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Tying the successor's hands or following the neighbor? Diffusion of access to information in Brazilian municipalities

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Why do political actors promote public transparency? Studies show that adherence to transparency can be both politically strategic, i.e., to tie the hands of the successor, and a result of observing the adoption of the policy made by other municipalities, i.e., to minimize the cost of information. We test both the political and the informational motivations to explain the adoption of transparency laws with a subnational analysis of the diffusion of LAI in Brazilian municipalities (2011-2019). Results show that both the informational and the political strategy motivations affect the probability of adopting the LAI. Socioeconomic factors are also important explanatory factors. However, an analysis of heterogeneous effects shows that the learning mechanism is relevant for reducing the impact of socioeconomic factors. This means that learning from neighboring municipalities minimizes the cost of information and the reliance on structural factors to promote transparency at the local level.
Keywords: transparency; access to information; diffusion; election; municipalities.

Atar as mãos do sucessor ou seguir o vizinho? Difusão do acesso à informação nos municípios brasileiros

Por que os atores políticos promovem a transparência pública? Estudos mostram que a adesão à transparência pode ser tanto politicamente estratégica, ou seja, para atar as mãos do sucessor, quanto resultado da observação da adoção da política feita por outros municípios, isto é, para minimizar o custo da informação. Testamos as motivações políticas e informacionais para explicar a adoção de leis de transparência com uma análise subnacional da difusão da LAI nos municípios brasileiros (2011-2019). Os resultados mostram que tanto o aprendizado quanto as motivações da estratégia política afetam a probabilidade de adoção da LAI. Fatores socioeconômicos também são importantes fatores explicativos. No entanto, uma análise dos efeitos heterogêneos mostra que o mecanismo de aprendizagem é relevante para reduzir o impacto dos fatores socioeconômicos. Isso significa que aprender com os vizinhos minimiza o custo da informação e a dependência de fatores estruturais para promover a transparência em nível local.
Palavras-chave: transparência; acesso à informação; difusão; eleição; municípios.

¿Atar las manos del sucesor o seguir al vecino? Difusión del acceso a la información en municipios brasileños

¿Por qué los actores políticos promueven la transparencia pública? Los estudios muestran que la adhesión a la transparencia puede ser tanto políticamente estratégica, es decir, para atar las manos del sucesor, como resultado de la observación de la adopción de la política hecha por otros municipios, esto es, para minimizar el costo de la información. Probamos las motivaciones políticas e informativas para explicar la adopción de leyes de transparencia con un análisis subnacional de la difusión de la LAI en los municipios brasileños (2011-2019). Los resultados muestran que tanto las motivaciones de aprendizaje como las de estrategia política afectan la probabilidad de adopción de la LAI. Los factores socioeconómicos también son factores explicativos importantes. Sin embargo, un análisis de los efectos heterogéneos muestra que el mecanismo de aprendizaje es relevante para reducir el impacto de los factores socioeconómicos. Esto significa que aprender de los vecinos minimiza el costo de la información y la dependencia de factores estructurales para promover la transparencia a nivel local.
Palabras clave: transparencia; acceso a la información; difusión; elección; municipios.

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1. INTRODUCTION

Why do political actors promote public transparency? This question is related to the puzzle of why rulers adopt policies that restrict them. While transparency is allegedly good for the quality of government, it constrains governments as it potentially increases the level of oversight over their decision-making and policy implementation (Berliner, 2014; Ferejohn, 1986; Stiglitz, 1999).

The diffusion of the so-called Freedom of Information (FOI) Laws worldwide has attracted the attention of scholars and mobilized the work of various advocates, especially from the 1970s, when the United States promulgated the Freedom of Information Act (Fox, 2007; Kosack & Fung, 2014). Its importance in fighting corruption, increasing participation, and improving democracy is based on the general argument that politicians behave better when observed (Bentham, 1995).

In Latin America, Colombia was the first adopter of a transparency law in 1985. But it was Mexico's 2002 legislation that was considered strong among developing countries, only surpassed by India's 2005 transparency initiative (Fox, 2007; Meijer, 2015). Brazil, in turn, promulgated its FOI, the Access to Information Law (LAI – *Lei de Acesso à Informação*), only in November 2011 (Lei nº 12.527, de 18 de novembro de 2011). It is, therefore, treated as a late adopter (Batista, 2017). Nevertheless, analysts consider Brazilian law strong (Michener, 2015b), although it still needs to advance its implementation (Michener, Contreras, & Niskier, 2018).

The LAI regulates access to information by addressing the procedures that should be adopted to ensure it. Entities controlled directly or indirectly by the Federal Government, States, Federal District and Municipalities, and private non-profit entities receiving public funds are subordinated to the LAI regime. The law establishes transparency as a rule and confidentiality as an exception. It provides for the disclosure of information that is of public interest, regardless of requests, among other points. Although it was adopted in 2011 and regulated in 2012, with the immediate application at the federal level, the law needs to be regulated in states and municipalities. And so, federative entities have the autonomy to decide how and when to regulate the law at the local level and, therefore, the specific rules and procedures to be enforced (Lei nº 12.527, de 18 de novembro de 2011).

In the case of Brazilian municipalities, what are the motivations that influence mayors to promote transparency initiatives? Literature focused on political factors emphasizes strategic reasons, especially political competition. Political actors would promote transparency as a way of tying the hands of successors. This is because promoting transparency is seen as a way to increase the visibility of the acts themselves (Berliner, 2014; Berliner & Erlich, 2015). A second motivation considers the informed

costs of decision-making. Transparency would be promoted through "adherence" to an international or national dissemination process. From the experience of mayors in similar contexts, it would be possible to identify what works and what doesn't and thus reduce the costs of promoting transparency by simply emulating the LAI of a neighboring municipality (F. S. Berry & W. Berry, 2007; Gilardi & Wasserfallen, 2019).

In short, we have mainly two explanations that often do not communicate with each other. A strategic motivation and a learning motivation. In this article, we test both arguments. We show that increasing information about LAI adoption through learning from municipalities in the same state and the strategic motivation of mayors in their second term both increase the likelihood of LAI regulation. Thus, informational and political incentives combine to accelerate the diffusion of LAI. However, socioeconomic factors such as economic development and population also explain why local governments promote transparency. Considering that these structural factors are harder to overcome, we analyze the heterogeneous effects. We show that the increased information provided by a larger number of municipalities adopting transparency laws in the state reduces the effect of socioeconomic factors. This shows an important yet tentative route to promote transparency in smaller and poorer municipalities.

We tested these arguments focusing on LAI diffusion in Brazilian municipalities from 2011 to 2019 from IBGE data (Brazilian Institute of Geography and Statistics). Brazil has over five thousand municipalities of different sizes, socioeconomic conditions, administrative capacity, and political composition. While keeping the main institutional design fixed, Brazilian municipalities show enough variation to test hypotheses about policy diffusion in a federative context. Therefore, this scenario is ideal for identifying the causes for the adoption of transparency laws.

We use the Cox Proportional-Hazards model to identify the effect of informational and political motivations and also of socioeconomic factors on the decision of whether and when to adopt LAI at the local level. Our results provide evidence that informational and strategic motivations are present when considering the diffusion of access to information laws. Socioeconomic factors also increase the probability of adoption. However, only informational motivations provide a route to reduce the effect of socioeconomic factors and a possible way to promote transparency in smaller and less developed municipalities.

The article presents two main contributions. The first is to bring new evidence to the arguments of learning and the political motivation to innovate. When considering whether to adopt LAI, mayors learn from their neighbors and consider the political strategy of tying their successor's hands. The second contribution is to bring evidence on the interaction between political and informational motivations and structural socioeconomic factors. Our results show that learning from their neighbors is a relevant strategy also to possibly overcome the difficulties of promoting transparency in smaller and less developed contexts.

This article is structured as follows. In addition to this first section introducing the article, the second section presents the motivations for public transparency. Based on this discussion, we present our argument and hypotheses. In the third section, we cover the research design used. In the next section, we present the results obtained. Finally, the last section brings the conclusion of the work.

2. MOTIVATIONS FOR PUBLIC TRANSPARENCY

Transparency in government can be defined as providing information about an actor to enable monitoring of their actions through external actors (Meijer, 2013). So, what factors may influence the decision of rulers to adopt transparency policies? This question can be answered both from the perspective of public policy diffusion and the specific debate on transparency.

In the framework of the diffusion of political innovations, it is understood that diffusion is an interdependent policymaking process in which the decision of the ruler to adopt a new policy is influenced by previous adoptions by other governments (Gilardi & Wasserfallen, 2019). In the second perspective, the authors discuss the normative role of transparency, its consequences, and the domestic political incentives in action for this decision (Berliner & Erlich, 2015; Kosack & Fung, 2014; Michener, 2015a, 2015b). Such approaches are complementary, as we shall see below.

There are several diffusion models that vary in terms of the channels of communication and the influence they assume to exist. For the sake of space, we will focus on the initial models since the others are variations of them. The first one is called the national interaction model. It assumes the existence of a national communication network between state officials. Through this network, policymakers learn about new programs implemented in other states (Gray, 1973). Another explanation, named the regional diffusion model, argues that governments are influenced to adopt a policy by states geographically close to them (Walker, 1969).

Following the logic of geographic proximity, the neighbor model determines that influence happens among states that share borders. In this case, the probability of innovation is proportional to the number or percentage of border states adopting the innovation. On the other hand, the fixed-region model sees multiple regions within a country. The logic of diffusion is conditional on states that are within the same region (F. S. Berry & W. Berry, 2007).

In addition to these models, the literature discusses four mechanisms of diffusion: learning, competition, pressure, and emulation. In the first one, policymakers learn rationally from other governments by observing the results of an innovation implemented by them in order to reduce uncertainty. In the second and third ones, governments respond to economic incentives. Finally, in emulation, decision-makers are concerned with looking at the adopting unit rather than the consequences of policies. While emulation leads to short-term effects, learning generates long-term outcomes (Gilardi & Wasserfallen, 2019; Shipan & Volden, 2008).

The learning mechanism, the most common of all diffusion models, is conventionally associated with the idea that policymakers make their decisions based on the consequences of public policies adopted by other governments. Thus, decision-makers systematically evaluate the results of these policies so that successful policies are more likely to be adopted than unsuccessful ones (F. S. Berry & W. Berry, 2007; Graham, Shipan, & Volden, 2013).

However, recent studies indicate several political elements within the diffusion process, which contradicts the notion that policy dissemination occurs through fact-based evaluations. "Political learning" is a highly politically mediated policy learning process. Thus, diffusion is not restricted to successful innovations, as decision-makers also care about political consequences, such as reelection (Gilardi, 2010; Shipan & Volden, 2008).

In this sense, the work of F. S. Berry and W. Berry (1990) establishes the unified model, which integrates the internal determinants of governments with the diffusion models. The assumption is that

internal government factors and systemic effects must intervene in the propensity for innovation. In this model, adopting a policy is a function of three elements. First, the internal factors are represented by a) the motivation to innovate and b) the obstacles to innovation and the resources to overcome them. The second factor concerns other state policies that may affect the decision to adopt (controls). Finally, there are the external factors related to the prior adoption of the policy in other unities.

Regarding internal factors, the motivations for innovation are the severity of the problem and the incumbent's level of electoral security. Regarding the obstacles and the resources available to overcome them, the literature sheds light on the importance of financial resources and other characteristics such as the individual's educational level or the size of organizations as proxies for the ability to innovate (F. S. Berry & W. Berry, 2007).

Concerning obstacles, the availability of resources would make it possible for the decision-maker to risk and try new programs or policies. This way, resource availability directly impacts the motivation to innovate by allowing obstacles to innovation to be overcome. Another important point is the ability to innovate. State capacity, or more specifically, local bureaucracy, enable the ruler to make decisions. Thus, low capacity can be a significant obstacle to innovation.

Regarding motivations, factors such as party competition and the composition of the Legislative could affect the willingness of the ruler to innovate. Parties facing competitive elections would be more likely to adopt new programs (Walker, 1969). Competition and control over the Legislative are also exploited by analyzing the adoption and design of the Freedom of Information Laws specifically (Berliner, 2014; Berliner & Erlich, 2015; Michener, 2015b). The logic proposed in the literature is that the response of the ruler must vary according to their level of security (or depending on the competitiveness and proximity of the elections): the more insecure the ruler, the more likely she will adopt new policies and, on the other hand, the less likely she will be to adopt broadly unpopular programs (F. S. Berry & W. Berry, 2007; Coêlho, 2012; Sugyiama, 2008).

In the second central debate for our argument regarding the transparency literature, there is a common understanding that political actors will oppose initiatives such as the Freedom of Information Laws (Berliner, 2014). Transparency policies can be costly for rulers because they interfere with their ability to make private gains from both the mandate itself as well as the information (Berliner, 2014; Ferejohn, 1986; Stiglitz, 1999). However, more recent studies indicate how FOI can be strategic for policymakers in specific contexts - the costs of transparency decrease compared to the benefits of secrecy (Berliner, 2014; Berliner & Erlich, 2015; Michener, 2015a, 2015b).

Thus, a competitive environment, as it represents electoral uncertainty about reelection, would offer incentives for adopting FOI laws, as voters can positively assess the credible commitment to transparency, anti-corruption, and better governance (Berliner, 2014). In addition, politicians with the imminent expectation of leaving the government may have incentives to adopt FOI laws to ensure their future access to government data and restrict their successor. At the same time, the expected exposure costs of passing such legislation are reduced, falling on the next ruler (Berliner, 2014). These arguments are respectively related to the reelection and the insurance mechanisms.

In a study conducted at the subnational level in Mexico, Berliner and Erlich (2015) find favorable evidence for the insurance mechanism. At the cross-country level, Michener (2015a) explains how in Panama, the opportunity to tie the hands of the possible successor was one of the factors

that influenced then-President Roberto Martinelle's decision to approve the 2013 reform. Other issues such as the pressure exerted by external factors and the congress and the desire to present approval as a symbolic legacy were also relevant. In Nicaragua, in turn, the legislation was passed at the beginning of the mandate of President Manuel Ortega, who had the minority of the seats in the legislative branch, suggesting that the opposition had adopted the law in order to restrict him (Michener, 2015a).

Another interesting point in Berliner and Erlich's (2015) analysis is the result that approval of Access to Information (ATI) initiatives in Mexican states is disproportionately more likely in the so-called "lame duck" period, the period between the defeat of the incumbent in the election and the end of their term. This result is inconsistent with the reelection argument (that rulers would embrace access to information to publicly and credibly commit to transparency and increase their chances of reelection) since the electoral dispute has already taken place.

With this discussion in mind, we argue that while transparency presents exposure costs for rulers, when they are in their last term, that is, without the possibility for reelection, the adoption of transparency policies becomes a political strategy to restrict their successor. The literature explores this possibility from the perspective of the insurance mechanism argument, but it generally focuses on electoral security, which depends on the competitiveness of elections.

However, the level of security of the ruler also depends on their perception of the possibility of reelection. On the other hand, mayors in the second term are certain that they cannot be reelected. The limitation is institutional since, in Brazilian municipalities, each mayor can only be reelected once, having a limit of two consecutive terms. This gives us the benefit of observing the mayor's behavior when she knows she will step down. Hence, we argue that second-term mayors may choose to adopt LAI as a way of "tying the hands" of their successor. In this way, the political actor can transfer transparency costs to whoever takes office next[1].

H1: second-term mayors are more likely to regulate the Access to Information Law.

In addition, in an innovation diffusion process, it is necessary to consider that the political actor needs information to anticipate the action's costs and benefits and establish appropriate procedures for their municipality. Thus, it is possible to "learn" from neighboring cities to reduce the information cost. In an extreme form of this learning, it is possible to simply "emulate" or "copy" the form adopted by municipalities that share the same characteristics due to being in the same state. Therefore, we propose the second hypothesis:

[1] Our analysis of the effect of mayors in their second term is different from the insurance argument defended by Berliner and Erlich (2015). In our argument, mayors would have incentives to adopt LAI in their second term due to their certainty that they will have to step down. So second-term mayors can tie the hands of their successor, whoever this successor is. Berliner and Erlich's argument refers to "lame duck" mayors that have already lost the election and know the identity of their successor. In this case, analyzing the effect of aligned and non-aligned successors becomes of interest. In our case, the mayor cannot anticipate who the successor will be. Of course, that the strategy of "tying the successor's hands" would be better informed if the mayor knew that an opposition mayor would take office. However, since we do not have information on electoral pools at the municipal level, we cannot include this in our analysis. However, this limitation represents a "hard test" to our hypothesis since it biases our estimates toward zero.

H2: The greater the proportion of municipalities that have adopted LAI in the state, the greater the likelihood of LAI regulation in the municipality.

However, although political and learning-related motivations are important in the debate on the adoption of transparency policies, it is not possible to analyze the issue without considering the effect of socioeconomic factors (Michener & Nichter, 2022). Political strategy and information cost affect motivation for innovation. However, it is also necessary to consider the structural factors that hinder the adoption of transparency policies. These structural factors are mainly the income level of the municipality and the size of the population.

Municipal income is indicative of the level of economic development, and it is expected that richer municipalities will be better able to promote transparency policies. This is for reasons related to the disposable income allocated to this type of transparency or the social demand for transparency since economic development is also associated with social development and sophistication of the population. In the same direction, the population is an important structural factor as it indicates the level of complexity and differentiation of the municipality[2]. Since the article focuses on local governments, these governments may involve tiny populations or metropolises. It is expected that the larger the population of the municipality, the greater the likelihood of innovation in promoting transparency.

H3: The greater the economic development, the greater the likelihood of LAI regulation in the municipality.

H4: The greater the population, the greater the likelihood of LAI regulation in the municipality.

An issue that arises in the debate on innovation in public policies is the relationship between socioeconomic factors and the promotion of innovative policies. Smaller and less developed locations would have fewer conditions and less chance to innovate. Furthermore, as structural factors are the product of a historical legacy and are difficult to change, these difficulties would be long-termed. Pointing out that socioeconomic factors increase the chance of promoting transparency leads to the conclusion that these policies will have a difficult path ahead. Therefore, it is interesting to understand which political factors or factors related to the systemic character of mutual influence between the units of a social system can help to mitigate the effects of socioeconomic factors and indicate a potential alternative route to promote innovative policies that do not depend on long-term structural change.

For this reason, we tested the heterogeneous effects between our main variables and socioeconomic structural factors. The expectation is that political motivation or learning from other state units will reduce the effect of socioeconomic factors on the adoption of transparency. In this way, it would be possible to overcome the difficulties of promoting transparency in smaller and less developed units.

[2] Of course, this argument holds for the average association between municipality size and development and transparency since small and poor municipalities may have strong transparency practices and large and rich municipalities may have weak transparency laws or no transparency at all. This point is important to call attention to the need for qualitative assessments to identify the important nuances of statistical associations in the study of transparency. For this topic, see Alves, Miranda, Teixeira, and Souza (2021) and Michener (2015c).

H5: The effect of the socioeconomic factors on the propensity to regulate LAI will be smaller for second-term mayors.

H6: The effect of the socioeconomic factors on the propensity to regulate LAI will be smaller the greater the proportion of municipalities that have adopted LAI in the state.

3. DATA AND METHODS

To test the effect of political strategy and information cost on the promotion of transparency, we analyzed the distribution of LAI in Brazilian municipalities in the period from 2011 to 2019. LAI was approved as national law in 2011. However, its provisions are general or federally related. In order for LAI to be effective at the local level, it is necessary to regulate it in the municipality, establishing specific rules for access, request, and confidentiality. For this reason, we use the LAI regulation by the municipality as a measure of local adoption of transparency.

LAI's regulation data are from the Municipalities Profile Survey, organized by IBGE. The edition of the survey that includes transparency data at the municipal level is 2019. Therefore, our variable of interest is the regulation or not of LAI, constituting a binary variable that assumes a value of 0 when it was not regulated and a value of 1 when it was regulated. In addition to the information on whether or not LAI was adopted, it is also relevant to identify the timing of the adoption; as for diffusion processes, it is important to ascertain not only who adhered to innovation but also who adhered at the beginning of the process (innovators) or who adhered to it at the end of the process (latecomers). For this reason, we also include the temporal dimension in the analysis.

The main independent variables are reelection and the state proportion of LAI adopters. The reelection variable is the operationalization of the political strategy argument. It is also binary and assumes the value 0 when the mayor is in the first term and 1 when she is in the second term and therefore can no longer be reelected. The data are also from the IBGE Municipalities Profile Survey. The second variable of interest is the proportion of municipalities in the same state that adopted the LAI. That is, for each *m* municipality it was calculated the proportion of municipalities in the same state in year *t* that had joined the LAI. This measure is an operationalization of the information cost argument. The state proportion of adopters variable is continuous and ranges from 0 to 1[3].

We also emphasize the importance of structural factors. We include two socioeconomic variables. The first is the level of economic development measured as the log of the municipal GDP per capita. The second is the size of the municipality, measured as the log of the total population. Control variables included identification between the mayor and the president, the proportion of local government officials classified as recruited through the meritocratic system of public examination, and the mayor's ideology. The identification between the mayor and the president is a binary variable that takes the

[3] A commonly used way of operationalizing the neighborhood argument is to calculate the proportion of adopters from border municipalities only. However, this operationalization is more appropriate for situations where the voter can "vote with their feet". That is, if a policy or service is not offered the voter can seek them in border municipalities, generating competition among local governments. As public transparency does not seem to be salient enough for a voter to move to another municipality, we opted for the use of the fixed region (state).

value 1 when the mayor is from the same political party as the president and 0 when the mayor is from a different party. This variable seeks to capture a vertical alignment through the political party in the diffusion of a policy formulated by the federal government to local governments.

Regarding the local bureaucracy, we include the proportion of municipal direct administration employees whose recruitment method was through public examinations. These employees are the most stable appointments since they enjoy tenure protected by law. Due to their status as civil servants, they are expected to be more policy skilled and be less in line with political interests. We use the proportion of civil servants (statutory employees) as a measure (Batista, 2015, 2017). Another control variable is the ideology of the mayor. The literature does not point to an association between left or right parties and the promotion of transparency. However, the ideological position of the mayor might be relevant, and for this reason, we include it as a control variable. Data comes from Bolognesi, Ribeiro, and Codato (2021) and is a continuous variable with values from 0 to 10; the greater the value more to the right.

The phenomenon we seek to explain presents two particularities that determine the analysis method. First, adoption is a binary variable. Second, the timing of adoption is also relevant. For these reasons, the database on LAI adoption is organized to include all Brazilian municipalities (5,570) from 2011 to 2019. The unit of analysis is the municipality-year. The number of observations per municipality is determined by the time of adherence to LAI. The municipality and all independent variables are observed from 2011 to the year that it adheres to LAI, after which the municipality "leaves" the analysis. This framework is standard for policy diffusion analysis, in an approach known as "event history analysis" (Box-Steffensmeier & Jones, 2004). In this approach, the event is adherence, and we observe the "history" of the event until the moment of its occurrence.

We used a survival analysis model known as the Cox Proportional Hazards Model for statistical analysis. In the Cox model, the two dimensions of the dependent variable are considered simultaneously: adoption and the moment of adoption (Box-Steffensmeier & Jones, 2004). In the survival model, we estimate the probability of the event occurring, as it has not occurred so far. When the event occurs, the unit no longer contributes information of interest and is excluded from the analysis. This approach is also appropriate for dealing with right censoring. Municipalities that did not adopt by 2019 can still adopt after that date. This means that the municipalities have not joined "yet." The Cox model was chosen because it does not assume a specific risk distribution; it only assumes that they are proportional. That is, they do not vary in time. We specifically use the extended Cox model to consider independent variables that vary over time (Carvalho et al., 2011).

4. DIFFUSION OF FREEDOM OF INFORMATION LAWS

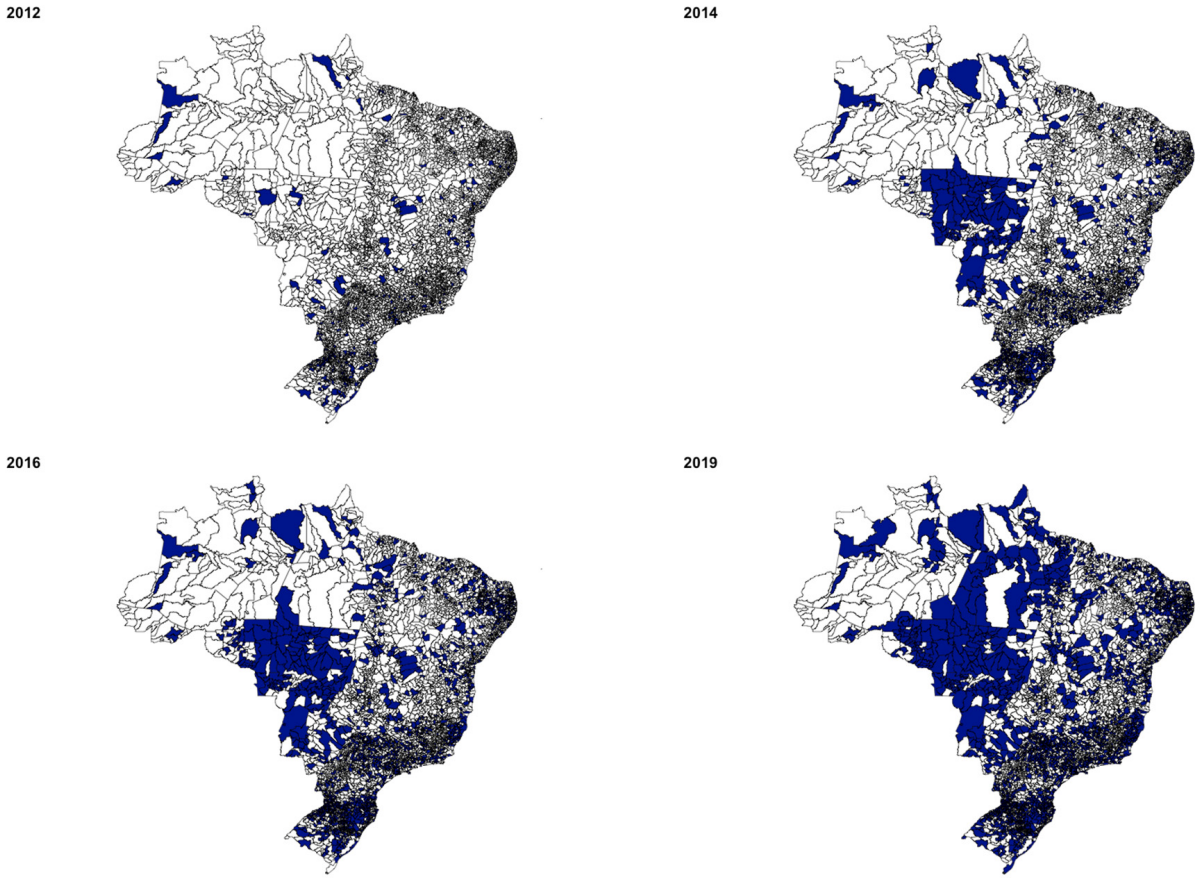
The Access to Information Law was approved nationally in 2011. However, by 2019 only 2,502 municipalities had regulated the specific provisions for its operation locally. This means that less than half of the municipalities had regulated the LAI in nine years of existence. Graph 1 shows the distribution of adherence to LAI over time. Data on the frequency of adopting municipalities show that the number increased by 2013, indicating that the spread of LAI had gained momentum. However, this number drops significantly in 2014 and continues to be stable until 2019, showing that adherence to LAI does not present the expected linearity of the beginning of the diffusion process.

GRAPH 1 ACCESS TO INFORMATION DIFFUSION IN BRAZILIAN MUNICIPALITIES

Source: Elaborated by the authors with IBGE data.

Graph 1 shows that Brazilian municipalities choose to join or not to LAI and when they join. Figure 1 shows the spatial distribution of LAI adopters in four time periods. The maps show two important patterns. First, there is a spatial association between LAI adopters, especially those adhering early in the diffusion process. Several municipalities close together regulated transparency in a sequence showing evidence of spatial dissemination and that the learning mechanism is in operation. This pattern is especially visible in the center-west of the country. The spatial distribution also shows areas where transparency has not been promoted. This is especially visible in the country's north, a poorer region with small cities (in terms of population). However, isolated municipalities also adopt LAI, indicating that some internal factors, such as the political context, may be at work.

FIGURE 1 SPATIAL DISTRIBUTION OF ACCESS TO INFORMATION LAWS



Source: Elaborated by the authors with IBGE data.

In sum, there is variation in which municipalities adopted, the timing of adoption, and where these are located. Considering the mayor as the key actor in decision-making about adoption and the timing, what motivates this political actor to promote transparency? As we discussed earlier, two main explanations can be found in the debate on the topic. The first focuses on strategic motivation, while the second focuses on the adherence of the rulers to the process of policy dissemination, which in the case analyzed here, would be the process of sequential regulation of LAI in Brazilian municipalities. These explanations are generally analyzed separately, and we do not know much about how they interact with each other. Which of the two motivations - strategic or learning - prevails in Brazilian municipalities, and how do they interact? Table 1 presents the results of this analysis.

TABLE 1 EXPLANATORY FACTORS FOR ACCESS TO INFORMATION DIFFUSION

	Dependent variable:	
	Adoption/Time	
	(1)	(2)
State Proportion	0.010***	0.010***
	(0.001)	(0.001)
Reelected Mayor	0.159***	0.210**
	(0.046)	(0.088)
Aligned President	0.489***	0.489***
	(0.060)	(0.060)
Bureaucracy	0.001	0.001
	(0.001)	(0.001)
Ideology	-0.020*	-0.020*
	(0.012)	(0.012)
GDP per Capita (log)	0.156***	0.156***
	(0.031)	(0.031)
Population (log)	0.212***	0.212***
	(0.017)	(0.017)
State Proportion*Reelected		-0.002
		(0.002)
Observations	39,110	39,110
Log Likelihood	-23,304.300	-23,304.080
Wald Test	408.970*** (df = 7)	408.930*** (df = 8)
LR Test	377.044*** (df = 7)	377.495*** (df = 8)
Score (Logrank) Test	412.002*** (df = 7)	412.084*** (df = 8)

Note: *p**p***p<0.01.

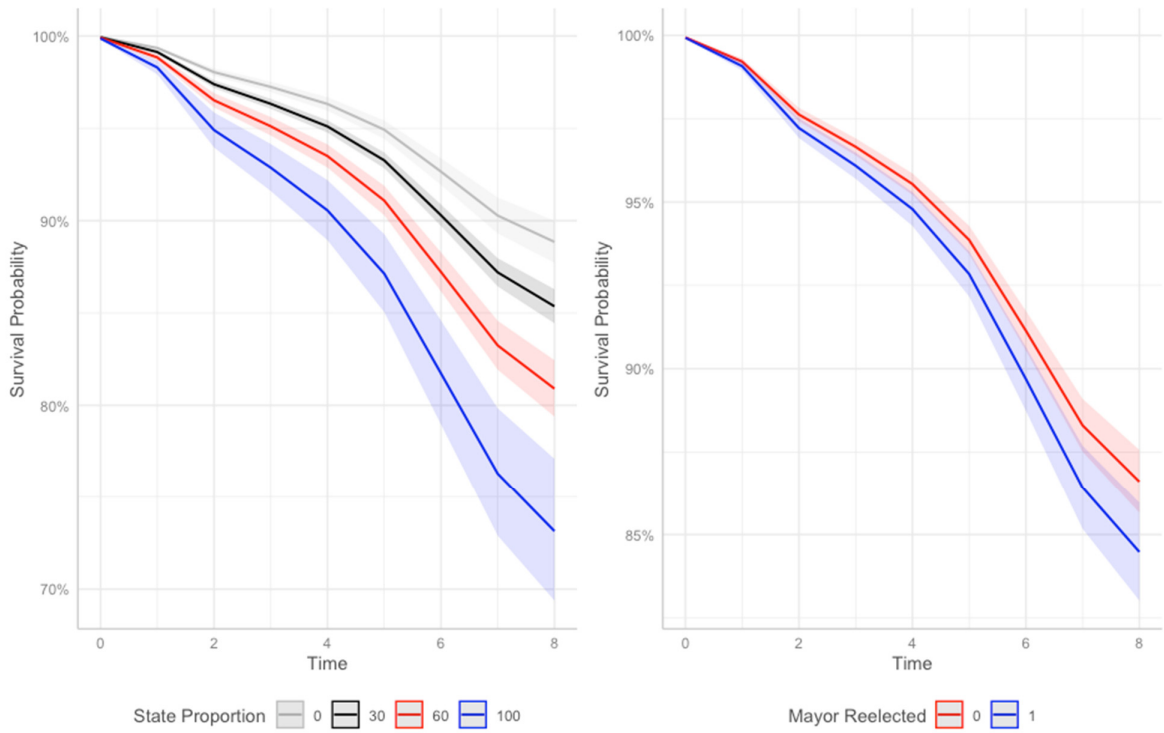
Source: Elaborated by the authors.

The results from table 1 show that the proportion of adopting municipalities in the state, a proxy for learning from neighbors, has the expected positive sign and is statistically significant in both specifications. This means an acceleration of the risk of adherence to LAI when the proportion of adopting municipalities in the state increases. This result is consistent with the hypothesis presented based on the argument of reducing informational costs and learning from neighboring municipalities, i.e., the more surrounding municipalities adopt LAI, the more information circulates in that state, the more LAI regulatory models are available for inspiration, and emulation, and thus the easier it is for the municipality to propose its local regulation.

In the case of the political strategy argument of tying the hands of the successor, the results in Table 1 also show evidence in favor of the hypothesis that mayors in the second term would be more likely to regulate LAI, keeping the other factors constant. The results are positive and statistically significant in both specifications. This result indicates that political strategy by itself does affect adherence to LAI. By the rational political calculus argument, mayors would seek to regulate LAI in their second term to increase the transparency of their successor's acts. Adoption costs would be paid by the next mayor. It is also important in this argument that since these second-term mayors will no longer run for reelection, the electoral costs of transparency are reduced. Our results show that second-term mayors do have incentives to join LAI as a way of constraining their successors.

Graph 2 shows the relationship between political and informational motivations and the diffusion of transparency laws in Brazilian municipalities. In survival models, it is common to report the relationship between the variables of interest using the survival probability. The event of interest here is the municipality adopting LAI at the local level. When this happens, it is considered that the event has occurred, and the municipality is no longer at risk. Therefore, the survival probability is the number of subjects surviving the event considering the number of subjects at risk. We can see from the graph that the survival probability decreases in time and that our variables of interest reduce this probability.

GRAPH 2 STATE PROPORTION, REELECTED MAYOR, AND SURVIVAL PROBABILITY (COX MODEL)



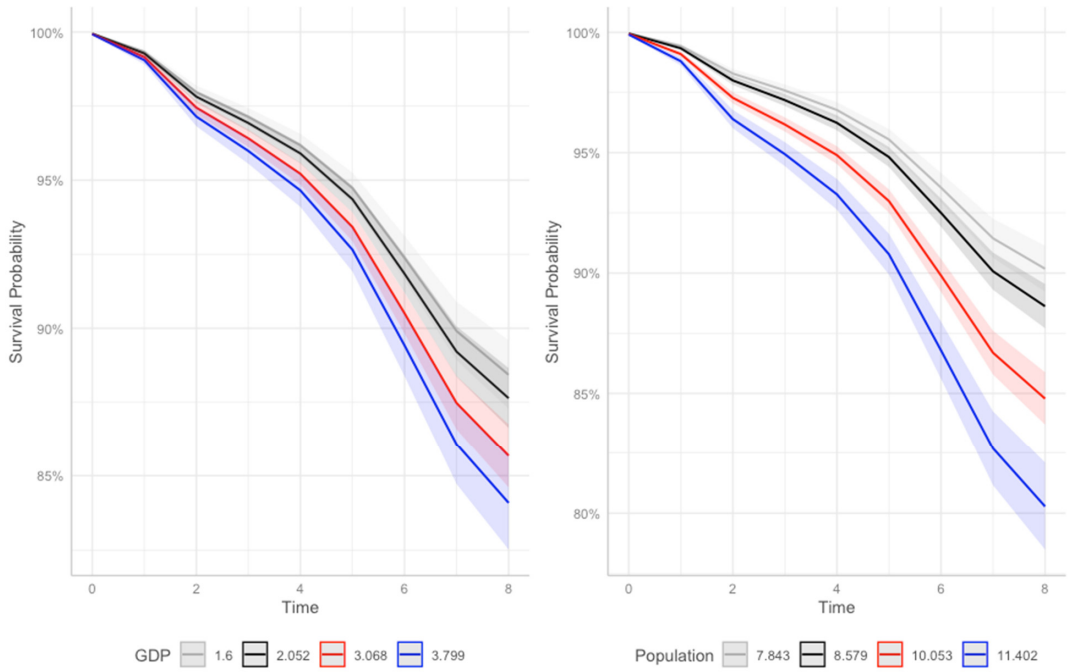
Source: Elaborated by the authors.

Considering the left panel, the relationship between the proportion of municipalities in a state adhering to LAI and the probability of survival is always negative. Comparing the curves with different values of state proportion, we can see that the greater the state proportion, the more reduced the survival probability. Conversely, this indicates that greater the adoption of LAI (occurrence of the event). In sum, results suggest that the effect of learning from neighbors is always positive, decreasing the survival probability to the event. The right panel shows the relationship between the mayor's term and survival probability. Again, the survival probability decreases in time. However, mayors in their second term and that, therefore, cannot be reelected show a slightly reduced probability of survival. This shows evidence that mayors promote transparency as a political strategy to tie the hand of their successors.

We also included the interactive term between political strategy and policy learning. The objective was to identify whether the political incentive increased the value of policy learning. However, the interaction between reelection and state proportion, which shows the change in the effect of the state-proportion when the mayor is in the second term, is not statistically significant.

In addition to the main variables of the proposed argument, we also included in the models some variables of interest for understanding the diffusion of LAI at the municipal level, specifically socioeconomic factors. Regarding these structural characteristics of the municipalities, we show that GDP also has a positive effect on the propensity to adhere, indicating that the higher the economic development, the faster the risk of adherence to transparency. The size of the municipality corroborates the expectation that larger municipalities more easily adopt LAI. These results show evidence that socioeconomic factors are important, yet not determinant, to understanding policy innovation at the local level and the structural conditions for promoting transparency. Graph 3 shows these results graphically.

GRAPH 3 SOCIOECONOMIC FACTORS AND SURVIVAL PROBABILITY (COX MODEL)



Source: Elaborated by the authors.

Comparing different levels of GDP and population (quantiles), we show that socioeconomic conditions are important to understand the incentives and constraints on the mayor's decision to promote transparency. Both variables reduce the probability of survival, indicating an accelerating risk of the event occurrence. This means that economic development and municipality size, both characteristics path-dependent and of difficult short-term change, are fundamental to promoting transparency. This result is aligned with previous research on policy innovation at the local level in general and the promotion of transparency in particular. However, one important question is whether this effect of socioeconomic factors can be reduced by other factors more susceptible to short-term change.

Table 2 shows the results of the interaction between our main variables (political and informational motivations to adhere to transparency) with these socioeconomic factors. The main goal of this additional analysis is to understand under what conditions the political strategy and the learning motivation are relevant, considering the socioeconomic challenges to transparency.

TABLE 2 EXPLANATORY FACTORS FOR ACCESS TO INFORMATION DIFFUSION – INTERACTIVE TERMS

	Dependent variable:			
	Adoption/Time			
	(3)	(4)	(5)	(6)
State Proportion	0.010***	0.010***	0.037***	0.064***
	(0.001)	(0.001)	(0.004)	(0.008)
Reelected Mayor	0.147	-0.279	0.153***	0.154***
	(0.189)	(0.356)	(0.046)	(0.046)
Alignment President	0.489***	0.489***	0.490***	0.471***
	(0.060)	(0.060)	(0.060)	(0.060)
Bureaucracy	0.001	0.001	0.001	0.001
	(0.001)	(0.001)	(0.001)	(0.001)
Ideology	-0.020*	-0.020*	-0.022*	-0.020*
	(0.012)	(0.012)	(0.012)	(0.012)
GDP per Capita (log)	0.155***	0.156***	0.462***	0.152***
	(0.036)	(0.031)	(0.058)	(0.031)
Population (log)	0.212***	0.199***	0.212***	0.415***
	(0.017)	(0.020)	(0.017)	(0.033)
Reelected*GDP	0.004			
	(0.064)			

Continue

	Dependent variable:			
	Adoption/Time			
	(3)	(4)	(5)	(6)
Reelected*Population		0.046		
		(0.037)		
State Proportion*GDP			-0.009***	
			(0.001)	
State Proportion*Population				-0.006***
				(0.001)
Observations	39,110	39,110	39,110	39,110
Log Likelihood	-23,304.300	-23,303.530	-23,285.010	-23,279.560
Wald Test (df = 8)	409.020***	413.420***	434.280***	439.980***
LR Test (df = 8)	377.049***	378.580***	415.617***	426.537***
Score (Logrank) Test (df = 8)	412.187***	417.457***	439.057***	441.442***

Note: *p**p***p<0.01.
Source: Elaborated by the authors.

The results in table 2 show that, as for the main effect, the variable used as a proxy for reduced cost of innovation or the learning motivation is always positive and statistically significant. Following the neighbor is a strategy used in lower socioeconomic conditions[4]. This result indicates that even when the municipality has low economic development or is very small in terms of population, the effect of the proportion of municipalities in the state adopting LAI is positive and statistically significant. The interactive terms show a negative and statistically significant effect considering both economic development and population. This result indicates that the greater the state proportion, the smaller the effect of both GDP and population on the risk of adopting LAI. In other words, the greater the possibility of learning from the neighbors, the smaller the effect of socioeconomic conditions on LAI adoption.

However, the effect of the political strategy to tie the successor's hands implemented by mayors in their second term is no longer statistically significant when considering the interaction with the socioeconomic conditions of the municipality. This result indicates that political motivation is not an important moderating factor to reduce the structural effect of socioeconomic conditions. The political strategy is relevant for itself, but not to increase the chances of promoting transparency in adverse conditions. Considering the interaction between political motivation, cost of information, and socioeconomic conditions, our results show that learning from the neighbors, but not political motivations, reduces the reliance on structural factors in promoting transparency at the local level.

The models also include important control variables. The results show that identification between the mayor and the president has a positive and statistically significant effect. This means that the

[4] The interpretation of main effects with interactive terms is the effect of the variable when the interacted variable is zero.

party does manifest as an effective mechanism of vertical alignment in the diffusion of innovations from the federal government to municipal governments. It also shows that a bureaucracy composed of civil servants does not affect the propensity to adhere to LAI. This result is important because it means that the decision to adopt LAI is not directly related to bureaucratic capacity. Interestingly, ideology has a negative and statistically significant effect, showing evidence that mayors more to the right are less inclined to adopt LAI.

The main results presented in the section are three. The diffusion of LAI at the municipal level is still timid. Adherence to transparency is higher in larger, richer municipalities. Given that one of the main objectives of transparency is to improve resource management, especially by municipalities that have acquired central status through the municipalization of social policies, this result shows that much remains to be done locally. Transparency did not become automatic with the enactment of LAI in 2011. It takes incentives and work to make local governments effectively transparent.

Secondly, the argument of the political strategy of not tying one's own hands but instead transferring the cost of transparency to political competitors has become almost prevalent in political science literature. We show that holding the macro institutional design of the country constant, there is evidence to support this direct effect of rational political calculation on adherence to transparency. The strategy of tying the hands of the successor is indeed observed.

Lastly, according to our results, state diffusion of LAI regulations appears to be a key factor. The cost of information is high for small and resource-lacking municipalities. The ability to simply emulate procedures that have already been implemented and tested in similar contexts is crucial for adoption. We can then point out that the broader diffusion of LAI can be stimulated by reducing the cost of information and also by local initiatives that increase the learning of local governments through the dissemination of similar experiences.

5. CONCLUSION

Why do political actors promote public transparency? That was the question we sought to answer in this article. Based on the theoretical debate on the subject, we argued that the observation of municipalities of the same state that have adopted the Access to Information Law and mayors in their second term both increase the likelihood of regulation of transparency laws at the local level. Lower learning costs to implement the policy and the political incentives for reelected mayors to tie the hands of their successors would increase the adoption of transparency.

Using Cox proportional hazard models to analyze the diffusion pattern of the access to information law in Brazilian municipalities, we found evidence favorable to the operation of both mechanisms. Mayors in their second term are at greater risk of joining the LAI. We argued that this positive effect of the second term would be a strategy by mayors to tie the hands of their successors. Instead of committing to transparency and bearing the costs of information during their own tenure, mayors would seek to join the LAI when the political costs to themselves are low and the possibility of imposing costs on the successor is high.

We also found evidence favorable to the learning mechanism. We argued that the analysis of LAI diffusion needs to include a systemic element in which each unit in the social system can observe, learn, or emulate the behavior of other units, which, because of proximity, share similar characteristics. The

proportion of municipalities in the same state was used as a proxy for the reduced cost of information and the possibility of learning from neighbors. We then identified that the higher this proportion of adopters more accelerated the risk of adherence to LAI. In sum, both political and informational factors are important to explain the promotion of transparency at the local level.

However, these factors are not the only ones. It is also necessary to emphasize socioeconomic aspects, which are fundamental for the capacity for innovation at the local level. Brazil has more than 5 thousand municipalities. Some are large and economically developed; others (the vast majority) are small and poorly developed. Exploring these socioeconomic factors, we identified that both the level of economic development and the size of the municipality matter for adherence to transparency. The higher the GDP and population, the greater the risk of adherence to LAI.

An essential point of this conclusion is that socioeconomic factors are arguably important for policymaking at the local level. Still, they are also clearly structural, path-dependent, and difficult to change in the short term. For this reason, we explore potential moderating effects in the relationship between socioeconomic factors and political and informational factors. The results show evidence that the informational mechanism can be a moderator of the effect of structural factors. The greater the proportion of municipalities that adopt LAI, the smaller the effect of socioeconomic factors on the risk of adherence to LAI. Thus, our results show that learning from their neighbors is a relevant strategy also to overcome the difficulties of promoting transparency in smaller and less developed contexts.

A limitation of the present study is the quantitative orientation of the research design. The study of transparency promotion, especially in local government, would benefit immensely from qualitative studies focused on decision-makers' points of view and the causal mechanism of the observed associations. The quantitative associations and mean effects focus hide important variations between specific municipalities and their trajectories and experiences (Alves et al., 2021; Michener, 2015c). Another limitation and potential research agenda is the inclusion of other factors that may be relevant to explain the diffusion of transparency, such as the size of the governing coalition and the organization of the opposition in local legislatures. The first factor is important because transparency may be adopted at the local level as a political strategy of the mayor to keep tabs on their coalition partners (Michener, 2015b). The second may become relevant as the opposition may organize to promote transparency as a strategy to control the incumbent government (Michener, 2015a). These are important factors that may be explored in future studies.

The present article brings two main contributions. The first is to bring new evidence to the debate on learning and the insurance policy mechanisms as motivations to innovate. We found favorable evidence for both arguments when considering transparency diffusion, showing that information costs and political motivations matter for the diffusion of innovations. The second contribution is to emphasize the importance of socioeconomic factors and how these can be moderated. With these findings, we seek to contribute to the knowledge about policy diffusion, specifically of transparency laws. We also contribute to the knowledge on the combination of informational, political, and structural factors for the explanation of public policies.

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