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Measuring Local Government Transparency

Abstract
Despite the importance of government transparency to promote accountability and prevent maladministration, empirical research has failed to produce proper tools to assess and compare government transparency practices. Most contributions to the topic do not address it from a stakeholders’ perspective, particularly in selecting the indicators to include in transparency indexes. This paper contributes to the debate by developing a municipal transparency index based on information available on local government official websites. The methodological approach borrows insights from the Decision Analysis literature to structure the index through a participatory process. An application to the Portuguese local government setting is briefly discussed.

Keywords: informing citizens; local governance; transparency indexes; websites.

INTRODUCTION
The internet in general, and official websites in particular, have fundamentally changed the relationship between citizens and their governments by facilitating access to massive amounts of data that can be collected, distributed, and transformed by private firms, journalists, civic organizations, and the public. Open government initiatives such as data portals, websites for public monitoring of government spending, social media tools, and online meetings and public feedback on public policies and regulations have played a crucial role in the promotion of government transparency, participation, and collaboration (Cullier and Piotrowski, 2009; Jaeger and Bertot, 2010). This expansion of information and communication technologies (ICTs) has contributed to the adoption and dissemination of government transparency policies and practices defined as the publicity of all the acts of government and its representatives to provide civil society with relevant information in a timely, useful and comparable way and in an accessible format (Transparency International, 2015).
Despite the importance of transparency, information access and dissemination, and the recognition that they should be incorporated as core values in public administration (Piotrowski 2010), research in this field has failed to produce proper tools to measure, assess, and compare government transparency practices and to investigate the determinants of success of transparency initiatives. Moreover, the contributions of the field to the topic have also failed to address it from a stakeholders’ perspective, particularly in accounting for what indicators to include in transparency indexes. Bertot et al. (2010, 269) criticize the imprecise use of the concept of transparency without a doubt due to ‘little evaluation criteria, measures, or methods for determining the extensiveness and success of transparency efforts’.

Recognizing the role of transparency to improve accountability and good governance and the gap in measuring transparency at the local level, our work develops a Municipal Transparency Index (MTI) based on a participatory method to determine the dimensions and indicators of transparency, to select the metrics and to compute their weights. This stakeholder-based method avoids the reliance on purely legal/formal indicators and produces an index that can be employed as a benchmarking tool. In addition, an index based on stakeholders’ opinions constitutes a form of collaboration to improve transparency and accountability that is believed to increase social capital and foster a culture of inclusiveness and diversity in local communities that facilitates participation (Kim 2010).

The official webpage of a municipality is probably the most durable form of internet enabled technology to provide local government information, thereby securing long term transparency goals (Jaeger and Bertot, 2010). The MTI aims to create national benchmarks of transparency in the municipalities, through the analysis of local government information made available on official websites. The availability of information on municipal websites alone does not improve the quality of democracy, but it can empower citizens to monitor and participate in local government (da Cruz and Marques 2014). Furthermore, the publication of a ranking of municipalities seeks to create social pressure and incentives for local authorities to improve their tools of communication and interaction with citizens, in order to reach a more open, accountable, and participatory government.
Following this introduction, the second section of the article discusses the concept of transparency and its broader implications for legitimacy, accountability, and citizens’ trust and participation in government. Section three presents the state of the art in measuring transparency with a focus on local government. In the fourth section we describe how the MTI was structured, including the methodology, the choice of dimensions and performance descriptors, the consultation with key stakeholders, and the process of determining the weights. The fifth section illustrates an application of the MTI to all Portuguese municipalities and presents a short summary of the results that highlights the strengths of this measure. The article closes with a set of conclusions and implications to policy-makers and practitioners as well as possible limitations of this methodology to assess local government transparency.

A LITERATURE BACKGROUND ON TRANSPARENCY AND ITS IMPLICATIONS

The diminishing interest in the affairs of political and administrative life is rooted in citizens feeling distant and often excluded from the process, with policy making compromised by a haze of low transparency, maladministration and/or corruption (King et al. 1998; Innes and Booher 2004). This generates distrust by citizens concerning government institutions, becoming unreceptive to the measures implemented when these do not fit the real interests and needs of communities. This problem is aggravated by the reliance on non-public agents to deliver public services, because “when public functions are delegated to private actors and are allowed to be transformed into ‘private’ actions, public accountability is inevitably lost” because transparency is lost (Stivers 2008: 111). A similar point is stressed by Piotrowski and Bertelli (2010) arguing that citizens frequently associate political and administrative matters to secrecy and opacity. This section reviews the literature on the implications of transparency for accountability, legitimacy and trust in government and highlights the role played by information and communication technologies (ICTs) to bring about government transparency and its desired consequences.
Government institutions are increasingly concerned with the wider dissemination of information and
the creation of new mechanisms to improve the quality of decision-making, promote greater
transparency in the political process, and increase the legitimacy of decisions (King et al. 1998; Catt
and Murphy 2003; Innes and Booher 2004; Bingham, Nabatchi and O’Leary 2005). Transparency can
foster active citizenship through shared governance, by allowing citizens to have a crucial role in
policy decisions and co-production of services (Stivers 2008). Greater levels of transparency and its
proper measurement contribute to the enhancement of government accountability to its citizens and
are determinant to improve the quality of governance (Hood and Heald 2006; Bauhr and Grimes
2014).

Access to information is now accepted as a fundamental right protected by national Constitutions in
many democratic countries, an ethical value and priority for Public Administration (Cooper 2004),
and a precondition for public scrutiny, participation, and accountability (Piotrowski and Van Ryzin
2007; Piotrowski and Bertelli 2010). From the demand side, Armstrong (2005) describes transparency
as the ‘unfettered access by the public to timely and reliable information on decisions and
performance in the public sector’. From a supply-side perspective, Wong and Welch (2004) define the
concept of transparency as the extent to which public organizations reveal information about their
operations, procedures, and decision-making processes. No less important is the role played by
elected officials and public managers in the implementation of measures to promote transparency at
all levels of government. The prevalence of a culture of transparency in the public sector is largely
dependent on the responsiveness of bureaucrats and politicians to the demand for information by
citizens and businesses as well as their affirmative steps to make information about government
affairs public without waiting for specific requests and, through the use of ICTs, i.e. proactive
disclosure.

Technology-driven transparency is also regarded as a vehicle to enhance trust in government. Many
researchers have found positive relationships between the use of e-government and e-participation to
improve transparency, accountability, and political trust (Kim and Lee 2012). Studies carried out by
Welch et al. (2005) found evidence that citizen satisfaction with transparency and accountability in government websites increases confidence in government policies and actions. Likewise, Tolbert and Mossberger (2006) found a positive relationship between the use of e-government and political trust, showing that readily accessible information available on government websites facilitates citizen access and promotes greater transparency. Vicente Pina and associates suggest that frequent and timely disclosure of information online increases the transparency of local government and empowers citizens to monitor government performance more closely (2007). Others highlight the role of ICTs in helping governments restore confidence in public institutions, create greater involvement, and foster greater interaction and political participation (Moon 2002; Welch, Hinnant, and Moon 2005; Cullier and Piotrowski 2009).

Open government initiatives seen in many countries around the world have been largely influenced by President Obama’s Memorandum on Transparency and Open Government issued in his first day in office (White House 2009). These policy initiatives seek to promote transparency, public participation and collaboration by taking advantage of ICTs to disclose large amounts of government data to produce substantive benefits to citizens. The adoption of citizen-centered or data user perspectives have been advocated as means to engage citizens, enhance trust in government, and improve public value of transparency policies (Harrison et al. 2012; Janssen et al. 2012).

In contrast, other research suggests that the effects of transparency on trust and perceived legitimacy are largely contingent on policy type. Using an explorative experiment in the context of the Swedish public health care system, de Fine Licht (2011) found that transparency in decision-making procedures in health care has a negative impact on decision acceptance and general trust. Recent work by the same author suggests that legitimacy may be adversely affected by transparency in policy decisions involving trade-offs between human and material values. The author employs a sample of 1,032 participants to test the variation of transparency effects across policy areas and finds that “decision-makers cannot simply assume that transparency will provide positive effects for public legitimacy beliefs” (de Fine Licht 2014: 367). Instead, the effects of transparency are conditional on
the types of decisions being made, with decisions involving taboo trade-offs more likely to generate
negative consequences to public legitimacy. In a similar vein, de Fine Licht et al. (2014) find that
transparency increases perceived legitimacy (reduced moral hazard, increased respect for others, and
perceptions of procedural fairness), but this goal can be achieved simply relying on transparency in
rationale (careful justifications after the fact) rather than full disclosure during the decision-making
process. Transparency in process may overwhelm the public with detailed information and create
frustration and disappointment, resulting in adverse effects for perceived legitimacy.

Other research has focused on geography and culture to assess the effects of transparency on trust.
Grimmelikhuijsen et al. (2013) argue that national cultural values influence how individuals perceive
government transparency. The authors show the importance of accounting for the effect of cultural
differences between countries when considering the relationship between transparency and citizens’
trust in government. They find that citizens in both South Korea and The Netherlands display negative
associations between transparency and the competence dimension of trust in government (stronger in
the case of South Korea). No significant effects were found between transparency and the honesty
dimension of trust. Low-power-distance cultures are more prone to accept transparency – a power-
reducing mechanism – than high-power distance cultures such as South Korea. “In contexts that lack
long-established track records with respect to open government, citizens may be more sensitive to the
information that transparency affords them” (p.584).

Using the World Bank Governance Indicators dataset for 110 countries, Lindstedt and Naurin (2010)
find that making political institutions more transparent is an effective tool to reduce corruption only
when conditions for publicity and accountability such as education, media circulation and free and fair
elections are met. In addition, they show that transparency implemented by public institutions is less
effective than the one promoted by independent agents such as a free press. Other research indicates
that in countries where corruption is endemic, transparency can erode institutional trust and lead to
public resignation due to the conviction that corruption practices are impossible to contain (Bauhr and
Grimes 2014). In these instances the effect of transparency on trust and perceived legitimacy can
actually be negative due to public disappointment with information overload and confusion (Fung, Graham and Weil 2007) and the way decision-making is conducted (Grimmelikhuijsen 2012).

Despite possible negative effects of transparency on perceived legitimacy detected in the empirical literature, most authors would argue that transparency is still justifiable from a normative perspective, i.e., the respect for citizen’s right to know (de Fine Licht 2011; Stivers 2008). Hence, from a normative standpoint, transparency as a means of achieving citizen engagement and involvement through citizen-centered e-government would lead to “…an informed citizenry that is able to engage in political discourse and shape the future directions of the government” (Jaeger and Bertot, 2010: 374-5).

ICTs in general and government websites in particular have the potential to create new forms of dialogue and informal interaction that enable greater involvement and participation of citizens in matters that affect them directly (Kaye and Johnson 2002; Pina et al 2010; Ahn 2011). Information available on government websites revitalizes the democratic process to create an electronic public square that allows citizens to contact with each other and with their rulers directly, increasing public access to information and contributing to create a more informed citizenry (Kaye and Johnson 2002).¹ This tendency suggests the need for an assessment of the degree to which governments are willing and able to disclose all relevant information to their citizens, i.e., it demands the development of appropriate tools to evaluate government transparency. Next, we turn to the state of the art in measuring local government online transparency.

**MEASURING LOCAL GOVERNMENT ONLINE TRANSPARENCY: THE STATE OF THE ART**

For the purpose of our study, transparency is defined as the publicity of all the acts of government and its representatives to provide civil society with relevant information in a complete, timely, and easily accessible manner (i.e. online). Other dimensions of transparency such as accessibility, intelligibility,
reliability, and quality of the information disclosed are excluded from our operational definition. The definition highlights the role of transparency in providing citizens with information so they can act as ‘armchair auditors’ that participate in the policy process, promote accountability, improve the quality of government decision-making, and help prevent and mitigate corruption (Bertot et al. 2010; Cullier and Piotrowski 2009; da Cruz and Marques 2014; Meijer 2003). This type of information disclosure has the potential to unravel private interests which can conflict with the collective interest and make actors accountable for all decisions and actions taken or omitted, and the reasons that informed them.

The literature on the determinants of local government transparency is still scarce, even though it has been growing over the past decade as seen by the works of Piotrowski and Van Ryzin (2007), Gallego-Álvarez et al. (2010); Piotrowski and Bertelli (2010), Jorge et al. (2011), and Albalate (2013). However, even less attention has been dedicated to measuring local government transparency. In fact, with the possible exception of the paper by Piotrowski and Bertelli (2010), few empirical studies have attempted to propose new methods to measure local government transparency in an appropriate way and most have focused on the usability and comprehensiveness of websites and/or on fiscal transparency, not on government transparency in its broader sense.

Pina et al. (2007) evaluate the role of ICT in improving transparency and accountability in 319 regional and local governments in the EU. The authors measure website performance in four dimensions: transparency, interactivity, usability, and maturity. Website transparency is gauged by 25 items divided in six categories: 1) Ownership and content update; 2) contact information; 3) information about the internal organization; 4) specific contents, including laws, reports, and publications; 5) explanations and instructions to citizens; and 6) security and privacy statements. Recent work in the European context proposes a Disclosure Index (DI) based on municipal website contents and applies it to measure fiscal transparency in Portugal and Italy (Jorge et al. 2011; Lourenço et al. 2013). The DI includes 13 items of budgetary and financial information, but unlike other fiscal transparency indexes also takes into account availability options, such as access/visibility, format of presentation, and delivery mode. According to Table 1, each item can score up to a
maximum of three points, if the item is highly accessible, in processable format, and appears as autonomous. Each municipality can score up to a maximum of 39 points (13 items times 3) and the index is reported as a percentage.

[Insert Table 1]

Other work has attempted to measure fiscal transparency and its determinants (Rodríguez et al. 2013 provide a good review of this literature). Esteller-Moré and Otero (2012) construct an index of fiscal transparency for 691 Catalan local governments. The index aims to measure the level of information about the budget provided by the municipalities to their citizens. The items are retrieved from the annual reports issued by the Public Audit Office of Catalonia and included in the index with equal weights. Each item takes the value of ‘1’ if the municipality has delivered the mandatory budget information within the established deadline and ‘0’ otherwise. The municipalities’ overall scores range from 0 to 1, with the value for each case calculated as the proportion of items reported by the local government in a timely fashion. Caamaño-Alegre et al. (2013) elaborated a survey questionnaire based on the International Monetary Fund’s Code of Good Practices on Fiscal Transparency to assess budget transparency in 33 small municipalities of the Spanish Autonomous Community of Galicia. Government officials were asked to indicate their level of agreement (5=Strong Agreement and 1=Strong Disagreement) with 15 items pertaining to municipal budget transparency. The fiscal transparency index presented is obtained by summing the scores recorded for all survey items. The authors conclude that the survey results do not present the expected positive bias usually associated with local government self-evaluation of transparency. However, because the index employs equal weights for all items, it also fails to take advantage of the respondents’ evaluation of varying degrees of importance of each item.
Few studies have produced comprehensive measures of local government transparency. Using data retrieved from archived surveys of chief administrative officers, Kathleen Dowley (2006) developed an additive index to measure local government decision-making transparency in seven East Central European countries. The index ranges from 0 to 7 points, depending on the number of actions reported by the respondents. One point for each of the following items: published budget, meeting with journalists, meeting with civic groups, and public reading of the budget; and zero to three points, depending on the frequency distributions and natural clustering of the number of public forums held. The index sums scores from ordinal scales (yes/no answers and zero to three points) which is both theoretically and methodologically incorrect (Stevens 1946).

Piotrowski and Bertelli (2010) developed a municipal transparency index using Item Response Theory (IRT) to measure the transparency of New Jersey municipalities. The index is based on a survey with 35 questions with four response options. The questions concern information disclosure of local government activity, namely: 1) Openness of municipal meetings and online availability of agendas, minutes, and upcoming meetings (questions 1 through 9); 2) document request processing (questions 10 through 26); and 3) proactive dissemination of municipal documents (questions 27 through 34). One additional question regarding unauthorized disclosure of information to the press was also included. Given that all survey responses are four-category ordinal scales, the authors measure the latent transparency of New Jersey municipalities using an ordinal IRT model. In this case, the IRT model is based on the idea that the probability of the responses is a mathematical function of an item difficulty parameter and a municipality’s latent transparency trait. The model is estimated through maximum likelihood and the transparency index is retrieved via empirical Bayes (Bertelli 2007: 254-56; Piotrowski and Bertelli 2010).

More recently, several authors have used the transparency index constructed by the Spanish Chapter of the NGO Transparency International to investigate the determinants of local government transparency (Guillamón et al. 2011; Albalate 2013; Vicente et al. 2013). The transparency index includes 80 indicators and reports an overall score and five subscores, one per each dimension:
general information on the council, relations with citizens and society, economic and financial information, municipal services procurement, and urban planning and public works. Each indicator is a binary variable (‘1’ when the item is available in the local government website; ‘0’ when the item is not available). The sum of the scores of the 80 indicators is rescaled so that the global score (and the scores in each dimension) ranges between 0-100. In practice, this means that all indicators have the same weight.

In our opinion, most indexes presented in the literature suffer from two main limitations. First, several indexes are based on simple additive evaluation models with equal weights for all indicators. As with all discretionary aggregation methods, equal weights for all criteria are theoretically incorrect and in general produce meaningless scores (da Cruz and Marques 2013). Indeed, when equal weights for all indicators are assumed, we are implying that the disclosure/non-disclosure of a given item is as important for the overall transparency of the local authority as the disclosure/non-disclosure of any other item (which may be a too strong assumption). As we shall see in the next section, our MTI avoids this problem by using a participatory approach to retrieve weighting coefficients from an iterative process with a decision-making group. The second limitation concerns the fact that numerous indexes are based on surveys of municipalities, which entails both problems of self-selection of responses and an inaccurate depiction of the actual level of transparency due to positive bias introduced by the respondents. The MTI avoids the difficulties associated with a survey-based index. Since it is based on municipal websites, there is no need to assign a minimum score to non-responding municipalities.

The following section presents the methodology and process employed by the team to develop the MTI for Portugal.
THE MUNICIPAL TRANSPARENCY INDEX IN PORTUGAL: PROCESS AND METHODOLOGY

It was in response to the growing concern for the quality of democratic local government in Portugal that Transparência e Integridade, Associação Cívica (TIAC) decided to act on the issue of municipal transparency. TIAC is a civil society, nongovernmental, non-profit organization, aimed at fighting corruption, promoting the values of transparency, integrity and accountability to citizens and institutions, and public and private companies (www.transparencia.pt). TIAC, the official representative of Transparency International (www.transparency.org) in Portugal, decided to develop a project to assess the level of transparency of local governments, through the analysis of the information available on the official websites of the municipalities.

The very first step of the MTI project was to establish a strong research team (including members from TIAC and four different academic institutions) and a comprehensive advisory group (AG) of experts to scrutinize and approve every methodological step. The group assembled for this project included 15 representatives from governmental and monitoring institutions (Agency for Administrative Modernisation, the General Inspector of Local Administration (currently integrated in the General Inspector of Finances), the Court of Auditors and the Association of Local Government Civil Servants), representatives from civic movements (TIAC and Má Despesa Pública (literally Bad Public Expenditure)) and academic experts from several research centres and four Portuguese Universities. The active participation of an AG or a decision-making group with a multidisciplinary background and composed of individuals with legitimacy to express opinions about aspects of local governance is essential for the success and credibility of a transparency index. If a suitable AG is involved in every step of the process of structuring the index, the customary controversy and resistance towards performance assessments may be averted (Downe et al. 2008). It is also expected that the results will be more in line with the needs of the users of the index (instead of being interesting only for academic purposes).
After reviewing past experiences and tools developed in other jurisdictions, and taking into account the mandate and competencies of Portuguese municipalities, the team produced a first list of 176 indicators concerning the information that should be available online. This list was circulated among the AG which challenged the applicability of some of the indicators and suggested new items. After this preliminary selection, the AG was asked to evaluate the indicators of the revised set using an ordinal scale ranging from 0 (not relevant for transparency) to 10 (extremely relevant for transparency). The results of this poll were presented in a meeting held with the whole team to discuss the less consensual indicators and decide on the suitable number of indicators (given the time and resources available and considering that the MTI effort should be repeated every year). In the end, taking into account operationalization issues, the group decided that the indicators should be structured under seven dimensions of ‘municipal transparency’ and that each dimension should have around 10-15 indicators. The final set of underlying variables of the MTI was approved by the AG nearly one month after the first meeting. It includes 76 indicators grouped in seven dimensions:

A) Organizational information, social composition, and operation of the municipality (executive and deliberative bodies) (18 indicators);
B) Plans and planning (13 indicators);
C) Local taxes, rates, service charges, and regulations (5 indicators);
D) Relationship with citizens as customers (8 indicators);
E) Public procurement (10 indicators);
F) Economic and financial transparency (12 indicators);
G) Urban planning and land use management (10 indicators).

This list of underlying indicators includes only items that are applicable to all municipalities (universality criterion) and information for which the respective disclosure/non-disclosure decision is the exclusive responsibility of local governments (ownership criterion) (see the appendix). Note that the MTI does not consider how visible the information is on the local government website or how
easy it is to access it. Furthermore, it is assumed that the disclosed information is accurate as our operational definition of transparency excludes the reliability and quality of the information disclosed.

Some of the items included in the MTI are legal obligations of disclosure imposed on municipalities. However, most are items that stakeholders have considered relevant to scrutinize the municipalities’ format, functioning, management, and public affairs, in particular in a key number of risk areas. In fact, some of these items of information do not yet exist even if they have been referred to in various strategic documents. They will have to be produced from scratch if they are to be disclosed. This takes the MTI one step beyond the assessment of information items that need to be disclosed by law. The MTI is comparable to other indexes developed by National Chapters of TI, such as TI-Spain or TI-Slovakia (TIE 2013; TIS 2014), but borrows insights from the Decision Analysis literature to compute the weights of the dimensions through a participatory method, taking into account the views of relevant stakeholders (Figueira et al. 2005). Decision analysis can be regarded as a sub-field of Operations Research and described as the discipline that promotes the development and use of logical (and quantitative) methods for improving decision-making in public and private settings. Multicriteria Decision Analysis provides a suitable framework to structure a model capable of taking into account the many aspects of governance and the perspectives of specialists, practitioners and other legitimate decision-makers (Munda 2004, Wallenius et al. 2008).

The weights adopted for the Portuguese MTI are the result of the opinions of the AG members, but the index methodology can be replicated in other contexts. Indeed, the indicators and the dimensions will vary from country to country, reflecting specific circumstances characterizing each country’s local government setting, and the weights will vary according to the composition of the AG or decision-making group, something we regard as an advantage rather than a limitation of the methodology. Similar to respecting fundamental theoretical properties (e.g. elicitation of sensible weights for additive aggregation models) establishing an heterogeneous decision-making group composed of reputable members/institutions is crucial for the credibility, robustness and acceptability of the multicriteria transparency index.
The scoring system and the weights of the dimensions of municipal transparency were established in a workshop attended by several members of the AG and facilitated by one of the members of the research team (for a detailed discussion on how to implement these participatory modelling approaches see Phillips, 2007). First, taking into account that all indicators are ‘Important’ (otherwise they would not be included), these stakeholders and experts were asked to identify which, among the defined set, they considered to be ‘Determinant’ (or of utmost importance) in each of the seven dimensions.

Unlike most indexes that (as a simplification) assume a linear relationship between municipality’s performance in terms of transparency (e.g. percentage of items disclosed) and score, the MTI adopted a somewhat more sophisticated scoring system. Indeed, the score of each municipality in each dimension is given by the scale presented in Table 2. During the workshop, the AG was also asked to select two reference levels: one corresponding to a ‘Good’ performance (the Level VI was selected); and one corresponding to the ‘Acceptable’ performance (the Level X was selected). Defining two reference levels is essential when the objective is to use an additive aggregation model to produce an overall transparency score (da Cruz and Marques 2014). Meaningful weights are calculated by taking into account the swings in performance regarding transparency between these reference levels for all the dimensions.

As can easily be seen in Table 2, perhaps due to the fact that this was the first effort to measure transparency in Portuguese local administration (and also because the general sentiment was that the current panorama is quite underdeveloped), the AG was somewhat conservative (or undemanding) in setting the two reference levels. Furthermore, Figure 1 shows that the scoring system of each
dimension is mainly concave; that is, the slope is greater for lower performance levels and thus the
disclosure of information is more valued in these cases (i.e. an incentive is given to the worst
municipalities). The cross sections also show that the disclosure of ‘Determinant’ information is
clearly more valued than the disclosure of ‘Important’ information. In sum, although it is relatively
easy to achieve an ‘average’ score, the level of effort required increases as one moves up the scoring
scale and local governments need to really prioritize transparency to achieve excellence. The choice
of the 0-100 punctuation was completely arbitrary (any other values could have been used for the
extreme levels).

[Insert Figure 1]

The scale provided in Table 2 allows evaluating the performance of local governments in each
dimension of transparency. To get a sense of the ‘overall’ transparency it is necessary to aggregate the
scores obtained in the seven dimensions. However, all other things being equal, having a good (or
bad) performance in a given dimension of transparency may not be as important as having a good (or
bad) performance in another dimension. For instance, the AG members may find that having a good
performance in dimension G) ‘Urban planning and land use management’ is more important than
having a good performance in dimension A) ‘Organizational information, social composition, and
operation of the municipality (executive and deliberative bodies)’. To consider this notion of ‘relative
importance’ the research team adopted different weights (or scaling factors) for each dimension.

The elicitation of these weights occurred during the workshop mentioned above, through an iterative
process where several questions were posed to the AG (e.g. see Mateus et al. 2008 for detail on this
type of procedure). The AG members were asked to consider eight fictitious municipalities with
different performance profiles. As depicted in Figure 2, each of these municipalities would have a
‘Good’ performance in one dimension and an ‘Acceptable’ performance in the remainder. First, the
AG was asked to rank these municipalities from the more transparent to the least transparent (the sequence was as follows: Municipality 7, Municipality 5, Municipality 6, Municipality 1, Municipality 3, Municipality 4, Municipality 2, and Municipality 8). Afterwards, the AG members were asked to express their opinions regarding the differences in terms of transparency between consecutive municipalities, for example: ‘how much more ‘transparent’ would Municipality 7 be when compared to Municipality 5?’

Figueira et al. (2005) details the specific technical features of several procedures that allow translating the qualitative opinions (preferences) of the decision-makers into quantitative weights. In simple terms, the several comparisons of the performance profiles illustrated in Figure 2 incorporate the notion of ‘trade-off’ (Figueira et al. 2005; Mateus et al. 2008). In other words, the weights take into account the reference levels of all the dimensions. They represent the relative importance (to the overall score) of the swings between the ‘Acceptable’ and ‘Good’ performance levels in each dimension (and not the ‘intrinsic’ importance of the dimensions which, according to Keeney (1992: 147), is the ‘most common critical mistake’ of Multicriteria Decisions Analysis models). The results of the weighting protocol for the MTI are shown in Figure 3.
THE APPLICATION OF THE MUNICIPAL TRANSPARENCY INDEX TO PORTUGUESE LOCAL GOVERNMENTS

As stated above, the MTI includes 76 indicators grouped in seven dimensions. The information was collected for all 308 Portuguese municipalities (23,408 entries in total). The use of quality indicators such as accessibility, clarity, and reliability of information was deemed unfeasible at this stage due to the lack of funding, but the MTI can certainly be extended to include them in the near future. Data collection was conducted in three stages during the months of June and July 2013: 1) capitals of the districts and autonomous regions (20 municipalities); 2) municipalities with more than 50,000 inhabitants (adding 44 municipalities to the database); 3) the remaining municipalities (adding 244 municipalities to the database). After data collection, the preliminary results were sent to all municipalities on August 20, 2013. Local governments were given two weeks to send back their suggestions/corrections (only 29 municipalities provided feedback; corrections were made when the claims were supported by the proper hyperlinks). The data analysis reported here is only a first reading of the results of the MTI 2013 (first edition).

The analysis of the MTI for the 308 Portuguese municipalities indicates that none reaches the cut-off line of ‘Good’ (64 points). Figueira da Foz has the best result (61 points) and Calheta, Montalegre and Santa Cruz are the worst (0 points). The MTI results for the best and worst municipalities are depicted on Table 3.

[Insert Table 3]

The descriptive statistics confirm and reinforce the idea that transparency practices are still quite underdeveloped in the Portuguese local government context. The average value of the MTI is 31.7 points, very close to the median value (32.0 points). These are fairly low values, particularly because both the mean and the median are distant from the middle point of the scale (50 points). The large
majority of Portuguese municipalities (63.3%) fail to attain the acceptable level of transparency defined by our model (36 points). Figure 4 displays the maximum, minimum and average MTI scores. The radar chart illustrates that Portuguese municipalities achieve the best performance in dimension F (economic and financial transparency) whereas dimension E (public procurement) is clearly the least transparent.

[Insert Figure 4]

Figure 5 shows the uneven geographic distribution of the MTI. The map suggests well known territorial splits in the Portuguese context, particularly between the North and South (separated by the Tejo river), between inland and coastal municipalities, and between rural and urban environments. In the list of ‘worst 10’ we find four municipalities of the Azores archipelago. Taking into account the low scores of the 30 municipalities in the archipelagos of Madeira and Azores, there is likely an ‘island factor’ that is worth examining more closely. Finally, Figure 5 also suggests a ‘diffusion effect’ associated with territorial contiguity. It is interesting to note that municipalities with the worst MTI ratings, as well as those with the best are, in many cases, territorially contiguous. In other words, there are clusters of municipalities by colour: the ‘worst’ municipalities (in red) are adjacent, and the same can be said of the ‘best’ (in green) and those that have ‘intermediate’ levels (in yellow and orange).

[Insert Figure 5]

Moreover, it should be noted that contrary to what one would expect, the largest cities are far from being the most transparent. The 10 most populous municipalities in Portugal according to the 2011
census (Lisbon, Sintra, Vila Nova de Gaia, Porto, Cascais, Loures, Braga, Matosinhos, Amadora, and
Almada) display MTI scores of 34, 38, 26, 46, 47, 38, 41, 38, 35, and 37, respectively. With the
exception of Lisbon, Vila Nova de Gaia and Amadora, all scores are above average and within the
acceptable range, but none in the top 10 best. It is also relevant to note that several small
municipalities reach the top 10 best, some of which have larger than average proportions of elderly,
rural, and low literacy populations. These results suggest possible paths for future research, namely to
analyse the determinants of the variation across municipalities.

CONCLUSIONS

Transparency is a guiding principle of good governance (Article 19, 1999). The normative belief is
that all levels of government should report on the ‘why, how, what, and how much’ are involved in
their activities and this reporting should be made available to citizens in the most convenient means.
Measuring transparency in local government gains special relevance because the monitoring coming
from the media and other oversight functions is often not as strong at this level and, since they are
responsible for providing essential services to the population, misconduct and maladministration in
local government have great impact on people’s lives (da Cruz and Marques 2014). Without
transparency, integrity and good performance are not demonstrable and accountability mechanisms
are not enforceable.

In recent years, transparency and open government initiatives have become vehicles to increase
legitimacy and trust in government, improve citizen engagement, and curb corruption and
maladministration. These visible trends have sparked a great interest in the assessment of government
online transparency, largely motivated by the idea that ICT tools can enhance transparency and
contribute to the creation of public value (Harrison et al 2012; Janssen et al. 2012). This work
contributes to the field by developing a transparency assessment tool to be applied to municipalities –
the MTI. It adds to other transparency indexes with the dimensions considered, but above all, the
participatory approach employed for selecting indicators, metrics and the weighting scheme. It also
provides a meaningful framework that can be expanded and used in other levels of government or public authorities. One of its advantages is the determination of the weights of the dimensions based on stakeholders’ perspectives, which allows for variation by country, reflecting the contextual features of each country’s local government setting.

A frequent call is made by authors and practitioners advocating for citizen-centered, long-term transparency policies (Fung et al. 2007; Jaeger and Bertot 2009). The key issue seems to be the sustainability of transparency practices which can be secured by involving representatives from various stakeholders, offering benefits to information disclosers, and providing comprehensible content overtime. Our methodology also provides guidance to managers and elected officials seeking to improve the levels of transparency in their jurisdictions in a sustainable manner. Carefully designed measures (i.e. assessment models) can produce sensible rankings that are robust enough to face criticism and institutional resistance, and, therefore, lead to reforms on the way local governments relate to their constituencies. The development of these rankings is likely to send a signal to all municipalities and their employees regarding the inclusion of transparency as a core value and a priority in their relationship with the public (Cooper 2004; Piotrowski 2010).

The next step will be to explore the determinants of the variation in transparency levels across municipalities. Our work highlights the importance of measuring transparency practices by local governments, but an additional effort is required to educate the public and promote local media outreach in order to secure the benefits promised by transparency. Finally, it is important to assert that the positive effects of the MTI on transparency practices by local governments are contingent upon the visibility and recognition of its role by all the stakeholders involved, particularly local officials and the general public.

The MTI can, however, be criticized for reducing a highly complex phenomenon to a single number (or numbers, since it is possible to get scores for each of the seven dimensions of transparency), ignoring scale, scope, context, and, more importantly, the quality of information (Bannister 2007;
Dawes 2010). We are also aware of the limitations associated with website-based transparency, particularly when it is unidirectional, decontextualized, and overly structured (Meijer 2009; Dawes 2010). Nevertheless, the MTI proposed in this work received national exposure through coverage in both traditional and social media as well as a web portal specifically created for this purpose (http://poderlocal.transparencia.pt). Journalists, bloggers, and civic-minded individuals publicized the MTI, putting additional pressure on local governments to disclose information not yet contained on official websites. ‘Name-and-shame’ techniques are extreme examples of the role the MTI can play in improving government transparency, but, for public managers and elected officials, public disclosure of positive results provides an additional incentive to foster a culture of transparency. It offers the municipalities the opportunity to publish the requested information on their municipal websites and thus improve their transparency scores. The MTI itself is open to adjustments and improvements as it is the team’s commitment to replicate it every year.

ACKNOWLEDGEMENTS

We would like to thank TIAC’s research team for putting together the data used in this paper, in particular Vitor Teixeira and Cátia Andrade for their dedication and assistance. Needless to say, that all usual disclaimers apply.

NOTES

1. It should be noted, however, that the specific context needs to be taken into account. Whereas e-governance and the disclosure of information online may be preferable in developed countries (i.e. wherever the access to and use of ICTs is widespread), the same may not apply in many jurisdictions where info-exclusion is present.

2. For example, all items included in the Economic and Financial Transparency dimension are mandatory by law.

3. The 2012 version of the Spanish Transparency Index for municipalities introduced some changes. The tool has now six dimensions although it still includes 80 indicators (some are new
whereas others were eliminated). The last version (2014) also uses six dimensions and 80 indicators (again with very few substitutions when compared to 2012).

4. As in other transparency indexes, these ‘indicators’ consist of binary variables that take the value of ‘1’ when the respective information item is available in the municipality website, and take the value of ‘0’ when the item is not available in the website.

5. Local governments are legally required to disclose some of the information items included in the final list of underlying indicators but not all. Indeed, the ‘legal requirement’ of disclosure was not a crucial factor for the AG during the selection of the indicators. The objective of the MTI was not to assess the degree of compliance with the law. Therefore, although taking into account the legal requirements and other international indexes, the final set of MTI indicators encompasses items that were deemed to be important for local government transparency according to the technical expertise of the AG members.

6. To curb the number of ‘Determinant’ indicators it was suggested to the group that they should not exceed 25% of the total number of indicators in each dimension. The different views on which indicators should be classified as ‘Determinant’ were discussed and resolved on the spot to develop a sense of common purpose (da Cruz and Marques 2013). The ‘Determinant’ indicators are identified in the list provided in the appendix.

7. Moreover, since the AG selected the same reference levels for all dimensions, one can immediately interpret the meaning of the overall (i.e. aggregate) MTI score: the best performers in terms of transparency are above the ‘Good’ level (64 points), whereas the municipalities with scores below the ‘Acceptable’ level (36 points) represent the worst practices (again, according to the preferences of the AG members).

REFERENCES


URL: http://mc.manuscriptcentral.com/rpxm Email: Isobel.speedman@ed.ac.uk

Appendix

List of MTI’s underlying indicators

**Organizational information, social composition and operation of the municipality (18 indicators)**

- Role and responsibilities of each member of the local council (executive body)
- Biographical note/CV of each member of the local council
- Email of each member of the local council
- Asset declaration of each member of the local council
- Register of interests of each member of the local council – (“Determinant”)
- Representation expenses for each member of the local council
- List of members of the Mayor’s cabinet and full time aldermen and respective remuneration – (“Determinant”)
- Employees annual report (“social balance sheet”)
- List of employees authorized to accumulate public and private duties (including the term and respective entities) – (“Determinant”)
- Job vacancies and recruitment notices
- Outsourcing and consulting service contracts (types and amounts)
- Recruitment process documents (jury, list of accepted and rejected applicants, evaluation criteria) – (“Determinant”)
- General information about the competences of the local council and municipal assembly (deliberative body)
- Code of ethics for municipal officers
- Schedule of both local council and municipal assembly meetings
- Minutes of local council and municipal assembly meetings for the past two years – (“Determinant”)
- List of local council and municipal assembly decisions/resolutions
- General email addresses of the local council, municipal assembly and civil parishes

**Plans and planning (13)**

- Annual report
- Sustainability report
- Compliance report of the Statute governing the Right of Opposition
- Report on service standards and complaints – (“Determinant”)
- Strategic plan
- Local Agenda 21 strategy
- Municipal public works plan – (“Determinant”)
- Local environment plan
- Local waste management plan
- Local education plan
- Local emergency plan (civil protection)
- Local plan for cultural activities
- Local corruption risk assessment and prevention plan – (“Determinant”)

**Local taxes, rates, service charges, and regulations (5)**

- Municipal regulations
- Information on the Quality Management System of municipal services
- Information on the Local Council Property and Assets – (“Determinant”)
- Local council newsletter
- Information on local taxes, fees, tariffs and service charges – (“Determinant”)

**Relationship with citizens (8)**

- Search engine of the municipality’s website
• Links to active social networks
• Citizen information concerning the interruption and suspension of local services
• Online Citizen Request and Tracking system – (“Determinant”)
• Email or contact details of the municipality’s ombudsman
• Information about the municipality’s opening hours
• Information on protocols and decisions/resolutions on subsidies, concessions, and use of local public assets – (“Determinant”)
• Municipality’s Complaints Management System

Public procurement (10)
• Public procurement through non-competitive procedures (suppliers, amounts and justification) – (“Determinant”)
• Public Procurement documents
• Report of the evaluation of the bids for each public tender
• Publication of the names of the winning and losing bidders (or consulted entities for other procedures) for each contract
• Publication of the winning bids
• Contracts signed with the contractors or suppliers – (“Determinant”)
• Monitoring and/or performance evaluation reports of the supplier/contractor/service provider
• Number of contracts awarded per supplier/contractor/service provider
• Amounts of extra works done for each contract
• Expert opinions, seal of approval and audit reports – (“Determinant”)

Economic and financial transparency (12)
• Annual Budget – (“Determinant”)
• Balance Sheet
• Income statement – (“Determinant”)
• Management report
• Cash flow statement
• Budget execution maps (revenue and expenditure)
• Execution of the multi-year investment plan
• Public investment per civil parish
• Annual budget amendments and rectifications
• List of amounts payable to suppliers and respective maturities – (“Determinant”)
• List of bank loans and respective maturities
• List of debt factoring and other debts to third parties

Urban planning and land use management (10)
• Section with contents on urban planning and land use management in the main page of the website
• Municipal master development plan and final report – (“Determinant”)
• Geographic information system (GIS) on land use
• Urbanization and detailed zoning area plans
• Results of the public consultation on the municipal territorial plans
• Status of urban planning report
• Summary of the opinions of the municipal urban planning services on all real estate and/or changes to previously approved or built projects – (“Determinant”)
• List of land exchanges and sales of the municipality, respective locations and amounts involved
• Alienable lands previously of public domain, respective values and buyers – (“Determinant”)
• List of concessions of surface or urban development rights
Figure 1: Detail and shape of the scoring system for the MTI dimensions
Figure 2: Performance profiles used to determine the weighting coefficients
Figure 3: Weights of the dimensions of transparency in the MTI
Figure 4: Maximum, Minimum and Average MTI Scores
Figure 5: Geographic distribution of MTI scores in Portugal
Table 1: Transparency index points for each item

<table>
<thead>
<tr>
<th>Visibility [cumulative]</th>
<th>Format [mutually exclusive]</th>
<th>Delivery Mode [mutually exclusive]</th>
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<tr>
<td>Item OR Specific Area referenced in Main Page</td>
<td>0.2</td>
<td>PDF Image</td>
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<tr>
<td>Item referenced in Site Map</td>
<td>0.4</td>
<td>Extractable</td>
</tr>
<tr>
<td>Item appears when searched by relevant words</td>
<td>0.4</td>
<td>Processable</td>
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Sources: Jorge et al. (2011); Lourenço et al. (2013: 286)
<table>
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<tr>
<th>Performance level</th>
<th>Description</th>
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<td>Level I</td>
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<tr>
<td>Level II</td>
<td>All ‘Determinant’ information and more than 50% of the ‘Important’ information.</td>
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<tr>
<td>Level III</td>
<td>All ‘Determinant’ information and between 25% and 50% of the ‘Important’ information.</td>
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<tr>
<td>Level IV</td>
<td>All ‘Determinant’ information and less than 25% of the ‘Important’ information.</td>
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<td>Level V</td>
<td>More than 50% of the ‘Determinant’ information and more than 50% of the ‘Important’ information.</td>
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<tr>
<td>Level VI</td>
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<tr>
<td>Level VII</td>
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<td>Level VIII</td>
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<td>50</td>
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<tr>
<td>Level IX</td>
<td>Between 25% and 50% of the ‘Determinant’ information and between 25% and 50% of the ‘Important’ information.</td>
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<tr>
<td>Level XV</td>
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Table 3: MTI results for Portugal (2013) (best performers and worst performers)

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<tr>
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<th>MTI</th>
<th>Ranking</th>
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<td>Figueira da Foz</td>
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<td>Abrantes</td>
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<td>Ferreira do Zêzere</td>
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<td>4</td>
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<td>Aveiro</td>
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<td>7</td>
</tr>
<tr>
<td>Coimbra</td>
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<td>9</td>
</tr>
<tr>
<td>Guimarães</td>
<td>51</td>
<td>9</td>
</tr>
<tr>
<td>Mirandela</td>
<td>51</td>
<td>9</td>
</tr>
<tr>
<td>Pombal</td>
<td>51</td>
<td>9</td>
</tr>
<tr>
<td><strong>10 worst</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calheta (Azores)</td>
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<tr>
<td>Montalegre</td>
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<tr>
<td>Santa Cruz das Flores</td>
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<td>Oleiros</td>
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<td>Melgaço</td>
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