

RESEARCH

What Drives Online Transparency Practices at the Local Level? Evidence from 2222 Municipalities in Switzerland

Vincent Mabillard¹ and Nicolas Keuffer²

¹ Université Libre de Bruxelles, BE

² Université de Lausanne, CH

Corresponding author: Vincent Mabillard (vincent.mabillard@ulb.be)

Regarded as a core principle of good governance, transparent government communication has been discussed at the national level in particular. This article aims to extend this reflection by assessing the transparency practices of all Swiss municipalities in 2018, using an index of the volume of information published online (LTI). The results show that the practices of municipalities are very heterogeneous and that the population size and financial capacity of municipalities have a significant impact on the amount of information disseminated on their official websites.

Keywords: Online transparency; local government; information disclosure; digital state; Switzerland

En tant que principe fondamental de bonne gouvernance, la communication de l'État a été examinée principalement au niveau national. Cet article vise à étendre cette réflexion en évaluant les pratiques de transparence de toutes les municipalités suisses en 2018, à l'aide d'un indice déterminant le niveau d'informations publié en ligne (LTI). Les résultats montrent que les pratiques des municipalités sont très hétérogènes et que la taille de la population et la capacité financière des municipalités ont un impact significatif sur la quantité d'informations diffusées sur leurs sites web.

Mots-clés: Transparence en ligne; gouvernement local; mise à disposition d'information; État digital; Suisse

Als Kernprinzip guter Regierungsführung wurde die Kommunikation des Staates vor allem auf nationaler Ebene untersucht. Dieser Artikel will diese Überlegungen erweitern, indem er, anhand eines Index den Grad ihrer Offenlegung online (LTI), die Transparenzpraktiken aller Schweizer Gemeinden im Jahr 2018 evaluiert. Die Ergebnisse zeigen, dass die Praktiken zwischen den Gemeinden sehr heterogen sind und dass die Bevölkerungszahl und die finanzielle Kapazität der Gemeinden einen erheblichen Einfluss auf den Umfang der auf ihren Websites verbreiteten Informationen haben.

Stichwörter: Online-Transparenz; Kommunalverwaltung; Offenlegung von Informationen; Digitaler Staat; Schweiz

1. Introduction

Depicted by Heald (2012: 31) as a “public virtue, which it is discreditable or inadvisable to oppose,” transparency is still considered as an essential pillar of good governance. Praised for its power to reveal hidden secrets, corrupt practices or dysfunction, it is growingly used by public organizations as a guideline in their operations. It is also frequently promoted for its supposed beneficial effects on the efficiency of administrations, citizen trust and participation, and accountability from public bodies towards the public at large (Esty 2006). These factors have led to the global development of transparency, especially through the explosion of Freedom of Information (FOI) laws, which allow citizens to request official information from public bodies. These laws are expected to solve accountability problems within democratic systems, where governments “often act without informing the public and, for the most part, are not subject to sanctions for wrongdoing” (Ackerman & Sandoval-Ballesteros 2006: 86).

Increased transparency is usually regarded as a way to rebalance the relationship between the governed and those who govern. This relationship particularly matters at the local level, where people generally show more interest in policies that have an impact on their lives: interactions tend to be more frequent, since services delivered at the local level directly affect citizens. Public organizations can therefore better respond to the requests expressed by the population. Yet the responsiveness of public authorities and the quality of interactions between them and citizens depend on transparency practices (Welch et al. 2005).

This article focuses on the proactive release of information. Recently, technological evolutions have oriented contributions on the matter towards online disclosure of information. Meijer (2009) states that the development and adoption of the internet by public administrations have changed the relationship with the governed, giving them more timely information via computer-mediated transparency. This perspective is adopted in this study since governments are increasingly communicating via online channels. Transparency is therefore understood as the voluntary dissemination of information by municipalities on their website. It is essential to inform citizens about the characteristics, internal workings or performance of public organizations. This perspective differs from the passive form of transparency, which relies on specific requests sent to public bodies by citizens, usually in the framework of a dedicated legislation.

Switzerland provides an interesting case study to explore government transparency. Although it belongs to the most advanced nations in terms of technology penetration among households according to the International Telecommunication Union (ITU 2017) and ranks first regarding internet for business usage, technology adoption differs significantly between the private and the public sector. The country still relies on an administrative culture of secrecy, despite the ideological shift provoked by the implementation of the FOI law in 2006 (Cottier 2014). Moreover, several cantons do not yet have legislation on transparency.

Although some contributions have tried to identify the determinants of online transparency at the local level (e.g. de Araujo & Tejedo-Romero 2016), no attempt has so far been made to provide an exhaustive, nation-wide analysis. Our study covers all 2222 municipalities of Switzerland (as of 1 January 2018) through a self-created index of information disclosed on the municipalities' websites. This extensive effort helps to respond to the **first research question (RQ₁)** addressed here: how transparent are Swiss municipalities in their online communication? Our study also considers variables used in previous research and specifically concentrates on dimensions relevant in the Swiss context. The **second research question (RQ₂)** takes a more explanatory perspective and focuses on variables directly related to transparent practices. From this point of view, what can explain higher levels of transparency in Swiss municipalities' online communication?

The article is structured as follows. The first part focuses on theoretical grounds for explaining the success of transparency and for studying the concept in the public sector. In the second part, the Swiss context is developed, including the passing of the FOI law. The construction of the online transparency index is also presented. The third part concentrates on the methodology used to develop our analysis model and the related hypotheses. The fourth part provides readers with more detailed information about the results of our study, referring more specifically to the answers given to the hypotheses. Finally, these results are further discussed in the concluding part.

2. Theoretical underpinnings

Bouckaert and Pollitt (2011: 111) argue that “interestingly, transparency is not something which seems to fit neatly into some of the groupings which we have found important for other aspects of reform. Thus, we cannot say, for example, that the core NPM states were way ahead (or behind) in the transparency stakes”. This observation extends to the issue of adoption: why do governments favor transparency and pass freedom of information laws threatening their power (Worthy 2017)? Research has remained rather exploratory so far, presenting scattered evidence related to the determinants leading governments to act

in a more transparent way. From a theoretical perspective, Erkkilä (2012: 129) insists on the paths taken by jurisdictions towards transparency, saying that path dependencies can help “understand why reforms tend to take differing institutional forms in national contexts”. Particular circumstances related to a given context can also individually explain why the idea of transparency reaches the top of the political agenda at a certain point in time. All in all, it became an increasingly popular concept due to its expected contribution to better governance. Indeed, the strong instrumental value conferred to transparency attributed a central role to the notion and raised high expectations regarding its ability to increase citizen participation and trust in government (Mabillard & Pasquier 2016).

The literature on transparency shows that the multifaceted character of the concept poses a major challenge to clearly defining its boundaries (Pasquier 2013). Meijer et al. (2012) distinguish between two dimensions of open government: participation and transparency, which is understood as access to government information, both intentional and through whistle-blowing acts. Here, we focus on intentional access to official information, especially the proactive release of information by public authorities). For clarification purposes, differences between transparency types are summarized below (see **Table 1**).

According to Pasquier (2013), proactive disclosure is the less codified form of transparency, although it has been a concern at the local level since the 1970s. An international treaty is under way and guidelines do exist regarding environmental information, but focuses mainly on the member states' requirements to respond to requests sent by citizens. Following a recommendation made in 1981 at the Council of Europe (COE) regarding access to administrative documents, a Convention was created in 2009 in Tromsø, Norway. A vast majority of COE members has not signed the Convention, indicating that transparency remains a disputed issue and that many countries prefer to adopt a conservative posture when it comes to government openness. Nevertheless, Ukraine became the tenth country to ratify the Convention in May 2020, which launched this international document, since ten ratifications were needed to the enforcement of the Convention. As a result, a Group of Specialists will be established to monitor the implementation provisions of the Convention by the signatory states.¹

Studies focusing on passive transparency have bloomed recently, resulting from the explosion of FOI laws across the globe. These laws provide “the public [with] a legally guaranteed right of access to information held by the government, the main objective being to force public authorities to disclose what they would rather keep secret” (Pasquier & Villeneuve, 2007: 149). While requests submitted to government bodies can be complementary to the proactive release of information, they remain a distinctive feature of transparency due to the constraint character of the documents disclosed. Although a majority of jurisdictions now have legislation on transparency, some refrain from granting access to information rights, also at the subnational level.

Despite the recent development of research on passive transparency, issues related to technology focus on proactive disclosure of information online. In this sense, Meijer (2009) claims that computer-mediated transparency is often regarded as improving governance, based on the idea that “computer-mediated

Table 1: Main types of transparency.

	Definition	Characteristics
Active	Proactive release of information on a <u>voluntary basis</u> , increasingly through online platforms (especially on government websites and apps)	Less codified form of transparency (Pasquier 2013), but increasingly used following the development of information and communication technologies (ICTs)
Passive	Disclosure of information on a <u>constrained basis</u> (as a response to official FOI requests or non-FOI requests)	Most codified form of transparency when a legislation on the matter exists (FOI). Laws' features differ strongly from one case to another (Worthy 2017)
Forced	Spontaneous, <u>uncontrolled disclosure</u> of information by internal or external stakeholders, triggering quick reactions from governments	Processes surrounding whistleblowing phenomena are not always codified but protection regimes are being reinforced (Council of the EU 2019)

¹ The ratification by the Ukrainian Parliament was communicated by the Council of Europe in May 2020 (<https://www.coe.int/en/web/kyiv/-/ukraine-has-ratified-the-council-of-europe-convention-on-access-to-official-documents>). Switzerland has not signed the Convention, showing its cautious approach to transparency.

transparency gives people better information and thus contributes to the rationalization of society" (Meijer 2009: 257). As a result, information published on websites continues to grow, and a significant amount of recent studies on transparency have focused on proactive dissemination of information online, often using it as the main dependent variable (da Cruz et al. 2016). This approach is preferred here, as websites of Swiss municipalities have been coded into an index used to create the dependent variable of our analytical framework.

From an empirical point of view, the review of the literature shows that most contributions have focused on a large number of variables, thereby trying to determine which factors can explain the dissemination online of information by public authorities. These variables can be gathered in specific categories: socio-demographic (e.g. population size), financial (e.g. municipal taxes), institutional and political (e.g. government characteristics) or organizational (e.g. size of government) (Albalade del Sol 2013; Caamaño-Alegre et al. 2013; Tejedo-Romero & de Araujo 2018). It should be noted that a majority of these studies' statistical models have been applied to the specific cases of Portugal and Spain. For this reason, variables and indicators used in this particular context have been reframed and relevantly selected according to the peculiarities of the Swiss case.

3. Transparency in the Swiss context: transparency index, determinants and hypotheses

In Switzerland, the implementation of the Federal Act on Freedom of Information in the Administration (LTrans)² in 2006 changed the way administrations work, since all documents – except for exemptions specifically set in the legislation – can be requested by citizens. Worthy (2017) explains that FOI emerges as a result of institutional reforms, the strong symbolism of openness making FOI hard to resist and hard to escape for jurisdictions that have adopted it. In Switzerland, transparency gained popularity through early working groups, which planned the draft of an FOI law. At the subnational level, cantons remain autonomous and do not depend on the LTrans; some of them have not adopted any legislation on transparency, arguing that the system functions well in their jurisdiction as things stand.

3.1 The local transparency index (LTI)

Although details about the LTrans have been extensively discussed at the national level (Pasquier 2013), contributions about proactive disclosure remain almost non-existent. Here, we take a global perspective on active transparency online to deal with **RQ₁**: how transparent is the online communication of Swiss municipalities? This is addressed through the creation of the local transparency index (LTI), which was built by collecting data on all Swiss municipalities' websites.³ It consists of six dimensions based on the index used by da Cruz et al. (2016). The process consisted in the elimination of indicators that do not apply at the municipal level in the Swiss case through a random selection of municipal websites (e.g. information communicated by other levels of government).

All dimensions include a set of indicators (**Table 2**), which have been coded 1 (information can be found on the website) or 0, allowing us to compile scores (non-weighted means) and draw up a ranking for all municipalities in Switzerland (N = 2222). Since active transparency remains the focus of the present article, the LTI is used here as the dependent variable.

3.2 Determinants of local government transparency and research hypotheses

The determinants of transparency are presented together with corresponding hypotheses. This empirical strategy, in line with a previous study on transparency at the local level (Tejedo-Romero & de Araujo 2018) allows us to develop a series of independent variables integrated into our statistical model. The multivariate analysis (ordinary least squares regression – OLS) integrates cluster standard errors (CSE) to overcome the problem of having variables at different levels (cantonal and municipal). Indeed, the existence of a FOI law is cantonal and applies equally to all municipalities in a given canton, while other variables are situated at the municipal level. This will enable us to respond more precisely to **RQ₂**, which aims to pinpoint what factors explain a higher level of proactive online transparency in certain municipalities compared to others.

² 152.3 Federal Act of 17 December 2004 on Freedom of Information in the Administration (Freedom of Information Act, LTrans).

³ Data were retrieved manually from all websites in the span of three months in 2018, using a codebook. Link to the dataset: https://www.researchgate.net/publication/341370817_Local_Transparency_Index_CH_Final.

Table 2: Dimensions and indicators of the local transparency index (LTI).

Dimensions	Indicators
<i>A. Organizational information, social composition and operation of the municipality</i>	<ol style="list-style-type: none"> 1. General information on the role and functions of the executive body (distribution of the departments or <i>dicastères</i>) 2. Roles and functions of the legislative commissions 3. Biographical note/CV of the members of the executive council 4. Possibility of direct contact with members of the executive council (email or/and phone) 5. Register of interests of members of the executive council 6. Agenda/minutes of the municipal legislative sessions in the last 2 years (either one or the other)
<i>B. Reports and planning</i>	<ol style="list-style-type: none"> 1. Annual activity report (already done) 2. Strategic plan (undertaking) 3. Public works in progress (underway)
<i>C. Local taxes, rates and regulations</i>	<ol style="list-style-type: none"> 1. Information on the tax rate 2. Information on municipal taxes 3. Regulations 4. Publication of a newsletter or an information journal
<i>D. Relations with citizens as customers</i>	<ol style="list-style-type: none"> 1. Search engine on the website of the municipality 2. Links to social networks 3. Possibility of submitting a request online 4. Information on opening hours (municipality)
<i>E. Public procurement</i>	<ol style="list-style-type: none"> 1. Tenders for public contracts
<i>F. Economic and financial transparency</i>	<ol style="list-style-type: none"> 1. Publication of the annual budget 2. Publication of municipal accounts

3.2.1 Population size

Although the elected representatives of small municipalities may show better responsiveness to citizens' demands, studies that empirically tested the factors leading to greater dissemination of information found a positive and statistically significant impact of size, because of the increased resources available to larger municipalities and the greater number of activities that need to be communicated (de Araujo & Tejedo-Romero 2016). Since the Swiss municipal structure is highly fragmented,⁴ with population as well as resources and tasks performed varying considerably, the number of inhabitants in a municipality (FSO, 2018a) is tested here.

Hypothesis 1: Larger municipalities are more likely to proactively disseminate information on their website.

3.2.2 Municipal autonomy

According to the theoretical model developed by Schmidt (2013), transparency is expected to increase the legitimacy of public authorities. Transposed to the local level in Switzerland, this approach has been used to test the relation between the level of autonomy and transparency at the local level (Keuffer & Mabillard 2019). It revealed a significant relationship between transparency and autonomy when the latter was used as the main independent variable. Municipal autonomy was considered as a complex relational construct in which municipalities "reflect and develop a sense of place through political and social interaction" (Pratchett 2004: 366). Subsequently, the realization of formally granted municipal autonomy through political activities was apprehended through the perceptions of executive bodies' members (ZHAW & IDHEAP 2018).⁵ Taking into account the influence of local factors, municipal autonomy is also regarded here as a bottom-up

⁴ As of 1 January 2018, the population of the 2222 Swiss municipalities varies considerably, the average of all municipalities' population size being 3818 and the median 1507 inhabitants (FSO 2018a).

⁵ Question 38: "In general, what is the degree of autonomy of your municipality in your opinion?" (1 = no autonomy; 10 = far-reaching autonomy).

phenomenon, and we assume that online dissemination of information will be more intensive in more autonomous municipalities.

Hypothesis 2: More autonomous municipalities are more likely to proactively disseminate information on their website.

3.2.3 Political culture

Reforms guided by the New Public Management (NPM) ideas of transforming the internal organizational structure, the steering instruments and the processes of delivering services to citizens represents the most widespread changes in Swiss municipalities (Kersting & Vetter 2003). The NPM movement has strengthened transparency to bring citizens closer to the authorities and change the bureaucratic model into a customer-friendly service enterprise. However, empirical evidence shows that it has spread unevenly across the country because there are important cultural differences between the language areas when it comes to the role of the state and of municipalities, with the Latin part being more resistant to reforms challenging the state as the unique provider of public services (Ladner 2016).

Hypothesis 3: French- and Italian-speaking municipalities are less likely to proactively disseminate information on their website.

3.2.4 Political participation

As far as political variables are concerned, the literature examined very often includes voter turnout, expressed as the percentage of participation in the last municipal elections (Albaladejo del Sol 2013; Tejedoro-Romero & de Araujo 2018). In Switzerland, we concentrate on the turnout in the last elections of the municipal executive, based on data collected in a recent survey on Swiss municipalities,⁶ and take into account the close relationship between citizens and the authorities. Consequently, a greater interest in local politics expressed through electoral turnout may encourage the authorities to give more information on plans, budgets and activities.

Hypothesis 4: The higher the turnout in the elections of the municipal executive, the larger the volume of information proactively disseminated by these municipalities on their website.

3.2.5 Existence of an access to information law

In other federalist countries such as the USA or Canada, all states/provinces have enacted an FOI law, but only 19 Swiss cantons out of 26 have implemented such legislation (applicable at the municipal level). We argue that municipalities located in a canton where transparency is supported through an FOI law may be more transparent in their online communication with citizens. To this end, we have created a dummy variable expressing whether a municipality is situated in a canton where a law on information exists or not. Darbishire (2010) has shown that FOI laws, increasingly incorporating guidelines for more proactive transparency, are expected to stimulate the voluntary release of information by local authorities. In Switzerland, guides of good practices are distributed to the municipalities when FOI laws exist, highlighting the need for them to communicate voluntarily their actions.

Hypothesis 5: Municipalities located in a canton where a law on access to information exists are more likely to proactively disseminate information on their website.

3.2.6 Municipal taxes

This variable is retrieved from a contribution by Caamaño-Alegre et al. (2013), who expect a positive association between per-capita municipal taxes and government transparency. When citizens pay higher taxes, they are supposedly entitled to demand more information, and the municipality has more resources to provide the population with higher levels of information. We obtained the effective cost of taxes in every Swiss municipality (for a married couple without children who earn a median annual salary of CHF 6502; FSO 2016) by using a comparative website, this variable being unavailable in official public records.⁷

⁶ This survey was sent to the secretaries of all 2255 Swiss municipalities in 2017 (response rate = 82.8%) (ZHAW & IDHEAP 2017).

⁷ We obtained the data by entering manually the 2221 municipalities on comparis.ch. No data for Basel-City since municipal and cantonal taxes overlap.

Hypothesis 6: The higher the municipal taxes, the greater the volume of information proactively disseminated by these municipalities on their website.

3.2.7 Municipal workforce

Another variable related to resources available for communication concerns the staff working in a municipality's administration to deliver public services. We have created a proxy for administrative capacity by considering the total amount of full-time positions for each municipality (FSO 2018b). According to Fairbanks et al. (2007: 32): "when agencies and communicators consider opening up agency processes they have to balance the impact that committing more resources in one area will have on another area". In this vein, we expect that municipalities with more staffing resources will communicate more transparently.

Hypothesis 7: The larger the municipal workforce, the greater the volume of information proactively disseminated by municipalities on their website.

3.2.8 Median age

Age was found to have an inverse relationship with higher levels of transparency, especially when considering elderly vs. young people in municipalities (Bernick et al. 2014). In Switzerland, older individuals tend to vote more and to be generally more active politically (Adler 2016). In this sense, we expect municipalities with a higher percentage of elderly people to be more transparent on their activities, since the demand for information may be higher in such municipalities. Here, we have created a more precise variable to test this relationship by using the median age for all municipalities (based on FSO 2018a).

Hypothesis 8: The higher the median age in a municipality, the larger the volume of information proactively disseminated by the municipality on its website.

4. Results

4.1 Transparency practices in Swiss municipalities' online communication

This section answers the first research question on the active transparency practices of Swiss municipalities by presenting the results of our self-created index of online transparency (See in **Table 3** below). The LTI potential range goes from 0 to 1 but only one municipality reaches the effective maximum of 0.97 (mean = 0.41; standard deviation = 0.15). Of the municipalities that score the minimum of 0, about 20 did not have their own website in 2018. Since these are small municipalities located in mountainous valleys important formal information is provided by the region where they are located. Regarding the distribution of the LTI, no problem of skewness (-0.251) or of kurtosis (-0.032) has to be underlined and 50% of municipalities have a score between 0.31 and 0.51 (median = 0.43).

Table 3: Descriptive statistics.

	N	Minimum	Maximum	Mean	St. Deviation
LTI, own elaboration (municipal websites)	2222	0.000	0.972	0.411	0.146
Population size (2017), natural logarithm	2217	2.565	12.877	7.333	1.257
Perceived municipal autonomy (2017), 10 = far-reaching autonomy	2105	1	10	6.284	1.298
Language area (2018), 1=German-speaking municipality	2212	0	1	0.643	0.479
Turnout in the elections of the municipal executive (2017), %	1455	3	95	46.572	16.778
Existence of a cantonal FOI law (2018), 1 = yes (own calculation)	2222	0	1	0.905	0.293
Municipal tax (2018) for standard profile, own calculation based on comparator website	2221	1767	12278	7175.045	1573.073
Municipal full-time equivalent posts (2015), own calculation based on FSO (2018b)	2167	0.020	11298	42.073	291.456
Median age (2017), own calculation based on FSO (2018a)	2218	31	80	45.613	3.941

The results show great diversity among the different indicators. The online communication of Swiss municipalities is on average weak (below 17%) regarding the functions of legislative commissions, biographical notes and the register of interests of members of the executive council and annual activity reports. Low scores are also observed in the cases of annual activity reports for example. By contrast, it is very frequent (the mean is above 79%) for Swiss municipalities to disseminate information about the responsibilities assumed by the executive body, regulations, and a search engine is almost always available on their website. The country map (**Figure 1**) below shows the overall results for all municipalities, according to four classes. These classes correspond to quartiles, meaning that all data have been sorted in four categories, each containing the same number of observations. Apart from the differences between municipalities, it is interesting to note that only a quarter of them score above 0.51 on an index that ranges from 0 to 1.

The results displayed on **Figure 1** show the vast diversity of Swiss municipalities, both in terms of characteristics and transparency practices. These differences are mainly related to size and geography, since large municipalities and urban areas tend to be more transparent. This result can be interpreted in the light of several elements, starting with the resources (human, technical and financial) at their disposal and the fact that more people need to be informed, and through a more “distant” relationship compared to small municipalities, where direct contacts may be more frequent between local authorities and their citizens. However, it remains to be seen what factors can explain these differences, taking into account other explanatory variables commonly found in the literature. This will be done in the next section through a multivariate analysis of the LTI and the determinants of transparency in Switzerland.

4.2 The determinants of transparency at the municipal level

Our findings are based on a multivariate analysis (OLS), taking the LTI as the dependent variable and the predictors presented above as the main determinants of transparency (independent variables). From a statistical point of view, the R^2 value explains 34.9% of the total variance (**Table 4**). No collinearity problem has been observed here, with a minimum value of -0.507 and a maximum value of 0.621. Furthermore, the variance-inflation factors (VIF) were also tested to analyze multicollinearity. Their values (min. 1.031; max. 2.025) are all lower than 5, thereby indicating the absence of multicollinearity in our model.

The most striking result is the importance of the municipality size. In line with most previous contributions on the subject (i.e. Albalade del Sol 2013; de Araujo & Tejedo-Romero 2016), it is strongly significant.

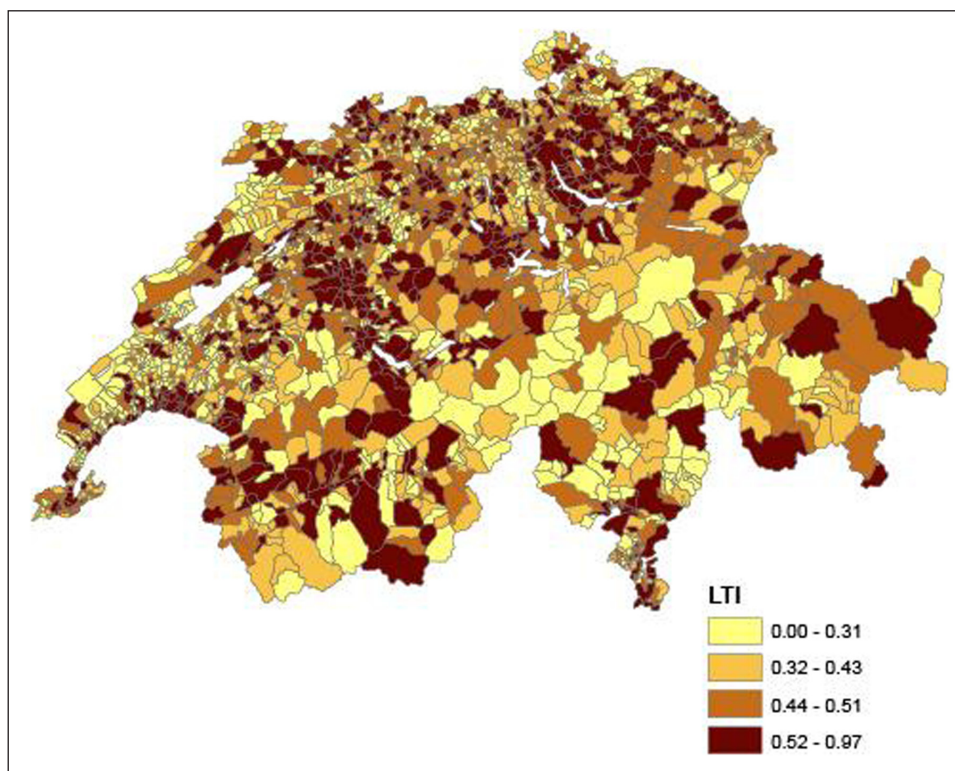


Figure 1: Local transparency index (LTI) in 2222 Swiss municipalities regrouped in four classes. Notes: N = 2222. Four classes, 0.00 = the least transparent, 0.97 = the most transparent.

Table 4: Determinants of Swiss municipalities' online communication (standardized beta coefficients and clustered standard errors).

Predictors	OLS	CSE
Ln population size (2017)	0.070***	0.003
Perceived municipal autonomy (2017)	0.002	0.002
Language area (2018)	0.001	0.009
Turnout in the elections of the municipal executive (2017)	0.000	0.000
Existence of a cantonal FOI law (2018)	-0.040**	0.013
Municipal tax (2018)	0.005*	0.002
Municipal full-time equivalent posts (2015)	6.293E-6	1.722E-5
Median age (2017)	0.002*	0.001
Constant	-0.232***	0.060
R2	0.349	

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Consequently, H_1 can be confirmed since larger municipalities are more likely to proactively disseminate information on their website. The main interpretation that can be drawn from this result is related to the greater resources available in larger municipalities. This was already raised by Gallego-Álvarez et al. (2010), who argued that administrative and financial capacity could affect the development of e-government, including municipalities' websites. Moreover, the targeted population is also larger, which makes it even more important to disseminate more information online. Finally, the greater distance between municipal authorities and their population prevents a more direct relationship, more frequently found in smaller municipalities.

This result remains especially interesting in the Swiss case in the absence of a metropolis and a rather fragmented institutional and geographical reality. This fragmentation can also explain why the other institutional and cultural predictors presented in our analysis model are not significant. As a result, we reject the corresponding hypotheses regarding autonomy and political culture (H_2 and H_3). Although local autonomy is formalized (to different degrees) at the cantonal level, the activities and actions of Swiss municipalities are very diverse even within the same canton, reflecting the great demographic, socioeconomic and financial diversity that characterizes the Swiss municipal level (Keuffer & Horber-Papazian 2019). These peculiarities of the Swiss case contrast with other contexts, for example Portugal, where financial autonomy is an important driver of transparency (Tavares & da Cruz 2020). However, the difference between the sample size and the construction of the variable calls for a deeper investigation when comparing the two results.

Regarding political culture, our results corroborate the assessment from Bouckaert and Pollitt (2011), who argued that more advanced NPM states were not systematically ahead in terms of government openness, although performance management and competition principles are often associated with increased transparency. Our results add evidence to the missing link between NPM reforms and transparency, a reflection that extends to Web 2.0 and social media tools in recent studies (e.g. Bonsón et al. 2012).

Moreover, it was expected that higher participation from citizens in municipal elections would trigger stronger demands for transparency, based on the idea that high levels of engagement and political interest would spark the demand for increased transparency (Piotrowski & van Ryzin, 2007). However, this variable is not significant in our model, leading us to reject H_4 ; this is unsurprising in Switzerland, due to the low levels of participation at the local level (48% in 2017) in European comparison (Steiner et al. 2020).

Interestingly, one of the most significant and strongest predictors in our model relates to the FOI law. Almost always neglected in previous studies on proactive dissemination of information online, the passive form of transparency plays a role, in a rather unexpected way. In cantons which have adopted legislation on the public's access to official information, municipalities tend to be less transparent than their counterparts in cantons where such legislation has not yet been passed. Consequently, we reject our hypothesis on the effect of passive transparency on proactive dissemination of information online (H_5). This observation can be interpreted through the prism of adoption: indeed, transparency laws have sometimes been enacted in cantons where political scandals raised awareness. On the contrary, we may deduce that in cantons without

legislation, the situation remains more satisfactory, leading to higher levels of proactive dissemination of official information on the municipalities' websites.

In addition, our results indicate that the amount of taxes collected by the municipalities does stimulate more information disclosure on a voluntary basis, thereby confirming H_6 . This contradicts what has been previously observed empirically in other settings (e.g. in Spain: Caamaño-Alegre et al. 2013; Tejedó-Romero & de Araujo 2018). This should however be nuanced since the coefficient is quite low and not highly significant. Besides, online transparency indexes are built differently, including diverse types of information (financial transparency for instance): this calls for cautiousness when comparing these studies. The staffing capacity does not play a significant role in Switzerland (H_7 , invalidated). This is surprising since this variable was expected to influence online transparency practices, as it has been previously shown that government size had a significant effect on the development of more open governments (Grimmelikhuijsen & Feeney, 2017). This is not the case in Switzerland, where governments with less staffing capacity in larger municipalities are more proactive.

Finally, age also plays a role in the dissemination of information by municipalities. Although socio-demographic variables do not belong among the main determinants of transparency according to the literature, this finding is in line with previous results observed in other contexts. Indeed, in the U.S., Piotrowski and van Ryzin (2007) show that older persons are more likely to demand greater transparency. Older people are more active politically in Switzerland (Adler 2016) and, although they are less likely to use the internet, municipalities with a higher percentage of elderly people tend to disseminate more information on their website, thereby confirming H_8 .

5. Conclusion and discussion

This article aimed at answering two research questions. The first question addressed the proactive dissemination of information by Swiss municipalities on their website, based on a self-created index of local transparency covering all 2222 Swiss municipalities. Findings show that Switzerland is characterized by strong diversity regarding transparency practices, reflecting the institutional fragmentation at the local level. Low scores on the LTI can be explained by the absence of detailed information on the executive councils' members and their potential conflict of interests with external stakeholders. In addition, communication about annual activity reports is often missing. The scores are counterbalanced by a more frequent dissemination of information about the responsibilities assumed by the executive body and the municipal regulatory framework. It would be interesting to further investigate the main characteristics of online transparency in other settings to see if these are Swiss specificities or more general trends.

The second question focused on variables expected to influence transparent practices. The results underline the importance of four explaining factors, two of them playing a central role and being highly significant. Firstly, smaller municipalities are less likely to disseminate a higher volume of information online because of the greater proximity and the potentially more direct relationship with the citizens. Moreover, in larger municipalities, the greater number of activities and the larger population lead to a higher level of online transparency.

Secondly, findings indicate that municipalities situated in cantons where no such law exists score higher in terms of transparency. This can be interpreted through the concept of path dependency, which highlights the absence of the need to pass a law when the situation is perceived as satisfactory. It should be added that transparency reforms in Switzerland are mostly supply-driven, following a global trend (Meilland 2013), thereby reinforcing this scenario. This is particularly interesting since it sheds new light on the relationship between active and passive transparency.

Finally, two other determinants also influence online transparency practices. Financial capacity of municipalities has a limited effect on online communication. It would be especially interesting to further investigate whether these financial means translate into better technical infrastructure and capacity and/or respond to demanding citizens who pay high municipal taxes. Moreover, median age also plays a minor yet significant role on municipal online communication. This contradicts empirical evidence recorded in previous studies (e.g. Tavares & da Cruz 2020), in which municipalities with an ageing population tend to communicate less on their website. It would be particularly interesting to dig deeper into this issue, since younger generations (at least in Switzerland) are less interested in politics (Adler 2016) but use websites more frequently. This may lead to a paradoxical situation in which municipalities should communicate online more frequently to reach younger people but at the same time must be reactive towards older people, who are more demanding in terms of local transparency. This study meets with some limitations. The first refers to the static approach preferred here. Although inevitable at this stage, it should nevertheless be

noted that our study does not take the evolution of websites and mergers of municipalities into account. Moreover, only online communication has been taken into account as an indicator of active transparency. We acknowledge that other channels may be preferred by municipalities to connect with their citizens. In this sense, an exploratory study from Keuffer and Mabillard (2019) with executive councilors revealed that other channels such as direct relationships with citizens are sometimes favored in small municipalities. This should be further explored, although feasibility remains a concern in Switzerland, where the number of municipalities is high.

A second limitation concerns the construction of the LTI. The added value of using an index lies in the simplification of information related to the multi-faceted concept of transparency. However, it does not allow for differences in municipal practices among the dimensions: these were selected and constructed taking the particularities of the Swiss context into account. The disadvantage of such an adaptation is that our measure is not systematically comparable with other countries. However, we are convinced that the LTI is a precious informational resource and that the provision of the dataset will lead to further investigation in Switzerland and beyond.

A final limitation refers to the determinants of transparency selected here. The alignment of predictors with previous studies would have enhanced the external validity of the paper and enabled a more systematic comparison. However, tests of several variables have shown that some are not amplifying the explaining power of the analysis model (especially political variables). More importantly, several variables are unavailable for all Swiss municipalities, mainly due to local specificities (e.g. elected councilors with no party affiliation) and because of the lack of harmonization between accounting systems (most financial variables).

Keeping these shortcomings in mind, our findings lead to several interesting paths for further research. For instance, it would be relevant to extend the measure of municipal transparency practices in a longitudinal perspective in order to better grasp their development over time. It would also be particularly interesting to compare data from cantons where transparency legislation does not currently exist but is expected to be passed soon (e.g. canton of Thurgau). The investigation of this issue would contribute to the discussion about the relationship between active and passive transparency in a rather innovative way. All told, this study contributes to the existing literature by providing evidence from an under-investigated country, Switzerland, and paves the way for further research in the field of public management and communication. Nevertheless, a more systematic comparative approach would require a harmonization of the indicators used and the measurement preferred in studying the issue of local transparency in different jurisdictions.

Competing Interests

The authors have no competing interests to declare.

References

- Ackerman, J. M., & Sandoval-Ballesteros, I. E.** (2006). The global explosion of freedom of information laws. *American Law Review*, *58*(1), 85–130.
- Adler, T.** (2016, June 29). La Suisse sur la voie de la gérontocratie? *Tribune de Genève*, 18.
- Albalade del Sol, D.** (2013). The institutional, economic and social determinants of local government transparency. *Journal of Economic Policy Reform*, *16*(1), 90–107. DOI: <https://doi.org/10.1080/17487870.2012.759422>
- Bernick, E. L., Birds, J. M., Brekken, K., Gourrier, A. G., & Kellogg, L. D.** (2014). Explaining county government fiscal transparency in an age of e-government. *State and Local Government Review*, *46*(3), 173–183. DOI: <https://doi.org/10.1177/0160323X14556819>
- Bonsón, E., Torres, L., Royo, S., & Flores, F.** (2012). Local e-government 2.0: Social media and corporate transparency in municipalities. *Government Information Quarterly*, *29*(2), 123–132. DOI: <https://doi.org/10.1016/j.giq.2011.10.001>
- Bouckaert, G., & Pollitt, C.** (2011). Public management reform: A comparative analysis of NPM, the Neo-Weberian State, and New Public Governance. Oxford: Oxford University Press.
- Caamaño-Alegre, J., Lago-Peñas, S., Reyes-Santías, F., & Santiago-Boubeta, A.** (2013). Budget transparency in local governments: An empirical analysis. *Local Government Studies*, *39*(2), 182–207. DOI: <https://doi.org/10.1080/03003930.2012.693075>
- Cottier, B.** (2014). Encore des résistances à l'application de la loi sur la transparence. *Plaidoyer*, *5*, 26–31.
- Council of the EU.** (7 October 2019). Better protection of whistle-blowers: new EU-wide rules to kick in in 2021. Retrieved from <https://www.consilium.europa.eu/en/press/press-releases/2019/10/07/better-protection-of-whistle-blowers-new-eu-wide-rules-to-kick-in-in-2021/>

- 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. DOI: <https://doi.org/10.1080/14719037.2015.1051572>
- Darbishire, H.** (2010). Proactive transparency: The future of the right to information? (Governance Working Paper Series No. 56598). Washington, DC: World Bank Institute. DOI: <https://doi.org/10.1596/25031>
- de Araujo, J. F. F. E., & Tejedo-Romero, F.** (2016). Local government transparency index: determinants of municipalities' rankings. *International Journal of Public Sector Management*, 29(4), 327–347. DOI: <https://doi.org/10.1108/IJPSM-11-2015-0199>
- Erkkilä, T.** (2012). *Government transparency: Impacts and unintended consequences*. Basingstoke: Palgrave Macmillan. DOI: <https://doi.org/10.1057/9781137035547>
- Esty, D. C.** (2006). Good governance at the supranational scale: Globalizing administrative law. *Yale Law Journal*, 115: 1490–1562. DOI: <https://doi.org/10.2307/20455663>
- Fairbanks, J., Plowman, K. D., & Rawlins, B. L.** (2007). Transparency in government communication. *Journal of Public Affairs*, 7(1), 23–37. DOI: <https://doi.org/10.1002/pa.245>
- FSO.** (2016). Salarium. Calculateur statistique de salaires 2016. Retrieved from <https://www.gate.bfs.admin.ch/salarium/public/index.html#/start>
- FSO.** (2018a). Répertoire officiel des communes de Suisse. Retrieved from <https://www.bfs.admin.ch/bfs/fr/home/bases-statistiques/agvch.html>
- FSO.** (2018b). *Vollzeitäquivalente Nach Gemeinden Und Rechtsform, Ebene Institutionelle Einheiten*. Neuchâtel: Federal Statistical Office.
- Gallego-Álvarez, I., Rodríguez-Domínguez, L., & García-Sánchez, I.-M.** (2010). Are determining factors of municipal e-government common to a worldwide municipal view? An intra-country comparison. *Government Information Quarterly*, 27(4), 423–430. DOI: <https://doi.org/10.1016/j.giq.2009.12.011>
- Grimmelikhuijsen, S., & Feeney, M.** (2017). Developing and testing an integrative framework for open government adoption in local governments. *Public Administration Review*, 77(4), 579–590. DOI: <https://doi.org/10.1111/puar.12689>
- Heald, D.** (2012). Why is transparency about public expenditure so elusive? *International Review of Administrative Sciences*, 78(1), 30–49. DOI: <https://doi.org/10.1177/0020852311429931>
- ITU.** (2017). *Measuring the information society report 2017* (Volume 1). Geneva: International Telecommunication Union.
- Kersting, N., & Vetter, A.** (2003). *Reforming local government in Europe. Closing the gap between democracy and efficiency*. Wiesbaden: Springer. DOI: <https://doi.org/10.1007/978-3-663-11258-7>
- Keuffer, N., & Horber-Papazian, K.** (2019). The bottom-up approach: essential to an apprehension of local autonomy and local governance in the case of Switzerland. *Local Government Studies*. DOI: <https://doi.org/10.1080/03003930.2019.1635019>
- Keuffer, N., & Mabillard, V.** (2019). Administrative openness and diversity in Swiss municipalities: how does local autonomy influence transparency practices? *International Review of Administrative Sciences*. DOI: <https://doi.org/10.1177/0020852318823278>
- Ladner, A.** (2016). Administrative reforms in Swiss municipalities over the last twenty years – the end of new public management? *Lex Localis*, 14(2), 185–207. DOI: [https://doi.org/10.4335/14.2.185-207\(2016\)](https://doi.org/10.4335/14.2.185-207(2016))
- Mabillard, V., & Pasquier, M.** (2016). Transparency and trust in government (2007–2014): A comparative study. *NISPA Journal of Public Administration and Policy*, 9(2), 69–92. DOI: <https://doi.org/10.1515/nispa-2016-0015>
- Meijer, A. J.** (2009). Understanding modern transparency. *International Review of Administrative Sciences*, 75(2), 255–269. DOI: <https://doi.org/10.1177/0020852309104175>
- Meijer, A. J., Curtin, D., & Hillebrandt, M.** (2012). Open government: Connecting vision and voice. *International Review of Administrative Sciences*, 78(1), 10–29. DOI: <https://doi.org/10.1177/0020852311429533>
- Meilland, P.** (2013). Caractéristiques des lois sur l'accès à l'information en Suisse. In M. Pasquier (Ed.), *Le principe de transparence en Suisse et dans le monde* (pp. 19–35). Lausanne: PPUR.
- Pasquier, M.** (2013). *Le principe de transparence en Suisse et dans le monde*. Lausanne: PPUR.
- Pasquier, M., & Villeneuve, J.-P.** (2007). Organizational barriers to transparency: A typology and analysis of organizational behavior tending to prevent or restrict access to information. *International Review of Administrative Sciences*, 73(1), 147–162. DOI: <https://doi.org/10.1177/0020852307075701>
- Piotrowski, S. J., & van Ryzin, G. G.** (2007). Citizen attitudes toward transparency in local government. *The American Review of Public Administration*, 37(3), 306–323. DOI: <https://doi.org/10.1177/0275074006296777>

- Pratchett, L.** (2004). Local Autonomy, Local Democracy and the 'new Localism'. *Political Studies*, 52(2), 358–375. DOI: <https://doi.org/10.1111/j.1467-9248.2004.00484.x>
- Schmidt V.** (2013). Democracy and legitimacy in the European Union revisited: Input, output and 'throughput'. *Political Studies*, 61(1), 2–22. DOI: <https://doi.org/10.1111/j.1467-9248.2012.00962.x>
- Steiner, R., Ladner, A., Kaiser, C., Haus, A., Amsellem, A., & Keuffer, N.** (2020). Zustand und Entwicklung der Schweizer Gemeinden. Ergebnisse des nationalen Gemeindemonitorings 2017. Glarus: Somedia Buchverlag.
- Tavares, A. F., & da Cruz, N. F.** (2020). Explaining the transparency of local government websites through a political market framework. *Government Information Quarterly*, 37(3), 101249. DOI: <https://doi.org/10.1016/j.giq.2017.08.005>
- Tejedo-Romero, F., & de Araujo, J. F. F. E.** (2018). Determinants of local governments' transparency in times of crisis: Evidence from municipality-level panel data. *Administration & Society*, 50(4), 527–554. DOI: <https://doi.org/10.1177/0095399715607288>
- Welch, E. W., Hinnant, C. C., & Moon, M. J.** (2005). Linking citizen satisfaction with e-government and trust in government. *Journal of Public Administration Research and Theory*, 15(3), 371–391. DOI: <https://doi.org/10.1093/jopart/mui021>
- Worthy, B.** (2017). The politics of freedom of information – How and why governments pass laws that threaten their power. Manchester: Manchester University Press. DOI: <https://doi.org/10.7228/manchester/9780719097676.001.0001>
- ZHAW & IDHEAP.** (2017). Nationale Gemeindeschreiberbefragung. Retrieved from <http://www.andreasladner.ch/uebersicht.htm>
- ZHAW & IDHEAP.** (2018). Nationale Befragung der Gemeindeexekutivmitglieder. Retrieved from <http://www.andreasladner.ch/uebersicht.htm>

How to cite this article: Mabillard, V., & Keuffer, N. (2020). What Drives Online Transparency Practices at the Local Level? Evidence from 2222 Municipalities in Switzerland. *Swiss Yearbook of Administrative Sciences*, 11(1), pp.158–170. DOI: <https://doi.org/10.5334/ssas.143>

Submitted: 14 June 2020

Accepted: 01 October 2020

Published: 19 October 2020

Copyright: © 2020 The Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC-BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. See <http://creativecommons.org/licenses/by/4.0/>.



Swiss Yearbook of Administrative Sciences is a peer-reviewed open access journal published by Ubiquity Press.

OPEN ACCESS