normative judgments, such as categories, blacklists or watch lists),[5] *regular* (issued on a predictable schedule, for example annually),[6] *inclusive* (include multiple states, with the aim, in principle, of full inclusiveness within a region or worldwide), and *purposive* (produced with an intention to influence policy or practices in the area at which they are aimed). This last quality is evidenced by repackaging existing data and labeling it in ways designed to attract

[2] Our definition has much in common with a prior definition by Davis *et al*., who define indicators as "a named collection of rank-ordered data that purports to represent the past or projected performance of different units" (Davis et al. 2012, 72). However, our definition is narrower and more specific.

[3] We exclude for example various city ratings, such as the *Bike Friendly Index*. See http://copenhagenize.eu/index/.

[4] For example, on this basis we exclude Maplecroft's Human Rights Risk Atlas, which is "designed to help business, investors and international organisations assess, compare and mitigate human rights risk across all countries." The data themselves are pay-walled and not publicly available. See http://maplecroft.com/themes/hr/.

[5] To qualify as a GPI for our purposes, it must be easy compare states using the proffered rating, ranking or categorization system. We exclude monitoring systems, such as Amnesty International's annual reports, that result in narratives but do not rate, rank or categorize states. We also exclude comparative information that could clearly and easily be converted into a numerical index, but the source declined to do so. See for example the data displayed at http://en.wikipedia.org/wiki/LGBT_rights_by_country_or_territory.

[6] We located some 39 GPIs that have apparently "died;" that is, they were apparently in use for a few years, but have been discontinued for some reason. These are noted as "defunct" in Figure 1.

attention,[7] making policy or reform recommendations based on the rankings, and especially marketing efforts to increase a GPI's visibility. Overall, the essential consequence of GPIs is the itchy feeling they create of being watched, judged and especially *publicly compared* with peers.

Performance indicators were initially created to respond to a demand for local and global policy data driven by burgeoning international investment and a growing interest governance and development (Arndt 2008, Arndt et al. 2006). But by the late 1990s, the number of GPIs exploded and many were not only meant to provide useful policy information for decision makers; they were deployed specifically as "technologies of power" (Hansen 2011b); that is, they were *intended* to influence the behavior of the rated. Private actors, NGOs, IGOs and states began to realize that "indicization" of information promoted not only transparency and accountability (Mathiason 2004), it could also be used to pressure states to conform. Figure 1 presents a cumulative count (from their start date) of GPIs that meet our definition and appear to still be actively updated as of 2011. Defunct indicators are included for their active periods as well. Recent years may be bloated by indexes that may yet fly-by-night, but the figure illustrates the unmistakable proliferation right around the turn of the millennium.

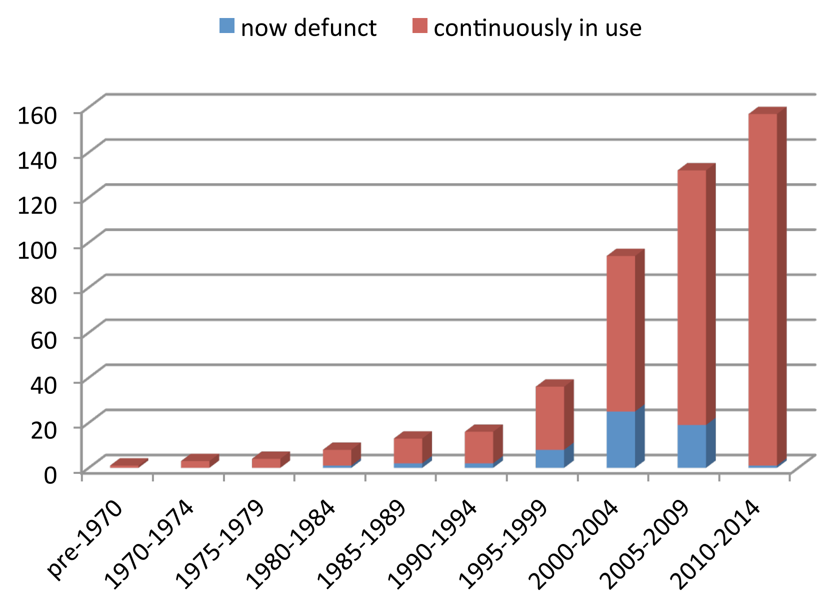

Figure 1: Cumulative Number of GPIs Meeting All Five Criteria

Source: Authors' database. "Now defunct" denotes GPIs that appeared to be actively updated in that year but were discontinued. Red bars represent GPIs that meet our criteria and appear to be regularly updated as of 2012.

[7] We do not consider measures such as GDP growth or literacy rates to be global performance indicators in our sense. However, when these are repackaged as subcomponents of an the *Basic Capabilities Index* – who advocates for "poverty eradication and gender justice" (http://socialwatch.org/node/13752) – we count the resulting index as a global performance indicator as used here.

About a quarter of all GPIs in our database are created by intergovernmental organizations, a third are promulgated by non-governmental organizations and a fifth by private profit-making institutions (e.g., consultancies).[8] More than half of the organizations are headquartered in the United States while a third are headquartered in Europe. Only 5 per cent are in the Global South.[9] Nearly half of the GPIs we located are top-to-bottom ranking systems and 4 percent create watch lists or black lists. Many raters highlight best and worst performers on their websites and publish the grading systems to encourage reforms.

Economic GPIs are especially common (Figure 2). Social issues, development and governance are also common topics as well. GPIs relating to security, conflict or military issues are much more rare.

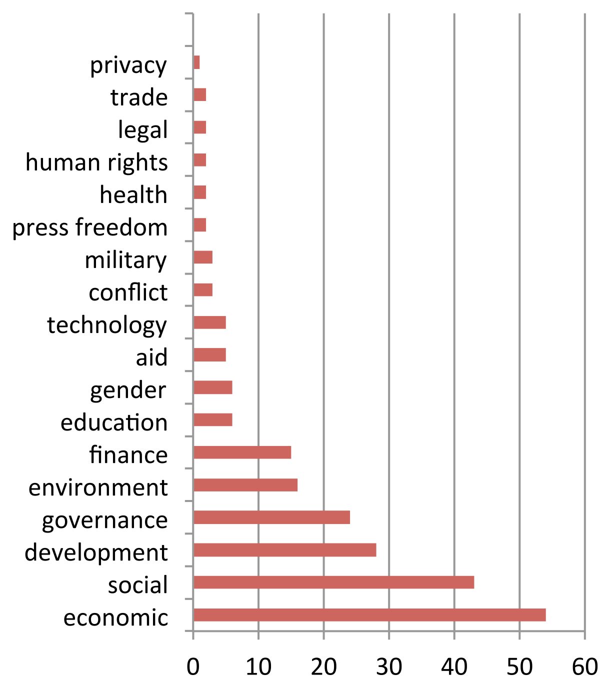

Figure 2: Number of GPIs, by Issue

Source: Authors' database. Includes only "active" GPIs as of 2012. Indicators were counted twice if they straddled issue areas such as health and development or social and gender.

Despite these trends, no studies systematically examine the consequences for policy choice in rated states. A few in-depth case studies look for effects of such systems in one or a handful of countries.[10] But why should ranking systems matter generally?

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[8] Author's database.

[9] Authors' database.

[10] For example on the Extractive Industries Transparency Initiative (EITI), which is a set of standards "to improve openness and accountable management of revenues from natural resources"[10] (Short 2014, Smith, Shepherd, and Dorward 2012); the "PISA effect" on education in Europe (Grek 2009) and the effect of United States' Special 301 Report's "Watch List" and "Priority Watch List" for intellectual property rights violations (Tian 2008). For a systematic quantitative study on the general effects of US State Department's ratings on human trafficking policies see Kelley and Simmons (2015).

III. Theory: The Politics of GPIs

If GPIs affect policies, it is because they affect politics. This section discusses why GPIs may be influential, and the various pathways that link rankings with results. We begin first with theoretical arguments about why ranking systems constitute strong pressures to conform. We then discuss how these pressures work their way through domestic politics, inter-bureaucratic relations and transnational pressures.

Sources of GPI Power: setting criteria, assessment effects, and the power of numbers

A critical function of GPIs is to define what does and does not constitute appropriate behaviors, policies or outcomes. GPI criteria signal what the rater values and will reward. Many are relatively transparent and quite a few use sophisticated methodologies to justify rankings or ratings. Assessment regimes are contestations over meaning; this becomes obvious when one looks at the proliferation of 'similar' indicators within an issue area. It is common to find GPIs that aim to replace one set of performance criteria with another (the insertion of 'sustainability' criteria; e.g., "Sustainable Society Index" (2006) or the "Sustainable Governance Indicators (2009).) NGOs often carve out new competitive spaces with GPIs, but the World Bank has done so as well. One example is the effort to draw more attention to gender inequality in business through its "Women, Business and the Law Indicators."[11] This exercise was so controversial that the bank *declined* to explicitly rank its members,[12] which testifies to the perceived power associated with defining appropriate behavior through competitive ranking systems.

Ranking systems also imply assessment and involve observing and checking the progress or quality of behaviors over time. It implies *systematic* review that is routinized. In experimental settings subjects behave differently when they know they are being watched. Referred to as the "Hawthorne effect," individuals may re-arrange their priorities to meet external expectations when they are aware of being observed (Adair 1984). Sociologists use the concept of *reactivity* – the tendency for people to change their behavior in response to being evaluated – to explain the effect, for example, of US News and World Report rankings on university priorities (Espeland and Sauder 2007). One reason may be that monitoring signals the social importance of specific tasks or values to the monitor and other actors (Larson and Callahan 1990). Monitoring has long been theorized as a potent form of social control (Foucault 1995, 201-202). Its power lies in its *latent* potential to embarrass those who are revealed to "underperform." Targets may internalize the regime and potentially *self*-regulate.

The comparability of rankings or ratings is key to their design (Hansen 2011a, 508, Buthe 2012). Ordinal indicators are simple, and readily serve as 'psychological rules of thumb' (Sinclair 2005, 52). Most importantly, numbers facilitate comparisons among units and over time. They can also be averaged to establish "norms" or "standards" against which it becomes straightforward to compare different units (Weisband 2000). Rankings grab attention and foster explicit comparisons that, once promulgated, are difficult to dislodge from public discourse (Andreas and Greenhill 2010). For these reasons, actors may well respond differently to ratings than to words alone (Hansen and Mühlen-Schulte 2012, 457,

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[11] See http://wbl.worldbank.org/.

[12] Personal interview with Rita Ralmaho, August 12, 2014, EDB Team, Washington DC.

Robson 1992). In the case of the EDB, states sometimes set public goals to achieve a specific EDB ranking rather than a more qualitatively substantial outcome. For example, King Abdullah of Saudi Arabia declared in 2006 that, "I want Saudi Arabia to be among the top 10 countries in *Doing Business* in 2010. No Middle Eastern country should have a better investment climate [as defined by the EDB rankings] by 2007 (*Celebrating Reforms 2008*, 17)."

Mechanisms Linking Indicators and State Policy Change

GPIs and their rankings can affect policy outcomes through several distinct mechanisms. Figure 3 illustrates three common pathways.

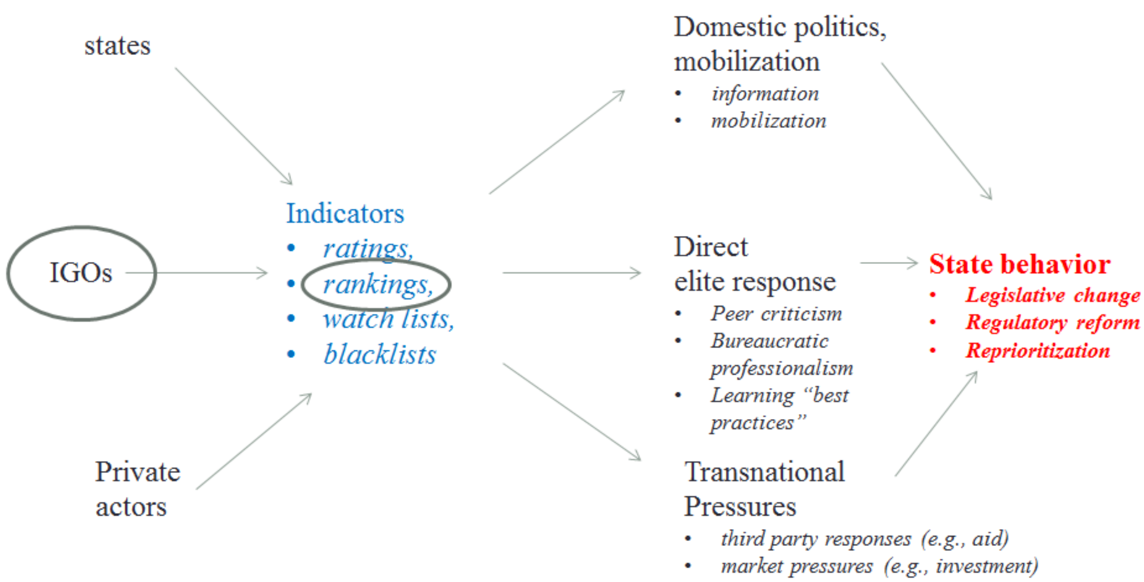

Figure 3: Mechanisms: indicators and policy change.
Adapted from Kelley and Simmons (2015)

First, GPIs can influence policymakers through domestic politics. Rankings in a domestically salient policy area such domestic business regulation create new information that can attract, retain or erode domestic political support (Dai 2007). Salient, negative rankings can mobilize domestic political actors (NGOs, economic actors) who press decision makers for behavioral or legislative change (Simmons 2009). Mobilization can strengthen vocal domestic political coalitions who are inspired or incensed enough by the rating to demand official attention to the matter. This mechanism does not depend on the rater's material or enforcement power, although some groups may be protecting an economic stake that could be threatened by an external sanction. In the case of EDB rankings, local businesses can use World Bank assessments to demand a reduction in costs and red tape associated with conducting business. Even the *anticipation* of publicity and negative domestic reactions could in some cases prompt preemptive policy review by government officials.

Second, GPIs can work through direct bureaucratic pressures if indicators target policies for which specific government officials are responsible. Ratings and rankings can therefore influence the personal status of an individual (e.g., government minister) or that of a department or bureaucracy (Kelley 2013). The EDB sub-indicators are specific enough that they could for example implicate the professionalism of bank regulators (for various measures of access to credit) or the ministry in charge of utilities (for ease of access to electricity). When rankings reflect poorly, implicated ministers or bureaucrats may introduce policy changes before the next "grading period" to avoid opprobrium. Although we realize the World Bank has implicit power through its lending facilities, these mechanisms can in principle work independently of the material power of the rater; what is critical is the subjective regard of the rated for the rater and the need or desire to maintain a good professional reputation.

Sometimes GPIs may even influence ongoing bureaucratic operations and capacities. GPIs may prompt bureaucrats to comb through records, assign employees data collection tasks, and forge connections with private actors who may have useful information. Such "collection, processing and dissemination of information" can itself shape the cognitive framework of policy-making (Bogdandy and Goldmann 2008, 242). More strategically, bureaucrats are adept at learning what it takes to improve their state's ratings by consulting the "approved" policy advice that annual reports imply will improve the ratings (Cialdini 2012). In the case of the EDB, more than 50 economies have formed reform committees that, according to the Bank, "use the *Doing Business* indicators as one input to inform their programs for improving the business environment."[13]

GPIs may also activate transnational pressure such as market expectations. Even if the rater lacks direct control of material resources, policy makers may expect private economic agents to use the information. Credit rating agencies for example control minimal material resources, but their ratings can touch off a tsunami in capital or exchange rate markets. Several recent studies suggest that EDB ratings may influence foreign direct investment (Corcoran and Gillanders 2015, Morris and Aziz 2011, Jayasuriya 2011) or new business start-ups (Klapper, Amit, and Guillén 2010), and if governments think so too they have powerful reasons to take actions to up their ratings. Funding agencies may also apply pressure to comply with a particular target. For example, at least three EDB sub-indicators are used in awarding Millennium Challenge Corporation (MCC) funding: the cost of starting a business, access to credit, and registering property.[14] A rater therefore need not have significant material power for the indicator to incentivize policymakers, but they must have enough credibility to be taken seriously by the market or other actors.

To summarize, GPIs are exercises in social power that interact with the status of the ranker in the broader international community. They can mobilize and inform domestic actors, embarrass specific policy makers, and sometimes even activate other transnational pressure and move markets. Powerful rankers seem well aware of the possibilities, and expend resources to collect data to display in easy-to-digest comparative formats. That they increasingly choose to do so is revealing in itself, since the entire assessment, rating and ranking machinery is difficult to explain if powerful actors could simply entice or threaten others directly to alter their ways.

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[13] Table A in Appendix A lists the countries by region.
[14] See https://www.mcc.gov/pages/docs/doc/report-guide-to-the-indicators-and-the-selection-process-fy-2015

IV. The Ease of Doing Business Rankings

The EDB index is "built on the premise that firms are more likely to flourish if they have to abide by fewer, cheaper, and simpler regulations."[15] It is an attempt to assess "the burden of regulation…as seen from the private firm's point of view," not the net social benefits of regulation.[16] Touting a ranking that makes like easier and cheaper for business has been justified theoretically on the basis that overregulation stifles business activity, which in turn stunts growth and development. (The EDB rankings do not address issues of under- or poorly-designed regulations.)

The EDB index was introduced into an environment already populated by multiple indices on business environment and competiveness. The 2004 Doing Business report listed 12 in roughly the same area, including the Index of Economic Freedom, which covers 161 countries and has been published since 1995 by the Heritage Foundation and the *Wall Street Journal*, and The Global Competitiveness Report, covering 80 countries and published since 1996 by the World Economic Forum in Geneva, Switzerland. For the ranking itself to have an impact, it would need to move the needle beyond any pressures already created by these well-known competitors. Furthermore, for the *ranking itself* to have any discernable impact, it would need to create reform momentum beyond that already created by the publication of the raw EDI data and narrative reports to date.

The EDB was designed to be an inventory for action. In August 2002, the Bank posted a description of what would make the EDB special: "The database differs from existing cross-country reports that address business environment issues – such as EBRD's Transition Report, WER's Global Competitiveness Report, Fraser Institute's Economic Freedom of the World - which tend to rely on business perceptions surveys and analyst assessments. They do not identify the *nature of regulatory reforms required to improve the investment climate*. Doing Business aims to provide a new set of objective, quantifiable measures of business regulations and their enforcement"[17] (emphasis added).

The Bank did not always rank. Data that would eventually form the basis of the rankings were first published in the fall of 2001 on the Bank's website, covering two areas: entry regulations (often called "starting a business") and contract enforcement.The first full, published report, EDB 2004, talked about the value of benchmarking but did not publish rankings.[18] Instead it simply included the data and made some tables of the top and bottom performing countries in each category. It did embed narrative comparisons in chapter discussions. But still, in the 2005 report none of the graphs mentioned individual countries. The first report that published a full ranking was in 2006. As we discuss below, this

[15] Independent Evaluation Group, Doing Business: An Independent Evaluation: Taking the Measure of the World Bank-IFC Doing Business Indicators, 2008, page Posted at http://siteresources.worldbank.org/EXTDOIBUS/Resources/db_evaluation.pdf. Accessed 14 January 2015.
[16] IEG 2008 forward, p.
[17] From the Way Back Machine, http://web.archive.org/web/20020806155832/http://rru.worldbank.org/DoingBusiness/AboutDoingBusiness.aspx
[18] It covered 110 countries (27 OECD countries, 19 countries from Eastern Europe and Central Asia, 21 from Africa, 5 from South Asia, 16 from Latin America, 12 from the Middle East and North Africa and 10 from the East Asia and the Pacific region. From the Way Back Machine, http://web.archive.org/web/20020806155832/http://rru.worldbank.org/DoingBusiness/AboutDoingBusiness.aspx

publication history is fortunate because we have baseline measures of the state of several regulations both before and after ranking.

The decision to rank was a deliberate effort by the Bank to impact policy. This "lively communication style" was design specifically to set states in competition with one another, and to enhance the World Bank's private-led development agenda.[19] Within a year of publicizing the rankings, they reported that leaders from many countries, including Algeria, Burkino Faso, Malawi, Mali, and Sao Tome and Principe had requested not general regulatory advice, but "how to improve their standings. This illustrates," according to a short staff report posted in 2005, "the main advantage of showing a single rank: it is easily understood by politicians, journalists, and development experts and therefore created pressure to reform. As in sports, once you start keeping score everyone wants to win."[20]

The Bank promotes the Doing Business Index as "one of [its]flagship knowledge products."[21] Bank staff carries out a massive media campaign every year when the ratings are released. The EDB product line has a Wikipedia page, and a robust online presence, including Chartsbin, Facebook, LinkedIn, several Youtube videos and Slideshare. As a result, the EDB rankings enjoy tremendous "market share" among the growing list of GPIs that deal with the economic and business environment within countries. To illustrate, we selected nine other GPIs that were the EDB's closest cognates from our list of over 160 that fit the definition above,[22] and searched over 50 thousand online media sources (news organizations, blogs, and other media).[23] The EDB brand dominates the market for easy-to-access comparative rankings of country performance, as Table 1 clearly shows. In fact, the EDB has more mentions in the media between 2010 and 2015 than all of the other nine cognate indicators *combined*.

Table 1: Market Share of the Ease of Doing Business Index

Economic Indicator Market Shares		
Indicator	**Hits**	**Market Share**
Ease of Doing Business Index	10548	53.23%
Global Competitiveness Index	4580	23.11%
Index of Economic Freedom	2378	12.00%
Global Entrepreneurship Monitor	1222	6.17%
World Competitiveness Rankings	806	4.07%
The Enabling Trade Index	173	0.87%
Forbes Best Countries for Business	99	0.50%
EIU Business Environment Rankings	9	0.05%
FDI Attraction Index	2	0.01%
FDI Potential Index	0	0.00%

[19] IEG 2008, p. xiii
[20] Simeon Djankov, Darshini Manraj, Caralee McLiesh, Rita Ramalho. 2005. "Doing Business Indicators: Why Aggregate and how to do it," p. 1. (accessed through the Way Back Machine, posting at 19 February 2006.
[21] IEG 2008, Executive Summary, p. xv.
[22] These choices were also corroborated by interviews with Bank officials and others involved in creating the cognate rankings.
[23] Media Cloud: http://mediacloud.org/. Accessed via the Berkman Center, Harvard University.

The bank believes the EDB is an effective reform tool. The group keeps track of related policies and has at last count recorded 2265 reforms that made it easier to do business. It notes that for about 600 reforms "Doing Business is aware that information provided by the Doing Business report was used in shaping the reform agenda" (EDB 2015, 21, note). Each year the EDB report discusses several reforms countries have undertaken. A report called "*Celebrating Reforms 2008"* detailed case studies of EBD-inspired reforms in 20 countries.[24] It highlighted for example how in 2006 Azerbaijan's president declared the ranking "unacceptable," noting that "Azerbaijan's position is not high enough to fulfill our ambition to create a modern economy and to maintain a role of regional leader" (*Celebrating Reforms 2008,* 5-6). A working group consulted extensively with the Bank and others to bring about reforms that improved the business environment and moved Azerbaijan up in the rankings.

There is some evidence that the index is salient for many states. For example, countries contact the Bank to query and sometimes to challenge the data. From November 2013 to October 2014 the EDB team reported receiving more than 160 data queries from countries (EDB 2015). This suggests that governments care and that they interact with the EDB team a fair amount. Sometimes the EDB team works directly with countries to design reforms specifically designed to move the EDB rank. For example, in February 2008 the Albanian government asked the World Bank's Doing Business Reform Unit to review proposed legislation to protect investors. The Reform Unit made specific recommendations it said would give Albania a spot among the top 20 best performers in the "protecting investors" indicator. The government implemented the modifications and presented the ranking simulations to the Parliament in March 2008. The proposal was unanimously enacted into law within a month.[25]

The press echoes many of these Bank claims that EDB rankings have spurred reforms (Williamson 2004, The Economist 2013). Countries sometimes openly state their plans to undertake reforms precisely to reach a certain place in the rankings (Williamson 2004). Georgia made concerted efforts to do so and managed to rise from 100th to the top 20 in two years (Schueth 2011, 52). Indeed, the perceived ability of the report to shape and encourage reforms has even led to a showdown between the Bank and some states who rate relatively poorly and would like to see the rankings weakened (The Economist 2013).

Self-promotion and press-hype aside, we know of no systematic, independent evidence of the EDB rankings' policy influence.[26] The academic research often assumes the EDB rankings are appropriate proxies for the actual business climate, and looks for the impact on investment and business activity. In the following section, we outline a strategy for showing that the advent of public ratings has on average reduced hurdles for businesses in the categories the Bank was measuring and rating.

V. Hypothesis, Methods & Data

[24] Azerbaijan, Bulgaria, Croatia, Colombia, Egypt, FYR Macedonia, Georgia, Ghana, Honduras, Italy, Jordan, Peru, Poland, Portugal, Saudi Arabia, Singapore, Rwanda, Turkey, Tonga, and Vietnam.

[25] "On Entrepreneurs and Companies" (*Celebrating Reforms 2009*, 55-56)."

[26] IEG 2008 xvi-xvii. The Independent Evaluation Group recommended in 2008 that the Bank reduce claims of "influence", and recommended studies be undertaken to trace the effects of the EDBI on actual regulatory reforms. IEG, 2008, xxv.

Does the pressure of public rankings affect concrete policy choices of the ranked? If GPIs influence policies, the first thing we should expect is a systematic difference between the policies of states before and they are ranked. We expect that *states are more likely to produce a business friendly environment, by the criteria of the ranker, when they are being rated or ranked than when they are not. In the case of the EDB, we expect states to reduce the costs, time and red tape associated with establishing businesses and enforcing contracts significantly more after the EDB ranks were published than previously.*

To test this hypothesis we take advantage of the fact that for some sub-indicators of its EDB rankings, the World Bank *collected data for several years before the ranking system was introduced*. This is what allows us to establish an appropriate baseline to test the impact of public comparative rankings. The Bank only makes historical data available from 2004 onwards, but using the Internet Wayback machine, we reconstituted the data for 2001 and 2002. Thus for the five indicators first published we have continuous data for 2001-2014. The earliest years we would expect to observe effects of the rankings would therefore be in the data covering the indicators in 2006. This is a conservative assumption, as countries might take longer to catch on to the introduction of rankings and to implement reforms.

The EDB indicators are based on questionnaires sent to professionals who administer or advise on the legal and regulatory requirements covered in each *Doing Business* topic. Since the start of the reports over 25,000 respondents have participated. Most respondents are lawyers, judges or notaries and most responses are based on laws, regulations and fee schedules. *Doing Business* does not survey firms (EDB 2014). The methodology is explained in detail in each EDB report. It is critical to note that some have criticized the EDB rankings for being based on *de jure* rather than *de facto* measures of the ease of setting up a business (Michaels 2009) and that these sometimes differ significantly (Hallward-Driemeier and Pritchett 2011). We remain agnostic as to whether the Bank is accurately measuring the “real” business environment.

We focus on two sets of sub-indicators: Enforcing Contracts and Starting a Business. These were the first two areas that the Bank published on its “Ease of Doing Business” website in 2002, covering data for 2001. Starting a Business consists of four sub-indicators and Enforcing Contracts of three. For all the indicators, larger numbers are considered worse from a business perspective. Table 2 displays the indicators and the years the data collection began. More detailed descriptions of the data as well as summary are in the appendix.[27]

[27] To provide a comparable time series for research, the WB back-calculates to adjust for changes in methodology, but these corrections only have been made since 2003 data in the 2004 report. Because data is back corrected at least until 2003, if the data in 2001 and 2002 tended to overestimate the measures (for example by requiring 1 day for all procedures rather than 1.2 day or lowering the capital requirement to the minimum paid-in capital rather than total required), then the biggest methodology-induced drop will occur between 2002-2003, which is a year before rankings existed. This therefore would bias the findings against our hypothesis, because it would make a non-ranked year appear to have large improvements.

Table 2: Overview of variables

Variable name	Definition	First year collected
Entry Regulations (starting a business) index		
sb_capital	Paid-in Min. Capital (% of income per capita) to start a business	2002
sb_proced	Procedures (number) required for an entrepreneur to legally operate a business.	2001
sb_days	Time (days) required to start a business.	2001
sb_cost	Cost (% of income per capita) of starting a business	2001
Enforcing Contracts index		
con_days	Time (days) required of the process of dispute resolution	2001
con_cost	Cost (% of claim) of resolution	2002
con_proced	Procedures (number) required of the process of dispute resolution	2001

Source: EDB website. For more information, see the appendix

Our test consists of a simple time-series regression with robust standard errors clustered on countries. The outcome variables are the individual sub-indicators that go into the "Entry Regulations" and the "Enforcing Contracts" indicators listed in Table 2 above. The analysis is limited to years 2002-2012 because we need the lagged value of the baseline outcome indicators for year 2001 and because the covariates are up to date until 2012. Our main variable of interest is an indicator for whether a country was ranked in the previous year. This indicator takes on the value of one in years 2006 onwards. We test with and without country fixed effects to examine effects within and between countries. To address concerns about the possible bias that is introduced by the fact that some countries enter the report later, we exclude countries that enter the EDB index after 2004, the last year required for us to have some baseline data on changes in the indicators without the ranking. This avoids concerns that late entrants are very zealous reformers.

We control for several covariates: GDP, GDP per capita, GDP growth, regime type using polity2, as well as the log of population size. We also control for the magnitude of civil or international conflict. Finally, we control for loans from the International Bank of Reconstruction and Development, using data from the World Bank. Because the Bank only posts data since 2005 and we need the years before 2005 in the model, we create a constant that captures the log of the sum of all loans between 2005-2012. We also test a simple indicator for whether a country had a loan during the 2001-1012 period.

VI. Results

We expected rankings to be associated with better scores on the sub-indicators. Table 3 displays an overview of our findings by showing just the coefficients on the lagged *Ranked* variables in all the different models that we ran for each outcome variable (listed in the left hand columns). In all cases, if the coefficient on the lagged Ranked variable is negative;

being ranked in the previous year has a positive effect on lowering Bank-established measures of barriers to conducting business. Table 4 displays the full Models 1 and 4 from Table 5 for each of the sub-indicators for Entry Regulation, while Table 5 does the same for Contract Enforcement.

[TABLES 3-5 about here]

As expected, ranking is positively associated with improvements in many of the sub-indicators. The strongest and most consistent effects are for Entry Regulations. It is worth keeping in mind that even before the ranking system was implemented the Bank was shining a light on these procedures and many of these sub-indicators were already improving. That said, for most sub-indicators, the rate of improvement is greater after rankings are implemented. Ranking correlates with fewer procedures (*sb_proceed*) required for an entrepreneur to legally start and operate a business, fewer days to carry out these procedures (*sb_days*) and lower cost of carrying them out (*sb_cost*). These are all actionable indicators; governments can affect them by changing laws and regulations. Ranking does not lower the minimum capital-paid in requirement (*sb_capital:* the amount of funds as a percent of per capita income an entrepreneur must deposit in an account to be allowed to open a business) as far as we can tell. It is the case, however, that the Bank did change the definition of this indicator from a minimum amount to a minimum paid-in amount. The latter is smaller, and thus it may well be that for the first few years of the data that we obtained from the Wayback machine, the figures are considerably higher. This likely undermines our ability to analyze this indicator as credibly as we can the others. Overall, however, the Entry Regulations findings consistently show that ranking is associated with greater reduction in (the Bank's measure of) regulations. For the number of days required to start a business the result sometimes only holds for the top three quartiles of the distribution, suggesting that there may be some extreme outliers (very poor performers) that do not respond to the pressure of the rankings.

The findings for contract enforcement are also encouraging. Ranking correlates with fewer required procedures to enforce a contract (*con_proced*), and fewer days required for dispute resolution (*con_days*). The latter can be very time-consuming, in some instances taking years. Nonetheless, reducing these barriers is reasonably actionable as well, e.g., by reducing mandated waiting periods that might slow down the dispute resolution process. Ranking has no discernable relationship with the cost of settling a claim. This is recorded as a percent of the total claim and consists of attorney fees and court costs. Although the government can lower the court costs, it has less control over legal charges by attorneys, which may be one reason there is no effect of ranking: *the indicator is less actionable by the government*.

We include a number of control variables in the models such as GDP and GDP per capita. Generally countries experiencing greater economic growth are lowering their barriers to business, which is consistent with the hopes of the Bank. We also control for population size, which, if anything, seems to also be associated with less regulation, although this is not consistent. Regime type has no discernable effect on business regulations, nor does the magnitude of civil or international conflict.

One possibility is that engagement and/or leverage connected with loans from the Bank that lowers regulation, rather than the public rankings themselves. We also included two different variables to capture loans for the International Bank of Reconstruction and Development (IBRD). One is an indicator of whether a country has a loan after 2005 and the other is the log of the sum of all loans. In most cases, these are not significantly related to changes in the business environment.

We conduct several robustness checks. We found that the findings above are robust to the inclusion of fixed effects. We also include a yearly time trend, which does not change the findings for the number of procedures or the cost of starting a business, but it does remove the significance of the number of days required. That said, since ranking begins in 2005 and continues thereafter this already correlates closely with a year variable (.6) so including a running year variable in the model as well requires extraordinary robustness of the ranking variable. The results are also robust to including only states that were in the original year of ranking and excluding those added later. The results are essentially unchanged.

Finally, we try stepwise dropping the first and second years of the data. This is because we are unsure of whether the data for 2001 and 2002 are missing many corrections or not. Dropping these years is very costly in terms of explanatory power because we only have four years of data before the introduction of the full ranking system; there is even some partial ranking in the year prior to that. Thus dropping the first two years halves the number of observations that serve as a base-line for comparison. Nonetheless, most of the findings are robust to dropping at least the first year. Two variables, *con_days* and *sb_cost* are not. Overall, the results hold up well to these stringent robustness checks.

VII. Conclusion:

An interesting potential of GPIs is the effect of ranking *per se*. Actors that create GPIs aim not only to call attention to their issue and set standard of appropriate behavior; most hope to change policy outcomes. Whether this actually happens is largely unknown, and difficult to assess. Many GPIs are a response to information over-load; several contest fields crowded with alternative indicators and assessment regimes. This makes their individual contribution difficult to assess, especially if multiple GPIs complete in area. This analysis relied on the detailed data collected by the World Banks and was able to leverage the delayed introduction of a ranking system. This provided considerable evidence that the World Bank's EDB ranking strategy is associated with reductions in barriers to business above and beyond the effect of the mostly narrative Doing Business Report itself. This aligns with our theory that such rankings can spur states to change their policies to conform to the norms and pressure from the creators of the GPIs. Combined with our earlier work on the effect of the US State Departments ratings on human trafficking (Kelley and Simmons 2015), it is important grist for the debate over what constitutes "power" in modern international politics and suggests that some GPIs may be important tools of governance.

The findings are good news for those who support the contents of the EDB rating system and want to use it as a model for achieving other development objectives, from health policy to climate change.[28] For those who believe the EDB is flawed, however, it is cause for concern. The index certainly has both admirers and detractors. One observer in the

[28] IEG 2008 p. xiii.

investment consulting industry exclaimed that the EDB rankings were one of the most effective things the World Bank had ever done. Others complain that the Bank has undermined its own goals of improving overall efficiency by focusing too much on the start-up costs of doing business and not the full array of transactions costs associated with doing business (Arruñada 2007). The International Labor Organization has criticized the ranking system as "a clear incentive to continuous reforms, in a race to deregulation of the labour market" (Berg and Cazes 2007, 12). Others note that the EDB rankings do not capture states' actual business environment (Hallward-Driemeier and Pritchett 2011). Purely statistical critiques exist as well (Pinheiro-Alves and Zambujal-Oliveira 2012, Høyland, Moene, and Willumsen 2012). The Bank has considered whether to withdraw the rankings,[29] but has so far clearly declined to do so.[30] *Interestingly, both critiques of the EDB rankings and the Bank's refusal to drop them assume they have an effect – for good or for ill – on reform policy*, something for which there has until now been little systematic evidence, but for which we have found at least some support.

The most important message of this research is what it says about new ways to capture governance spaces using ingenious forms of communication. The proliferation of GPIs described in this paper is a reflection of the frenzy by a broad range of actors to attempt to devise communication strategies to draw attention to the issues that concern them, and to define problems and solutions using extreme forms of simplification. Actors that try to create competitive dynamics or even social shame through ranking systems are well-aware that they oversimplify reality, strip concepts of their context and history, conceal their underlying theoretical origins, and offer a false sense of precision and certainty (Merry 2011, S84). But many judge it is more important to grab attention and to start a conversation than to present the world in all of its complexity. Our findings suggest that when authoritative actors, such as the World Bank, define criteria and challenge states to out-do one another to improve their scores, they had better be careful about what it is they are asking. The International Labor Organization has understood this point very well, and has been a strong proponent to keep the labor flexibility measures *out* of the Bank's overall EDB rankings.

This deep-dive into the World Bank indicator weeds has been important for its high-altitude implications for the global politics of information. First, it reminds us that information is not necessarily neutral, but rather is an important power resource. Indeed, it can be deployed in forms that reinforce already authoritative power centers. It is not inconsequential that fewer than 5% of the GPIs we have collected have their provenance in organizations headquartered in the Global South. This observation has led to a good deal of discussion about how indicators may impact power and authority relationships (Buthe 2012, Kelley and Simmons 2014, Davis, Kingsbury, and Merry 2012, Halliday 2012, 215). Arguably, the cumulative effect of widespread quantification is to reinforce global power structures (Löwenheim 2008). That said, there is some evidence that alternative power centers – notably China – understands the game and has or will soon launch a few new

[29] See IEG 2008 p. xxvi

[30] In 2013 a formal review (Independent *Doing Business* Report Review Panel, Independent Panel Review of the Doing Business report, 24 June 2013, Washington D.C.) commenced in October 2012 following pressure from China who was unhappy with its rankings, discussed tensions over the rankings and once again recommended that they be removed, and, furthermore, that the EDB team should no longer author the report, only produce the figures and then leave others to write the report. The Bank ignored both of these recommendations.

rankings of its own. The Shanghai University rankings are an early example. The Asian Infrastructure Investment Bank may eventually be as much an opportunity to offer alternative scorecards for doing business as it will be a resource for finance. By constructing "standards and scripts for action" performance indicators determine "what constitutes legitimate social practice" (Hansen 2011b).

Of course, this study is a small step in understanding the influence of rankings in international relations. We have presented evidence that ranking per se can create expectations and possibly stimulate competitive dynamics that move the ranked toward specific policy criteria. But much more research should be done to determine how states respond to "demotions" and whether there is serious risk that states will game the system to improve their scores rather than select the most appropriate policies. We also can say very little at this point about the conditions under which rankings matter; surely not every one of the 160 GPIs we have uncovered have anything like the impact of the World Bank's EDB system. Who has the "authority" to rank, and why? Why do some states seem to "care" about their rankings more than others? These and other questions will have to be answered if we are to understand this form of soft power in global governance.

Tables

Table 3: Summary of findings of coefficients on the lagged "Ranked" variable

Model / Outcome Variable	Main controls	Main controls, L.civtot, L.inttot, L.lnloan	Main controls, L.civtot, L.inttot, L.biloan	Main controls	Main controls, dropping data for 2001	Main controls, dropping data for 2001 and 2002	Main controls, year
sb_proceed	-0.245***	-0.264***	-0.266***	-0.470***	-0.440***	-0.365***	-0.235**
sb_days	-0.297	-0.294	-0.341	-4.331***	-3.639***	-2.915***	-2.154
sb_days, top 3/4	-2.212***	-2.261***	-2.271***	-2.678***	-2.209***	-1.606**	-0.962
sb_cost	-8.093***	-8.888***	-8.894***	-7.222***	-6.074**	-3.082	-5.616**
sb_captial	2.889	3.489	2.851	-4.553	N/A	-8.656	-4.206
con_proced	-1.368***	-1.318***	-1.307***	-0.099	-0.275***	-0.048*	-0.344***
con_days	-67.961***	-67.533***	-67.141***	-9.924**	-13.298**	3.763	-18.289***
con_cost	1.084	0.633	0.605	0.234	N/A	-0.139	0.019
Fixed Country effects	No	No	No	Yes	Yes	Yes	Yes

Note: Main Controls are L.gpdcap, L.gdp, L.gdpgrowth, L.lnpop, L.polity2

Table 4: Starting a business

VARIABLES	sb_proced	sb_proced	sb_days	sb_days	sb_days	sb_cost	sb_cost	sb_capital	sb_capital
				(top ¾)					
L.sb_proced	0.918***	0.762***	0.866***	0.796***	0.667***	0.872***	0.802***	0.824***	0.552***
	(0.013)	(0.024)	(0.024)	(0.031)	(0.030)	(0.019)	(0.035)	(0.083)	(0.099)
L.ranked	-0.266***	-0.470***	-0.341	-2.271***	-4.331***	-8.894***	-7.222***	2.851	(4.553)
	(0.066)	(0.090)	(0.796)	(0.767)	(1.253)	(2.532)	(2.639)	(6.575)	(6.355)
L.gdpcap	0.000	0.000	-0.000	-0.000	0.000	0.000	0.001***	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	0.000	(0.001)
L.gdpgrowth	-0.021***	-0.008	-0.295***	-0.189***	-0.217***	-0.682***	-0.425	-1.235*	0.066
	(0.006)	(0.007)	(0.074)	(0.070)	(0.066)	(0.241)	(0.329)	(0.656)	(0.640)
L.polity2	-0.006	-0.021	-0.091*	-0.081	-0.152	-0.204	-1.852	-0.795	0.040
	(0.006)	(0.017)	(0.055)	(0.063)	(0.188)	(0.140)	(1.288)	(0.799)	(1.538)
L.lnpop	0.034	-1.655***	-0.072	0.302	-11.581**	-1.133	-81.406**	(5.15)	-201.136***
	(0.027)	(0.562)	(0.293)	(0.344)	(5.720)	(0.913)	(36.078)	(4.725)	(64.896)
L.gdp	0.000	0.000	0.000	-0.000	0.000	0.000	0.000*	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	0.000	0.000
L.inttot	0.060		-0.487	-0.043		2.567*		(9.211)	
	(0.062)		(0.755)	(0.695)		(1.512)		(11.623)	
L.civtot	0.032		-0.035	0.063		2.815		5.863	
	(0.026)		(0.253)	(0.235)		(2.006)		(3.905)	
L.biloan	0.179*		0.402	0.423		5.196***		4.880	
	(0.103)		(1.035)	(0.929)		(1.629)		(8.646)	
Constant	-0.021	33.334***	4.487	1.121	221.876**	24.822	1,538.695**	85.582	3,545.347***
	(0.427)	(11.211)	(5.300)	(5.416)	(112.113)	(15.141)	(696.279)	(84.379)	(1327.224)
Country FE	No	Yes	No	No	Yes	No	Yes	No	Yes
Observations	1,650	1,651	1,650	1,239	1,651	1,650	1,651	1550	1551
Number of countries	134	134	134	120	134	134	134	134	134

*Robust standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1*

Table 5: Enforcing contracts

VARIABLES	con_proced	con_proced	con_days	con_days	con_cost	con_cost
L.con_proced	0.706***	0.369***	0.900***	0.448***	0.305***	0.095**
	(0.02)	(0.03)	(0.02)	(0.04)	(0.078)	(0.040)
L.ranked	-1.307***	-0.099	-67.141***	-9.924**	0.605	0.234
	(0.24)	(0.15)	(5.32)	(4.65)	(0.908)	(0.679)
L.gdpcap	-0.000**	0.000	-0.001***	0.000	-0.000*	0.000**
	0.000	0.000	0.000	0.000	0.000	0.000
L.gdpgrowth	-0.053**	0.013	-2.872***	-0.886	0.114	0.130
	(0.024)	(0.024)	(0.71)	(0.59)	(0.117)	(0.147)
L.polity2	-0.118***	0.051	1.222**	-0.670	0.142	-0.130
	(0.04)	(0.05)	(0.52)	(1.77)	(0.166)	(0.501)
L.lnpop	0.03	0.068	3.729	-42.031	-0.401	-15.194*
	(0.12)	(0.88)	(3.06)	(33.07)	(1.479)	(8.311)
L.gdp	0.000	0.000**	0.000	0.000	0.000	0.000**
	0.000	0.000	0.000	0.000	0.000	0.000
L.inttot	0.414		6.648		-0.021	
	(0.53)		(6.01)		(0.685)	
L.civtot	0.226**		9.858**		0.644	
	(0.10)		(4.29)		(0.837)	
L.biloan	-0.403		0.227		7.265	
	(0.52)		(11.42)		(4.762)	
Constant	13.047***	6.547	70.995	911.524	26.839	276.931*
	(2.42)	(17.67)	(48.42)	(646.98)	(25.234)	(160.825)
Country FE	No	Yes	No	Yes	No	Yes
Observations	1625	1626	1624	1625	1546	1547
Number of countries	134	134	134	134	134	134

*Robust standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1*

Appendix

Table A

Countries with reform committees directly using the EDB data

Region	*Countries*
East and South Asia	Indonesia, the Republic of Korea, Malaysia, the Philippines and Sri Lanka.
Middle East and North Africa	Algeria, Kuwait, Morocco, Saudi Arabia and the United Arab Emirates
Europe and Central Asia	Azerbaijan, Croatia, the Czech Republic, Georgia, Kazakhstan, Kosovo, the Kyrgyz Republic, the former Yugoslav Republic of Macedonia, Moldova, Montenegro, Poland, the Russian Federation, Tajikistan, Ukraine, the United Kingdom and Uzbekistan
Sub-Saharan Africa	Botswana, Burundi, the Central African Republic, the Comoros, the Democratic Republic of Congo, the Republic of Congo, Cote d'Ivoire, Guinea, Kenya, Liberia, Malawi, Mali, Nigeria, Rwanda, Sierra Leone, Togo and Zambia
Latin America	Chile, Colombia, Costa Rica, the Dominican Republic, Guatemala, Mexico, Panama and Peru

Source: EDB 2015

Data Appendix

Starting a Business indicators

Variable name and First year collected	*Definition*
sb_capital 2002	**Paid-in Min. Capital (% of income per capita)** The paid-in minimum capital requirement reflects the amount that the entrepreneur needs to deposit in a bank before registration starts. This amount is typically specified in the commercial code or the company law.
sb_proced 2001	**Procedures (number)** All the procedures that are officially required for an entrepreneur to obtain all necessary permits, and to notify and file with all requisite authorities, in order to legally operate a business. There are a number of procedures necessary to legally operate industrial or commercial businesses. These include (i) obtaining all the necessary permits and licenses, and (ii) completing all the required inscriptions, verifications and notifications to enable the company to start operation. A "procedure" is defined as any interaction of the company founder with external parties (government agencies, lawyers, auditors, notaries, etc). Interactions between company founders or company officers and employees are not considered as separate procedures. All procedures that are required for establishing a business are recorded, even if they may be avoided in exceptional cases or for exceptional types of business. In general, there are four types of procedures: (i) procedures that are always required; (ii) procedures that are generally required but that can be avoided in exceptional cases or for exceptional types of businesses; (iii) mandatory procedures that are not generally required (industry-specific and procedures specific to large companies), and (iv) voluntary procedures. The data cover only procedures within the first two categories.
sb_days 2001	**Time (days)** Time in calendar days required to start a business. For the sake of uniformity, for all countries it is assumed that the minimum time required to fulfill a procedural requirement is minimum half a day for online procedures and otherwise minimum one day for other procedures. Therefore, the shortest procedure lasts one calendar day. The time variable captures the average duration which incorporation lawyers estimate is necessary to complete a procedure. If a procedure can be speeded up at additional cost, the fastest procedure, independent of cost, is chosen.
sb_cost 2001	**Cost (% of income per capita)** Cost of starting a business. The text of the Company Law, the Commercial Code, or specific regulations are used as a source. In all cases, the cost estimate excludes bribes. In the absence of express legal fee schedules, we take a governmental officer's estimate as an official source. If several sources have different estimates, the median reported value is used. In the absence of government officer's estimates, estimates of incorporation lawyers are used instead. If several incorporation lawyers have different estimates, the median reported value is computed.

Enforcing Contracts Indicators

Variable name and year Collected since	*Definition*
con_days 2001	**Time (days)** an estimate – in calendar days – of duration of the process of dispute resolution by the lawyers who completed the questionnaires. Duration is measured as the number of calendar days counted from the moment the plaintiff files the lawsuit in court, until the moment of actual payment. This measure includes both the days where actions take place and waiting periods between actions. The

	participating firms make separate estimates of the average duration until the completion of service of process, the issuance of judgment (duration of trial), and the moment of payment or repossession (duration of enforcement).
con_cost 2002	**Cost (% of claim)** the cost - in attorney fees and court costs - of resolution. The cost does not include any illegal payments.
con_proced 2001	**Procedures (number)** the number of independent procedural actions, where each action is defined as a step of the procedure, mandated by law or court regulation, that demands interaction between the parties or between them and the judge or court officer.

Control variables

Variable name	*Definition*	*Source*
lnpop	Log of Population, total	World Development Indicators
gdp	GDP (constant 2005 US$)	World Development Indicators
gdpcap	GDP per capita	World Development Indicators
gdpgrowth	GDP growth	World Development Indicators
civtot	Magnitude of civil conflict	Polity IV
inttot	Magnitude of international conflict	Polity IV
lnloan	log of the sum of all loans from the IBRD since 2005, constant for all years	Polity IV
biloan	A bivariate indicator of whether a country received an IRDB loan after 2005	World Development Indicators

Summary of variables

Variable	Obs	Mean	Std. Dev.	Min	Max
sb_days	2160	37.23625	35.41976	.5	302
sb_cost	2159	56.15883	125.2509	0	1540.2
sb_capital	1965	110.8389	377.0946	0	5627.2
sb_proced	2160	8.543657	3.541629	1	21
con_proced	2046	35.97234	7.997036	0	62
con_days	2045	567.8265	293.9943	7	1800
con_cost	1961	35.90479	32.75629	.1	520.6
gdpcap	2204	9647.034	15250.25	102.6662	100818.5
gdpgrowth	2189	2.619906	4.515163	-37.26443	50.03123
polity2	2019	4.350669	5.995775	-10	10
lnpop	2211	16.04789	1.812336	9.845753	21.02882
gdp	2183	3.15e+11	1.22e+12	8.93e+07	1.45e+13
inttot	2064	.0717054	.5160477	0	6
civtot	2064	.4457364	1.318779	0	9
lnloan	2615	14.89593	10.70494	0	26.45731
ranked	2615	.56826	.4954134	0	1

References

Adair, John G. 1984. "The Hawthorne effect: A reconsideration of the methodological artifact. ." *Journal of Applied Psychology* 69 (2):334-345. doi: doi: 10.1037/0021-9010.69.2.334.
Andreas, Peter, and Kelly M. Greenhill. 2010. *Sex, drugs, and body counts : the politics of numbers in global crime and conflict*. Ithaca, N.Y.: Cornell University Press.
Arndt, Christiane. 2008. "The Politics of Governance Ratings." *International Public Management Journal* 11 (3):275-297. doi: 10.1080/10967490802301278.
Arndt, Christiane, Charles Oman, Co-operation Organisation for Economic, and Centre Development. Development. 2006. *Uses and abuses of governance indicators*, *Development Centre studies*. Paris: Development Centre of the Organisation for Economic Co-operation and Development.
Arruñada, Benito. 2007. "Pitfalls to avoid when measuring institutions: Is Doing Business damaging business?" *Journal of Comparative Economics* 35 (4):729-747.
Avant, Deborah D., Martha Finnemore, and Susan K. Sell, eds. 2010. *Who governs the globe?*, *Cambridge studies in international relations ; 114*. New York: Cambridge University Press.
Berg, Janine, and Sandrine Cazes. 2007. *The Doing Business indicators: Measurement issues and political implications*: Internat. Labour Office.
Bogdandy, Armin von, and Matthias Goldmann. 2008. "The Exercise of International Public Authority through National Policy Assessment: The OECD's PISA Policy as a Paradigm for a New International Standard Instrument." *International Organizations Law Review* 5 (2):241-298.
Buthe, Tim. 2012. "Beyond Supply and Demand: A Political-Economic Conceptual Model." In *Governance by indicators: global power through classification and rankings*, edited by Kevin Davis, Angelina Fisher, Benedict Kingsbury and Sally Engle Merry. Oxford.
Cialdini, Robert. 2012. *Influence : science and practice*. 1st ed. Highland Park, IL: Writers of the Round Table Press.
Corcoran, Adrian, and Robert Gillanders. 2015. "Foreign direct investment and the ease of doing business." *Review of World Economics (Weltwirtschaftliches Archiv)* 151 (1):103-126.
Davis, Kevin E., Angelina Fisher, Benedict Kingsbury, and Sally Engle Merry, eds. 2012. *Governance by indicators : global power through classification and rankings*. Oxford: Oxford University Press.
Davis, Kevin, Benedict Kingsbury, and Sally Engle Merry. 2012. "Indicators as a Technology of Global Governance." *Law & Society Review* 46 (1):71-104. doi: 10.1111/j.1540-5893.2012.00473.x.
Espeland, Wendy, and Michael Sauder. 2007. "Rankings and Reactivity: How Public Measures Recreate Social Worlds." *American Journal of Sociology* 113 (1):1-40. doi: 10.1086/517897.
Foucault, Michel. 1995. *Discipline & punish: The birth of the prison*: Vintage.
Grek, Sotiria. 2009. "Governing by numbers: The PISA 'effect'in Europe." *Journal of Education Policy* 24 (1):23-37.
Hale, Thomas, and David Held. 2011. *Handbook of transnational governance*: Polity.
Hale, Thomas, and Charles Roger. 2014. "Orchestration and transnational climate governance." *The Review of International Organizations* 9 (1):59-82.
Halliday, Terence C. 2012. "Legal Yardsticks: International Financial Institutions as Diagnosticians and Designers of the Laws of Nations." In *Governance by indicators : global power through quantification and rankings*, edited by Kevin E. Davis, Fisher Angelina, Benedict Kingsbury and Sally Engle Merry, xi, 491 p. New York: Oxford University Press.
Hallward-Driemeier, Mary, and Lant Pritchett. 2011. "How Business is Done and The 'Doing Business' Indicators: The Investment Climate When Firms Have Climate Control." *World Bank Policy Research Working Paper Series* (5563).
Hansen, Hans Krause. 2011a. "The power of performance indices in the global politics of anti-corruption." *Journal of International Relations and Development*.

Hansen, Hans Krause. 2011b. "The power of performance indices in the global politics of anti-corruption." *Journal of International Relations and Development* 15.

Hansen, Hans Krause, and Arthur Mühlen-Schulte. 2012. "The power of numbers in global governance." *Journal of International Relations and Development* 15:455–465.

Høyland, Bjørn, Karl Moene, and Fredrik Willumsen. 2012. "The tyranny of international index rankings." *Journal of Development Economics* 97 (1):1-14. doi: http://dx.doi.org/10.1016/j.jdeveco.2011.01.007.

Jayasuriya, Dinuk. 2011. "Improvements in the World Bank's ease of doing business rankings: do they translate into greater foreign direct investment inflows?" *World Bank Policy Research Working Paper* (5787).

Kelley, Judith G, and Beth A Simmons. 2014. "Politics by Number: Indicators as Social Pressure in International Relations." *American Journal of Political Science*.

Kelley, Judith G, and Beth A Simmons. 2015. "Politics by Number: Indicators as Social Pressure in International Relations." *American Journal of Political Science* 59 (1):55-70.

Klapper, Leora, Raphael Amit, and Mauro F Guillén. 2010. "Entrepreneurship and Firm Formation across Countries." In *International differences in entrepreneurship*, edited by Joshua Lerner and Antoinette Schoar, 129 - 158. Chicago: University of Chicago Press.

Larson, James R., and Christine Callahan. 1990. "Performance monitoring: How it affects work productivity." *Journal of Applied Psychology* 75 (5):530-538. doi: 10.1037/0021-9010.75.5.530.

Löwenheim, Oded. 2008. "Examining the State: a Foucauldian perspective on international 'governance indicators'." *Third World Quarterly* 29 (2):255-274. doi: 10.1080/01436590701806814.

Mathiason, John R. 2004. "Who controls the machine, III: accountability in the results-based revolution." *Public Administration and Development* 24 (1):61-73. doi: 10.1002/pad.308.

Merry, Sally Engle. 2011. "Measuring the World: Indicators, Human Rights, and Global Governance: with CA comment by John M. Conley." *Current Anthropology* 52 (S3):S83-S95. doi: 10.1086/657241.

Michaels, Ralf. 2009. "Comparative Law by Numbers? Legal Origins Thesis, Doing Business Reports, and the Silence of Traditional Comparative Law." *American Journal of Comparative Law* 57 (4):765-795.

Morris, Rosetta, and Abdul Aziz. 2011. "Ease of doing business and FDI inflow to Sub-Saharan Africa and Asian countries." *Cross Cultural Management: An International Journal* 18 (4):400-411.

Nye, Joseph S. 2004. *Soft power : the means to success in world politics*. 1st ed. New York: Public Affairs.

Pinheiro-Alves, Ricardo, and João Zambujal-Oliveira. 2012. "The Ease of Doing Business Index as a tool for investment location decisions." *Economics Letters* 117 (1):66-70.

Robson, Keith. 1992. "Accounting numbers as "inscription": action at a distance and the development of accounting." *Accounting, Organizations and Society* 17 (7):685-708.

Schueth, Sam. 2011. "Assembling international competitiveness: The Republic of Georgia, USAID, and the Doing Business project." *Economic geography* 87 (1):51-77.

Short, Clare. 2014. "The development of the Extractive Industries Transparency Initiative." *The Journal of World Energy Law & Business*:jwt026.

Simmons, Beth A. 2009. *Mobilizing for human rights : international law in domestic politics*. New York: Cambridge University Press.

Sinclair, Timothy. 2005. *The new masters of capital: American bond rating agencies and the politics of creditworthiness*: Cornell University Press.

Smith, Shirley M, Derek D Shepherd, and Peter T Dorward. 2012. "Perspectives on community representation within the Extractive Industries Transparency Initiative: Experiences from south-east Madagascar." *Resources Policy* 37 (2):241-250.

The Economist. 2013. "Stand up for "Doing Business"." *Economist*, May 25, 2013.

Tian, Dexin. 2008. "The USTR Special 301 Reports: an analysis of the US hegemonic pressure upon the organizational change in China's IPR regime." *Chinese Journal of Communication* 1 (2):224-241.
Weisband, Edward. 2000. "Discursive Multilateralism: Global benchmarks, Shame, and Learning in the ILO Labor Standards Monitoring Regime." *International Studies Quarterly* 44 (4):643-666.
Williamson, Hugh. 2004. "Hazards of charting corruption." *Financial Times*, October 20, 2004. http://www.ft.com/cms/s/0/d0c8d270-2235-11d9-8c55-00000e2511c8.html#axzz37BrVP4S2.