

The Politics of Informal Governance*

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Abstract

Why do states sometimes use informal instead of formal institutions to govern global problems? Extant research on the forms of institutionalization in world politics focuses on formal modes of cooperation, such as intergovernmental organizations and treaties. Formal rules, however, do not exhaust the institutional variety of international cooperation. They are often inadequate, if not entirely misleading, descriptions of the game that actors play in world politics. Recent work has started to examine informal governance as a mode of cooperation in global governance. In this paper, I examine the factors that lead states to choose the specific level of informality of an international institution to structure their interactions and govern global problems. I highlight the political dimensions of informal governance and argue that distributional conflict and power asymmetries are critical for the selection and design of informal modes of international cooperation. States use informal institutions as a means to project power and bias outcomes toward their particularistic interests. Using a new data set on formal and informal international institutions as well as a new, continuous measure of the formality of international institutions, I test hypotheses derived from this argument as well as alternative functionalist explanations. Results indicate that power dynamics are a strong driver of the informality of international institutions, while functionalist factors are of less importance.

Keywords: informal governance, international cooperation, international institutions, rational design, power.

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Introduction

In the 19th and most of the 20th century, cooperation among nations was based on international regimes and formal intergovernmental organizations (FIGOs) (Krasner, 1983; Keohane, 1984; Abbott and Snidal, 1998). Yet, beginning in the 1980s and accelerating in the 1990s, states have started turning to governance through informal intergovernmental organizations (IIGOs) (Vabulas and Snidal, 2013) and transnational public-private governance initiatives (TGIs) (Abbott and Snidal, 2009) to structure their interactions and govern global problems. IIGOs are intergovernmental organizations in which states participate in regular meetings to make policies and coordinate behavior without a formal institutional support structure (Vabulas and Snidal, 2013, p. 197). Examples include the various G groups (e.g. G8) (Gstohl, 2007) and the Proliferation Security Initiative (Eilstrup-Sangiovanni, 2009). By contrast, in TGIs, states and/or FIGOs work together with both business actors and non-governmental organizations (NGOs) to govern problems that no actor alone has the knowledge and resources to address effectively (Abbott and Snidal, 2009, p. 45). Examples include the World Commission on Dams in the environment domain (Dingwerth, 2007) and the International Code of Conduct for Private Security Service Providers Association in the security area (Avant, 2016).

Despite the recent surge in informal forms of cooperation in world politics, research has largely focused on formal institutions, such as FIGOs and treaties (Abbott and Snidal, 1998; Goldstein et al., 2000; Koremenos, Lipson and Snidal, 2001; Barnett and Finnemore, 2004; Hawkins et al., 2006; Thomson et al., 2006; Thompson, 2009; Copelovitch and Putnam, 2014; Koremenos, 2016).¹ Formal institutions and the rules governing cooperation within this framework, however, provide only a very limited picture of international cooperation and are only one part of the increasingly complex patchwork of contemporary global governance (Lake, 2010; Barnett, Pevehouse and Raustiala, 2016). They are often inadequate, if not entirely misleading, descriptions of the game that actors play in world politics (Thomson et al., 2006; Stone, 2013; Kleine, 2014).

¹For extensive reviews of the literature, see Haggard and Simmons (1987), Martin and Simmons (1998) and Keohane and Martin (2003).

Recent work has started to examine informal governance as a mode of international cooperation (Stone, 2011, 2013; Pauwelyn, Wessel and Wouters, 2012; Kilby, 2013; Kleine, 2013). Informal governance refers to unwritten rules, shared expectations, and norms that are not enshrined in formally constituted organizations and which modify or substitute legally binding rules. It includes informal practices within FIGOs, informal institutions, and a broad array of networks constituted by state and non-state actors. Existing work largely focuses on informal governance within FIGOs (Steinberg, 2002; Stone, 2011, 2013; Kilby, 2013; Kleine, 2013). But the phenomenon is broader than this. Informal governance outside FIGOs is an alternative to governance within a formal, treaty-based structure, though the two should theoretically influence each other (Abbott and Snidal, 2009; Avant and Westerwinter, 2016). While scholarship that focuses on the formal structures of FIGOs neglects informal forms of cooperation altogether, the work on informal governance within FIGOs tends to overlook informal governance outside formal arrangements. Both research programs can benefit from incorporating IIGOs and TGIs in their models. Moreover, neglecting the co-existence of formal and informal modes of international cooperation makes it difficult to examine the trade-offs between different types of governance.

This paper starts to fill these gaps. Drawing on a new data set that combines detailed information on 1,109 FIGOs, IIGOs, and TGIs, I examine the factors that drive states' decisions when they choose the level of informality of their cooperation. Existing works point to the efficiency and flexibility advantages of informal international institutions vis-à-vis formal organizations to explain their emergence and proliferation (Aust, 1986; Lipson, 1991; Abbott and Snidal, 2000; Prantl, 2005; Benvenisti, 2006). In contrast to such functionalist explanations of informal institutions, I highlight the political dimensions of informal governance and argue that distributional conflict and power asymmetries are critical for the selection and design of informal modes of cooperation. States use informal institutions as a means to project power and bias outcomes toward their particularistic interests. I test hypotheses derived from functionalist theories as well as my own power-oriented argument. Preliminary results suggest that the choice of informal global governance is shaped by power dynamics, while functionalist factors play less of a role in the level of

informality of global governance.

The remainder of the paper proceeds in five steps. First, I map the informal turn in global governance by presenting descriptive data on patterns of emergence, distribution, and growth trajectories of TGIs and IIGOs in comparison to FIGOs. I also introduce a continuous measure of informality that allows to compare the level of informality across international institutions independent of whether these institutions are FIGOs, IIGOs, or TGIs. Second, I briefly outline functionalist theories of informal governance, present my own power-based argument, and derive testable hypotheses from both theoretical arguments. Third, I assess these two alternative arguments using statistical analysis. The final section summarizes the findings and concludes.

Informal governance in world politics, 1816-2014

The institutional architecture of global governance has undergone dramatic changes in the past decades. I describe the patterns of variation in the informality of world politics across time, issue areas, and different types of institutions on the basis of a new data set on the design of a broad range of international institutions that were founded in the period 1816-2014. This data set contains information on 1,109 international institutions across a broad range of issue areas. Specifically, the data includes information on 534 FIGOs, 107 IIGOs, and 468 TGIs. FIGOs are the intergovernmental organizations which have traditionally been at the center stage of the analysis of international institutions and organizations (Pevehouse, Nordstrom and Warnke, 2004). IIGOs are intergovernmental organizations in which states participate in regular meetings to make policies and coordinate behavior without a formal institutional support structure (Vabulas and Snidal, 2013). Examples include the various G groups (e.g. G8) (Gstohl, 2007) and the Proliferation Security Initiative (Eilstrup-Sangiovanni, 2009). The FIGOs in the data set are drawn from the most recent version of the Correlates of War (COW) data on international organizations (Pevehouse et al., 2015).² The IIGO cases are based on the data collected by Vabulas and Snidal (2013) and

²FIGOs are traditional formal intergovernmental organizations, such as the United Nations, the World Bank, or the World Trade Organization. I define FIGOs in accordance with the Correlates of War project which considers an international institution an intergovernmental organization if it has at least three member states, holds regular

complemented by additional observations identified using websites of IIGOs and other sources.

The data on TGIs were newly collected for this project. No undisputed definition of the universe of TGIs in world politics exists and it is unclear how many organizations this universe of cases contains. While there is consensus that the number of transnational public-private governance arrangements has risen dramatically over the past decades, numbers range across sources. Kaul (2006, p. 219), for example, shows that the number of transnational public-private partnerships has increased from 50 in the mid-1980s to at least 400 in the 2000s. Similarly, Abbott and Hale (2014) document the existence of 223 global solution networks of varying mixtures of states, business, NGOs, and other actors. Focusing on environmental governance, Andonova (2010, p. 25) reports the creation of over 400 so-called type II partnerships in the aftermath of the 2002 UN World Summit on Sustainable Development and the initiation of more than 150 collaborations between UN agencies, states, and non-state actors between 1998 and 2008 under the auspices of the UN Fund for International Partnerships. Finally, Widerberg and Stripple (2016) show that even within a single issue area, such as climate change, the number of existing governance arrangements reported varies considerably across databases. This ambiguity is at least partially due to the lack of a widely shared definition of transnational public-private governance arrangements (Börzel and Risse, 2005; Abbott and Snidal, 2009). Therefore, building on existing research, I develop my own definition of TGIs and use it to specify the criteria for selecting organizations into the sample.

I define transnational public-private governance initiatives as institutions that 1) involve at least one state and/or FIGO, one business actor, and one civil society organization; 2) perform tasks that are related to governing global problems; and 3) are institutionalized to the extent that they create a basis for shared expectations about behavior and are observable. First, I focus on institutions that are of a multi-stakeholder nature and bring together actors from the public sector, the private for-profit sector, as well as the private non-profit sector. In other words, my definition of a TGI zooms in on the center of the governance triangle proposed by Abbott and Snidal (2009). State actors are governments, government agencies, or representatives of government agencies. Institutions in

plenary meetings at least once every ten years, and possesses a permanent secretariat and corresponding headquarter (Pevehouse, Nordstrom and Warnke, 2004).

which the only public participant is a local government actor, such as a municipality or a city, are not included in the sample. FIGOs may participate in a TGI either through their main secretariat or their organizational branches. Business actors encompass firms, business associations, and business foundations. Civil society actors may be NGOs, NGO coalitions, or universities and research institutes.

Second, TGIs are built to fulfill a task or set of tasks that is related to providing governance at the global level in a broad sense. Governance tasks that TGIs may be concerned with include the creation of rules and standards that govern the behavior of states, corporations, and other actors, the implementation of rules and standards, the financing of projects, as well as the facilitation of information exchange and networking related to a global problem. Other governance tasks that may be part of the activities of TGIs are agenda setting as well as the monitoring, enforcement, and adjudication of rules and standards (Abbott and Snidal, 2009; Avant, Finnemore and Sell, 2010). In other words, TGIs are explicitly focused on contributing to governing global problems or the provision of global public or collective goods. As a consequence, the sample does not include, for example, information sharing platforms without a focus on a particular governance problem.

Third, TGIs are characterized by a minimum level of institutionalization that generates stable shared expectations about the behavior of the actors involved. This minimum level of institutional structure is critical for distinguishing TGIs from a range of instances of cooperation at the global level that are of a less regular nature. For example, once off, ad-hoc meetings of public and private actors are not captured by my definition of a TGI. The definition also does not include project-based collaboration between states and/or FIGOs, business, and NGOs. The minimum level of institutionalization of TGIs is also important from a practical research perspective. TGIs are often characterized by a lower level of institutional formalization than other forms of global governance, such as FIGOs. While mapping the empirical variation in the level of institutional formalization of TGIs is part of the purpose of the data set, there is a limit to the extent of the informality of global governance institutions that researchers are able to observe. One of the hallmarks of informal institutions is that they are difficult to trace empirically because they leave little or no

publicly accessible paper trail (Christiansen and Neuhold, 2012; Koremenos, 2013). At the lower end of the continuum of institutional formalization, governance efforts become difficult to observe and many global governance institutions of a highly informal character may never be observed by any researcher. To address this problem and to avoid bias toward more institutionalized forms of governance in the data set, I theoretically exclude from the definition of a TGI, governance efforts that feature very low or no institutionalization.

All institutions that meet these three requirements are part of the population of TGIs in world politics as understood here and therefore targeted by the data collection. An example of a TGI that governs issues related to global health is the Global Fund to Fight AIDS, Tuberculosis and Malaria (GF) (Liese and Beisheim, 2011). Based on the participation of states, the private sector, and NGOs, the GF garners, manages, and disburses resources to fight HIV/AIDS, Tuberculosis, and Malaria. Founded in 2002, the GF has a governing board and its work is supported by the Global Fund Secretariat, the Global Fund's Office of the Inspector General, as well as other institutional structures.³ In the security area, the International Code of Conduct for Private Security Service Providers' Association (ICoCA) was founded in 2013 (Avant, 2016). Building on the International Code of Conduct for Private Security Service Providers process that started in 2009, the ICoCA brings together states, private security companies, and a range of civil society organizations that collaborate to create and monitor standards for private security service providers and how states make use of their services. The ICoCA meets on an annual basis in the form of its general assembly, has its own secretariat, and working bodies focused on different substantive aspects of the governance of private security providers.⁴

The data presented in this paper is a sample of the population of TGIs in world politics. The creation of the sample took place between 2015 and 2016. To identify TGIs, the definition of a TGI was applied to seven source databases that were identified as containing information about transnational governance arrangements. These databases include the Global Solution Network

³See <http://www.theglobalfund.org/en/overview/>, accessed: 23.02.2017.

⁴See <http://icoca.ch/en>, accessed: 23.02.2017.

(GSN) database,⁵ the United Nations Environment Programme (UNEP) Climate Initiatives Platform,⁶ and the UN World Summit on Sustainable Development (WSSD) partnerships database.⁷ We also searched all organizations that are recorded as “networks” in the Yearbook of International Organizations.⁸ Further, we applied our TGI criteria to the organizations documented in the databases of Andonova, Hale and Roger (2016) as well as ongoing research projects at the University of Zurich and Duke University.⁹ Finally, we searched websites of TGIs that were included in the sample for references and links to identify additional organizations that meet the TGI definition. Thus, in total we used eight sources to identify cases for the data set. Across these sources, 468 TGIs were identified for inclusion in the data set (for a full list of the TGIs in the sample, see the online appendix).

I combine TGIs with FIGOs and IIGOs in a single data set on international institutions which contains a total of 1,109 observations. For each institution in the data set, we collected basic information, such as its full name, founding date, and termination date (if the institution does not exist anymore). The temporal domain of the data starts with the founding of the first institution in 1816 and ends in 2015. In addition to the basic information, for each institution we collected data on the number of its members, the issues it addresses, as well as a range of institutional design features. The institutional design elements that we coded for the observations in our data capture whether a founding document exists for an international institution, whether it articulates behavioral obligations for its members, whether it has a secretariat and, if so, whether this secretariat is independent, whether institutional structures for monitoring of member behavior exist, whether enforcement provisions are in place, whether there is a dispute settlement mechanism, and whether decision making procedures are explicitly specified. The appendix provides more detailed descriptions of the measurement and coding of each variable in the data set. I use this new data set to map the emergence and distribution of formal and informal international institutions in world

⁵See <http://gsnetworks.org/>, accessed: 23.02.2017.

⁶See <http://climateinitiativesplatform.org/index.php/Welcome>, accessed: 23.02.2017.

⁷See <https://sustainabledevelopment.un.org/partnership/search/?str=>, accessed: 23.02.2017.

⁸See <http://www.uia.org/yearbook>, accessed: 23.02.2017.

⁹I thank Katja Michaelowa and her team at the University of Zurich as well as Ben Collins and Suzanne Katzenstein (Collins and Katzenstein, 2016) and their team at Duke University for sharing their databases.

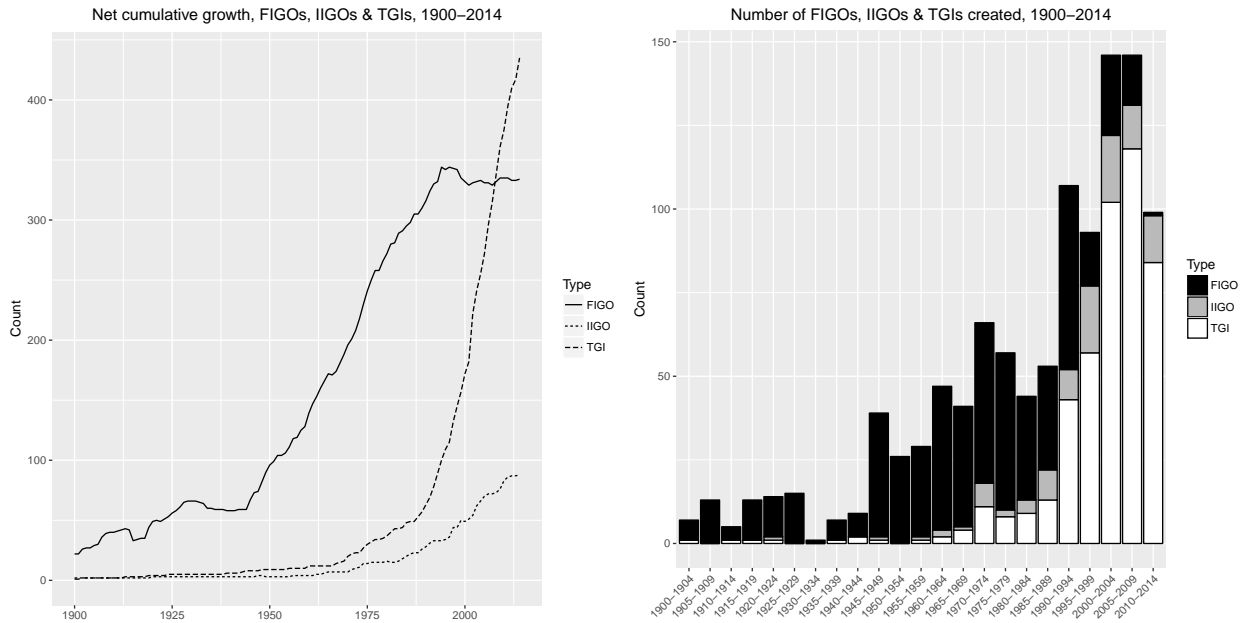
politics over time and across issue areas.

The institutional architecture of global governance has undergone dramatic changes in the past decades. The number of informal international institutions in the form of IIGOs and TGIs has been growing rapidly since the 1990s, both in absolute terms and even more so relative to FIGOs. Starting with the development of IIGOs, we observe that, while in 1990 there existed only 28 IIGOs, their number multiplied to 88 by 2014. This corresponds to a growth rate of about 214 percent. TGIs experienced even more rapid growth. From 63 in 1990, within 24 years their number increased by about 590 percent to a total of 435 in 2014. This evidence is consistent with other studies of transnational governance initiatives. According to Abbott and Snidal (2009), transnational public-private governance initiatives are a recent phenomenon. While few such arrangements existed before 1994, since then their number has increased steadily (2009, pp. 53-5). Likewise, Abbott, Green and Keohane (2016, p. 248) find that “private transnational regulatory organizations” formed by different combinations of civil society and business actors have proliferated in the past decades. Although the absolute number of FIGOs was still higher at 316 in 1990, TGIs became the most frequent form of cooperation in the data as of 2009. In addition, between 1990 and 2014, the growth of FIGOs was much slower, at about 6 percent (see figure 1 left-hand panel).

Importantly, the decrease and flattening out of the growth of FIGOs co-occurred with the beginning of the sharp increase in the importance of IIGOs, and even more so of TGIs, as major forms of cooperation in the late 1990s. This observation is further supported if we look at the number of new formations of international institutions over time. As the right-hand panel of figure 1 shows, the growth rates of FIGOs were consistently higher than those of IIGOs and TGIs between 1950 and 1990. Only in the 1990s, and particularly in the second half of that decade, FIGO growth rates began to plummet, while at the same time the number of new TGIs created increased dramatically. The same observation can be made about the growth of IIGOs in comparison to FIGOs, although on a lower scale.

While the recent growth of IIGOs and TGIs is striking, it is not universal. In some issue areas

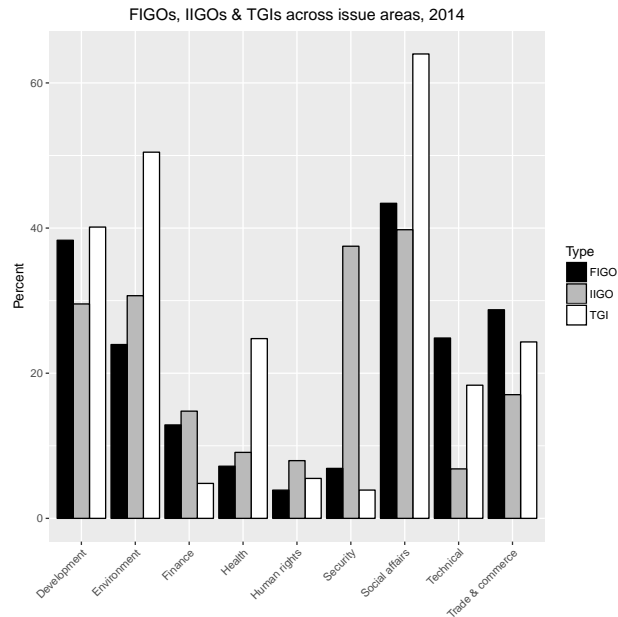
Figure 1: Growth FIGOs, IIGOs, and TGIs, 1900-2014



we observe more of a turn towards informal global governance than in others. Looking at TGIs, we see that in 2014 about 51 percent of all organizations in our data are concerned with environmental issues, including climate change and energy-related problems; 40 percent deal with development. Sixty-four percent address social problems, and 25 percent deal with health problems. Transnational public-private governance initiatives have also begun to enter the realms of high politics, with 25 percent of the TGIs in our data dealing with trade and commerce, 5 percent with finance, and 4 percent with security issues.

The picture looks different for IIGOs. Here 38 percent of the organizations in our data address security issues, 17 percent govern trade and commerce problems, and 15 percent deal with questions related to finance; 40 percent deal with social problems, 31 percent environment issues, 30 percent with development questions, and about 9 percent health problems. FIGOs, by contrast, are most prominent in the areas of social affairs, development, trade and commerce, and technical issues (see figure 2). These figures should be interpreted cautiously. Nevertheless, we can see that IIGOs and TGIs are not equally distributed among issue areas, and that they are not limited to the low politics of environment, health, and human rights. They are also increasingly important for

Figure 2: FIGOs, IIGOs, and TGIs across issue areas, 2014

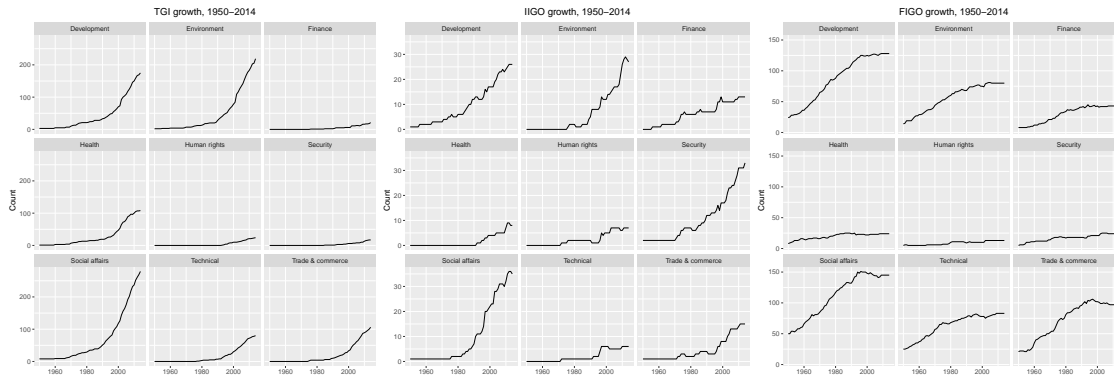


states that seek to address economic, financial, and security problems.

The growth trajectory of informal modes of global governance also varies across issue areas. Starting again with TGIs, we can see in figure 3 that the creation of transnational public-private governance initiatives in the environment, development, and social affairs domains can be traced back to the 1970s. It began to increase slowly in the 1970s and 1980s, and then exponentially in the 1990s. For TGIs operating in the health, technical, and trade and commerce areas, we observe a similar growth pattern, although here growth started later and its intensity level has so far remained below that of environment, development, and social affairs TGIs. In the areas of finance, security, and, interestingly, human rights, the speed and intensity of TGI growths has remained low until today.

A different pattern emerges for the growth trajectories of IIGOs. Here, organizations that govern development, finance, and security issues started to emerge as early as the 1960s, and their numbers have increased considerably since then. The increase in IIGOs focused on environmental and social problems has also increased rapidly in recent years, but this development only took off in the 1980s. IIGOs in the health, human rights, technical, and trade and commerce areas

Figure 3: TGI, IIGO, and FIGO growth across issue areas, 1950-2014



appeared later, and their growth has remained at a lower level compared to issue areas, such as development, social affairs, and security. The growth of FIGOs was most pronounced in the fields of development, environment, social affairs, technical, and trade and commerce, but has flattened out or even decreased since the 1990s. FIGO growth has remained slower and lower in the finance, health, human rights, and security areas.

So far, the mapping of patterns in the emergence and distribution of formal and informal modes of international cooperation relied on a measure of informality that simply categorizes international institutions as TGIs, IIGs, or FIGOs. Underlying this categorical measure of informality is the assumption that, everything else being equal, TGIs and IIGOs are of a more informal nature compared to FIGOs. This categorical treatment of informality is in line with the often observed explicit or implicit dichotomous treatment of informality in the literature on informal forms of cooperation in world politics (Lipson, 1991; Abbott and Snidal, 2000) and serves as a useful first step to trace variations in patterns of institutional growth over time and across issue areas. This categorical measure of informality is, however, limited. TGIs and IIGOs are unlikely to be informal to the same extent and in the same ways and even within the groups of TGIs and IIGOs there is likely to be variation in the degree of institutional informality. Furthermore, FIGOs are unlikely to be exclusively formal in terms of their institutional structures, but are likely to be characterized by different levels of formalization and the parallel existence of formal and informal institutional structures and processes (Prantl, 2005; Stone, 2011; Kleine, 2013). In short, a categorical mea-

sure of the informality of international institutions, while a helpful first step in empirical research, introduces theoretical contrasts between different types of international institutions that are stark and mask theoretical and empirical variation between and within different types of international institutions.

To address this limitation, I propose a continuous measure of the informality of international institutions. This measure uses the information on the presence and absence of institutional design elements to capture the level of informality of international institutions. The basic idea underlying this measure is that the degree of informality of an international institution is reflected in the extent to which it explicitly specifies its structural and procedural features, such as administrative support, decision-making, monitoring, enforcement, dispute settlement. The more such structural features of an international institution are explicitly articulated and codified, the more formalized it is.

To operationalize this idea of a continuous measure of informality of international institutions, I measure the level of informality of an institution based on a summated rating scale that captures how many of its design elements are explicitly specified. I thereby assume that the more of the structural and procedural details of an international institution are specified, the more formal it is. I take the inverse of this formality score and rescale it between 0 and 1 to obtain a measure of informality for each international institution in the data:

$$Informality_i = \frac{\left(k - \sum_{j=1}^k x_{ij} - \min\left(\sum_{j=1}^k x_{ij}\right)\right)}{\left(\max\left(\sum_{j=1}^k x_{ij}\right) - \min\left(\sum_{j=1}^k x_{ij}\right)\right)} \quad (1)$$

where k is the number of institutional design elements taken into account and x_{ij} is the indicator for the presence or absence of institutional design element j in institution i with $j = 1, 2, \dots, k$ and $i = 1, 2, \dots, n$. I sum institutional design element indicators for each institution i in the data. As equation 1 shows, $informality_i \in [0, 1]$ with values closer to 1 referring to international institutions that are characterized by a high level of informality and values closer to 0 denoting low levels of informality, i.e. higher levels of formality. This continuous measure of informality enables researchers to not only trace variations in informality in terms of types of international institutions

over time and across issue areas, but also allows for unveiling differences in terms of levels of informality within groups of international institutions.

In the following descriptions, I use a broad version of this informality measure. It is based on the seven institutional design features independent secretariat, monitoring, enforcement, dispute settlement, decision-making, obligation, and funding document. Thus, for this broad operationalization of informality $k = 7$. In the statistical analysis below, I also use an alternative operationalization that is based on the five institutional design elements independent secretariat, monitoring, enforcement, dispute settlement, and decision-making. For this narrower operationalization of the informality measure $k = 5$.

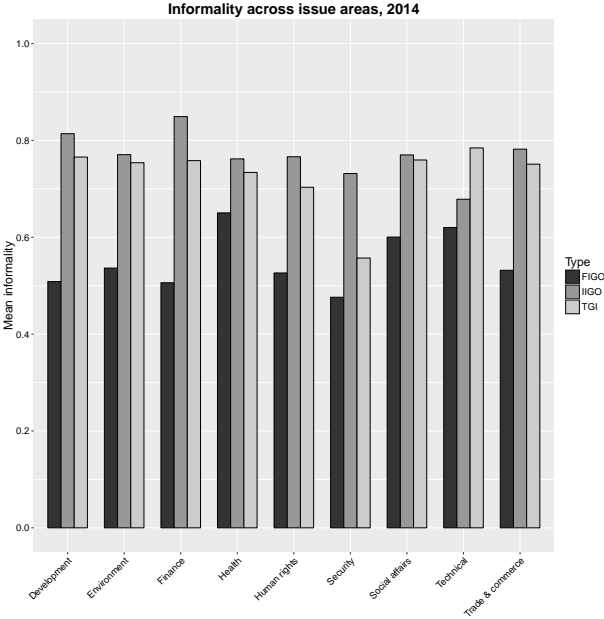
Table 1: Informality across types of international institutions, 2014

	Mean	Std. dev.	Min.	Max.	N
FIGO	0.58	0.28	0	1	493
IIGO	0.78	0.24	0.14	1	105
TGI	0.75	0.24	0	1	300
Sample	0.66	0.28	0	1	898

Table 1 provides a first overview over the levels of informality in the overall data set as well as across types of international institutions. We can observe that the institutions in the data set have a mean level of informality of 0.66 and cover the full spectrum of informality ranging from very low levels to very high levels of informality. We also observe that with 0.58 FIGOs have considerably lower level of informality than IIGOs and TGIs which have a average level of informality of 0.78 and 0.75 respectively. Furthermore, we see that all three groups of international institutions are far from homogenous in terms of their level of informality. FIGOs cover the full range of the informality spectrum and so do TGIs. Thus, we observe both highly formal as well as highly informal FIGOs as well as highly formal and informal TGIs. Examples of highly formal FIGOs in the data include the World Trade Organization and the Carribbean Council which both have an informality score of 0. More informal FIGOs include the Nordic Council of Ministers and the Inter-American Coffee Board with informality scores of 0.86. Among the more formal TGIs are the Kimberley Process and the International Code of Conduct for Private Security Service Providers Association

with informality scores of 0.14, while the Global Alliance for Vaccines and Immunization, the World Commission on Dams, and Global Partnership on Forest and Landscape Restoration have informality scores of 0.43, 0.86, and 1 respectively. We do not observe IIGOs at the formal end of the informality spectrum. For IIGOs, the spectrum of informality ranges from 0.14 to 1. At the lower end of the scale, we have, for example, the the Asia-Pacific Group on Money Laundering with an informality score of 0.14, while IIGOs such as the Proliferation Security Initiative, the G7 Plus, and the Alliance Alliance of Small Island States are characterized by a higher level of informality as captured by their informality scores of 0.86, 0.86, and 1 respectively.

Figure 4: Informality across issue areas, 2014



In addition to unveiling variation in informality across types of international institutions that categorical measures are unable to detect, the continuous measure of informality also sheds additional light on patterns of informality across issue areas. As shown in figure 4, in all issue areas IIGOs and TGIs are characterized by a higher average level of informality as FIGOs. We also see that the informality of IIGOs and TGIs is on average high irrespective of the issue area in which they are operating. Finally, issue areas in which IIGOs and TGIs are rare, such as finance and human rights (see figure 2), exhibit a considerable level of average informality of both IIGOs and

TGI. This suggests that although IIGOs and TGIs are few in these issue areas, those that do exist are on average quite informal in terms of their institutional structures and processes.

Explaining informal global governance: Theories and hypotheses

The previous section showed that the trend toward informal governance spans all areas of world politics, while at the same time significant variation continues to exist across multiple dimensions including growth trajectories, issue areas, and types of international institutions. In this section, I first outline the conventional functional wisdom on the emergence and proliferation of informal international institutions, and then present my own alternative explanation based on a power-oriented perspective on international cooperation and institutional design.

The conventional wisdom: Functionalism

The first wave of research on the topic approached informal governance from a functionalist perspective and emphasized its efficiency advantages in solving collective action problems vis-à-vis formal agreements (Aust, 1986; Lipson, 1991; Abbott and Snidal, 2000; Prantl, 2005; Benvenisti, 2006; Kleine, 2013; Koremenos, 2016). These arguments were originally developed in the study of informal international agreements and have dominated the field since the late-1980s. Advocates of this perspective refer to the greater speed and flexibility as well as lower contracting costs of informal governance as major drivers of its emergence and proliferation (Aust, 1986, pp. 789-93; Lipson, 1991, pp. 500-1; Abbott and Snidal, 2000, pp. 434-50).

The speed and flexibility with which informal institutions can be negotiated and adapted are particularly appealing design elements for states that are confronted with a problem that is characterized by uncertainty about the state of the world. Uncertainty about the state of the world refers to a cooperation problem where the future benefits and costs of cooperation are not easily predicted, and therefore institutional structures for governing the problem are difficult to design because the problem and available solutions are ill-known and subject to frequent change (Koremenos, Lipson and Snidal, 2001; Thompson, 2010). The uncertainty can be scientific and technical, but it

can also be about political and economic issues. For example, the states that collaborate in the Inter-American Tropical Tuna Commission (IATTC) initially knew only little about how fishing techniques affect dolphin mortality and had no precise idea of how to accomplish their shared goal of preserving Eastern Tropical Pacific tuna stocks and protecting dolphins. This uncertainty made devising specific policies and institutional structures difficult (Burca, Keohane and Sabel, 2013, pp. 744-49).

Previous work has shown that the incorporation of flexibility measures in formal intergovernmental agreements and organizations, such as termination clauses, can facilitate cooperation under circumstances of uncertainty (Kucik and Reinhardt, 2008; Helfer, 2013; Baccini, Dür and Elsig, 2015; Koremenos, 2016). Importantly, while the flexibility provisions in formal institutions are typically designed as instruments to respond to unforeseen exceptional circumstances, the speed of negotiations and flexibility of informal institutions result from the fact that their rules and procedures deliberately remain informal (Lipson, 1991; Abbott and Snidal, 2000). This kind of flexibility is more fundamental than the flexibility within formal institutions and provides an institutional setup that enables actors to continuously learn and redefine the problems they face and quickly readjust the processes needed for solving them (Burca, Keohane and Sabel, 2013). This makes it easier to readjust the set of actors involved and reform governance procedures as new information about the problem at hand and its potential solutions becomes available. The speed and flexibility provided by informal international institutions is therefore well-suited to deal with problems and issue areas characterized by persistent uncertainty about the state of the world.

The benefits of speed and flexibility of informal institutions come at a price. The institutional adaptability and frequent re-negotiations of governance procedures increase bargaining costs as individual actors seek to modify agreements to serve their short-term interests (Oye, 1985; Axelrod and Keohane, 1985; Koremenos, Lipson and Snidal, 2001). These costs are likely to be particularly acute among large heterogeneous groups but are less liable to cause problems among a small number of countries that are, all else being equal, more likely to achieve agreement fast (Koremenos, Lipson and Snidal, 2001, p. 782). Thus, small homogenous groups are better able to reap

the benefits of speed, flexibility, and low contracting costs from cooperation that takes the form of informal international institutions (Eilstrup-Sangiovanni, 2009, p. 205). I hypothesize:

Hypothesis 1: All else being equal, international cooperation that involves smaller numbers of states is more likely to take the form of informal institutions.

Hypothesis 2: All else being equal, international cooperation that involves homogeneous groups of states is more likely to take the form of informal institutions.

The argument: Power

Functionalism abstracts away from the agents of global governance and neglects the conflicting interests and power differentials involved in institution building and change. As an alternative to the conventional wisdom, I therefore advance an argument about the selection of informal modes of global governance that places distributional conflict and power asymmetries at the center of the analysis of the selection and design of informal institutions (Stone, 2011, 2013; Westerwinter, 2014, 2016).

Power-oriented theories of international institutions suggest that the creation and the design of global governance arrangements are a direct function of the preferences of powerful players (Krasner, 1991; Garrett, 1992). Consequently, as the distribution of power among states changes, and/or the preferences of powerful players change, shifts in the institutional architecture of global governance are likely to occur. What applies to international institutions in general, is likely also to be at play with informal global governance arrangements. States use informal institutions as a means to project power and realize more favorable outcomes (Stone, 2011, 2013; Westerwinter, 2013, 2014; Avant and Westerwinter, 2016). The resulting institutions are not always, perhaps not even most of the time, efficient responses to the collective action problems they address (Krasner, 1991; Garrett, 1992; Moe, 1990, 2005). I therefore conjecture that the decision of whether to base cooperation on an informal or a formal international institution is less determined by the nature of the collective action problem that states face or the number of actors involved in the cooperative effort, and more reflective of political processes that underlie bargaining over the design of the

institutions of global governance.

Structural power is an important currency in all political organization, whether formal or informal. Compared to formal institutions, however, informal institutions impose fewer constraints on structural power and thereby increase the returns to power. This creates incentives for powerful states to favor international institutions with higher levels of informality as forms of cooperation that preserve their power advantage. By instituting formal procedures for information-sharing, agenda-setting, proposal-making, and decision-making, formal institutions weaken the relationship between structural power and control over outcomes by distributing power more widely among those who participate in an institution (Stone, 2011). Within formal organizations, informal governance can be used by powerful players to bypass these formal constraints and achieve their goals (Steinberg, 2002; Stone, 2011; Kilby, 2013). The IMF, World Bank, and WTO are cases in point.

More broadly, informal international institutions typically do not grant formal access and voting rights to weaker actors. In fact, they do not grant them to any actor. Thus, they leave powerful actors freer to dictate policy by exploiting their superior agenda-setting power and bargaining leverage (Steinberg, 2002). Knowing about these advantages of informality, powerful states have strong incentives to steer institutional design toward higher levels of informality, particularly in situations where their preferences are strong. This may apply to situations where strong players, such as the US, the European Union (EU), or regional powers are involved in cooperative endeavors. It may also apply more generally to situations of high power asymmetry. Therefore, I test the following two hypotheses:

Hypothesis 3: All else being equal, international cooperation that involves powerful states is more likely to take the form of informal institutions.

Hypothesis 4: All else being equal, international cooperation that is characterized by a high degree of power asymmetry is more likely to take the form of informal institutions.

Research design

The unit of analysis in this paper is the international institution. Each observation in the data set contains information about a particular international institution which can be a FIGO, an IIGO, or a TGI. I use the continuous measure of informality of an international institution summarized in equation 1 as the main dependent variable in my empirical analysis. I use a broad version of this informality measure. It is based on the seven institutional design features independent secretariat, monitoring, enforcement, dispute settlement, decision making, obligation, and funding document. To examine the robustness of my empirical results with regard to changes in the operationalization of the dependent variable, I also use an alternative, narrower operationalization that is based on the five institutional design elements independent secretariat, monitoring, enforcement, dispute settlement, and decision making. To compare the results of my empirical analysis with results obtained using a categorical dependent variable that captures different types of international institutions, I also create a dependent variable that is an indicator variable that captures whether an international institution is an IIGO or TGI or not. It is coded 1 if an international institution in the data set is an IIGO or a TGI and 0 otherwise. To estimate models that use the continuous informality measure, I use ordinary least-squares regression. The models with the dichotomous dependent variable are estimated using logistic regression.

To test hypotheses 1 and 2, I create two independent variables. The first captures the number of states that are involved in the creation of an international institution. Since the distribution of the number of states that participate in the creation of international institutions is skewed, I use the natural logarithm of the count of states involved in the creation of an international institution (Koremenos, 2005, 2016). The second variable combines information on state participation in the creation of international institutions with data on ideal point estimates of states' preferences based on United Nations (UN) General Assembly voting (Voeten, 2000). Specifically, I compute the absolute difference between the lowest and the highest ideal point estimate of the states that participate in the creation of an international institution to approximate the degree of heterogeneity

of the preferences of the states involved in an international institution.¹⁰ If hypotheses 1 and 2 are confirmed, we expect to observe a negative sign on the coefficients for these two independent variables in the statistical analysis.

To test my power-related hypotheses, I create two independent variables. The first variable captures the participation of powerful states in the creation of international institutions. I use countries' GDP as a proxy of their power in global governance (Drezner, 2007). Based on state involvement in the international institutions in the data set as well as GDP data from the World Bank, I generate a variable that captures the mean logged GDP of the states involved in the creation of a particular international institution. This variable captures the average level of economic power present among the states involved in the creation of an international institution. Hypothesis 3 suggests a positive sign of the coefficient of this variable in the statistical analysis.

A second power-oriented variable captures the asymmetry in economic power among the states involved in the creation of an international institution. I use a measure that captures the balance of economic power among the states involved in an international institution by dividing the logged GDP of the economically most powerful state by the average logged GDP of all states participating in an international institution: $\frac{\max(\log GDP_i)}{\log \overline{GDP_i}}$. Smaller values of this variable refer to situations in which power is evenly distributed among the states involved in the creation of an international institution, while larger values refer to more power imbalance. Evidence that supports hypotheses 4 would result in a positive sign on the coefficient of this variable in the statistical analysis.

In addition to these two main power variables, I also use an indicator variable that is coded 1 if the US participates in the creation of an international institution and 0 if the US is not involved (Stone, 2011). If the selection of informal forms of cooperation as means of global governance is driven by powerful players and the US is different beyond the mere realities of its economic power, the coefficient for this variable in the estimated models should be positive. I also control for the number of permanent members of the UN security council as well as the number of BRICS

¹⁰I also calculate the standard deviation and variance of states' UN General Assembly voting based on ideal point estimates as proxy for preference heterogeneity. Results obtained with these alternative measures do not differ from the ones presented in the main empirical analysis.

countries involved in an international institution. If major powers and rising powers exhibit particular preferences and strategic incentives to use informal international institutions as suggested by extant works (Steinberg, 2002; Stone, 2011; Vabulas and Snidal, 2013), then these variables should be positively related to the level of informality of an international institution.

Researchers have suggested that the type of political regime of a country affects its behavior at the global level including the type of international institutions in which it participates (Pevehouse, 2003; Tallberg et al., 2013). Specifically, scholars argued that democracies are different from autocracies in terms of the types of international institutions they decide to get involved in (Tallberg et al., 2013). To control for the effect of democracy on whether an international institution is likely to be of a formal or informal nature, I include a variable in the statistical models that captures the average regime type of the countries involved in the creation of an international institution. I use the PolityIV data and its 21-point scale of democracy to measure countries' regime types (Gurr, Jagers and Moore, 1989). Based on this democracy measure, I compute the average level of democracy of the states that participate in the creation of an international institution. Using alternative measures of democracy, does not affect results.

In addition to domestic regime types of states participating in international institutions, I also control for the strength of domestic legislative veto players in the countries that participate in an international institution. For measuring domestic legislative veto players, I follow existing studies of the relationship between veto players and international cooperation (Mansfield, Milner and Pevehouse, 2007; Mansfield and Milner, 2012; Lupu, 2015) and use the *PolCon III* measure developed by Henisz (2002). The measure contains information not only about institutional veto points but also the extent to which those are controlled by opposition groups. The measure is continuous, with possible values ranging from 0 to 1. The largest values are given to countries that feature effective, cohesive legislatures with divergent preferences from those of the executive. Based on this measure I create the average domestic legislative veto player strength of the states that participate in an international institution.

Moreover, I control for the policy scope of an international institution (Hooghe and Marks,

2015) by including a count of the issue areas an international institution is operating in. Finally, I control for the issue area of cooperation by including indicator variables for a security, environment, trade and commerce, and human rights (Koremenos, 2016). Data on the policy scope of FIGOs comes from the most recent version of the COW data on intergovernmental organizations (Pevehouse et al., 2015). For IIGOs and TGI, the measurement of the issue areas in which they operate comes from our new data set (Westerwinter, 2017). Table 2 provides summary statistics for the dependent and independent variables used in the main empirical analysis.

Table 2: Summary statistics: Dependent and independent variables

	Mean	Variance	Std. dev.	Min.	Max.	<i>N</i>
Informality _{<i>i</i>}	0.662	0.076	0.275	0.00	1.00	898
Log number states _{<i>i</i>}	2.435	1.001	1.001	0.69	5.11	898
Abs. diff. ideal points _{<i>i</i>}	2.349	2.084	1.444	0.00	5.21	783
Number P5 _{<i>i</i>}	1.587	2.357	1.535	0.00	5.00	894
Number BRICS _{<i>i</i>}	0.126	0.296	0.544	0.00	5.00	894
Mean log GDP _{<i>i</i>}	24.497	5.769	2.402	18.05	29.74	710
Log GDP ratio _{<i>i</i>}	1.116	0.005	0.069	1.00	1.39	710
Mean democracy _{<i>i</i>}	3.710	26.874	5.184	-9.67	10.00	890
Mean legislative veto players _{<i>i</i>}	0.279	0.021	0.145	0.00	0.61	869
Policy scope _{<i>i</i>}	2.024	1.480	1.217	0.00	8.00	898
Security _{<i>i</i>}	0.094	0.085	0.291	0.00	1.00	898
Environment _{<i>i</i>}	0.323	0.219	0.468	0.00	1.00	898
Trade and commerce _{<i>i</i>}	0.268	0.197	0.443	0.00	1.00	898
Human rights _{<i>i</i>}	0.048	0.046	0.214	0.00	1.00	898

Results

I start my empirical analysis by investigating hypotheses 1 and 2 that examine the effect of the number of states involved in the creation of an international institution and the heterogeneity of the revealed preferences of the states involved in the creation of an institution on its level of informality. Table 3 reports the results of this analysis in the first column. The results of model 1 suggest that there is a statistically significant negative relationship between the number of states involved in the creation of an international institution and the level of institutional informality. The more states

Table 3: OLS regression estimates informality

	Model 1	Model 2	Model 3	Model 4	Model 5
Log number states _{<i>i</i>}	-0.064*** (0.013)	-0.043* (0.018)	-0.043* (0.018)	-0.048* (0.019)	-0.050* (0.020)
Abs. diff. ideal points _{<i>i</i>}	0.007 (0.009)	-0.009 (0.012)	-0.011 (0.013)	-0.009 (0.013)	-0.016 (0.013)
Number P5 _{<i>i</i>}		-0.009 (0.011)	-0.009 (0.011)	-0.011 (0.011)	-0.003 (0.013)
Number BRICS _{<i>i</i>}		0.015 (0.014)	0.011 (0.015)	0.011 (0.016)	0.005 (0.020)
Mean log GDP _{<i>i</i>}		0.028*** (0.006)	0.032*** (0.008)	0.032*** (0.008)	0.032** (0.012)
Log GDP ratio _{<i>i</i>}		0.537* (0.229)	0.595* (0.242)	0.593* (0.249)	0.703* (0.289)
Mean democracy _{<i>i</i>}			-0.001 (0.006)	-0.001 (0.006)	-0.005 (0.007)
Mean legislative veto players _{<i>i</i>}			-0.050 (0.212)	-0.061 (0.213)	0.031 (0.233)
Policy scope _{<i>i</i>}				0.013 (0.011)	0.014 (0.011)
Security _{<i>i</i>}				-0.039 (0.041)	-0.051 (0.043)
Environment _{<i>i</i>}				-0.018 (0.024)	-0.024 (0.025)
Trade and commerce _{<i>i</i>}				-0.096*** (0.027)	-0.091*** (0.027)
Human rights _{<i>i</i>}				-0.004 (0.050)	-0.018 (0.054)
Constant	0.793*** (0.024)	-0.482 (0.305)	-0.636 ⁺ (0.367)	-0.597 (0.372)	-0.667 (0.493)
Year FEs	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>Yes</i>
Adj. R ²	0.152	0.277	0.239	0.267	0.094
<i>N</i>	783	703	674	674	674

Robust standard errors in parentheses. All significance tests two-tailed.

⁺ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

are involved in the creation of an international institution, the less informal this institution is likely to be, all else being equal. Specifically, a one-unit increase in the logged number of participating states leads to a 0.06 decrease in an institutions informality. This finding is in line with hypothesis 1. By contrast, the heterogeneity of state preferences makes an international institution more not less informal, although this result is not statistically significant at conventional levels. This runs against the argument of a negative relationship between preference heterogeneity and informality as summarized in hypothesis 2. Together, these findings suggest that it is particularly small groups of states with heterogeneous preferences that create informal institutional arrangements to structure their interactions and to govern global problems that they care about.

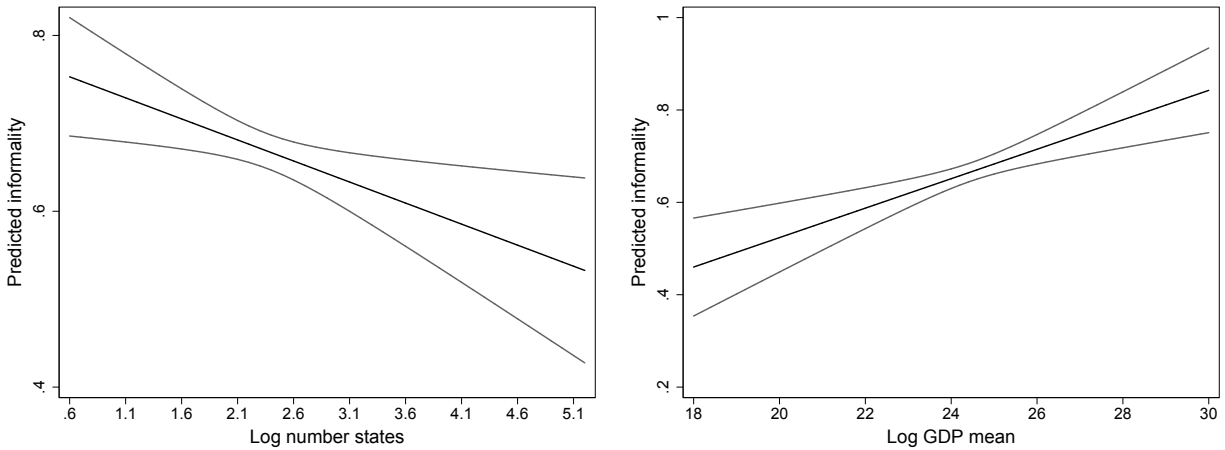
In addition to the two functionalist independent variables, model 2 also includes the variables that capture power-oriented explanations of informal international cooperation. As we can see from the second column of table 3, the average logged GDP of all states participating in the creation of an institution as well as the balance of economic power measure have both a positive and statistically significant relationship with the level of informality of an international institution. Both effects are of substantial size. The association between the two GDP variables and the level of informality of an international institution is robust even if we control for the effect of regime type, domestic legislative veto players, policy scope, unobserved heterogeneity across issue areas, as well as unobserved heterogeneity across years. This finding lends support to the power-oriented hypotheses 3 and 4.

By contrast, the variables that capture the participation of major powers in form of permanent members of the UN security council and the participation of rising powers in form of BRICS countries are statistically insignificant across model specifications. However, in terms of direction of association, we can see that BRICS countries seem to tend toward informal international institutions, while P5 countries seem to favor more formalized institutional arrangements. Both associations are substantively small.

With respect to the control variables, we see that the average level of democracy among the states involved in the creation of an international institution does not affect its level of informality in

a way that is distinguishable from 0. The same is true for average levels of domestic legislative veto players, policy scope and all issue areas except trade and commerce. In the trade and commerce area, we observe a tendency toward lower levels of informality, i.e. higher levels of institutional formality.

Figure 5: Predicted informality



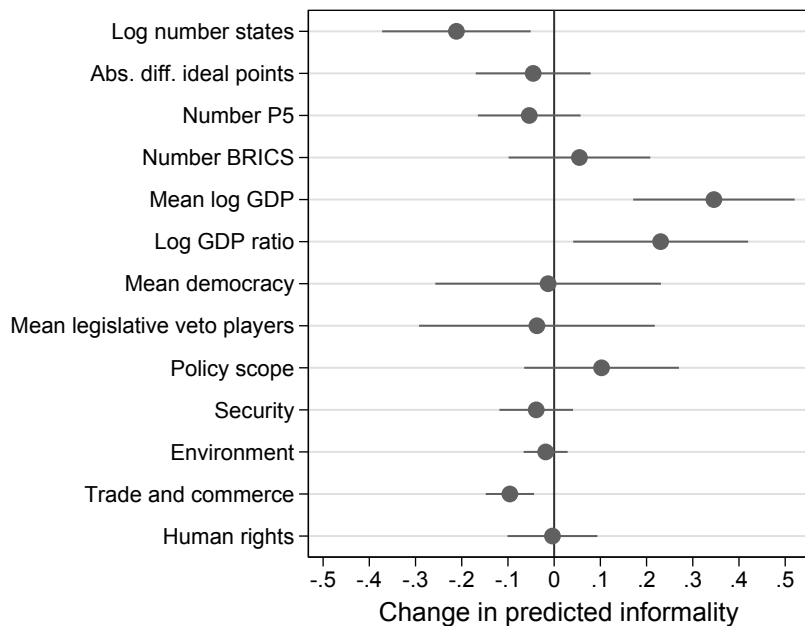
Note: Calculations of predicted values based on model 4 in table 3. All other variables held constant at their means. 95% confidence intervals.

In order to further facilitate the interpretation of the estimation results presented in table 3, I calculate predicted informality values and changes in the predicted informality of international institutions as functions of changes in independent variables. The plot in the left-hand panel of figure 5 shows that as the number of states participating in an international institutions increases, the predicted level of informality decreases. The opposite occurs for changes in average logged GDP of states participating in an international institution. As the average logged GDP of states participating in an international institution increases, its predicted level of informality increases (see right-hand panel of figure 3).

Figure 6 provides further insights in the substantive size of the relationships between the independent variables in my models and the level of informality of an international institution by reporting changes in predicted informality scores as independent variables change from their sample minimum to maximum (continuous variables) or from 0 to 1 (indicator variables), holding all

other variables constant at their means. We can see that holding all other variables constant at their means, increasing the logged number of participating states from its minimum to maximum leads to a decrease in the informality of an international institutions of about 0.21. By contrast, a change from the sample minimum to maximum of the mean logged GDP variable leads to an increase of about 0.35. Increasing the imbalance of economic power among the states participating in an international institution from its minimum to its maximum has a similar effect on its informality. Here, we observe an increase in informality of about 0.23. Together, these findings suggest that states' choice of the level of informality of an international institution is shaped by both functionalist as well as power-related considerations. Power as well as efficiency in solving cooperation problems are important drivers of informal global governance.

Figure 6: Changes in predicted informality



Note: Changes in predicted informality of international institutions with 95% confidence intervals as independent variables increase from their sample minimum to maximum (continuous variables) or from 0 to 1 (indicator variables). Estimates are drawn from model 4 in table 3. All other variables held constant at their means.

I also estimate a series of alternative models to examine the robustness of the results of my main empirical analysis. Table 4 reports the results of the substantively most important of these robust-

ness checks.¹¹ Model 6 in table 4 uses a narrower operationalization of the informality variable as dependent variable. Instead of seven design elements, this operationalization only considers five design features; namely, independent secretariat, monitoring, enforcement, dispute settlement, and decision-making. As can be seen, the results regarding number of participating states as well as the two economic power variables do not differ from those obtained using the broader operationalization of the informality variable. Model 7 adds an indicator variable for the participation of the US in an international institution. Although the presence of the US exerts a positive effect on an international institution's level of informality, this effect is not distinguishable from 0. Finally, model 8 presents estimates of a logistic regression model with an indicator variable that captures whether an institution is an IIGO or TGI as dependent variable. This model mirrors the so far prevalent dichotomous treatment of informal international institutions in the literature. The findings of my main analysis also hold in this model specification. In fact, in terms of statistical significance, the effect of the power variables further increases. Importantly, several control variables that did not reach statistical significance in the main models, such as number of P5 countries, legislative veto players, policy scope, and security issue focus, do so in the logit model. This raises the concern that by using a simple dichotomous operationalization of informality as dependent variable, we may find statistically significant relationships between informality and independent variables of interest where there is perhaps actually none.

Conclusion

This paper examines the factors that shape states' choices of the level of informality of international institutions that they create to structure their interactions and to govern global problems. While informal international institutions have become important elements of the patchwork of contemporary global governance, their growth is not universal. While some issue areas have seen a dramatic rise in informal governance (e.g. environment and development), others (e.g. finance and security) have undergone less dramatic changes. Based on a new continuous measure of in-

¹¹Additional robustness checks are reported in the appendix.

Table 4: Robustness analysis informality

	Model 6	Model 7	Model 8
Log number states _{<i>i</i>}	−0.040* (0.018)	−0.046* (0.021)	−0.472* (0.200)
Abs. diff. ideal points _{<i>i</i>}	−0.005 (0.012)	−0.010 (0.013)	0.117 (0.139)
Number P5 _{<i>i</i>}	−0.009 (0.011)	−0.012 (0.014)	−0.306** (0.114)
Number BRICS _{<i>i</i>}	0.023 (0.015)	0.011 (0.016)	0.271 (0.214)
US member _{<i>i</i>}		0.008 (0.035)	
Mean log GDP _{<i>i</i>}	0.030*** (0.008)	0.032*** (0.008)	0.854*** (0.120)
Log GDP ratio _{<i>i</i>}	0.560* (0.239)	0.576* (0.267)	17.08*** (2.927)
Mean democracy _{<i>i</i>}	−0.001 (0.006)	−0.001 (0.006)	−0.045 (0.062)
Mean legislative veto players _{<i>i</i>}	−0.014 (0.201)	−0.058 (0.213)	4.486* (2.129)
Policy scope _{<i>i</i>}	0.011 (0.011)	0.013 (0.011)	0.401*** (0.113)
Security _{<i>i</i>}	−0.026 (0.041)	−0.039 (0.041)	0.969* (0.391)
Environment _{<i>i</i>}	−0.002 (0.024)	−0.018 (0.024)	0.025 (0.252)
Trade and commerce _{<i>i</i>}	−0.088*** (0.026)	−0.096*** (0.027)	−0.847** (0.277)
Human rights _{<i>i</i>}	0.009 (0.048)	−0.004 (0.050)	−0.430 (0.509)
Constant	−0.514 (0.362)	−0.574 (0.393)	−40.42*** (5.357)
Year FEs	<i>No</i>	<i>No</i>	<i>No</i>
Adj. R ²	0.311	0.256	0.390
<i>N</i>	674	674	674

Robust standard errors in parentheses. All significance tests two-tailed.

Dependent variable in model 6: Broad informality operationalization.

Model 8 is a logistic regression model with an indicator variable for institution *i* being an IIGO or TGI.

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

formality proposed in this paper, we also observe considerable variation in levels of informality across and, more importantly, within different types of international institutions, such as FIGOs, IIGOs, and TGIs.

The paper tests four hypotheses about when states choose informal governance as mode of international cooperation that are drawn from functionalist and power-oriented theories of international cooperation. I find that power-oriented dynamics play a statistically significant and substantively important role in the choice of the level of informality of international institutions. Among the functionalist factors, only the number of states participating in an international institution has a discernible effect on an institution's level of informality, while the heterogeneity of revealed preferences is has no effect.

Theoretically, the paper contributes to broadening the analysis of informal governance in world politics beyond informal governance within formal international organizations. It also introduces a comparative perspective that allows researchers to capture a broader range of the institutional choices available to states in their analysis. Empirically, the paper introduces a new data set on formal and informal international institutions as well as a new, continuous measure of institutional informality which allows the systematic testing of hypotheses about informal cooperation in the context of global governance that have so far only been examined using qualitative case studies. The results also have important policy implications. They suggest that if policy-makers seek to understand what international institution is likely to emerge in a particular situation with what level of informality, they should pay attention to power dynamics in addition to functional requirements related to the issue they wish to govern.

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