Policy Studies

ISSN: 0144-2872 (Print) 1470-1006 (Online) Journal homepage: https://www.tandfonline.com/loi/cpos20

The effects of the political environment on transparency: evidence from Spanish local governments

Maria Teresa Balaguer-Coll & Maria Isabel Brun-Martos

POLICY STUDIES
https://doi.org/10.1080/01442872.2019.1599838

Routledge
Taylor & Francis Group

Check for updates

The effects of the political environment on transparency: evidence from Spanish local governments

Maria Teresa Balaguer-Coll[a] and Maria Isabel Brun-Martos[b]

[a]Finance and Accounting Department, University Jaume I, Castelló de la Plana, Spain; [b]Economic and Business Department, Universidad Cardenal Herrera-CEU, CEU Universities, Valencia, Spain

ABSTRACT

This article analyzes the evolution of economic and financial transparency in Spanish local governments (LGs) and their determining factors. The main results show that the level of financial disclosure seems to be the result of pressure from, on the one hand, opposition groups when there is rivalry and political competition, and, on the other hand, the increased demands of citizens involved in public affairs, who want to know how the government is spending their money and how public services are financed. Political parties are therefore key to increasing municipal transparency since greater pressure from opposition parties enhances transparency. Pressure from the parties as well as from citizens positively affects transparency; in other words, the more active people are in terms of voter turnout, and the greater the pressure from and debate among citizens, the higher the level of transparency. One way to increase transparency could therefore be to raise awareness about the importance that citizen pressure can have on governments.

ARTICLE HISTORY
Received 24 January 2018
Accepted 18 March 2019

KEYWORDS
Transparency; local governments; political environment; information disclosure; municipal budgetary

JEL CLASSIFICATION
h11; h71; h72

1. Introduction

Transparency is a tool to guarantee good public management as it can be used to evaluate the performance of activities carried out by public administrations. The economic and financial crisis has increased concern among citizens, who are calling for greater transparency in public sector accountability. Greater disclosure from public sector managers and, specifically, transparency in financial reporting is required by economic and social agents who need to evaluate the efficiency of public administrations in their use of public resources, and for whom this information is essential to their decision making (Rodríguez et al. 2013).

Citizens, as taxpayers, service receivers, and voters, must be seen as important users of public accounting information available to them as a control mechanism (Cárcaba García and García García 2010). Brusca and Montesinos (2006) discuss citizens' use of budgetary and financial information and find that voting behavior is influenced by financial reporting since it reflects the results of public policy, serving as a communication mechanism of the economic effects of public management.

CONTACT Maria Teresa Balaguer-Coll bcoll@uji.es Finance and Accounting Department, Univeritat Jaume I, Castelló de la Plana, Spain

The importance of transparency has led the OECD and the IMF to develop codes of good practices on fiscal and budget transparency (OECD 2002 and IMF 2007, respectively), which list a set of principles and guidelines aimed to increase the transparency of public administrations and guidelines to achieve this. In Spain, the *Spanish Association of Accounting and Business Administration* (AECA) has also published its own code of good practices for financial disclosure.

In Spain, moreover, the current economic situation, the continuing cases of political corruption, the growing loss of confidence in institutions, and the lack of regulation have led to the need to increase transparency in all areas of the public sector. In this regard, *Law No. 19/2013, on transparency, public access to information and good governance* was approved, with the aim of increasing transparency in government activity, ensuring access to information and establishing the obligations of good governance to be followed by public managers. Thus, Spain is no longer one of the few European countries that still have no legislation with these characteristics.

Spanish legislation includes regulation on enhancing citizen participation in the use of new information and communication technologies (*Law No. 57/2003, on measures for the modernization of local government*). *Law No. 11/2007, on citizens' electronic access to public services*, recognizes the right of citizens to interact with public administrations by electronic means, and aims to facilitate citizens' access to information and administrative process through them, thus contributing to the development of the information society in the public sphere.

Therefore, the aim of this research is to study the evolution of fiscal or budgetary transparency in the largest Spanish municipalities during the period 2008–2012 using the index developed by *Transparency International-Spain* (*TI-Spain*), and to analyze the factors that may influence the degree of online financial disclosure. Specifically, we examine the effect of political, budgetary and socioeconomic variables on the level of transparency. Some of the variables used have not previously been analyzed in the literature, as is the case of the variable change of government or the decomposition of expenditures and transfers into current and capital.

The main results of this article show that the level of transparency in municipalities depends negatively on the level of political strength of their governments; that is, political competition favors transparency. In addition, a higher voter turnout also positively affects the transparency of the economic-financial information municipalities provide. Change of government does not significantly affect the level of transparency, however.

The paper proceeds as follows. Section 2 reviews the literature on transparency in the public sector. Section 3 presents a description of the variables affecting the level of transparency and the hypotheses to be tested. Section 4 discusses the research design and Section 5 presents the methodology used in the empirical analysis. The results of the empirical analysis are reported in Section 6. Finally, the main conclusions of the study are presented in the last section.

2. Literature review

2.1. Transparency and good governance

Numerous scholars and organizations believe that transparency is the basis of good governance and the first step in fighting corruption. However, according to Alt and Lassen (2006), "the evidence linking transparency and fiscal policy outcomes is less compelling".

At the international level, organizations such as the World Bank, the International Monetary Fund (IMF), the Organization for Economic Co-operation and Development (OECD) and the United Nations have incorporated prevention and combating of corruption into their list of objectives, with transparency as an essential tool, alongside other prevention measures.

In Spain, according to the barometer of the CIS (*Centro de Investigaciones Sociológicas*, July 2017, study No. 3195) corruption is considered to be the second most serious problem facing the country, only surpassed by unemployment. Furthermore, a glance at the daily newspaper is enough to be aware of the increasing number of corruption cases in the public sphere, especially at the local level. The headlines are full of property development scandals, favoritism, rezoning and irregular allocations, and so on.

A large number of studies have shown the negative effects of corruption on the economy and society (Aidt 2009; Otusanya 2011; Uma and Eboh 2013), considering it as an impediment to economic and social development. Corruption also reduces citizen support and confidence in democratic political institutions (Anderson and Tverdova 2003); combating corruption is therefore essential in order to improve the quality of democracy.

This problem has led to greater demand for information from citizens, which governments are now recognizing. Electronic government (e-government) is a new way for citizens to interact with all levels of government, facilitating citizen involvement in governance using information and communication technologies (ICT).

Bertot, Jaeger, and Grimes (2010) claim that ICT are the new way to create transparency and promote anti-corruption. Furthermore, the use of ICT by government promotes public participation and trust, generating improvements in the quality of democracy (Jorge et al. 2011). The use of ICT enhances financial disclosure processes and extends the reach of its content. Internet is a powerful mechanism for information dissemination and the websites of public bodies are increasingly being used to disclose accounting, economic, and financial information. "The advantages of the internet for the dissemination of information have clearly indicated the possibility of increasing transparency in public life" (Serrano-Cinca, Rueda-Tomás, and Portillo-Tarragona 2009). In the same line, Albassam (2015) states that "budget transparency contributes to reducing corruption, improving government performance, and holding bureaucrats and politicians accountable for their actions".

Numerous studies have shown that transparency has far-reaching positive effects on good governance. However, the literature analyzing the relationship between transparency and good governance yields controversial results. Some authors, such as Besley and Smart (2006), found transparency can have little or no effect. These authors conclude that

> greater transparency can reduce the incentives for bad politicians to try to convince voters that they are good since they are more likely to be found out when pursuing such strategies. Thus, increased transparency can actually lead to worse incumbent discipline.

Lindstedt and Naurin (2010) confirm the common assertion that transparency may reduce corruption. However, these authors consider that transparency in itself is insufficient. If the conditions for publicity and accountability are weak, more transparency will not prevent corruption. Countries where education levels are low or where fully democratic political systems are not in place must introduce improvements in transparency alongside reforms that strengthen citizens' capacity to access information and systems to impose sanctions if their aim is to reduce corruption.

2.2. Government transparency at all levels of public administration

A large body of literature has attempted to analyze the financial disclosure practices of public bodies at all levels of government. More recently, particular interest has grown in the level of transparency on the websites of public institutions, examining the content of the information disseminated, and other features related to presentation, navigability, etc.

In addition, the search for the determinants of the degree of disclosure or quality of the information provided has also been a major focus of research, which sets out to study the causes of the differences in the levels of information dissemination and financial transparency.

Growing interest in the question of transparency has led to an expansion of the literature on the dissemination of economic, budgetary and financial reporting by public entities.[1] Increased demands from citizens, the spread of ICT and the ongoing legislative developments on the need to establish standards of transparency has resulted in an extensive analysis of public administration disclosure practices and, above all, on the political, budgetary, socio-economic or institutional determinants which condition the degree of information disclosure.

Studies on transparency have explored all levels of public administration. Alt and Lassen (2006) perform a comparative study for 19 OECD countries and confirm that "a higher degree of fiscal transparency is associated with lower public debt and deficits".

Caba Pérez, López Hernández, and Rodríguez Bolívar (2005) explore whether there is growing awareness among the central public administrations of EU member states of the importance of publishing financial information on their websites for citizens to use in their decision making; these authors also develop a model that will help citizens to access this financial information.

Rodríguez Bolívar, Caba Pérez, and López Hernández (2006) analyze use of internet in the central governments of Anglo-Saxon, South American and Continental European countries, finding that usage of the web for financial disclosure is deeply rooted in each country's administrative culture.

Other studies such as Alt, Lassen, and Rose (2006), Cheng (1992) and Ingram (1984) analyze financial disclosure practices and the factors that explain them in the U.S. states. Alt, Lassen, and Rose (2006) observed that political polarization and fiscal conditions affect transparency levels. Cheng (1992) notes that state governments' decisions to disclose accounting information depends "on factors in the political environment and on institutional forces". Ingram (1984) concludes that constituents' and administrators' information demands and needs affect levels of accounting disclosure by state governments more than recommendations given in accounting disclosure standards.

Ma and Wu (2011) examine the determinants of fiscal transparency in the Chinese provinces and found that market-oriented reform and economic openness have a strong effect on fiscal transparency.

Rodríguez Bolívar, Caba Pérez, and López Hernández (2007) analyze financial disclosure on the internet in the Spanish regions, comparing it with the information presented in the hardcopy general account. These authors show that the use of official websites for financial reporting is not yet sufficiently widespread.

But it is at the local level that the largest body of literature on financial transparency has focused. Ingram and De Jong (1987), Giroux and McLelland (2003) or Styles and

Tennyson (2007) study the levels of transparency in U.S. cities through accounting disclosure indices. Ingram and De Jong (1987) found that cities that require non-GAAP practices have significantly fewer reporting practices than cities in the other categories. Giroux and McLelland (2003) test the significance of governance structure on accounting disclosure levels and financial condition. Styles and Tennyson (2007) examine the determinants of availability and accessibility of LG reports on the internet.

Christiaens (1999) studies financial disclosure on Belgian municipalities; and Laswad, Fisher, and Oyelere (2005) in the cities of New Zealand. Other studies examine local authorities in different countries. For instance, Jorge et al. (2011) compare levels of fiscal transparency in Italian and Portuguese municipalities.

The determinants of the level of transparency of Spanish municipalities have been the subject of a large number of studies, using various measures of the disclosure level. Esteller-Moré and Polo Otero (2012) and Vila (2013) evaluate transparency based on the budgetary provision of required information to the corresponding Audit Office by the deadline. Guillamón, Bastida, and Benito (2011) and Albalate del Sol (2013) use the disclosure indices developed by *TI-Spain*.

Gandía and Archidona (2008) develop a disclosure index by observing 88 items related to the presentation of general, budgetary and financial information and other matters concerning the presentation and navigation of 130 municipal websites. Caba Pérez, Rodríguez Bolívar, and López Hernández (2008) create, for 65 large Spanish cities, an index of financial disclosure by local authorities on their municipal websites, analyzing issues such as information content, features or other aspects such as design and navigability. Cárcaba García and García García (2010) create an index for 334 municipalities with over 20,000 inhabitants that distinguishes between municipalities disclosing financial information on the internet and those that do not. In a second index, they examine different items on the content of the information, presentation format, and user interaction.

Serrano-Cinca, Rueda-Tomás, and Portillo-Tarragona (2009) prepared a 9-item questionnaire on the financial disclosure on municipal websites of provincial capitals and municipalities with more than 70,000 inhabitants. Caamaño-Alegre et al. (2013) developed a 15-item questionnaire that they sent to a group of Galician municipalities to conduct a self-assessment of the degree of budget transparency measured on a Likert scale. Navarro, Alcaraz, and Ortiz (2010) analyze the websites of 55 large LGs using a questionnaire of 73 items classified into four groups: general information about corporate social responsibility, economic, social, and environmental information. Cuadrado-Ballesteros, Frías-Aceituno, and Martínez-Ferrero (2014) measure the level of disclosure of economic, social or environmental information on the websites of 102 councils using a list of 72 indicators.

To summarize, most of the studies conducted at the state level of government focus on the extent of information disseminated by countries, and conclude that administrative culture significantly impacts how much government information is disclosed (Pina, Torres, and Royo, 2010; Rodríguez Bolívar, Caba Pérez, and López Hernández 2006). At the local level, the vast majority of studies analyze the determinants of financial disclosure using questionnaires, by analyzing the volume of financial information disclosed on the internet or from the *Transparency International* index.

3. Description of the variables affecting the level of transparency and hypotheses

3.1. Political variables

Ideology (ideol).

Studies on transparency and disclosure have shown an interest in analyzing the actions of the incumbents according to their position on the political spectrum. The general result indicates that left-wing governments tend to be more transparent and disclose more information than more conservative governments (Guillamón, Bastida, and Benito 2011; Albalate del Sol 2013; Caamaño-Alegre et al. 2013). However, Garrido-Rodríguez, López-Hernández, and Zafra (2017) obtained that conservative governments grant more importance to transparency indicators, especially regarding legal and institutional information, than progressive ones. Likewise, a large number of studies observe that the political color of the government in office does not play a decisive role in the level of transparency and disclosure (Alt, Lassen, and Rose 2006; Serrano-Cinca, Rueda-Tomás, and Portillo-Tarragona 2009; Jorge et al. 2011; Esteller-Moré and Polo Otero 2012; Vila 2013). Taking into account the above arguments, we formulate our first hypothesis:

H1: Political sign may or may not influence municipal transparency.

Political competition (herf).

The degree of political competition can influence many aspects of the political sphere such as budget decisions, responses to citizens' demands, economic measures, etc. The study of the effect of political competition on incumbents' behaviors is therefore widespread. This is the case of research on financial disclosure and transparency, where the degree of political competition between political groups has been widely studied (Ingram 1984; Cheng 1992; Laswad, Fisher, and Oyelere 2005; Caba Pérez, Rodríguez Bolívar, and López Hernández 2008; Gandía and Archidona 2008; Serrano-Cinca, Rueda-Tomás, and Portillo-Tarragona 2009; Jorge et al. 2011; Esteller-Moré and Polo Otero 2012; Caamaño-Alegre et al. 2013).

The expected effect in the literature is clearly an increase in disclosure levels with increasing political competition. This could largely be explained by the pressure from opposition groups, which forces the incumbent to disclose certain information. This relationship has been evidenced by studies such as Baber (1983), Alt, Lassen, and Rose (2006) or Cárcaba García and García García (2010), where a greater degree of political competition increases levels of transparency and disclosure. When the degree of political competition is lower and the ruling party is therefore stronger, an increased confidence in being re-elected in the next election is implied. Therefore, when there is a high probability of re-election, the expected benefit from increasing transparency is lower (Alt, Lassen, and Rose 2006) and the need for strategic use of transparency decreases (Esteller-Moré and Polo Otero 2012). By contrast, if the ruling party wants to find ways of winning more votes, they will make more effort to satisfy the needs of the electorate (Caba Pérez, Rodríguez Bolívar, and López Hernández 2008); one such need could be for information through responsible management.

Rivalry will lead political opponents to demand that the incumbent party manage responsibly and consistently with its electoral promises, and will inform the public of any deviation (Cárcaba García and García García 2010). To measure the degree of political competition in the municipalities analyzed, we use a Herfindahl index, which takes values between 0 and 1, depending on the number of councilors from each party represented in the council, with higher values indicating a lower degree of political fragmentation and therefore a lower degree of competition or higher degree of political strength.

$$\sum_{i=1}^{n} c_i^2 / \left(\sum_{i=1}^{n} c_i \right)^2$$

where, c_i is the number of city councilors of party i in the LG; and n is the number of parties in the LG.

As a result of increased pressure from political rivals and the need to compete in order to increase the number of votes in the next election, we expect political competition to positively influence the level of financial transparency; therefore the expected sign for this variable is negative. The above arguments lead us to our second hypothesis:

H2: Political competition increases municipal transparency.

Voter turnout (turnout).

According to Serrano-Cinca, Rueda-Tomás, and Portillo-Tarragona (2009), in municipalities where citizens are highly involved in social and political affairs, the probability of financial disclosure is higher as a consequence of the pressure they put on incumbents. Political commitment can be measured by voter turnout, since citizens who vote show a greater interest in public issues in their community and this could lead to a greater demand for transparency from their public managers. Thus, citizens who are involved in and committed to public affairs are more likely to monitor the council's financial information more closely. In this line, Kim and Lee (2017) found a positive relationship between citizen participation and transparency.

Although authors such as Serrano-Cinca, Rueda-Tomás, and Portillo-Tarragona (2009), Guillamón, Bastida, and Benito (2011), Jorge et al. (2011), Albalate del Sol (2013), Caamaño-Alegre et al. (2013) and Vila (2013) expected a positive relationship between voter turnout and level of disclosure, the significance of this relationship could be defined as scarce. Thus, following the above mentioned studies, we use the voter turnout rate[2] to examine the possible effect of higher citizen involvement on the level of information reported by LGs; a positive relationship is expected. Our third hypothesis is therefore:

H3: When electoral participation is higher, municipal transparency will be greater.

Change of government (changegov).

As we want to analyze whether the political orientation of the incumbent party affects the level of municipal transparency, it is also interesting to study if financial disclosure in the post-election years is affected by a change in government after the local elections. The lack of previous evidence makes it more difficult to predict the effect of a change of government on the transparency level. Mayors' re-election may have a dual effect on levels of transparency. Either complacency may set in, halting the incentive to increase the level of disclosure, or the government could reward the electorate that has returned it at the polls by increasing the transparency through higher levels of disclosure.

In the opposite case, when there is a change of government in the local elections the new administration might react by increasing transparency as an example of renewal, thereby enhancing citizens' opinion of it. However, on the other hand, the certainty of remaining in office throughout the entire term could lead it to think that disclosure is not its largest concern. Also, if the new government plans major changes in the council and its finances, managers might consider an excessive level of financial disclosure unfavorably.

In the absence of previous literature on the subject, we build on the studies that relate the strategic use of debt to re-election probabilities, and those relating debt with transparency. Hence:

- There is a positive relationship between the increase in debt and change in government.[3]
- Higher debt levels are associated with lower information transparency.[4]

Based on these studies, it could be expected that the relationship between government change and transparency will be negative. This leads to the following hypothesis:

H4: Change of government has negative effects on transparency.

We also examine whether there are any significant differences in the levels of transparency according to the direction of the change from right to left or left to right.

3.2. Control variables

3.2.1. Budgetary variables

Level of indebtedness (debt). Level of debt has been one of the most commonly used factors in the literature as a determinant of the level of public bodies' financial disclosure and fiscal transparency. Although studies such as Alt, Lassen, and Rose (2006) and Vila (2013) found that higher debt levels are associated with lower information transparency, the predominant effect in the literature is positive (Robbins and Austin 1986; Evans and Patton 1987; Banker, Bunch, and Strauss 1989; Giroux and Deis 1993; Styles and Tennyson 2007; Caba Pérez, Rodríguez Bolívar, and López Hernández 2008; Caamaño-Alegre et al. 2013).

In this regard, Gore (2004) notes that managers will be encouraged to disseminate information voluntarily in order to reduce the information asymmetry problem and reduce the risk perceived by creditors, thus contributing to reducing the cost of capital.

In this way, increases in the level of indebtedness can motivate public managers to voluntarily report information to show that the administration is able to fulfill its obligations (Cárcaba García and García García 2010). Styles and Tennyson (2007) also state that for citizens it is important to know how the provision of public programs and services are financed through the use of debt. However, the literature does not always find a positive relationship; in some studies this variable has not proved to be significant (Ingram 1984; Baber and Sen 1984; Christiaens 1999; Cárcaba García and García García 2010; Guillamón, Bastida, and Benito 2011; Albalate del Sol 2013).

In light of results from most of the literature, we propose the following hypothesis:

H5: The relationship between level of indebtedness and financial transparency is positive.

Fiscal pressure (fiscal). As citizens must pay taxes, if there is an increase in the level of taxes they may demand information about how their money is being spent and thus monitor their contribution more closely by calling for greater transparency through financial disclosure. According to Vila (2013), fiscal pressure[5] could be a negative indication for the citizen, but in turn, higher tax levels could result in an increase in the level of investment, which may encourage incumbents to report budget information.

Thus, in line with other studies that have analyzed the effect of taxes on transparency and information disclosure (Christiaens 1999; Serrano-Cinca, Rueda-Tomás, and Portillo-Tarragona 2009; Navarro Galera et al. 2011), the level of tax revenues is included in our analysis of determinants of LG financial disclosure on the internet. Following the expected positive relationship in studies such as Caba Pérez, Rodríguez Bolívar, and López Hernández (2008), Guillamón, Bastida, and Benito (2011) and Caamaño-Alegre et al. (2013). This leads us to the following hypothesis:

H6: Fiscal pressure has a positive influence on the level of financial transparency.

Current and capital transfer revenues (currtransf and captransf). Many studies have analyzed the relationship between the level of intergovernmental transfers and the disclosure of financial or budgetary information (Ingram 1984; Ingram and DeJong 1987; Banker, Bunch, and Strauss 1989; Giroux and McLelland 2003; Caba Pérez, Rodríguez Bolívar, and López Hernández 2008; Guillamón, Bastida, and Benito 2011; Esteller-Moré and Polo Otero 2012).

Ingram and De Jong (1987) and Guillamón, Bastida, and Benito (2011) have shown that a greater reliance on transfers results in an increased incentive to disclose. A higher level of transfer revenues could involve higher levels of government regulation and monitoring of the use of funds, thus prompting higher levels of disclosure (Copley 1991; Giroux and Deis 1993). In contrast, citizens' demand for information, and contrary to what might happen with the level of debt or taxes, as Péteri (2008) points out, intergovernmental transfers may not attract the attention of the public towards budget monitoring.

A negative relationship between transfer revenues and disclosure is found in studies such as Robbins and Austin (1986), Copley (1991) and Giroux and Deis (1993). As these studies suggest, less reliance on intergovernmental transfers implies that resources from taxes or indebtedness should be raised, which could require an increase in financial reporting to show voters that at least their taxes are being well spent. If, instead, reliance on intergovernmental grants rises, it may cause a reduction in the incentives to disseminate information on the authority's activities.

Giroux and McLelland (2003); Caba Pérez, Rodríguez Bolívar, and López Hernández (2008) and Esteller-Moré and Polo Otero (2012) could not confirm the existence of a significant relationship between transfers and the level of financial disclosure. Alcaide Muñoz, Rodríguez Bolívar, and López Hernández (2013) suggest that the heterogeneity of the results of the effect of transfers on the disclosure of financial information may be due to issues such as the medium of disclosure (hardcopy or internet) or the level of public administration considered. Therefore, and due to the diversity of results obtained in previous studies we test the effect of transfers on transparency, but disaggregating by type of transfers (current and capital), that is:

H7: Current transfer and capital transfer revenues have a positive/negative effect on transparency.

Current and capital expenditure (currexp and capexp). According to La Porte, Demchak, and De Jong (2002), in countries with higher levels of public spending, citizens may demand greater government openness about their activities, as they have a higher presence in many aspects of political, social or economic life. Navarro, Alcaraz, and Ortiz (2010) predicts a positive relationship between expenditure and the dissemination of Corporate Social Responsibility information, but their analysis reveals that the relationship is not significant. Conversely, the opposite relationship is obtained by Caamaño-Alegre et al. (2013) for a sample of Galician municipalities.

Hence, if larger revenues from taxes or indebtedness are expected to increase transparency levels, greater public expenditure could show the same positive relationship to the extent that the population might increase their demands for public expenditure information. Additionally, financial disclosure when spending levels increase could be an incentive for incumbents because they can show citizens what they are doing and reveal the spending incurred. The literature has observed that, in general, public expenditure positively affects the probability of LGs' re-election (Veiga and Veiga 2007; Sakurai and Menezes-Filho 2008) and therefore ruling parties may be interested in revealing their expenditure.

However, on the other hand, larger spending budgets could increase the level of corruption (Alesina and Angeletos 2005), which may result in a reduction of transparency and hiding of economic information, because corruption could skew the composition of public spending (Mauro 1997) and lower the efficiency of government expenditure (Del Monte and Papagni 2001). Therefore, because the evidence in the literature is inconclusive on the effect of this variable on disclosure, the expected relationship is an open question.

We test the effect of public expenditure on transparency, but disaggregating by type of expenses, that is:

H8: Current and capital expenditure have a positive/negative effect on transparency.

3.2.2. Socio-economic variables

Population (log (pop)). Larger municipalities tend to achieve higher levels of disclosure (Copley 1991; Styles and Tennyson 2007; Serrano-Cinca, Rueda-Tomás, and Portillo-Tarragona 2009; Cárcaba García and García García 2010; Guillamón, Bastida, and Benito 2011; Albalate del Sol 2013). The explanations given for this finding in the literature are diverse. First, the public funds managed in larger populations are higher and therefore there could be more pressure to account for them (Guillamón, Bastida, and Benito 2011). In addition, the broader range of services and functions provided by larger municipalities will result in more sophisticated websites allowing better access to visitors (Styles and Tennyson 2007). Also, larger municipalities have more resources that can be used to promote transparency, to encourage the use of new technologies and to assign more material and human means to disclosure (Styles and Tennyson 2007; Guillamón, Bastida, and Benito 2011; Jorge et al. 2011). Therefore, according to the previous literature, we formulate the following hypothesis:

H9: The higher the municipal population, the greater the transparency.

Economic activity (eco). Ingram (1984), Giroux and McLelland (2003), Laswad, Fisher, and Oyelere (2005), Styles and Tennyson (2007), and Serrano-Cinca, Rueda-Tomás, and Portillo-Tarragona (2009) have observed that the economic situation clearly affects the levels of transparency and financial disclosure. In administrations where citizens have higher income levels or a higher economic level, the levels of financial reporting are also higher. Citizens with higher incomes demand higher levels of fiscal transparency (Piotrowski and Van Ryzin 2007). Comfortably off residents might have more time to participate in political activities and therefore require greater access to information, thus contributing to information openness (Ma and Wu 2011). Thus, the populations of higher income municipalities will show higher levels of monitoring and political control, which gives rise to an increased demand for information that allows them to measure government performance (Styles and Tennyson 2007).

In addition, the number of citizens with internet access is related to their income level (Styles and Tennyson 2007); therefore, if the number of internet users is higher, the network is more likely to be used to consult financial information on the municipal website (Serrano-Cinca, Rueda-Tomás, and Portillo-Tarragona 2009) and, as Caba Pérez, Rodríguez Bolívar, and López Hernández (2008) demonstrated, the greater the percentage of households with internet access, the greater the degree of online financial disclosure will be. Therefore, since concern and interest in greater access to information and political monitoring increases as the municipality's economic position improves, we propose the following hypothesis:

H10: Economic level is positively related to the level of financial disclosure.

To summarize, Table 1 reports the abovementioned variables as determinants of the level of municipal transparency with their definition and the expected sign.

4. Research design: transparency index and sample

The organization *TI-Spain* works towards increasing information openness in Spanish public institutions and since 2008 the organization has produced a transparency index for the largest Spanish municipalities. *TI-Spain* has defined a list of 80 indicators to assess the degree of transparency and disclosure of each of the municipalities evaluated through the detailed analysis of the information provided on their municipal websites. The indicators are grouped into sections to create transparency sub-indices,

Table 1. Definition of the variables and expected sign.

Variables		Definition	Expected sign
Political variables	*ideol*	Political ideology of the incumbent party (1: right; 0: left)	+/-
	herf	Herfindahl index (range from 0 to 1)	-
	turnout	Voter turnout in local elections	+
	changegov	Change of government in the election (1: change; 0: no change)	-
Budgetary and socioeconomic variables	*debt*	Indebtedness /total non-financial revenues	+
	fiscal	Direct and indirect taxes, fees and other revenues/total non-financial revenues	+
	currtransf	Current transfer revenues /total non-financial revenues	+/-
	captransf	Capital transfer revenue/total non-financial revenues	+/-
	currexp	Current expenditure per capita	+/-
	capexp	Capital expenditure per capita	+/-
	log(pop)	Logarithm of population	+
	eco	Index of economic activity	+

Table 2. Transparency index of municipalities by areas (average).

	2008	2009	2010	2012
Global transparency	52.1	64.0	70.2	70.9
Economic-financial transparency	29.1	49.1	63.8	71.2
Information about the local government	69.6	71.4	68.1	72.2
Relations with citizens and society	69.0	71.4	77.3	76.3
Transparency of public procurement procedures	37.3	58.3	70.1	68.6
Transparency in urban planning and public work	48.4	67.0	72.2	77.6
New transparency law				57.4

Note: TI-Spain does not provide data for the year 2011.

ranging from 0 to 100, in different areas. The average transparency score for all municipalities has increased in recent years, but the most notable growth, and the one that most concerns us in this analysis, is the economic and financial transparency index, where the average went from only 29.1 points in 2008–71.2 points in 2012 (see Table 2).

Therefore, the study on the determinants of online financial transparency focuses on the 100 largest Spanish municipalities for the years in which TI-*Spain* publishes information on the index, i.e. 2008, 2009, 2010 and 2012, therefore giving a sample of 400 observations. Having defined the variable that will allow us to measure the degree of LG transparency, we now explain the socio-economic, political, and budgetary variables that may influence the degree of financial disclosure by local authorities. The independent variables were taken from several sources. The socio-economic variables came from *La Caixa* Economic Yearbook and the National Institute of Statistics. Political variables were taken from the information provided by the Ministry of Home Affairs, and budget balances from the Ministry of Finance and Public Administration.

Tables 3 and 4 report the set of descriptive statistics of the determinant variables of transparency and the correlation coefficients between the variables, respectively.

5. Methodology

Online municipal financial transparency could be explained by political, budgetary and socio-economic determinants. Therefore, the empirical specifications to be estimated are defined as follows:

Table 3. Descriptive statistics of the variables (2008–2012).

	Variables	Mean	St. Dev.	Min.	Max.
Dependent variable	*TI*	54.23	37.16	0	100
Political variables	*ideol*	0.51	0.50	0	1
	herf	0.40	0.09	0.21	0.67
	turnout	59.67	7.64	43.64	75.17
	changegov	0.30	0.46	0	1
Control variables (budgetary and socioeconomic variables)	*debt*	0.09	0.11	0	0.69
	fiscal	0.36	0.09	0.13	0.68
	currtransf	0.26	0.09	0.08	0.64
	captransf	0.09	0.07	0	0.27
	currexp	822.33	174.20	535.17	1415.53
	capexp	215.11	127.84	4.19	763.59
	log(pop)	11.89	0.73	10.46	15.00
	eco	555.75	1228.51	64	10585

Table 4. Pearson's correlation coefficient.

	idel	herf	turnout	Changegov	debt	fiscal	currtransf	captransf	currexp	capexp	log(pop)	eco
idel	1											
herf	0.319	1										
turnout	0.282	0.433	1									
changegov	0.031	−0.131	0.174	1								
debt	0.204	0.015	0.064	0.130	1							
fiscal	0.152	0.203	0.048	−0.026	−0.364	1						
currtransf	−0.166	−0.272	−0.203	−0.107	−0.335	−0.344	1					
captransf	−0.233	0.005	−0.108	0.029	−0.280	−0.254	−0.094	1				
currexp	0.080	−0.103	−0.009	0.042	0.053	−0.209	−0.023	−0.067	1			
capexp	−0.143	−0.049	−0.002	−0.066	−0.132	−0.412	−0.022	0.55	0.337	1		
log(pop)	0.073	0.043	−0.076	−0.164	−0.008	−0.094	0.289	−0.153	0.153	−0.002	1	
eco	0.077	−0.034	0.008	−0.091	−0.001	−0.059	0.140	−0.114	0.269	0.09	0.728	1

Model 1:

$$\begin{aligned} IT_{it} = {} & a + \beta_1 ideol_{it} + \beta_2 herf_{it} + \beta_3 turnout_{it} + \beta_4 changegov_{it} + \\ & + \beta_5 debt_{it} + \beta_6 fiscal_{it} + \beta_7 currtransf_{it} + \beta_8 captransf_{it} + \beta_9 currexp_{it} \\ & + \beta_{10} capexp_{it} + +\beta_{11} log(pop)_{it} + \beta_{12} eco_{it} + h_i + u_{it} \end{aligned} \tag{1}$$

Model 2:

$$IT_{it} = a + \beta_1 ideol_{it} + \beta_2 herf_{it} + \beta_3 turnout_{it} + \beta_4 changegov_{it} + h_i + u_{it} \tag{2}$$

where i refers to municipality ($i = 1, \ldots, 100$), t refers to each of the years analyzed ($t =$ 2008, 2009, 2010, 2012), hi is the unobservable heterogeneity or individual effect and u_{it} is the error term. We differentiate between two specifications.[6] Model 1 uses all the above mentioned independent variables that might explain the level of financial transparency (political, budgetary and socioeconomic); Model 2 includes only the political variables.

First, these models are estimated using generalized least squares (GLS). Second, we also estimate a panel data *Tobit* model with random effects, given that transparency indexes are censored, which has a lower limit of 0 and an upper limit of 100. The use of the two methodologies allows us to contrast the results.

6. Results

Table 5 shows the mean transparency in the post-election year for the municipalities where the government changed compared to those with no change, and for the municipalities that changed, whether the change was from right to left or left to right. To interpret the results an analysis of variance with one factor is useful. This enables us to test whether the null hypothesis of mean rank is the same between the groups, as opposed to the alternative hypothesis of difference of means. We performed the Kruskal–Wallis test for this purpose.

The results show that the ρ-value associated with the statistic is higher than 0.10. Consequently, at the 10% significance level the null hypothesis of equality of means is not rejected. Thus, we can conclude that there are no significant differences in the levels of transparency between municipalities where the government changed and those where it stayed the same. In turn, of the municipalities where the government changed there are no significant differences between whether the change was from right to left or vice versa. Explanations for differences in levels of transparency should therefore be sought in others factors.

Table 6 shows the results obtained from the estimates[7] of Models 1 and 2, using the panel data Tobit model and generalized least squares (GLS) regression; the results are similar for the two models.

Model 1 shows the effect of the explanatory variables defined above on the financial transparency level for the 100 municipalities observed in four different years. Model 2 includes only the political variables in order to contrast the results.

The results obtained in Table 6 (Model 1) confirm that the relationship between the variable *change of government (changegov)* and the transparency index is not significant. Therefore, it seems that the level of disclosure is not affected by a change in the incumbent party or

Table 5. Economic and financial transparency and change of government.

			Transparency mean[a]
Change of government?	Yes	Elections 2007	21.251
		Elections 2011	70.089
	No	Elections 2007	31.973
		Elections 2011	72.140
Municipalities with a change in ideology	Right to left	Elections 2007	21.251
		Elections 2011	70.089
	Left to right	Elections 2007	31.973
		Elections 2011	72.140
Kruscal-Wallis test[b]			
Change of government?[c]	Elections 2007	Chi-squared	2.633
		p-value	0.104
	Elections 2011	*Chi-squared*	0.673
		p-value	0.412
Municipalities with a change in ideology[d]	Elections 2007	Chi-squared	0.074
		p-value	0.786
	Elections 2011	Chi-squared	0.705
		p-value	0.401

Notes:
[a]Transparency median in post-election years (2008 and 2012).
[b]The Kruskal-Wallis test is carried out for levels of transparency in the year after the municipal elections of 2007 and 2011.
[c]We test for differences between the medians of transparency by change of government. We test the null hypothesis *H*0: *The k medians for all municipalities are equal* (i.e. there is no statistically significant difference between the median transparency of municipalities with a change of government and municipalities with no change), against the alternative hypothesis *H*1: *At least two medians differ*.
[d]We test the null hypothesis *H*0: *The k medians for all municipalities are equal* (i.e. there is no statistically significant difference between the median transparency of municipalities with a right-to left versus left-to-right change of government), against the alternative hypothesis *H*1: *At least two medians differ*.

Table 6. Determinants of local financial transparency.

		Model 1		Model 2	
		GLS	Tobit	GLS	Tobit
Political variables	*ideol*	1.137	0.893	1.654	4.321
		(4.839)	(6.189)	(4.478)	(5.773)
	herf	−97.049**	−140.337***	−91.345**	−131.378***
		(30.444)	(38.264)	(28.782)	(36.279)
	turnout	0.641*	0.958**	0.472	0.739*
		(0.370)	(0.462)	(0.349)	(0.437)
	changegov	−7.447	−9.787	− 5.864	−7.807
		(4.782)	(5.982)	(4.677)	(5.855)
Control variables	*debt*	64.085**	76.446**		
(budgetary and socioeconomic variables)		(30.136)	(37.193)		
	fiscal	77.842*	98.910*		
		(41.133)	(50.983)		
	currtransf	21.583	21.991		
		(40.114)	(50.020)		
	captransf	118.689**	131.040*		
		(39.065)	(49.119)		
	currexp	0.011	0.109		
		(0.015)	(0.194)		
	capexp	−0.047**	−0.056**		
		(0.021)	(0.027)		
	log(pop)	3.400	4.840		
		(5.362)	(6.681)		
	eco	0.003	0.002		
		(0.003)	(0.003)		
Log likelihood Wald chi2 rho		30.18**	−1698.58	10.47**	−1707.36
		0.297	30.92**	0.26	13.43***

Notes*:* Standard errors in parenthesis Statistical significance: (*) 10%; (**) 5%; (***) 1%.

otherwise. Neither is the *political ideology (ideol)* significant. The widespread expected sign in the literature is obtained, indicating higher levels of disclosure for left-wing parties, but the relationship is not significant, as Jorge et al. (2011), Serrano-Cinca, Rueda-Tomás, and Portillo-Tarragona (2009) or Esteller-Moré and Polo Otero (2012) found. In consequence, H1 and H4 formulated in our theoretical framework cannot be accepted.

The results for the degree of political competition indicate that the greater the level of political rivalry, the greater the level of financial disclosure. The *Herfindahl index (herf),* in which values closer to 1 indicate a higher degree of political strength, shows a negative relationship with the transparency index, indicating that the lower the political competition in the LG, the lower the level of transparency. Therefore, and as expected in H2, the higher rivalry due to the presence of different political groups on the council will raise the pressure from the opposition on the ruling party to be more transparent and disclose more information and increase, in turn, the need to use transparency for strategic purposes. The result is consistent with the findings by Alt, Lassen, and Rose (2006), who observe that the demand for information transparency is positively related to the political fragmentation of government.

Lastly, the impact of the *percentage of voters in the municipal elections (turnout)* on transparency is positive and significant, supporting H3. A higher voter turnout, studied as a proxy for citizens' social and political involvement, indicates an increase in the financial transparency level, due in part to the increased demand from voters with a greater interest in public affairs.

Model 1 includes all the explanatory variables of Model 2 and the control variables (budgetary and socioeconomic). The budgetary variables, studied as determinants of the level of transparency, show that the effects of *current transfer revenues (currtransf)* and *current public expenditure (currexp)* on transparency are not significant.

In contrast, results show the expected significant and positive effect for the variable *debt*, supporting H5. The results indicate that the level of indebtedness also leads to a higher level of financial transparency (Evans and Patton 1987; Styles and Tennyson 2007; Caba Pérez, Rodríguez Bolívar, and López Hernández 2008; Caamaño-Alegre et al. 2013). Thus, far from concealing debt levels, ruling parties have incentives to disseminate financial information as levels of debt increase, which could be done in order to show their ability to fulfill the entity's obligations. In addition, it is also a way of showing citizens how public services are financed.

In addition, we find an expected significant and positive effect for the variable *fiscal*, supporting H6. Our findings are consistent with those of Guillamón, Bastida, and Benito (2011). These authors showed that the higher the level of tax revenues, the greater the degree of dissemination of economic and financial information by local managers, which could be due to the reaction of public managers to increased demands from citizens who express their interest by closer monitoring of the way their money is spent.

The variable *capital transfers revenues (captransf)* presents a positive and significant relationship with the level of transparency. This result is in tune with Ingram and De Jong (1987) and Guillamón, Bastida, and Benito (2011), who find that a greater reliance on transfers results in an increased incentive to disclose. A higher level of transfers could involve higher levels of government regulation and monitoring of the use of funds, thus prompting higher levels of disclosure (Copley 1991; Giroux and Deis 1993).

Another interesting result is the positive relationship between *capital expenditures per capita* (*capexp*) and transparency. The value of β_8 is high (118.689 and 131.040, depending on the methodology). These results are in line with Alesina and Angeletos (2005), who consider that larger spending budgets could increase the level of corruption, which may result in reduced transparency and the hiding of economic information. Our sample consists of the largest Spanish municipalities, which may explain this negative relationship.

Finally, although we obtained the expected signs for our socio-economic variables (*log (pop)* and *eco*), they are not relevant in determining the transparency index, and we therefore cannot confirm H11 and H12. Thus, municipality size does not seem to affect the degree of financial disclosure (Alt, Lassen, and Rose 2006). The same result is obtained for the economic level of the municipality, in line with Jorge et al. (2011) and Albalate del Sol (2013).

7. Conclusions

This study has analyzed the evolution in the levels of financial transparency for the largest Spanish LGs from the information collated by the organization *Transparency International-Spain* for the period 2008-2012. Additionally, we have studied the effect of political variables on the level of internet financial disclosure. The methodologies used to study the determinants of transparency were the panel data Tobit model and Generalized Least Squares (GLS).

It should be noted that during the period examined there was an increase in the level of voluntary financial disclosure. In this line and in an attempt to increment this tendency, a transparency law (*Law No. 19/2013*) was approved with the purpose of raising disclosure levels in Spanish public administrations.

An overview based on the results of our analysis of the determinants of online financial transparency shows that the level of financial disclosure does not entirely depend on the incumbents' features. This is because neither their ideology nor the existence of a change in government has a relevant impact on transparency.

Therefore, the level of financial disclosure seems to be the result of pressure from, on the one hand, opposition groups when there is rivalry and political competition, and, on the other hand, the increased demands of citizens involved in public affairs, who want to know how the government is spending their money and how public services are financed. These results are in line with Ingram (1984), who shows the importance of users' demands and needs for information, or Alt, Lassen, and Rose (2006), who found political competition tends to increase the level of fiscal transparency.

Based on our findings, the key to improving transparency in LGs lies in the pressure among political parties and citizen pressure on governments. One way to increase transparency could therefore be to raise awareness about the importance that citizen pressure can have on governments.

Notes

1. Moon, Lee, and Roh (2014) review research themes and methods used in information technology (IT) in government.
2. We consider the voter turnout in the municipal 2007 and 2011 elections, given that the study period is 2008–12.

3. The empirical evidence on the strategic use of debt has produced contradictory results, although most studies observe a positive relationship between the increase in debt and change in government (Balaguer-Coll et al. 2015; Brender, 2003; Cassette and Farvaque 2014; Pettersson-Lidbom 2001).
4. In the literature, the predominant effect of debt on transparency is positive (Robbins and Austin 1986; Evans and Patton 1987; Banker, Bunch, and Strauss 1989; Giroux and Deis 1993; Styles and Tennyson 2007; Caba Pérez, Rodríguez Bolívar, and López Hernández 2008; Caamaño-Alegre et al. 2013).
5. To calculate fiscal pressure we included the following revenues: Direct taxes (chapter I); Indirect taxes (chapter II) and Fees and other revenue (chapter III). Chapter III includes all fees, public prices and special contributions paid by taxpayers or users. The special contributions included in chapter III should not be included to calculate the fiscal pressure, since they are not tax revenues. However, because we do not have disaggregated information we were unable to eliminate the special contributions of chapter III. This revenue represents a small percentage in chapter III, so we believe that its inclusion will not affect the results.
6. See table 6.
7. The existence of multicollinearity was examined by calculating the Variance Inflation Factor (VIF). According to Kleinbaum, Kupper, and Muller (1988), values higher than 10 indicate the existence of multicollinearity. In our models, none of the VIFs reached this value; therefore there is no indication of multicollinearity.

Disclosure statement

No potential conflict of interest was reported by the authors.

Funding

We are grateful to two anonymous reviewers for their valuable recommendations. The authors acknowledges the financial support of the Ministerio de Economía y Competitividad (ECO2017-85746-P and ECO2017-88241-R) and Universitat Jaume I (UJI-B2017-14).

Notes on contributors

Maria Teresa Balaguer-Coll is Associate Professor of Finance and Accounting at the University Jaume I, Spain. Her research interests are focused on local government finance. She has published in journals such as *European Economic Review, Annals of Regional Science, Journal of Productivity Analysis, Environment and Planning A, Spanish Accounting Review, Applied Economics, International Public Management Journal, Local Government Studies*, and *European Journal of Political Economy*.

Maria Isabel Brun-Martos is Associate Professor of Finance and Accounting at the University CEU Cardenal Herrera, Spain. Her research interests are focused on local government finance and public sector management. She has published in journals such as *Spanish Accounting Review, European Journal of Political Economy, Public Management Review*, and *Applied Economics*.

References

Aidt, T. S. 2009. “Corruption, Institutions, and Economic Development.” *Oxford Review of Economic Policy* 25 (2): 271–291.

Albalate del Sol, D. 2013. “The Institutional, Economic and Social Determinants of Local Government Transparency.” *Journal of Economic Policy Reform* 16 (1): 90–107.

Albassam, A. 2015. "The Influence of Budget Transparency on Quality of Governance." *International Journal on Governmental Financial Management* 15 (2): 89–109.
Alcaide Muñoz, L., M. P. Rodríguez Bolívar, and A. M. López Hernández. 2013. "Financial Determinants for Improving Public Sector Accountability: A Meta-Analytic Study." *Transylvanian Review of Administrative Sciences* (Special Issue): 66–87.
Alesina, A., and G. M. Angeletos. 2005. "Corruption, Inequality, and Fairness." *Journal of Monetary Economics* 52 (7): 1227–1244.
Alt, J. E., and D. D. Lassen. 2006. "Fiscal Transparency, Political Parties, and Debt in OECD Countries." *European Economic Review* 50 (6): 1403–1439.
Alt, J. E., D. D. Lassen, and S. Rose. 2006. "The Causes of Fiscal Transparency: Evidence From the US States." *IMF Staff Papers* 53: 30–57.
Anderson, C. J., and Y. V. Tverdova. 2003. "Corruption, Political Allegiances, and Attitudes Toward Government in Contemporary Democracies." *American Journal of Political Science* 47 (1): 91–109.
Baber, W. R. 1983. "Toward Understanding the Role of Auditing in the Public Sector." *Journal of Accounting and Economics* 5: 213–227.
Baber, W. R., and P. K. Sen. 1984. "The Role of Generally Accepted Reporting Methods in the Public Sector: An Empirical Test." *Journal of Accounting and Public Policy* 3 (2): 91–106.
Balaguer-Coll, M. T., M. I. Brun-Martos, A. Forte, and E. Tortosa-Ausina. 2015. "Local Governments' Re-election and its Determinants: New Evidence Based on a Bayesian Approach." *European Journal of Political Economy* 39: 94–108.
Banker, R. D., B. S. Bunch, and R. P. Strauss. 1989. "Factors Influencing School District Financial Reporting Practices." *Research in Governmental and Nonprofit Accounting* 5: 27–56.
Bertot, J. C., P. T. Jaeger, and J. M. Grimes. 2010. "Using ICTs to Create a Culture of Transparency: E-Government and Social Media as Openness and Anti-Corruption Tools for Societies." *Government Information Quarterly* 27 (3): 264–271.
Besley, T., and M. Smart. 2006. "Fiscal Restraints and Voter Welfare." *Journal of Public Economics* 91 (3–4): 755–773.
Brender, A. . 2003. "The Effect of Fiscal Performance on Local Government Election Results in Israel: 1989–1998." *Journal of Public Economics* 87: 2187–2205.
Brusca, I., and V. Montesinos. 2006. "Are Citizens Significant Users of Government Financial Information?" *Public Money and Management* 26 (4): 205–209.
Caamaño-Alegre, J., S. Lago-Peñas, F. Reyes-Santias, and A. Santiago-Boubeta. 2013. "Budget Transparency in Local Governments: An Empirical Analysis." *Local Government Studies* 39 (2): 182–207.
Caba Pérez, C., A. M. López Hernández, and M. P. Rodríguez Bolívar. 2005. "Citizens' Access to on-Line Governmental Financial Information: Practices in the European Union Countries." *Government Information Quarterly* 22 (2): 258–276.
Caba Pérez, C., M. P. Rodríguez Bolívar, and A. L. López Hernández. 2008. "e-Government Process and Incentives for Online Public Financial Information." *Online Information Review* 32 (3): 379–400.
Cárcaba García, A., and J. García García. 2010. "Determinants of Online Reporting of Accounting Information by Spanish Local Government Authorities." *Local Government Studies* 36 (5): 679–695.
Cassette, A., and E. Farvaque. 2014. "Are Elections Debt Brakes? Evidence From French Municipalities." *Economics Letters* 122 (2): 314–316.
Cheng, R. H. 1992. "An Empirical Analysis of Theories on Factors Influencing State Government Accounting Disclosure." *Journal of Accounting and Public Policy* 11 (1): 1–42.
Christiaens, J. 1999. "Financial Accounting Reform in Flemish Municipalities: An Empirical Investigation." *Financial Accountability and Management* 15 (1): 21–40.
Copley, P. A. 1991. "The Association Between Municipal Disclosure Practices and Audit Quality." *Journal of Accounting and Public Policy* 10 (4): 245–266.
Cuadrado-Ballesteros, B., J. Frías-Aceituno, and J. Martínez-Ferrero. 2014. "The Role of Media Pressure on the Disclosure of Sustainability Information by Local Governments." *Online Information Review* 38 (1): 114–135.

Del Monte, A., and E. Papagni. 2001. "Public Expenditure, Corruption, and Economic Growth: The Case of Italy." *European Journal of Political Economy* 17 (1): 1–16.
Esteller-Moré, A., and J. Polo Otero. 2012. "Fiscal Transparency." *Public Management Review* 14 (8): 1153–1173.
Evans, J. H., and J. M. Patton. 1987. "Signaling and Monitoring in Public-Sector Accounting." *Journal of Accounting Research* 25: 130–158.
Gandía, J. L., and M. C. Archidona. 2008. "Determinants of web Site Information by Spanish City Councils." *Online Information Review* 32 (1): 35–57.
Garrido-Rodríguez, J. C., A. López-Hernández, and J. L. Zafra. 2017. "Measuring Local Government Transparency. Influence of Political Sign in Multidimensional Analysis." *Lex Localis - Journal of Local Self-Government* 15 (4): 889–917.
Giroux, G., and D. Deis. 1993. "Investor Interests and Government Accounting Disclosure." *Accounting, Auditing and Accountability Journal* 6 (1): 63–78.
Giroux, G., and A. J. McLelland. 2003. "Governance Structures and Accounting at Large Municipalities." *Journal of Accounting and Public Policy* 22 (3): 203–230.
Gore, A. K. 2004. "The Effects of GAAP Regulation and Bond Market Interaction on Local Government Disclosure." *Journal of Accounting and Public Policy* 23 (1): 23–52.
Guillamón, M. D., F. Bastida, and B. Benito. 2011. "The Determinants of Local Government's Financial Transparency." *Local Government Studies* 37 (4): 391–406.
IMF. 2007. *Manual on Fiscal Transparency*. Washington, DC: International Monetary Fund.
Ingram, R. W. 1984. "Economic Incentives and the Choice of State Government Accounting Practices." *Journal of Accounting Research* 22 (1): 126–144.
Ingram, R. W., and D. V. DeJong. 1987. "The Effect of Regulation on Local Government Disclosure Practices." *Journal of Accounting and Public Policy* 6 (4): 245–270.
Jorge, S., P. Moura, A. F. Pattaro, and R. P. Lourenço. 2011. "*Local Government Financial Transparency in Portugal and Italy: A Comparative Exploratory Study on its Determinants.*" in '13th Biennial CIGAR Conference, bridging public sector and non-profit sector accounting, Ghent'.
Kim, S., and J. Lee. 2017. "Citizen Participation, Process, and Transparency in Local Government: An Exploratory Study." *Policy Studies Journal* 0 (0): 1–22.
Kleinbaum, D. G., L. L. Kupper, and K. E. Muller. 1988. *Applied Regression Analysis and other Multivariate Analysis Methods*. Boston, MA: PWS-KENT.
La Porte, T. M., C. C. Demchak, and M. De Jong. 2002. "Democracy and Bureaucracy in the age of the Web: Empirical Findings and Theoretical Speculations." *Administration and Society* 34 (4): 411–446.
Laswad, F., R. Fisher, and P. Oyelere. 2005. "Determinants of Voluntary Internet Financial Reporting by Local Government Authorities." *Journal of Accounting and Public Policy* 24 (2): 101–121.
Lindstedt, C., and D. Naurin. 2010. "Transparency is not Enough: Making Transparency Effective in Reducing Corruption." *International Political Science Review* 31 (3): 301–322.
Ma, L., and J. Wu. 2011. "*What Drives Fiscal Transparency? Evidence From Provincial Governments in China.*" 1st Global Conference on transparency research, Rutgers University-Newark.
Mauro, P. 1997. "Why Worry About Corruption?" *Economic Issues*, 6. International Monetary Fund, Washington, D.C.
Moon, M. J., J. Lee, and C. Roh. 2014. "The Evolution of Internal IT Applications and e-Government Studies in Public Administration: Research Themes and Methods." *Administration & Society* 46 (1): 3–36.
Navarro, A., F. J. Alcaraz, and D. Ortiz. 2010. "La Divulgación de Información Sobre Responsabilidad Corporativa en Administraciones Públicas: Un Estudio Empírico en Gobiernos Locales." *Spanish Accounting Review* 13 (2): 285–314.
Navarro Galera, A., D. Ortiz Rodríguez, F. J. Alcaraz Quiles, and J. L. Zafra Gómez. 2011. "*La divulgación de información sobre sostenibilidad en los gobiernos regionales y sus factores influyentes: El caso de España.*" 16th Congress AECA, Granada.
OECD. 2002. *OECD Best Practices for Budget Transparency*. París: Organisation for Economic Co-operation and Development.

Otusanya, O. J. 2011. "Corruption as an Obstacle to Development in Developing Countries: A Review of Literature." *Journal of Money Laundering Control* 14 (4): 387–422.

Péteri, G. 2008. "Transparency of Intergovernmental Transfers." In *Finding the Money: Public Accountability and Service Efficiency Through Fiscal Transparency, Local Government and Public Service Reform Initiative*, edited by G. Péteri, 131–142. Budapest: Open Society Institute-Budapest.

Pettersson-Lidbom, P. 2001. "An Empirical Investigation of the Strategic Use of Debt", *Journal of Political Economy*, 109(3), 570–583.

Pina, V., L. Torres, and S. . Royo. 2010. "Is E-Government Promoting Convergence Towards More Accountable Local Governments." *International Public Management Journal* 13 (4): 350–380.

Piotrowski, S. J., and G. G. Van Ryzin. 2007. "Citizen Attitudes Toward Transparency in Local Government." *The American Review of Public Administration* 37 (3): 306–323.

Robbins, W. A., and K. R. Austin. 1986. "Disclosure Quality in Governmental Financial Reports: An Assessment of the Appropriateness of a Compound Measure." *Journal of Accounting Research* 24 (2): 412–421.

Rodríguez, M. P., S. Royo, L. Alcaide, and C. Caba. 2013. *La difusión de información financiera pública en internet*. Madrid: AECA.

Rodríguez Bolívar, M. P., C. Caba Pérez, and A. M. López Hernández. 2006. "Cultural Contexts and Governmental Digital Reporting." *International Review of Administrative Sciences* 72 (2): 269–290.

Rodríguez Bolívar, M. P., C. Caba Pérez, and A. M. López Hernández. 2007. "E-Government and Public Financial Reporting: The Case of Spanish Regional Governments." *The American Review of Public Administration* 37 (2): 142–177.

Sakurai, S. N., and N. A. Menezes-Filho. 2008. "Fiscal Policy and Reelection in Brazilian Municipalities." *Public Choice* 137 (1–2): 301–314.

Serrano-Cinca, C., M. Rueda-Tomás, and P. Portillo-Tarragona. 2009. "Factors Influencing e-Disclosure in Local Public Administrations." *Environment and Planning C: Government and Policy* 27 (2): 355–378.

Styles, A. K., and M. Tennyson. 2007. "The Accessibility of Financial Reporting of US Municipalities on the Internet." *Journal of Public Budgeting, Accounting and Financial Management* 19 (1): 56–92.

Uma, K. E., and F. E. Eboh. 2013. "Corruption, Economic Development and Emerging Markets: Evidence From Nigeria." *Asian Journal of Management Sciences and Education* 2 (3): 56–67.

Veiga, L. G., and F. J. Veiga. 2007. "Does Opportunism Pay Off?" *Economics Letters* 96 (2): 177–182.

Vila, J. 2013. "Determinantes de la Transparencia Contable en los Municipios." *Auditoria Pública: Revista de los Órganos Autonómicos de Control Externo* 60: 57–64.