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**ARTIGO**

**THE OPEN BUDGETA PUBLIC GOVERNANCE APPROACH**

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## The Open Budget: a Public Governance Approach

**Abstract:** Although open actions related to budget originated in ancient Greece, governments still maintain their budgetary decisions in secrecy. Despite that, interest in how budgetary tools could help in reducing poverty is increasing, opening a window of opportunity to debate the open budget in the public administration domain. Hence, this paper (1) presents a definition of the open budget; (2) develops an open budget framework of governance and its five theoretical statements; and (3) discusses the possibilities of the open budget framework in theory and practice. Moreover, a proposed research agenda should support new studies on the open budget issue. Finally, the main contributions are that (1) the collaborative stakeholders' influence should compose the open budget core; (2) The budgetary constraint relates to the open budget approach; and (3) the open budget framework gathers actions of transparency, participation, and accountability with collaborative stakeholder influence and availability resource.

**Keywords:** Governance Outcomes; Open Budget; Transparency; Participation; and Accountability.

### 1. Introduction

Recent transitions to democratic regimes or political elections have been seen as windows of opportunity to warrant more transparency, participation, and accountability initiatives to open public budgets (Abreu & Gomes, 2021; Bisogno & Cuadrado-Ballesteros, 2021). For instance, to stimulate new reflections on social progress related to sustainable development or corruption control (Acemoglu & Robinson, 2019; Ling & Roberts, 2014). Furthermore, it is essential to emphasise that the ancient Athenians already had decided on public budget issues for themselves, negotiating for an open collective consensus before government policies executed to deliver better public goods and services (Abreu, 2017; Tanaka, 2007).

Budgeting is historically one of the most crucial decision-making processes in the government domain (Hughes, 2003; Hyde, 2002; You & Lee, 2013). Therefore, to make public budgeting more effective, society should participate in such processes, from drafting to audit (Chemin, 2020; Hyde, 2002). However, governments have maintained the secrecy of their budgetary information and decision-making results, involving only a few agents in the processes (Abreu, 2017; Khagram, Fung, & De Renzio, 2013).

Despite that, such secrecy has been the subject of much discussion since adopting open budgets for improving governance results (Abreu, 2017; Khagram et al., 2013; Ling & Roberts, 2014). For instance, such relevant evidence is a briefing from the society influences over the United States Federal Government for more openness in health budget issues (Culliton, 1976). This work focused on the open and collaborative governance perspectives to improve transparency, participation, and accountability initiatives around budgetary processes.

According to Denhardt and Denhardt (2007, p. 25-9), greater discretion, responsiveness, and openness are on evidence in new public governance, which is based on 'citizens' engagement, focus on 'public interest,' and structured in a 'democratic citizenship' environment. In the new public governance model, the public budget management allows interaction between government and external governmental stakeholders in a network of public, civic, and business institutions (Guinn & Straussman, 2016; Muthomi & Thurmaier, 2020; Schmidhuber, Ingrams, & Hilgers, 2021).

A public budget is a strategical tool for managing resource constraints, inducing co-production, combining with the available resource to achieving better social outcomes (Bisogno & Cuadrado-Ballesteros, 2021; Guinn & Straussman, 2016; Honig & Weaver, 2019). Therefore, we should expect better public organisation's performance in states with mature governance initiatives, such as the open budget actions (Acemoglu & Robinson, 2019; Ling & Roberts, 2014; Muthomi & Thurmaier, 2020).

Independently of the budgetary process phase (drafting, approval, execution, and audit), the open budget approach considers transparency, participation, and accountability as actions of its governance model (Cicatiello, De Simone, Ercolano, & Gaeta, 2021; Guinn & Straussman, 2016). The practices to enhance more collaboration in the public budget arena, for instance, are budgetary information freedom, participatory budget, budget advocacy, budget monitoring, and social audit (Abreu, 2017; Khagram et al., 2013; Ling & Roberts, 2014; Torres, Royo, & Garcia-Rayado, 2020).

Transparency is associated with public disclosure of information, free access to all stakeholders to the whole set of information and impartial and reasonable rules (Bisogno & Cuadrado-Ballesteros, 2021; Chen & Han, 2019; Muthomi & Thurmaier, 2020). Participation is seen as allowing stakeholders' engagement and promoting space through which society would have its voice (Lassinantti, Ståhlbröst, & Runardotter, 2019; Muthomi & Thurmaier, 2020; Schmidhuber et al., 2021). Accountability means authorities' answerability with responsibility and responsiveness and indicates stakeholders' ability to make claims and hold authorities accountable to commitments (Bisogno & Cuadrado-Ballesteros, 2021; Cicatiello et al., 2021; Torres et al., 2020).

Despite the recent interest in the open budget approach from public administration scholars, the extent to how budget transparency, participation, and accountability contribute to promoting better social development outcomes remains in the spot for further theoretical development (Abreu & Gomes, 2021; Bisogno & Cuadrado-Ballesteros, 2021). Therefore, before carrying out a broad empirical investigation, we identify the higher relevance to review the current evidence on the open budget field. Hence, this paper aims to develop a theoretical framework from the open budget definition.

It is essential to notice the United Nations Resolution 67/218 (adopted in 2012), which recognises the fundamental role that transparency, participation and accountability in fiscal policy are likely to play in the pursuit of financial stability, poverty reduction, equitable economic growth and the achievement of social development. Consequently, we took this window of opportunity to discuss the possibilities of the open budget framework and present considerations about the consequences for public administration theory building and empirical applications.

In addition, this paper does not limit the debate over theoretical approaches. On the one hand, we also prioritise examining empirical pieces, searching evidence to validate the open budget framework and its statements. On the other hand, pondering that open budget is still a theme in developing, we consider theoretical and working papers and academic books to understand better the most recent insights and practices in the open budget field.

This paper is structured as follows: in the next section, we presented a definition of open budget. Afterwards, we showed the methodological aspects. Following this, we developed an open budget framework of governance, identifying five theoretical insights. Finally, we discussed the mentioned structure, show some practices in the literature findings, and present a research agenda proposal. Finally, we highlighted this study's key contributions and stated the final considerations.

## **2. Defining an Open Budget**

An open budget is a public governance tool that includes external governmental stakeholders in the budgetary process in a collaborative model (Abreu, 2017; De Renzio & Wehner, 2015; Guinn & Straussman, 2016). It is a process based on transparency, participation, and accountability actions (Bisogno & Cuadrado-Ballesteros, 2021; Khagram et al., 2013). The literature suggests that an open budget helps improve social development and combat corruption in a governance approach (Abreu & Gomes, 2021; Ling & Roberts, 2014; Schmidhuber et al., 2021).

For instance, the open budget can produce financial stability, poverty reduction, economically equitable growth, and the achievement of sustainable social development (Abreu, 2017; Siau & Long, 2006). Moreover, it should curb corruption by ameliorating resource allocation to improve performance spending, focusing on the budget quality results (Abreu & Gomes, 2021; Schmidhuber et al., 2021; Wehner & de Renzio, 2013).

As the International Budget Partnership (IBP, 2021) states, an open budget ensures that people can judge good fiscal and social policies. For that reason, external collaborative stakeholders should first negotiate decisions regarding a country's governance by elaborating social commitments in the budgetary process (Guinn & Straussman, 2016; Matinheikki, Aaltonen, & Walker, 2019; Muthomi &

Thurmaier, 2020). In this arena, disputes and tensions are usual, but after the consensus is built and the right opportunities devised, quality results can happen faster with the respective results for social development (DFID, 2006; Guinn & Straussman, 2016).

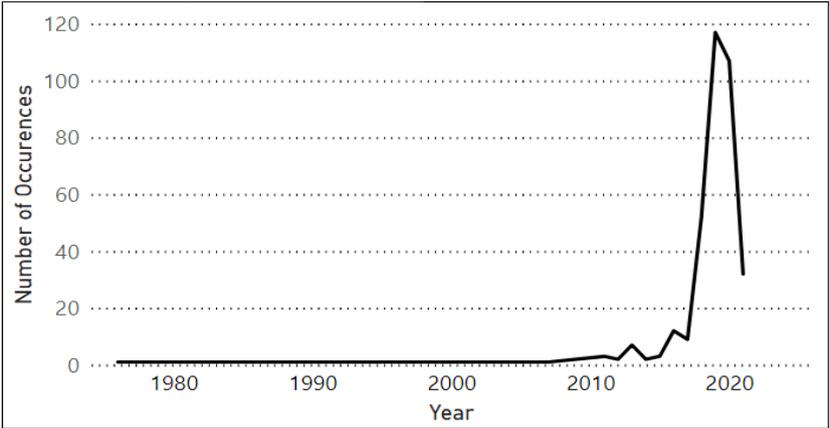
According to Sarker & Hassan (2010), external collaborative stakeholders are drivers of a budgetary process to allocate insufficient budgetary resources in a collaborative governance approach. For instance, Bangladesh implemented a project from 2000 to 2006, supported by the United Nations Development Programme, which suggested that external collaborative stakeholder achieves open budgeting and influences budgetary resource allocation to induce social progress (Abreu, 2017; Khagram et al., 2013).

Therefore, not only does the amount of resource available is essential, but also the collaborative stakeholder influences and open budget actions affect the budgetary allocation to promote the public policies for ensuring governance outcomes (Ansell & Gash, 2008; Bovaird & Löffler, 2003; Emerson, Nabatchi, & Balogh, 2012). Hence, Abreu (2017, p. 4) concluded that the open budget model has four core elements: ‘open budgeting; external collaborative stakeholders; budgetary resources; and social development.’

**3. Methodological Aspects**

Although budget openness is a fractionated arena, open budget actions are recognised by their synergic power (Ling & Roberts, 2014; Meijer, 2013; Schmidhuber et al., 2021). Open Budget actions have a high association with the democratic environment, logical links among them, and ongoing loops in a mutually integrated and reinforcing model (Abreu, 2017; Ling & Roberts, 2014; Muthomi & Thurmaier, 2020). Identifying the open budget framework elements in blocks should be the starting point for consolidating a sophisticated new theory to a fragmented field of study (Bisogno & Cuadrado-Ballesteros, 2021; Meijer, Curtin, & Hillebrandt, 2012).

Based on the open budget definition suggested, we selected works that used the term ‘open budget’ from the SCOPUS, Web of Science, and Dimensions scientific databases (FGV, 2021) to apply in R’s Bibliometrix package on 5<sup>th</sup> May 2021. The results sum 350 observations (see their yearly frequency in Figure 1). We use the MS Power BI and the NVivo software to support a systematic review process to priority pieces that should collaborate to describe the open budget framework.



**Figure 1.** Number of scientific works by year on open budget  
**Source:** FGV (2021)

The review concentrated the effort analyses in pieces published in sources with the 2019 JCR impact factor score higher than four (JCR, 2021). This sample represents 5% of all results (19 observations), which we expect that represent the highest value level (see Table 1). Nevertheless, we did

not limit the study in these selected observations. For instance, we also identified relevant works in the prioritised pieces' references.

We acknowledged that the review process possibilities a role perspective of the open budget theme, mainly because of the: (1) quality of the reviewed pieces; (2) relevance of the empirical evidence that supports the development of an open budget approach; and (3) identification of theoretical statements.

Furthermore, we discuss the implications of the approach for theory, research, and practice. Finally, we emphasise the main contributions of this paper, propose a research agenda, and show practice examples highlighted in the extant literature related to the theoretical statements and present some final considerations.

**Table 1.** Prioritised Scientific Works

JCR	Source title	Pieces	Authors
41.845	Science	1	Culliton (1976)
9.936	IEEE Internet of Things Journal	1	Mohammed et al. (2020)
6.620	International Journal of Project Management	1	Matinheikki, Aaltonen, and Walker (2019)
5.452	Expert Systems With Applications	1	Musyaffa, Vidal, Orlandi, Lehmann, and Jabeen (2020)
5.098	Government Information Quarterly	3	Wasike (2020); Lassinantti, Ståhlbröst, and Runardotter (2019); Torres, Royo, and Garcia-Rayado (2020)
5.042	Energy Policy	1	Kraal (2019)
5.000	International Organization	1	Honig and Weaver (2019)
4.787	Information Processing and Management	1	Cantador, Cortés-Cediel, and Fernandez (2020)
4.345	Review of Economics and Statistics	1	Chemin (2020)
4.221	Public Management Review	3	Bisogno and Cuadrado-Ballesteros (2021); Chen and Han (2019); Abreu and Gomes (2021)
4.149	Socio-Economic Planning Sciences	1	Cicatiello, De Simone, Ercolano, and Gaeta (2021)
4.139	Telematics and Informatics	1	Wilson and Cong (2021)
4.063	Public Administration Review	3	Schmidhuber, Ingrams, and Hilgers (2021); Guinn and Straussman (2016); Muthomi and Thurmaier (2020)
$\Sigma$		<b>19</b>	

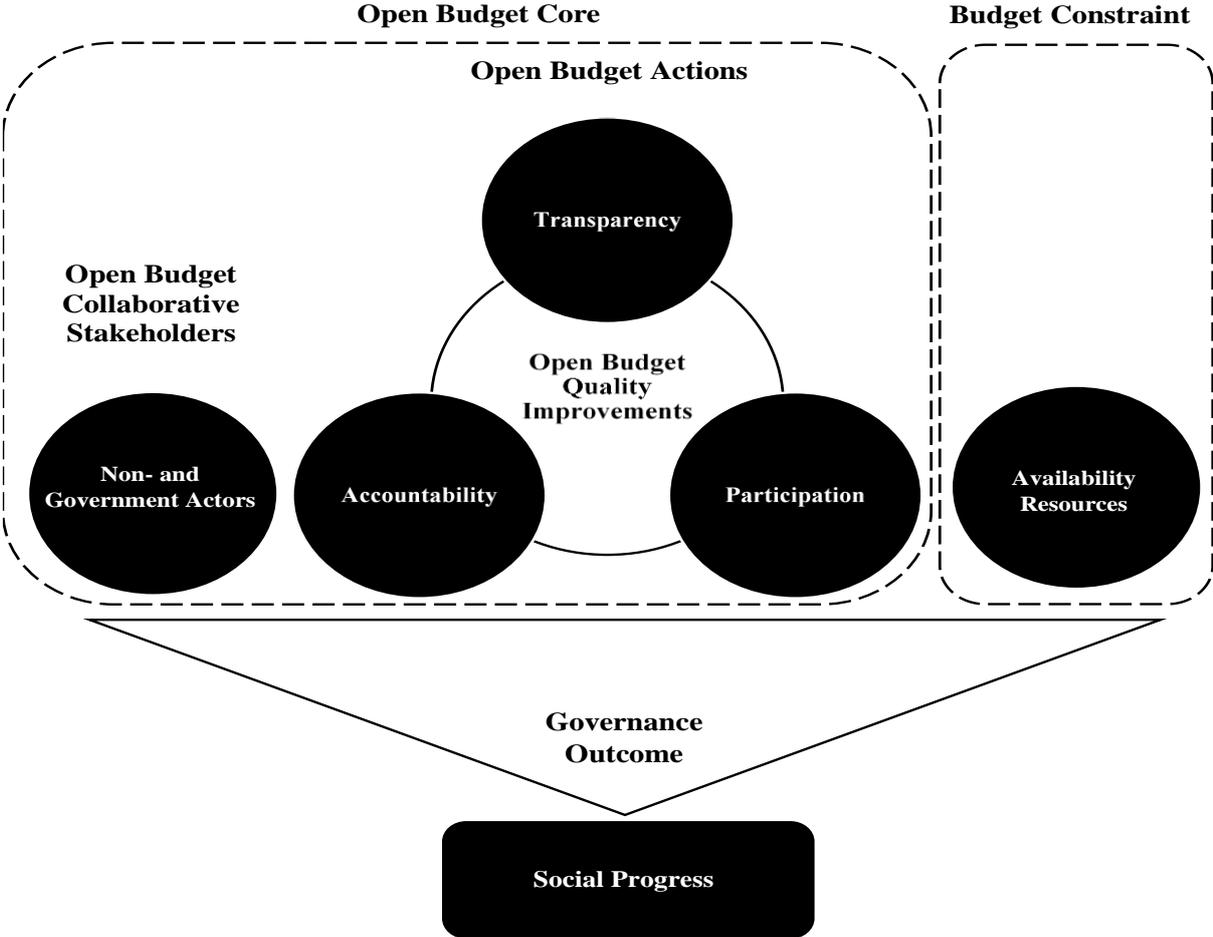
**Source:** FGV (2021) and JCR (2021)

#### 4. The Open Budget Approach and its Theoretical Discussion

The open budget actions are strategically used to manage resource constraints, inducing co-production, and combining available resources to stimulate improvements in budgetary quality (Abreu, 2017; Bisogno & Cuadrado-Ballesteros, 2021; Guinn & Straussman, 2016). Take note that the stakeholder management style influences the performance of public organisations (Lassinantti et al., 2019; O'Toole & Meier, 1999; Wasike, 2020). Moreover, resource availability could limit the achievement of government policy results (Holland, Ruedin, Scott-Villiers, & Sheppard, 2012; Kraal, 2019; Wilson & Cong, 2021). Consequently, social progress (Abreu & Gomes, 2021; Cicatiello et al., 2021; Honig & Weaver, 2019; Schmidhuber et al., 2021) should occur from an open budget framework (Figure 2) as a specific governance outcome.

The literature suggests that transparency (Bisogno & Cuadrado-Ballesteros, 2021; Chen & Han, 2019; Cicatiello et al., 2021; Muthomi & Thurmaier, 2020), participation (Lassinantti et al., 2019; Muthomi & Thurmaier, 2020; Touchton & Wampler, 2014), and accountability (Bisogno & Cuadrado-Ballesteros, 2021; Schmidhuber et al., 2021; Torres et al., 2020; Wampler, 2004) are open budget actions of an open budget core. In addition, collaborative stakeholders are also reported as an element of this core (Cantador et al., 2020; Guinn & Straussman, 2016; Schmidhuber et al., 2021). We highlight that open budget actions affect quality improvements, which can be considered intermediary governance

outcomes (Abreu, 2017; Guinn & Straussman, 2016; Muthomi & Thurmaier, 2020; Schmidhuber et al., 2021).



**Figure 2.** The Open Budget Framework of Governance  
**Source:** Authors

The available resource allocated to public policies is a fundamental variable by itself to producing social gains, to the extent that it stimulates or limits governance actions in certain circumstances (Abreu, 2017; Bisogno & Cuadrado-Ballesteros, 2021; Foster & Fozzard, 2000; Gruber, 2009; Muthomi & Thurmaier, 2020). Hence, the open budget core seeing and resource availability are likely to explain a country’s social development.

The literature described examples of governance outcomes such as community capacity to solve public problems like crime, homelessness, health care, improved integration of critical services for vulnerable populations, environmental pollutions, economic issues, and social inequality (Bovaird, 2005; Guinn & Straussman, 2016; Kraal, 2019; Matinheikki et al., 2019; Provan & Kenis, 2008). For instance, Gaventa and McGee (2013) categorised social development as a category of governance outcomes.

In the framework presented in Figure 2, we can see three main sections: first, the open budget core, with the collaborative stakeholders (governmental and external governmental), and the open budget actions (related to quality results); the second is a budget constraint (availability resource), which is associated with the open budget core, inclusive in the budgetary decision-making process; and, finally, in the third section there is the governance outcome (social development). Table 2 shows this framework in a logical model, exploring its components.

**Table 2.** A Logic Model to Open Budget Framework

Open Budget System					Budgetary Resources	Governance Outcomes
Stakeholders	Actions			Institutional Changes		
	Transparency	Participation	Accountability			
- Government Actors - External Government Actors	- Disclose information to stakeholders - Free access to stakeholders	- Stakeholders' engagement - Society voice	- Authorities' answerability - Stakeholders' enforceability	- Adjustments in the institution level, promoting Improvements in delivery of services, budget utilization, state responsiveness, citizen engagement, and local voices	- Available budgetary Resources that is allocated in public policies	- Reduction of poverty from development, democracy and empowerment improvements

**Source:** Authors.

#### 4.1. Open Budget Collaborative Stakeholders

A stakeholder has power, urgency, and legitimacy of its demands and expectations of a given organisation's objectives (Mitchell, Agle, & Wood, 1997). The complexity of stakeholders' political and social networks is likely to explain why it is challenging to calculate results (Abreu, 2017). According to Freeman (1984, p. 46), '[a] stakeholder in an organization is (by definition) any group or individual who can affect or is affected by the achievement of the organization's objectives.' If the preferences and the identities are inconsistent, the decisions taken will ultimately depend on who participates and who does not participate in the decision-making process (March, 2009, p. 139; Shepsle & Bonchek, 1996).

Take note that many of the participants are already institutionalised. Therefore, the decisions come with the rules that ordering them (March, 2009). The collaborative stakeholder is the specific driver who should influence open budget results in a governance view (Abreu, 2017; Guinn & Straussman, 2016; Honig & Weaver, 2019; Lassinantti et al., 2019; Schmidhuber et al., 2021; Torres et al., 2020).

Frequently, stakeholders that are more dependent on a given organisation demonstrate a more significant commitment to cooperation. An organisation may turn to specific key stakeholders to achieve initial backing, facilitating coordination and avert conflicting goals with other stakeholders (Gomes & Gomes, 2008). The importance of stakeholder cooperation is common to be ignored because the analysis requires a sophisticated understanding of the types and magnitudes of the stakeholder influences. However, the potential for stakeholder cooperation is particularly relevant since it can facilitate collaborative powers between an organisation and its stakeholders, which may result in better management of business ambience (Savage, Nix, Whitehead, & Blair, 1991). The relationship formed between external government stakeholders and the government is symmetrical dependence (balanced). They need each other to achieve their common goals, such as the ones related to social policies in the budgetary process (Gomes, Liddle, & Gomes, 2010).

Consequently, the collaborative stakeholders can influence the budgetary allocation decision-making process in a collective mode focused on social necessities. Furthermore, they can join the government to help in delivering services or goods. (Gomes & Gomes, 2008; Gomes et al., 2010). Emerson et al. (2012, p. 14) stated that in collaboration governance, the 'interaction through principled will help foster trust, mutual understanding, internal legitimacy, and shared commitment, thereby generating and sustaining shared motivation,' what results in 'shared motivation will enhance and help sustain principled engagement and vice versa in a virtuous cycle.'

Moreover, the coordination of collaborative influences should be promoted to facilitate communication. The coordination of stakeholders' actions will be concentrated on interests (strategic and habits) and agreements: conventions, and regulations (Habermas, 2012). Therefore, to produce actions from external government stakeholders to influence the budgetary decisions, it is strategic and necessary to embark on efforts communicatively (with a collective, collaborative and cooperative

environment) seeking to satisfy social needs (Guinn & Straussman, 2016; Khagram et al., 2013; Schmidhuber et al., 2021; Torres et al., 2020). The stakeholders negotiate decisions regarding collaborative governance by elaborating commitments in the budgetary process to achieve good fiscal and social policies (IBP, 2021).

Not only does the budgetary process is being by excellence the aggregation of preferences trying to solve collective action problems in a democratic environment, but it also should endeavour to translate the desires and aspirations of collaborative stakeholders from society (Abreu, 2017). As Ling and Roberts (2014) argued, the level of open budget actions produced by multi-stakeholders should strategically influence the budgetary decision-making process from a collaborative environment shaping the focus on promoting institutional changes for seeking collective consensus in an open governance perspective. Gomes and Gomes (2008, p. 265) concluded that ‘a stakeholder can be people, categories of people – such as employees, managers, suppliers, owners and customers (service users for public organizations) – and organizations.’ Thus, stakeholders should be identified based on their ‘power’ to influence actions in a decision-making process.

*Statement 1: Social development has better results in high open budget conditions because there are more influences of collaborative stakeholders.*

#### **4.2. Open Budget Actions**

Open Budget actions are composed of transparency, participation, and accountability initiatives, which generally associated with the democratic environment (Abreu & Gomes, 2021; Schmidhuber et al., 2021). First, as Kaufmann and Bellver (2005) argued, in spite of the lack of consensus on the definition of transparency, we can agree that there are some requirements for providing a better view of the government’s activities and processes. In this line of thinking, transparency can be stated as making information publicly available through relevant laws, regulations, and other policies; to notify interested parties of applicable laws and regulations; and ensuring that laws and regulations are administered in a uniform, impartial and reasonable manner (Bisogno & Cuadrado-Ballesteros, 2021; Dye, Hudspeth, & Merriman, 2011). Furthermore, budgetary transparency is the high and significant disclosure of relevant and understandable fiscal information quickly and systematically (Cicatiello et al., 2021). By increasing access to budgetary information, transparency-based results are likely to enhance budgetary resources allocation (Bisogno & Cuadrado-Ballesteros, 2021; Gaventa & McGee, 2013; Ling & Roberts, 2014).

Second, participation creates incentives to articulate and to aggregate citizen’s interests, to provide channels for leaders’ recruitment, to adjudicate disputes between conflicting interests, and to engage citizens in government decision-making, providing linkage between the ruler and the ruled, and policy-makers and citizens (Boulding & Wampler, 2010; Fung & Wright, 2003; Lassinantti et al., 2019; Muthomi & Thurmaier, 2020). Adopting participatory institutions will be followed by an ongoing debate regarding who should represent civil society ranging from direct democracy to indirect delegate models (Ling & Roberts, 2014; Mansuri & Rao, 2004). Moreover, participatory budgeting is figured as political empowerment and an incentive for citizen’s engagement (Abreu, 2017; Avritzer & Navarro, 2003). It also strengthens inclusive governance by marginalising and excluding the right to have their voices heard and influence public decision-making (Kasymova & Schachter, 2014; Lassinantti et al., 2019; Muthomi & Thurmaier, 2020; Schmidhuber et al., 2021).

Third, accountability is concerned with the responsibility and responsiveness exercised by state authorities during the period between political elections in democratic environments (Guinn & Straussman, 2016). It also means stakeholder’s ability to hold those who exercise power accountable for their actions (Ackerman, 2004; Friis-Hansen & Cold-Ravnkilde, 2013; Goetz & Jenkins, 2001; Tisné, 2010). According to Gaventa and McGee (2013, p. s9), accountability ‘is the concept that individuals, agencies, and organisations (public, private and civil society) are held responsible for executing their

powers according to a particular standard (whether set mutually or not).’ However, accountability is more complex (Tisné, 2010), for instance, public (horizontal) and social (vertical) approaches (Yilmaz, Beris, & Serrano-Berthet, 2010). Furthermore, public hearings to investigate public spending, social audits, and independent judiciaries are possibilities of budgetary accountability (Alt & Lowry, 2010; Chen & Han, 2019; Schmidhuber et al., 2021; Torres et al., 2020).

Transparency alone does not guarantee greater accountability, and it is likely to enhance participation by improving the quality of the public debate (Bisogno & Cuadrado-Ballesteros, 2021; Muthomi & Thurmaier, 2020; Schmidhuber et al., 2021). However, it is not always sufficient to foster citizen engagement (Gaventa & McGee, 2013; Ling & Roberts, 2014). Additionally, participation can make governments more responsive to citizens’ needs and preferences, increasing accountability and transparency (Ackerman, 2004; Cantador et al., 2020; Cicatiello et al., 2021; Ling & Roberts, 2014). Finally, accountability can also promote participation (Deininger & Mpuga, 2005; Singh & Vutukuru, 2010), although Abreu and Gomes (2016) highlighted the mechanisms on how participation improves accountability continuous unclear.

Therefore, logical links and continuous loops emphasise that the open budget framework has interdependency among open budget actions in a mutually reinforcing and integrated model (Abreu, 2017; Bisogno & Cuadrado-Ballesteros, 2021; Khagram et al., 2013; Ling & Roberts, 2014; Muthomi & Thurmaier, 2020). In addition, the level of open budget actions ought to provoke governance improvements, as well as social progress, corruption control, and economic gains (Abreu & Gomes, 2021; Bisogno & Cuadrado-Ballesteros, 2021; Chen & Han, 2019; Cicatiello et al., 2021; De Renzio & Wehner, 2015; Guinn & Straussman, 2016).

***Statement 2:** The mutually and reinforced open budget actions are positively associated with governance outcomes, such as social development.*

### **4.3. Open Budget Quality Results**

As Acemoglu and Robinson (2012) argued, not only should the higher quality of governance openness enable a virtuous cycle, but the lack of it ought to activate a vicious cycle. In this line of thinking, the change of the type of democratic regime should create institutional conditions for breaking the cycle status of a government (virtuous or vicious). Hardin (1968) describes the tragedy of commons as an example of a virtuous cycle breakdown. The transitions to democratic regimes in Brazil, South Korea, and the Philippines in the late 1980s, as Wampler (2012) stated, can be classified as a vicious cycle breakdown.

Based on Streeck and Thelen (2005), an institution’s elaboration, transformation, maintenance, and division can be explained by the actions of stakeholders’ behaviour. Depending on the stakeholders’ type with which the institution is involved, changes could happen differently (Gomes, 2014). Therefore, institutional types of evolution (as a qualification for action, policing, deterrence, recovery, and demonisation, mythologising preservation and routinisation) need to consider the behaviour of the stakeholders engaged in the decision-making process (Gomes, 2014; Streeck & Thelen, 2005).

As DIFD (2006) stated, good governance is not easy to be promoted by the public administration because institutional changes (as economic, sociological, or cognitive results) can take decades to be completed. Governance progress can sometimes be slow and challenging (Abreu & Gomes, 2021). However, after consensus is built and the right opportunities occur, budgetary reforms can come fast with their respective social development results (Abreu & Gomes, 2021; Guinn & Straussman, 2016). Different society groups must first negotiate decisions on country governance by elaborating quality budgetary commitments focused on fiscal discipline, allocations, and service delivery (Abreu & Gomes, 2016; De Renzio & Wehner, 2015; Khagram et al., 2013; Kraal, 2019).

In this arena, disputes and tensions are common (Guinn & Straussman, 2016; Matinheikki et al., 2019). As Castro-Leal, Dayton, Demery, and Mehra (1999, p. 68) argued, ‘although spending on social services is usually justified on equity and efficiency grounds, most health and education subsidies in the region are not particularly well-targeted to the poorest.’ Although open budget actions do not cover all possibilities of budgetary performance gains, it is essential to highlight that transparency, participation, and accountability initiatives should produce some institutional changes, which can impact the government effectiveness (Abreu & Gomes, 2016; Bisogno & Cuadrado-Ballesteros, 2021; Gaventa & McGee, 2013; Muthomi & Thurmaier, 2020; Sedmihradská & Haas, 2012).

Following from the evidence of empirical studies, we present five suitable types of improvements that can be related to the open budget quality results:

- Better delivery of services (Abreu & Gomes, 2021; Bisogno & Cuadrado-Ballesteros, 2021; Reinikka & Svensson, 2005; Singh & Vutukuru, 2010);
- Better utilization of the budget (Abreu, 2017; Caseley, 2003; Culliton, 1976; Reinikka & Svensson, 2005; Robinson, 2006; Singh & Vutukuru, 2010);
- Greater responsiveness (Clark, Fox, & Treakle, 2003; Hobolt & Klemmensen, 2008; Honig & Weaver, 2019; Kraal, 2019; Misra, 2007);
- Building spaces for citizen’s engagement (Avritzer & Navarro, 2003; Guinn & Straussman, 2016; Lassinantti et al., 2019; Muthomi & Thurmaier, 2020; Torres et al., 2020); and
- Empowerment of the local voices (Cantador et al., 2020; Jacobs & Wilford, 2010; Mohammed et al., 2020; Schmidhuber et al., 2021; Torres et al., 2020).

Therefore, the governance quality results should be associated with the open budget initiatives (Abreu & Gomes, 2021; Bisogno & Cuadrado-Ballesteros, 2021; Cantador et al., 2020; Cicatiello et al., 2021; Culliton, 1976; Guinn & Straussman, 2016; Musyaffa et al., 2020; Wasike, 2020), such as the ones measured in Open Budget Survey developed by the International Budget Partnership (2021). According to Guinn and Straussman (2016), the Open Budget Survey should be a valuable measurable tool because of its rigorous methodology.

Ling and Roberts (2014, p. 22) stated that ‘outcomes of institutional impact will then be easier to track,’ and they represent the consequences of the open budget core. Abreu and Gomes (2016) found empirical evidence that institutional changes came from transparency, supported participation, and contributed with accountability.

***Statement 3:** The synergic transparency, participation, and accountability initiatives provoke open budget quality results.*

#### **4.4. Budget Constraint**

Budget management is one of the most critical issues for governments (Hughes, 2003; Hyde, 2002; You & Lee, 2013) because every government’s action needs money to work out (Hughes, 2003). For instance, the public budget is more than a document with words and figures that contain intentions for the government’s expenditures. The public budget translates public policies priorities into financial resources (Davis, Dempster, & Wildavsky, 1966). The available amount of money determines the limits upon which the government will base the execution of its policies (Hughes, 2003).

Budgetary institutions play a significant role in shaping performance since it contributes to stabilising, defining and applying the main economic rules for the country. The most common preparation and best-established procedures of the pure rational choice theory recognise the uncertainty around future consequences for present actions (Abreu, 2017). This uncertainty issue is noticed in the budget process as part of the assumptions of the budget decisions occurs under a limited cognitive decision as decision-makers have limitations to surveying possible alternatives and stochastic processes (Padgett, 1980).

Hyde (2002) stated the public budget is an instrument of management, development, control, and allocation in this line of thinking. More emphasis should be placed on the last one, whether allocation refers to the political tool that distributes scarce available resources among social and economic needs in a decision-making process (Hyde, 2002; Matinheikki et al., 2019; Muthomi & Thurmaier, 2020). Therefore, data science should support open budget initiatives to incorporate collaborative stakeholders in the budgetary decision-making process (Cantador et al., 2020; Honig & Weaver, 2019; Mohammed et al., 2020; Musyaffa et al., 2020).

According to Key (1940, p. 1138), although ‘the budget-maker never has enough revenue to meet the requests of all spending agencies,’ the budget ‘represents a judgment upon how scarce means should be allocated to bring the maximum return in social utility.’ Traditionally, as Rubin (2009, p. 17) concluded, ‘one of the major characteristics of public budgeting is that those who pay the bills are not the ones who decide how the money is to be spent.’ Nevertheless, as a powerful instrument for implementing democracy, the public budget needs to reflect the citizen’s preferences to influence the economy to focus on social outcomes (Foster & Fozzard, 2000; Rubin, 2009; Schmidhuber et al., 2021).

Hence, an essential element to be considered in the governance process is resource availability. It does happen because governance outcomes are affected by the constraints of limited resources (Gruber, 2009; Guinn & Straussman, 2016; Mohammed et al., 2020; Muthomi & Thurmaier, 2020; Von Hagen & Harden, 1996). According to Abreu (2017), budgetary resource constraint is one of the most significant challenges in transparency and participative actions. Emerson, Nabatchi, and Balogh (2012) highlighted that resources are part of collaborative governance as an element for joint action’s capability. Collaboration can benefit from sharing and leveraging scarce resources (Bisogno & Cuadrado-Ballesteros, 2021; Emerson et al., 2012; Guinn & Straussman, 2016; Thomson & Perry, 2006).

Considering that resources are limited (Gruber, 2009) and that governance outcomes depend on the amount of them (Emerson et al., 2012), governance outcomes are strictly based on the available resource (Bisogno & Cuadrado-Ballesteros, 2021; Guinn & Straussman, 2016; Khagram et al., 2013). It is fundamental to emphasise the role of budgetary institutions to support economic performance gains and control social progress (Foster & Fozzard, 2000; Rubin, 2009). The literature provides some indexes for measuring resource availability: public expenditures and revenues per capita (Elson, 2002; Elson & Cagatay, 2000; Gruber, 2009).

***Statement 4:*** *The budget constraints contribute to governance outcomes because of limited available resource for social progress.*

#### **4.5. Governance Outcome**

Governance is related to the public administration decision-making process based on institutions and procedures that regard citizens' voices and public concerns (Abreu & Gomes, 2021; Bisogno & Cuadrado-Ballesteros, 2021). They usually happen through the following operations: democratic decision-making; citizen and stakeholder’s engagement; transparency; accountability; fair and honest treatment of citizens; sustainability and coherent policies; willingness and capacity for working in partnership; social inclusion and equality; respect for diversity; and respect for the others’ rights (Bovaird, 2005).

As Osborne (2006) emphasised, governance is a social-political theory that includes institutional relationships between government and society in a pluralistic state. Good governance associates with social progress, such as the better capacity to prevent conflict, fulfil human rights obligations, helping business growth, and deliver essential public services to the citizens (Bovaird & Löffler, 2003; DFID, 2006).

In the governance model, multiple stakeholders are gathered together in forums and public agencies to engage in consensus-oriented decisions (Abreu, 2017). Furthermore, collaborative

governance is a particular type of governance in which public and private actors work collectively to establish laws and rules to provide public goods. In this process, leadership is crucial for setting and maintaining the regulations' clarity, building trust, and supporting negotiations for mutual gains (Bovaird & Löffler, 2003; Emerson et al., 2012; Khagram et al., 2013; Matinheikki et al., 2019).

Therefore, we should expect that crucial issues in effective collaborative leadership are likely to be time, resources, managerial skills, technical credibility, and legitimacy of public administration decision-making processes, in both local, state, or at the federal level (Emerson et al., 2012; Huxham & Vangen, 2000; Muthomi & Thurmaier, 2020). Collaborative governance is related to a clear focus on improving social needs (Abreu & Gomes, 2021; Bisogno & Cuadrado-Ballesteros, 2021; Cicatiello et al., 2021; Guinn & Straussman, 2016; Muthomi & Thurmaier, 2020).

According to Emerson, Nabatchi, and Balogh (2012), collaborative governance is broadly defined as the processes and structures of public policy decision-making and management that engage people to participate constructively across public agencies' boundaries using strategies of high levels of transparency and accountability. Hence, the budgetary decision-making process is based on collaborative community involvement that often invites public agencies' participation (Abreu, 2017). Thus, the intergovernmental collaborative structures arrangements, such as private or civic sectors, focus on improving social needs, which produce feedback in the same governance framework (Emerson et al., 2012; Schmidhuber et al., 2021).

Such governance outcomes might include strengthening community capability to produce social progress, empowered by the democratic environment and focus on the reduction of poverty, and considering the available resource (Abreu & Gomes, 2021; Bovaird, 2005; Cicatiello et al., 2021; Matinheikki et al., 2019; Muthomi & Thurmaier, 2020; Provan & Kenis, 2008; Schmidhuber et al., 2021). Social progress can be measured, for example, by using the Social Progress Index (SPI), as proposed by Porter and Stern (2013). As Otoi and Titan (2014, p. 50) argue, the SPI 'is a valid alternative approach, yielding results close to those obtained with parametric methods.'

**Statement 5:** *Collaborative stakeholders, open budget actions, and available resources should be related to social development; then, an open budget framework may explain governance outcomes.*

## **5. Final Considerations**

This article examined the open budget literature state of the art and analysis results into five statements. It is grounded in public administration theories, such as governance, social science, public budget, and stakeholder. We argued that government and external government stakeholders and the open budget actions and the available resources should promote social development from a collaborative governance perspective from the open budget definition.

Therefore, we asserted that the open budget framework of governance comprises three parts: the open budget core, available resource, and governance outcomes. Moreover, the open budget core has two elements: collaborative stakeholder influences; and open budget actions. Consequently, we highlight that the influences of collaborative stakeholders stimulate social progress (Statement 1). According to Khagram et al. (2013), in a Korean case study, external government stakeholders (of Citizen's Coalition for Economic Justice) influenced collaborative budgetary commitments and promoted social improvements. Furthermore, the open budget actions are positively associated with social development (Statement 2). Abreu and Gomes (2016) found regression evidence of a positive relationship between open budget and social progress.

In addition, the synergic open budget actions provoke quality gains (Statement 3). According to Robinson (2006, p. 30), 'budget work can have a positive impact on budget policies by influencing the allocation and use of public expenditure in a manner that directly contributes to equity and social justice

outcomes.’ For instance, open budget actions dedicated to emergency obstetric care programs in Mexico promoted better budget allocation, reducing maternal mortality (Robinson, 2006). The open budget quality results are related to gains in management performance, contributing to corruption curbing, improving better service delivery, amending the utilisation of the budget, raising state responsiveness, increasing citizen engagement, and empowering local voices (Abreu & Gomes, 2021; Bisogno & Cuadrado-Ballesteros, 2021; Cicatiello et al., 2021; Guinn & Straussman, 2016; Muthomi & Thurmaier, 2020; Schmidhuber et al., 2021).

Moreover, the availability of the budgetary resource is positively associated with social development (Statement 4). As Elson and Cagatay (2000, p. 1351) stated, ‘when restrictive macroeconomic policies are needed, it is important to adjust the composition of fiscal expenditure and revenue to protect the people who are worst off.’ Furthermore, the open budget output is combined with the available resources within a governance framework.

Hence, the budget transparency, participation, accountability, resource, and stakeholder influence should explain social development in an open governance framework (Statement 5). We acknowledge that based on this last statement, the open budget governance framework covers several grounds. Consequently, it became possible due to the incorporation of concepts from a broad range of literature.

The framework identifies points, which can be used in either quantitative or qualitative analysis. Although this is not a complete or conclusive thesis, it provides grounds for future empirical investigation for theory building. Therefore, the five statements can support the development of new theories, using, for instance, approaches considering different levels of government or for specific public policies. Following, we suggest a research agenda for further studies:

- The necessity to investigate the profile of the collaborative stakeholders to understand how they support social commitments;
- Cluster analyses are likely to produce findings that could identify best initiatives of transparency, participation, and accountability;
- The gains from open budget quality results should be identified by relevance and by using transaction costs, and even by considering the implementation of open budget actions;
- A strategic model is required to enhance governance outcomes, which would arise from the maximisation of the open budget outputs and the available resources to achieve higher and balanced social development results; and
- The identification of good data science practices could collaborate with the implementation of open budget initiatives using, for instance, integrated datasets and artificial intelligence.

In terms of the theoretical contributions of this paper, the first one is about integrating and reinforcing the open budget framework where collaborative stakeholders’ influences and open budget actions can be seen as elements of the governance core (Figure 2). The second contribution relates to the importance of budgetary constraint as a relevant component of the open budget framework due to the extent of resource availability, which, combined with open budget output, should imply a high explanation of governance outcomes. The third contribution is to point out the possible occurrence of relationships discriminated among open budget framework components. An example of this is the governance outcomes’ influence on establishing open budget output and available resource. Hence, this influence could be checked in the historical statistical analysis as the possibility of further studies.

The open budget issue is growing in recent academic literature. However, it is seen as an incomplete subject where more studies are needed. The contributions we present here can help attract more attention to producing knowledge on this new paradigm in public administration. We do not know if the open budget is a transitory fashion. However, we can argue that governance frameworks for

reducing poverty are always welcome. This historical problem remains without a plausible solution. In a nutshell, we hope that this paper will stimulate the open budget approach to develop new theories.

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