



**UNIVERSIDAD DE MURCIA**  
**FACULTAD DE ECONOMÍA Y EMPRESA**

Budget Transparency and  
Legislative Oversight in  
Public Administrations

Transparencia Presupuestaria y  
Control Legislativo en  
las Administraciones Públicas

**D<sup>a</sup> Ana María Ríos Martínez**

2015





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## **ABBREVIATIONS**

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**2SLS:** Two-Stage Least Squares  
**3SLS:** Three-Stage Least Squares  
**CIA:** Central Intelligence Agency  
**CPR:** Common Pool Resource  
**CSOs:** Civil Society Organisations  
**GDP:** Gross Domestic Product  
**IBP:** International Budget Partnership  
**ICTs:** Information and Communication Technologies  
**IDEA:** Institute for Democracy and Electoral Assistance  
**IMF:** International Monetary Fund  
**INTOSAI:** International Organization of Supreme Audit Institutions  
**OBI:** Open Budget Index  
**OECD:** Organisation for Economic Co-operation and Development  
**OLS:** Ordinary least squares  
**O.PROBIT:** Ordered Probit estimation  
**PACE:** Philanthropy for Active Civic Engagement  
**PPM:** Partisan Politics Matters  
**RSH:** Roubini and Sachs's weak government hypothesis  
**SAI:** Supreme Audit Institution  
**UN:** United Nations  
**VIF:** Variance Inflation Factor  
**WB:** World Bank

## INTRODUCTION

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Good governance dictates that public policy decisions should be made openly and with the active engagement of those people who are affected by them (Fölscher et al., 2000). The public sector is mainly funded by tax-payers, who in turn require transparent information to be able to monitor government activities. Government budgets represent financial plans which specify how public resources are going to be used to meet policy goals (Organisation for Economic Cooperation and Development [OECD], 2006). Previous studies show that the best way to improve the allocation of public resources is through budget systems that are transparent, have robust oversight institutions (e.g., legislatures) and mechanisms and are open to public engagement. Such budgeting practices can positively impact growth, efficiency and equity, thus reducing poverty and creating sustained economic development (International Budget Partnership [IBP], 2012).

Unfortunately, citizens, legislatures, and the media have been traditionally excluded from budget decision-making and monitoring. In most developing countries, public budgeting is still considered as a state secret, and the process is controlled exclusively by the executive (de Renzio and Krafchik, 2007). Moreover, modern economies' budgets are very complex, allowing practices that aim to veil the real budget balance. Thus, politicians have little incentives to disclose simple, clear and transparent budgets (Alesina and Perotti, 1996). Accordingly, accountability mechanisms are required to verify that governments meet their duties.

Budget transparency can be one of these mechanisms. It is defined as the clarity, reliability, frequency, timeliness, and relevance of public fiscal reporting and the openness to the public of the government's fiscal policy-making process (International Monetary Fund [IMF], 2012).

The importance of government fiscal transparency was highlighted during the Asian financial crisis of the late 1990s, which showed the risks of opaque and unaccountable management of public finances (Santiso, 2005a). Investors and rating agencies failed to detect creeping fiscal disequilibria, large public contingent liabilities, vulnerable asset-liability structures and time inconsistencies of fiscal policy (Marcel and Tokman, 2002). Thus, it is clear the key role budget transparency plays in the credibility of

governments' policies. Higher budget transparency enhances the performance of all economic agents in the country.

Accordingly, the role of budget transparency has increasingly attracted attention from governments and international organizations as a way to prevent such failures in the future and give credibility to economic policies and thereby, enhancing economic growth. This concern has triggered the development of budget transparency international standards. In this respect, the IMF published in 1998 its "Code of Good Practices on Fiscal Transparency". It was a first attempt to define fiscal transparency in an exhaustive way (IMF, 1998). Similarly, the OECD issued in 2001 a document entitled "Best Practices for Budget Transparency" (OECD, 2001a). Finally, the IBP, a civil society organization sponsored by the Centre for Budget and Policy Priorities, started to release the Open Budget Survey biennially since 2006. It is based on an exhaustive questionnaire (Open Budget questionnaire) intended to gather a comparative data set on the public availability of budget information and other accountable budgeting practices around the world. Based on this questionnaire, the IBP publishes, also biennially, the Open Budget Index (OBI) to provide a systematic measurement of central governments' budget transparency. This questionnaire-based index fits the budget transparency international standards established by IMF, OECD and International Organization of Supreme Audit Institutions (INTOSAI) (IBP, 2010).

Research on central governments' budget transparency is rather scarce (see, e.g., Bastida and Benito, 2007; Andreula et al., 2009; Benito and Bastida, 2009; Khagram et al., 2013). In the same way, although the new information and communication technologies (ICTs) have become an important tool to foster relationships between citizens and governments, few studies have investigated so far central governments' e-government (see, e.g., Kim, 2007; Rodríguez-Domínguez et al., 2011). E-government is defined as the use of the ICTs, particularly Internet, for disclosing information and providing services to citizens.

Given the above, Chapter I of this thesis attempts to provide a first insight about the level of central governments' budget information disclosure, through the Internet and other media, in an international comparative approach. For this purpose, based upon the 2010 Open budget questionnaire data (IBP), we first build some indicators to



measure the level of budget information disclosure, through the Internet and other media. Then, we analyse what socio-economic, political and institutional factors promote central governments' budget information disclosure, through the Internet and other media.

However, as we can see from the definition of budget transparency stated above (IMF, 2012), budget transparency is much more than the simple disclosure of budget information. For this reason, Chapter II aims to complement our prior findings by analysing the institutional, political and socio-economic determinants of budget transparency in an international comparative approach. We will mainly focus on one institutional factor: legislative budgetary oversight.

An active legislature plays an important role in governance and accountability, which in turn is essential for democracy. The primary roles of legislatures are oversight, representation and legislation. Oversight refers to controlling the activities of the executive, and – on behalf of citizens – holding the executive accountable. Therefore, legislative oversight can contribute to guarantee that the relationship between the state and its citizens is characterized by accountability (Hudson and Wren, 2007).

A particularly important element of oversight concerns the budget: checking that spending decisions are in line with national priorities (Hudson and Wren, 2007). In this regard, legislative budgetary oversight is defined as the “power to scrutinize and influence budget policy and to ensure its implementation” (Wehner, 2006, p. 768). Legislatures participate in the governance of the budget by approving budget allocations, overseeing budget execution and controlling budget performance. Effective legislative budgetary oversight will enhance accountability and transparency, which are all concepts associated with a strong democracy.

Accordingly, there is growing interest in understanding the role of legislatures regarding both the governance of the budget and the oversight of public finances, prompted, in part, by calls for greater transparency and accountability in government financial management (Santiso, 2005a, 2005b). Nevertheless, as far as we know, the impact of legislative budgetary oversight on budget transparency has never been empirically tested (Pelizzo, 2011). In this regard, Chapter II aims to analyse the determinants of budget transparency in an international comparative approach,

focusing primarily on how the legislative budgetary oversight over the executive affects budget transparency. Additionally, we analyse the determinants of legislative budgetary oversight along all phases of budgetary process, since empirical literature on international legislative budgetary oversight is also rather scarce (Stapenhurst et al., 2008; Wehner, 2010b). To measure budget transparency in each country, we use the 2010 OBI. We also build some indicators based on 2010 Open Budget questionnaire items (IBP) to measure legislative oversight along all phases of budgetary process.

We expect that the stronger the legislative budgetary oversight over the executive, the higher the level of central governments' budget transparency. However, there is a more sceptical perspective on the role of legislatures in the budget process, i.e., there is evidence that powerful legislatures can undermine fiscal discipline (Wehner, 2007). According to Santiso (2005b), legislative activism may weaken fiscal discipline due to the Common Pool Resource (CPR) problem. If the legislature has unrestrained budget amendment power, it has incentives to overspending and under-taxation, thus leading to higher budget deficits and public debt.

Therefore, we consider it is necessary to simultaneously examine the potential risks and benefits associated with legislative budgetary oversight. In particular, Chapter III aims to ascertain whether legislative budgetary oversight supposes a risk to fiscal discipline as well as a benefit to budget transparency. It seems desirable to strike the right balance between executive prerogatives and legislative oversight in the budget process, and this way ensure fiscal discipline while providing the institutional checks and balances that guarantee effective accountability (Santiso, 2005a; Wehner, 2007).

Given the above, an adequate legislative budgetary oversight might play an important role in governance. Legislatures may oversight the activities of the executive, and – on behalf of citizens – holding the latter accountable. However, it is also essential that citizens have opportunities to participate directly, without intermediaries, in the budget process.

Government budgets play a central role in citizens' lives, especially in the poor and low-income ones, who are the primary beneficiaries of government programmes financed through the budget (de Renzio and Krafchik, 2007). Nowadays, central governments around the world are trying to address the fallout from the global

economic crisis, which has led them to make painful decisions in respect of spending reductions and tax increases (Ebdon and Franklin, 2006; IBP, 2012). Therefore, it seems to be an important opportunity for citizens to help the government to find the best solutions for the community regarding public funds' allocation (Ebdon and Franklin, 2006). In this regard, many international organizations as well as government officials, Civil Society Organisations (CSOs) and scholars have established the goal of increasing public engagement in budget decisions as the top priority (Tanaka, 2007; Khagram et al., 2013).

Given the key importance of this issue, it is noteworthy that only few studies have thoroughly investigated so far which factors make central governments' budget process more open to public engagement (Khagram et al., 2013). This is mainly due to the lack of cross-country dataset on public participation (Ebdon and Franklin, 2006; Khagram et al., 2013). The 2012 Public Participation in the Budget Process Index, published by IBP, addresses this problem.

In this regard, Chapter IV aims to examine what socio-economic, institutional and political factors promote public engagement in the central governments' budgetary process, using the 2012 Public Participation in the Budget Process Index as a measure of public participation. Among institutional factors, we will study how budget transparency could affect public engagement. According to Justice and Dülger (2009), there can be no authentic citizen participation in the budget process without effective transparency. Nevertheless, other authors state that transparency and participation are mutually reinforcing, i.e., transparency is a prerequisite for citizen participation which, in turn, can lead to more requests for information (Fölscher et al., 2000). Therefore, in this chapter, we not only analyse if budget transparency promote public participation, but also if public participation is necessary to achieve a good level of budget transparency.

In a nutshell, this thesis attempts to answer the following research questions:

1. What are the socio-economic, political and institutional factors that promote central governments' budget information disclosure through the Internet and other media? (Chapter I)

2. What are the institutional, political and socio-economic determinants of central governments' budget transparency? How does legislative budgetary oversight affect budget transparency?. What are the determinants of legislative budgetary oversight along all phases of budgetary process? (Chapter II)
3. Is legislative budgetary oversight a risk to central governments' fiscal discipline and a benefit to budget transparency? (Chapter III)
4. What are the socio-economic, institutional and political factors that foster the opportunities for public engagement in the central governments' budgetary process? Are public engagement and budget transparency mutually reinforcing? (Chapter IV)

Finally, the main findings of this thesis are presented in the Conclusions section.

**CHAPTER I: "DETERMINANTS OF CENTRAL GOVERNMENT BUDGET DISCLOSURE"**

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## 1. Introduction

The public sector is mainly funded by tax-payers, who require transparent information to be able to monitor government activities. Budget is the tool governments use to implement specific policy objectives during each fiscal year. Modern economies' budgets are very complex, allowing practices that attempt to veil the real budget balance. Thus, politicians have little incentives to disclose clear and transparent budgets (Alesina and Perotti, 1996). Accordingly, accountability mechanisms are required to verify that governments meet their duties.

Budget transparency can be one of these mechanisms. It is defined as full disclosure of all relevant fiscal information in a timely and systematic manner (OECD, 2001a). The role of budget transparency has increasingly attracted attention from governments and international organizations as a way to give credibility to economic policies and thereby, enhancing economic growth. This concern has triggered the development of budget transparency international standards.

In this respect, the IMF published in 1998 its "Code of Good Practices on Fiscal Transparency". It was a first attempt to define fiscal transparency in an exhaustive way (IMF, 1998). Similarly, the OECD issued in 2001 a document entitled "Best Practices for Budget Transparency" (OECD, 2001a). Finally, in 2006, the IBP, a nongovernmental organization, published the OBI to provide central governments a systematic measure of their budget transparency. This index is built from a questionnaire (Open Budget questionnaire) and fits the budget transparency international standards established by IMF, OECD and INTOSAI (IBP, 2010).

According to Bastida and Benito (2007), research on central governments' budget transparency is rather scarce. In the same way, although the new ICTs have become an important tool to foster relationships between citizens and governments, few studies have investigated so far central governments' e-government (Siau and Long, 2006; Kim, 2007; Rodríguez-Domínguez et al., 2011). E-government is defined as the use of information and ITCs, particularly Internet, for disclosing information and providing services to citizens. Therefore, e-government goes beyond the disclosure of budget information through the Internet. All these previous studies have focused on the

determinants of e-government in general, but none of them has focused exclusively on the determinants of budget disclosure on the Internet.

In this regard, this chapter attempts to know what socio-economic, political and institutional factors promote budget disclosure, through the Internet and other media. With this aim, we build some indicators to measure central governments' budget disclosure. Besides, we create groups of homogeneous countries according to their features, mainly the level of budget disclosure.

We use a sample of 93 countries. Our data is based upon 2010 Open Budget questionnaire items (IBP) and other socio-economic and political data.

This study specifically seeks to contribute to the literature on international budget disclosure in a threefold way. First, we work on the Open Budget questionnaire (IBP) because it is recognized by the literature as a reliable source of data on budget disclosure (de Renzio and Masud, 2011; Seifert et al., 2013; Wehner and de Renzio, 2013). Thus, our budget disclosure indicators overcome some of the limitations of previous transparency indexes, which were based on OECD surveys (Alt and Lassen, 2006; Bastida and Benito, 2007; Benito and Bastida, 2009). On the one hand, Open Budget questionnaire is filled by independent experts not associated with the government. On the other hand, the answers are focused on actual practices rather than formal procedures established by law, as it happens in OECD questionnaires.

Second, little is known about budget disclosure determinants in an international comparative approach (Benito and Bastida, 2009). Moreover, to the best of our knowledge, there are no studies exclusively focused on budget disclosure determinants through the Internet in an international comparative approach.

Third, our sample covers 93 countries whose population accounts for 87.6 per cent of world population in 2009. In addition, these countries are located in different geographical areas and have different income levels, political regimes and administrative cultures. Finally, data are collected simultaneously, providing a comparative snapshot of fiscal transparency at one point in time (Wehner and de Renzio, 2013).

The chapter has been structured as follows. First, we review theoretical and empirical literature on budget disclosure. Second, we provide details of the empirical methodology. Then, we present and discuss the empirical results. Finally, we conclude.

## **2. Literature review**

### **2.1. Budget disclosure**

Both agency and institutional theories shape the way governments disclose financial information (Zimmerman, 1977; Carpenter and Feroz, 2001).

The relationship between citizens and politicians can be described as an agency relationship whereby the citizen is the principal and the politician plays the role of the agent (Banker and Patton, 1987). The agency theory argues that principal and agent may not pursue identical objectives, since incumbents sometimes have their own interest, which do not always maximize citizens' welfare. Among incumbents' interests, Zimmerman (1977) highlights re-election, advance in political/professional careers and increase in their current and future incomes. Voters' wealth is related to agents' actions. Accordingly, citizens press incumbents to disclose information as a way to weaken information asymmetry and to allow the monitoring of incumbents' activities (Zimmerman, 1977). In a principal-agent framework, elections work as a revelation mechanism, in which voters attempt to induce truthful revelation by the incumbents (Benito and Bastida, 2009). In this way, Besley and Smart (2007) show that increasing transparency has two countervailing effects on voter welfare. On the one hand, increasing transparency allows voters to better screen good politicians from bad ones. On the other hand, greater transparency disciplines politicians in their rent seeking, which makes it harder for voters to distinguish between good and bad politicians.

The institutional theory is mostly concerned with the diffusion of organizational models and management practices. This theory assumes that organizations respond to external pressures to adopt structures and practices that are deemed legitimate and socially acceptable (DiMaggio and Powell, 1983). In this way, financial information disclosure practices can be used as a strategy to respond to external pressures (Wang, 2002). Moreover, information disclosure is a signal of modernity and good governance,



which enhances public administrations' reputation and reliability (Coursey and Norris, 2008).

According to Pina et al. (2010), both agency and institutional theory have contributed to explain public management reforms such as e-government implementation. These authors, based on the agency theory, argue that local governments can use financial information disclosure on the Internet to allow citizens to better monitor their performance. Finally, Berry et al. (2004) state that e-government and, therefore, on-line budget disclosure practices, are often implemented in response to external factors (institutional theory).

## **2.2. Determinants of budget disclosure**

The literature shows that several factors explain central governments' financial disclosure. As Allen (2001) states, differences in political systems, government structures and socio-economic objectives among countries may explain differences in their financial reporting.

In this section we review the literature on budget disclosure determinants, grouped into two categories: (2.2.1) socio-economic and (2.2.2) political and institutional.

### **2.2.1. Socio-economic factors**

**Economic level.** Grigorescu (2003) states that more developed countries are less concerned about the high cost of gathering, processing and disclosing information. Therefore, they are more likely to adopt laws on information disclosure, which enhances their transparency. In less developed countries, these costs may discourage the adoption of this kind of laws. Nevertheless, this author states that, in poorer countries, citizens have greater incentive to request information about their government, since the level of satisfaction with its actions is lower than in wealthier countries.

Consequently, previous empirical studies show that the richer the country is, the more transparent the budget is (Hameed, 2005; Piotrowski and Van Ryzin, 2007). However, Alt et al. (2006) do not prove a significant relationship between these variables.

Focusing on information disclosure through the Internet, most of the literature shows that greater economic performance can be considered essential for e-government

development and, therefore, for implementing on-line budget disclosure practices (Siau and Long, 2006; Kim, 2007). Therefore, citizens of less developed countries may face a disadvantage in communicating with their governments through ICTs due to the lack of their human and financial resources.

Several empirical studies suggest a positive relationship between economic level and e-government (Laswad et al., 2005; Siau and Long, 2006; Kim, 2007; Tolbert et al., 2008; Serrano-Cinca et al., 2009).<sup>1</sup>

**Internet penetration.** If the number of Internet users is high, citizens will be more likely to visit government websites and demand the e-disclosure of information. Moreover, if the number of visitors to government websites increases, the government may improve the management of its websites as well as the delivery of public services through the Internet (Kim, 2007).

Previous empirical studies find a positive and significant relationship between Internet penetration and e-government (Pina et al., 2007; Caba et al., 2008; Tolbert et al., 2008). Nevertheless, Kim (2007) and Pina et al. (2010) do not report a significant association between both variables.

**Education level.** As Tolbert et al. (2008) state, a well-educated population is supposed to demand more information from public administrations. Evans and Yen (2005) assume that citizens should have an appropriate education level to acquire the necessary computer skills for e-government development and, therefore, for examining the budget information available on-line.

Some previous studies observe a significant positive effect of education level on e-government (Kim, 2007; Tolbert et al., 2008), although other authors do not prove a significant relationship (Rodríguez-Domínguez et al., 2011).

**Central government relative size.** Conflicts of interest are more likely in larger governments and the advantage of disclosing information is correspondingly greater (Serrano-Cinca et al., 2009). According to the agency theory, larger governments

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<sup>1</sup> Henceforth, when we focus on literature about budget information disclosure through the Internet, we present the results obtained in e-government empirical studies because, as state above, there is no paper focused exclusively on the determinants of budget disclosure on the Internet (e-disclosure) in an international comparative approach. We think that though e-government concept is much broader than e-disclosure, these results can be to some extent extrapolated.

present greater information asymmetry between politicians and citizens. Thus, these governments are expected to face higher voters' demands to disclose information as a way to reduce this asymmetry and to allow the latter to evaluate incumbents' performance (Zimmerman, 1977).

The empirical literature shows a positive and significant association between public administration size and information disclosure (Evans and Patton, 1987; Gore, 2004). On the contrary, Ingram (1984) does not note this relationship.

A positive effect of public administration size on information disclosure on the Internet is also expected. The cost of preparing and disclosing information on the Internet is considered fixed. Therefore, these costs become lower in larger governments, since they take advantage of economies of scale.

Previous empirical studies demonstrate a positive relationship between information disclosure through the Internet and public administration size (Moon, 2002; Justice et al., 2006; Serrano-Cinca et al., 2009; Pina et al., 2010). However, other authors do not find a statistically significant relationship (Laswad et al., 2005).

**Government debt.** According to the agency theory, politicians have incentives to reduce the cost of debt and this way increase the financial resources available for other programs that enhance incumbents' welfare (Zimmerman, 1977). This makes politicians disclose voluntary information to enhance creditors' monitoring role (Zimmerman, 1977; Ingram, 1984; Gore, 2004).

Previous studies, nevertheless, do not present conclusive evidence of this influence. Whereas Evans and Patton (1987) or Gore (2004) show a positive relationship between debt and voluntary disclosure, Ingram (1984) or Cheng (1992) do not find it.

If debt increases, politicians can use several media to disclose information as a way to show creditors their ability to face their obligations. In this way, Internet is likely to be an efficient means to disclose information, since it helps creditors to monitor government activities in an easy and regular way (Debreceeny et al., 2002).

Previous empirical studies find a positive and significant relationship between local governments' debt and financial information disclosure on the Internet (Laswad et al.,

2005). Nevertheless, other works do not show a significant association between both variables (Caba et al., 2008).

**Government balance.** According to empirical works and political theory, instruments such as transparency are essential to obtain greater governments' fiscal performance. These instruments are useful not only to enhance incumbents' competent economic management but also to reduce their incentives to be fiscally irresponsible (Rogoff, 1990). Thus, the larger debt and balance ratios over Gross Domestic Product (GDP), the more important the influence of the government on the economy is. As a result, the demand for budget transparency is expected to be greater (Benito and Bastida, 2009).

Similarly, Alt et al. (2006) argue that both higher deficits and higher surpluses contribute to greater fiscal transparency. On the one hand, the positive effect of deficit on fiscal transparency can be explained by the fact that, during economic downturns, politicians need to communicate, explain and justify their actions. On the other hand, governments with good fiscal records will be encouraged to disclose information.

From an empirical point of view, Alt et al. (2006) show a statistically positive relationship between deficits (or surpluses) and fiscal disclosure. Nevertheless, Guillamón et al. (2011) fail to prove this association.

### **2.2.2. Political and institutional factors**

**Administrative culture.** The literature identifies three styles of administrative cultures: Anglo-Saxon, Nordic and Continental (Kickert, 1997). It is expected that Anglo-Saxon and Nordic countries, which have a longstanding tradition of transparency to citizens, promote e-government and, therefore, disclose more budget information through Internet (Pina et al., 2010). Continental countries, which are oriented towards the fulfilment of law (Benito and Brusca, 2004), act more slowly when implementing new styles of public management, since they do not feel so much pressure to be accountable to citizens (Pina et al., 2010).

Some papers empirically study this association (Pina et al., 2007; Gallego-Álvarez et al., 2010; Pina et al., 2010; Rodríguez-Domínguez et al., 2011). Pina et al. (2010) argue that Anglo-Saxon and Nordic countries' local governments disclose more financial

information through the Internet than their Continental countries' counterparts. However, Gallego-Álvarez et al. (2010) do not find a statically significant relationship.

**Electoral participation.** The question here is whether electoral participation affects politicians' incentives to be more transparent (Alt et al., 2006). Incumbents will be more likely to be transparent in presence of high electoral participation. The reason is that a great turnout indicates that citizens are concerned about governments' activities, therefore, an increase in transparency will be required and welcomed by voters (La Porte et al., 2002).

Benito and Bastida (2009) show a positive correlation between political turnout and budget transparency.

Focusing on budget disclosure through the Internet, La Porte et al. (2002) and Tolbert et al. (2008) do not demonstrate that political turnout has a positive influence on budget disclosure through the Internet.

**Participation of women in politics.** As Verba et al. (1978) argue, men are more politically active than women. Piotrowski and Van Ryzin (2007) state that men may be more likely to require information than women, as the former have higher level of political engagement. From another perspective, La Porte et al. (2002) assert that countries where women have a prominent role in society are more likely to disclose information, since certain values such as sharing and building relationships among various groups in society prevail.

However, some previous empirical studies do not find a statistically significant relationship between this variable and information disclosure (La Porte et al., 2002; Guillamón et al., 2011).

**Political competition.** Once politicians win the elections, they tend to ignore most of the pre-election promises, since they take for granted that information asymmetries prevent voters from monitoring them. This opportunistic behaviour is expected to decrease as the level of political competitions rises. If the level of political competitions is high, incumbents seeking re-election would like to have their electoral promises checked by voters and thus governments would be willing to disclose more

information (Evans and Patton, 1987). Consequently, the gap between voters and incumbents' interests narrows (Zimmerman, 1977).

Previous literature analyses this relationship. Whereas Alt et al. (2006) show that political competition has a positive effect on information disclosure, Ingram (1984) does not find a statistically significant association between both variables.

Internet is likely to be an efficient mechanism for instantaneous information disclosure to voters (Laswad et al., 2005). Thus, Serrano-Cinca et al. (2009) observe a significant positive effect of political competition on financial information disclosure through the Internet. Nevertheless, Caba et al. (2008) and Tolbert et al. (2008) do not present a significant relationship.

**Ideology.** According to Alt et al. (2006), politicians can change the level of transparency as a way to achieve their political goals. Ferejohn (1999) argues that politicians in favour of a larger public sector should increase transparency to prompt voters to pay higher taxes. It is commonly assumed that left-wing parties favour public spending increases while right-wing parties aim at budget reductions (Tellier, 2006). Cusack (1997) defines this idea as the "partisan politics matters" (PPM) thesis. Therefore, progressive governments are expected to keep higher levels of transparency than their conservative counterparts. Similarly, Piotrowski and Van Ryzin (2007) show that ideology affects transparency, although the direction of its influence may depend on the nature of the local government information at stake and on the ruling party in that moment. However, Schick (2003) states that the budget process is politically neutral.

Guillamón et al. (2011) find that left-wing parties are more transparent than right-wing ones. Nevertheless, Bastida and Benito (2007) show that progressive and conservative governments reach similar transparency levels. In the same way, Alt et al. (2006) do not find a statistically significant relationship between ideology and fiscal transparency.

Focusing on information disclosure on the Internet, Tolbert et al. (2008) argue that conservative governments, which are inclined to lower public spending, are more likely to adopt e-government and, therefore, disclose more on-line budget information, since this implies an increase in efficiency and a cost reduction. Thus, Tolbert et al.

(2008) prove that republican-controlled legislatures are more likely to embrace e-government over time. Finally, Serrano-Cinca et al. (2009) report no statistically significant relationship between ideology and information disclosure through Internet.

### **3. Econometric procedure**

#### **3.1. Sample**

The sample consists of 94 countries surveyed by IBP in 2010. One of the countries, namely East Timor, is removed from our sample because after a preliminary descriptive analysis it is considered an outlier. On the one hand, East Timor has the highest government balance (239.27%). If we remove it from our sample, this variable takes a maximum value of 10.61 per cent in the sample. On the other hand, a preliminary cluster analysis showed that if East Timor were included, it would form one cluster on its own, which clearly indicates that this country is extremely dissimilar to the rest of the sample. Therefore, we use a final sample of 93 countries.

IBP Survey data were collected in 2009 (IBP, 2010). Therefore, all socio-economic data refer to 2009. Political data are taken from the year of the closest parliamentary election held before 2009. If the last election took place in 2009, we consider the previous parliamentary elections, since 2009 election results may not have an immediate impact on information disclosure in that year.

#### **3.2. Variables**

The 2010 Open Budget questionnaire (IBP) serves as main source of data to build our dependent variables. We take those Open Budget questionnaire items that check whether central governments disclose each of the budget documents that are considered key according to international budget transparency standards, taking into account information disclosure both through the Internet and other media.

The first indicator seeks to measure the degree of budget information disclosure through different media. It consists of a set of 11 dummy variables (each dummy variable corresponds with one questionnaire item). Each dummy variable takes value 1 if the central government discloses the specific budget document through different media and 0 otherwise. Accordingly, we set the variable *pub.disc* for each country as follows:

$$pub.disc = \sum_{i=1}^{11} [pdisc_i] \quad \text{where } pdisc_i \text{ stands for } pdisc \text{ item number } i \quad (1)$$

This variable ranges from 0 to 11, where the higher the score, the greater the degree of budget information disclosure through different media.

Variable *e-disc* measures budget information disclosure through the Internet. It comprises 11 items that take value 1 if the central government publishes each specific budget document on the Internet and 0 otherwise.

$$e-disc = \sum_{i=12}^{22} [edisc_i] \quad \text{where } edisc_i \text{ stand for } edisc \text{ item number } i \quad (2)$$

Variable *tot.disc* is a summary variable that considers central government budget disclosure, both through the Internet and other media. This variable adds the scores of the other two variables (*pub.disc* and *e-disc*).

See Appendix A for a full description of the items included in each indicator. Concrete values of *pub.disc*, *e-disc* and *tot.disc* for every country are available upon request to the authors.

Independent variables have been selected in agreement with the previous literature and taking into account the available data sources.

Table I.1 shows variables' description and basic statistics.



**Table I.1** Definition of variables and descriptive statistics

Variable	Description	Calculation	Source	N	Mean	Min.	Max.	Std. Dev
(1) <i>pub.disc</i>	Budget information disclosure through different media	$pub.disc = \sum_{i=1}^{11} [pdisc_i]$ where <i>pdisc<sub>i</sub></i> stand for <i>pdisc</i> item number <i>i</i>	Own elaboration from 2010 Open Budget questionnaire data	93	6.2700	0.0000	11.0000	2.9160
<i>e-disc</i>	Budget information disclosure through the Internet	$e-disc = \sum_{i=12}^{22} [edisc_i]$ where <i>edisc<sub>i</sub></i> stand for <i>edisc</i> item number <i>i</i>	Own elaboration from 2010 Open Budget questionnaire data	93	6.1200	0.0000	11.0000	2.9670
<i>tot.disc</i>	Total budget information disclosure	Sum of <i>pub.disc</i> and <i>e-disc</i>	Own elaboration from 2010 Open Budget questionnaire data	93	12.3900	0.0000	22.0000	5.8270
(2) <i>gdppc</i>	Economic level	GDP per capita, dollars	Work Bank (WB)	93	8,449.9727	174.5076	76,763.7400	12,849.8510
<i>internet</i>	Internet penetration	Percentage of Internet users	WB	93	27.2489	0.5100	92.1806	254.7194
<i>edu</i>	Education level	Literacy rate (%)	Central Intelligence Agency (CIA)	93	80.9581	21.8000	100.0000	20.1187
<i>Inpop</i>	Central government relative size	Population of the country (natural logarithm) <sup>a</sup>	WB	93	16.7277	11.9985	21.0095	1.5197
<i>debt</i>	Government debt	Government debt (% of GDP)	IMF	92	45.1936	5.0640	194.0490	31.6477
<i>gov.balance</i>	Government balance	Central Government net lending/borrowing (% of GDP)	IMF	93	-5.2399	-22.0750	10.6070	4.1769
(3) <i>adm.culture</i>	Style of administrative culture	1 – Nordic and Anglo-Saxon countries 0 – Continental countries	Own elaboration from CIA database	93	0.2700	0.0000	1.0000	0.4460
<i>elect. part</i>	Electoral participation	Voters turnout in the last parliamentary elections (% of registered voters)	Institute for Democracy and Electoral Assistance (IDEA)	88	63.8702	25.2600	99.6400	15.9155

<i>women</i>	Participation of woman in political activity	Number of seats obtained by women in the last parliamentary elections (% of total seats)	Parline	91	18.1502	0.3000	56.3000	10.9169
<i>pol.compet</i>	Political competition	The difference between the seats obtained in the parliament by the government's party and those obtained by the largest opposition party (% of total seats)	Own elaboration from Parline database	91	28.8799	0.0000	97.2222	27.2692
<i>ideology</i>	Political sign of incumbents	1- Conservative 0 - Progressive	Own elaboration from Parline database	93	0.4900	0.0000	1.0000	0.5030

Notes: <sup>a</sup> The population has been taken as a proxy of the level of complexity of the government in previous studies (Ingram, 1984; Evans and Patton, 1987; Cheng, 1992).

Key: (1) dependent variables; (2) independent variables: socio-economic factors; (3) independent variables: political and institutional factors.

### 3.3. Econometric model and cluster analysis

With the aim of analysing the explanatory factors of budget information disclosure, both through the Internet and other media, we estimate the following ordinary least squares (OLS) regression:

$$y_i = \alpha + \sum_{j=1}^{11} \beta_j X_{ji} + \varepsilon_i \quad (3)$$

where  $y_i$  is the dependent variable (*pub.disc*, *e-disc* or *tot.disc*), subscript  $i$  ( $i=1...93$ ) represents each country,  $\alpha$  is the constant of the equation,  $X_{ji}$  is the vector of explanatory variables,  $\beta_j$  is a vector of parameters to be estimated and  $\varepsilon_i$  is the error term.

We must acknowledge the limitations of regression analysis. In our study, one limitation may stem from variables measurement. Since Open Budget questionnaire was replied by experts, on the one hand, we avoid the self-serving bias on the dependent variables. This bias may exist in the OECD survey on budget practices, for example. On the other hand, answers may not be totally accurate, since experts are not inside finance ministries, and perhaps do not have all accurate information on all Open Budget questionnaire items.

Another limitation would exist if the relationships between the independent variables and the dependent variables were not linear. In that event, OLS would show sub-optimal estimations. However, no literature supports so far any quadratic relationship between the variables at stake in our model.

In addition, we make a cluster analysis to group homogeneous countries according to their features. This is especially useful in an international framework, since it allows us to focus on the description of a few groups instead of a country-by-country data analysis. The application of cluster analysis will define clusters of countries with similar features, different from the rest, and, consequently, with their own distinctive features. ANOVA tests prove the statistical significance of the heterogeneity between-clusters.

## 4. Results

Table I.2 shows OLS coefficients. Table I.3 depicts the ANOVA test for clusters (detailed list of every cluster is available upon request to the authors). Finally, Figure I.1 displays the worldwide representation of clusters.

**Table I.2** Regressions

	Dependent Variables		
	<i>pub.disc</i>	<i>e-disc</i>	<i>tot.disc</i>
<i>constant</i>	** -7.29 (-2.45)	** -7.11 (-2.30)	** -14.40 (-2.43)
<i>gdppc</i>	-0.00 (-0.40)	-0.00 (-0.34)	-0.00 (-0.36)
<i>internet</i>	*0.04 (1.95)	*0.03 (1.74)	*0.07 (1.88)
<i>edu</i>	***0.06 (3.74)	***0.05 (3.31)	***0.11 (3.60)
<i>lnpop</i>	***0.51 (3.35)	***0.55 (3.47)	***1.06 (3.49)
<i>debt</i>	0.00 (0.10)	0.00 (0.47)	0.01 (0.30)
<i>gov.balance</i>	0.09 (1.61)	*0.10 (1.71)	*0.19 (1.70)
<i>adm.culture</i>	*0.98 (1.90)	*0.97 (1.80)	* 1.95 (1.89)
<i>elec. part</i>	0.00 (0.21)	-0.01 (-0.29)	-0.00 (-0.05)
<i>women</i>	0.01 (0.61)	0.03 (1.03)	0.04 (0.84)
<i>pol.compet</i>	-0.01 (-0.78)	* -0.02 (-1.75)	-0.02 (-1.30)
<i>ideology</i>	*-0.87 (-1.91)	*-0.91 (-1.93)	*-1.77 (-1.97)
N	87	87	87
R <sup>2</sup>	0.57	0.56	0.57
White's Test (p(Chi-Square))	0.09	0.28	0.13

OLS estimation. T-value in parentheses.

None of VIF( Variance Inflation Factor) exceeded 4.79, which suggests that no strong multicollinearity exists.

Significance: \*\*\*1%, \*\* 5%, \*10%.

**Table I.3** ANOVA test for clusters

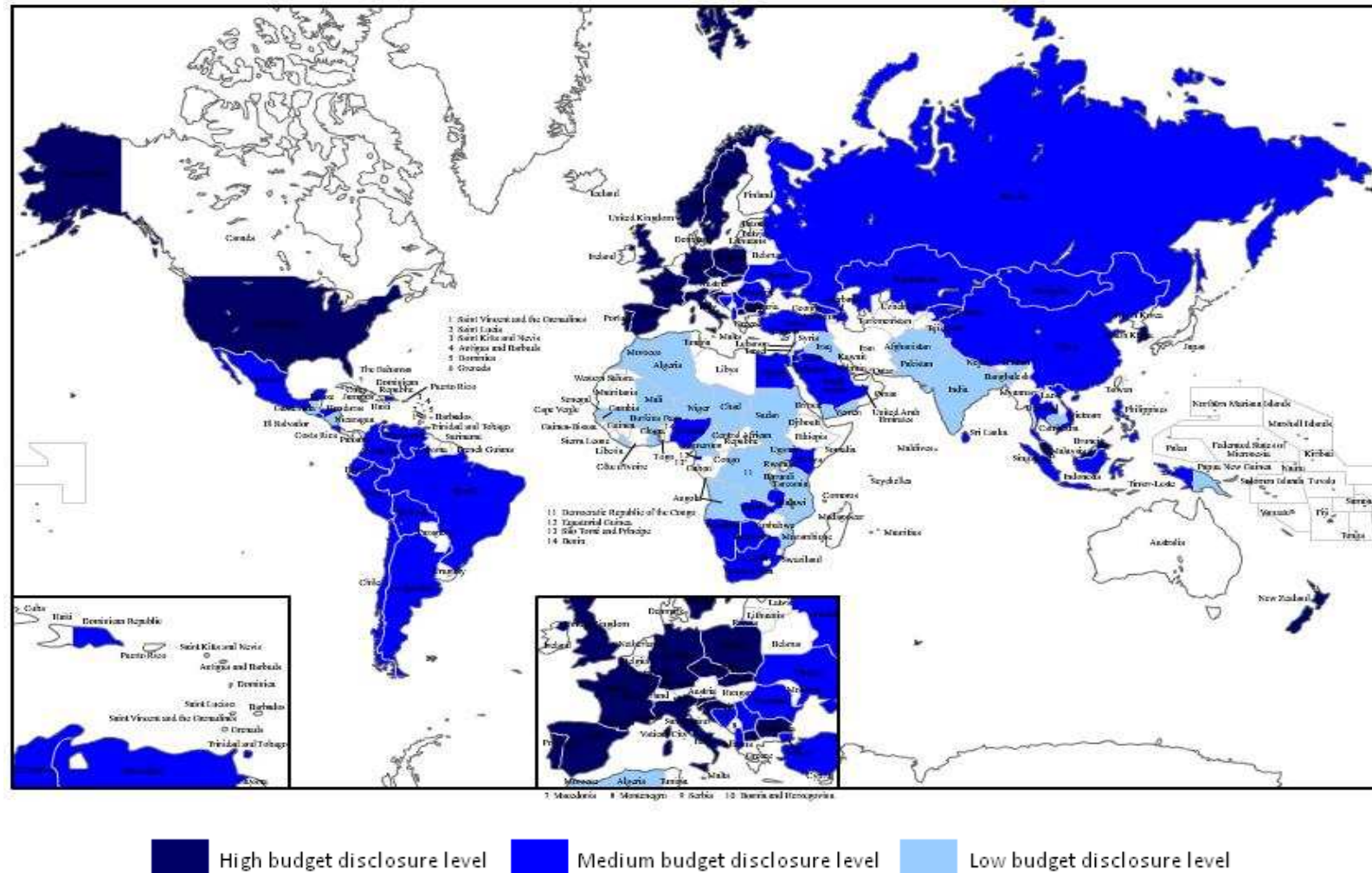
<b>Cluster H:</b> high budget disclosure level	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Dev.</b>
<i>tot.disc</i>		13.0000	22.0000	17.7400	2.7050
<i>internet</i>	19	44.7481	92.1806	67.5958	14.7864
<i>edu</i>		88.7000	100.0000	97.9316	2.7082
<i>Inpop</i>		14.5283	19.5424	16.6484	1.4121
<b>Cluster M:</b> medium budget disclosure level	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Dev.</b>
<i>tot.disc</i>		0.0000	22.0000	12.4700	5.1190
<i>internet</i>	45	2.1300	44.3000	23.6873	11.9389
<i>edu</i>		68.0000	100.0000	90.2422	7.4962
<i>Inpop</i>		11.9985	21.0095	16.5637	1.7699
<b>Cluster L:</b> low budget disclosure level	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Dev.</b>
<i>tot.disc</i>		0.0000	20.0000	8.7600	5.7110
<i>internet</i>	29	0.5100	41.3000	6.3412	8.0894
<i>edu</i>		21.8000	74.1000	55.4310	15.0993
<i>Inpop</i>		15.1599	20.8677	17.0342	1.1130
<b>ANOVA.</b> Between groups H-M-L (combined). Linear-order trend components.	<b>Sum of Squares</b>	<b>Degrees of freedom</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
<i>tot.disc</i>	925.870	2	462.935	18.954	***0.000
<i>internet</i>	44,177.197	2	22,088.599	165.122	***0.000
<i>edu</i>	28,249.954	2	14,124.977	141.435	***0.000
<i>Inpop</i>	4.054	2	2.027	0.875	0.420

Between-groups sums of squares have been partitioned into linear and quadratic order trend components. Significances of both tests were equal, thus, only linear-order results are depicted.

Squared Euclidean Distance and Ward Method.

Variances difference significance: \*\*\*1%, \*\* 5%, \*10%.

Figure I.1 Graphic representation of clusters



## 5. Discussion

### 5.1. Determinants of budget disclosure

#### 5.1.1. Socio-economic factors

Contrary to the mainstream literature, the economic level (*gdppc*) appears not to affect the central government budget disclosure, both through the Internet and other media. This finding, however, agrees with the results of Alt et al. (2006) and Rodríguez-Domínguez et al. (2011).

As expected, Internet penetration (*internet*) has a positive influence on budget disclosure on the Internet (Kim, 2007). Moreover, we find that *internet* not only has influence on budget disclosure on the Internet, but also on budget disclosure through other media. A possible explanation is that economic development is connected to higher Internet penetration (Kim, 2007). In this way, previous literature shows that more developed countries are more likely to adopt laws on information disclosure, making them more transparent (Grigorescu, 2003).

The positive and significant coefficient of variable *edu* in all regressions indicates the positive effect of education on budget disclosure, both through the Internet and other media. Highly educated citizens are likely to demand more information from public administrations.

Furthermore, this high education level allows citizens to acquire the necessary computer skills to look for the budget information available on websites. Our results are in line with Evans and Yen (2005), Kim (2007) and Tolbert et al. (2008).

With regard to central government relative size (*lnpop*), the results reveal that the larger the population, the greater budget information disclosure, both through the Internet and other media. Our findings fit the agency theory. The agency theory posits that larger governments are expected to face more pressures by voters to disclose information as a way to reduce information asymmetry and to allow the latter to monitor their performance (Zimmerman, 1977).

The empirical result of the debt variable (*debt*) is in line with the agency theory, i.e., higher debt is connected to higher transparency. However, the coefficient is not significant, which prevents us from strongly confirm the agency theory. Ingram (1984),

Cheng (1992) and Caba et al. (2008) also find that government debt has no impact on financial information disclosure.

We prove that government balance (*gov.balance*) has a positive influence on budget disclosure on the Internet. Moreover, we observe a significant relationship between this variable and variable *tot.disc*. This shows that a large surplus contributes to a budget disclosure increase. Incumbents, in line with agency theory assumptions, seek to signal their achievements to voters. This finding agrees with Alt et al. (2006), who state that governments with good fiscal performance will have incentives to disclose more information.

### **5.1.2. Political and institutional factors**

The positive sign of *adm.culture* in all regressions indicates that Anglo-Saxon and Nordic countries disclose more budget information than their continental-culture counterparts. This result confirms Pina et al. (2010), who show that Continental countries implement new styles of public management at a slower pace, since they do not feel the need to be accountable to citizens.

Regarding electoral participation (*elect.part*), our results indicate that budget disclosure, both through the Internet and other media, does not depend on electoral participation. Our findings support previous empirical studies on the relationship electoral participation-information disclosure through the Internet (La Porte et al., 2002; Tolbert et al., 2008) and on the relationship electoral participation-information disclosure through other media (Guillamón et al., 2011).

The coefficient of variable *women* is not significant, which indicates that the participation of women in politics does not affect budget disclosure. This finding agrees with the results of La Porte et al. (2002) and Guillamón et al. (2011).

The coefficient of *pol.compet* impacts negatively on *e-disc*. It demonstrates that politicians are willing to disclose more budget information when they expect closer elections. Thus, our results show that Internet is likely to be the most efficient mechanism for instantaneous information disclosure to voters.

Finally, *ideology* has a significant effect on all dependent variables. Thus, we can conclude that countries ruled by progressive parties disclose more budget information,



both through the Internet and other media, than countries ruled by conservative parties. Progressive parties, in our opinion, seek to justify their commitment to a larger public sector. This finding supports the PPM thesis.

## 5.2. Cluster analysis

The cluster procedure considers the variable *tot.disc* in order to group countries by their level of budget disclosure, both through the Internet and other media. Moreover, we include in our cluster analysis all continuous variables significantly related to budget disclosure in all regressions (*internet*, *edu* and *lnpop*). We only take continuous variables, since squared euclidean distance measure does not provide good results if discrete and continuous variables are jointly included.

We consider three clusters: clusters H, M and L for a high, medium and low budget disclosure level, respectively.

The number of clusters is low, thus enhancing model parsimony and achieving within-cluster homogeneity and between-cluster heterogeneity, as the ANOVA test in Table I.3 shows. This test is highly significant for three of the four variables (*tot.disc*, *internet*, *edu*). This allows us to draw conclusions about disclosure level, Internet penetration and education level of each group, as each cluster is quite dissimilar to the rest.

Cluster H includes countries which central government discloses a large amount of budget information (with a mean total score of 17.74). These countries are also characterized by having the greatest levels of Internet penetration (67.60% on average) as well as the highest literacy rates (97.93% on average).

Cluster M consists of countries with a medium degree of budget disclosure (12.47 points out of 22, on average). The number of Internet users and literacy rates are lower than in cluster H, 23.69 per cent and 90.24 per cent on average, respectively.

Finally, we observe that countries with the lowest budget disclosure levels (Cluster L) (8.76 points out of 22, on average) are also characterized by showing the lowest levels of Internet penetration and education (55.43% and 6.34% on average, respectively).

Figure 1 represents the clusters. Countries whose central government discloses a large amount of budget information are concentrated in Europe, excluding South Korea, United States, Malaysia and New Zealand. Most of the Asian, Latin American and

southern Africa countries show a medium degree of budget disclosure. Countries that present the lowest budget disclosure levels are mainly located in Africa.

## 6. Conclusions

This chapter aims to analyse the determinants of central government budget disclosure in an international comparative approach. We use some indicators, built from Open Budget questionnaire items, to measure the level of budget disclosure, both through the Internet and other media. We use a sample of 93 countries surveyed by IBP in 2010. Our results reveal that budget disclosure, both through the Internet and other media, depends on many socio-economic, political and institutional factors.

Regarding socio-economic factors, Internet penetration and education level have a positive effect on budget disclosure, both through the Internet and other media. This indicates that central governments disclose more information in those countries with the highest levels of Internet penetration and education. Moreover, we note that the larger the population is, the greater the budget information disclosure is, both through the Internet and other media. Our findings are in line with agency theory. This theory posits that larger governments are expected to face higher voters' demands to disclose information as a way to reduce this asymmetry. Finally, we find that a large surplus is connected to an increase in budget disclosure. This may indicate a strategic behaviour of governments amid the information asymmetry predicted by the agency theory. If good news is reported, voters will be impacted in a way that enhances their opinion about incumbents' competence.

Turning to political and institutional factors, our results show that Anglo-Saxon and Nordic countries disclose more budget information than Continental ones. This may show that Continental countries do not feel so much pressure to be accountable to citizens. Moreover, we observe that higher political competition leads to greater budget disclosure on the Internet, which indicates that Internet is the most efficient mechanism for information disclosure to voters when closer elections are expected. Finally, we conclude that progressive governments disclose more budget information, both through the Internet and other media, than conservative ones. This finding agrees with the PPM theory, which predicts that left governments support larger public sectors with increased participation in the economy. These progressive

governments are encouraged to disclose more information as a way to account for the larger amount of resources they manage.

After applying a cluster analysis, three groups of countries arise: high, medium and low budget disclosure. In general, we note that countries whose central government discloses more budget information also have the greatest levels of Internet penetration and education. Moreover, this kind of countries are concentrated in Europe, whereas countries that show a medium degree of budget disclosure are concentrated in Asia, Latin American and southern Africa countries. The rest of African countries present the lowest levels of budget disclosure.

Our study has the limitation that budget disclosure indexes are based on 2010 Open Budget questionnaire, which does not take into account the quality of the information disclosed. Overall, however, we believe this questionnaire is a good source of data on budget disclosure that captures the main characteristics of budget disclosure in our model. This dataset has been recognized by the literature as a reliable research source (de Renzio and Masud, 2011; Seifert et al., 2013; Wehner and de Renzio, 2013).

From our point of view, further research is needed to build a new measure of budget disclosure that tackles the quality of the information disclosed, both through the Internet and other media. These new indicators will allow us to confirm the relationships found in this study. Moreover, we think it would be interesting to evaluate the long-term evolution of central governments' budget disclosure.

## **CHAPTER II: "BUDGET TRANSPARENCY AND LEGISLATIVE BUDGETARY OVERSIGHT"**

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## 1. Introduction

Governments have a moral obligation to their citizens to be transparent about their handling of tax-payers' money (Fölscher et al., 2000). Government budgets represent financial plans which specify how public resources are going to be used to meet policy goals (OECD, 2006). The budget plays a central role in the lives of every citizen. Citizens, especially poor and low-income ones, are the primary beneficiaries of government programs financed through the budget. It is therefore essential that citizens understand government budgets, and have access to information that will allow them to hold the government accountable for the use of public funds. Unfortunately, citizens, legislatures, and the media have been traditionally excluded from budget decision-making and monitoring. In most developing countries, public budgeting is still considered as a state secret, and the process is controlled exclusively by the executive (de Renzio and Krafchik, 2007). Moreover, modern economies' budgets are very complex, allowing practices that aim to hide the real budget balance. Politicians have little incentives to disclose simple, clear, and transparent budgets (Alesina and Perotti, 1996). Accordingly, accountability mechanisms are required to verify that governments meet their duties.

Budget transparency can be one of these mechanisms. Fiscal transparency has been recently defined by the IMF as the clarity, reliability, frequency, timeliness, and relevance of public fiscal reporting and the openness to the public of the government's fiscal policy-making process (IMF, 2012).

The importance of government fiscal transparency was highlighted during the Asian financial crisis of the late 1990s, which showed the risks of opaque and unaccountable management of finances (Santiso, 2005a). Investors and rating agencies failed to detect creeping fiscal disequilibria, large public contingent liabilities, vulnerable asset-liability structures, and time inconsistencies of fiscal policy (Marcel and Tokman, 2002). Nowadays, history is almost repeating itself with the financial crisis involving Greece, which threatens to splinter the Eurozone (Manessiotis, 2011). Thus, it is clear the key role budget transparency plays in the credibility of governments' policies. Higher budget transparency enhances the performance of all economic agents in the country. Besides, budget transparency may be a tool to fight against poverty. In fact, budget

transparency is often weakest in countries where poverty is highest. The result is a huge misuse of public resources into unnecessary projects, corruption, and ineffective service delivery, which undermines efforts to reduce poverty, improve governance, and consolidate democracy (de Renzio and Krafchik, 2007).

Accordingly, the role of budget transparency has increasingly attracted attention from governments and international organizations as a way to prevent such failures in the future and give credibility to economic policies. This concern has triggered the development of budget transparency international standards such as the “Code of Good Practices on Fiscal Transparency” (published by IMF in 1998 and updated in 2007) or the “Best Practices for Budget Transparency” (published by the OECD in 2001). Furthermore, in 2006, the IBP, a civil society organization sponsored by the Centre for Budget and Policy Priorities, published the OBI for the first time to provide central governments with a systematic measure of their budget transparency level. This questionnaire-based index fits the budget transparency international standards established by IMF, OECD, and INTOSAI (IBP, 2010). The average 2010 OBI score for the surveyed countries is only 42 out of 100, which indicates that central governments should take further steps to enhance budget transparency.

Despite the growing interest that budget transparency has received in the last decade, empirical studies on its determinants are quite limited (Andreula et al., 2009; Rodríguez et al., 2013; Wehner and de Renzio, 2013). Specifically, there is a renewed interest in the contribution of parliaments to the governance of the budget and the oversight of public finances, prompted, in part, by calls for greater transparency and accountability in government financial managements (Santiso, 2005a). According to Wehner (2006), legislative oversight over budgets is defined as the power to scrutinize and influence budget policy and to ensure its implementation. International organizations assume that legislative budgetary oversight ensures government accountability and promotes greater public finances’ transparency (IMF, 1998; OECD, 2001a). Legislative budgetary oversight should improve the transparency of public accounts by providing independent checks on government budget execution (Dye and Stapenhurst, 1998; Santiso, 2005b). However, the impact of legislative budgetary oversight on budget transparency has never been empirically tested (Pelizzo, 2011).

In this regard, this chapter attempts to analyse what institutional, political, and socio-economic factors promote central governments' budget transparency, focusing primarily on how the budgetary oversight of the legislature over the executive affects budget transparency.

We use data on 93 countries. To measure budget transparency in each country, we use the 2010 OBI. We also build some indicators based on 2010 Open Budget questionnaire items (IBP) to measure legislative oversight along all phases of budgetary process.

This chapter specifically seeks to contribute to the literature in three ways. First, as stated above, the relationship between legislative budgetary oversight and budget transparency has never been empirically tested. Moreover, little is known about budget transparency determinants in an international comparative approach (Andreula et al., 2009; Rodríguez et al., 2013; Wehner and de Renzio, 2013). Second, we use the 2010 OBI to measure budget transparency, which overcomes some of the limitations of fiscal transparency indexes proposed in previous studies (Alt and Lassen, 2006; Benito and Bastida, 2009). On the one hand, Open budget questionnaire is filled by independent experts not associated with the government. Thus, the independence of the research process makes it far less susceptible to government manipulation. On the other hand, the countries covered by the OBI are located in different geographical areas and have different income levels, political regimes, and administrative cultures. Besides, data are collected simultaneously, providing a comparative snapshot of fiscal transparency at one point in time (Wehner and de Renzio, 2013). Third, legislative budgeting remains also a neglected area in comparative research (Wehner, 2005). In fact, apart from recent works of Stapenhurst et al. (2008) and Wehner (2010b), literature on international legislative budgetary oversight is rather scarce.

## **2. Literature review**

### **2.1. Budget transparency and legislative budgetary oversight**

Both rule-of-law principle and agency theory shape the way governments are transparent (Hood, 2001). On the one hand, rule-of-law deems compulsory publicity and transparent management as cornerstones of public management. On the other

hand, agency theory posits that principal (citizen) and agent (politician) may not pursue identical preferences, as incumbents have their own interest, which do not always maximize citizens' welfare. Thereby, citizens press incumbents to disclose information as a way to weaken information asymmetry and to allow the former to monitor incumbents' activities (Zimmerman, 1977).

Premchand (1993) defines budget transparency as the public availability of information regarding governments' decision procedures and transactions. Kopits and Craig (1998) add that this information must be reliable, comprehensive, timely, understandable, and internationally comparable. Furthermore, Blöndal (2003) argues that budget transparency has three essential elements: (a) the release of budget data (systematic and timely release of all relevant fiscal information); (b) an effective role for the legislature (scrutinizing and independently reviewing budget reports, discussing and influencing budget policy, and holding government accountable); and (c) an effective role for civil society through the media and non-governmental organizations (influencing budget policy, holding government accountable).

Regarding the role of the legislature and its impact on civil society, legislators have wide discretion to use their resources, benefiting in some cases their own constituency and/or campaign contributors. However, the oversight role is a public good within the legislature, thus benefiting the entire population (Benito and Bastida, 2009). In fact, budget transparency depends on the role the legislature plays regarding budgetary oversight (Santiso, 2005a).

The agency theory in general states that the principal (citizens) should be able to hold the agent (government) accountable. In the context of our research, the legislature represents the citizens' interests. According to Alesina and Perotti (1996), governments have little incentive to disclose clear and transparent budgets. These authors state that the problem of lack of budget transparency can be addressed either by setting standards (e.g., procedural fiscal rules and hard budget constraints) or having independent agencies which provide a check on the accuracy of the budget (e.g., general audit offices and legislative budget institutions). Therefore, budgetary oversight by critical legislatures and external auditing of public accounts by credible general audit offices are key mechanisms of financial accountability (Santiso, 2005a).



Ambition theory suggests that legislators will use their powers to expand their authority over policy making through legislative oversight (Desposato, 2008). Effective and responsible legislatures can help mitigate the risks of excessive executive budgetary discretion by reinforcing the compensatory mechanisms of government accountability and legislative scrutiny (Santiso, 2005a). By providing independent checks and balances on executive discretion, legislative budgetary oversight should improve the transparency of public accounts. Therefore, legislatures help ensure that governments are held accountable for public finances management (Dye and Stapenhurst, 1998; Santiso, 2005b). In other words, enhancing legislative budgetary scrutiny leads to a strengthening of government accountability and promotes greater transparency in the management of public finances (IMF, 1998; OECD, 2001a). In addition, information asymmetries between government and society that stem from agency theory may be diminished by legislative oversight. The legislature, by opening up the budget to public debate on governments' policies and public funds management, it helps create the conditions for greater governments' accountability (Santiso, 2005a). Hence, an effective financial scrutiny may enhance executive accountability, facilitate public debate and broaden participation in the budgetary process. By creating demand for financial information disclosure, the legislative oversight can improve budgetary process transparency where it was previously secret (Wehner, 2007).

Legislatures around the world have the constitutional power to consider national budgets and authorize governments to raise revenues and carry out expenditures. Currently, there is a trend to enhance legislative involvement in the budget process. Some OECD-country legislatures are seeking to regain a more active role in the budget process (Stapenhurst, 2008). France, for example, introduced reforms to support parliamentary oversight and to expand the powers to amend expenditures. In developing countries, there is also a trend toward legislative budget activism, as a way to increase the transparency of previously closed budgetary systems. For instance, in Brazil, constitutional changes have given the Congress powers to modify the budget. In this country, the Congress had historically played no significant role in the budget process. In Africa changes are occurring too: South Africa and Uganda have passed

financial administration acts or budget acts that give more influence to the legislature during the budget formulation and approval processes.

All the aforementioned reforms are aimed to strengthen the traditional legislative control over executive financial indicators. Recently, performance management literature claims a shift from finance-focused accountability to performance-based in financial reporting. Performance management is defined as a reform that focuses on the use of performance measures in budget decisions, as well as a philosophical shift to focus on results rather than inputs or processes (Hatry, 1999; Bourdeaux and Chikoto, 2008). In this vein, recent reforms are shaping new legislative roles in setting overall fiscal policy targets and checking government performance (Posner and Park, 2007). Executives and legislatures in many countries now require agencies to report on the performance and financial costs of government. Thus, for example, France, Korea, the United Kingdom, and the United States require agencies to develop performance plans and reports that for the first time disclose on a systematic and often public basis how government programs are working to achieve outputs and outcomes (Posner and Park, 2007). These examples show that the actual exercise of the legislative oversight over the budget varies widely (Stapenhurst, 2008).

The annual budgetary process can be divided into four stages: drafting, approval, execution, and audit and evaluation (Lee and Johnson, 1998). The role of the legislature in every stage differs from one country to another. For instance, the US Congress focuses on the ex-ante process, in which various financial committees decide fiscal parameters, tax policy, and the allocation of available funds. However, the Congress has no dedicated committee for the consideration of audit findings. In the German Bundestag, for example, the Budget Committee both approves the annual budget and later considers audit results (Wehner, 2004). The contribution of legislatures in public budgeting can be best assessed along the main stages of the budgetary cycle (Lienert, 2005; Wehner, 2007). Traditionally, using game theory models, the literature about legislative budgeting has evaluated the role of parliaments in the initial phases of the budgetary process (Saporiti and Streb, 2008). However, parliaments not only oversee ex-ante, in the drafting and approval stages. They also do it concurrently, during the execution stage, as well as ex-post, in the audit

and evaluation stage. In fact, ex-ante scrutiny of the draft budget supports accountability for policy; in-year scrutiny provides an opportunity to perceive deviations between the approved budget and actual spending; and ex-post scrutiny of audit findings supports accountability for policy implementation (Wehner, 2007). Therefore, we should consider the role of the legislature in budget planning and expenditure allocations (ex-ante), budget execution (during), and evaluation (ex-post) phases of the budget process (Wehner, 2007; Stapenhurst et al., 2008).

The potential role of legislature at each stage of the budgetary process is displayed in Figure II.1.

**Figure II.1** The potential role of the legislature along all stages of the budgetary process

Timing	ex-ante		currently	ex-post
Stage	Drafting	Approval	Execution	Audit and evaluation
Potential role of legislature	Pre-budget debate on broad priorities and fiscal policy objectives for the medium-term	Review of budget (scrutinizing executive's expenditure and revenue proposals), amendments or approval	In-year monitoring of actual spending and revenues	Scrutiny of external audit office findings and follow-up on audit recommendations

Own elaboration from Wehner (2007)

The annual budget process is embedded within a broader socio-economic and political environment that affects the potential for legislative scrutiny (Hudson and Wren, 2007). In fact, there may be reverse causality, such that budget transparency may affect the degree of legislative budgetary oversight. According to Barraclough and Dorotinsky (2008), both IBP's and OECD's recommended good practices defend that legislatures should scrutinize the budget to hold governments accountable and that the executive should report transparent budget to enable meaningful engagement in the budget process by the legislature. This acknowledgment by both IBP and OECD indicates the reverse causality between budget transparency and legislative budgetary oversight.

So far, we have studied the impact of legislative budgetary oversight on budget transparency and we have also showed that we expect a reverse causality. Now we turn our focus on the reverse influence, that is, how budget transparency affects legislative budgetary oversight. As von Hagen (1992) and Bernoth and Wolff (2008) state, parliamentary oversight can be reduced by fiscal misreporting. Therefore, transparency is considered as a cross-cutting issue that has an influence on the legislative potential to be involved in each stage of the budgetary cycle. For instance, regarding the first step of legislature's involvement in the budgetary process, legislatures require transparent information to be able to prepare the budget (Anderson, 2008). But not only in the first step, but also through the whole budgetary process. Thus, legislative oversight throughout the budgetary cycle requires comprehensive, accurate, appropriate, and timely information to be disclosed by the executive (Wehner, 2004, 2007). If the budget transparency is undermined by the executive, for example, by manipulating budget figures, the oversight role of the legislature is clearly hindered (Wildavsky and Caiden, 2004).

Apart from budget transparency, the literature identifies institutional/political (2.1.1) and socio-economic (2.1.2) factors that also impact the degree of legislative budgetary oversight.

### **2.1.1. Institutional and political determinants of legislative budgetary oversight**

**Type of government.** The choice between presidential and parliamentary systems of government has several implications, for example, on budgetary oversight (Lijphart, 1992). Indeed, in presidential systems, where legislature and executive powers are strongly separated, the legislature is a powerful agenda-setter and decision-maker and it is able to reinforce its budgetary oversight over the executive (Dubrow, 2002; Lienert, 2005). However, in parliamentary systems, where there is no a clear separation of powers between the legislature and the executive, the former generally has fewer opportunities for oversight (Dubrow, 2002). In fact, although Parliament votes on the annual budget, if the government has a majority in Parliament, the government alone determines the shape and size of the budget (Lienert, 2005). However, Wehner (2005) does not find a significant relationship between the government system and the legislative budgetary oversight.

**Type of legislature.** If members of a second legislative chamber are independently elected, both chambers may have different points of view over draft budget law proposals. The second chamber, depending on its constitutional and legal powers, can veto budget legislation that has already been adopted by both the government and the first chamber. Consequently, whether a second chamber of the legislature is provided with budgetary powers, it strengthens the legislative budgetary powers relative to those of the executive (Lienert, 2005).

**Legal system.** Legal culture helps explain why some legislatures have more budget authority than others. In continental countries, high-level courts ensure that budget-related laws are consistent with written constitutions. In these countries, the Constitution specifies key elements of the annual budget and requires that the budget system be established by law. However, in Westminster countries, the legal formalities are lighter and the options for legal instruments other than formal statute are greater. Therefore, the latter group is unrestrained by extensive written constitutions and even written constitutional provisions for budgeting are interpreted in a liberal way. Moreover, in Westminster countries, the delegation of budget authority to the executive appears to be higher than that in the legally formalistic ones (Lienert and Jung, 2004). In fact, Wehner (2005) finds that Westminster-heritage countries' legislatures have fewer budgetary powers.

**Supreme Audit Institution's (SAI) budgetary oversight.** The audit and evaluation stage follows the end of the fiscal year (Wehner, 2007). A SAI, such as an auditor general or audit court, is tasked with assessing government accounts and financial statements (Stapenhurst and Titsworth, 2001). Strengthening SAIs' capacity and improving their relationship with public accounts committees may help improve legislative budgetary oversight (Santiso, 2005a).

In this respect, Santiso (2006) finds that external auditing does not appear to be related to the strength of legislative budgetary powers, while there is a higher correlation between the auditing and the centralization of budgetary powers in the executive. According to this author, these results suggest that there is a significant gap between external auditing and legislative oversight and that SAIs are required to counteract weaknesses in legislative oversight and check executive's discretion.

**Party discipline.** Party discipline involves voting along party lines although the outcome does not fully match individual legislators' preferences (von Hagen, 1992). An overly strict party discipline may constrain legislators' actions (Hudson and Wren, 2007). Party majorities only ensure the predictability of legislative behaviour when matched with tight party discipline, which is not always the case (Wehner, 2004). Legislators may cultivate a "personal vote" and distinguish themselves from their party affiliation, diminishing the ability of government parties to enforce party discipline (Wehner, 2005).

This separation of purpose can be attributed to the effects of different electoral systems. Carey and Shugart (1995) investigate how electoral formulas induce legislators to cultivate a "personal vote." In this regard, candidate-centered electoral systems are usually associated with low levels of party cohesion (Wehner, 2004). This contrasts with party-centered systems, where the alignment of ideologies leads to more cohesive governments (Lienert, 2005). This latter electoral system, which improves party cohesion, may increase legislators' political incentives to oversight budget executions (Santiso, 2005a).

From an empirical point of view, however, Wehner (2005) does not find a significant relationship between party discipline and legislative budgetary oversight.

**Political competition.** Political majorities have an important effect on parliaments' role in the budgetary process (Leston-Bandeira, 1999; Young, 1999). When the interest of a legislative majority and the executive coincide, the majority has little incentive to oversee the executive. It is the opposition who has the greatest interest and incentive to oversee government, so the degree of political competition becomes essential as far as legislative budgetary oversight is concerned (Messick, 2002). Therefore, the strength of legislative opposition is a key factor to explain the effectiveness of legislative oversight. The executive dominates budget formulation and execution, so that the partisan participation in the budgetary process depends on parties' relations with the executive (Santiso, 2005a). When there are minority governments, the legislature has relatively more budget powers, as the parties not represented in the government can force it to amend the budget (Lienert, 2005). Therefore, it is expected that legislatures exert more oversight power in countries

with minority governments, as the difference of preferences between the legislature and the executive is widened. In fact, Wehner (2005) finds that legislatures invest in more complex scrutiny structures if the political system is characterized by protracted spells of divided government. However, this author cannot prove that divided governments have a positive effect on legislative budgetary oversight.

### **2.1.2. Socio-economic determinants of legislative budgetary oversight**

**Economic level.** According to Wehner (2005), institutions may be shaped by the broader development context of a country. In this vein, Wehner (2005) states that the economic level of a country may affect the degree of legislative budgetary oversight over the executive. Nevertheless, this author fails to empirically show that the economic level have a positive effect on legislative budgetary oversight.

**Degree of democracy.** The democratic level of a country may also have an effect on the degree of legislative budgetary oversight. According to O'Donnell (1998), there is growing awareness of the weaknesses of governments' oversight mechanisms and accountability and the consequent need to enhance "horizontal accountability" institutions. The ability of legislature to act as independent institutions for "horizontal accountability" is expected to be more developed in democratic countries than in authoritarian regimes or where democracy is weakly entrenched. However, from an empirical point of view, Wehner (2005) does not find a significant relationship between the democratic level and legislative budgetary oversight.

## **2.2. Other determinants of budget transparency**

### **2.2.1. Institutional and political determinants of budget transparency**

**Legal system.** Laws on access to information are a powerful tool to enhance government transparency (Matheson and Kwon, 2003). Nevertheless, the effectiveness of these laws may depend on the type of legal system in place.

Common law countries are traditionally more market- and less government-oriented than civil law ones, so that the greater protection of property against the state found in the former improves various aspects of government performance. This may manifest itself directly on outcomes, or through increased attention paid to

governance (La Porta et al., 1999). In this way, Alt and Lassen (2006) find that common law countries are more fiscally transparent than civil law ones.

**Political competition.** Alt et al. (2006) state that a high level of political competition encourages ruling politicians to promote transparency and reduce discretion, regardless of their partisan goals, as they want to tie other politicians' hands, whether those others are potential successors or fellow incumbents with whom they are currently sharing the power. However, Messick (2002) argues that opposition party members are more likely to request information from the government than members from the governing majority as a way to criticize and scrutinize its actions. Thereby, a higher political competition may lead governments to disclose less information, as it could be used to scrutinize their actions (Wehner and de Renzio, 2013).

From an empirical point of view, whereas Alt et al. (2006) and Wehner and de Renzio (2013) find that political competition has a positive effect on fiscal transparency, Andreula et al. (2009) do not confirm it.

**Ideology.** According to Schick (2003), the budget process is politically neutral and it suits both left-wing and right-wing governments. However, Alt et al. (2006) state that politicians can change the level of transparency as a way to achieve their political goals. Ferejohn (1999) posits that politicians in favour of a larger public sector should increase transparency so as to make voters trust them with more resources (Alt et al., 2006). In this sense, the PPM thesis, posited by Cusack (1997), states that left-wing parties favour public spending expansion whereas right-wing parties aim for budget reductions. Accordingly, if we connect both ideas, progressive governments, favouring a larger public sector, are expected to keep higher levels of transparency than their conservative counterparts as a way to account for the greater amount of resources they manage.

In this regard, Bastida and Benito (2007) find that progressive and conservative governments hold similar transparency levels. In the same way, Alt et al. (2006) do not show a statistically significant relationship between ideology and fiscal transparency.



### 2.2.2. Socio-economic determinants of budget transparency

**Economic level.** Grigorescu (2003) argues that richer countries (in terms of GDP per capita) are less worried about the high cost of gathering, processing, and disclosing information. Therefore, they are more likely to adopt laws on access to information than poorer countries. However, this author also states that, in poorer countries, citizens have greater incentive to request information about government and policies, as the level of satisfaction with government actions is lower than that in wealthier countries.

In this respect, Hameed (2005) shows that the wealthier a country, the more transparent its budget reports. However, Alt et al. (2006) do not prove a significant relationship between economic level and transparency.

**Degree of democracy.** The idea that citizens have a right to fiscal information comes from a long-standing tradition. However, this right is unlikely to be fulfilled without a mechanism that helps ensure disclosure (Wehner and de Renzio, 2013). If there are free and fair elections, citizens as voters have access to such mechanism that allows them to get rid of bad incumbents. This, in turn, may affect the degree of fiscal transparency (Brender and Drazen, 2005). In this way, Rosendorff (2004) shows that a country's democratic level has a significant impact on its degree of transparency: As democratic accountability rises, so does government transparency.

However, Martin and Feldman (1998) argue that a democratic political system expands the realm in which citizens can engage, but it is not itself a factor for promoting government transparency. In fact, some autocratic governments have enhanced their fiscal transparency as a way to attract foreign investment and development assistance. Moreover, democratically elected governments may have incentives to limit disclosure (Kono, 2006; Mani and Mukand, 2007). As Hollyer et al. (2011) state, the greater vulnerability to citizens' disapproval may make democratic incumbents more inclined to obfuscate or withhold information than their autocratic counterparts, who are less worried about citizens' perceptions.

**Fiscal performance.** Instruments such as transparency and accountability are essential to obtain greater governments' fiscal performance. These instruments are important

not only to enhance authorities' competent economic management but also to reduce their incentives to be fiscally irresponsible (Rogoff, 1990). Thereby, the larger debt and balance ratios over GDP, the more important the influence of the government on the economy. Consequently, the demand for budget transparency is expected to be greater (Benito and Bastida, 2009).

Moreover, according to the agency theory, politicians have incentives to reduce the cost of debt and this way increase the financial resources available for other programs that enhance incumbents' welfare. This makes politicians disclose voluntary information to enhance creditors' monitoring role (Zimmerman, 1977).

In this respect, Alesina and Perotti (1996) and Alt et al. (2006) show that higher levels of debt are associated with lower transparency. Nevertheless, Benito and Bastida (2009) find that there is no effect of government debt on budget transparency, whereas there is a positive correlation between national governments fiscal balance and budget transparency. Similarly, Alt et al. (2006) argue that both higher deficits and higher surpluses contribute to greater fiscal transparency.

### **3. Econometric procedure**

#### **3.1. Sample**

As in the previous chapter, we use a sample of 94 countries as these are the only ones included in a survey on central governments' budget transparency and accountability (Open Budget Survey) published by IBP in 2010. This information is crucial for our study, given that it is used to measure our main dependent variable (the degree of budget transparency) as well as to build the legislative budgetary oversight indicators.

One of the countries, East Timor, drops because after a preliminary descriptive analysis it is considered an outlier. East Timor has the highest government balance (239.27%). If we remove it from our sample, this variable takes a maximum value of 10.61%. Therefore, our final sample consists of 93 countries.

Open Budget Survey data were collected in 2009 (IBP, 2010). Accordingly, all institutional, political, and socio-economic data refer to 2009.

### 3.2. Econometric model

This chapter aims to determine what institutional, political, and socio-economic factors promote central governments' budget transparency, focusing primarily on how the budgetary oversight of the legislature affects budget transparency.

We run a two-stage least squares (2SLS) regression as a way to solve the endogeneity problem between legislative budgetary oversight and budget transparency. 2SLS ensures that estimators are consistent when endogeneity exists in the model, which is assumed according to the previous literature. In a first stage, the endogenous variable is regressed on the instrument(s). The instruments have to be correlated with the endogenous variable but not with the error term of the underlying equation. In this way, the variation in the endogenous variable that is not correlated with the error term is isolated. In a second stage, the endogenous variable is replaced with the resulting predicted value (Wooldridge, 2002; Bascle, 2008).

In this regard, we first analyse the determinants of legislative budgetary oversight along all phases of budgetary process. Then, we use these determinants as instruments for legislative budgetary oversight in the budget transparency determinants' regression, using 2SLS estimation.

To analyse the determinants of legislative budgetary oversight along all phases of budgetary process, we estimate the following regression:

$$y_i = \alpha + \sum_{j=1}^8 \beta_j X_{ji} + \varepsilon_i \quad (1)$$

where subscript  $i$  ( $i = 1 \dots 93$ ) represents each country,  $\alpha$  is the constant of the equation, and  $\varepsilon_i$  is the error term.  $y_i$  are the three indicator of legislative budgetary oversight according to each phase of budgetary process (ex-ante, during, and ex-post budgetary oversight) as well as the global legislative budgetary oversight indicator.  $X_{ji}$  is the vector of explanatory variables (type of government, type of legislature, type of legal system, SAI budgetary oversight, party discipline, political competition, economic level, and democratic level).

We use OLS estimation for three of the dependent variables: ex-ante, during, and global legislative budgetary oversight. These three variables are continuous, that is,

they take values from 0 to 100. However, in the ex-post legislative oversight regression, we use an ordered probit estimation (O.PROBIT) as this indicator is built based on one questionnaire item and therefore it has a discrete ordinal nature (Greene, 2003).

As noted above, to examine the determinants of budget transparency (*budget.transparency*), we use the 2SLS estimator. In this analysis, we only include the global legislative budgetary oversight indicator (*leg.oversight*), as it is a summary variable that considers the degree of budgetary oversight of the legislature over the executive along all phases of the budgetary process. Therefore, we estimate the following system of equations:

$$leg.oversight_i = \alpha + \sum_{j=1}^8 \beta_j X_{ji} + \varepsilon_i \quad (2)$$

$$budget.transparency_i = \alpha + \gamma_1 \hat{leg.oversight}_i + \sum_{j=1}^7 \lambda_j W_{ji} + \varepsilon_i \quad (3)$$

where subscript  $i$  ( $i = 1 \dots 93$ ) represents each country,  $\alpha$  is the constant of the equation, and  $\varepsilon_i$  is the error term. As stated above,  $X_{ji}$  is the vector of legislative budgetary oversight determinants (type of government, type of legislature, type of legal system, SAI budgetary oversight, party discipline, political competition, economic level, and democratic level). The *leg.oversight* variable in equation (3) is replaced with its predicted value from equation (2), using legislative budgetary oversight determinants as instruments.  $W_{ji}$  is the vector of other budget transparency determinants (type of legal system, political competition, ideology, democratic level, economic level, government debt, and government balance).

### 3.3. Variables

We use the 2010 OBI, published by IBP in 2010, to measure the level of budget transparency (*budget.transparency*). The IBP collaborates with civil society around the world to use budget analysis and advocacy to improve governance and reduce poverty. The main aim of IBP is making government budgeting more transparent and participatory, more responsive to national priorities, better able to resist corruption, and more efficient and effective. In support of this collaboration, the IBP also provides

national governments with technical and financial assistance, comparative research opportunities, information exchange, and peer networking. In fact, the IBP has released the Open Budget Survey biennially since 2006. It is based on an exhaustive questionnaire (Open Budget questionnaire) intended to gather a comparative data set on the public availability of budget information and other accountable budgeting practices around the world. The 2010 Open Budget questionnaire consists of 123 questions and has been conducted in 94 countries by independent budget experts who are not associated with national governments (IBP, 2010). Out of the total 123 questions, only 92 evaluate public access to budget information, which were averaged by IBP to build the 2010 OBI. This index ranges from 0 to 100, where the greater the score, the higher the degree of budget transparency.

This questionnaire also covers additional important topics for civil society, such as legislative oversight or the role of the SAI. Indeed, 22 of the 123 questions that comprise the 2010 Open Budget questionnaire assess how the legislature and the SAI can contribute to budget transparency and accountability in a country. The questionnaire therefore provides us data to build the other dependent variables, that is, legislative budgetary oversight indicators. We take those items that reflect the legislature's ability to provide effective oversight over the budget (IBP, 2010). We organize them into three groups to capture the corresponding phases of the budgetary process. Thus, we get three indicators of the degree of legislative budgetary oversight, one for each stage of the budgetary cycle. Moreover, we build a global legislative budgetary oversight indicator.

The first indicator seeks to measure the degree of ex-ante legislative budgetary oversight over the executive. It consists of a set of seven questions from the Open Budget questionnaire. Each question takes a value (100, 67, 33, or 0) depending on the strength of the ex-ante legislative budgetary oversight. The responses to these questions have been averaged to build the *leg.pre* index for each country:

$$leg.pre = \sum_{i=1}^7 [leg.pre_i] / 7 \quad \text{where } leg.pre_i \text{ stands for } leg.pre \text{ question number } i \quad (4)$$

This index ranges from 0 to 100, where the higher the score, the greater the degree of ex-ante legislative budgetary oversight over the executive.

The second index (*leg.dur*) measures the degree of legislative oversight during budget execution. We average three Open Budget questionnaire items to build this index.

$$leg.dur = \sum_{i=8}^{10} [leg.dur_i] / 3 \quad \text{where } leg.dur_i \text{ stands for } leg.dur \text{ question number } i \quad (5)$$

This variable also ranges from 0 to 100. The higher the score, the greater the degree of legislative budgetary oversight during budget execution.

To measure the level of ex-post legislative budgetary oversight (*leg.post*), we use a single question: Question Number 11 (Q. 120 in Open Budget questionnaire). This question, and thus, this variable, takes a value 100, 67, 33, or 0 according to the degree of ex-post legislative budgetary oversight (100 high ex-post oversight; 67 medium ex-post oversight; 33 low oversight; 0 scant or no ex-post oversight).

Finally, we build the variable *leg.oversight* that accounts for the global legislative budgetary oversight as it considers the degree of legislative budgetary oversight along the whole budgetary process. It is a summary variable that averages the scores obtained from Questions 1 to 11.

$$leg.oversight = \sum_{i=1}^{11} [leg.oversight_i] / 11 \quad \text{where } leg.oversight_i \text{ stands for } leg.oversight \text{ question number } i \quad (6)$$

This variable ranges from 0 to 100. The greater the score, the higher the global legislative budgetary oversight.

See Appendix B (Table B1) for a full description of questions included in each indicator. Concrete values of *leg.pre*, *leg.dur*, *leg.post*, and *leg.oversight* for every country are available on request to the authors.

As for independent variables, they have been selected in agreement with the literature and taking into account the available data set.

Table II.1 describes the variables. Table II.2 presents expected sign for independent variables in each regression according to the literature.

**Table II.1** Definition of variables and descriptive statistics

	Variable	Description	Calculation	Source	N	Mean	Min.	Max.	Std. Dev
(1)	<i>budget.transparency</i>	Budget transparency	2010 OBI: 0 scant or no information; 100 extensive information	IBP	93	42.2849	0.0000	92.3407	24.6343
	<i>leg.pre</i>	Degree of ex-ante budgetary oversight of the legislature over the executive	$leg.pre = \frac{\sum_{i=1}^7 [leg.pre_i]}{7}$ where <i>leg.pre<sub>i</sub></i> stand for leg.pre question number i	Own elaboration from 2010 Open Budget questionnaire data (IBP)	93	38.0415	0.0000	95.2857	19.6990
	<i>leg.dur</i>	Degree of legislature's oversight over the executive during budget execution	$leg.dur = \frac{\sum_{i=8}^{10} [leg.dur_i]}{3}$ where <i>leg.dur<sub>i</sub></i> stand for leg.dur question number i	Own elaboration from 2010 Open Budget questionnaire data (IBP)	93	55.5556	0.0000	100.0000	34.7699
	<i>leg.post</i>	Degree of legislature's budgetary ex-post oversight over the executive	Question number 11	Own elaboration from 2010 Open Budget questionnaire data (IBP)	93	60.1936	0.0000	100.0000	40.6582
	<i>leg.oversight</i>	Degree of budgetary oversight of the legislature over the executive	$leg.oversight = \frac{\sum_{i=1}^{11} [leg.oversight_i]}{11}$ where <i>leg.oversight<sub>i</sub></i> stand for leg.oversight question number i	Own elaboration from 2010 Open Budget questionnaire data (IBP)	93	44.8319	0.0000	97.0000	20.4371
(2)	<i>presidential</i>	Type of government	1 - Presidential 0 - Parliamentary	Database of Political Institution (WB)	92	0.6196	0.0000	1.0000	0.4882
	<i>bicameral</i>	Type of legislature	1 - Bicameral 0 - Unicameral	IDEA	93	0.4516	0.0000	1.0000	0.5004
	<i>common.law</i>	Type of legal system	1 - Common law	Own elaboration	93	0.2581	0.0000	1.0000	0.4399

		0 - Civil law	from CIA database						
	<i>sai</i>	Degree of budgetary oversight of the SAI <sup>a</sup>	$sai = \sum_{i=1}^5 [sai_i] / 5$ where <i>sai<sub>i</sub></i> stand for <i>sai</i> question number <i>i</i>	Own elaboration from 2010 Open Budget questionnaire data (IBP)	93	60.5075	0.0000	100.0000	26.5975
	<i>party.discipline</i>	Party discipline <sup>b</sup>	1- Open list proportional system 0 -The rest	IDEA	90	0.5111	0.0000	1.0000	0.5027
	<i>political.competition</i>	Political competition	Seats obtained in the parliament by the ruling party (% of total seats)	Database of Political Institution (WB)	89	62.5835	9.2784	100.0000	20.3549
	<i>conservative</i>	Political sign of ruling party	1- Conservative 0 - Progressive	Own elaboration from Parline database	93	0.4946	0.0000	1.0000	0.5027
(3)	<i>eco.level</i>	Economic level	GDP per capita (natural logarithm)	WB	93	8.1348	5.1620	11.2485	1.4028
	<i>democracy</i>	Democratic level	Polity 2 index: -10 strongly autocratic; +10 strongly democratic	Polity IV project database	89	4.8202	-10.0000	10.0000	5.3990
	<i>debt</i>	Government debt	Government debt (% of GDP)	IMF	92	45.1936	5.0640	194.0490	31.6477
	<i>gov.balance</i>	Government balance	Central Government net lending/borrowing (% of GDP)	IMF	93	-5.2399	-22.0750	10.6070	4.1769

Notes: <sup>a</sup> See Appendix B (Table B2) for a full description of the questions included in *sai* variable. <sup>b</sup> Electoral system has been taken as a proxy of party discipline, in agreement with previous studies (Wehner, 2005). The aim is to test whether there is an effect of open list proportional representation, since this electoral system is often regarded as candidate-centered.

Key: (1) dependent variables; (2) independent variables: political and institutional factors; (3) independent variables: socio-economic factors.

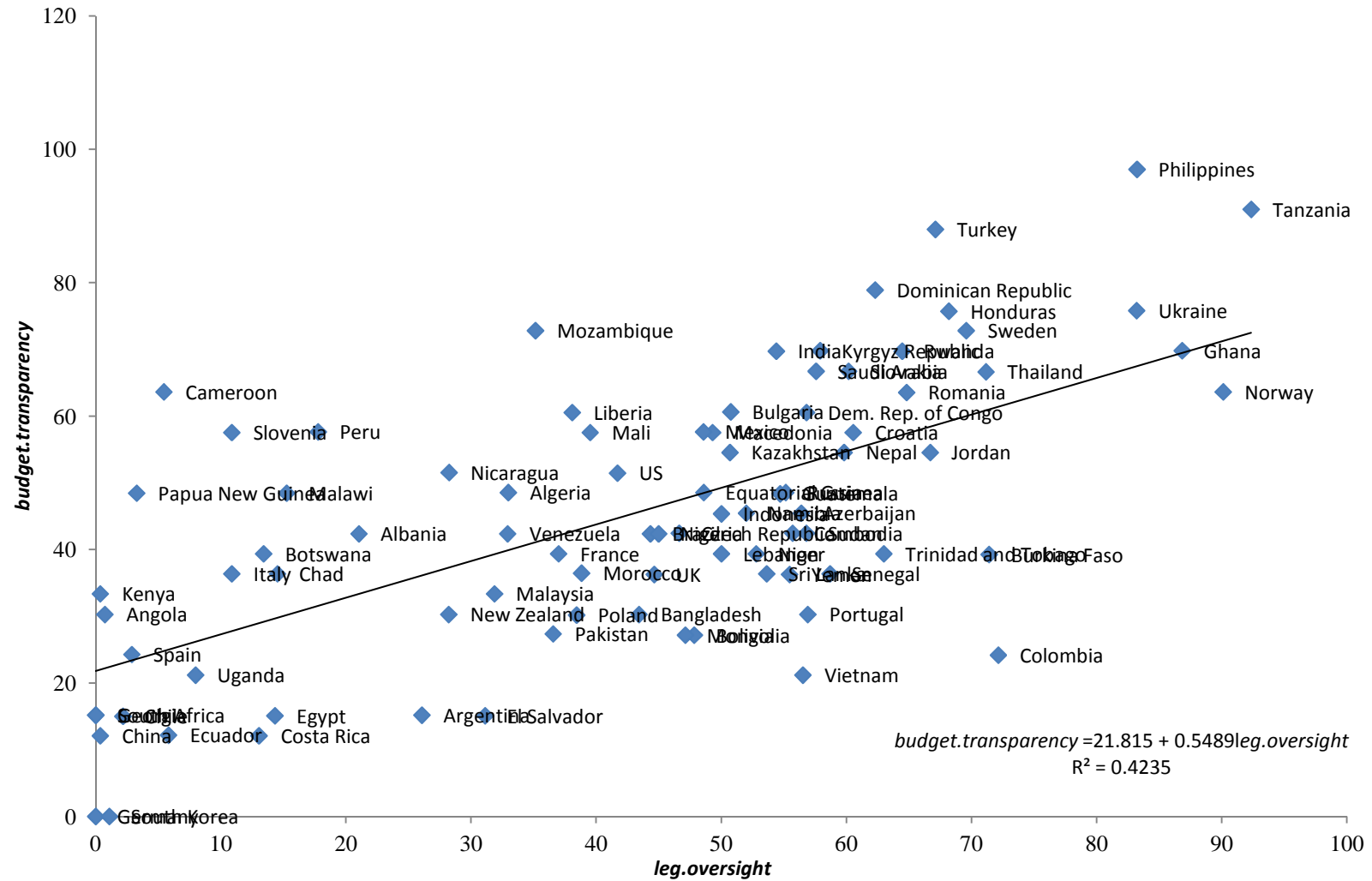


**Table II.2** Expected signs

	<i>leg.pre</i>	<i>leg.dur</i>	<i>leg.post</i>	<i>leg.oversight</i>	<i>budget.transparency</i>
<sup>^</sup> <i>leg.oversight</i>					+
<i>presidential</i>	+	+	+	+	
<i>bicameral</i>	+	+	+	+	
<i>common.law</i>	-	-	-	-	+
<i>sai</i>			+	+	
<i>party.discipline</i>	+	+	+	+	
<i>political.competition</i>	-	-	-	-	?
<i>conservative</i>					?
<i>eco.level</i>	?	?	?	?	?
<i>democracy</i>	+	+	+	+	?
<i>debt</i>					?
<i>gov.balance</i>					?

Finally, Figure II.2 shows the relationship between the two main variables at stake, that is, legislative budgetary oversight (*leg.oversight*) and budget transparency (*budget.transparency*). This preliminary analysis confirms the theoretical expectations about the relationship between these two variables.

**Figure II.2** Relationship between *budget.transparency* and *leg.oversight*



## 4. Results

### 4.1. Determinants of legislative budgetary oversight

Table II.3 presents the results of OLS and ordered probit regressions.

**Table II.3** Legislative budgetary oversight determinants

	<i>leg.pre</i> (OLS)	<i>leg.dur</i> (OLS)	<i>leg.post</i> (O.PROBIT)	<i>leg.oversight</i> (OLS)
<i>constant</i>	-19.74 (-1.21)	15.34 (0.47)		-6.40 (-0.41)
<i>presidential</i>	4.43 (1.00)	0.05 (0.01)	-0.42 (-1.27)	0.86 (0.20)
<i>bicameral</i>	-3.42 (-0.92)	-0.41 (-0.06)	**0.54 (2.05)	-1.46 (-0.40)
<i>common.law</i>	*9.25 (1.86)	6.50 (0.65)	*0.63 (1.70)	*8.18 (1.69)
<i>sai</i>			***0.02 (2.83)	***0.34 (3.65)
<i>party.discipline</i>	3.22 (0.76)	13.36 (1.57)	-0.01 (-0.05)	4.62 (1.11)
<i>political.competition</i>	0.07 (0.64)	0.17 (0.76)	0.01 (1.22)	0.10 (0.90)
<i>eco.level</i>	*** 5.35 (3.28)	1.82 (0.56)	-0.09 (-0.73)	2.47 (1.51)
<i>democracy</i>	**1.27 (2.64)	*1.68 (1.75)	-0.01 (-0.22)	0.27 (0.48)
N	85	85	85	85
R <sup>2</sup>	0.31	0.11	0.12	0.38
White's test (chi2)	39.63 (p =0.14)	21.30 (p =0.90)		38.53 (p =0.54)

OLS estimation. T-values in parentheses.

O.PROBIT estimation. Z-values in parentheses.

Maximum VIF: 2.53.

Significance: \*\*\*1%, \*\* 5%, \*10%.

Regarding institutional and political determinants of legislative budgetary oversight, the type of government (*presidential*) appears not to affect the legislative budgetary oversight in any phase of budgetary process. Thus, both in presidential and

parliamentary systems, the legislature has the same opportunities for budgetary oversight. This finding agrees with Wehner (2005).

The positive and significant coefficient of *bicameral* in *leg.post* indicates that bicameral legislatures have a greater ex-post budgetary oversight over the executive than unicameral ones. Our results confirm previous literature such as Lienert (2005), who states that a second chamber of the legislature with budgetary powers enhances the budgetary powers of the legislative body. However, we can only prove this relationship partly, as it is significant only for ex-post legislative budgetary oversight.

Contrary to the mainstream literature, the positive sign of *common.law* in *leg.pre*, *leg.post*, and *leg.oversight* indicates that common law legislatures exert higher budgetary oversight than their civil law counterparts. Previous literature shows that in common law countries (Westminster), the delegation of budget authority to the executive appears to be higher than that in civil law countries (Lienert and Jung, 2004). However, our interpretation is that in common law countries, this higher budgetary discretion of the executive encourages legislatures to oversight it. This relationship is largely confirmed by our data, as it is significant in three of the four regressions, including *leg.oversight* regression, which comprises all stages of budgetary process.

The positive and significant coefficient of variable *sai* indicates the positive effect of SAIs on legislative budgetary oversight. We find a positive effect not only on ex-post legislative budgetary oversight, as previous literature states (Stapenhurst and Titsworth, 2001; Lienert, 2005; Wehner, 2007), but also on legislative budgetary oversight along all stages of budgetary process. A possible explanation is that if the audit process is effective, its findings are reflected in future budgets (Wehner, 2007) and thus, in future budgetary processes.

Our results indicate that legislative budgetary oversight does not depend on either party discipline (*party.discipline*) or political competition (*political.competition*). These findings agree with Wehner (2005).

Turning to socio-economic determinants of budgetary oversight, the positive sign of *eco.level* in *leg.pre* indicates that economic level has a positive effect on ex-ante legislative budgetary oversight. Regarding this phase of the budgetary process, our

results are in line with Wehner (2005), who states that the economic level of a country may affect the degree of legislative budgetary oversight over the executive.

Finally, with regard to the degree of democratic level (*democracy*), we show an impact on *leg.pre* (ex-ante budgetary oversight) and *leg.dur* (legislative oversight during budget execution). Thus, our findings partly agree with O'Donnell (1998) that posits that the ability of the legislature to act as independent institutions for "horizontal accountability" is expected to be higher in democratic countries.

#### **4.2. Determinants of budget transparency**

In this section, we analyse whether legislative budgetary oversight, among other factors, affects budget transparency. The Durbin–Wu–Hausman endogeneity test confirms our theoretical assumption on the endogeneity of *leg.oversight* and *budget.transparency*. Thus, the proposed 2SLS regression is appropriate (see Table II.4). Sargan test does not reject the validity of the instruments used.

As expected, after controlling for endogeneity, legislative budgetary oversight over the executive (*leg.oversight*) has a positive influence on budget transparency (*budget.transparency*). This finding confirms Santiso's (2005a), who states that budgetary oversight by critical legislatures is a key mechanism of financial accountability. In addition, this result fits IMF (1998) and OECD (2001a) assumptions, which argue that enhanced legislative budgetary scrutiny strengthens government accountability and promotes greater transparency in public finances management.

The variable *commom.law* has a significant effect on *budget.transparency*. Thus, we can conclude that common law countries have higher levels of budget transparency than their civil law counterparts. Common law countries, in our opinion, seek to justify their commitment to greater protection of property against the government and, thus, to governance. This result confirms Alt and Lassen (2006), who show that common law countries are more fiscally transparent than civil law ones.

The variable *political.competition* affects *budget.transparency*. It demonstrates that when political competition is high, incumbents promote transparency, as they want to tie other politicians' hands. Alt et al. (2006) and Wehner and de Renzio (2013) also find that political competition has a positive effect on fiscal transparency.

Regarding variable *conservative*, our results indicate that budget transparency does not depend on ideology, showing that both progressive and conservative governments disclose similar budget information. This finding contradicts the PPM thesis but agrees with Schick (2003), who states that the budget process is politically neutral.

**Table II.4** Budget transparency determinants

	<i>budget.transparency</i> (2SLS)
<i>constant</i>	-26.77 (-2.18)
<sup>^</sup> <i>leg.oversight</i>	***0.74 (3.19)
<i>common.law</i>	** 0.44 (2.43)
<i>political.competition</i>	*-0.21 (-2.04)
<i>conservative</i>	-2.14 (-0.65)
<i>eco.level</i>	***5.79 (3.59)
<i>democracy</i>	0.54 (1.02)
<i>debt</i>	-0.03 (-0.56)
<i>gov.balance</i>	0.06 (0.11)
N	85
R <sup>2</sup>	0.60
Endogeneity (Durbin-Wu-Hausman) test (F(1,75))	3.45 (p = 0.0671)
Over-identification (Sargan) test (chi2(3))	6.17 (p = 0.1037)

First- stage regression not reported.

2SLS estimation. Z-values in parentheses.

2SLS instruments: *presidential, bicameral, common.law, sai, party.discipline, political.competition, democracy, eco.level, conservative, debt, gov.balance*.

Significance: \*\*\*1%, \*\* 5%, \*10%.

With regard to socio-economic determinants, the estimates reveal that the higher the economic level (*eco.level*), the greater the budget transparency. This feature confirms Grigorescu (2003), who states that more developed countries are more likely to adopt laws on information disclosure, which enhances their transparency. Hameed (2005) also finds that economic level has a positive effect on budget transparency.

The variable *democracy* shows that the democratic level does not affect budget transparency. This finding agrees with Martin and Feldman (1998), who state that a democratic political system is not itself a factor for promoting government transparency.

Finally, regarding fiscal performance of the country, both government debt (*debt*) and government balance (*gov.balance*) appear not to affect central government budget transparency (*budget.transparency*). Our results, however, are partly in line with Benito and Bastida (2009), who show that there is no effect of government debt on budget transparency.

## 5. Conclusions

This chapter aims to analyse the determinants of budget transparency in an international comparative approach, focusing primarily on how the legislative budgetary oversight over the executive affects budget transparency. We use a sample of 93 countries surveyed by IBP in 2010. We run a 2SLS regression to examine the determinants of budget transparency as a way to solve the endogeneity problem between legislative budgetary oversight and budget transparency. In this respect, we first analyse the determinants of legislative budgetary oversight along all phases of budgetary process. Then, we use these determinants as instruments for legislative budgetary oversight in the 2SLS regression.

Our results show that there are many institutional, political, and socio-economic factors that affect legislative budgetary oversight along the different phases of budgetary process. With regard to institutional and political factors, we can only partly observe that bicameral legislatures have more opportunities for budgetary oversight than unicameral ones. In addition, we note that common law legislatures have a greater budgetary oversight over the executive than civil law ones. This may

indicate that the excessive executives' budgetary discretion in common law countries encourages those countries' legislatures to oversight them. Finally, we conclude that higher SAIs' budgetary oversight leads to greater legislative budgetary oversight, but not only ex-post also along all stages of budgetary process. As an implication for public policy, this finding supports the idea that a strong, independent SAI, properly provided with human and technical resources, is key to enhance the legislative oversight role.

In respect of socio-economic factors, economic level and democracy appear to have a positive effect on legislative budgetary oversight along some of the stages of budgetary process. Our findings are in line with previous literature, which states that institutions may be shaped by the broader development context of a country, namely, economic and democratic level.

All these findings are very important as further research was needed into the political and institutional determinants of parliaments' role in the budgetary oversight, according to Santiso (2006). Moreover, we analyse the determinants of legislative budgetary oversight along all phases of budgetary process, whereas previous analysis focused on parliaments' involvement in the initial phases of the budget (Saporiti and Streb, 2008).

The main finding of this chapter is that legislative budgetary oversight has a positive effect on budget transparency. This relationship, as far as we know, has never been empirically tested. Therefore, our results confirm the ambition theory, which suggests that legislative oversight is an essential tool to scrutinize executive policy making. Specifically, we confirm international organizations' assumptions, which state that enhanced legislative budgetary scrutiny leads to deeper government accountability and greater transparency in public finances management. For example, OECD claims that Parliament should be able to examine any fiscal report it deems necessary (OECD, 2001a). Concrete countries, such as France, Brazil, South Africa, and Uganda, are already enhancing legislative engagement in budgetary oversight. Our findings show that they are in the right way. However, some process remains to be made. For example, OECD 2003 survey shows that 99% of countries make few, if any, changes to the budget. Besides, legislatures with a greater



involvement in the budgetary process need the capacity to analyse budgetary information. However, the same survey shows that 72% of countries do not have specialized budget organizations to advise legislatures in the budgetary oversight task (Barraclough and Dorotinsky, 2008). Our point, in light of our results, is triple. First, regarding practical issues, legislature involvement on budgetary oversight should be enhanced and facilitated as much as possible, as it affects positively the executive accountability and increases budget transparency. A specific budget office supporting technically the parliament would be useful in this respect. Second, the theoretical background indicates that agency problem would be diminished if legislatures exerted a closer oversight on governments' budget. Third, an enhanced implication of the legislative throughout all phases of the budgetary cycle clearly improves budget transparency.

Regarding other institutional and political factors, our results show that common law countries are more transparent than civil law ones. This may indicate that common law countries strongly protect property against the government, increasing transparency as a way to check that the government is respecting private property. Moreover, we observe that higher political competition leads to greater budget transparency, which indicates that incumbents try to tie other politicians' hands when closer elections are expected.

Finally, turning to socio-economic factors, only economic level appears to affect budget transparency. This indicates that developed countries' governments, less worried about the high cost of gathering, processing, and disclosing information, are more fiscally transparent.

From our point of view, our study has two limitations. The first one refers to the process by which legislative budgetary oversight indicators are built. Our proxies for legislative budgetary oversight along the different stages of budgetary process (*leg.pre*, *leg.dur*, and *leg.post*) may suffer of measurement error, as they consist of a small number of items. This may create a bias that lowers the value of our results. However, we further aggregate our three indicators into one (*leg.oversight*) to obtain a broader synthetic measure of the legislative budgetary oversight. We think that *leg.oversight* is a relevant indicator of legislative budgetary oversight and is likely to

produce stronger results due to the fact that there is more variation in that variable, because it summarizes 11 items. The second limitation has to do with the time ordering of the variables. In fact, various independent variables may cause budget transparency, but the path of the influence could sometimes move in the opposite direction. That is, budget transparency could sometimes be a cause of other variables apart from legislative budgetary oversight.

As future research, a new measure of legislative budgetary oversight along the different stages of budgetary process should be built to confirm the relationships found in this study. Moreover, we think it would be interesting to evaluate the long-term evolution of central governments' budget transparency. Upcoming data collection on budget transparency practices by IBP will provide a panel data set that would allow in the future within-country assessment of some of the determinants identified in this study. Besides, time series data would allow us to control for the second aforementioned limitation, that is, endogeneity between budget transparency and other variables.

## **CHAPTER III: “RISKS AND BENEFITS OF LEGISLATIVE BUDGETARY OVERSIGHT”**

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## 1. Introduction

An active legislature plays an important role in governance and accountability, which in turn is essential for democracy. The primary roles of legislatures are legislation, oversight and representation. Oversight refers to controlling the activities of the executive, and – on behalf of citizens – holding the executive accountable. Therefore, legislative oversight can contribute to ensuring that the relationship between the state and its citizens is characterized by accountability (Hudson and Wren, 2007). In fact, legislatures play a key role that makes them pivotal to good governance, since they are involved both in vertical accountability mechanisms and horizontal accountability mechanisms. In other words, legislatures are the point in a governance system where voters-executive relations (vertical accountability) come into contact with legislature-executive relations (horizontal accountability). It is through playing this pivotal role that legislatures can contribute to effective and democratic governance. By providing oversight, they can contribute to accountability, which in turn can facilitate learning and improved performance (Hudson and Wren, 2007). In democratic countries, ultimate accountability of the executive is to the electorate (vertical accountability), but several years can pass in between elections. During this interval, horizontal accountability in the form of independent checks and balances plays an essential role in safeguarding government integrity (O'Donnell, 1998). An effective legislature is one which performs its horizontal accountability functions in agreement with the wishes of the voters.

A particularly important element of oversight concerns the budget: checking that spending decisions are in line with national priorities (Hudson and Wren, 2007). In this regard, legislative budgetary oversight is defined as the “power to scrutinize and influence budget policy and to ensure its implementation” (Wehner, 2006, p. 768).

Legislatures around the world have the constitutional power to oversee budget formulation and implementation. Legislatures participate in the governance of the budget by approving budget allocations, overseeing budget execution and controlling budget performance. Effective legislative budgetary oversight enhances accountability, participation and transparency, which are all concepts associated with a strong democracy. Besides, legislative budgetary oversight becomes even more important in

economic crisis times, such as the world financial crisis that started in 2008. In fact, central governments around the world are trying to address the fallout from the global economic crisis, which has led them to make painful decisions in respect of spending reductions and tax increases. The best way to improve the allocation of public finances is through budget systems that are transparent, open to public engagement and scrutiny, and that have robust oversight institutions (IBP, 2012). In fact, a lack of transparency and effective oversight of the vulnerability of government debt and deficits to external shocks contributed to the recent economic crisis (IBP, 2010).

Accordingly, there is growing interest in understanding the role of legislatures regarding both the governance of the budget and the oversight of public finances, prompted, in part, by calls for greater transparency and accountability in government financial management (Santiso, 2005a, 2005b). However, there is also a more sceptical perspective on the role of legislatures in the budget process, since there is evidence that powerful legislatures can undermine fiscal discipline (Wehner, 2007).

Therefore, we consider it necessary to analyse the potential risks and benefits associated with legislative budgetary oversight simultaneously. In particular, this chapter aims to ascertain whether legislative budgetary oversight supposes a risk to fiscal discipline as well as a benefit to budget transparency.

Previous literature has focused on assessing the impact of budget institutions on fiscal outcomes empirically (see, e.g., von Hagen, 1992; Alesina et al., 1999; Gleich, 2003; Wehner, 2010a). Nevertheless, most of them, apart from Wehner (2007, 2010a, 2010b), focus on industrialized or transition countries, but not on a more diverse sample. Besides, there are no empirical studies that focus simultaneously on both legislative budgetary oversight risks and benefits. To overcome this research gap, we extend the literature on international legislative budgetary oversight by examining simultaneously the potential risks and benefits of legislative budgetary oversight through an empirical model applied to a wide and comprehensive sample.

We use a sample of 93 countries surveyed by IBP in 2010. Our results show that legislative budgetary oversight has a negative impact with regard to fiscal discipline as well as a positive effect in terms of increasing budget transparency.

The chapter is structured as follows. First, we review the literature on the potential risks and benefits of legislative budgetary oversight. Second, we provide details of the econometric procedure. Then, we present our results. Finally, we conclude.

## **2. Literature review**

### **2.1. Risks of legislative budgetary oversight: fiscal indiscipline**

The fragmentation of budgetary decision-making leads to a CPR problem (Hallerberg and Marier, 2004). Literature on the impact of budget institutions on fiscal effect posits that, when the number of budgetary decision-makers is high, the possibility for legislators to disperse costs and target benefits leads to higher spending (Weingast et al., 1981; von Hagen and Harden, 1995; Velasco, 2000). In other words, policy-makers have incentives to increase public spending given that the costs of extra spending are borne by all, while the benefits are usually concentrated (Weingast et al., 1981).

According to this approach, individual policy-makers consider the full benefits of expanding projects in their areas, but take into account only a fraction of the social costs of an increase in spending (higher taxes or borrowing) directed toward their own constituents. The incomplete internalization of these social costs leads policy-makers to demand overspending on and/or excessive debt financing compared to the social optimal level. This strategy is individually rational, but creates negative externalities, producing a collectively inefficient budget outcome (Gleich, 2003). Thus, this excessive spending/deficit is not economically efficient, since it is not used as a countercyclical tool, but stems from the CPR problem.

Von Hagen and Harden (1995) and Hallerberg and von Hagen (1997) propose that both imposing hierarchical budget institutions and cooperative bargaining are conducive to reducing the CPR problem, thus promoting fiscal discipline.

On the one hand, hierarchical budget institutions concentrate budgetary decision-making in the finance minister, who is more likely to internalize the entire social costs than spending ministers, thus containing free-riding and enhancing fiscal discipline (Poterba and von Hagen, 1999; Strauch and von Hagen, 1999; Gleich, 2003; Wehner,

2007).<sup>2</sup> On the other, cooperative bargaining reduces the CPR problem by inducing policy-makers to consider the externality problem when they collectively negotiate and mutually commit themselves to budget targets (Gleich, 2003).

Therefore, a greater centralization of budgetary powers in the executive leads to greater fiscal discipline and lower budget deficits (Alesina and Perotti, 1996; Stein et al., 1999). In this regard, Schick (2002) posits that the legislature may voluntarily yield budgetary power to the executive because it accepts the view that legislators cannot constrain their political inclination to tax less and spend more, which leads to higher budget deficits and public debt (Santiso, 2005b).

Since the pioneer work of von Hagen (1992), there have been numerous empirical studies on the fiscal effects of budget institutions. This author, using a sample of European Community countries in the 1980s, finds that a strong finance minister leads to fiscal discipline. Later, Alesina et al. (1999), using a sample of 20 Latin American and Caribbean countries, show that more hierarchical budget institutions lead to greater fiscal discipline. Subsequently, other empirical studies have also provided evidence for the view that budget institutions have an impact on budget outcomes (see, e.g., Hallerberg and Marier (2004) for Latin America and Caribbean countries; Gleich (2003) and Fabrizio and Mody (2006) for Central and Eastern European countries; Hallerberg et al. (2007) for European countries). All the aforementioned works focus on the impact of the executive's budget management on fiscal discipline. However, more recently, Wehner (2007, 2010a, 2010b), has extended the empirical literature on this issue in a double way—first, by considering the role of the legislature on the budget process and its impact on fiscal discipline and second, by broadening the sample, as he works on a much larger global sample of both developed and developing countries

Given the above, we propose the following hypothesis:

***Hypothesis 1: the greater the legislative budgetary oversight, the higher the fiscal indiscipline (higher deficit or lower surplus).***

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<sup>2</sup> Hierarchical budget systems concentrate power in the finance minister, vis-à-vis other ministers, and in the executive vis-à-vis congress' (Stein et al., 1999). According to Alesina et al. (1999), hierarchical budget institutions are those procedural and organizational arrangements that limit the role of the congress in expanding the size of the budget and the deficit, and attribute a strong role to a single individual, typically the treasury minister, in the budget negotiations within the government, so limiting the prerogatives of the spending ministries.

## **2.2. Benefits of legislative budgetary oversight: budget transparency**

Governments have a moral obligation to their citizens to be transparent about their handling of tax-payers' money (Fölscher et al., 2000). Government budgets represent financial plans which specify how public resources are going to be used to meet policy goals (OECD, 2006). However, modern economies' budgets are very complex, allowing practices aimed at hiding the real budget balance. Thus, politicians have few incentives to disclose simple, clear and transparent budgets (Alesina and Perotti, 1996). According to Alesina and Perotti (1996), the problem of lack of budget transparency can be addressed either by setting standards (for example, procedural fiscal rules and hard budget constraints) or by having independent agencies which check the accuracy of the budget (for example, general audit offices and legislative budget institutions). Indeed, Blöndal (2003) argues that one of the three essential elements of budget transparency is the effective role for the legislature. According to this author, legislatures must be able to (1) scrutinize the budget reports and independently review them; (2) debate and influence budget policy; and (3) effectively hold the government accountable. Budget transparency therefore depends on which role the legislature plays regarding budgetary oversight (Santiso, 2005a).

Active legislatures can help mitigate the risks of excessive executive budgetary discretion by reinforcing the compensatory mechanisms of government accountability and legislative scrutiny (Santiso, 2005a). By providing independent checks and balances on executive discretion, legislative budgetary oversight should improve the transparency of public accounts. Therefore, enhancing legislative budgetary scrutiny increases government accountability and promotes greater transparency in the management of public finances (IMF, 1998; OECD, 2001a). Moreover, the agency theory posits that the principal (citizens) should be able to hold the agent (government) accountable. In the context of our research, the legislature represents the citizens' interests. Legislative oversight helps redress the information asymmetries between the government and society, opening up the budget to public debate and social control on the governments' objectives and performances in the management of public funds and, therefore, it helps create the conditions for greater governments' accountability (Santiso, 2005a). By creating a demand for financial information



disclosure, legislative oversight can improve government budgetary process transparency, where it was previously shrouded in secrecy (Wehner, 2007). This process of higher accountability and transparency diminishes the agency problem.

The seminal paper of Alt et al. (2006) analyses the determinants of fiscal transparency in a sample of US states. Among the determinants, they consider several legislative institutions of every state. More recently, but for a sample of countries, Khagram et al. (2013) and Wehner and de Renzio (2013) also investigate the determinants of fiscal transparency. We broaden this empirical literature by adding a variable that gauges the legislative involvement on the budgetary process. Accordingly, we propose the following hypothesis:

***Hypothesis 2: the greater the legislative budgetary oversight, the higher the budget transparency.***

So far, we have summarized the literature that supports the impact of legislative budgetary oversight on budget transparency. However, there may be reverse causality (endogeneity), i.e., budget transparency may affect the degree of legislative budgetary oversight. According to Barraclough and Dorotinsky (2008), both the organization IBP and the OECD recommended good practices posit that the executive should report transparent budget to enable meaningful engagement in the budget process by the legislature. This acknowledgement by both the IBP and the OECD indicates the reverse causality between budget transparency and legislative budgetary oversight. As von Hagen (1992) and Bernoth and Wolff (2008) state, legislative oversight can be reduced by fiscal misreporting. Therefore, transparency is considered as a cross-cutting issue that has an influence on the legislative potential to be involved in each stage of the budgetary cycle (Wehner, 2007). If the budget transparency is undermined by the executive, for example, by manipulating budget figures, the oversight role of the legislature is clearly hindered (Wildavsky and Caiden, 2004). Accordingly, we must take into account this endogeneity problem between legislative budgetary oversight and budget transparency (see next section).

### **3. Econometric procedure**

### 3.1. Sample

As in the previous chapters, our sample comprised the 94 countries included in a survey on central governments' budget transparency and accountability (Open Budget Survey) published by the organization IBP in 2010. This survey was collected in 2009. This information is crucial for our study given that it is used to measure our variable of interest (the degree of legislative budgetary oversight) as well as one of our dependent variables (the degree of budget transparency). One of the countries, namely East Timor, is removed from our sample because after a preliminary descriptive analysis it is considered an outlier. Therefore, our final sample consists of 93 countries. These countries are located in different geographical areas and have different income levels, political regimes and administrative cultures. Besides, our sample includes the most influential countries, such as US, UK, China, India or Germany. However, one limitation of this dataset is the number of countries, which we hope that will be increased in future IBP datasets.

As stated above, 2010 Open Budget Survey data were collected in 2009 (IBP, 2010). Accordingly, all institutional, political and socio-economic data refer to 2009.

### 3.2. Variables

#### 3.2.1. Risks of legislative budgetary oversight: fiscal indiscipline

One of the aims of our empirical analysis is to assess the likely negative effect of legislative budgetary oversight on fiscal discipline. To measure fiscal discipline we use the average of central government's net lending/borrowing as percentage of GDP from 2005 to 2009 (*gov.balance.average*) as dependent variable.<sup>3</sup> Hallerberg and Marier (2004) and Wehner (2010a) also take central government's budget balance as a percentage of GDP as a proxy of budget discipline.

As discussed above, limiting legislative involvement in budgetary process is conducive to fiscal discipline (Santiso, 2005b). Therefore, a higher legislative oversight of the

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<sup>3</sup> We use the average of central government's net lending/borrowing as percentage of GDP over a 5 year period (2005-2009), since fiscal deficits vary substantially from year to year. Therefore, from a statistical point of view, it is appropriate to average over several years.

budget may be a risk to fiscal discipline. Accordingly, we include legislative budgetary oversight (*leg.oversight*) as an explanatory variable of government's budget balance (*gov.balance.average*), and we expect a negative sign in the regression, i.e., the higher the oversight, the higher (lower) the deficit (surplus).

As we explained in the previous chapter, the Open Budget Survey provides us data to build our legislative budgetary oversight indicator along all phases of the budgetary process (*leg.oversight*). It is based on an exhaustive questionnaire (Open Budget questionnaire) intended to gather a comparative data set on the public availability of budget information and other accountable budgeting practices around the world. This questionnaire also covers additional important topics for civil society, such as legislative oversight or the role of the SAI. Indeed, 22 of the 123 questions that comprise the 2010 Open Budget questionnaire assess how the legislature and the SAI can contribute to budget transparency and accountability in a country. Accordingly, we take those 2010 Open Budget questionnaire questions that reflect the varying degrees of strength of legislative budgetary oversight along all phases of the budgetary process (see Appendix B, Table B1). Thus, our legislative budgetary oversight indicator (*leg.oversight*) consists of a set of 11 questions from the 2010 Open Budget questionnaire. Each question takes a value (0, 33, 67 or 100) depending on the strength of the legislative budgetary oversight. The responses to these questions have been averaged to build the legislative budgetary oversight indicator (*leg.oversight*) for each country:

$$leg.oversight = \sum_{i=1}^{11} [leg.oversight_i] / 11 \quad \text{where } leg.oversight_i \text{ stands for} \quad (1)$$

leg.oversight question number i

This variable ranges from 0 to 100. The higher the score, the stronger the degree of legislative budgetary oversight. Concrete values of *leg.oversight* for each country are available upon request to the authors.

In order to isolate the impact of legislative budgetary oversight (*leg.oversight*), we need to control for other variables that the literature has identified as determinants of government's budget balance (*gov.balance.average*).

Among the control variables, we consider political competition (*political.competition*). Roubini and Sachs (1989) state that large coalition governments face higher deficits than one-party incumbents governing with majority. This hypothesis, is known in the literature as the Roubini and Sachs' weak government hypothesis (RSH). According to Cheibub (2006), the strength of the government matters for budget performance. If no party holds more than 50% of the seats (the government has a minority status) budget management will be hindered by negotiations with external parties to take measures for reducing budget deficits. In the same way, Goeminne et al. (2008) argue that it may be more difficult for fragmented governments to agree on necessary fiscal adjustments in the budget.

We also control for the ruling party's political ideology by defining the dummy variable *conservative*. The PPM thesis, posited by Cusack (1997), argues that progressive parties favour public spending expansion while conservative parties aim for budget reductions. Thus, progressive governments are likely to have a poorer financial situation and will therefore probably have higher budget deficits.

Furthermore, in order to control for the economic growth, we include *eco.growth* variable (Heller, 1997; Hallerberg and Marier, 2004).

Moreover, we take into account the unemployment rate by including the variable *unemployment*. Feld and Kirchgässner (2001) state that as the unemployment rate increases, spending and deficit increase.

Finally, we include the population density (*pop.density*) as control variable. According to previous studies, population density may lead to economies of scale in the provision of public services. In this case, a negative relationship between population density and spending is expected (Pettersson-Lidbom, 2001; Burchell and Mukherji, 2003; Litman, 2004; Carruthers and Ulfarsson, 2008). Therefore, a larger population density may be associated with lower spending, and possibly lower deficits (Hallerberg et al., 2007).

### **3.2.2. Benefits of legislative budgetary oversight: budget transparency**

In order to evaluate the benefit of legislative budgetary oversight on budget transparency, we use a government budget transparency indicator (*budget.transparency*) as dependent variable. Wehner and de Renzio (2013) employ

the 2008 OBI as a measure of budget transparency. It is published by IBP and is based on the responses to the 2008 Open Budget questionnaire. These authors argue that this index is a good measure of budget transparency since it overcomes the shortcomings of previous studies. First, the countries covered by OBI are located in different geographical areas and have different income levels, political regimes and administrative cultures. Second, data are collected simultaneously, providing a comparative description of governments' budget transparency practices at one point in time. Third, IBP surveys are completed by independent experts from civil society organizations who are not associated with the government. Thus, the independence of the OBI research process prevents its survey from being manipulated by governments (Wehner and de Renzio, 2013). Accordingly, as in the previous chapter, we use the 2010 OBI (*budget.transparency*) as dependent variable. The answers to 92 of the 2010 Open Budget questionnaire questions were averaged to build the 2010 OBI (IBP, 2010). It ranges from 0 to 100, where the greater the score, the higher the degree of government budget transparency.

As stated above, enhancing legislative budgetary oversight ensures government accountability and promotes greater public finances' transparency (IMF, 1998; OECD, 2001a). Therefore, a higher legislative budgetary oversight may be beneficial for government budget transparency. Consequently, we include legislative budgetary oversight (*leg.oversight*) as an explanatory variable of *budget.transparency*. We expect a positive sign of the variable *leg.oversight*, which means that stronger legislative budgetary oversight ensures greater transparency.

In order to isolate the effect of our interest variable (*leg.oversight*), it is necessary to control for the effect of other factors that, according to previous literature, impact on budget transparency (*budget.transparency*).

We control for political competition (*political.competition*) given that a high level of political competition encourages politicians in office to promote transparency, regardless of their partisan goals (Alt et al., 2006). This is because they want to tie other politicians' hands, whether those others be potential successors or fellow incumbents with whom they are currently sharing the power. Nevertheless, higher political competition may lead governments to disclose less information, since it could

be used to scrutinize their actions (Wehner and de Renzio, 2013). Consequently, the impact of political competition on budget transparency is uncertain.

We include the ruling party's ideology (*conservative*) as control variable. Ferejohn (1999) argues that politicians in favour of a larger public sector should increase transparency to prompt voters to pay higher taxes. As mentioned above, the PPM thesis posits that progressive parties favour public spending increases, while conservative parties aim for budget reductions (Cusack, 1997). In this sense, progressive governments, favouring a larger public sector, are expected to keep higher levels of transparency than their conservative counterparts.

We also control for the type of legal system (*common.law*). As La Porta et al. (1999) state, common law countries have traditionally placed greater emphasis on individual property rights and the restraint of the state than their civil law counterparts. Therefore, the greater protection of property against the state found in the former improves various aspects of government performance. This may manifest itself directly on outcomes, or through increased attention paid to governance. It is therefore expected that common law countries will have higher levels of budget transparency.

We also consider the economic level of the country (*eco.level*). Grigorescu (2003) states that richer countries are less worried about the high cost of gathering, processing and disclosing information. Therefore, they are more likely to adopt laws on access to information, which enhances their transparency.

The variable *democracy* is included to stand for the democratic level of the country. According to Lord (2006), democratic countries tend to produce more information about government activity than autocratic ones. However, Martin and Feldman (1998) argue that a democratic political system expands the realm in which citizens can engage, but it is not itself a factor for promoting government transparency. In fact, some democratically-elected governments may have incentives to limit disclosure. As Hollyer et al. (2011) state, the greater vulnerability to citizens' disapproval may make democratic incumbents more inclined to obfuscate or withhold information than their authoritarian counterparts, who are less worried about citizens' perceptions. Therefore, the effect of democratic level on budget transparency is uncertain.

Finally, we take into account the fiscal performance of the country by including *debt* and *gov.balance.average* variables. According to Benito and Bastida (2009), the larger debt and balance ratios over GDP, the more important the influence of the government on the economy. Consequently, the demand for budget transparency is expected to be greater.

### 3.3. Econometric model

The aim of this chapter is to analyse simultaneously whether legislative budgetary oversight has a negative effect with regard to fiscal discipline as well as a positive impact in terms of increasing budget transparency. Accordingly, we propose the following two-equation system:

$$gov.balance.average_i = \alpha + \beta_1 leg.oversight_{1i} + \beta_2 political.competition_{2i} + \beta_3 conservative_{3i} + \beta_4 eco.growth_{4i} + \beta_5 unemployment_{5i} + \beta_6 pop.density_{6i} + \varepsilon_i \quad (2.1)$$

$$Budget.transparency_i = \alpha + \gamma_1 leg.oversight_{1i} + \gamma_2 political.competition_{2i} + \gamma_3 conservative_{3i} + \gamma_4 common.law_{4i} + \gamma_5 eco.level_{5i} + \gamma_6 democracy_{6i} + \gamma_7 debt_{7i} + \gamma_8 gov.balance.average_{8i} + \varepsilon_i \quad (2.2)$$

where subscript  $i$  ( $i=1...93$ ) represents each country,  $\alpha$  is the constant of the equation,  $\beta_{ji}$  and  $\gamma_{ji}$  are the parameters to be estimated and  $\varepsilon_i$  is the error term.

We must take into account that previous literature has shown an endogeneity problem between *budget.transparency* and *leg.oversight*. To control for this reverse causality, we add a third equation in our system to instrument the variable *leg.oversight* (Alt and Lowry, 2010):

$$leg.oversight_i = \alpha + \lambda_1 budget.transparency_{1i} + \lambda_2 political.competition_{2i} + \lambda_3 presidential_{3i} + \lambda_4 bicameral_{4i} + \lambda_5 sai_{5i} + \lambda_6 discipline_{6i} + \lambda_7 common.law_{7i} + \lambda_8 eco.level_{8i} + \lambda_9 democracy_{9i} + \varepsilon_i \quad (2.3)$$

where subscript  $i$  ( $i=1...93$ ) represents each country,  $\alpha$  is the constant of the equation,  $\lambda_{ji}$  are the parameters to be estimated and  $\varepsilon_i$  is the error term. See Appendix C for a description of the instruments of *leg.oversight*.

We estimate this three equation system by three-stage least squares (3SLS).

### 3.4. Descriptive statistics

Table III.1 describes the variables and basic statistics.

Table III.2 shows a preliminary assessment of the relationship between the key variables. The bivariate correlation between *leg.oversight* and *gov.balance.average* is negative and statistically significant at the 90% confidence level. The relationship between *leg.oversight* and *budget.transparency* is positive and statistically significant at the 99% confidence level. This preliminary analysis confirms the theoretical expectations about the relationships between our key variables.



**Table III.1** Definition of variables and descriptive statistics

	Variable	Description	Calculation	Source	N	Mean	Min.	Max.	Std. Dev
(1)	<i>gov.balance.average</i>	Government balance	Central Government net lending/borrowing (% of GDP) (average from 2005 to 2009)	IMF	93	-0.2870	-9.4766	29.5340	5.5495
(1)	<i>budget.transparency</i>	Budget transparency	2010 OBI : 0 scant or no information; 100 extensive information	IBP	93	42.2849	0.0000	92.3407	24.6343
(1)	<i>leg.oversight</i>	Degree of budgetary oversight of the legislature over the executive	$leg.oversight = \frac{\sum_{i=1}^{11} [leg.oversight_i]}{11}$ where <i>leg.oversight<sub>i</sub></i> stand for leg.oversight question number i	Own elaboration from 2010 Open Budget questionnaire data (IBP)	93	44.8319	0.0000	97.0000	20.4371
(2)	<i>political.competition</i>	Political competition <sup>a</sup>	Seats obtained in the legislative body by the ruling party (% of total seats)	Database of Political Institution (WB)	89	62.5835	9.2784	100.0000	20.3549
(2)	<i>conservative</i>	Political sign of ruling party <sup>a</sup>	1- Conservative 0 - Progressive	Own elaboration from Parline database	93	0.4946	0.0000	1.0000	0.5027
(2)	<i>presidential</i>	Type of government	1 - Presidential 0 - Parliamentary	Database of Political Institution (WB)	92	0.6196	0.0000	1.0000	0.4882
(2)	<i>bicameral</i>	Type of legislative body	1 - Bicameral 0 - Unicameral	IDEA	93	0.4516	0.0000	1.0000	0.5004
(2)	<i>sai</i>	Degree of budgetary control of the SAI <sup>b</sup>	$sai = \frac{\sum_{i=1}^5 [sai_i]}{5}$ where <i>sai<sub>i</sub></i> stand for sai question number i	Own elaboration from 2010 Open Budget questionnaire data (IBP)	93	60.5075	0.0000	100.0000	26.5975
(2)	<i>discipline</i>	Party discipline <sup>c</sup>	1- Proportional system 0 - Plurality system	Database of Political Institution (WB)	87	0.5517	0.0000	1.0000	0.5002
(2)	<i>common.law</i>	Type of legal system	1 - Common law 0 - Civil law	Own elaboration from CIA database	93	0.2581	0.0000	1.0000	0.4399

(2)	<i>eco.level</i>	Economic level	GDP per capita (natural logarithm)	WB	93	8.1532	5.2216	11.2703	1.3860
(2)	<i>eco.growth</i>	Economic growth	Real growth of GDP per capita from 2005 to 2009 (constant 2005 US\$)	WB	92	13.2670	-5.4835	91.1887	13.3069
(2)	<i>unemployment</i>	Unemployment rate	Number of unemployed /Population	WB , IMF and CIA database	85	13.8155	0.1000	85.0000	14.6940
(2)	<i>pop.density</i>	Population density	Population / Km <sup>2</sup>	WB	93	112.9610	1.7454	1129.5240	149.1061
(2)	<i>democracy</i>	Democratic level	Polity 2 index: -10 strongly autocratic; +10 strongly democratic	Polity IV project database	89	4.8202	-10.0000	10.0000	5.3990
(2)	<i>debt</i>	Government debt	Government debt (% of GDP)	IMF	92	45.1936	5.0640	194.0490	31.6477

Notes: <sup>a</sup> Political data (*political.competition* and *conservative* variables) have been taken from the year of the closest legislative elections held before 2009. If the last election took place in 2009, we consider the previous legislative elections, since 2009 election results may not have an immediate impact in that year. <sup>b</sup> See Appendix B (Table B2) for a full description of the questions included in *sai* variable; <sup>c</sup> Electoral system has been taken as a proxy of the party discipline in previous studies (Wehner, 2005). The aim is to test whether there is an effect of proportional representation. This electoral system is often regarded as party-centered.

Keys: (1) endogenous variables; (2) control variables.

**Table III.2** Key correlations

		<i>gov.balance.average</i>	<i>budget.transparency</i>
<i>leg.oversight</i>	Correlation	*-0.190	***0.653
<i>budget.transparency</i>	Correlation	***-2.278	

Significance: \*\*\*1%, \*\* 5%, \*10%.

## 4. Results

### 4.1. Risks of legislative budgetary oversight: fiscal indiscipline

Column 2 of Table III.3 shows the results of the regression with government's budget balance (*gov.balance.average*) as dependent variable.

The negative and significant coefficient of *leg.oversight* indicates that strong legislative budgetary oversight leads to fiscal indiscipline: higher deficit or lower surplus. This finding supports Santiso (2005b) and Lienert (2010), who state that legislative activism may weaken fiscal discipline due to the CPR problem. If the legislature has unrestrained budget amendment power, it has incentives to overspending and under-taxation, thus leading to higher budget deficits.

Regarding control variables, the non-significance of variable *political.competition* means we cannot confirm that more fragmented governments are assumed to face higher deficits (Roubini and Sachs, 1989; Cheibub, 2006; Goeminne et al., 2008).

Furthermore, the ruling party's political ideology (*conservative*) appears not to affect fiscal discipline (*gov.balance.average*), which means that the political sign may not be an important factor in explaining the country financial situation. The fact that ideology does not affect government's budget balance is in line with the "convergence" school of thought. This posits that modern societies face the same problems and solve them in the same way, so political, institutional and cultural differences are not relevant in explaining public policies (Skinner, 1976; Thomas, 1980)

Moreover, our results indicate that fiscal discipline does not depend on either economic growth (*eco.growth*) or unemployment rate (*unemployment*).

Finally, the coefficient of variable *pop.density* is significant, meaning that higher population densities' countries have better financial situation, due to the effect of

economies of scale (Pettersson-Lidbom, 2001; Burchell and Mukherji, 2003; Litman, 2004; Hallerberg et al., 2007; Carruthers and Ulfarsson, 2008).

#### 4.2. Benefits of legislative budgetary oversight: budget transparency

In the previous section, we showed that legislative budgetary oversight entails a risk, since we have found that fiscal discipline decreases as legislative budgetary oversight increases. In this section, we analyse whether legislative budgetary oversight is not only a risk but also a benefit in terms of increasing budget transparency. Column 4 of Table III.3 presents the estimation of regression with budget transparency (*budget.transparency*) as dependent variable.

As expected, after controlling for endogeneity, we find that the stronger the legislative budgetary oversight on the executive (*leg.oversight*), the greater the government budget transparency (*budget.transparency*). This finding fits previous studies assumptions, which argue that the legislature engagement in the budgetary process is essential for promoting good governance and fiscal transparency (Santiso, 2005a, 2005b; Wehner, 2007; Lienert, 2010). Additionally, when estimating the third equation (2.3) of our model (see column 6 in Table III.3), we find that not only legislative budgetary oversight promotes budget transparency but also budget transparency (*budget.transparency*) enables meaningful engagement in the budget process by the legislature (*leg.oversight*). This result confirms von Hagen (1992), Wehner (2007) and Bernoth and Wolff (2008), who state that transparency influences the legislative potential to be involved in the budgetary cycle. As for the remaining determinants (instruments) of *Legislative oversight*, only *political.competition* and *eco.level* are significant, and their impact agrees with the theoretical and empirical assumptions.

Regarding the other independent variables, the coefficient of *pol.competition* impacts negatively on *budget.transparency*. This demonstrates that higher political competition leads incumbents to disclose more information, given that incumbents try to tie other politicians' hands when closer elections are expected (Alt et al., 2006). For *conservative*, the results indicate that budget transparency does not depend on ideology, which shows that both progressive and conservative governments disclose similar budget information. This finding contradicts the PPM thesis but agrees with

Schick (2003), who states that the budget process is politically neutral and suits both progressive and conservative governments.

Moreover, the type of legal system (*commom.law*) appears not to affect the degree of budget transparency, i.e., we cannot prove that common law countries are more fiscally transparent than their civil law counterparts (La Porta et al., 1999).

The coefficient of variable *eco.level* is significant, which shows that an increase in economic level leads to a higher budget transparency. Our results agree with Grigorescu (2003), who argues that richer countries are more prone to adopt laws on information disclosure, so enhancing their transparency. Hameed (2005) also finds that economic level has a positive impact on budget transparency.

With regard to democratic level (*democracy*), the estimates reveal that there is no effect of democratic level on budget transparency. This feature confirms Martin and Feldman (1998), who state that a democratic political system is not itself a factor for promoting government transparency.

Finally, regarding country's fiscal performance, both government debt (*debt*) and government's budget balance (*gov.balance.avarage*) appear not to affect budget transparency (*budget.transparency*).

**Table III.3** Risks and benefits of legislative budgetary oversight

	<i>gov.balance.average</i>		<i>budget.transparency</i>		<i>leg.oversight</i>
<i>constant</i>	1.90 (0.65)	<i>constant</i>	-33.02 (-2.32)	<i>constant</i>	40.72 (2.14)
<i>leg.oversight</i>	*-0.07 (-1.79)	<i>leg.oversight</i>	***0.94 (3.74)	<i>budget.transparency</i>	***1.10 (3.15)
<i>political.competition</i>	0.03 (1.14)	<i>political.competition</i>	*-0.20 (-1.72)	<i>political.competition</i>	*0.23 (1.93)
<i>conservative</i>	-0.39 (-0.43)	<i>conservative</i>	-0.28 (-0.14)	<i>presidential</i>	0.22 (0.11)
<i>eco.growth</i>	0.01 (0.36)	<i>common.law</i>	5.89 (1.29)	<i>bicameral</i>	1.51 (0.65)
<i>unemployment</i>	-0.01 (-0.46)	<i>eco.level</i>	***5.37 (3.01)	<i>sai</i>	-0.03 (-0.25)
<i>pop.density</i>	** -0.01 (-2.14)	<i>democracy</i>	0.01 (0.02)	<i>discipline</i>	0.43 (0.18)
		<i>debt</i>	-0.02 (-0.23)	<i>common.law</i>	-7.54 (-1.18)
		<i>gov.balance.average</i>	-1.11 (-1.28)	<i>eco.level</i>	** -6.46 (-2.07)
				<i>democracy</i>	-0.08 (-0.13)
N	75		75		75
R <sup>2</sup>	0.04		0.47		0.11

First- stage regressions not reported.

3SLS estimation. Z-values in parentheses.

Endogenous variables: *gov.balance.average*, *budget.transparency* and *leg.oversight*.

Maximum VIF is 2.99, which confirms that no multicollinearity exists.

Significance: \*\*\*1%, \*\* 5%, \*10%.

## 5. Conclusions

This chapter attempts to assess the potential risks and benefits of legislative budgetary oversight. Specifically, we aim to ascertain whether legislative budgetary oversight entails a risk to fiscal discipline as well as a benefit to budget transparency.

Using a sample of 93 countries from around the world, we find that legislative budgetary oversight is not only a risk in terms of decreasing fiscal discipline but also a benefit, since higher legislative oversight leads to greater budget transparency. This is consistent with Wehner (2007), who posits that strong legislative powers over budgetary decision are associated with fiscal indiscipline, but also appear to be related to some benefits, such as budget transparency.

These results confirm that a higher legislative engagement in the budgetary process leads to higher budget deficits, as a result of overspending and under-taxation. Therefore, limiting legislative involvement in budgeting is conducive to fiscal discipline. In fact, Schick (2002) states that legislature may voluntarily yield budgetary power to the executive because it accepts the view that legislators cannot constrain their political inclination to tax less and spend more. However, whereas greater centralization of budgetary powers in the executive ensures fiscal discipline, legislative oversight is crucial to providing budget transparency. By providing independent checks and balances on executive discretion, legislative budgetary oversight should improve the transparency of public accounts (Wehner, 2007).

Given the above, it seems desirable to strike the right balance between executive prerogatives and legislative oversight in the budget process, and so ensure fiscal discipline while providing the institutional checks and balances that guarantee effective accountability (Santiso, 2005a; Wehner, 2007). In other words, a re-equilibration of budgetary powers is required to reach more balanced budgetary systems, where executive discretion and legislative oversight complement each other to ensure both fiscal discipline and budget transparency.

According to Wehner (2010b), certain institutional mechanisms, such as top-down budgeting, can help legislatures to reconcile budgetary activism and fiscal prudence. In particular, Wehner (2007) states that institutional safeguards can mitigate the risk of

legislative fiscal indiscipline by disallowing amendments that lead to higher deficits or spending. Moreover, other mechanisms such as the centralization of legislative decisions on fiscal aggregates in a particular committee (Crain and Muris, 1995; Wehner, 2007) or fiscal rules (Schick, 2003) may also help to contain a pro-spending bias in legislative decision-making. Therefore, we consider it desirable that legislatures implement these kinds of institutional devices to help reconcile budgetary engagement and fiscal discipline. Thus, greater active legislative involvement in the budgetary process would lead to both fiscal discipline and budget transparency.

As far as future research is concerned, other legislative budgetary oversight indices would allow us to provide deeper insights on the budgetary oversight by the legislatures. It would be valuable to have extensive questionnaires from legislatures in each of the countries included in our dataset, to know their level of oversight over government budget decisions and to allow us to build more comprehensive legislative budgetary oversight indices. Unfortunately, such a survey is not available and, therefore, we have to rely on IBP datasets, which are collected by civil society partners in each country, rather than taking inputs from samples of legislators in each country. Moreover, our future research will focus on other risks and benefits of legislative budgetary oversight. Finally, we think we should provide insight on the long-term evolution of the research question tackled in this study, and not just for one year. To that aim, two IBP features prevent such analysis. First, not the same countries are surveyed every time IBP makes the dataset. Second, the items included in the survey related to legislative oversight change from survey to survey.



**CHAPTER IV: “THE CAUSES OF PUBLIC PARTICIPATION IN THE CENTRAL GOVERNMENT BUDGET PROCESS”**

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## **1. Introduction**

Good governance dictates that public policy decisions should be made openly and with the active engagement of those people who are affected by them (Fölscher et al., 2000). Government budgets represent financial plans that specify how public resources will be used to meet policy goals (OECD, 2006). Previous studies show that the best way to improve the allocation of public resources is through budget systems that are transparent, open to public engagement, and that have robust oversight institutions and mechanisms (IBP, 2012). Such budgeting practices can positively impact growth, efficiency and equity, thus reducing poverty and creating sustained economic development (IBP, 2012).

Government budgeting is related to public interests and social welfare as well as the relationship between the state and society (Wu and Wang, 2012). In fact, government budgets play a central role in citizens' lives, especially in the poor and low-income ones, who are the primary beneficiaries of government programmes financed through the budget (de Renzio and Krafchik, 2007). Nowadays, central governments around the world are trying to address the fallout from the global economic crisis, which has led them to make painful decisions in respect of spending reductions and tax increases (Ebdon and Franklin, 2006; IBP, 2012). Therefore, it seems to be an important opportunity for citizens to help the government to find the best solutions for the community regarding public funds' allocation (Ebdon and Franklin, 2006). For this reason, it is essential for citizens to understand government budgets, to have access to the necessary information to hold the government accountable for the use of public funds and to have their views considered in budget decisions (Ebdon, 2000; Fölscher et al., 2000; de Renzio and Krafchik, 2007).

Unfortunately, citizens, as well as civil society organizations, legislatures or the media have been traditionally excluded from budget decision-making and monitoring. In most developing countries, public budgeting is still considered as a state secret, and the process is controlled exclusively by the executive (de Renzio and Krafchik, 2007; Khagram et al., 2013). However, over recent years, transparency, public participation, and accountability in fiscal decision-making have increasingly attracted attention from international organizations such as the OECD, the United Nations (UN) and the WB, as

well as government officials, CSOs and scholars, which, concerned with improving the government, have established the goal of increasing public engagement in budget decisions as the top priority (Tanaka, 2007; Khagram et al., 2013).

Given the key importance of these issues in the global economy, it is surprising that few studies have thoroughly investigated so far which factors make central governments' budget process more transparent and open to public engagement (Khagram et al., 2013).

Most of the previous empirical studies have analysed the causes of budget transparency in an international comparative approach (see, e.g., Bastida and Benito, 2007; Andreula et al., 2009; Benito and Bastida, 2009; Khagram et al., 2013). However, although budget transparency and public participation in the budget process are conceptually related, it is not clear whether the factors that predict transparency are also likely to predict public participation (Khagram et al., 2013; Harrison and Sayogo, 2014). In this regard, there is little understanding of the causes of public participation in the budget process mainly due to the lack of cross-country dataset on public participation (Ebdon and Franklin, 2006; Khagram et al., 2013). The 2012 Public Participation in the Budget Process Index, published by IBP, addresses this problem (see section 3.2 of this chapter for more information about the index).

In this regard, this chapter aims to examine what socio-economic, institutional and political factors promote public engagement in the central governments' budget process. Therefore, this chapter attempts to shed light on existing literature on the causes of public participation in the budget process in an international comparative approach (see, e.g., Khagram et al., 2013; Harrison and Sayogo, 2014), using the 2012 Public Participation in the Budget Process Index as a measure of public participation.

Our sample comprised the 100 countries included in a survey on central governments' budget transparency and accountability (Open Budget Survey) published by IBP in 2012. We find that Internet penetration, population, central government financial situation and central government budget transparency determine opportunities for public engagement in the central governments' budget process. Additionally, we show, to the best of our knowledge for the first time, that not only budget transparency

promotes public participation, but also public participation is necessary to enhance budget transparency.

The chapter is structured as follows. First, we review the literature on public participation in the budget process and its determinants. Second, we provide details of the sample, variables and econometric model. Then, we present the empirical results. Finally, we conclude.

## **2. Literature review**

### **2.1. The basis of public participation**

Participation is the expectation that citizens have a voice in policy choices. Such participation takes many forms, ranging from community meetings to citizen advisory committees, administrative law, etc. (Bishop and Davis, 2002). Citizen participation in one way or the other is essential for democracy. Protective models of democracy state that citizen participation is important to protect people from governments' power, but this does not necessarily require extensive direct citizen engagement in public decision-making process. Indeed, some protective democracy theoreticians argue that citizens' ability to periodically replace the ruling government may be sufficient democratic participation. By contrast, developmental, direct, and deliberative models of democracy, consider that the direct citizen involvement in public decision-making process is an important purpose of democratic governance (Justice and Dülger, 2009).

According to Tanaka (2007), public distrust and cynicism provide evidence of distance between government and citizens. The OECD distinguishes between three types of government-citizen interaction used by governments to strengthen the relationship between them during the policy-making process: (a) information, in which government uses passive or active means to disseminate information to citizens; (b) consultation, in which government asks citizens about their opinions regarding some issues; and (c) active participation, in which government provides opportunities for citizens to become involved in policy-making process. The latter type is what OECD considers as public engagement (participation) (OECD, 2001b; Tanaka, 2007; Harrison and Sayogo, 2014).

The OECD endorses public participation in policy-making process as a strategy to promote good governance and to close the gap between the government and citizens, thus leading to stronger democratic government, more open and responsive to citizens' needs. Both national and local governments benefit from increased public participation in governance processes, since, on the one hand, it will provide those institutions with direct input on how to best respond to citizen needs and on the other hand, it will make decision-making more efficient (Carothers and Brechenmacher, 2014). Moreover, engaged public should also lead to better public policy and budget outcomes, including more equitable and efficient allocation of resources and greater long-term fiscal stability (Tanaka, 2007).

Moynihan (2007) states that public participation exists when citizens interact with and provide feedback to governments regarding policy formulation or implementation. According to Moynihan (2003, 2007), three arguments support the rise of public engagement: the postmodern discourse theory, the disillusionment with bureaucracy and the search for a democratic ideal. The postmodern discourse theory suggests that current societal conditions make it even more likely for citizens to get involved in public decisions through discourse (Maier, 1994; Fox and Miller, 1996). One broad rationale underlying such a movement is a worldwide shift in citizens' values to postmodern ones, which include a distrust of governments and a desire for more participatory democracies (Inglehart, 1997). Disillusionment with the traditional hierarchical bureaucracy model has also sparked citizens' interest in participatory processes. It has been shown that bureaucracies are unable to set an inclusive relationship with citizens (Zajac and Bruhn, 1999). In this vein, the popular discontent with the bureaucracies' discretionary authority has led to a search for alternative modes of democratic accountability and bureaucratic control, including increased citizen participation in public decision-making (Moynihan, 2003). Finally, the search for the democratic ideal may also explain the rise of public engagement. It seems that there is a greater concern for participation that produces benefits to citizens and offers them the chance to fulfil the democratic wish to influence on policy-making process (Moynihan, 2003, 2007).

Focusing on public participation in the budget process, many budget experts view it as one solution to the lack of popular support for responsible fiscal policies. The desire of citizens to benefit from more public services is not accompanied by a corresponding willingness to pay for them. In fact, citizens welcome spending that provides them with visible and immediate benefits, but many appear not to see the need for essential public goods and refuse to pay for them (Tanaka, 2007). Therefore, getting citizens more involved in the budget process may increase their awareness and understanding of the fiscal challenges (Blöndal, 2003). In fact, participatory budgeting may increase citizens' compliance, given that once they are granted more direct political influence, their evaluations of government honesty increases and non-compliance decreases (Lledo et al., 2004).

This literature on public participation in the budget process is lively and offers a number of insights, but it is somewhat under-theorized and isolationist in its neglect of comparative research (Justice and Dülger, 2009). This is partly due to the methodologies used to date. Previous studies have largely been case studies or small limited samples, but not large-scale research projects or longitudinal analysis. Case studies are important from a descriptive point of view, but without generalizing this information through cross-countries analysis, we cannot advance the theory development (Ebdon and Franklin, 2006).

In any case, public engagement in the public resources' allocation is the object of a small but growing literature in US journals of Public Administration (Justice and Dülger, 2009). This literature simultaneously offers both, on the one hand, a descriptive or explanatory theory that considers power over resource allocation as concentrated almost exclusively in the executive, and, on the other hand, a normative theory of developmental and direct democracy, which views citizen engagement in the public resources' allocation as a main objective (Justice and Dülger, 2009).

The normative theory tends to presume either explicitly or implicitly the desirability of achieving authentic participation through direct citizen involvement in the preparation stage of the budget process (Justice and Dülger, 2009). In this regard, Ebdon and Franklin (2004) state that citizen participation needs to occur early in the budget process, when there is a greater opportunity for it to be considered. Once the budget

reaches the approval stage, the basic procedures of approval are centralized in legislative committees. Indeed, although it is still possible for citizen participation to occur at the approval stage, the participation modes that can have an effect at this stage (committee hearings, executive budget proposal analysis, etc.) do not lend themselves to direct citizen involvement. Therefore, there is greater opportunity for active citizen participation in the preparation stage than in the approval one (Moynihan, 2007).

An example of active public participation in budget process is the participatory budgeting (Moynihan, 2007). Participatory budgeting is a process by which citizens, either as individuals or through CSOs, may contribute to decision-making over at least part of the government budget (Carlitz, 2013). The most famous example of participatory budgeting took place in Porto Alegre (Brazil). Later, this model of public participation in the budget process has been introduced in other municipalities in Brazil, Great Britain, Germany, Italy, or the US (Harrison and Sayogo, 2014). However, it is noteworthy that citizens' involvement in the budget process through participatory budgeting is more common in local and regional governments than in central governments. This is because the characteristics of citizen engagement that allow it at the local level are difficult to replicate at the national level (Tanaka, 2007). Notwithstanding this fact, Tanaka (2007) points out the relevance of citizen engagement at the national level. She starts from the broader concept of citizen engagement set by Philanthropy for Active Civic Engagement (PACE) (2005, p.6), compared with the OECD definition: "...activities by which people participate in civic, community and political life and by doing so express their commitment to community". This definition accommodates the complexity of public involvement in national policy making. It recognises that the principal benefit of public engagement is educational, not decision-oriented. It is more likely to involve the other forms of government-citizen interaction than direct participation. Governments' role is not limited to direct activities, it can also facilitate a range of efforts by non-governmental organisations and even unorganised individuals. Those third-party activities will then help generate a more active public discussion about national issues (Tanaka, 2007).

## **2.2. Determinants of public participation in the budget process**

From our point of view, further literature should shed more light on what factors foster citizen engagement. In fact, there is little understanding of the causes of public participation in the budget process (Khagram et al., 2013).

Most of the empirical literature on the causes of public participation in the budget process have been conducted at the subnational level (see, e.g., Ebdon, 2000; Zhang and Liao, 2009; Zhang and Liao, 2011; Liao and Zhang, 2012), given the limited availability of cross-country dataset on public participation (Ebdon and Franklin, 2006; Khagram et al., 2013). In this regard, for instance, Ebdon (2000), using a sample of US council-manager cities for 1996, examines whether the institutional structure, level of heterogeneity and political culture affect citizens' involvement in the budget process. In a recent study, Zhang and Liao (2011) analyse whether public officials' attitudes, forms of government, council's diversity and politics and community characteristics have an influence on participatory budgeting adoption in New Jersey municipalities.

However, as stated above, the empirical literature on the causes of public engagement in the central governments' budget process is rather scarce (see, e.g., Khagram et al., 2013; Harrison and Sayogo, 2014). For example, Harrison and Sayogo (2014) analyse which socio-cultural, political, economic and government conditions may predict transparency, participation, and accountability in an international comparative approach. This study is the first attempt to analyse the causes of public participation in central governments' budget process, using appropriate cross-country data of public participation. Specifically, based on some public participation indicators provided by 2012 Open Budget Survey, they build two indexes that assess the extent to which the executive and the SAI of each country engage the public in budget process.

Our study contributes to the literature in three aspects. First, we consider more factors (political, institutional and socio-economic) than previous literature to determine public engagement in national budget issues. Second, we control for endogeneity between some variables at stake. Third, we use the 2012 Public Participation in the Budget Process Index as a whole, which measures the extent to which the executive, legislature and SAI of each country provide opportunities for public participation in budget process.



The determinants of public participation in the budget process can be grouped into two categories: (2.2.1) socio-economic and (2.2.2) institutional and political.

### **2.2.1. Socio-economic determinants of public participation in the budget process**

The economic level of a country may impact on public participation in the budget process. The relationship between economic development and public participation in public issues has been widely analysed. According to Norris (2001), citizens of wealthier countries demand more freedom, including more open government, and thereby, more participation in public policies. However, efforts to connect economic development and citizen participation in developing countries provide suggestive results that differ from country to country (Bardhan and Mookherjee, 2006). Proponents of participation in richer countries, i.e., citizens, share dissatisfaction with government. In poorer countries, citizens disapproval of government is even more appropriate. In these latter countries, citizens point to corruption, opaque resource allocation, the failure to deliver basic public services and a power structure that offers them little opportunity to be heard. Indeed, the criticism in many poor countries is not about governments having failed to promote citizen engagement but having failed to meet their basic responsibilities (Moynihan, 2007). Focusing on public participation in the budget process, Harrison and Sayogo (2014) fail to find a significant relationship between countries' economic level and public participation in the budget process.

Moreover, the technology gap between countries with different economic levels, known as digital divide, limits citizens' opportunities to use ICTs and, particularly, the Internet for a wide variety of activities, including political issues (Norris, 2001; Justice et al., 2006). In fact, ICTs can provide channels that facilitate citizen participation in public policy-making. Information and opinion sharing through the Internet has led to high expectations about the use of these technologies for facilitating consultation and participation (Halachmi and Holzer, 2010). However, it is not only important that governments extend ICTs usage, but also it is the governments' responsibility to make available education to facilitate citizen engagement in fiscal policy (Bertot et al. 2010). Actually, the lack of education affects citizens' ability to understand public fiscal finance, resulting in limited political participation (Alers-Tealdi, 2012). Therefore, government investing in ICTs and education seems to contribute to enhance citizen

engagement in the central government budget process. In this regard, Harrison and Sayogo (2014) show a significant relationship between citizens' education and the opportunities for public participation in the budget process provided by the SAI.

The population diversity of the country may also affect citizen participation in the budget process. According to Protasel (1988), larger cities are more heterogeneous, which may result in increased political conflict due to varying group demands. Therefore, governments of larger and more diverse communities are more likely to formalize citizen participation in budgeting decisions since they have more resources and face more competing demands in formulating budget (Ebdon, 2000; Ebdon and Franklin, 2006; Liao and Zhang, 2012). Some empirical studies show a positive impact of population on citizen engagement in local governments' budget process (Ebdon, 2000; Zhang and Yang, 2009), whereas others find the opposite (Liao and Zhang, 2012). Moreover, while some studies find that communities' diversity has a positive effect on public participation in local governments' budget process (Liao and Zhang, 2012), others fail to prove a positive relationship between them (Ebdon, 2000).

Finally, the financial situation of the country may also have an impact on public participation in the budget process. In this sense, Liao and Zhang (2012) state that communities with greater resources are more likely to adopt administrative reforms, such as enhancing citizen participation in budgeting. However, Liao and Zhang (2012) do not find a significant relationship between resource availability and the level of citizen participation in the local budget process.

### **2.2.2. Institutional and political determinants of public participation in the budget process**

Participation in budgetary decision-making requires the availability of timely and flexible financial data (Justice et al., 2006; Moynihan, 2007). In fact, Arnstein (1969) states that information is essential in genuine public participation. Therefore, participation is meaningless if not well informed, and participants can only be well informed if there is budget transparency. This means that there can be no authentic citizen participation in the budget process without effective transparency (Justice and Dülger, 2009). However, previous empirical studies do not shed much light on the potential of budget transparency as a factor that enhances citizen participation

(Carlitz, 2013). Moreover, we would like to point out that transparency and participation are mutually reinforcing, i.e., transparency is a prerequisite for citizen participation which, in turn, can lead to more requests for information (Fölscher et al., 2000). Therefore, there may be reverse causality, so that public participation may affect the level of budget transparency. Indeed, participatory mechanisms strengthen citizen access to budget information by creating a framework that provides incentives for citizens to demand more and better information (Tanaka, 2007). Better information is always clear information, which sometimes is not the case when public data are released. In other words, information is sometimes divulged only nominally, or turns out to be unreliable. Then civil society has to invest a lot of time and resources to translate nominally public data into clearly transparent information (Fox, 2007).

Furthermore, we would expect that the democratic level of a country would be related to public participation in the budget process. According to Halachmi and Holzer (2010) and Harrison and Sayogo (2014), democratic countries would foster public participation since they are fundamentally concerned with opening up decision-making opportunities to citizens. The more vibrant a country democratic governance, the more options are open for effective civil society participation (Moynihan, 2007). However, democracies can vary in the extent to which citizens take active roles in the public policy decisions, so we do not expect this relationship to be perfect (Norris, 2001; Harrison and Sayogo, 2014). For instance, Carlitz (2013) found that legal empowerments can help institutionalize public participation in the budget process.

The type of legal system is also related to good governance and, in turn, to public participation. The legal system creates more or less favourable normative resources that condition the extent to which public participation is understood as a component of legitimate government (Khagram et al., 2013). Common law countries are traditionally less government-oriented than civil law ones, so that the greater protection of property against the state found in the former improves various aspects of government performance. This may manifest itself directly on outcomes, or through increased attention paid to governance (La Porta et al., 1999). It is therefore more likely that common law countries foster the opportunities for public engagement in the budget process.

Moreover, the ruling party's political sign may impact on the public participation in the budget process. In fact, Schneider and Goldfrank (2002) posit that public participation depends on the support of the group seeking to implement an alternative vision of participatory democracy. In this vein, progressive parties are more likely to promote participatory budget than conservative ones (Peña, 2013). Indeed, Schneider and Goldfrank (2002) show that public participation in the local budget process is positively correlated with the percentage of the electorate aligned with the progressive party.

Finally, political competition may also lead to more public participation in decision making, including budgeting (Wang, 2001). Political competition encourages political parties to join with social groups and to promote their interests (Goetz and Gaventa, 2001). Moreover, higher political competition motivates governments to involve citizens in decision making to legitimize their decisions (Langton, 1978). In this vein, Wang (2001), for a sample of US cities, finds that political competition increases public participation in decision making.

### **3. Econometric procedure**

#### **3.1. Sample**

Our sample comprised the 100 countries included in a survey on central governments' budget transparency and accountability (Open Budget Survey) published by IBP in 2012. This dataset is crucial for our study for it is used to measure our dependent variable (the level of public participation in the budget process) as well as one of the determinants of public participation (the level of government budget transparency). These countries are located in different geographical areas and have different income levels, political regimes and administrative cultures. Besides, our sample includes the most influential countries, such as US, UK, China, India or Germany.

Furthermore, our dataset includes socio-economic, institutional and political variables. All these data refer to 2011, since the 2012 Open Budget Survey data were collected in 2011 (IBP, 2012).

#### **3.2. Variables**

The aim of our empirical analysis is to assess the determinants of public participation in central governments' budget process. For this purpose, we use a public participation

indicator (*Public Participation*) as dependent variable. Specifically, we use the Public Participation in the Budget Process Index published by IBP in 2012.

As stated in previous chapters, the IBP has released the Open Budget Survey biennially since 2006. This survey intended to gather a comparative database on the public availability of budget information and other budgeting practices around the world. The 2012 Open Budget Survey consists of 125 questions and has been conducted in 100 countries by independent researchers (IBP, 2012). Out of the total 125 questions, 95 evaluate public availability and comprehensiveness of budget information, which were averaged by IBP to build the 2012 OBI, which we use to measure the level of government budget transparency. The remaining questions gauge the state of public participation and oversight in the countries assessed. Indeed, the 2012 Open Budget Survey contains a set of 12 indicators (questions) of public engagement in the budget process (which are not included in the OBI). These questions seek to assess the extent to which the executive, the legislature, and the SAI provide opportunities for public participation along all phases of the budget cycle. Each of the 12 questions takes a value 100, 67, 33, or 0 according to the opportunities for public engagement in the budget process (100 high opportunities for public engagement; 67 medium opportunities; 33 opportunities; 0 scant or no opportunities). The answers to these 12 questions were averaged by IBP to build the 2012 Public Participation in the Budget Process Index for each country. It ranges from zero to 100, where the greater the score, the higher the opportunities for public engagement in the budget process. See the IBP (2012) report for the description of the specific questions included in the index.

In accordance with the literature discussed in Section 2.2 of this chapter, the determinants of public participation in the budget process can be grouped into two categories: (1) socio-economic and (2) institutional and political. Our independent variables have been classified accordingly. The socio-economic features considered are the economic level (*Economic level*), the Internet penetration (*Internet*), the education level (*Education*), the population diversity of the country (population of the country (*Population*) and migrant rate (*Migrant*)) and the financial situation of the country (government debt (*Debt*) and government's budget balance (*Government Balance*)). The institutional and political category includes the level of government budget

transparency (*Budget transparency*), the democratic level (*Democracy*), the type of legal system (*Common law*), the ideology of the ruling party (*Conservative*) and the political competition (*Political competition*).

Table IV.1 describes the variables and basic statistics.

**Table IV.1** Definition of variables and descriptive statistics

	<b>Variable</b>	<b>Description</b>	<b>Calculation</b>	<b>Source</b>	<b>N</b>	<b>Mean</b>	<b>Min.</b>	<b>Max.</b>	<b>Std. Dev</b>
(1)	<i>Public participation</i>	Public participation in the budget process	2012 Public Participation in the Budget Process Index: 0 no opportunities for public engagement; 100 many opportunities for public engagement	IBP	100	19.4983	0.0000	91.7500	17.0135
(2)	<i>Economic level</i>	Economic level	GDP per capita (natural logarithm)	WB, 2011 data	100	8.3061	5.5036	11.5043	1.4271
	<i>Internet</i>	Internet penetration	Percentage of Internet users (%)	WB, 2011 data	100	33.2029	0.9000	94.0000	26.1047
	<i>Education</i>	Education level	Literacy rate (%)	CIA, 2011 data	100	82.6118	28.1000	100.0000	19.3784
	<i>Population</i>	Population	Population of the country (natural logarithm)	WB, 2011 data	100	16.6689	12.1182	21.0190	1.5156
	<i>Migrant</i>	Migrant rate	International migrant stock (% of Population of the country)	WB, 2010 data	100	5.3282	0.0511	74.6081	9.7829
	<i>Debt</i>	Government debt	Government debt (% of GDP)	IMF, 2011 data	98	42.4972	5.3970	137.5340	23.2162
	<i>Government balance</i>	Government's budget balance	Central Government net lending/borrowing (% of GDP)	IMF, 2011 data	100	-1.9931	-11.9680	42.6730	6.2078
(3)	<i>Budget transparency</i>	Budget transparency	2012 OBI : 0 scant or no information; 100 extensive information	IBP	100	42.6689	0.0000	93.1630	24.2587
	<i>Democracy</i>	Democratic level	Polity 2 index: -10 strongly autocratic; +10 strongly democratic	Polity IV project database, 2011 data	96	4.8229	-10.0000	10.0000	5.4037
	<i>Common law</i>	Type of legal system	1 - Common law 0 - Civil law	Own elaboration from CIA, 2011 data	100	0.2800	0.0000	1.0000	0.4513
	<i>Conservative</i>	Political sign of ruling party	1- Conservative 0 - Progressive	Own elaboration from Parline database, 2011	100	0.4800	0.0000	1.0000	0.5021

			data					
<i>Political competition</i>	Political competition	Seats obtained in the parliament by the ruling party (% of total seats)	Database of Political Institution (WB), 2011 data	95	63.7535	14.0625	100	17.8747

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Keys: (1) dependent variable; (2) independent variables: socio-economic factors; (3) independent variables: institutional and political factors.



### 3.3. Econometric model

We propose the following model to analyse the explanatory factors of public participation in the central government budget process:

$$\begin{aligned} \text{Public participation}_i = & \alpha + \beta_1 \text{Economic level}_{1i} + \beta_2 \text{Internet}_{2i} + \beta_3 \text{Education}_{3i} + \\ & \beta_4 \text{Population}_{4i} + \beta_5 \text{Migrant}_{5i} + \beta_6 \text{Debt}_{6i} + \beta_7 \text{Government balance}_{7i} + \beta_8 \text{Budget} \\ & \text{transparency}_{8i} + \beta_9 \text{Democracy}_{9i} + \beta_{10} \text{Common law}_{10i} + \beta_{11} \text{Conservative}_{11i} + \\ & \beta_{12} \text{Political competition}_{12i} + \varepsilon_i \end{aligned} \quad (1.1)$$

where subscript  $i$  ( $i=1\dots 100$ ) represents each country,  $\alpha$  is the constant of the equation,  $\beta_{ji}$  are the parameters to be estimated and  $\varepsilon_i$  is the error term.

We must take into account that previous literature has shown an endogeneity problem between *Public participation* and *Budget transparency*. To control for this reverse causality, we add a second equation in our model to instrument the variable *Budget transparency*. Following Alt and Lassen (2006) and Jarmuzek (2006), we use the type of legal system (*Common law*), the political competition (*Political competition*), the rule of law (*Rule of law*), the freedom of the press (*Press freedom*) and the type of government (*Presidential*) as instruments for *Budget transparency* (see appendix D for a description of the instruments and basic statistics). Moreover, we include the endogenous variable (*Public Participation*) as an explanatory variable for *Budget transparency*. Accordingly, we estimate the following two equation system by 3SLS:

$$\begin{aligned} \text{Public participation}_i = & \alpha + \beta_1 \text{Economic level}_{1i} + \beta_2 \text{Internet}_{2i} + \beta_3 \text{Education}_{3i} + \\ & \beta_4 \text{Population}_{4i} + \beta_5 \text{Migrant}_{5i} + \beta_6 \text{Debt}_{6i} + \beta_7 \text{Government balance}_{7i} + \beta_8 \text{Budget} \\ & \text{transparency}_{8i} + \beta_9 \text{Democracy}_{9i} + \beta_{10} \text{Common law}_{10i} + \beta_{11} \text{Conservative}_{11i} + \\ & \beta_{12} \text{Political competition}_{12i} + \varepsilon_i \end{aligned} \quad (1.1)$$

$$\begin{aligned} \text{Budget transparency}_i = & \alpha + \gamma_1 \text{Common law}_{1i} + \gamma_2 \text{Political competition}_{2i} + \\ & \gamma_3 \text{Rule of law}_{3i} + \gamma_4 \text{Press freedom}_{4i} + \gamma_5 \text{Presidential}_{5i} + \gamma_6 \text{Public participation}_{6i} \\ & + \varepsilon_i \end{aligned} \quad (1.2)$$

where subscript  $i$  ( $i=1\dots 100$ ) represents each country,  $\alpha$  is the constant of the equation,  $\beta_{ji}$  and  $\gamma_{ji}$  are the parameters to be estimated and  $\varepsilon_i$  is the error term.

The idea behind the type of legal system (*Common law*) is that common law countries have traditionally placed greater emphasis on individual property rights and the restraint of the state than civil law countries (La Porta et al., 1999). Accordingly, it is

expected that this intent to limit the state will make common law countries disclose more budget information than their civil law counterparts (Alt and Lassen, 2006).

Furthermore, a high level of political competition (*Political competition*) encourages politicians in office to promote transparency, regardless of their partisan goals (Alt et al., 2006). This is because they want to tie other politicians' hands, whether those others are potential successors or fellow incumbents with whom they are currently sharing the power.

Moreover, the rule of law enforcement (*Rule of law*) can also have an effect on budget transparency (Jarmuzek, 2006). The rule of law is a measure of institutional quality that represents the extent to which citizens have confidence in laws and abide by the rules of society. It is expected that the higher the rule of law enforcement, and therefore, the higher the institutional quality, the higher the budget transparency (Andreula et al., 2009). The freedom of the press (*Press freedom*) is also critical to governments' information disclosure (Martin and Feldman, 1998). As the press has more ability to obtain government information, it is more difficult for the government to hide information from the press and, implicitly, from the citizens (Grigorescu, 2003). Therefore, a higher press freedom is likely to increase budget transparency.

Finally, the level of budget transparency may also be determined by the type of government (*Presidential*). According to Alt and Lassen (2006), legislative demand for budget transparency from the executive is higher under divided governments, which are usually associated with presidential systems. Thus, presidential systems are expected to show higher levels of budget transparency.

#### **4. Results**

Table IV.2 presents the results of the 3SLS regression.

**Table IV.2** Determinants of public participation in the budget process

	System	
	<i>Public participation</i>	<i>Budget transparency</i>
<i>Economic level</i>	-2.18 (-1.43)	
<i>Internet</i>	**0.22 (2.36)	
<i>Education</i>	0.13 (1.45)	
<i>Population</i>	*1.65 (1.82)	
<i>Migrant</i>	-0.08 (-0.63)	
<i>Debt</i>	*-0.10 (-1.74)	
<i>Government balance</i>	-0.13 (-0.45)	
<i>Budget transparency</i>	***0.45 (2.90)	
<i>Democracy</i>	0.32 (0.86)	
<i>Common law</i>	1.50 (0.48)	2.57 (0.76)
<i>Conservative</i>	0.06 (0.50)	
<i>Political competition</i>	0.12 (1.37)	***-0.28 (-2.95)
<i>Rule of law</i>		3.97 (1.41)
<i>Press freedom</i>		** -0.22 (-2.03)
<i>Presidential</i>		-1.43 (-0.47)
<i>Public participation</i>		***0.83 (4.27)
N	93	93
R <sup>2</sup>	0.53	0.63

First- stage regressions not reported.

3SLS estimation. Z-values in parentheses. A constant term was included in all regressions, but is not reported.

Endogenous variables: *Public engagement* and *Budget transparency*.

Significance: \*\*\*1%, \*\* 5%, \*10%.

With regard to socio-economic determinants, the economic level of the country (*Economic level*) appears not to affect opportunities for public engagement in the central government budget process (*Public participation*). This agrees with the results of Harrison and Sayogo (2014), who do not find a significant relationship between countries' economic level and citizen participation in the budget process.

The positive and significant coefficient of Internet penetration (*Internet*) indicates the positive effect of the Internet usage on public participation in the central governments' budget process (*Public participation*). This feature confirms Halachmi and Holzer (2010), who state that ICTs can provide channels that facilitate citizen participation in public policy-making. Therefore, the higher the Internet penetration, the higher the public engagement in public policy decisions, and, thereby, the higher the citizen participation in the budget process.

However, we have failed to find a significant relationship between the education level (*Education*) and *Public participation*. This result contrasts with Harrison and Sayogo (2014), who show that citizens' education have a positive effect on the opportunities for public participation in the budget process.

As for the population diversity of the country, the estimates reveal that the higher the population of the country (*Population*), the higher the opportunities for public engagement in the budget process (*Public participation*). This finding agrees with Ebdon (2000), who finds that local governments of larger communities are more likely to formalize citizen participation in budgeting decisions since they face more competing demands in formulating budget due to the heterogeneity.

Finally, regarding the financial situation of the country, only government debt (*Debt*) appears to affect *Public participation*. Our results are partly in line with Liao and Zhang (2012), who state that communities with greater resources are more likely to adopt administrative reforms, such as enhancing citizen participation in budget process. Therefore, the higher the debt, the lower the resources availability to adopt administrative reforms and, thereby, the lower the opportunities for citizen participation in budgeting.

Turning to political and institutional determinants, as expected, after controlling for endogeneity, the level of budget transparency (*Budget transparency*) has a positive impact on the opportunities for public engagement in the central government budget process (*Public participation*). This finding fits with Arnstein (1969), who argues that information is essential in genuine public participation. There cannot be citizen participation in the budget process without effective budget transparency (Justice and Dülger, 2009). Additionally, when estimating the second equation (1.2) of our model (see column 3 in Table IV.2), we find that not only budget transparency promotes public participation but also public participation (*Public participation*) is necessary to achieve a good level of budget transparency (*Budget transparency*). This result confirms Fölscher et al. (2000), who state that transparency and participation are mutually reinforcing, i.e., transparency is a prerequisite for citizen participation which, in turn, can lead to more requests for information. In fact, participatory mechanisms strengthen citizen access to budget information by creating a framework that provides incentives for citizens to demand more budget transparency (Tanaka, 2007). Regarding the remaining determinants (instruments) of *Budget transparency*, only *Press freedom* and *Political competition* are significant, and their impact agrees with the theoretical and empirical assumptions. Specifically, the higher the press freedom and the higher competition, the higher the budget transparency.

The variable *Democracy* shows that the democratic level does not affect *Public participation*. These findings differ from Harrison and Sayogo (2014), who show that democracy is a significant predictor of public participation. However, these authors posit that, although democratic countries may foster public participation, we do not expect this relationship to be perfect since democracies can vary in the extent to which citizens take active roles in the public policy decisions.

Moreover, the type of legal system (*Common law*) appears not to affect the opportunities for public engagement in the budget process, i.e., we cannot prove that common law countries encourage more participation in the budget process than their civil law counterparts.

Regarding the variable *Conservative*, our results indicate that *Public participation* does not depend on political ideology of the ruling party, showing that both progressive and

conservative governments offer citizens the same opportunities to participate in the budget process. This result contrasts with the findings of Peña (2013), which reveal that that local governments governed by progressive parties promote participatory budgeting.

Finally, the non-significance of variable *Political competition* means we cannot confirm that political competition leads governments to engage citizens in budget decision-making as a way to legitimize their decisions (Langton, 1978).

## 5. Conclusions

This chapter attempts to assess the determinants of public participation in the budget process in an international comparative approach, using the 2012 Public Participation in the Budget Process Index published by IBP as a measure of public participation. Specifically, we examine what socio-economic, institutional and political factors promote public engagement in the central governments' budget process.

We use a sample of 100 countries. Our results reveal that opportunities for public engagement in the central governments' budget process depend on many socio-economic, political and institutional factors.

Regarding socio-economic determinants, we find that the Internet penetration has a positive effect on public participation. This indicates that it is important that governments foster Internet use to facilitate citizen engagement in the budget process. Moreover, we note that the larger the population, the greater the opportunities for public engagement in the budget process. Finally, we show that whether there are greater resources available, governments are more likely to adopt administrative reforms, such as enhancing citizen participation in budget process.

As for institutional and political determinants, we show, to the best of our knowledge for the first time, that not only budget transparency promotes public participation but also public participation calls for higher budget transparency. This is consistent with previous literature, which posits that transparency and public participation are mutually reinforcing. Transparency is a prerequisite for citizen participation which, in turn, can lead to more requests for information, and thereby, more transparency.

Given the above, it seems desirable that governments promote both transparency and public participation in the budget process, since they reinforce each other and it can have many benefits for the society. This is because budget systems that are transparent and open to public engagement can improve the public resources' allocation which, in turn, can reduce poverty and create sustained economic development. This is really important in these times, in which central governments around the world are facing the fallout from the global economic crisis.

One of the main implications for practitioners that stems from our findings is that public participation and budget transparency are key aspects to diminish the information asymmetry between citizens and politicians and to increase fiscal accountability. The higher the public engagement and the higher budget transparency, the more legitimate the decision-making of governments is. Governments should pave the way to economic development, rather than being an obstacle. In many developing countries, and in some developed countries, politicians are considered an obstacle by citizens, rather than a solution, to the economic issues of the country. Accordingly, international organizations should encourage central governments to foster public participation in budget, fiscal accountability and budget transparency.

As for the limitations of this research, we can point out data availability. It would be interesting to have extensive questionnaires from citizens in each of the countries included in our dataset, to know their level of engagement in government budget decisions. Unfortunately, such a survey is not available, and therefore we have to rely on IBP datasets, which are conducted by experts in each country, rather than taking inputs from adequate samples of citizens in each country. Besides, another limitation is the number of countries, that could be increased in future IBP datasets.

As far as future research is concerned, we think it would be interesting to evaluate the long-term evolution of the research question tackled in this study. Upcoming data on public participation by IBP will provide a panel dataset that would allow this proposed research. Other citizen-based surveys with the features we point out above would allow us in the future to provide deeper insights on the public participation in the budget process.

## CONCLUSIONS

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The public sector is mainly funded by taxpayers, who require transparent information to be able to monitor public administration activities. Budget is the tool governments use to implement specific policy objectives during each fiscal year. According to IBP (2012), the best way to improve the allocation of public resources is using budget systems that are transparent, have robust oversight institutions (e.g., legislatures) and are open to public engagement. Such budgeting practices can positively impact growth, efficiency and equity, thus reducing poverty and creating sustained economic development.

However, modern economies' budgets are very complex, allowing practices that aim to veil the real budget balance. Thus, politicians have little incentives to disclose transparent budgets (Alesina and Perotti, 1996). Moreover, unfortunately, legislatures and citizens have been traditionally excluded from budget decision-making and monitoring. In most developing countries, public budgeting is still considered as a state secret, and the process is controlled exclusively by the executive (de Renzio and Krafchik, 2007).

Accordingly, the purpose of this thesis is to analyse what factors promote budget information disclosure by central governments and, in a broader sense, budget transparency. We specifically focus on one of the institutional factors: legislative budgetary oversight. Thus, we analyse the determinants of legislative budgetary oversight along all phases of budgetary process and, afterwards, we examine how legislative budgetary oversight impacts on budget transparency. Additionally, this thesis aims to ascertain simultaneously whether legislative budgetary oversight is not only a benefit to budget transparency, but also a risk to central governments' fiscal discipline. Finally, this study attempts to analyse the determinants of public participation in the central governments' budget process, focusing mainly on how budget transparency promotes public engagement.

Our findings reveal that central governments' budget disclosure, through the Internet and other media, depends on many socio-economic, political and institutional factors. Regarding socio-economic factors, Internet penetration and education level have a positive effect on budget disclosure through the Internet and other media. This feature indicates that central governments disclose more information in those countries with

the highest levels of Internet penetration and education. Moreover, we note that the larger the population is, the greater the budget information disclosure is, both through the Internet and other media. Our results are in line with the agency theory, which posits that larger governments are expected to face higher voters' demands to disclose information as a way to reduce this asymmetry. Finally, we find that a large surplus is connected to an increase in budget disclosure. This may indicate a strategic behaviour of governments amid the information asymmetry predicted by the agency theory. If good news are reported, voters will be impacted in a way that enhances their opinion about incumbents' competence.

As for political and institutional factors, our results show that Anglo-Saxon and Nordic countries disclose more budget information than Continental ones. This may show that Continental countries do not feel so much pressure to be accountable to citizens. Moreover, we observe that higher political competition leads to greater budget disclosure on the Internet, which indicates that Internet is the most efficient mechanism for information disclosure to voters when closer elections are expected. Finally, we find that progressive governments disclose more budget information through the Internet and other media, than conservative ones. Progressive governments are encouraged to disclose more information as a way to account for the larger amount of resources they manage.

Regarding the determinants of legislative budgetary oversight along all phases of budgetary process, we find that there are many factors that affect legislative budgetary oversight over the executive. With regard to institutional and political factors, we can only partly observe that bicameral legislatures have more opportunities for budgetary oversight than unicameral ones. In addition, we note that common law legislatures have a greater budgetary oversight over the executive than civil law ones. This may indicate that the excessive executives' budgetary discretion in common law countries encourages those countries' legislatures to oversight them. Finally, we conclude that higher SAIs' budgetary oversight leads to greater legislative budgetary oversight, but not only ex-post also along all stages of budgetary process.

In respect of socio-economic factors, economic level and democracy appear to have a positive effect on legislative budgetary oversight along some of the stages of budgetary process.

Focusing on central governments' budget transparency determinants, our main finding is that legislative budgetary oversight has a positive effect on budget transparency. This result confirms the ambition theory, which suggests that legislative oversight is an essential tool to scrutinize executive policy making. Specifically, we confirm international organizations' assumptions, which state that enhanced legislative budgetary scrutiny leads to deeper government accountability and greater transparency in public finances management. Therefore, we think that legislature involvement on budgetary oversight should be enhanced and facilitated as much as possible, as it affects positively the executive accountability and increases budget transparency. A specific budget office supporting technically the parliament would be useful in this respect.

Regarding other institutional and political factors of budget transparency, our results show that common law countries are more transparent than civil law ones. This may indicate that common law countries strongly protect property against the government, increasing transparency as a way to check that the government is respecting private property. Moreover, we observe that higher political competition leads to greater budget transparency, which indicates that incumbents try to tie other politicians' hands when closer elections are expected. Turning to socio-economic factors, only economic level appears to affect budget transparency. This indicates that developed countries' governments, less worried about the high cost of gathering, processing, and disclosing information, are more fiscally transparent.

When analysing simultaneously the impact of legislative budgetary oversight on budget transparency and fiscal discipline, we find that legislative budgetary oversight is not only a benefit in terms of increasing budget transparency, but also a risk, since higher legislative oversight undermine central governments' fiscal discipline. This is consistent with previous studies, which posit that strong legislative powers over budgetary decision are associated with fiscal indiscipline, but also appear to be related to some benefits, such as budget transparency. Higher legislative engagement in the

budgetary process leads to higher budget deficits, as a result of overspending and under-taxation. However, whereas greater centralization of budgetary powers in the executive ensures fiscal discipline, legislative oversight is crucial to providing budget transparency.

Given the above, we think that a re-equilibration of budgetary powers is required to reach more balanced budgetary systems, where executive discretion and legislative oversight complement each other to ensure both fiscal discipline and budget transparency. Therefore, we consider it desirable that governments implement certain institutional devices, such as top-down budgeting or fiscal rules, to help reconcile budgetary engagement and fiscal discipline. Thus, greater active legislative involvement in the budgetary process would lead to both fiscal discipline and budget transparency.

Finally, our results reveal that opportunities for public engagement in the central governments' budget process depend on many socio-economic, political and institutional factors. Regarding socio-economic determinants, we find that the Internet penetration has a positive effect on public participation. This indicates that it is important that governments foster Internet use to facilitate citizen engagement in the budget process. Moreover, we note that the larger the population, the greater the opportunities for public engagement in the budget process. Finally, we show that whether there are greater resources available, governments are more likely to adopt administrative reforms, such as enhancing citizen participation in budget process.

Turning to institutional and political determinants, we show, to the best of our knowledge for the first time, that not only budget transparency promotes public participation but also public participation calls for higher budget transparency. This is consistent with previous literature, which posits that transparency and public participation are mutually reinforcing. Transparency is a prerequisite for citizen participation which, in turn, can lead to more requests for information, and thereby, more transparency.

Therefore, it seems desirable that governments promote both transparency and public participation in the budget process, since they reinforce each other and it can have many benefits for the society. This is because budget systems that are transparent and

open to public engagement can improve the public resources' allocation which, in turn, can reduce poverty and create sustained economic development. This is really important nowadays, in which central governments around the world are facing the fallout from the global economic crisis.

## APPENDICES

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**Appendix A. Open Budget questionnaire items included in disclosure indicators****Table A1** Open Budget questionnaire items included in disclosure indicators

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**Items included in *tot.disc* index (A+B)**

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**A) Items included in *pub.disc* index**

1. Pre-budget is produced and distributed to the public
2. Main document is produced and distributed to the public
3. Budget summary is produced and distributed to the public
4. Supporting document 1 is produced and distributed to the public
5. Supporting document 2 is produced and distributed to the public
6. Citizens budget is produced and distributed to the public
7. Enacted budget is produced and distributed to the public
8. In-year reports are produced and distributed to the public
9. Mid-year review is produced and distributed to the public
10. Year-end report is produced and distributed to the public
11. Audit report is produced and distributed to the public

**B) Items included in *e-disc* index**

12. Pre-budget is available on the Internet free of charge
  13. Main document is available on the Internet free of charge
  14. Budget summary is available on the Internet free of charge
  15. Supporting document 1 is available on the Internet free of charge
  16. Supporting document 2 is available on the Internet free of charge
  17. Citizens budget is available on the Internet free of charge
  18. Enacted budget is available on the Internet free of charge
  19. In-year reports are is available on the Internet free of charge
  20. Mid-year review is available on the Internet free of charge
  21. Year-end report is available on the Internet free of charge
  22. Audit report is available on the Internet free of charge
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**Appendix B. Open Budget questionnaire questions included in *leg.pre*, *leg.dur*, *leg.post*, *leg.oversight* and *sai* variables**

According to IBP (2010), questions Number 69, 74 to 81, 96, 98, and 100 from 2010 Open Budget questionnaire are considered appropriate for assessing legislative oversight. However, we remove Question Number 81, as it is also included in the OBI and there could be a high correlation between legislative budgetary oversight indicators and *budget.transparency* (measured by the 2010 OBI). We also remove question Number 78 because it does not measure budgetary oversight in a correct way. Finally, we include question Number 120, as we consider it is a good way to measure ex-post budgetary oversight.

**Table B1.** Open Budget questionnaire questions included in legislative oversight indicators.

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**Questions included in *leg.oversight* variable (A+B+C)**

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**A) Questions included in *leg.pre* variable**

1. (Q. 69) Does the executive hold consultations with members of the legislature as part of its process of determining budget priorities?
2. (Q. 74) How far in advance of the start of the budget year does the legislature receive the budget?
3. (Q. 75) Does a legislative committee (or committees) hold public hearings on the macroeconomic and fiscal framework presented in the budget in which testimony from the executive and the public is heard?
4. (Q. 76) Do legislative committees hold public hearings on the individual budgets of central government administrative units (that is, ministries, departments, and agencies) in which testimony from the executive branch is heard?
5. (Q. 77) Does a legislative committee (or committees) hold public hearings on the individual budgets of central government administrative units (that is, ministries, departments, and agencies) in which testimony from the public is heard?
6. (Q. 79) Is the legislature (or the appropriate legislative committee or members of the legislature) given full information for the budget year on the spending of all secret items related to, for instance, national security and military intelligence?
7. (Q. 80) Does the legislature have authority in law to amend the budget presented by the executive?

**B) Questions included in *leg.dur* variable**

8. (Q. 96) Does the executive seek input from the legislature when the executive shifts funds between administrative units (except when the amounts are below a certain minimal level specified in law or regulation)?
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9. (Q. 98) When does the legislature typically approve supplemental budgets?
  10. (Q. 100) When does the legislature approve the expenditure of contingency funds or other funds for which so specific purpose was identified in the budget?

**C) Question included in *leg.post* variable**

11. (Q. 120) Does a committee of the legislature view and scrutinize the audit reports?
- 

According to IBP (2010), questions Number 111, 114, and 116 to 123 from 2010 Open Budget questionnaire are considered appropriate for assessing SAI oversight. However, we remove questions Number 111, 115, 120, 121, 122, and 123 as they are included in other indicators and there could be a high correlation.

**Table B2.** Open Budget questionnaire questions Included in *sai* variable.

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1. (Q. 114) Must a branch of government other than the executive) such as the legislature or the judiciary) give final consent before the head of the SAI can be removed from office?
  2. (Q. 116) Beyond the established year-end attestation audits, does the SAI have the discretion in law to undertake those audit it may wish to?
  3. (Q. 117) Who determines the budget of the SAI?
  4. (Q. 118) Does the SAI employ designated staff for undertaking audits of the central government agencies pertaining to the security sector (military, police, intelligence services)?
  5. (Q. 119) Does the SAI maintain formal mechanisms of communication with the public to receive complaints and suggestions to assist it in determining its audit program (that is, to identify the agencies, programs, or projects it will audit)?
-

**Appendix C. Instruments for *leg.oversight*.**

According to Hudson and Wren (2007), the annual budget process is embedded within a broader socio-economic and political environment that affects the potential for legislative scrutiny. Indeed, we consider the variables (instruments) that previous research has deemed as determinants of the legislative budgetary oversight:

***Budget transparency.*** We include the *budget.transparency* variable given that legislative oversight can be reduced by fiscal misreporting, i.e., by the lack of budget transparency (von Hagen, 1992; Bernoth and Wolff, 2008). See literature review of Chapter III for more references on this relationship.

***Political competition.*** We also consider the political competition (*political.competition*). According to Lienert (2005), when there are minority governments, the legislature has relatively more budget powers given that the parties not represented in the government can force it to adopt policies that change budget spending allocations and amounts. Therefore, it is expected that legislatures will exert more oversight power in countries with minority governments, since the difference of preferences between the legislature and the executive is widened.

***Type of government.*** We consider the type of government by including the variable *presidential*. According to Dubrow (2002) and Lienert (2005), in presidential systems, where legislature and executive powers are strongly separated, the former exerts a significant oversight powers over the latter. However, in parliamentary systems, where there is no a clear separation of powers between the legislature and the executive, the legislature generally has fewer opportunities for oversight.

***Type of legislature.*** We also include the *bicameral* variable, since when a second chamber of the legislature is provided with budgetary powers, it unequivocally strengthens the legislative body's budgetary powers relative to those of the executive (Lienert, 2005).

***SAI's budgetary control.*** The variable SAI's budgetary control (*sai*) has been included in the model given that strengthening SAIs' capacity may help improve legislative budgetary oversight (Santiso, 2005a).

**Party discipline.** The variable *discipline* is included to stand for the party discipline. Electoral system has been taken as a proxy of the party discipline in previous studies (Wehner, 2005). The aim is to test whether there is an effect of proportional representation. This electoral system is often regarded as party-centered, where the alignment of ideologies leads to more cohesive governments (Lienert, 2005). This electoral system, which improves party cohesion, may increase legislators' political incentives to control budget executions (Santiso, 2005a).

**Type of legal system.** We also consider the type of legal system of the country (*common.law*). In Westminster countries the delegation of budget authority to the executive appears to be higher than in their civil law counterparts (Lienert and Jung, 2004). Therefore, Westminster countries' legislatures are expected to have fewer budgetary powers.

**Development context of the country.** We consider the economic level (*eco.level*) and the level of democracy (*democracy*) given that institutions may be shaped by the broader development context of a country (Wehner, 2005).

## Appendix D. Instruments for *Budget transparency*

**Table D1** Definition of instruments for *Budget transparency* and descriptive statistics

Instrument	Description	Calculation	Source	N	Mean	Min.	Max.	Std. Dev
<i>Common law</i>			See Table IV.1					
<i>Political competition</i>			See Table IV.1					
<i>Rule of law</i>	Rule of law	Governance indicator for Rule of Law: -2.5 weak governance performance; 2.5 strong governance performance	Worldwide Governance Indicators (WB), 2011 data	100	-0.2923	-1.9400	1.9500	0.8770
<i>Press freedom</i>	Freedom of the press	Freedom of the Press index : 0 - 30 free; 31- 60 partly free; 61-100 not free	Freedom House, 2011 data	100	50.6200	11.0000	94.000	20.7607
<i>Presidential</i>	Type of government	1 - Presidential 0 - Parliamentary	Database of Political Institution (WB), 2011 data	100	0.6500	0.0000	1.0000	0.4794
<i>Public participation</i>			See Table IV.1					

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## SUMMARY

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Good governance dictates that public policy decisions should be made openly and with the active engagement of those people who are affected by them (Fölscher et al., 2000). The public sector is mainly funded by tax-payers, who in turn require transparent information to be able to monitor government activities. Government budgets represent financial plans which specify how public resources are going to be used to meet policy goals (OECD, 2006). Previous studies show that the best way to improve the allocation of public resources is through budget systems that are transparent, open to public engagement and have robust oversight institutions and mechanisms (e.g., legislative oversight). Such budgeting practices can positively impact growth, efficiency and equity, thus reducing poverty and creating sustained economic development (IBP, 2012).

Unfortunately, citizens and legislatures have been traditionally excluded from budget process. In most developing countries, public budgeting is still considered as a state secret, and the process is controlled exclusively by the executive (de Renzio and Krafchik, 2007). Moreover, modern economies' budgets are very complex, allowing practices that aim to veil the real budget balance. Thus, politicians have little incentives to disclose clear and transparent budgets (Alesina and Perotti, 1996). Accordingly, accountability mechanisms are required to verify that governments meet their duties.

Budget transparency can be one of these mechanisms. It is defined as the clarity, reliability, frequency, timeliness, and relevance of public fiscal reporting and the openness to the public of the government's fiscal policy-making process (IMF, 2012).

The importance of government fiscal transparency was highlighted during the Asian financial crisis of the late 1990s, which showed the risks of opaque and unaccountable management of public finances (Santiso, 2005a). Accordingly, the role of budget transparency has increasingly attracted attention from governments and international organizations as a way to prevent such failures in the future and give credibility to economic policies and thereby, enhancing economic growth. This concern has triggered the development of budget transparency international standards. In this respect, the IMF published in 1998 its "Code of Good Practices on Fiscal Transparency". It was a first attempt to define fiscal transparency in an exhaustive way

(IMF, 1998). Similarly, the OECD issued in 2001 a document entitled “Best Practices for Budget Transparency” (OECD, 2001a). Finally, the IBP, a civil society organization, published in 2006 the OBI to provide central governments a systematic measure of their budget transparency. This index is built biennially from a questionnaire (Open Budget questionnaire) and fits the budget transparency international standards established by IMF, OECD and INTOSAI (IBP, 2010).

Research on central governments' budget transparency is rather scarce (see, e.g., Bastida and Benito, 2007; Andreula et al., 2009; Benito and Bastida, 2009; Khagram et al., 2013). In the same way, although the new ICTs have become an important tool to foster relationships between citizens and governments, few studies have investigated so far central governments' e-government (see, e.g., Kim, 2007; Rodríguez-Domínguez et al., 2011). E-government is defined as the use of the ICTs, particularly Internet, for disclosing information and providing services to citizens.

Given the above, Chapter I of this thesis attempts to provide a first insight about the level of central governments' budget information disclosure, through the Internet and other media, in an international comparative approach. For this purpose, based upon the 2010 Open budget questionnaire data (IBP), we first build some indicators to measure the level of budget information disclosure, through the Internet and other media. Then, we analyse what socio-economic, political and institutional factors promote central governments' budget information disclosure.

We use a sample of 93 countries surveyed by IBP in 2010 (data collected in 2009). Applying OLS to our sample, our findings reveal that the higher the education level, Internet penetration and government size, the higher the central governments' budget information disclosure, both through the Internet and other media. Moreover, our results show that a large surplus is connected to an increase in budget information disclosure, and that Anglo-Saxon and Nordic countries disclose more budget information than Continental ones. Finally, we find that higher political competition leads to greater budget information disclosure on the Internet, and that progressive governments disclose more budget information than conservative ones.

As we can see from the definition of budget transparency stated above (IMF, 2012), budget transparency is a much broader concept than budget information disclosure.

For this reason, Chapter II aims to complement our prior findings by analysing the institutional, political and socio-economic determinants of budget transparency in an international comparative approach. We will mainly focus on one institutional factor: legislative budgetary oversight over executive.

An active legislature plays an important role in governance and accountability, which in turn is essential for democracy. The primary roles of legislatures are oversight, representation and legislation. Oversight refers to controlling the activities of the executive, and, on behalf of citizens, holding the executive accountable (Hudson and Wren, 2007).

A particularly important element of oversight concerns the budget: checking that spending decisions are in line with national priorities (Hudson and Wren, 2007). In this regard, legislative budgetary oversight is defined as the “power to scrutinize and influence budget policy and to ensure its implementation” (Wehner, 2006, p. 768). Legislatures participate in the governance of the budget by approving budget allocations and overseeing budget execution. Effective legislative budgetary oversight will enhance accountability and transparency, which are all concepts associated with a strong democracy.

Accordingly, there is growing interest in understanding the role of legislatures regarding both the governance of the budget and the oversight of public finances, prompted, in part, by calls for greater transparency and accountability in government financial management (Santiso, 2005a, 2005b). Nevertheless, as far as we know, the impact of legislative budgetary oversight on budget transparency has never been empirically tested (Pelizzo, 2011). In this regard, as we stated above, Chapter II aims to analyse the determinants of budget transparency in central governments, focusing primarily on how the legislative budgetary oversight over the executive affects budget transparency. Additionally, we analyse the determinants of legislative budgetary oversight along all phases of budgetary process, since empirical literature on international legislative budgetary oversight is also rather scarce (Stapenhurst et al., 2008; Wehner, 2010b). In order to measure budget transparency in each country, we use the 2010 OBI. We also build some indicators based on 2010 Open Budget



questionnaire items (IBP) to measure legislative oversight along all phases of budgetary process.

Depending on the dependent variable's characteristics, we apply OLS or O.PROBIT estimations to the same sample than in the previous chapter. Thus, we find that bicameral legislatures have more opportunities for budgetary oversight than unicameral ones, and that common law legislatures have a greater budgetary oversight over the executive than civil law ones. Moreover, we conclude that higher SAIs' budgetary oversight leads to greater legislative budgetary oversight along all stages of budgetary process. Finally, our findings reveal that economic level and democratic level appear to have a positive effect on legislative budgetary oversight.

Focusing on central governments' budget transparency determinants, we run a 2SLS regression to solve the possible endogeneity problem between legislative budgetary oversight and budget transparency. Our results reveal that the higher the legislative budgetary oversight, the higher the budget transparency, which confirms the assumptions established in previous literature. Therefore, we think that legislature involvement on budgetary oversight should be facilitated and/or enhanced as much as possible, as it affects positively the executive accountability and increases budget transparency. A specific budget office supporting technically the parliament would be useful in this respect.

Regarding other institutional, political and socio-economic factors of budget transparency, our results show that common law countries are more transparent than civil law ones. Moreover, we observe that higher political competition leads to greater budget transparency, which indicates that incumbents try to tie other politicians' hands when closer elections are expected. Finally, we find that developed countries' governments are more transparent, given that they are less worried about the high cost of gathering, processing, and disclosing information.

As we can see above, our results fit previous authors' assumptions, which posit that legislative budgetary oversight over the executive is necessary to increase the level of central governments' budget transparency. However, there is a more sceptical perspective on the role of legislatures in the budget process, i.e., there is evidence that powerful legislatures can undermine fiscal discipline (Wehner, 2007). According to

Santiso (2005b), if the legislature has unrestrained budget amendment power, it has incentives to overspending and under-taxation, thus leading to higher budget deficits and public debt.

For this reason, we consider it is interesting to simultaneously examine the potential risks and benefits associated with legislative budgetary oversight. In particular, Chapter III aims to ascertain whether legislative budgetary oversight supposes a benefit to budget transparency as well as a risk to fiscal discipline. For this purpose, we use the same sample than in the previous chapters.

Applying 3SLS to our sample, we find that a strong legislative oversight over budgetary decision undermines central governments' fiscal discipline, since higher legislative engagement in the budgetary process leads to higher budget deficits, but also enhances budget transparency. In this regard, we think that it is necessary to reach more balanced budgetary systems, where legislatures exert an adequate budgetary oversight in such a way that ensure both fiscal discipline and budget transparency.

Given the above, an adequate legislative budgetary oversight might play an important role in governance. Legislatures may oversight the activities of the executive, and, on behalf of citizens, holding the latter accountable. However, it is also essential that citizens have opportunities to participate directly, without intermediaries, in the budget process.

Government budgets play a central role in citizens' lives, especially in the poor and low-income ones, who are the primary beneficiaries of government programmes financed through the budget (de Renzio and Krafchik, 2007). Nowadays, central governments around the world are trying to address the fallout from the global economic crisis, which has led them to make painful decisions in respect of spending reductions and tax increases (Ebdon and Franklin, 2006; IBP, 2012). Therefore, it seems to be an important opportunity for citizens to help the government to find the best solutions for the community regarding public funds' allocation (Ebdon and Franklin, 2006). In this respect, many international organizations have established the goal of increasing public engagement in budget decisions as the top priority (Tanaka, 2007; Khagram et al., 2013).

Given the key importance of this issue, it is noteworthy that only few studies have thoroughly investigated so far which factors make central governments' budget process more open to public engagement (Khagram et al., 2013). This is mainly due to the lack of cross-country dataset on public participation (Ebdon and Franklin, 2006; Khagram et al., 2013). The 2012 Public Participation in the Budget Process Index, published by IBP, addresses this problem. In this regard, Chapter IV aims to examine what socio-economic, institutional and political factors promote public engagement in the central governments' budgetary process, using the 2012 Public Participation in the Budget Process Index as a measure of public participation. Among institutional factors, we study how budget transparency could affect public engagement. According to Justice and Dülger (2009), there can be no authentic citizen participation in the budget process without effective transparency. Nevertheless, other authors state that transparency and participation are mutually reinforcing, i.e., transparency is a prerequisite for citizen participation which, in turn, can lead to more requests for information (Fölscher et al., 2000).

Using the 3SLS estimation method for a sample of 100 countries surveyed by IBP in 2012, we find that not only budget transparency promotes public participation but also public participation calls for higher budget transparency. Therefore, it seems desirable that governments promote both transparency and public participation in the budget process, since they reinforce each other and it can have many benefits for the society. This is because budget systems that are transparent and open to public engagement can improve the public resources' allocation which, in turn, can reduce poverty and create sustained economic development.

As for other factors of public participation in the budget process, we find that the Internet penetration has a positive effect on public participation. This feature indicates that it is important that governments foster Internet use to facilitate citizen engagement in the budget process. Moreover, we note that the larger the population, the greater the opportunities for public engagement in the budget process. Finally, we show that whether there are greater resources available, governments are more likely to adopt administrative reforms, such as enhancing citizen participation in budget process.

## **SUMMARY IN SPANISH (RESUMEN EN ESPAÑOL)**

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Para que haya una buena gestión pública, las decisiones de política pública deben tomarse de forma abierta y con la participación activa de todos aquellos a los que les atañen (Fölscher et al., 2000). El sector público está siendo sufragado con recursos económicos procedentes de los ciudadanos, por lo que es comprensible que éstos demanden cada día una mayor cantidad de información y transparencia con el fin de controlar las actividades que realizan las administraciones públicas. El presupuesto es el instrumento mediante el cual los gobiernos plantean la forma en la que se proponen cumplir con sus responsabilidades durante cada ejercicio (OECD, 2006). Estudios previos muestran que una buena manera de mejorar la asignación de los recursos públicos es a través de procesos presupuestarios transparentes, abiertos a la participación ciudadana y que cuenten con instituciones y mecanismo de control fuertes (ej. control legislativo). Estas prácticas presupuestarias pueden afectar positivamente al crecimiento económico, la eficiencia y la equidad, lo que podría llevar a reducir la pobreza y crear un desarrollo económico sostenible (IBP, 2012).

Desafortunadamente, los ciudadanos y el poder legislativo han estado tradicionalmente excluidos del proceso presupuestario. En la mayoría de países en vías de desarrollo, los presupuestos públicos son todavía considerados como un secreto de estado, y el proceso presupuestario está controlado exclusivamente por el poder ejecutivo (de Renzio y Krafchik, 2007). Además, los presupuestos de las economías modernas son muy complejos, lo que permite implementar prácticas que intentan ocultar el equilibrio presupuestario real. Así, los políticos tienen pocos incentivos para realizar los presupuestos de forma clara y transparente (Alesina y Perotti, 1996). En este sentido, se requiere de mecanismos de rendición de cuentas y sistemas de información que reflejen de la manera más integral posible la forma en la que el gobierno cumple con sus responsabilidades.

La transparencia presupuestaria puede ser uno de esos mecanismos. Esta se define como la claridad, confiabilidad, frecuencia, puntualidad y pertinencia de los informes fiscales públicos y la apertura al público del proceso de formulación de política fiscal del gobierno (IMF, 2012).

La importancia de la transparencia presupuestaria se hizo latente durante la crisis financiera asiática de finales de 1990, que puso de manifiesto los riesgos de una

gestión de las finanzas públicas poco transparente e irresponsable (Santiso, 2005). En consecuencia, los gobiernos y organismos internacionales han valorado crecientemente el papel de la transparencia de la información presupuestaria y fiscal como una forma de evitar este tipo de errores en el futuro y darle credibilidad a las políticas económicas y, así, mejorar las perspectivas de crecimiento económico. Todo esto ha motivado el desarrollo de estándares internacionales de transparencia fiscal y presupuestaria. Así, en 1998, el Fondo Monetario Internacional (FMI) publicó el “Código de las Buenas Prácticas en Transparencia Fiscal”, en el que se hacía un primer intento de definirla de forma detallada (IMF, 1998). Por su parte, la Organización para la Cooperación y el Desarrollo Económico (OCDE) elaboró en 2001 un documento titulado “Las Mejores Prácticas en Transparencia Fiscal” (OECD, 2001). Finalmente, IBP, una organización de sociedad civil, creó en 2006 el OBI con el objetivo de aportar a los gobiernos centrales una valoración sistemática de su nivel de transparencia presupuestaria. Este índice se elabora de forma bienal a partir de un riguroso cuestionario (Open Budget questionnaire) basado en los principios sobre transparencia presupuestaria establecidos por el FMI, la OCDE e INTOSAI (IBP, 2010).

Los estudios sobre transparencia presupuestaria a nivel internacional son muy escasos (ver, p.ej., Bastida y Benito, 2007; Andreula et al., 2009; Benito y Bastida, 2009; Khagram et al., 2013). Del mismo modo, a pesar de que las nuevas tecnologías de la información y comunicación (TICs) se han convertido en una importante herramienta para promover las relaciones entre los ciudadanos y los gobiernos, son escasos los estudios que analizan el desarrollo del gobierno electrónico (e-gobierno) desde el punto de vista de los gobiernos centrales (ver, p.ej., Kim, 2007; Rodríguez-Domínguez et al., 2011). El e-gobierno se define como el uso de las TICs, particularmente Internet, para el suministro de información y prestación de servicios a la ciudadanía.

A la vista de lo anterior, el objetivo principal del Capítulo I de esta tesis es proporcionar una primera visión sobre la cantidad de información presupuestaria que divulgan los gobiernos centrales. Para ello, en primer lugar, utilizando algunos de los ítems incluidos en el Open Budget questionnaire de 2010 (IBP), construimos distintos indicadores para medir el nivel de divulgación de información presupuestaria de los gobiernos centrales, tanto a través de internet como de otros medios. Posteriormente,

analizamos qué factores socio-económicos, políticos e institucionales favorecen la divulgación de información presupuestaria.

Nuestra muestra está formada por 93 países encuestados por IBP en el Open Budget questionnaire de 2010 (datos recolectados en 2009). Aplicando mínimos cuadrados ordinarios sobre nuestra muestra, los resultados indican que cuanto mayor es el nivel educativo de la población de un país, el uso de internet por parte de los ciudadanos y la complejidad de las administraciones públicas, mayor es la cantidad de información presupuestaria que divulgan los gobiernos centrales tanto a través de internet como de otros medios. Además, nuestros resultados revelan que la existencia de un superávit elevado contribuye al incremento de la divulgación de información presupuestaria y que los países de cultura nórdica y anglosajona divulgan una mayor cantidad de información presupuestaria que los países de estilo continental. Finalmente, los resultados indican que la competencia política influye positivamente en la divulgación de información presupuestaria a través de internet, y que los gobiernos progresistas divulgan una mayor cantidad de información presupuestaria que los conservadores.

Según la definición de transparencia presupuestaria establecida anteriormente (IMF, 2012), la transparencia presupuestaria es un concepto mucho más amplio que el de divulgación de información presupuestaria examinado hasta ahora. Por esta razón, el Capítulo II de esta tesis pretende completar nuestros resultados anteriores, analizando los determinantes institucionales, políticos y socio-económicos de la transparencia presupuestaria a nivel internacional. Se presta especial atención a uno de los factores institucionales: el control que el poder legislativo ejerce sobre el gobierno (ejecutivo), en lo que materia presupuestaria se refiere.

Un poder legislativo activo es fundamental para la buena gestión pública y la rendición de cuentas, lo que a su vez es esencial para la democracia. Las funciones principales del poder ejecutivo son el control, la representación y la legislación. El control legislativo consiste en controlar las acciones que realiza el ejecutivo y, en nombre de los ciudadanos, asegurarse de que este último rinda cuentas sobre las mismas (Hudson y Wren, 2007).

Uno de las acciones que controla el poder legislativo es la realización del presupuesto por parte del ejecutivo. Es decir, el legislativo se encarga de comprobar que la asignación de recursos que el ejecutivo propone en el borrador del presupuesto está en línea con las prioridades nacionales (Hudson y Wren, 2007). En este sentido, el control legislativo del presupuesto se define como el "poder de escudriñar e influir en la política presupuestaria y asegurar su aplicación" (Wehner, 2006, p. 768). Es decir, el poder legislativo participa en la buena gestión del presupuesto, aprobando la asignación del presupuesto y supervisando su ejecución. Un control efectivo del legislativo sobre el presupuesto ayuda a mejorar la rendición de cuentas del gobierno y la transparencia, conceptos asociados con la democracia.

Por consiguiente, hay un creciente interés por entender el papel que tiene el poder ejecutivo en la buena gestión del presupuesto, provocado, en parte, por la necesidad de incrementar la transparencia y la rendición de cuentas en la gestión financiera de los gobiernos (Santiso, 2005a, 2005b). Sin embargo, hasta lo que sabemos, el efecto que tiene el control legislativo sobre la transparencia presupuestaria nunca ha sido probado de forma empírica (Pelizzo, 2011). En este sentido, como ya hemos comentado anteriormente, el Capítulo II tiene por objetivo analizar los determinantes de la transparencia presupuestaria de los gobiernos centrales, centrándose principalmente en examinar en qué medida el control que el parlamento ejerce sobre el gobierno, en cuanto a materia presupuestaria se refiere, afecta a la transparencia presupuestaria. Adicionalmente, examinaremos los determinantes del control legislativo en todas las fases del proceso presupuestario, ya que la literatura empírica sobre el control legislativo es también bastante escasa a nivel internacional (Stapenhurst et al., 2008; Wehner, 2010b). Para medir la transparencia presupuestaria de cada país, utilizamos el OBI de 2010. Por su parte, para medir el nivel de control legislativo en las distintas fases del proceso presupuestario, construimos distintos indicadores a partir de algunos de los ítems incluidos en el Open Budget questionnaire de 2010 (IBP).

Aplicando el método de los mínimos cuadrados ordinarios o el probit ordenado (según características de la variable dependiente) sobre la misma muestra que en el capítulo anterior, nuestros resultados revelan que cuando el poder legislativo es bicameral,



este tiene más oportunidades para controlar el presupuesto que si es unicameral, y que en los países de ley común el poder legislativo tiene más control sobre el presupuesto que en los países de ley civil. Además, encontramos que un mayor control presupuestario por parte de los órganos supremos de auditoría lleva también a un mayor control presupuestario por parte del poder legislativo en todas las fases del proceso presupuestario. Finalmente, los resultados muestran que el nivel económico y el grado de democracia del país tienen un efecto positivo sobre el control legislativo.

Centrándonos en el análisis de los determinantes de la transparencia presupuestaria, cabe destacar en primer lugar que en este caso usamos el método de los mínimos cuadrados en dos etapas, con el fin de tener en cuenta la posible endogeneidad entre el control legislativo y la transparencia presupuestaria. Nuestros resultados revelan que un mayor control legislativo del presupuesto lleva a una mayor transparencia presupuestaria, lo que confirma las suposiciones establecidas en la literatura previa. Por tanto, creemos que se debería facilitar y/o aumentar la participación del poder legislativo en el proceso presupuestario, ya que un mayor control legislativo del presupuesto mejora la rendición de cuentas y la transparencia presupuestaria. La creación de una oficina presupuestaria que de soporte técnico al poder legislativo podría ser muy útil a este respecto.

Respecto al resto de factores institucionales, políticos y socio-económicos que pueden afectar a la transparencia presupuestaria de los gobiernos centrales, nuestros resultados muestran que los países de ley común son más transparentes que los de ley civil. Además, observamos que cuanto mayor es la competencia política, mayor es la transparencia presupuestaria, lo que indica que los políticos son más transparentes cuando esperan que las próximas elecciones sean reñidas. Finalmente, encontramos que los países desarrollados son más transparentes, dado que están menos preocupados por los altos costes que supone recopilar, procesar y divulgar información.

Tal y como hemos visto, nuestros resultados confirman las suposiciones establecidas por autores previos que establecen que el control presupuestario del legislativo es necesario para que se incremente la transparencia presupuestaria de los gobiernos. Sin embargo, otros estudios anteriores resaltan los posibles riesgos del control del

parlamento sobre el presupuesto, ya que existe evidencia de que un fuerte control legislativo del presupuesto puede disminuir la disciplina fiscal (Wehner, 2007). Según Santiso (2005b), si el legislativo tiene un poder de enmienda ilimitado sobre el presupuesto, éste tiene incentivos para aumentar los gastos y bajar los impuestos, lo que conduce a un aumento del déficit y de la deuda pública.

Por esta razón, consideramos que sería interesante analizar conjuntamente los beneficios y los riesgos asociados al control legislativo del presupuesto en los gobiernos centrales. En concreto, el Capítulo III de esta tesis tiene como objetivo investigar si el control presupuestario del parlamento no solo tiene beneficios, en lo que al incremento de la transparencia presupuestaria se refiere, si no también riesgos, ya que puede disminuir la disciplina fiscal del gobierno. Para ello, utilizamos la misma muestra que en los capítulos anteriores.

Aplicando el método de los mínimos cuadrados en tres etapas sobre nuestra muestra, los resultados revelan que efectivamente un mayor control legislativo sobre las decisiones presupuestarias mina la disciplina fiscal, ya que la mayor participación del legislativo en el proceso presupuestario lleva a aumentar el déficit de los gobiernos centrales, pero también incrementa la transparencia presupuestaria de los mismos. En este sentido, creemos que serían necesarios sistemas presupuestarios más equilibrados, donde el parlamento ejerciera el control presupuestario adecuado para que se consiguiera tanto una mayor transparencia presupuestaria como una mayor disciplina fiscal del gobierno central.

A la vista de lo anterior, un adecuado control legislativo del presupuesto puede ser fundamental para una buena gestión pública. El poder legislativo debe controlar las acciones que realiza el ejecutivo y, en nombre de los ciudadanos, asegurarse de que este último rinda cuentas sobre las mismas. Sin embargo, también es esencial que los ciudadanos tengan la oportunidad de participar directamente, sin intermediarios, en el proceso presupuestario.

El presupuesto de los gobiernos juega un papel fundamental en la vida de los ciudadanos, especialmente de los más desfavorecidos, ya que son los principales beneficiarios de los programas gubernamentales que se financian a través del presupuesto (de Rencio y Krafchik, 2007). Hoy en día, los gobiernos de todo el mundo

están tratando de hacer frente a las consecuencias de la crisis económica, lo que les lleva en muchas ocasiones a tomar decisiones dolorosas como la reducción de los gastos y el incremento de los impuestos (Ebdon y Franklin, 2006; IBP, 2012). Por tanto, parece ser una excelente oportunidad para que los ciudadanos participen en el proceso presupuestario y ayuden a los gobiernos a encontrar la mejor solución posible para asignar los recursos públicos disponibles (Ebdon y Franklin, 2006). En este sentido, numerosas organizaciones internacionales han establecido el objetivo de incrementar la participación ciudadana en las decisiones presupuestarias como una prioridad máxima (Tanaka, 2007; Khagram et al., 2013).

Dada la importancia de este tema, es llamativo que muy pocos estudios hayan analizado los factores que hacen que el proceso presupuestario de los gobiernos centrales sea más abierto a la participación ciudadana (Khagram et al., 2013). Esto se debe principalmente a la falta de datos sobre participación ciudadana a nivel internacional. El índice de participación ciudadana publicado por IBP en 2012 intenta solucionar este problema. En este sentido, el último capítulo de esta tesis, el Capítulo IV, tiene como objetivo examinar que factores socio-económicos, institucionales y políticos fomentan la participación ciudadana en el proceso presupuestario de los gobiernos centrales, utilizando el índice de participación publicado por IBP en 2012 como medida de participación ciudadana en el proceso presupuestario. Entre los factores institucionales, estudiamos si la transparencia presupuestaria afecta a la participación ciudadana. Según Justice y Dülger (2009), no puede haber una auténtica participación ciudadana en el proceso presupuestario sin una transparencia efectiva. Sin embargo, otros autores establecen que la transparencia y la participación se refuerzan mutuamente, es decir, que la transparencia es un requisito necesario para la participación ciudadana y, a su vez, la participación ciudadana requiere que los gobiernos divulguen más información, y por tanto, sean más transparentes (Fölscher et al., 2000).

Empleando el método de los mínimos cuadrados en tres etapas y utilizando una muestra de 100 países para 2012, nuestros resultados muestran que efectivamente no solo la transparencia presupuestaria promueve la participación ciudadana sino que también que la participación ciudadana da lugar a una mayor transparencia

presupuestaria. Por tanto, sería deseable que los gobiernos promovieran tanto la transparencia presupuestaria como la participación ciudadana, ya que ambas se refuerzan mutuamente y esto puede traer beneficios a la sociedad. Los sistemas presupuestarios que son transparentes y abiertos a la participación pública pueden mejorar la asignación de recursos lo que, a su vez, puede reducir la pobreza y crear un desarrollo económico sostenible.

Respecto al resto de factores que fomentan las oportunidades de los ciudadanos de participar en el proceso presupuestario de los gobiernos centrales, nuestros resultados revelan que el uso de Internet facilita la participación ciudadana en el proceso presupuestario. Además, encontramos que cuanto mayor es la población de un país, mayor son las oportunidades de los ciudadanos de participar en las decisiones presupuestarias. Finalmente, nuestros resultados muestran que cuando hay más recursos disponibles, los gobiernos son más proclives a adoptar reformas administrativas, entre las que se encuentran, por ejemplo, la implementación de presupuestos participativos.