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# Joining the open government partnership initiative: An empirical analysis of diffusion effects



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#### ABSTRACT

Prior empirical studies of the Open Government Partnership have failed to take into account possible diffusion mechanisms contributing to the expansion in the number of countries joining the partnership since its beginning in 2010. Notwithstanding the increase in the study of open government policies over the past decade across multiple levels of government, the factors influencing the decision to join multilateral initiatives like the Open Government Partnership are still under-researched. Using data from 175 countries and covering a period that goes from the year prior to the establishment of the Open Government Partnership (OGP) until the year when the latest current members have joined the partnership (2010–2018), this article examines the diffusion mechanisms affecting a country's decision to participate in the OGP. Based on binary response logit regression models, this study analyses the effects of key diffusion variables while controlling for the countries' internal determinants of participation. The findings indicate that diffusion of the OGP takes place through regional proximity, common cultural and system of government traits, and membership in international organization. While democratic countries are more likely to join, autocracies also join conditional on other countries in the same group joining. This suggests further research is needed to uncover the way countries with different regime traits design and implement transparency and open government policies under the banner of this multilateral initiative.

# 1. Introduction

Since Inauguration Day, US President Barack Obama sought to promote open government as a cornerstone of his presidency to improve transparency, citizen engagement, and collaborative government. The initiatives undertaken during the first few years of the Obama Presidency culminated with an international call to articulate the efforts of government agencies and civil society organizations to promote cooperation and democratic values under the open government banner. In 2011, eight governments<sup>1</sup> and nine civil society organizations<sup>2</sup> established the Open Government Partnership (OGP) as a multilateral initiative designed to elicit the commitment of national governments to promote transparency, empower citizens, enhance accountability, and combat corruption by taking advantage of new information and communication technologies. Since then, 76 countries have joined the OGP and several more are planning to do so in the upcoming years.

The OGP is run by a steering committee of 22 members (11 national governments and 11 civil society organizations) and an executive board composed by four members (two of each). Governments and civil society organizations can join if they agree with the principles, mission, and agenda of the OGP. This includes the promotion of freedom of information about government activities, civic participation, professional integrity in public administration, and access to technology for openness and accountability (OGP, 2011). In order to join the OGP, partners must meet certain targets, but, since membership is purely voluntary, they can commit to these goals by following different national strategic

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<sup>&</sup>lt;sup>2</sup> The Brazilian Institute for Socioeconomic Studies INESC, the Indian Association for the Empowerment of Workers and Peasants MKSS, the Mexican Institute GESOC (Gestión Social y Cooperación), the Open Government Institute from Moldavia, Twaweza from Tanzania, Publish What You Pay from Indonesia, the British Transparency and Accountability Initiative, the Revenue Watch Institute from the US, and the International Budget Partnership.

action plans, as long as these conform to the OGP principles (Fraundorfer, 2017).

The empirical evidence concerning a decade of experience with the OGP provides a few contradictory developments surrounding the implementation and the implications of the initiative. On the one hand, the voluntary nature of the commitments, the lax enforcement rules and the absence of sanctions for noncompliance has led to accusations of window dressing (Berliner, Ingrams, & Piotrowski, 2021; Ingrams, 2020). On the other hand, there are some reasons to be optimistic, primarily related to the diffusion of norms of transparency, the empowerment of civil society actors in countries where this was largely absent and the formation of coalitions supporting participation norms in government institutions (Wilson, 2020). Given the mixed results arising from the flexible nature and weak enforcement of commitments to the OGP, the time has come to investigate the countries' motivations to join this international initiative.

This study investigates the adoption of the OGP across countries, following the recent trend in the worldwide expansion of transparency policies (Piotrowski, 2017; Wirtz & Birkmeyer, 2015). It attempts to answer the following research questions: What motivates national governments to join the OGP? More specifically, what is the role played by diffusion mechanisms – learning, competition, coercion and imitation – in the decision made by national governments to join the OGP? We employ logit regression models for 175 countries over a 10-year period to test hypotheses related to these diffusion mechanisms while controlling for internal determinants.

Policies aiming to promote open government have been associated with benefits across a large spectrum of areas, including political, societal, economic, and technical and operational (Zuiderwijk, Shinde, & Janssen, 2019). Politically, open government is thought to increase transparency and accountability, with mixed impacts on citizens' trust in democratic institutions (de Fine Licht, 2014; Grimmelikhuijsen, Porumbescu, Hong, & Im, 2013). For society, open data is regarded as a means to increase civic participation, promote innovation through data resuse (Janssen, Charalabidis, & Zuiderwijk, 2012), control of corruption (Laboutková, 2018), and encourage citizens actions as 'armchair auditors' (da Cruz, Tavares, Marques, Jorge, & de Sousa, 2016). Given all these potential advantages, it is unsurprising that open government has become an international phenomenon (Piotrowski, 2017; Ingrams, Piotrowski, & Berliner, 2020) and that national governments seek to actively join multilateral initiatives related to open government and transparency (David-Barrett & Okamura, 2016).

The determinants of the adoption of open government reforms across countries under the banner of the OGP have been investigated in recent years. Schnell and Jo (2019) tested the influence of political, administrative, and civic factors on the scores and the share of the total OGP eligibility criteria. Our study contributes to extend their work in several ways. First, we account for the possible presence of diffusion mechanisms in explaining the adoption of the OGP by national governments. Second, we extend the number of countries included in the analysis to avoid possible issues of sample selection bias. Third, our data set covers nine years (2010–2018), which is a better time frame to capture longitudinal effects. Fourth, given the importance of the OGP in reshaping international policy discourses on e-government and public governance, our work addresses a major gap in the literature by investigating the incentives to join the OGP.

The paper is organized as follows. The first section after this introduction summarizes the literature and describes the causal mechanisms leading to policy diffusion. Next, we present the open government partnership as a multilateral international initiative to promote government transparency and accountability and argue why it makes sense to analyze the decision to join the OGP from a policy diffusion perspective. The section also summarizes the hypotheses derived from the extant framework. The fourth section describes the data and analytical methods. This is followed by a discussion of the findings in section five. Section six concludes.

#### 2. A background on the theory of policy diffusion

Seminal work by Rogers (1962) conceptualized diffusion as "the process by which an innovation is communicated through certain channels over time among the members of a social system" (p.5). Following on Rogers footsteps, Walker (1969) defined policy innovation as a "program or policy which is new to [the state] adopting it" (p.881). Initially, the policy diffusion literature grew in the context of American federalism. Early works by Walker (1969) and Gray (1973) argued that policies diffuse across states through a series of causal mechanisms. State policymakers emulate policies which have proven effective as an heuristic device to simplify complex decisions (Walker, 1969). In addition, policies can be triggered by state competition in a federal system, with states adopting policies either influenced by policy elites in other states or under the pressure of public opinion in their states.

A second generation of policy diffusion studies starting with Berry and Berry (1990), argues that policy innovations occur due to the combined effect of internal determinants and diffusion processes. Berry and Berry (1999) proposed the use of research designs that control for internal determinants as alternative explanations to account for the possibility that the adoption of the same policy by two states in consecutive years is purely coincidental and not due to regional diffusion mechanisms. While Berry and Berry's work was important to improve research designs and empirical testing of diffusion models, it paid less attention to the multiple theoretical mechanisms (or "channels", according to Rogers) through which policy diffusion can occur. During the first decade of the 21st century, scholars sought to bridge this gap in the literature by detailing the causal mechanisms responsible for the diffusion of public policies. Concomitantly, the cross-country diffusion of national level policies also became a matter of interest to researchers, specifically looking at the diffusion of economic policies (Elkins, Guzman, & Simmons, 2006; Gilardi, 2010; Meseguer, 2009; Simmons, Dobbin, & Garrett, 2008; Simmons & Elkins, 2004), and, more recently, renewable energy policies (Baldwin, Carley, & Nicholson-Crotty, 2019).

Public administration reforms have been particularly targeted in the diffusion literature, including public sector downsizing (Lee & Strang, 2006), structural pension reforms (Brooks, 2007; Weyland, 2005), hospital financing reforms (Gilardi, Füglister, & Luyet, 2009), conditional cash transfer programs (Osorio Gonnet, 2019), and administrative licensing centers in China (Zhang & Zhu, 2019). Just like these reforms, the cross-country diffusion of the OGP can be hypothesized to follow a similar sequential pattern: innovators (inventors), early adopters, followers, and laggards.

### 2.1. Four causal mechanisms of policy diffusion

The policy diffusion literature identifies four causal mechanisms (Shipan & Volden, 2008), which can potentially explain the dissemination of the OGP: learning, competition, coercion, and social (symbolic) emulation. Learning implies a rational decision by government policymakers to enact a specific policy with higher expected net benefits when compared to the current status quo (Marsh & Sharman, 2009). More importantly, learning does not require full rationality and can take place as an incremental decision subjected to bounded rationality. Mooney (2001) argues that diffusion operates through "a satisficing search for solutions to problems due to familiarity, ease of communication, cross-mixing of media and population, common values" (p.105). According to the concept of Bayesian learning applied to policy diffusion "actors are assumed to choose policies after updating their beliefs about the policy effects by looking at the experience of others, which is then used to update prior beliefs and eventually orient action" (Braun & Gilardi, 2006: 306; see also Meseguer, 2005, 2006). In addition, learning may not even require an assessment of prior success in another country; all it takes is the adoption and continuation of support for a policy (Shipan & Volden, 2008).

Simmons and Elkins (2004) suggest that diffusion operates through two broad sets of forces: 1) mounting adoptions of a policy alter the benefits of adopting for others (the political effect); and 2) adoptions provide policy relevant information about the benefits of adopting (the policy information effect). This view is compatible with the concept of Bayesian learning, since both the political effect and the policy effect generate relevant information for policymakers and help them determine whether a new policy is useful for them (Brau & Gilardi, 2006). Regional diffusion whereby government officials learn from policy adoptions by neighboring countries is perhaps the most discussed form of learning in the literature. However, learning can also occur via bilateral conversations, membership in international organizations or presence in epistemic communities (Stone, 2012). Regardless of the form, learning processes begin with individuals acquiring information, which is then translated into new meanings in the new context and results in collective policy learning by institutions (Heikkila & Gerlak, 2013; Wilson, 2021).

Policy diffusion through competition applies primarily to the diffusion of economic policies. Investor-friendly policies are preferred by government officials as a response to competition for capital in international markets. While this argument does not translate directly to the diffusion of the OGP, it can be argued that investors are more likely to choose countries with stable institutions. Joining the OGP signals a commitment to transparency and accountability (Harrison & Sayogo, 2014), improved trust in government and, ultimately contributes to building stronger institutions (Braun & Gilardi, 2006; Bertot, Jaeger, & Grimes, 2010; Zuiderwijk et al., 2019). This argument suggests that joining the OGP may be supported as a way to signal a stable political environment for economic competition and investment purposes.

Diffusion through competition may also occur in the context of a 'race-to-the-top' in terms of reputational benefits (Honig & Weaver, 2019). The emergence of transparency "as an international norm associated with good governance" is consistent with the decision to join the OGP and reap the reputational benefits that allow governments to access social and material benefits (David-Barrett & Okamura, 2016: 227–228). Social benefits come in the form of international legitimacy, esteem, and good citizenship (Erickson, 2014; Finnemore & Sikkink, 1998), whereas material benefits include international creditworthiness (Tomz, 2008), good standing with international donors and stable business environment for foreign investors (David-Barrett & Okamura, 2016).

Coercion as a diffusion mechanism has been associated with the actions of international organizations such as the European Commission, the United Nations, the International Monetary Fund (IMF) or the World Bank (Shipan & Volden, 2008; Marsh & Sharman, 2009). These institutions are known for attaching conditional features when deciding over financial aid to countries under intervention (Schimmelfennig & Sedelmeier, 2004). Requirements associated with institutional reforms, particularly 'good governance' reforms, are supported by multilateral international organizations committed to promote common norms and appropriate practices (Braun & Gilardi, 2006).

Diffusion is also explained through social emulation or mimicry. Here, diffusion is explained by symbolic or moral reasons. According to this perspective, policies are adopted in a country if they are regarded as "advanced, progressive and morally praiseworthy" (Marsh & Sharman, 2009: 272). A policy alternative with these features is likely to become attractive because adoption provides additional legitimacy to national governments, whereas staying on the 'sidelines' can be costly and/or unpopular (Braun & Gilardi, 2006). Unlike policy learning, imitation does not value *what* can be learned but rather concentrates on *who* is (are) the leader(s) (Shipan & Volden, 2008).

#### 2.2. Policy diffusion in transparency initiatives

Other research investigated how diffusion mechanisms operate for countries joining initiatives comparable to the OGP, such as the adoption of state-level access to information laws in Mexico, joining the

Extractive Industries Transparency Initiative (EITI) or donors' assessment conducted through the Aid Transparency Index. In the case of the adoption of state-level access to information laws in Mexico, Berliner and Erlich (2015) found that higher intra-state political competition increased the likelihood of early adoption because incumbent political parties wish to secure access to information in face of an uncertain political future (i.e. an insurance mechanism). In other words, access to information laws operates to constrain opponents in case they access power in the future. In turn, David-Barrett and Okamura (2016) find that states join the EITI to build a reputation and gain legitimacy in the international community. The EITI fosters commitment to the norm of transparency, helping countries to improve their reputation among international actors. Honig and Weaver (2019) investigated how the Aid Transparency Index (ATI) developed and published by Publish What You Fund, a small London-based nongovernmental organization, exercises social pressure over political authorities and bureaucratic elites to influence donors' aid practices. Changes in donors' behaviors and commitment to aid transparency are attributed to the diffusion of professional norms, organizational learning, and peer pressure set and exerted by the ATI. While by no means exhaustive, these examples illustrate how diffusion mechanisms operate to influence countries to join these multilateral initiatives and/or are affected by them.

Lastly, one important cross-cutting element in the diffusion literature is the role played by social norms and social hierarchies among countries. Towns and Rumelili (2017) developed a typology of social hierarchies that emerge among states in international contexts. The first dimension of this typology divides social hierarchies into relative and absolute standards. Relative social hierarchies emerge when governments are compared along a single dimension, while absolute social standards are fixed and are either observed or not. The second dimension divides standards into homogeneizing or heterogeneizing. Heterogenous standards separate countries as distinctive in kind, whereas homogenous standards compare countries in the same category. In the open government context, accession to the OGP falls into the absolute and heterogeneizing social standards, because the rules of entry are flxed and countries are either in or out, depending on whether they fulfil the requisites. The authors' work suggests that the heterogeneizing nature of the OGP standards may exert social pressure through the stigmatization of excluded countries, but each country's response may vary between "rejecting the norm, modifying the norm (...) or accepting the norm and complying with its standards (p.20).

This article argues that the decision to join the OGP in countries across the world is the product of these diffusion processes. Following prior examples from the literature, we treat countries as the *adopters*, even though diffusion takes place through the actions of individuals (Shipan & Volden, 2008) and after a series of governmental decisions that eventually produce the outcome. The reasons for employing this assumption will be discussed in further detail in the Methods section. Before, however, the next section links the main tenets of the theory of policy diffusion expanded upon here to the decision by national governments to join the Open Government Partnership.

#### 3. Policy diffusion and the open government partnership

The four mechanisms of policy diffusion – learning, competition, coercion and imitation – have been articulated and discussed in multiple contexts and policies. Diffusion through these mechanisms can take place between countries, states within a country or cities and applied to different policy sectors, including economic, social, environmental, and morality policies. This section extends prior studies to the OGP that thus far had not been analyzed from this perspective.

Bayesian learning applied to the OGP suggests that government officials learn about norms of transparency and civic participation in international organizations (Stone, 2004), which help collective learning processes and influence national processes and policies in their institutions (Berliner et al., 2021; Wilson, 2020; Žuffová, 2020). This diffusion of norms and shared consensus incentivizes the decision to join because of the reputational benefits associated with the OGP, both in terms of the legitimacy gained by the incumbents in national politics and the harmonization benefits in the international community (Finnemore & Sikkink, 1998). The information available in global public policy networks allows decision makers to update their beliefs so that joining the OGP becomes more beneficial than not joining.

One of the most common patterns is regional diffusion. As more jurisdictions in a given region adopt a specific policy, the more likely it becomes that others will adopt the same policy. As suggested by Simmons and Elkins (2004), regional diffusion happens due to the combination of a political effect and an information effect. On the one hand, the political effect is the positive change in benefits of adopting for others. The more neighbors adopt a policy, the less costly it becomes for the government in a given country to adopt. On the other hand, the information effect occurs because when more neighbors adopt a given policy, more information will become available for policymakers wishing to follow the same policy.

In addition, it is possible that countries in the same region compete in the adoption of policies for reputational benefits. DiMaggio and Powell (1991) argued that "organizations compete not just for resources and customers, but for political power and institutional legitimacy" (p.66). Entering the OGP may be a way of securing legitimacy (Radaelli, 2000), eligibility for public and private grants and contracts (DiMaggio & Powell, 1991), and achieve good reputation and respect in the international community (David-Barrett & Okamura, 2016).

Accordingly, we derive our first hypothesis from Simmons and Elkins' work:

**H1**. The proportion of countries in a region joining the OGP influences the likelihood of a country's decision to join (regional diffusion).

Joining the OGP may be a *taken-for-granted* argument, since few people would argue in favor of opaque government. Ingrams et al. (2020) point to "the universal appeal of people-oriented government, integrity, and transparency supported by the global Internet" (pp.268–269), stressing the broad geographic representation of OGP country membership and initiatives. Consistent with this idea, transparency as a method of open government (Ingrams et al., 2020) has been associated to negative impacts on trust, even though the magnitude of these effects varies across nations and cultures (Grimmelikhuijsen et al., 2013).

Beyond the variation in the preferences for open government across cultures, the mechanisms expected to operate in cultural diffusion are similar to the ones described for regional diffusion. When more countries sharing similar cultural traits join, the expected benefits of joining also increase for other countries with similar traits and the amount of information available and communicated between these countries is also more significant (Holzinger & Knill, 2005; Simmons & Elkins, 2004).

The difference between learning and imitation is a subtle one, but both mechanisms are likely at play in cultural diffusion. Studlar (2006) suggested that imitation is an incomplete form of learning that consists in the ad hoc copying of ideas, policies and practices. Diffusion through imitation or symbolic emulation occurs due to copying the leaders rather than as a conscious learning process of acquisition, translation and dissemination (Heikkila & Gerlak, 2013). This 'shallow' learning contrasts with other, deeper forms of learning, that take place in transnational epistemic communities, where consensual knowledge is developed and shared among specialists and accepted as valid by decision-making elites (Stone, 2004).

Hence, it is possible that both imitation and learning are part of the explanation in the diffusion of the OGP among countries sharing the same cultural traits. If we accept that countries with shared culture belong to the same policy networks, it is possible that, as suggested by Stone (2004), some countries display "great capacity for learning, whereas others may adopt lessons for symbolic purposes" (p.549). Thus,

the second hypothesis is related to diffusion among cultural reference groups:

**H2**. The proportion of countries sharing the same cultural traits joining the OGP influences the likelihood of a country's decision to join (cultural diffusion).

The decision to join the OGP is likely grounded on political motivations (Ingrams et al., 2020), but these may vary between political regimes. For many countries, joining the OGP and implementing open government policies is motivated by political competition, either internally between incumbents and their opposition (Berliner & Erlich, 2015) or externally as a way to improve a country's standing among their international peers in a 'race-to-the-top' (David-Barrett & Okamura, 2016; Honig & Weaver, 2019).

The primary diffusion mechanism at work in these cases is competition, but it cannot be ruled out that symbolic imitation and learning may take place. On the one hand, government officials may seek international legitimacy and adopt "modern" innovations to improve a country's prestige and to make it appear advanced (Weyland, 2005a). Joining the OGP for symbolic reasons primarily affects the policy component of the benefits, but not joining may also influence the political legitimacy component (Brau & Gilardi, 2006). Citizens and nongovernmental organizations concerned with good governance may criticize a government's inaction, which might lead to electoral losses in democratic countries and instability and social unrest in autocracies. This also suggests that while OGP diffusion among countries with different political regimes may unfold in a similar manner, the mechanisms of diffusion may be substantially different. Whereas competition may be the dominant mechanism in democracies, in autocracies open government initiatives may be employed as window dressing (Ingrams, 2020). Democracies are also more likely to respond to social pressures by accepting and complying with the norms of open government, while autocracies prefer to reinterpret or modify the same norms (Towns & Rumelili, 2017).

Diffusion among similar systems of government may not be limited to the competition and imitation mechanisms. Learning is conditional upon the sensitivity of policy makers to the experience of others (preferences and prior beliefs). Information on the political and policy benefits of joining the OGP is taken into account differently by governments, conditional on democratic levels. Democracy and prior beliefs shape the influence of learning on policy choices in general. Thus, the third hypothesis can also be grounded on the lessons learned from success and communicated among peers sharing the same system of government. If this form of learning is important, we should expect national governments to be influenced by the policy innovations of similar systems of governments.

**H3.** The proportion of countries sharing similar democratic attributes joining the OGP influences the decision to join by other countries in the same group (system of government diffusion).

International organizations stimulate the emergence of common norms based on repeated interaction and socialization (Finnemore & Sikkink, 1998; Braun & Gilardi, 2006). The promotion of a normative consensus about transparency and open government raises the intangible costs of nonconformity, can damage the reputation of those countries that refuse to join and may raise questions regarding the legitimacy of their governance (Simmons & Elkins, 2004). International organizations provide opportunities for learning, combining political and policy information effects. Often, these organizations operate as epistemic communities, i.e., "...networks of professionals with recognised expertise and competence in a particular domain and an authoritative claim to policy relevant knowledge within that domain or issue-area." (Haas, 1992: 3). Country membership in international organizations provides extensive opportunities for sharing information about transparency and is likely to be an additional factor to promote open government policies and practices. As a result, membership in

international organizations may change the relative benefits of policy alternatives.

Powerful nongovernmental organizations, such as Transparency International (TI) chapters, for example, can change the relative size of the benefits for national governments and shift the decision in favor of joining. The national chapters of Transparency International propagate the mission and message of this international organization aiming to promote cross-nationally the values of transparency, accountability and good governance (da Cruz et al., 2016; Transparency International, 2015). A similar role has been taken on by the International Budget Partnership (IBP), aiming to "generate data, advocate for reform, and build the skills and knowledge of people so that everyone can have a voice in budget decisions that impact their lives." (https://internat ionalbudget.org/). The IBP has also advocated for best practices in budget transparency, contributing to the introduction of changes in national accounting standards.

Additionally, organizations such as the IMF control critical resources that can be used as incentives or sanctions when associated with conditions to provide financial help to countries (Holzinger & Knill, 2005). This kind of 'conditionality' (Dolowitz & Marsh, 2000) is often related to good governance policies and practices. Even though the dominant mechanism is not equivalent to coercion, there is at least some nudging effect (Thaler & Sunstein, 2008) associated with membership in international organizations. Beyond this, the IMF organizes conferences, develops outreach activities and raises citizen awareness (Stone, 2012), functioning as an "institutional junction for epistemic communities" (Stone, 2004: 554). This suggests that the impact of the IMF in the diffusion of norms of transparency and open government goes beyond coercion and into knowledge sharing and lesson-drawing.

The same can be said about the OECD, which promotes shared values between national civil servants and academics aiming to find solutions to common economic and social problems (OECD, 2016). The role of the OECD in the diffusion of public management ideas and practices through the PUMA (Public Management Programme) is well-known and recognized as an attempt to promote 'forward thinking' among top-level public managers and decision-makers (Stone, 2004).

Lastly, it is important to notice that countries participate in multiple international organizations that have been described as 'overlapping clubs' (Rosecrance & Stein, 2001) capable of "promoting an international policy culture or commonly accepted norms" (Stone, 2012: 488). This happens because the overlap in membership creates opportunities for knowledge sharing and policy coordination and transfer to occur (Stone, 2004). Thus, the fourth and last hypothesis states that:

**H4**. The proportion of countries in international organizations joining the OGP influences the decision to join by other countries members of the same organization.

The discussion of the four hypotheses above suggests that the mechanisms of diffusion are not mutually exclusive and operate concurrently in the diffusion of the OGP. Each of the four hypotheses can be linked to more than one mechanism.

#### 4. Data and methods

In order to investigate which diffusion mechanisms explain the decision to join the OGP, we constructed a dataset that includes information for 175 countries as units of analysis, ranging from the year prior to the establishment of the OGP (in 2010), until the last year for which the data are available (2018). Binary response logit regression models were used to estimate the probability of a country joining the OGP in a specific year and its determinants.

The most noticeable feature of this research design is that it conceptualizes the decision to join the OGP as a single and binary choice. This is just a methodologically necessary artifact that simplifies the complexities of the decision making process and the multiple decision bodies that may arguably intervene in it. In sum, it assumes the decision to join the OGP as a dichotomous choice rather than a sequence of decisions leading to that outcome.

The dependent variable in the analysis is a binary variable that captures whether a country has joined the OGP. That variable is coded as 0 for all countries except the founders in the first year of the period under analysis. In the year the country joins the OGP, the variable is coded as 1 and observations are not considered in the years after the entry in the partnership. Therefore, in the regressions, we estimate the probability of an entry occurring, given that it has not occurred yet.<sup>3</sup> In order to distinguish the founders from the other members that joined in the same year and to account for the fact that the founders had to negotiate and design the terms of the partnership prior to its establishment, we included a set of corresponding dummy variables.<sup>4</sup> Table 1 presents the entry dates of the current OGP members, according to the OGP official website. Fig. 1 shows the cumulative number of countries joining the OGP (in black) and countries adopting Freedom of Information legislation (in blue) for comparison.

The first hypothesis (H1) states that the proportion of countries in a region joining the OGP should influence a government's decision to join. To test this hypothesis, we constructed a *regional diffusion* variable. This variable measures the proportion of countries in a given region that, in a given year, have joined the OGP. To construct this variable, ten different regions were considered: Eastern Europe and post-Soviet Union; Latin America; North Africa and the Middle East; Sub-Saharan Africa; Western Europe and North America; East Asia; South-East Asia; South Asia; The Pacific; The Caribbean.

The second hypothesis states that the lessons learned from cultural reference groups matter and that, consequently, cultural similarities between countries may be a predictor of the diffusion of the OGP (H2).

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Entry dates of the OGP members	s.
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	Country names	Nr. countries
Founders	Brazil, Indonesia, Mexico, Norway, Philippines, South Africa, UK, USA	8
2011	Albania, Armenia, Azerbaijan, Bulgaria, Canada, Chile, Colombia, Croatia, Czech Republic, Denmark, Dominican Republic, El Salvador, Estonia, Georgia, Ghana, Greece, Guatemala, Honduras, Israel, Italy, Jordan, Kenya, Latvia, Liberia, Lithuania, Malta, Moldova, Montenegro, Netherlands, North Macedonia, Paraguay, Peru, Romania, Slovakia, South Korea, Spain, Sweden Ukraine Uruguay	39
2012	Argentina, Costa Rica, Finland, Panama, Serbia, Trinidad and Tobago	6
2013	Ireland, Malawi, Mongolia, New Zealand, Sierra Leone	5
2014	Bosnia and Herzegovina, France, Tunisia	3
2015	Australia, Cape Verde, Ivory Coast, Papua New Guinea, Sri Lanka	5
2016	Burkina Faso, Germany, Jamaica, Luxembourg, Nigeria, Pakistan	5
2017	Afghanistan, Kyrgyzstan, Portugal	3
2018	Ecuador, Morocco, Senegal, Seychelles	4

For the purpose of this study, we define similarity considering two

<sup>&</sup>lt;sup>3</sup> Similar procedures are used in previous studies (e.g. Shipan & Volden, 2008).

<sup>&</sup>lt;sup>4</sup> Alternatively, we also estimate equivalent models using a different procedure to distinguish the founders by coding them as 1 in 2010. This procedure has the advantage of reducing the proportion of events that happen in the same year. The results are virtually the same, so we opted not to include them. They are available upon request.



Fig. 1. Evolution of FOI laws and OGP membership.

cultural dimensions, broadly defined as any trait of human activity acquired in social life and transmitted by communication.<sup>5</sup> First, we consider diffusion by religious similarity. For that purpose, we use the World Religion dataset to identify the percentage of Catholic, Protestant, Islamic, and Jewish population of each country at each moment in time.<sup>6</sup> Using these data, we constructed a categorical variable, *religious majority*, ranging from 1 to 4, where a country is coded as 1 if more than half of its population is catholic, 2 if more than half of the population is protestant, 3 if more than half of the population is Islamic and 4 otherwise. Based on that variable, we calculated the proportion of countries in each group that have joined the OGP at each moment in time. Second, we measured cultural diffusion based on each country's colonial origin.<sup>7</sup> Namely, we consider the proportion of countries that share the same colonial origin that joined the OGP in each year.

The third hypothesis states that the proportion of countries sharing similar democratic attributes joining the OGP influences the decision to join by a country in the same group (H3). To test this, a *system of government diffusion* variable was constructed measuring the proportion of the countries in the same system of government category that have joined the OGP in each year. In order to construct this variable we started by normalizing (0 to 1) the widely used *polity* variable, that ranges from autocracy (-10) to democracy (+10). Then, we divided the countries in four levels: i) 0 to 0.35; ii) 0.35 to 0.75; iii) 0.75 to 0.95; iv) 1. Finally, we considered the proportion of countries that lie in the same group that joined the OGP.

Lastly, the fourth hypothesis argues that the proportion of countries in international organizations joining the OGP influences the decision to join by another country member of the same organization. Accordingly, the presence of a country in an international organization or multilateral initiative may positively influence the probability of joining the OGP (H4). To account for this, we included four variables measured as the proportions of countries that are members of each of four international organizations and joined the OGP: Transparency International (TI), the Organization for Economic Co-operation and Development (OECD), the International Monetary Fund (IMF), and the International Budget Partnership (IPB).

Besides the diffusion-related variables, our analysis also contemplates several internal determinants of the OGP adoption. It is possible that the adoption of the OGP is a choice of liberal democracies, leading similar regimes to join the OGP independently and in a highly clustered manner rather than as a result of a diffusion process (Simmons & Elkins, 2004). As joining the OGP may be strongly related to a government's willingness and predisposition to open their data and foster freedom of information, we expect that the existence of Freedom of Information (FOI) laws may help predict the probability of joining the OGP. Furthermore, prior adoption of FOI laws may also serve as a proxy for a country's readiness level to embrace OGP initiatives (Wang & Lo, 2016). Therefore, we include a binary variable that identifies if a country has a FOI law (*FOI laws*).

Based on Schnell and Jo (2019) we consider five additional internal dimensions: the level of freedom of the press, participation in international trade and global markets, the level of political competition, the size of the population, and wealth. In order to measure the freedom of the press, we use the Freedom of the Press Index (press freedom) published by the Reporters Without Borders. To control for a country's participation in international trade and global markets, we use the degree of openness of each country's economy (openness), as measured by the sum of the imports and exports as a percentage of GDP. To measure the level of political competition we employ the ratio of the number of seats of the opposition parties in the parliament over the sum of opposition and government seats (seats opposition party). This variable is based on data from the Database of Political Institutions from the Inter-American Development Bank. To control for the size of the country's population we use the log of the population (population). Lastly, as the GDP per capita is a variable that assumes a central role in most of the development discussions, we also consider the log of per capita GDP (GDP per capita) as an independent variable.<sup>8</sup> Table 2 summarizes the content of the variables and displays the descriptive statistics for the sample period.

As the dependent variable is binary, we estimated logistic regressions as the main empirical models. Considering the strongly unbalanced proportion of 1's in the sample (5.7%), we used a rare-events estimator, namely the *RELOGIT: rare events logistic regressions* procedure developed by Tomz, King, and Zeng (2021). Given that the estimation coefficients produced by the logistic model do not have a direct interpretation, namely a non-linear effect over the interval of the dependent variable, we also compute and present the predicted marginal effects in complementary graphs. To control for heteroscedasticity and correlation across observations we computed robust standard errors clustered by country. Finally, we include a time trend to control for time patterns and potential shocks that may affect a specific year.

#### 5. Results

Table 3 reports the results for several model specifications testing hypotheses 1 to 3. Column (1) reports the results for the model that includes the *regional diffusion* variable and column (2) the model of the *similar culture diffusion (religious majority)* variable. Column (3) presents the model combining (1) and (2), meaning that it considers the effect of a diffusion variable while controlling for the other. Column (4) displays the results for the model which includes the *similar culture diffusion (colonial origin)* and column (5) the model with mutual control for the *regional* and *colonial* diffusion. Column (6) shows the results for the model that includes the *system of government diffusion* variable and

<sup>&</sup>lt;sup>5</sup> These cultural traits are conceived here in very general terms, as in the idea of assuming the effects of a society's culture on the values of its members (Hofstede, 1984). By focusing on these specific traits, we avoid the difficult task of measuring culture itself.

<sup>&</sup>lt;sup>6</sup> Values for these variables exist for every five years, starting in 1945 and ending in 2010. To have yearly data, the series were interpolated using the Stata ipolate command. Since these variables tend to exhibit a low within variation, it is expected that the interpolation does not lead to considerable biases.

<sup>&</sup>lt;sup>7</sup> The ten colonial origins considered are: 1. Dutch; 2.Spanish; 3. Italian; 4.
US; 5. British; 6. French; 7. Portuguese; 8. Belgian; 9. British-French; 10.
Australian; 0. Never colonized by a Western oversea.

<sup>&</sup>lt;sup>8</sup> We only include the GDP per capita in the robustness tests, because its inclusion in the regressions leads to high Variance Inflated Factors values and does not change the main results of the analysis.

#### Table 2

Variables' description and summary statistics.

Variable	Description	Mean	St. Dev.
OGP Adoption	Dependent variable $=1$ if a country has joined the OGP and = 0 if not	0.279	0.450
Regional Diffusion	Proportion of countries in the region that joined the OGP	0.279	0.254
Similar Culture Diffusion (Religious majority)	Proportion of countries that share the same religious majority that joined the OGP	0.279	0.144
Similar Culture Diffusion (Colonial origin)	Proportion of countries that share the same colonial origin that joined the OGP	0.279	0.228
System of Government Diffusion	Proportion of countries with a similar level of democracy that joined the OGP	0.279	0.159
Diffusion: TI	Proportion of countries that host a chapter of the TI that joined the OGP	0.279	0.214
Diffusion: OECD	Proportion of countries that are members of OECD that joined the OGP	0.280	0.177
Diffusion: IMF	Proportion of countries that are members of IMF that joined the OGP	0.280	0.137
Diffusion: IPB	Proportion of countries that members of OECD that joined the OGP	0.280	0.167
Diffusion: FOI	Proportion of countries that members of OECD that joined the OGP	0.280	0.232
FOI laws	Dummy variable $=1$ if the country has Freedom of Information laws and $= 0$ if not	0.335	0.471
Press Freedom	Reports Without Borders' Freedom of the Press Index	0.705	0.158
Openness	a percentage of the GDP (divided by 100)	0.933	0.546
Seats Opposition Parties	Ratio of the number of seats of the opposition parties in the parliament over the sum of opposition and government seats	0.735	1.932
Population	Population, in millions	36.11	136.75
GDP per capita	Gross Domestic Product, per capita	14,930.8	21,866.2

To facilitate the interpretation of the results this index was rescaled to a 0 to 1 scale, where 0 represents the lowest possible freedom of the press score and 1 the highest possible score.

column (7) combines the *regional diffusion* and *system of government* variables. The consistency of the results across model specifications serves as an additional test for robustness. This is especially clear with regard to the *regional diffusion* variable, which reveals strong stability and significance in all models. The results presented on Table 4 serve as a test of hypothesis 4 by including each of the four variables related with diffusion through international organizations (TI, OECD, IMF, and IPB). Again, the stability of the results appears noticeable.

In more substantive terms, all four hypotheses regarding diffusion mechanisms receive empirical support from the statistical models. *Regional diffusion* is positive and statistically significant in all models, providing support for the first hypothesis. Fig. 2 shows the expected increase in the predicted probabilities that a country will join the OGP as a function of the increase in the proportion of member countries in the

region that have joined.<sup>9</sup> Clearly, the increase in the probability is stable along the interval – notice the concave shape of the curve – but it is more pronounced when >40% of countries in the region have joined the OGP.

The second hypothesis also receives empirical support from the analysis (columns (2)–(5). The coefficients for both cultural variables – *religious majority* and *colonial origin* – are positive and statistically significant. For a given country, the probability of joining the OGP increases with an increase in the proportion of countries who share its religious majority also joining the OGP. This effect is faster in the interval between 35% and 75% of those countries joining the OGP. This can be observed in Fig. 3, which also makes it clear that the share of countries with same colonial origin has a slightly different effect, more similar to the one observed in Fig. 2.

The third hypothesis states that sharing the same system of government attributes influences a government's decision to join the OGP. Model specifications (6) and (7) indicate that this is indeed the case. Even after controlling for regional diffusion (7), joining the OGP is more likely when other countries of the same level of democracy have also joined. As shown in Fig. 4, this effect is much more pronounced in the middle range of the interval (35% - 65%). As a robustness test of this more subtle diffusion mechanism, we ran the same models with the inclusion of a measure of the degree of democracy (see Table in Appendix). It becomes clear that higher levels of democracy are significantly associated with higher probabilities of joining the OGP but, more importantly, this effect becomes insignificant as the variable of diffusion based on the system of government is included. This is a very important result, suggesting a powerful diffusion process through imitation between countries having similar system of government traits, regardless of their level of democracy.

The results also reveal that, among all diffusion mechanisms, participating in other international organizations and multilateral initiatives, has a robust impact in enhancing the likelihood of joining the OGP. However, as depicted in the different shapes of Fig. 5, the effects are not all similar. The case of IMF is very peculiar, as it is very pronounced but concentrated only in a short interval (30% - 55%). This is certainly due to the fact that 93.5% of the countries in the sample are members of the IMF. The effect is the opposite in the case of OECD, since only 17.8% of the countries in the sample are members of this organization.

The results also support the idea that countries that have FOI laws and countries where the freedom of the press is higher have a higher probability of joining the OGP, with specific effects depending on the model. Lastly, there is also strong evidence that the probability of joining the OGP erodes as the time passes, which suggests important implications for the adoption of this type of partnership.

#### 6. Discussion

Taken together, the findings underscore the need to consider the mechanisms of diffusion as a package. While the magnitude of each diffusion effect may vary depending on the specific mechanism involved, all diffusion variables have a role to play in the expansion of the OGP across countries. This is clearly visible regardless of the model specification used, suggesting robust results across the board. In other words, each effect remains both statistically and substantively relevant even after the inclusion of other diffusion and internal determinants variables in a given model specification.

The robustness of the findings provides support to the idea that

<sup>&</sup>lt;sup>9</sup> More technically, predictive margins (after a logit) represent the conditional probability for a given variable at a specified range, setting the other variables to a specified statistic (e.g., average). The Stata command *relogitplot* produces predictive margins plots after a rare events logit (relogit) for the specified variable. Hence, Figs. 2 to 5 plot the predictive margins for the diffusion variables.

#### Table 3

Baseline models of difusion: logistic regression results.

~ ~	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Regional Diffusion	4 963***		3 835***		2.179*		3 869***
regional Director	(0.750)		(0.794)		(1.223)		(0.815)
Cultural Diffusion (Religious majority)	(011 00)	8.899***	5.168***		(11220)		(0.010)
		(1.820)	(1.724)				
Cultural Diffusion (Colonial origin)				5.700***	3.662**		
				(0.951)	(1.522)		
System of Government Diffusion						12.951***	9.944***
						(2.322)	(2.121)
Founder Countries	2.406***	2.393***	2.703***	2.607***	2.543***	2.487***	2.865***
	(0.392)	(0.423)	(0.436)	(0.394)	(0.382)	(0.446)	(0.442)
FOI Laws	0.336	1.029***	0.565	0.584*	0.408	1.075***	0.457
	(0.345)	(0.375)	(0.360)	(0.342)	(0.354)	(0.361)	(0.384)
Press Freedom	2.832**	1.178	2.078*	3.066***	2.967**	1.200	1.119
	(1.126)	(1.096)	(1.163)	(1.151)	(1.156)	(1.382)	(1.290)
Openess	0.080	0.027	0.021	0.205	0.153	-0.084	-0.150
*	(0.311)	(0.304)	(0.326)	(0.290)	(0.298)	(0.356)	(0.367)
Seats Opposition Parties	-0.024	0.034	-0.023	0.093**	0.044	0.050	-0.011
	(0.044)	(0.041)	(0.045)	(0.041)	(0.052)	(0.041)	(0.047)
Population, log	0.064	0.004	0.027	0.017	0.043	-0.057	-0.040
	(0.123)	(0.102)	(0.122)	(0.115)	(0.122)	(0.106)	(0.125)
GDP per capita, log	-0.120	-0.003	-0.165	-0.232*	-0.203	0.276**	0.116
	(0.119)	(0.112)	(0.122)	(0.121)	(0.127)	(0.116)	(0.131)
Time trend	-0.343***	-0.515***	-0.490***	-0.366***	-0.373***	-0.678***	-0.674***
	(0.092)	(0.137)	(0.116)	(0.103)	(0.102)	(0.129)	(0.115)
Constant	-5.438**	-4.906**	-4.529*	-4.319*	-4.779**	-7.118***	-5.889**
	(2.433)	(2.181)	(2.385)	(2.276)	(2.408)	(2.702)	(2.727)
Observations	883	883	883	883	883	883	883

Notes: All estimations were obtained through *RELOGIT: rare events logistic regressions* (Tomz et al., 2021) and are clustered by country. Statistical significance of coefficients: \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1. Standard errors in parentheses.

#### Table 4

Logistic regression results: the role of international organizations.

Variables	(1)	(2)	(3)	(4)
Diffusion: TI	7.097***			
	(1.521)			
Diffusion: OECD		4.384***		
		(0.991)		
Diffusion: IMF			21.890***	
			(3.942)	
Diffusion: IPB				8.271***
				(1.396)
Founder Countries	2.679***	2.386***	3.632***	2.428***
	(0.454)	(0.379)	(0.652)	(0.521)
FOI Laws	0.912**	0.815**	1.272***	1.068***
	(0.373)	(0.376)	(0.361)	(0.342)
Press Freedom	0.946	0.919	2.266**	2.195*
	(1.055)	(1.043)	(1.050)	(1.125)
Openess	0.165	0.103	0.104	0.336
	(0.524)	(0.311)	(0.343)	(0.337)
Seats Opposition Parties	0.035	0.052	0.052	0.109***
	(0.041)	(0.040)	(0.041)	(0.042)
Population, log	-0.076	-0.045	0.010	-0.146
	(0.126)	(0.108)	(0.106)	(0.112)
GDP per capita, log	0.022	-0.211**	0.002	0.119
	(0.102)	(0.107)	(0.101)	(0.105)
Time trend	-0.515***	-0.353***	-0.928***	-0.497***
	(0.145)	(0.101)	(0.155)	(0.121)
Observations	883	883	883	883

Notes: All estimations were obtained through *RELOGIT: rare events logistic regressions* (Tomz et al., 2021) and are clustered by country. Statistical significance: \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1.

multiple mechanisms are simultaneously at work when attempting to explain diffusion (Shipan & Volden, 2008). The decision of other countries to join affects a country's beliefs in the effectiveness and/or payoffs associated with membership. Some countries may learn from others by taking advantage of policy and political information, whereas other countries may respond as symbolic imitation. Nowhere is this duality more evident than in the diffusion across systems of



Fig. 2. Predictive margins for regional diffusion (hypothesis 1).

governments with similar traits. The results show that, ceteris paribus, democracies are more likely to join, but diffusion is powerful in countries with similar regime traits, regardless of their more democratic or more autocratic status. Governments with more autocratic traits also join conditional to other countries in the same group joining. Earlier on we suggested this happens as a form of window dressing (Ingrams, 2020) or because autocracies reinterpret or modify the norms of transparency underlying the OGP when they accept to join (Towns & Rumelili, 2017). The results are consistent with this interpretation, but future research should employ case studies to investigate how countries with autocratic traits which have joined the OGP actually design and implement policies in line with the principles, mission and agenda of the OGP. A qualitative study with this goal in mind should consider interviewing experts who coordinate the OGP and other open government experts to extract the motives and deeper meanings underlying each country's complex decision making process involving multiple individuals and collective



Fig. 3. Predictive margins for cultural diffusion (hypothesis 2).



Fig. 4. Predictive margins for diffusion by system of government (hypothesis 3).

decision bodies responsible for designing and implementing open government policies under the OGP banner.

Geographical proximity facilitates diffusion, as evidence by the results for the regional diffusion variable. Nevertheless, when comparing the rate of regional diffusion with the rate of system of government diffusion, it appears that diffusion through geographical proximity is slower than regime diffusion. Even when more than half of the countries in a region join the OGP, the probability of others in the same region joining remains low. In contrast, countries where governments display similar traits, the OGP is adopted faster after an initial threshold has been achieved, suggesting that having a similar regime is a powerful driver in the expansion of OGP membership. In other words, countries look for cues from similar regimes when deciding whether or not to join the OGP. This is hardly surprising, since joining the OGP may be motivated by the desire to adhere to good governance principles and seek the approval of the international community. For democratic regimes, staying out may be interpreted as apathy and, ultimately, result in internal political (electoral) and policy costs. In contrast, more autocratic regimes may prefer to join to improve their legitimacy and status among their international peers, as suggested by David-Barrett & Okamura, 2016). In addition, it is also possible that diffusion operates in reverse for countries with illiberal or autocratic regimes. They may withdraw by inactivity (e.g. Turkey in May 2016) or by request (e.g. Hungary in December 2016) in order to take an explicit stand against the principles

of transparency and open government. Either way, similar system of government traits appear to play a more significant role than regional or cultural diffusion.

Our findings also indicate that diffusion occurs through international organizations. Some of these organizations seem to contribute to diffusion at a faster pace than others. The IMF, in particular, fits this pattern, even though we can rule out the possibility that this is due to the large number of IMF members in our sample. For the remaining international organizations, the pace of diffusion appears to be slower but consistent and statistically significant across all of them, suggesting these organizations may function as OGP learning hubs and confirming the role of epistemic communities in policy diffusion recognized in previous work (Adler & Haas, 1992; Galbreath & McEvoy, 2013).

The negative effect of our time trend variable is one last finding worth discussion. The analysis indicates that the probability of joining the OGP diminishes as time passes, which suggest that this multilateral initiative is struggling to attract new members in recent years and that there may be limits to its expansion above current levels. Thus, a more practical implication of this study is that the steering committee may need to play a stronger role in energizing the OGP community to convince nonmember countries of the merits of the initiative.

#### 7. Conclusion

This research sought to shed new light on the motivations surrounding the decision by national governments to join the OGP multilateral initiative. To that intent, we asked what is the role played by diffusion mechanisms – learning, competition, coercion and imitation – in the decision made by national governments to join the OGP?

Based on the results of the empirical analysis, three main conclusions can be highlighted. First, all diffusion mechanisms emerge as relevant for the expansion of the OGP, even more so than other internal determinants included in our models. Second, the findings also indicate that several mechanisms of diffusion may be operating concomitantly and contributing to the popularity of the OGP initiative. The results are consistent with the idea that competition in a 'race to the top' and symbolic emulation play a crucial role in the diffusion of the OGP, as national governments are more likely to join the initiative when countries in same region, with similar cultural traits and/or political regime have previously joined. Reputational benefits are the lubricant that facilitates the operation of these mechanisms, with national governments seeking to improve their institutional legitimacy and international status among their peers. Lastly, the results also show that countries adopting FOI legislation are also more likely to join the OGP. This is consistent with the idea that participation in open government initiatives are contingent on organizational readiness (Wang & Lo, 2016).



Fig. 5. Predictive margins for diffusion in international organizations (hypothesis 4).

Our research contributes to both academia and society. Scientifically, the study highlights the role played by diffusion mechanisms in explaining the adoption of the OGP by national governments. The attempt to link the four mechanisms of policy diffusion to the expansion of the OGP adds new insights as to how norms of transparency and participation initiatives travel across countries. This work also delivers more robust results of the determinants of OGP membership by including a larger number of countries in the analyses to avoid possible issues related to sample selection bias. The data set also covers nine years (2010–2018), which guarantee a more adequate time frame to capture longitudinal effects. For society, given the importance of the OGP in reshaping international policy discourses on e-government and public governance, our work underscores the responsibility taken on by the OGP in the diffusion of best practices of transparency and civic participation.

This study is not without its limitations. First, current data limitations prevent us from explicitly linking each of the four mechanisms of diffusion identified by Shipan and Volden (2008) to the individual variables testing diffusion. Each diffusion variable can easily capture more than one mechanism at work, but our design is unable to identify which mechanism is driving the statistical significance of the results. Second, a large number of adoptions (39) took place in 2011, which creates problems for estimating the empirical models. Although not critical, this fact introduces some lack of precision in the estimates because this specific data pattern makes it difficult to disentangle the variation among this group of countries.

Despite recent attempts to investigate the content of OGP initiatives in individual countries (Laboutková, 2018; Piotrowski, 2017; Wilson,

2021), more research is still needed to detect substantive changes in the implementation of open government practices under the auspices of the OGP, particularly using case studies to compare design and implementation practices by countries with different systems of government (e.g. democracies versus autocracies). Prior work comparing national open data policies under a specific framework can serve as a template for these types of studies (see Nugroho, Zuiderwijk, Janssen, & de Jong, 2015; Susha, Zuiderwijk, Janssen, & Grönlund, 2015; Zuiderwijk & Janssen, 2014). In addition, future work should also concentrate on investigating the diffusion of FOI laws. Using FOI laws as a predictor of OGP adoption makes empirical sense because the overwhelming majority of FOI laws were adopted before 2009 and, therefore, are plausibly seen as a pre-condition for joining the OGP. However, much less is known about the cause for the adoption of FOI legislation, which justifies a closer look at its determinants and whether diffusion mechanisms have played a role in their expansion across countries.

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#### CRediT authorship contribution statement

António F. Tavares: Conceptualization, Funding acquisition, Investigation, Methodology, Formal analysis, Project administration, Supervision, Validation, Writing – original draft, Writing – review & editing. Pedro J. Camões: Conceptualization, Investigation,

#### Appendix A

## Appendix 1

Logistic regression results controlling for the degree of democracy.

Methodology, Resources, Software, Validation, Writing – review & editing. João Martins: Conceptualization, Investigation, Resources, Software, Data curation, Visualization, Writing – original draft.

#### **Declaration of Competing Interest**

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Variables	(1)	(2)	(3)	(4)
Regional Diffusion		4.675***		3.422***
		(0.834)		(0.930)
System of Government Diffusion			13.074***	9.262***
-			(3.187)	(3.355)
Degree of Democracy	5.081***	4.964***	5.043**	4.051
	(1.288)	(1.357)	(2.514)	(2.538)
Founder Countries	1.598***	1.885***	2.206***	2.411***
	(0.318)	(0.328)	(0.419)	(0.399)
FOI laws	0.826**	0.212	0.868**	0.388
	(0.341)	(0.399)	(0.397)	(0.430)
Press Freedom	-2.772*	-2.050	-1.144	-1.166
	(1.475)	(1.468)	(1.700)	(1.584)
Openness	-0.123	-0.479	-0.293	-0.503
	(0.329)	(0.468)	(0.415)	(0.463)
Seats Opposition Parties	0.107**	0.041	0.103**	0.045
	(0.046)	(0.050)	(0.047)	(0.055)
Population, log	-0.118	-0.104	-0.145	-0.139
	(0.119)	(0.144)	(0.135)	(0.149)
GDP per capita, log	0.004	-0.114	0.195	0.072
	(0.123)	(0.149)	(0.142)	(0.158)
Time trend	-0.070	$-0.312^{***}$	-0.665***	-0.628***
	(0.054)	(0.090)	(0.145)	(0.132)
Constant	-2.716	-2.561	-7.293*	-5.013
	(2.587)	(2.916)	(4.212)	(4.459)
Observations	840	840	840	840

#### References

- Adler, E., & Haas, P. M. (1992). Conclusion: Epistemic communities, world order, and the creation of a reflective research program. *International Organization*, 46(1), 367–390.
- Baldwin, E., Carley, S., & Nicholson-Crotty, S. (2019). Why do countries emulate each others' policies? A global study of renewable energy policy diffusion. *World Development*, 120, 29–45.
- Berliner, D., & Erlich, A. (2015). Competing for transparency: Political competition and institutional reform in Mexican states. *American Political Science Review*, 109(01), 110–128.
- Berliner, D., Ingrams, A., & Piotrowski, S. J. (2021). Process effects of multistakeholder institutions: Theory and evidence from the open government partnership. *Regulation* & *Governance*. https://doi.org/10.1111/rego.12430
- Berry, F. S., & Berry, W. D. (1990). State lottery adoptions as policy innovations: An event history analysis. *The American Political Science Review*, 84(2), 395–415.
- Berry, F. S., & Berry, W. D. (1999). Innovation and diffusion models in policy research. In P. A. Sabatier (Ed.), *Theories of the policy process* (pp. 169–200). Westview.
- Bertot, J. C., Jaeger, P. T., & Grimes, J. M. (2010). Using ICTs to create a culture of transparency: E-government and social media as openness and anti-corruption tools for societies. *Government Information Quarterly*, 27(3), 264–271.
- Braun, D., & Gilardi, F. (2006). Taking 'Galton's problem' seriously: Towards a theory of policy diffusion. *Journal of theoretical politics*, 18(3), 298–322.
- Brooks, S. M. (2007). When does diffusion matter? Explaining the spread of structural pension reforms across nations. *Journal of Politics*, 69(3), 701–715.
- da Cruz, N. F., Tavares, A. F., Marques, R. C., Jorge, S., & de Sousa, L. (2016). Measuring local government transparency. *Public Management Review*, 18(6), 866–893.
   David-Barrett, E., & Okamura, K. (2016). Norm diffusion and reputation: The rise of the
- extractive industries transparency initiative. *Governance*, 29(2), 227–246.
- DiMaggio, P., & Powell, W. W. (1991). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. In W. W. Powell, & P. DiMaggio (Eds.), *The new institutionalism in organizational analysis* (pp. 63–82). Chicago: University of Chicago Press.

- Dolowitz, D. P., & Marsh, D. (2000). Learning from abroad: The role of policy transfer in contemporary policy-making. *Governance*, 13(1), 5–23.
- Elkins, Z., Guzman, A. T., & Simmons, B. A. (2006). Competing for capital: The diffusion of bilateral investment treaties, 1960–2000. *International Organization*, 60(4), 811–846.
- Erickson, J. L. (2014). Saving face, looking good, and building international reputation in east and west. In *Power in a complex global system* (pp. 194–207). Routledge.
- de Fine Licht, J. (2014). Policy area as a potential moderator of transparency effects: An experiment. Public Administration Review, 74(3), 361–371.
- Finnemore, M., & Sikkink, K. (1998). International norm dynamics and political change. International Organization, 52(4), 887–917.
- Fraundorfer, M. (2017). The open government partnership: Mere smokescreen or new paradigm? Globalizations, 14(4), 611–626.
- Galbreath, D. J., & McEvoy, J. (2013). How epistemic communities drive international regimes: The case of minority rights in Europe. *Journal of European Integration*, 35(2), 169–186.
- Gilardi, F. (2010). Who learns from what in policy diffusion processes? American Journal of Political Science, 54(3), 650–666.
- Gilardi, F., Füglister, K., & Luyet, S. (2009). Learning from others: The diffusion of hospital financing reforms in OECD countries. *Comparative Political Studies*, 42(4), 549–573.
- Gray, V. (1973). Innovation in the states: A diffusion study. American Political Science Review, 67(4), 1174–1185.
- Grimmelikhuijsen, S., Porumbescu, G., Hong, B., & Im, T. (2013). The effect of transparency on trust in government: A cross-national comparative experiment. *Public Administration Review*, 73(4), 575–586.
- Haas, P. M. (1992). Introduction: Epistemic communities and international policy coordination. *International Organization*, 46(1), 1–35.
- Harrison, T. M., & Sayogo, D. S. (2014). Transparency, participation, and accountability practices in open government: A comparative study. *Government Information Quarterly*, 31(4), 513–525.
- Heikkila, T., & Gerlak, A. K. (2013). Building a conceptual approach to collective learning: Lessons for public policy scholars. *Policy Studies Journal*, 41(3), 484–512.

- Hofstede, G. (1984). Culture's consequences: International differences in work-related values. Beverly Hill, CA: Sage Publications.
- Holzinger, K., & Knill, C. (2005). Causes and conditions of cross-national policy convergence. *Journal of European Public Policy*, 12(5), 775–796.
- Honig, D., & Weaver, C. (2019). A race to the top?: The aid transparency index and the normative power of global performance assessments. *International Organization*, 73 (3), 579–610.
- Ingrams, A. (2020). Administrative reform and the quest for openness: A Popperian review of open government. *Administration & Society*, *52*(2), 319–340.
- Ingrams, A., Piotrowski, S., & Berliner, D. (2020). Learning from our mistakes: public management reform and the hope of open government. *Perspectives on Public Management and Governance*, 3(4), 257–272.
- Janssen, M., Charalabidis, Y., & Zuiderwijk, A. (2012). Benefits, adoption barriers and myths of open data and open government. *Information Systems Management*, 29(4), 258–268.
- Laboutková, Š. (2018). Open government partnership: Unutilized potential in postcommunist EU members?(case of the Czech Republic). Innovation: The European Journal of Social Science Research, 31(3), 350–376.
- Lee, C. K., & Strang, D. (2006). The international diffusion of public-sector downsizing: Network emulation and theory-driven learning. *International Organization*, 60(4), 883–909.
- Marsh, D., & Sharman, J. C. (2009). Policy diffusion and policy transfer. Policy studies, 30 (3), 269–288.
- Meseguer, C. (2005). Policy learning, policy diffusion, and the making of a new order. The Annals of the American Academy of Political and Social Science, 598(1), 67–82.
- Meseguer, C. (2006). Rational learning and bounded learning in the diffusion of policy innovations. *Rationality and Society*, 18(1), 35-66.
- Meseguer, C. (2009). Learning, policy making, and market reforms. Cambridge: Cambridge University Press.
- Mooney, C. Z. (2001). Modeling regional effects on state policy diffusion. Political Research Quarterly, 54(1), 103–124.
- Nugroho, R. P., Zuiderwijk, A., Janssen, M., & de Jong, M. (2015). A comparison of national open data policies: Lessons learned. *Transforming Government: People*, *Process and Policy*, 9(3), 286–308.
- OECD. (2016). Open government: The global context and the way forward. Paris: OECD Publishing.
- OGP. (2011). The open government declaration. Retrieved November 25, 2019, from http://www.opengovpartnership.org/about/open-government-declaration.
- Osorio Gonnet, C. (2019). A comparative analysis of the adoption of conditional cash transfers programs in Latin America. *Journal of Comparative Policy Analysis: Research* and Practice, 21(4), 385–401.
- Piotrowski, S. J. (2017). The "open government reform" movement: The case of the open government partnership and US transparency policies. *The American Review of Public Administration*, 47(2), 155–171.
- Radaelli, C. M. (2000). Policy transfer in the European Union: Institutional isomorphism as a source of legitimacy. *Governance*, 13(1), 25–43.
- Rogers, E. M. (1962). Diffusion of innovations. New York: Free Press of Glencoe.
- Rosecrance, R., & Stein, A. (2001). The theory of overlapping clubs. In R. Rosecrance, & A. Stein (Eds.), *The new great power coalition: Toward a world concert of nations* (pp. 221–234). Rowan & Littlefield: Lanham, MD.
- Schimmelfennig, F., & Sedelmeier, U. (2004). Governance by conditionality: EU rule transfer to the candidate countries of central and Eastern Europe. *Journal of European Public Policy*, 11(4), 661–679.
- Schnell, S., & Jo, S. (2019). Which countries have more open governments? Assessing structural determinants of openness. *The American Review of Public Administration*, 49 (8), 944–956.
- Shipan, C. R., & Volden, C. (2008). The mechanisms of policy diffusion. American Journal of Political Science, 52(4), 840–857.
- Simmons, B. A., Dobbin, F., & Garrett, G. (Eds.). (2008). The global diffusion of markets and democracy. Cambridge: Cambridge University Press.
- Simmons, B. A., & Elkins, Z. (2004). The globalization of liberalization: Policy diffusion in the international political economy. *American Political Science Review*, 98(1), 171–189.
- Stone, D. (2004). Transfer agents and global networks in the 'transnationalization' of policy. Journal of European Public Policy, 11(3), 545–566.
- Stone, D. (2012). Transfer and translation of policy. *Policy Studies*, 33(6), 483–499. Studlar, D. T. (2006). Tobacco control policy instruments in a shrinking world: How
- much policy learning? International Journal of Public Administration, 29(4–6), 367–396.
- Susha, I., Zuiderwijk, A., Janssen, M., & Grönlund, Å. (2015). Benchmarks for evaluating the progress of open data adoption: Usage, limitations, and lessons learned. *Social Science Computer Review*, 33(5), 613–630.

- Thaler, R., & Sunstein, C. (2008). Nudge: Improving decisions about health, wealth, and happiness. Penguin Books.
- Tomz, M. (2008). Reputation and international cooperation: Sovereign debt across three centuries. Princeton, NJ: Princeton University Press.
- Tomz, M., King, G., & Zeng, L. (2021). RELOGIT: Stata module to perform rare event logistic regression. In Statistical software components S458936. Boston College Department of Economics.
- Towns, A. E., & Rumelili, B. (2017). Taking the pressure: Unpacking the relation between norms, social hierarchies, and social pressures on states. *European Journal of International Relations*, 23(4), 1–24.
- Transparency International. (2015). Local governance integrity: Principles and standards. Berlin: Transparency International.
- Walker, J. L. (1969). The diffusion of innovations among the American states. American Political Science Review, 63, 880–899.
- Wang, H. J., & Lo, J. (2016). Adoption of open government data among government agencies. Government Information Quarterly, 33(1), 80–88.
- Weyland, K. (2005). Theories of policy diffusion lessons from Latin American pension reform. World Politics, 57(2), 262–295.
- Weyland, K. (2005a). The diffusion of innovations: How cognitive heuristics shaped Bolivia's pension reform. *Comparative Politics*, 38(1), 21–42.
- Wilson, C. (2020). The socialization of civic participation norms in government ?: Assessing the effect of the open government partnership on countries e-participation. *Government Information Quarterly*, 101476.
- Wilson, C. (2021). Multi-stakeholder initiatives, policy learning and institutionalization: The surprising failure of open government in Norway. *Policy Studies*, 42(2), 173–192.
- Wirtz, B. W., & Birkmeyer, S. (2015). Open government: Origin, development, and conceptual perspectives. *International Journal of Public Administration*, 38(5), 381–396.
- Zhang, Y., & Zhu, X. (2019). Multiple mechanisms of policy diffusion in China. Public Management Review, 21(4), 495–514.
- Žuffová, M. (2020). Do FOI laws and open government data deliver as anti-corruption policies? Evidence from a cross-country study. *Government Information Quarterly*, 37 (3), Article 101480.
- Zuiderwijk, A., & Janssen, M. (2014). Open data policies, their implementation and impact: A framework for comparison. *Government Information Quarterly*, 31(1), 17–29.
- Zuiderwijk, A., Shinde, R., & Janssen, M. (2019). Investigating the attainment of open government data objectives: Is there a mismatch between objectives and results? *International Review of Administrative Sciences*, 85(4), 645–672.

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