



**UNIVERSIDADE DE BRASÍLIA
FACULDADE DE ECONOMIA, ADMINISTRAÇÃO E CONTABILIDADE
PROGRAMA DE PÓS-GRADUAÇÃO EM ADMINISTRAÇÃO - PPGA**

**UNLOCKING THE GOVERNMENT DOOR TO SOCIETY:
HOW DOES OPEN BUDGETING RELATE TO SOCIAL DEVELOPMENT?**

**DESTRAVANDO A PORTA GOVERNAMENTAL PARA A SOCIEDADE:
COMO O ORÇAMENTO ABERTO SE RELACIONA COM DESENVOLVIMENTO SOCIAL?**

WELLES MATIAS DE ABREU

Dissertation presented to the Graduate Program in Administration of the University of Brasilia in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Administration

Supervisor: Prof. Dr. Ricardo Correa Gomes

Brasilia (DF), Brazil

2017

WELLES MATIAS DE ABREU

**UNLOCKING THE GOVERNMENT DOOR TO SOCIETY:
HOW DOES OPEN BUDGETING RELATE TO SOCIAL DEVELOPMENT?**

**DESTRAVANDO A PORTA GOVERNAMENTAL PARA A SOCIEDADE:
COMO O ORÇAMENTO ABERTO SE RELACIONA COM DESENVOLVIMENTO SOCIAL?**

Graduate Program in Administration of the University of Brasília (PPGA / UnB),
approved by the Committee Members:

Committee

Chair: Supervisor Prof. Dr. Ricardo Correa Gomes (UNB)

Member: Prof. Dr. Sandro Cabral (Insper)

Member: Prof. Dr. Marco Aurélio Marques Ferreira (UFV)

Member: Prof. Dr. Patricia Guarnieri (UnB)

Substitute Member: Prof. Dr. Diego Mota Vieira (UnB)

Dedication

To my sweet darling Geane;
my children Davi and Pedro; and
my lovely parents Osvaldo and Marlene.

Acknowledgement

To God;

My family;

My supervisor Dr. Ricardo Gomes; and

The staff of the Graduate Program in Administration (PPGA/UnB).

Granting

This work was supported by CNPq and CAPES.

Abstract

Open budgeting is the disclosure of public financial revenue and expenditure in an appropriate manner to society engagement. Although ancient Athenians have practiced open budgeting actions, governments still remain secretive on their budgetary information. The open budget literature was reviewed to identify the theoretical background on the field. Three missing points were identified: the fact that it is not clear how to measure open budgeting and collaborative stakeholder; the lack of empirical evidence on the relationships between open budgeting, collaborative stakeholder, and budgetary resource with social development; and the effects of the relationship among these elements as a result of actions of governance. This research is guided by the following question: how does open budgeting, driven by collaborative stakeholder and moderated by the budgetary resource, explains the social development? The main goal is to describe how these variables can promote it. The research was executed in two phases, using a sequential mixed method for the identification of forms to measure the levels of collaborative stakeholders and open budgeting as determinant factors related to social development: a qualitative study, to explore specialised evidence and the verification of the relationship between the cited variables and the social development; and a quantitative study, to explore secondary data. Brazil is a reference country to collect data due to the recent endeavour to introduce governance reforms in the budgetary process. Altogether, this research

focused on mechanisms for measuring collaborative stakeholder and open budgeting; an explanation for social development by open budgeting, collaborative stakeholder, and budgetary resource as a governance framework; and its effects on social development. The proposed framework was named the collaborative budget model. Collaborative stakeholders are likely to be seen as the drivers who have the leadership to achieve social development. Thus, the great innovation and contribution of this study is that the collaborative stakeholder can be considered as a strategic element in the collaborative budget model due to its direct and indirect effects on social development.

Key Words: Open Budget; Collaborative Stakeholders; Budgetary Resources; Social Development; Public Administration.

Resumo

O orçamento aberto é a disponibilização de dados e espaços para promoção de influências nas decisões sobre as receitas e as despesas públicas de forma adequada com vistas a estimular o engajamento da sociedade. Embora os antigos atenienses tenham praticado ações de orçamento aberto, diversos governos atualmente continuam secretos em suas informações orçamentárias. A literatura de orçamento aberto está sendo revista com vistas a incorporar uma visão sistêmica por meio de uma nova modelagem considerando elementos da nova governança pública. Foram identificadas três lacunas teóricas para isso: o fato de não estar claro como medir a orçamentação aberta e os *stakeholders* colaborativos; a falta de evidências empíricas sobre as relações entre a orçamentação aberta, os *stakeholders* colaborativos e os recursos orçamentários com o desenvolvimento social; e a ausência de verificação sobre quais os efeitos da relação entre esses elementos. A questão de pesquisa que norteia o presente estudo é: como o orçamento aberto, conduzido por *stakeholders* colaborativos e moderado pelo recurso orçamentário, explica o desenvolvimento social? O objetivo principal é descrever como essas variáveis podem promover o desenvolvimento social. A pesquisa foi executada em duas fases, usando um método sequencial e misto para a identificação de formas de como medir os níveis de *stakeholders* colaborativos e o orçamento aberto (estudo qualitativo) e a verificação do relacionamento entre os elementos de orçamento aberto referenciados (estudo

quantitativo). O Brasil é usado como país de referência para coletar dados devido aos esforços recentes para introduzir reformas de governança no processo orçamentário. Em suma, esta pesquisa centrou-se em mecanismos para a: medição dos níveis das influências dos *stakeholders* colaborativos e das ações do orçamento aberto; explicação do desenvolvimento social através dos orçamentos abertos, dos *stakeholders* colaborativos e dos recursos orçamentários tendo como base um quadro de governança; e, por último, identificação dos efeitos das variáveis endógenas sobre o desenvolvimento social. A estrutura de governança identificada, considerando os elementos delimitados no âmbito da abordagem de orçamento aberto, foi denominada modelo de orçamento colaborativo. Os *stakeholders* colaborativos, no citado modelo, devem ser vistos como os condutores que têm a liderança para alcançar o desenvolvimento social. Por fim, vale ressaltar que a grande inovação e contribuição deste estudo é que o *stakeholder* colaborativo é considerado como um elemento estratégico no modelo de orçamento colaborativo devido aos seus efeitos diretos e indiretos para com o desenvolvimento social.

Palavras Chave: Orçamento Aberto; *Stakeholders* Colaborativos; Recursos Orçamentários; Desenvolvimento Social; Administração Pública

Figures

Figure 1: Constitutional Brazilian Budgetary Acts (*)	15
Figure 2. Brazilian Budgetary Governance Model	19
Figure 3. Social Development as a Governance Result	30
Figure 4. The Research Design Workflow	36
Figure 5. Content Analysis Framework	40
Figure 6. Structural Equation Modelling	46
Figure 7. Occurrences by Clusters	54
Figure 8. Occurrences in Groups of interviewers by Categories	55
Figure 9. Net-Map of Relationships between Clusters and Social Groups	56
Figure 10. Structural Equation Model: The Collaborative Budget Model	60
Figure 11. Municipal Open Budget Means	62

Tables

Table 1. Theoretical Considerations of the Theoretical Subjects	29
Table 2. Contributions' summary of higher relevance pieces	34
Table 3. Items that compose the MUNIC open budget index.	43
Table 4. Sample of Brazilian Municipalities in Numbers.....	45
Table 5. Measurement Forms	49
Table 6. Complementary Issues	50
Table 7: Further Perspectives	52
Table 8. Structural Equation Modelling Statistical Summary Results	58
Table 9. Direct, Indirect and Total Effects of the Structural Equation Modelling	61
Table 10. Theoretical Contributions to Literature Expansion	65
Table 11. The Logic Model to the Collaborative Budget Model.....	68
Table 12. Participation in Research Events	94
Table 13. Products of this Research Work	95

Summary

Dedication	v
Acknowledgement.....	vi
Granting	vii
Abstract.....	ix
Resumo	xi
Figures	xiii
Tables	xiv
Summary	xv
1. Introduction.....	1
2. The Theoretical Background	11
2.1. The Brazilian Public Administration.....	12
2.2. The Brazilian Public Budgeting	14
2.3. Social Development	16
2.4. The Open Budget Approach.....	20
2.5. Theoretical Considerations	28
3. The Methodological Aspects	32
3.1. Gauging Determination of External Collaborative Stakeholders and Open Budgeting	37
3.2. Checking the Social Development Consequences from External Collaborative Stakeholders, Open Budgeting, and Budgetary Resources	41

4. Results.....	48
4.1.The Measurement Forms of Open Budgeting and External Collaborative Stakeholders	48
4.2.The Improvement of Social Development from Open Budgeting, External collaborative Stakeholders, and Budgetary Resources	57
5. Discussion.....	64
5.1.Theoretical Contributions	64
5.2.The Collaborative Budget Model	67
5.3.Follow-up Points	70
6. Final Considerations.....	72
References.....	78
Appendix	92
I. Interview Questionnaire.....	92
II. Scientific Production	94

1. Introduction

The ancient Athenians had the clue for deciding public issues, which included negotiating a collective consensus before public policies were executed (TANAKA, 2007). This approach seems to be associated with the public budget using an open approach as we have seen on participative budgeting. Khagram et. al. (2013) stated that an open budget approach relates to transparency, participation, and accountability as actions of governance.

However, governments are still largely secretive about their budgetary information, involving only a few agents in the public policy decision-making process (ABREU and GOMES, 2013; KHAGRAM, FUNG and DE RENZIO, 2013). Such secrecy has been the subject of much discussion since the adoption of the open budget approach (GAVENTA and MCGEE, 2013; KHAGRAM, FUNG and DE RENZIO, 2013; LING and ROBERTS, 2014).

Social development is the improvement of the individual quality of life and social welfare of society members (DAVIS, 2004). Recent literature emphasizes the relevance of transparency, participation, and accountability initiatives to open the budgetary process in order to achieve social development (KHAGRAM, FUNG and DE RENZIO, 2013; LING and ROBERTS, 2014; DE RENZIO and WEHNER, 2015).

Open budgeting is the disclosure of public financial revenue and expenditure in an appropriate manner, from its working out, examining and approval to its executing (JINGUANG and XIANYONG, 2011). Moreover, the open budgeting relates to collaboration in the public budget arena regardless of the budgetary phases, from drafting up to auditing (GAVENTA and MCGEE, 2013; KHAGRAM, FUNG and DE RENZIO, 2013; LING and ROBERTS, 2014).

According to Denhardt and Denhardt (2007), greater discretion, responsiveness, and openness are on evidence in the new public governance, which is based on citizens' engagement, focused on the public interest, and structured in a democratic citizenship environment. In the new public governance model, the management of the public budget allows interaction between non-governmental and governmental stakeholders, in a network of public, civic and business institutions (BOVAIRD, 2005).

Budgeting is historically one of the most important decision-making processes in the government domain (HYDE, 2002; HUGHES, 2003; YOU and LEE, 2013). Considering that, one possibility to make public budgeting more effective is that people should take part on this budgetary process (HYDE, 2002). However, the adoption of collaborative stakeholder (CS) perspective is the key point to the success or not of this open budgeting strategy (FREEMAN, 1984; KHAGRAM and ALI, 2008; GOMES, LIDDLE and GOMES, 2010).

Contemporary government transitions to democratic regimes have been seen as windows of opportunity to increase open budgeting initiatives (AVRITZER, 2009; YILMAZ, BERIS and SERRANO-BERTHET, 2010; ACEMOGLU and ROBINSON,

2012; KHAGRAM, FUNG and DE RENZIO, 2013; KASYMOVA and SCHACHTER, 2014; LING and ROBERTS, 2014). Collaborative institutional changes in governance should make society more equitable and inclusive (ANSELL and GASH, 2008; EMERSON, NABATCHI and BALOGH, 2012). Governments that prioritize external collaborative stakeholders in decision-making processes should give them the opportunity to participate in developing policies for social progress (DFID, 2006; WB, 2014).

According to Emerson, Nabatchi, and Balogh (2012), the collaborative governance approach uses decision-making processes focused on open strategies of structural arrangements. In these procedures, stakeholders with collaborative views are likely to drive decisions regarding governance results by including social commitments in the budgetary process (DFID, 2006; BURGE, 2010).

The external collaborative stakeholders should first negotiate decisions regarding a country's governance by formulating social commitments in the budgetary process (SVENDSEN, 1998; KOONTZ, 2005; KHAGRAM and ALI, 2008). In this arena, disputes and tensions for the scarce budget resources are usual, but, in general, after a consensus is built and the right opportunities are devised, budgetary resource performance gains can happen faster with the respective social results (DFID, 2006; BURGE, 2010).

The adoption of the collaborative perspective in the decision-making process to manage government resources should be strategic to achieve better public organisational performance in settings with robust governance initiatives (LING and ROBERTS, 2014). In this context, the management style supports the performance of

public organisations (O'TOOLE and MEIER, 1999), such as the ones related to budgetary resource execution.

The external collaborative stakeholder style engages people to participate constructively across boundaries of public agencies, using strategies involving high levels of transparency and accountability (EMERSON, NABATCHI and BALOGH, 2012). For that reason, non-governmental and governmental stakeholders work collectively to establish rules for the provision of public goods (ANSELL and GASH, 2008). In this process, leadership is crucial for setting down and maintaining the clarity of the rules in order to build trust and to support negotiations for better allocation of budgetary resources (VANGEN and HUXHAM, 2003; BOVAIRD, 2005; ANSELL and GASH, 2008; EMERSON, NABATCHI and BALOGH, 2012; KHAGRAM, FUNG and DE RENZIO, 2013).

Hence, open budgeting is more than just a process based on transparency, participation and accountability actions; it also should consider external collaborative stakeholders as drivers of a budgetary process to allocate scarce budgetary resources in a collaborative governance approach. For instance, Bangladesh executed a project from 2000 to 2006, funded by the United Nations Development Programme, in which suggested that external collaborative stakeholder achieves open budgeting, and influences budgetary resource allocation, in order to induce social progress (SARKER and HASSAN, 2010).

In this context, four core elements from the open budget perspective could be recognized: open budgeting; external collaborative stakeholders; budgetary resources; and social development. However, the following question is instigating:

what is the evidence that open budgeting has driven by external collaborative stakeholder and moderated by the budgetary resource in order to explain social development? To contribute to answering this question, there were identified three missing points in the literature: a) it is not clear how to measure open budgeting and external collaborative stakeholders; b) there is no empirical evidence of if the gathering of open budgeting, external collaborative stakeholders, and budgetary resources should explain social development; and c) it does not have an effect report of the relationship among these open model elements of governance.

Therefore, the overall aim of this work is to describe how open budgeting, external collaborative stakeholders, and budgetary resources should promote better social development. In addition, the specific aims are: a) to identify forms to measure the levels of external collaborative stakeholders and open budgeting as determinant factors related to social development; b) to verify if external collaborative stakeholders, open budgeting, and budgetary resources can explain social development; and c) to report a governance model based on the elements of the open budgeting approach.

If the governance theory is still in development (BOVAIRD, 2005; BOVAIRD and LÖFFLER, 2009), the open budget as an approach to governance is no different. Despite the recent substantial increase in academic publications, new literature expansions are required to consolidate it as an academic field. Khagram et al. (2013) stated that the open budget approach remains an incomplete subject especially because of its unclear consequences. In this line of thinking, the identification of the open budget framework elements should be the starting point for developing a governance approach (MEIJER, CURTIN and HILLEBRANDT, 2012). Consequently,

there are hopes that this dissertation contributes to enriching governance and stakeholder theories, demystifying how to gauge open budgeting and external collaborative stakeholders, and checking their effects as determinant factors, especially for social development consequences.

The description of this new framework made it possible to use structural equations modeling as a methodological tool to help test the complex links suggested by theory. This study concentrates its efforts to describe the relations among open budgeting, external collaborative stakeholders, budgetary resources and social development as an innovative governance framework.

The main contribution of this work is to expand the public administration literature by considering the external collaborative stakeholders as a core element of the open budgeting approach, because of its direct and indirect effects on explaining social development. With empirical evidence on this field, it is expected to contribute to prompt studies on financial sustainability in order to reduce poverty and induce economically equitable growth, and, in a final analysis, to achieve sustainable progress.

The literature review (chapter 2) introduces the theoretical background of the governance's open budget approach. Focused on the social development consequences, it is identified that the stakeholder and public budget theories should relate to the open budget approach from the recognition of five hypotheses. Thus, there is a window of opportunity to expand the governance literature using collaborative stakeholder as a new core element of governance.

It is also shown a short description of the Brazilian context. It starts with a brief historical description of the Brazilian public administration, which covers the periods from patrimonialism up to governance. Then, the Brazilian public budget process is described, indicating the recent institutional changes focused on the open perspective of the governance mode. Finally, there is a debate on Brazilian social development, highlighting the suggestion of its increasing due to the mentioned governance budgetary institutional changes.

The theoretical background in open budget knowledge suggests that open budgeting impacts social development (hypothesis 1). Furthermore, budgetary resources moderate the governance process by the constraints on the budget's capacity to achieve social development (hypothesis 2). Nevertheless, more than this primary proposition, the external collaborative stakeholders are the ones who could have the leadership to promote the social commitment to influence social development (hypothesis 3), open budgeting (hypothesis 4), and budgetary resources (hypothesis 5).

The efforts result in a research design based in three studies (chapter 3): 1st) a literature review in governance from an open budget perspective; 2nd) a qualitative research of how to measure the open budgeting and the external collaborative stakeholders; and 3rd) a quantitative study to verify if external collaborative stakeholders, open budgeting, and budgetary resources can explain social development.

In the methodological aspects for the determination of external collaborative stakeholders and open budgeting gauging, the use of interviews was thought of as a

qualitative strategy from a positivist perspective. Therefore, the data was collected from open questions in fifteen interviews focused on five groups of Brazilian public budgeting specialists. The collected data was analysed using a cluster classification, based on three categories: Measurement Forms, Complementary Issues, and Further Perspectives. Data mining and net-map techniques were applied to explore data, to realize comparative analyses, and to validate the results.

Next, in the methodological aspects for checking the social development consequences from external collaborative stakeholders, open budgeting, and budgetary resources, it is used an *ex-post-facto* method, formulated from complex links among the literature review elements. Hence, it is based on a quantitative strategy from a constructivist perspective with the purpose of checking the theoretical hypotheses. The use of structural equations modelling is a validated option to be considered in this case. Brazilian secondary data were collected from official government surveys and financial databases, which represents over than 96% of the Brazilian municipalities and population, using the 2010 year as reference.

In chapter 4, first, it was shown the results of the measurements forms of open budgeting and external collaborative stakeholders, the content analyses consequences are introduced in three tables, discriminating the clusters of each mentioned category. In the category Measurement Forms, the clusters “the number of civil society organizations” and “the presence of social councils and their components of operation” are crucial, because of the strong evidence from all groups of interviews. From the data mining and net-map analyses, the Complementary Issues category cluster “the determination of the accountability level should be associated with the

transparency and participation measurement” should be emphasized as a relevant support to open budgeting level determination. The clusters of the Further Perspectives category are important as opportunities to compose a research agenda.

Following, on the verification of the improvement of social development from open budgeting, external collaborative stakeholders, and budgetary resources, it was identified that these variables should be combined in three validated structural equations, which have significant levels of contributions to explain social development. Tests suggest that this model has sufficient goodness of fit. Considering the shape of the framework, it was called “the collaborative budget model,” noticing that the variable external collaborative stakeholder has the highest total effect on social development.

In the discussion on results (chapter 5), the three main theoretical contributions associated with the literature expansion are highlighted. These contributions are directly related to this work’s specific aims: external collaborative stakeholders and open budgeting measurement forms; social development explained by open budgeting, external collaborative stakeholders, and budgetary resources; and governance model reported based on the effects of open budgeting, external collaborative stakeholders, and budgetary resources effects in social development. Afterwards, there is a specific topic on the collaborative budget model. In this part, the logic of this model is described, as well as the importance of external collaborative stakeholders among open budgeting and budgetary resources to explain social development. Next, in follow-up points, are introduced relevant themes for a research agenda. Finally, it is presented a scientific production from the participation on eight research events and five submissions in academic outlets.

In the final considerations (chapter 6), there is a return to the main points of this work, emphasizing the innovatory characteristics of the main theoretical contributions over the empirical results. In this context, open budgeting and external collaborative stakeholder measurement research should be used in further studies and for government improvement actions. Finally, yet importantly, it is emphasized the importance to consider external collaborative stakeholders as a strategic element in governance mode, because of its direct and indirect effects to increase social development level.

2. The Theoretical Background

According to Bovaird (2005), governance results are brought about by democratic decision-making, open government processes, social inclusion, and equality. Good governance is associated with the better capacity to prevent conflicts, meeting human rights obligations, helping business growth, and delivering essential public services to citizens to achieve social progress (DFID, 2006). In the governance model, multiple stakeholders gather in forums with public agencies to engage in consensus-oriented decisions (ANSELL and GASH, 2008; 2018).

The governance decision-making process is based on citizen engagement with collaborative involvement (EMERSON, NABATCHI and BALOGH, 2012). In this case, leadership and resources are crucial for setting, and maintaining the clarity of, the rules, in order to build trust and support negotiations for better social development (ANSELL and GASH, 2008; KHAGRAM, FUNG and DE RENZIO, 2013).

The recent institutional changes in Brazilian public administration that were designed to implement the governance model are related to the introduction of open initiatives in budgetary processes to achieve better social policy results (UNDP, 2014a; FERREIRA *et al.*, 2016). In the following sections, a short historical account of Open Budgeting is presented from Brazilian and international literature.

2.1. The Brazilian Public Administration

Brazilian Public Administration is more than a constitutional legal system in a stage of social democracy. It is a complex institutional system that focuses on the governance model for government reforms at all levels: federal; state; and municipal (ABRUCIO, 2005). However, less than a century ago, Brazil had a patrimonial model, based on privilege and private interests in the public policy processes (BRESSER-PEREIRA, 2009). Only in the 1930s did Brazil start reforms to reduce red tape, from the DASP (Public Service Department for Administration) establishment, with the purpose of launching formal, impersonal, and meritocratic control over procedures, with a formal hierarchy acting in the public interest (BRESSER-PEREIRA, 1996).

In the 1990s, the Brazilian government introduced reforms based on new public management (PECI, PIERANTI and RODRIGUES, 2008). These reforms concentrated on: a) resource decentralization – allocation to local levels; b) administration; c) decentralization – empowerment; d) reducing levels in the hierarchy; e) management by results; and f) administration focused on citizen service (OSBORNE, 1994). This process was steered by a Brazilian Master Plan, which was modelled upon the United Kingdom's managerial reforms carried out by Margaret Thatcher (BRESSER-PEREIRA, 2010).

The Fiscal Responsibility Act of 2000 (Constitutional Law No. 101) is one result of this process, which, together with complementary institutional changes, culminated in Brazilian Budget Management Reform (Core 2007) that was an advance in terms of public administration.

The new public management became old very fast. In the 2000s, concerns about governance turned toward institutional changes focused on the advance of social democracy (PECI, PIERANTI and RODRIGUES, 2008). According to Knopp (2011), Brazil is still in a consolidation process. It follows an international trend to focus on issues related to:

- Creating more inclusive spaces, with transparency, participation, and accountability initiatives;
- Setting a legitimate public policy agenda to build trust between government and society; and
- Modifying government procedures to make the decision-making process more flexible and efficient.

The recent adoption of transparency, participation, and accountability initiatives in the public policy arena from an open budget approach is an attempt to strengthen democracy to promote social progress (ABREU and GOMES, 2016; FERREIRA *et al.*, 2016). This followed the new public governance wave when society received more attention from public managers and politicians in order to increase education and health quality, as well as to reduce corruption and to improve the budgetary institutions.

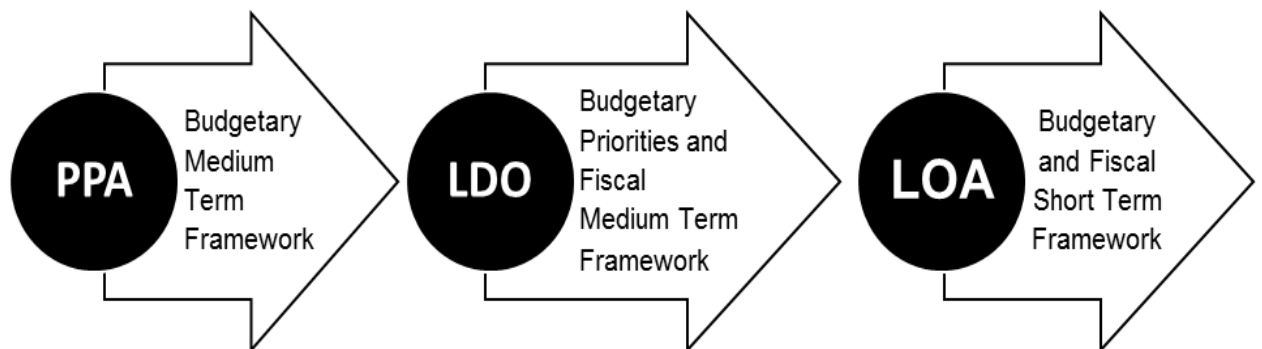
2.2. The Brazilian Public Budgeting

The budgetary process is central to the formulation of a strategy for public policy results. The budget depends on the costs of the alternatives chosen. This complex process of calculation takes into account several variables, and there is a little theory that helps predict the consequences for social development (DAVIS, DEMPSTER and WILDAVSKY, 1966).

According to March (2009, p. 5), “the most common and best-established elaboration of the pure theories of rational choice is that which recognizes uncertainty about future consequences of present actions.” Bounded rationality presupposes that budget decisions occur with a limited range of alternatives in the context of a stochastic process (PADGETT, 1980). In general, individuals want institutions to make their decisions logically (NORTH, WALLIS and WEINGAST, 2009). This process is often complex, systematic and rationally limited, and aims to establish identities, finding rules for recognized situations (MARCH, 2009).

In Brazil, as Sanches (2007, p. 190) noted, the 1988 Federal Constitution introduced a number of significant institutional changes in the public budgeting process. It emphasizes the obligation to prepare the following budgetary acts (figure 1): medium-term planning (four years, starting in the second year of government), short-term planning (annual), and goals fiscal-term (annual). Brazil’s Budgetary Acts are available on the Senate’s website (see <https://www12.senado.leg.br/orcamento>).

Figure 1: Constitutional Brazilian Budgetary Acts (*)



(*) PPA, medium-term planning; LDO, goals fiscal-term; and LOA, short-term planning.

Source: Author

The 2000 Brazilian Budgetary Reform was developed based on strong international influences – due to the financial crisis in the 1990s – with the purpose of giving governments more effective and efficient results, improving public policy delivery and reducing state costs (CORE, 2004). The changes to budgetary institutions from Decree 2829/1998 impacted all budgetary acts instruments, focusing on: a) more flexibility in budgetary programming; b) increased responsibility of program managers for the delivery of public policy results; and c) the establishment of multi-year fiscal goals focused on debt control.

Recently, Abreu and Gomes (2013) found evidence in Brazil of emancipatory budget processes, including parliamentary adjustment, public meetings, public policy councils, the influence of nongovernment organisations, citizen participation in the

elaboration of medium-term planning, priorities set by public policy specialists, citizens' budgets (documents that summarize the public budget for society), actions towards fiscal education, and data disclosure.

2.3. Social Development

Social development means better delivery of social goods and services, as well as an increase in the capacity to generate jobs and redistribute national income for a better individual quality of life (GENTIL and MICHEL, 2009). On the road to social development, a budget strategy has inevitable social consequences (ABREU and GOMES, 2010; FERREIRA *et al.*, 2016).

Social development is considered to be a result of governance (LING and ROBERTS, 2014; DE RENZIO and WEHNER, 2015). The United Nations Development Program (UNDP) uses the Human Development Index as a measure of social development (NOORBAKHS, 1998), based on, "The expansion of people's freedoms to live long, healthy and creative lives" (KLUGMAN, 2010, p. 12).

According to Ramos (1983, p. 149-150), "There is notable progress, in the field of economic theory, if the analysis of the development progress occurs from a systematic strategic view." The budgetary allocation decision-making process must be associated with social development strategies, based on ethical conditions for the reduction of poverty as the preferred public policy consequence (RAMOS, 1946; 1981).

The budgetary strategy should take into account the risk analysis and plan reliability, in order to increase government capacity for social policy implementation (SICCÚ, 2009). The budgetary strategy ought to stimulate tax revenue, on a progressive basis, focused on social justice and equity, as well as building citizens' awareness (ABREU and GOMES, 2010). Sicsú (2008) states that budgetary strategies for social progress are only effective if the government involves society.

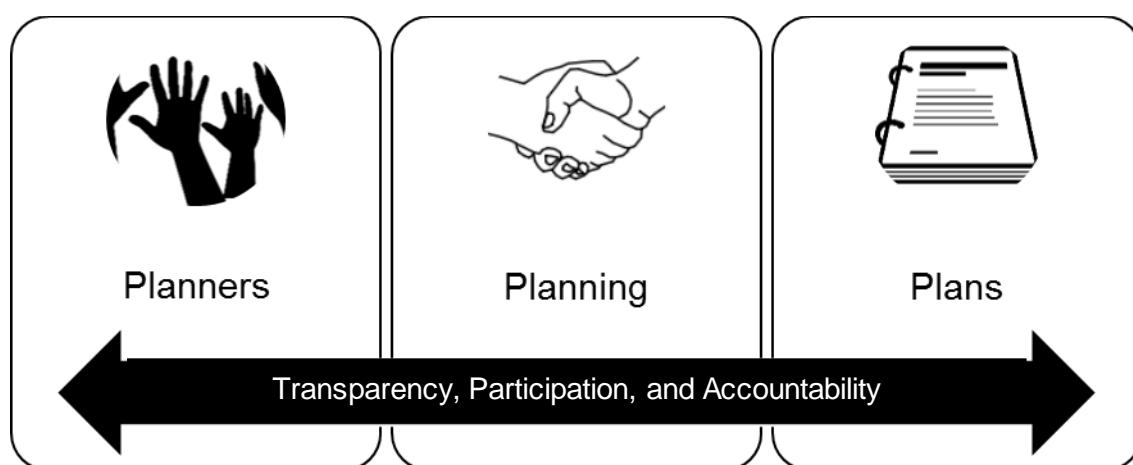
According to Abreu and Gomes (2013), in order to achieve social development, the budgetary strategy should promote social inclusion, democratic representation, authentic dialogue, and collective knowledge. Therefore, the formulation of the budgetary strategy for social development should not be a cabinet plan, but a joint process constructed with the society (ABREU and GOMES, 2013). This strategy is aligned with the open budget approach.

Brazil is the leader of Latin America in the 2012 Open Budget Survey, and its participation in the Open Government Partnership and in the Global Initiative of Fiscal Transparency recognizes the Brazilian position as one of the most important countries in this field. As a result, the Brazilian government proposal to the United Nations General Assembly was adopted in 2012, that recognizing transparency, participation, and accountability in fiscal policies can, a) enhance financial stability, poverty reduction, equitable economic growth and the achievement of sustainable development; and b) should be promoted in a manner that is consistent with diverse circumstances and national legislation (ABREU, GOMES and ALFINITO, 2015).

The Human Development Report 2014 of the United Nation Development Programme (UNDP) highlighted recent social improvements in Brazil, including reduced racial disparities for Afro-Brazilian and mixed-race populations, by implementing affirmative action policies in education. Brazilian social progress suggests that the influence of civil society on people-friendly policies and outcomes is a key aspect of state–civil society interaction. The Brazilian open initiatives in budgetary processes are possible causes of social gains, by increasing participation in budgetary allocation, disclosing budgetary data, and strengthening spaces for social influence (UNDP, 2014b).

The profile of the public administrator in the governance model focuses on the process of decision-making in public policy, and not only on producing more and better quality using fewer resources. Brazil is recognized for its implementation of governance tools and its moves toward better governance, although there is still a long way to go (PECI, PIERANTI and RODRIGUES, 2008; KNOPP, 2011). The Brazilian budgetary process followed a trend after changes in 2000 and seeks to increase the strategic dimension and integrate planners, plans, and planning (figure 2). Recent developments advanced in the governance model promote transparency, participation, and accountability (ABREU and GOMES, 2010).

Figure 2. Brazilian Budgetary Governance Model



Source: Author

Despite the short time since the introduction of these changes, and cultural inertia, social gains associated with the current governance reforms can already be seen (ABREU and GOMES, 2013). In order to continue development into a social democracy, it is important that non-government planners engage with the planning process even more to produce equitable plans (KNOPP, 2011; ABREU and GOMES, 2013).

Non-government planners play a fundamental role in carrying out collaborative actions, given that the open budget process is related to the collective behaviour of strategic planners as a core component of social progress (ABREU and GOMES, 2013; FERREIRA *et al.*, 2016). Brazil considers that the open budget approach is a possible strategy to obtain social gains, and there is an opportunity to study it in order to have a better understanding of the open budget consequences.

The following literature review presents the theoretical background of the open budget approach, considering the literature on governance, stakeholders, and public budgets, to support the empirical examination of the Brazilian context.

2.4. The Open Budget Approach

The open budget approach relies on actions of transparency, participation, and accountability in a strategic manner, from planning and forecasting revenues and expenditures to executing public policies (JINGUANG and XIANYONG, 2011). From direct democracy to indirect delegate models, the adoption of the open budget approach is subject to an ongoing debate about the people who should represent civil society (MANSURI and RAO, 2004).

Budgetary transparency involves full disclosure of all relevant fiscal information in a timely and systematic manner (OECD, 2002). Transparency means making information publicly available through institutions (MEIJER, 2009; 2013). Participatory budgeting gives otherwise marginalized and excluded people the right to have their voices heard and to influence public decision-making (WAMPLER, 2012; KASYMOVA and SCHACHTER, 2014). Participation creates incentives to articulate and aggregate citizens' interests, providing linkages between the ruler and ruled, policymakers and citizens (FUNG and WRIGHT, 2003; SHAH, 2007).

Budgetary accountability involves procedures for public hearings to investigate spending, public audits and an independent judiciary (ALT and LOWRY, 2010). Accountability is the responsiveness and responsibility exercised by state authorities during the period between political elections in democratic environments (FRIIS-

HANSEN and COLD-RAVNKILDE, 2013; GAVENTA and MCGEE, 2013).

Due to its complexity, accountability should be classified in public and social approaches, which link with transparency and participation initiatives, respectively (YILMAZ, BERIS and SERRANO-BERTHET, 2010). This relationship gathers transparency, participation, and accountability in a mutually integrated and reinforced open budget framework toward social development (KHAGRAM, FUNG and DE RENZIO, 2013; LING and ROBERTS, 2014).

Hypothesis 1: *More open budgeting stimulates gains in social development results.*

De Renzio and Masud (2011) state that the Open Budget Index has a rigorous methodology, independence, and comparability, making it a useful addition to existing tools. Moreover, there is statistical evidence of a positive relationship between the Open Budget Index and the Human Development Index in resource-dependent countries (DE RENZIO, GOMEZ and SHEPPARD, 2009).

Nevertheless, the Open Budget Index focuses on the transparency perspective. The development of a complete index for open budgeting remains a challenge. A measurement that gathers transparency, participation and accountability should be the key to identifying the level of open budgeting. According to Ling and Roberts (2014), an index for the open budgeting can be composed of selected survey items. The items included should relate to access to information, mechanisms of inclusion, and responsiveness and responsibility.

Budgeting means the allocation of scarce resources in the government decision-

making process (RUBIN, 2009). The budget process happens stochastically in a bounded rationale since decision-makers have limitations in studying possible alternatives (PADGETT, 1980).

The public budget is more than a document with words and figures that contain targets for government expenditures and justifies them. It is the translation of public policy priorities into financial resources (DAVIS, DEMPSTER and WILDAVSKY, 1966). According to Hyde (2002), the public budget is an instrument of management, development, control, and allocation.

Traditionally, as Rubin (2009, p. 17) states, “One of the major characteristics of public budgeting is that those who pay the bills are not the ones who make the decisions on how the money is to be spent.” Although budget-makers never have 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” (KEY, 1940, p. 1138).

As a powerful instrument for the implementation of democracy, the public budget needs to reflect citizens’ preferences to influence the economy and to focus on social outcomes (FOSTER and FOZZARD, 2000). On the other hand, the availability of budgetary resources determines the limits within which the government will execute public policies (HUGHES, 2003). According to Emerson, Nabatchi, and Balogh (2012), resources are part of the governance model as an element of joint action capability. Hence, the availability of budgetary resources moderates the governance process by the constraints on the budget’s capacity to promote social progress (VON HAGEN and HARDEN, 1996).

Hypothesis 2: *The availability of more budgetary resources provides for greater delivery of social development.*

The literature provides some indexes for measuring the level of budgetary resources. These are almost all related to public expenditures and per capita revenues. Elson and Cagatay (2000, p. 1351) argue that “when restrictive macroeconomic policies are needed, it is important to adjust the composition of fiscal expenditure and revenue so as to protect the people who are worst off.”

However, the association between budgetary resources and social development is still new in specific empirical studies. Therefore, there is a window of opportunity to test new theories and check the link between the traditional budgetary view (focused on resource availability) and the recent open budget approach.

A stakeholder can be any organisation, group or individual (FREEMAN, 1984). Stakeholders are those who have power, urgency, and legitimacy, based on demands and expectations, that can affect or be affected (MITCHELL, AGLE and WOOD, 1997). The potential for stakeholder cooperation is particularly relevant since it can facilitate collaborative efforts between an organisation and its stakeholders, which can result in better management performance (SAVAGE *et al.*, 1991).

According to Koontz (2005, p. 460), “Collaboration is characterised by diverse stakeholders working together to resolve a conflict or develop and advance a shared vision.” Stakeholders that are more dependent on a given organisation usually demonstrate greater commitment to cooperation (FREEMAN, 1984). Unfortunately, the importance of stakeholder cooperation is commonly ignored because the analysis requires a sophisticated understanding of the types and magnitudes of stakeholder

influence (GOMES and GOMES, 2008).

Emerson et al. (2012, p. 14) propose that “quality interaction through principled engagement will help foster trust, mutual understanding, internal legitimacy, and shared commitment, thereby generating and sustaining shared motivation”. In this perspective, the relationships of collaborative stakeholder are based on public and organisational values, by which collective social rules support shared gains (FREEMAN, 1984).

The participation of external collaborative stakeholders can influence government actions to help deliver social policies (GOMES, LIDDLE and GOMES, 2010). For instance, external collaborative stakeholder support for facing health problems in South Africa influenced the relaxation of intellectual property protection for HIV/AIDS medications in 2003 (DOH and GUAY, 2006).

External collaborative stakeholders typically use strategies to promote government actions in a communicative manner with a collective, collaborative and cooperative environment (KHAGRAM and ALI, 2008). Poverty reduction in social development processes is focused on collaboration among various stakeholders (BOWEN, 2005).

The influence of community cooperation on social development represents a collective endeavour toward social change, whereby external collaborative stakeholders lead actions that directly address social needs (BOWEN, 2005; KHAGRAM and ALI, 2008). Therefore, the literature suggests that social development relates to the open budget, the budgetary resources, and external collaborative stakeholders.

Hypothesis 3: *More external collaborative stakeholders' influence promotes better social development outcomes.*

Social institutions play an important role in the organisation and application of budgetary rules to stimulate a collaborative environment. Social institutions encourage individual action by making available the content of identities and rules, supporting certain behaviours in identifiable situations. These institutional structures are not static, and may change in the face of external pressures, resulting in reforms (MARCH, 2009).

Collaborative stakeholders act in a strategic manner focused on collective and cooperative causes, based on community values (SVENDSEN, 1998). The coordination of external collaborative stakeholders' influence is concentrated on collective interests (strategies and habits), as well as on social agreements, conventions, and regulations (KEIJZERS, 2003). The engagement of external collaborative stakeholders ought to facilitate communication about potential influence on government decision-making processes.

Hence, the open budget approach suggests that external stakeholders who act collaboratively push the actions of open budgeting toward social commitment (KHAGRAM, FUNG and DE RENZIO, 2013). A Korean case study suggested that external stakeholders (of the Citizens Coalition for Economic Justice) who act in a strongly collaborative environment drove transparency, participation, and accountability initiatives in order to stimulate social policy debate in public forums (YOU and LEE, 2013).

According to Ansell and Gash (2018), external stakeholders should produce positive impacts on open budgeting, in collaborative governance perspectives. This could be explained by the strategies, because of generative and positive feedback in the concept in the use of collaborative platforms, which stimulate the balance between participation in order to encourage both commitment and diversity, as well as promote transparency and accountability actions focus on the production of positive public value-creating (ANSELL and GASH, 2008; 2018).

Hypothesis 4: *An increase in the external collaborative stakeholders' influence has a positive impact on open budgeting.*

A collaborative stakeholder can act by assessing the political inducements for relevant interest groups in terms of public perceptions of legitimacy (MITCHELL, AGLE and WOOD, 1997). In this process, the resource and lobbying strategies of external collaborative stakeholders turn toward collective issues related to public interests from a budgetary perspective (DOH and GUAY, 2006).

In this line of thinking, a social fund is an institution typically set up as an autonomous agency of a national government that involves external collaborative stakeholders, through which government agencies create social mechanisms to channel budgetary resources to meet social demands (DE HAAN, HOLLAND and KANJI, 2002). The engagement of external collaborative stakeholders increases the availability of budget resources to finance social projects designed to improve living standards and help empower vulnerable and poor populations.

Although the literature suggests that external collaborative stakeholders also acts by inducing an increase in the budgetary resource (WILLIAMS and AGUILERA, 2008), further empirical investigations are needed to check the link between collaborative stakeholders and budgetary resources. Collective action in community settings is, by itself, a relevant opportunity to develop knowledge to make available the resources required in the government decision-making processes (BOWEN, 2005).

As Ansell and Gash stated (2018), the Global Environmental Facility (GEF) is an example of collaborative platform that catalyses and supports multi-stakeholders alliances on sustainable projects. For instance, in Brazil, a GEF project for the protection of Amazon Forest (ARPA) with social perspective conditioned the increase of Government expenditures in environment public policies to support new international grants (BRAZIL, 2017; GEF, 2017).

Hypothesis 5: *An increase in the external collaborative stakeholders' influence positively affects the availability of budgetary resources.*

Gomes and Gomes (2008, p. 265) suggest that a starting point to help in stakeholder measurement is to recognise that stakeholders can be either people (or categories of people) or organisations. Stakeholder influence should be focused on the identification of who has the power and interest in government decision-making processes (GOMES, LIDDLE and GOMES, 2010). However, the literature is not clear on how to measure the level of external collaborative stakeholder involvement, although some theoretical considerations support its measurement.

Nongovernmental organisations are identified as entities that mobilize communities to influence government's social actions (BOWEN, 2005). Gomes et al. (2010) state that external collaborative stakeholders should join together in a non-governmental organisation, to influence public policies, including the possibility of receiving budgetary transfers.

According to Doh and Guay (2006), the variation among non-governmental organisations in Europe and the USA shows different levels of collaborative influence in these two regions. Therefore, the number of non-governmental organisations could be a proxy to determine the level of external collaborative stakeholder engagement in a region, always in relation to the overall population, to allow the limited capacity of non-governmental organisations to mobilize people.

2.5. Theoretical Considerations

This research is based on a literature focused on governance, stakeholders, and public budget in the public administration field. Following are presented some considerations for this work related to theoretical approaches in subjects such as social development, open budget, collaborative stakeholders, and budgetary resources (table 1).

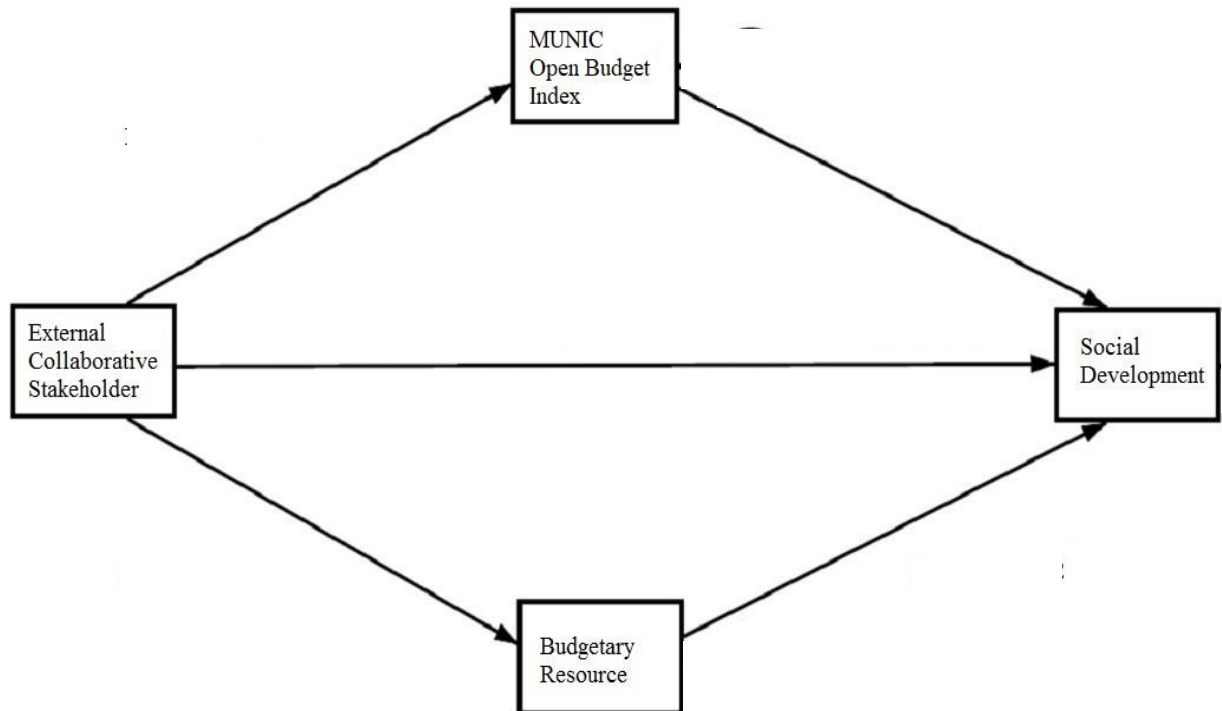
Table 1. Theoretical Considerations of the Theoretical Subjects

Subjects	Theoretical Subjects
Social development	The improvement of social development is related to the human progress in a satisfactory quality of life manner. Public needs are achieved by health, education, and better income, which produce social welfare.
Open budgeting	The open budgeting is associated with transparency, participation, and accountability initiatives in a synergic model. The adoption of the open governance perspective in the budgetary process ought to produce social gains.
External collaborative stakeholders	The external collaborative stakeholders subsidize the establishment of social commitments and actions, which are suggested to be linked with social development achievement. Moreover, they should contribute in the government decision-making process in order to influence the open budgeting adoption and the budgetary resources allocation.
Budgetary resources	The increase of budgetary resources availability is traditionally associated with the rise of the social development level. Hence, the use of budgetary resources as a moderate element should support the empirical validation process of a governance approach.

Source: Author

It was identified that these subjects of theoretical approach could be interrelated in a collaborative budget model. In this perspective, one suggestive point of evidence is that the social development appears as the focus of a governance result from the other subjects (figure 3).

Figure 3. Social Development as a Governance Result



Source: Author.

The open budget approach covers several grounds. Consequently, it is possible only through the incorporation of concepts from a broad range of literature. Although this is not a complete or conclusive subject, it provides grounds for empirical investigations from five theoretical hypotheses.

However, before testing the five hypotheses, it is required to fill another lack of literature: the theoretical absence of how to gauge the level of external collaborative stakeholders and open budgeting. Therefore, this research is

designed to support new theories, from qualitative and quantitative strategies, as can be seen in the next chapters.

3. The Methodological Aspects

In this dissertation, the starting point is the theoretical background identification of the open budget approach, based on governance, stakeholders, and public budgeting theories. The literature review focused on the examination of empirical pieces, searching for evidence to validate the open budget framework and its conditions. On the other hand, since this is still a theme in progress, some theoretical and working papers were considered, as well as academic books, on supporting a better understanding of the most recent insights and practices in the open budget field.

It began with the collection of pieces related to transparency, participation, and accountability actions with governance perspective. The main sources were journals that had an impact factor in Thomson Reuters' 2014 Journal Citation Reports, at the Public Administration section. Some other pieces, available in the Google Scholar database, were also consulted.

Afterwards, to prioritise the analysis of the findings, there were selected for the scope of this review the empirical and theoretical articles using the NVivo software, focusing on pieces subjected to a peer-reviewed academic process. Nevertheless, working papers and books from academic presses or well-known publishers were also considered.

The theoretical investigation focused on the contribution that each item's findings brought to support the development of the open budget approach. There were recognised 14 piece findings (table 2) with the higher relevance contributions that gather transparency, participation, and accountability in a governance view. Next, this review was complemented by 71 findings related to the open budgeting, in general, to identify possibly isolated conceptions and models, such as the ones of Gaventa and Barrett (2012), Touchton and Wampler (2014), and Friis-Hansen and Kyed (2009).

Almost all findings have good reflections and present robust methods. However, some of them did not undergo a peer-reviewed academic process, such as Petrie (2012), what demanded more attention before the results citation. The theoretical papers help to understand the definition details of each framework element. Furthermore, some of the books and working papers contain overviews of open budgeting, as well as practices that should support new studies on this theme – for instance, Khagram et al. (2013) and Ling and Roberts (2014). These findings give an updated view mainly because of the literature review presented, the empirical evidence that supports the development of the open budget approach, and the collaboration with the formulation of theoretical hypotheses.

Table 2. Contributions' summary of higher relevance pieces

Author	Year	Type	Contributions' Summary
De Renzio and Wehner	2015	Working Paper	Evidence review that transparency and participation, linked with accountability actions improve the quality of the budget and promote macro-fiscal outcomes, resource allocation, and service delivery, as well as governance and development outcomes.
Ling and Roberts	2014	Working Paper	Evidence of development impact from the institutional change of open budget actions, highlighting the multi-stakeholder importance in a collaborative decision-making process.
Friis-Hansen and Cold-Ravnkilde	2013	Working Paper	Social accountability definition, linked with participation and transparency mechanisms, focused on the demand-side of good governance.
Gaventa and McGee	2013	Journal Article	Impact and effectiveness of transparency and accountability, as well as participation initiatives, in development outcomes.
Justice and McNutt	2013	Journal Article	Quantitative empirical results that support open budget initiatives are related to greater perceptions of official corruption.
Khagram, Sanjeev, Archon Fung, and Paolo De Renzio	2013	Academic Book	Open budgets promote transparency, participation, and accountability actions in order to achieve development results in a governance perspective.
Wehner and De Renzio	2013	Journal Article	Empirical results suggest the open budget effectiveness is associated with the quality budgetary outcomes, lower sovereign borrowing costs, decreased corruption, and less creative accounting by governments.
De Renzio and Masud	2011	Journal Article	Recognition of the valid methodological approach of the Open Budget Index, from the governance perspective.
Masud	2011	Journal Article	The implementation of open budget reforms is paramount and should be focused on legislatures and audit institutions in order to promote quality improvements.
Yilmaz, Beris, and Serrano-Berthet	2010	Journal Article	The decentralisation reforms are associated with accountability promotion, as well as transparency and participation actions.
Shah	2007	Working Paper	Participatory Budgeting creates incentives for good governance from institutional mechanisms to empower citizens.
Kaufmann and Bellver	2005	Conference Paper	Empirical analysis between open budget actions and development.
Siau and Long	2006	Journal Article	Quantitative evidence supports that country development is associated with the availability of open government technological services.
Foster and Fozzard	2000	Working Paper	Transparency, participation, and accountability actions affect the budget quality improvements, and, as well as the available resources, are related to the social gains.

Source: Author

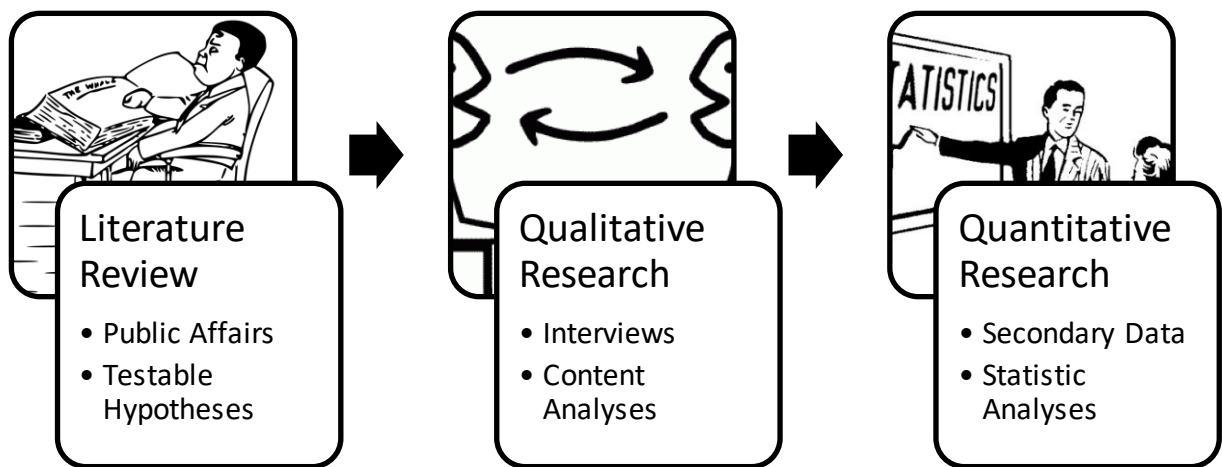
In this context could be recognized the suggestion that open budgeting impacts social development. Nevertheless, more than necessary for checking this preliminary suggestion is the acknowledgment of the possible existence of external collaborative stakeholders and open budgeting. Moreover, the availability of a budgetary resource moderates the governance process by the constraints on the budget's capacity to meet social development (AMES, 1990; VON HAGEN and HARDEN, 1996; GRUBER, 2009).

Therefore, bearing in mind the aims of this research, the work was planned to be executed in two procedures, using a sequential mixed method for: the identification of forms to measure levels of external collaborative stakeholders and open budgeting as determinant factors related to social development, from a qualitative study, exploring specialist evidence (first procedure); and the verification of the relationship among external collaborative stakeholders, open budgeting, budgetary resources, and social development, from a quantitative study, exploring secondary data (second procedure).

Considering what Creswell (2013) stated, the qualitative research has focused on constructivist allegations based on a narrative investigation process, using different interview methods. On the other hand, the quantitative research has focused on objectivist allegations based on testable hypotheses by a quasi-experimental process, using statistical methods. The methodological details of both types of research (qualitative and quantitative) are following detailed.

The use of a mixed method project presupposes a sequential research implementation (figure 4) with a pragmatic view. In this process, the application of triangulations among the empirical results and literature gives a step forward to fill the lack of knowledge on the open budget consequences.

Figure 4. The Research Design Workflow



Source: Author

Brazil was selected due to the significant amount of data available in more than 5,000 municipalities (for instance, from economic and geographic statistical surveys or finance databases of government agencies), as well as the long period from when the decentralisation principle was institutionalised (since 1964, when the Decree-Law n. 200 was published). Moreover, another justificative for selecting Brazil as a case study is the fact that in the 2012 Open Budget Survey (IBP, 2014) its score was one of the best in the world sample and the leader in Latin America. The existence of senior specialists on finance as civil servants and researchers in Brazil is very welcome to obtain data from the interviews as well.

3.1. Gauging Determination of External Collaborative Stakeholders and Open Budgeting

The purpose of this research phase is to identify how to measure the open budgets core elements (external collaborative stakeholders and open budgeting) in order to figure out the importance of transparency, participation, and accountability for making society more developed and fair, in a constructivist perspective. Evidence based on policy and practice can produce a better understanding of “what works with whom and in what circumstances” (BOAZ and NUTLEY, 2003, p. 332).

Following the interpretive strategy put forward by (SILVERMAN, 2010), the methodological aspects are designed to be executed using qualitative methods. Comparative analyses are required to identify pragmatic evidence. Therefore, I collected data from open questions in interviews conducted with Brazilian professionals who have expertise in the area of public budgeting (LEE and LINGS, 2008; CRESWELL, 2013).

This study focuses on the identification of performance indicators for measuring Open Budget Actions and Collaborative Stakeholder Influences in the Brazilian governance structure. Brazil is taken as a case study in this paper because in the 2012 Open Budget Survey (IBP, 2014) it was the twelfth in a world sample of one hundred countries. In the same survey, Brazil also was at the Latin America leader position.

From November 2015 to February 2016, it was conducted 15 open-ended interviews (three for each group of respondents) from National Congress consultants (NCC), government finance analysts (GFA), social government executives (SGE), public budget researchers (PBR), and civil society organisation's leaders (CSO). Finally, It was carried out content analysis of the data to describe open budget core elements, which may be used at all levels of government (BARDIN, 1977; SILVERMAN, 2010).

The National Congress consultants, government finance analysts and social government executives interviewed were all federal and local budgetary specialists. These groups focus on the legislative budgetary process, executive control of finance, and social policy execution. The public budget researchers interviewed were employees of government economic and statistical entities linked to the Budget Ministry and an accounting professor at the University of Brasilia. The leaders of civil society organisations were from the International Budget Partnership, Institute for Socioeconomic Studies, and Open Accounts.

From this methodological design and addressing an open budget process focused on improvements in the quality of life, the interview process asked respondents to describe what they thought would be good measures of external collaborative stakeholders and open budgeting. After completing the data collection process, It was conducted a validation procedure by sending each interviewee the transcript of his or her interview for their assessment.

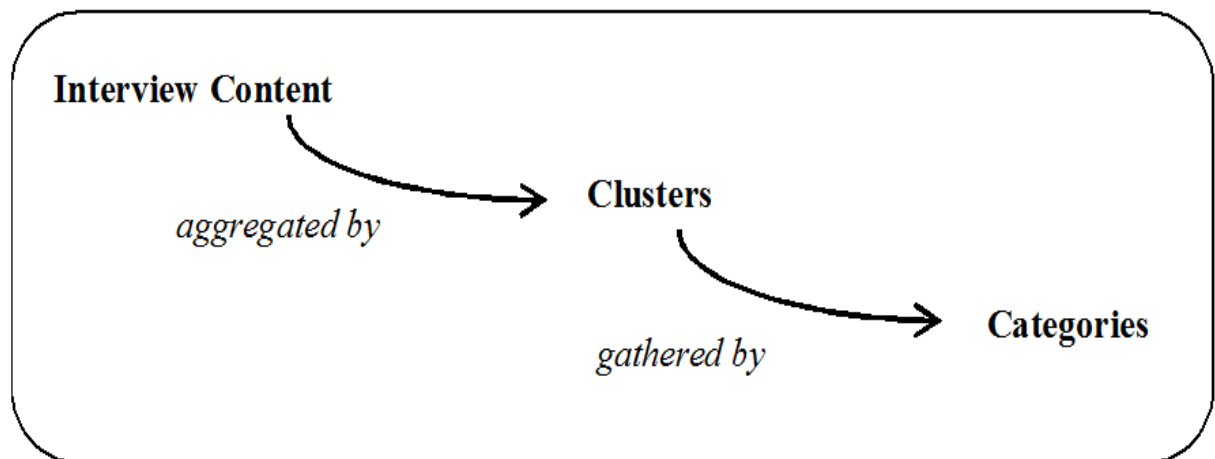
The selection of three budgetary experts from different organizations for each of the five groups was strategic in the sense that opinions were gathered from experts on all the stages of the budgetary process from the development phase to the evaluation phase. The focus was content analysis because it has the potential to maximise the extraction of knowledge from interview responses using open questions, and to integrate evidence from different levels in a structured framework (BARDIN, 1977; BRYMAN, 2012).

Consequently, from this methodological design, considering an open budget process focused on life quality improvements, the interview questionnaire (see appendix I) focused on determining what the respondents see as good measures of external collaborative stakeholders and open budgeting. However, first It was presented the main theoretical definitions that based my interview questions. In addition, It was asked for complementary issues and further perspectives of the following interview questions:

“Focusing on improving the quality of life for society, how can be measured the level of open budgeting actions and the collaborative stakeholder influences?” (Author free translation)

It was analysed the collected data, focusing on the classification of data into clusters. Then, based on these clusters, It was identified three different categories: Measurement Forms (A); Complementary Issues (B); and Further Perspectives (C). See the content analysis framework in figure 5.

Figure 5. Content Analysis Framework



Source: Author

Finally, It was used NVIVO software for the content analysis. The results are presented in clusters of categories, linked with groups of interviewees, and highlighting the theoretical contribution. It was also used the Rapidminer program for data mining to explore and identify the priority clusters and their relationships. Finally, I plotted a net-map of the relationships between the groups to find clusters, using the UCINET software.

3.2. Checking the Social Development Consequences from External Collaborative Stakeholders, Open Budgeting, and Budgetary Resources

To check the theoretical hypotheses, this study is based on an objectivist perspective, using a quantitative strategy to check elements that may be involved in the open budget process. In line with Shadish et al. (2002), It was used an ex-post-facto method formulated from complex links between the elements identified in the literature review.

Following Williams, Vandenberg, and Edwards (2009), It was argued that the use of structural equations modelling can support an expansion of the literature. The structural equation modelling and goodness of fit statistics help to test the theoretical suggestions related to the open budget approach. Furthermore, It was tested the model's stability, the effects of variables, and the power of endogenous variables to predict the exogenous variable, as well as observing the covariance and residual matrices.

It was collected data from official governmental surveys and financial databases, as well as from the UNDP index. In the following section, the variables are described.

Exogenous variable

Social development: The UNDP formulates the Human Development Index (HDI) as a proxy for social development. HDI has three aspects (income, longevity, and education), which cover points theoretically considered for the definition of social development. For Brazil, this index is based on national census data consolidated at the municipal level. The data are available on the UNDP website (available at <http://www.undp.org/content/brazil/pt/home.html/>).

Endogenous variables

MUNIC Open budget index: The Brazilian Institute of Geography and Statistics conducts a yearly survey to collect municipal data on public administration and policies called MUNIC. The selection of the MUNIC survey items had the purpose of determining the open budget level and was based on the identification of transparency or participation actions, which linked with accountability view. In this process, it was identified 20 items related to government communication initiatives to provide transparency and 20 items associated with citizen engagement to promote participation (table 3). Therefore, the composition of this innovatory index considers that each of the 40 selected items has the same weight to gauge the open budget level. The data are available on the Brazilian Institute of Geography and Statistics website (available at <http://www.ibge.gov.br/home/>).

Table 3. Items that compose the MUNIC open budget index.

Code	Description
A130	Communication to general public: mail
A132	Communication to general public newspapers
A133	Communication to general public: internet
A134	Communication to general public: telephone
A135	Communication to general public: ombuds offices
A145	Communication by internet (egov initiative): newsletter
A146	Communication by the internet (egov initiative): document public access
A147	Communication by the internet (egov initiative): procurement
A148	Communication by the internet (egov initiative): ombuds offices
A149	Communication by the internet (egov initiative): electronic trading
A150	Communication by the internet (egov initiative): electronic processes
A151	Communication by the internet (egov initiative): electronic licensing
A152	Communication by the internet (egov initiative): government journals, legislation, and finance
A153	Communication by the internet (egov initiative): civil servant selection
A154	Communication by the internet (egov initiative): school enrolment
A155	Communication by the internet (egov initiative): certificate issuance
A156	Communication by the internet (egov initiative): medical appointment scheduling
A158	Communication by the internet (egov initiative): friendly disability
A159	Communication by the internet (egov initiative): suburbs with free public access points
A160	Communication by the internet (egov initiative): government agencies with free access points
A197	Education policy: participative management in schools
A211	Education policy: existence of a council
A212	Education policy: the council has community participation
A214	Education policy: the council is advisory
A215	Education policy: the council is deliberative
A216	Education policy: the council is normative
A217	Education policy: the council is investigative
A218	Education policy: the council had a meeting last year
A223	Education policy: private partnership
A224	Education policy: community support
A391	Health policy: existence of a council
A393	Health policy: the council has community participation
A394	Health policy: the council is advisory
A395	Health policy: the council is deliberative
A396	Health policy: the council is normative
A397	Health policy: the council is investigative
A398	Health policy: the council had a meeting last year
A401	Health policy: Government planning
A417	Health policy: private partnership
A418	Health policy: community support

Source: IBGE 2009 MUNIC Survey (available in <http://www.ibge.gov.br/>)

External collaborative stakeholder: The Brazilian Institute of Geography and Statistics also carries out a municipal survey to collect data on non-governmental organisations. It was used the per capita number of non-governmental organisations in a municipality as a proxy for the external collaborative stakeholder power to influence social development results, taking into account the importance of the population in increasing the power effect. In this sense, the density of non-governmental organizations indicates the influence level of external collaborative stakeholders in order to mobilize people over a public policy decision-making process. Data is available on the Brazilian Institute of Geography and Statistics website.

Budgetary resource: The Brazilian National Treasury consolidates municipal accounts in a database. It was used per capita municipal public expenditure as a proxy for the budgetary resource. In this case, as in the case of external collaborative stakeholders, It was scaled this to the population. The data are available on the Brazilian National Treasury website (available at <http://www.tesouro.fazenda.gov.br/>).

Most of the data pertain to 2010, so it was decided to adopt a cross-sectional analysis because of the broad sample of Brazilian municipalities – 96.4% of municipalities and 96.2% of the population (table 4). It was used the 2009 data from the MUNIC survey, because of the prioritization of the national census in 2010 precluded conducting the MUNIC survey that year.

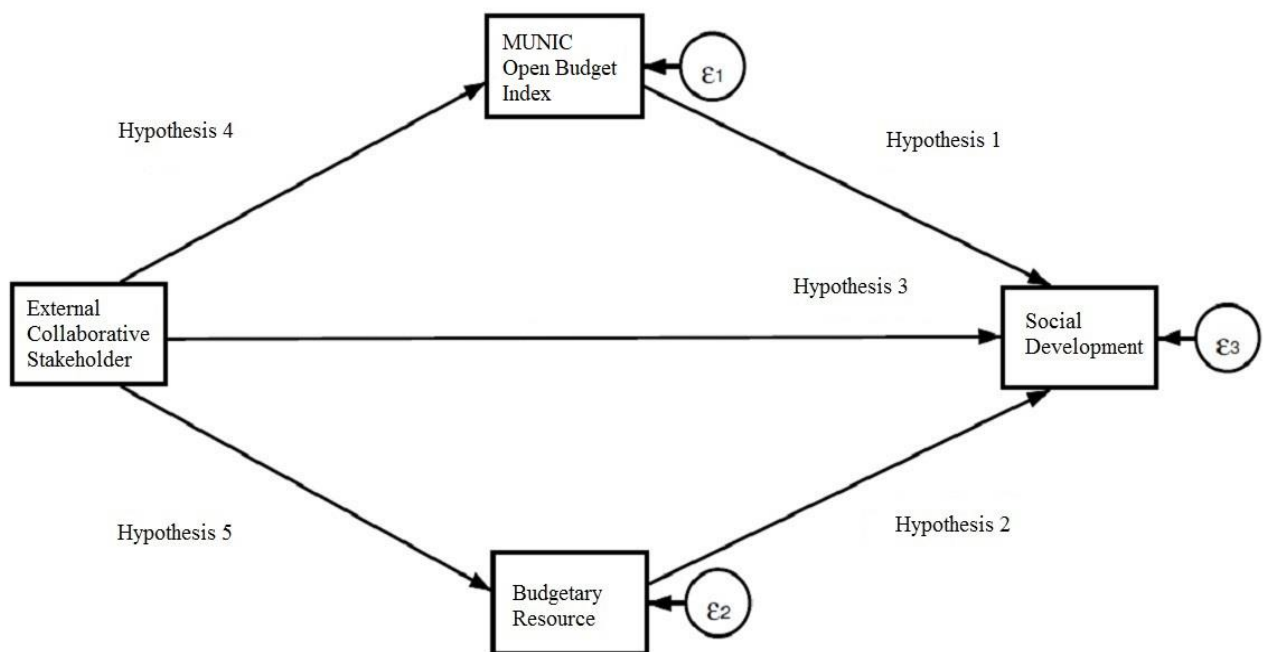
Table 4. Sample of Brazilian Municipalities in Numbers

Geographic Region	Number of Municipalities	Region Population	Municipality Population		
			Mean	Minimum	Maximum
Northeastern	1,706	53,011,607	31,074	1,253	2,675,656
Southeastern	1,653	78,242,310	47,334	805	11,253,503
Southern	1,158	27,538,451	23,781	1,216	1,751,907
Middle-western	434	10,934,484	25,195	1,020	1,302,001
Northern	413	13,721,741	33,225	1,037	1,802,014
Sum	5,364	183,448,593			

Source: Brazilian Institute of Geography and Statistics (2010)

I was used the 2010 national census data to obtain the municipal populations, to operationalize the per capita indexes. All data are in a 0-1 standard scale. It was used the STATA 13 software for all statistical tests. Figure 6 depicts the tested structural equation modelling. The variables are in boxes and arrows indicate their relationships. Each of the hypotheses was tested in isolation and from an integrated perspective, and the compound of the five theoretical hypotheses represents the structural equation modelling.

Figure 6. Structural Equation Modelling



Source: Author

Finally, as Mikut and Reischl (2011) suggest, It was used comparative analyses with the support of a data mining tool (Rapidminer software) to help test the results. Following the suggestions of Monteiro (1995), It was used the regional classification of Brazilian Institute of Geography and Statistics to aggregate the municipalities into two groups: the equatorial (northern and north-eastern regions); and the tropical (southern, south-eastern and middle-western regions).

4. Results

Following, first, it was presented the results of how to identify forms to measure the levels of external collaborative stakeholders and open budgeting as determinant factors related to social development.

Next, It was shown the verification if external collaborative stakeholders, open budgeting, and budgetary resources can explain social development, as well as It was reported a new governance model based on the open budgeting elements.

4.1. The Measurement Forms of Open Budgeting and External Collaborative Stakeholders

First, It was presented the results of the content analyses. The clusters provide evidence on how to measure external collaborative stakeholders and open budgeting. Groups of respondents identify clusters. Table 5 shows the clusters of Measurement Forms, which I classified.

Table 5. Measurement Forms

Clusters	Related to		Occurrences*					Sum
	OB	CS	NCC	GFA	SGE	PBR	CSO	
A01 – The number of civil society organisations		√	3	3	3	1	3	13
A02 - The presence of social councils and their components of operation	√		1	2	3	2	2	10
A03 - The existence of specific elements of a government open data process	√				2	2	2	6
A04 - The occurrence of participatory budget characteristics in public choices	√			2	1		1	4
A05 - The government's answerability to citizen questioning	√				2	1		3
Sum			4	7	11	6	8	36

* OB – open budgeting, CS – external collaborative stakeholders, NCC – National Congress consultants, GFA – government finance analysts, SGE – social government executives, PBR – public budget researchers, and CSO – civil society organisations.

Source: Author

The respondents gave clear evidence that the number of Civil Society Organisations measures the level of external collaborative stakeholders. The presence of social councils, open data systems, participatory budgeting and government answerability are all indicators of the level of open budgeting. Clusters A01 (13) and A02 (10) are crucial, because of the strong evidence was given by all groups of interviewees, and these two clusters are associated with open budgeting and external collaborative stakeholders respectively. Table 6 presents the clusters for the Complementary Issues category.

Table 6. Complementary Issues

Clusters	Related to		Occurrences*					Sum
	OB	CS	NCC	GFA	SGE	PBR	CSO	
B01 - The determination of the accountability level should be associated with the transparency and participation measurement	√		1	2	3	2	3	11
B02 - The mechanism for measurement related to the Open Budget Index should be a good reference to infer the transparency level	√		1	2	1		2	6
B03 - The data from IBGE FASFIL Survey should determine the Brazilian municipal level of CS		√				2		2
B04 - The data from the IBGE MUNIC Survey should determine the Brazilian municipal levels of transparency, participation, and accountability actions	√					2		2
B05 - The E-GOV initiatives should be associated with participation	√			2				2
B06 - The Brazilian Health System, for instance, should be evidence of social result related to the influences of civil society organisations in the government decision-making process		√	1		1			2
B07 - The activity of the civil society organisations indicates the compliance with CS		√	1		1			2
B08 -The Participatory Commission of Brazilian Parliament supports political social demands of society	√		1			1		2
B09 – The OB measurement is complex and without a clear agenda	√						2	2
B10 – The OB should be mutually integrated	√					1		1
B11 -Civil society organisations should collaborate more when they do not receive resources from governments		√			1			1
B12 - The participation initiatives should be easier to execute in local governments	√					1		1
B13 – The OB should affect the level of social progress	√		1					1
B14 - The implementation of OB should consider the GIFT, PEFA, and INESC principles	√						1	1
Sum			6	6	7	9	8	36

* OB – open budgeting, CS – external collaborative stakeholders, NCC – National Congress consultants, GFA – government finance analysts, SGE – social government executives, PBR – public budget researchers, and CSO – civil society organisations.

Source: Author

From the number of occurrences, I was highlighted the clusters B01 and B02, which suggest that the accountability level together with the standardisation of transparency and participation can be used as indicators. Measuring of the level of open budgeting is not a simple process.

The budgetary agenda is not clearly stated most of the time. The Open Budget Index is an incomplete reference for determining the levels of open budget actions, because it concentrates the measurement effort on transparency aspects, missing components related to participation and accountability. To measure open budgeting in a proper manner, one needs to take into account open government practices and open budget principles.

The Brazilian external collaborative stakeholder's measurement can use the Brazilian civil organisation survey as a reference. When the government collaborates with civil society organisations, the social results supposed to increase. The implementation of the Brazilian Health System is good evidence of external collaborative stakeholders.

In the Further Perspectives category (table 7), each of the fourteen clusters has less than five occurrences. Nevertheless, all of them are crucial because they offer good suggestions, either to improve government actions or to support new studies.

Table 7: Further Perspectives

Clusters	Related to		Occurrences*					Sum
	OB	CS	NCC	GFA	SGE	PBR	CSO	
C01 - The Brazilian governments could develop more channels to interact with collaborative stakeholders		√	2	1			1	4
C02 - The budgetary education initiative could support more budget participation initiatives	√		1		1	1	1	4
C03 – The budget allocation laws (amendments) enacted in response to civil society organisations’ interests could indicate who is involved in the budgetary process	√		1	1		1		3
C04 - The government stakeholders could believe more in the power of collaborative stakeholders to influence social results		√	1				1	2
C05 - The Brazilian audit tribunals could be more open-minded to accept innovative actions with an accountability perspective	√		1			1		2
C06 - The social results could stimulate a virtuous circle from OB	√		1			1		2
C07-The Brazilian budget actions should not have actions with unclear descriptions	√		1	1				2
C08 - The Brazil transparency level could be more useful in practical terms	√		1				1	2
C09 - The Open Budget Index could consider elements of participation in its measurement mechanisms	√						2	2
C10 - The data from IBGE PNAD surveys could relate to the Brazilian municipal level of social indexes	√					1		1
C11 - The participation in budget formulation needs to guarantee the corresponding participation in budget evaluation	√			1				1
C12 - The accountability initiatives could be better developed at all Brazilian government levels	√		1					1
C13 - The budgetary articles in the media could indicate the level of openness actions	√		1					1
C14 - The participation could avoid restrictions regarding budgetary resources	√						1	1
Sum			11	4	1	5	7	28

* OB – open budgeting, CS – external collaborative stakeholders, NCC – National Congress consultants, GFA – government finance analysts, SGE – social government executives, PBR – public budget researchers, and CSO – civil society organisations.

Source: Author

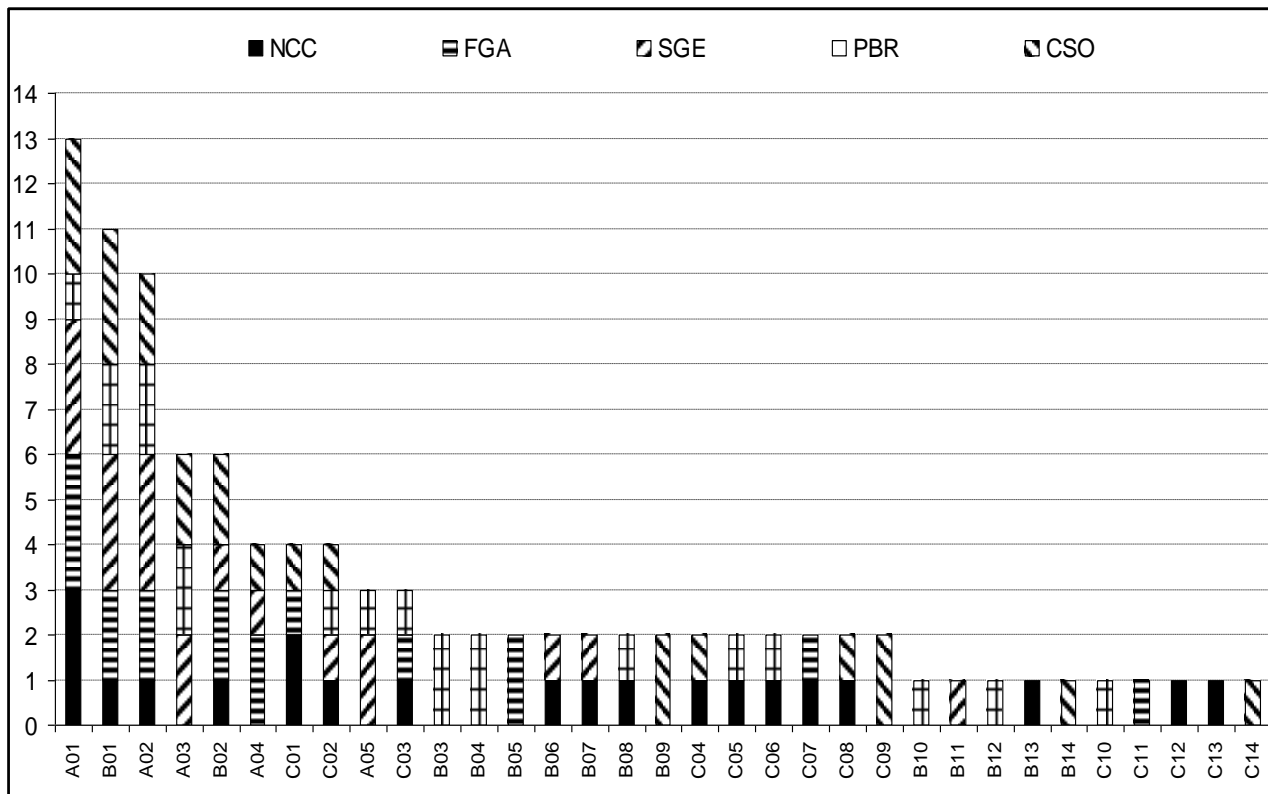
For example, it is important that governments create channels to interact with collaborative stakeholders. This includes evaluation processes, using clear specifications of budget actions, from transparency to innovative accountability measures, without limiting them to small amounts of resources.

Similarly, the government needs to prioritise budget education and to consider the power of collaborative stakeholders to have a positive influence on the decision-making process. The legislative budget allocations and articles in the news media provide additional evidence of external collaborative stakeholders.

In addition, the open budgeting is associated with social progress, which can be measured using selected items from municipal surveys. The adoption of open budgeting ought to promote a virtuous cycle of social progress.

Based on the verification of the number of interviewees' occurrences by cluster (figure 7), I observed that there are three clusters in featured. These three clusters were mentioned by at least one representative of all groups, as well as have been cited by 66% or more of all the interviewees.

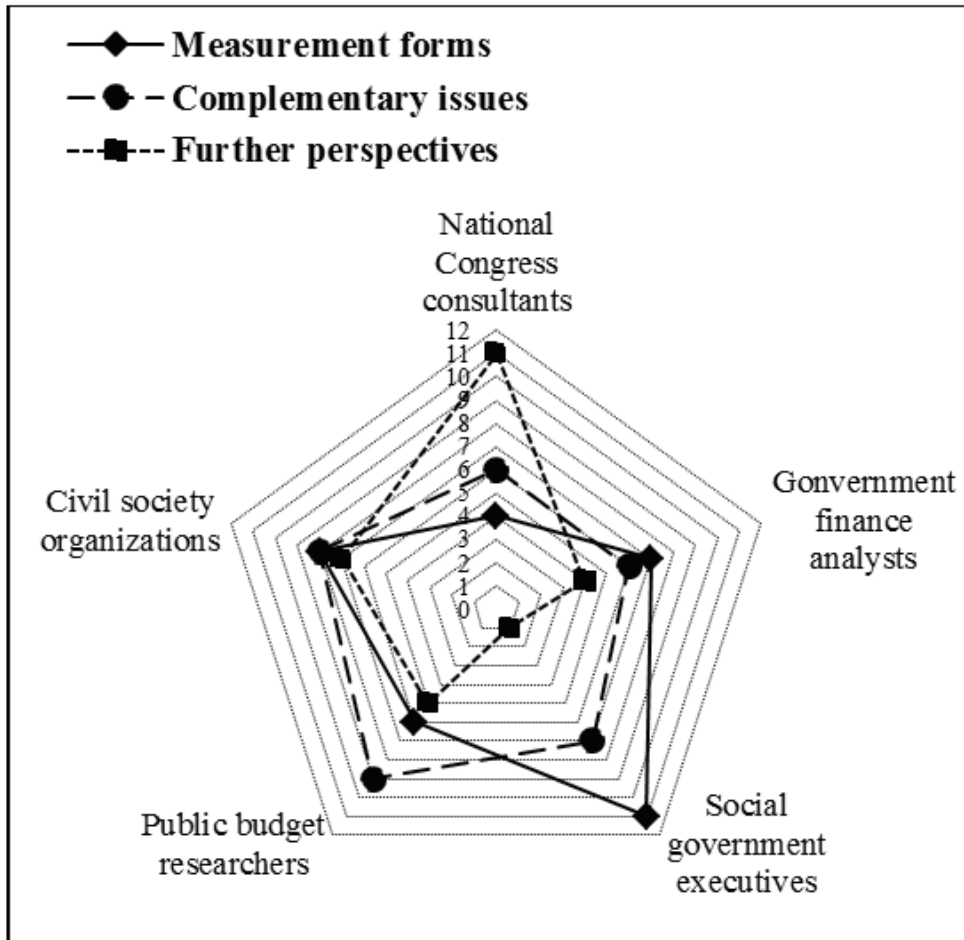
Figure 7. Occurrences by Clusters



Source: Author

It was emphasized that the data for each category of evidence was obtained from a different group of interviewees (figure 8). The strongest contribution to Measurement Forms came from social government executives (11), public budget researchers (9) and National Congress consultants (11). One curiosity is that It was found evidence from social government executives for Further Perspectives. However, every group of interviewees contributed to a similar number of clusters, with an average of 20.

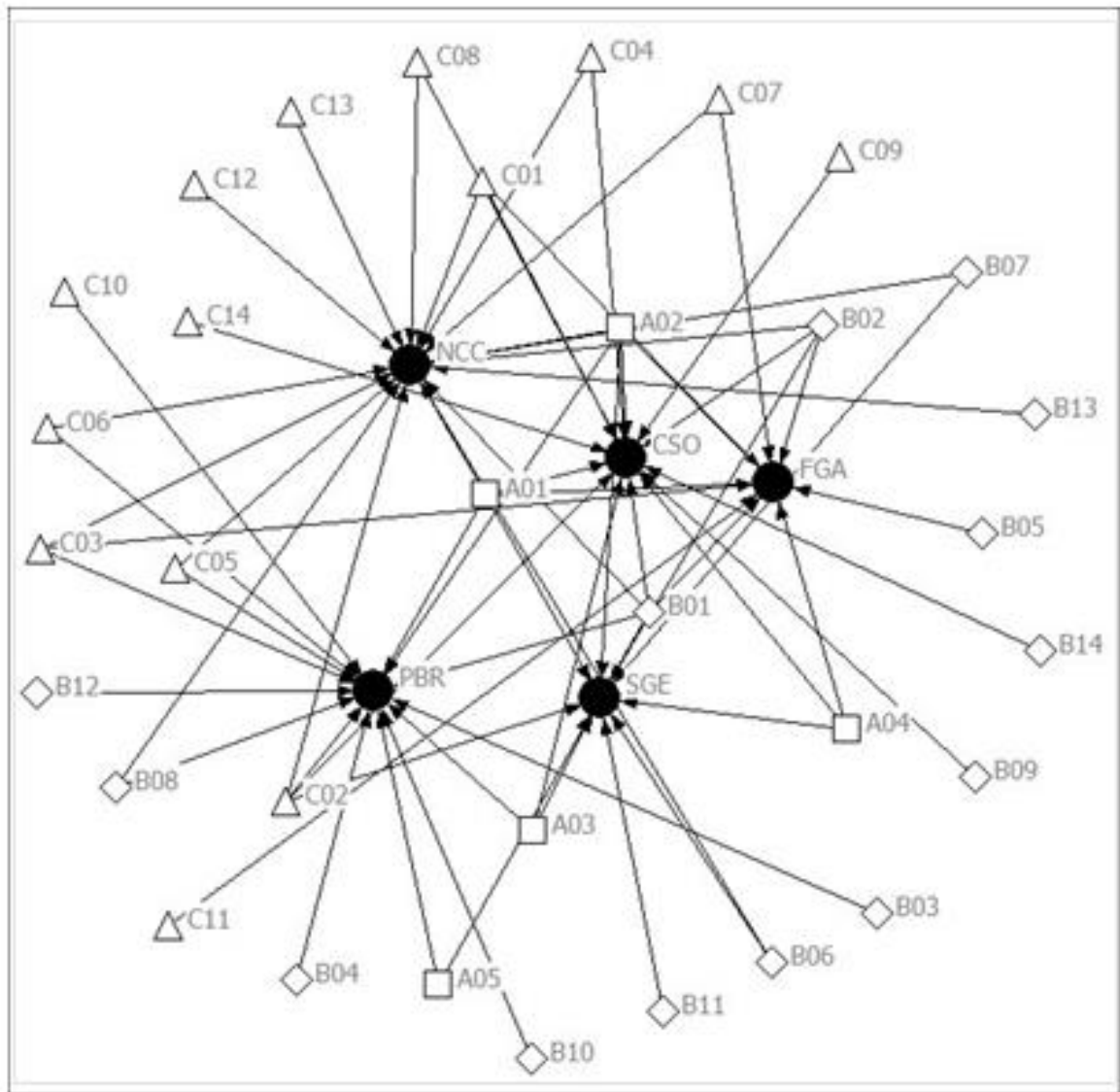
Figure 8. Occurrences in Groups of interviewers by Categories



Source: Author

Next, from the analysis of the net-map (figure 9), I note the relevance of clusters A01, B01, and A02. Because all groups of interviewees refer to these three clusters, they stayed in a core (central) position in the net-map of relationships between clusters and social groups, based on the nearest Euclidean distance.

Figure 9. Net-Map of Relationships between Clusters and Social Groups



Source: Author

The analysis of the interviews produced evidence on how to measure external collaborative stakeholders and open budgeting, their complementary issues and further perspectives. The clusters grouped the evidence, gathered into categories. Clusters A01, B01, and A02 have the highest values.

4.2. The Improvement of Social Development from Open Budgeting, External collaborative Stakeholders, and Budgetary Resources

Based on the literature review, It was examined the relationship among external collaborative stakeholders, MUNIC open budget index, budgetary resources, and social development. These variables are combined in three structural equations. The data of this cross-sectional study come from 5,364 (96%) of the 5,566 Brazilian municipalities in 2010.

Social development is the exogenous variable, and external collaborative stakeholders, MUNIC open budget index, and budgetary resources are the endogenous variables. Table 8 reports the summary of the statistical results of structural equation modelling.

Table 8. Structural Equation Modelling Statistical Summary Results

Social development (SD)	Structural Equations		
	1 st CS; OB; BR => SD	2 nd CS => OB	3 rd CS => BR
Intercept	0.5204363 *** (0.0030983)	0.3956755 *** (0.0028387)	0.1305619 *** (0.0016253)
External collaborative stakeholders (CS)	0.166952 *** (0.0111584)	0.226319 *** (0.0230644)	0.3222374 *** (0.0132056)
MUNIC open budget index (OB)	0.2164679 *** (0.0062236)		
Budgetary resource (BR)	0.2087836 *** (0.0108699)		
R-Squared	0.3006103	0.0176337	0.0999146
Fitted	0.0050924	0.0174581	0.0062463
Variance predicted	0.0015308	0.0003079	0.0006241
Residual	0.0035616	0.0171503	0.0056222
N	5364		
Overall R-Squared	0.149655		
Chi ² (test of model vs. saturated)	2.55		
Prob > Chi ²	0.1103		

Sig Levels: '**' 0.05; '***' 0.01; '****' 0.001

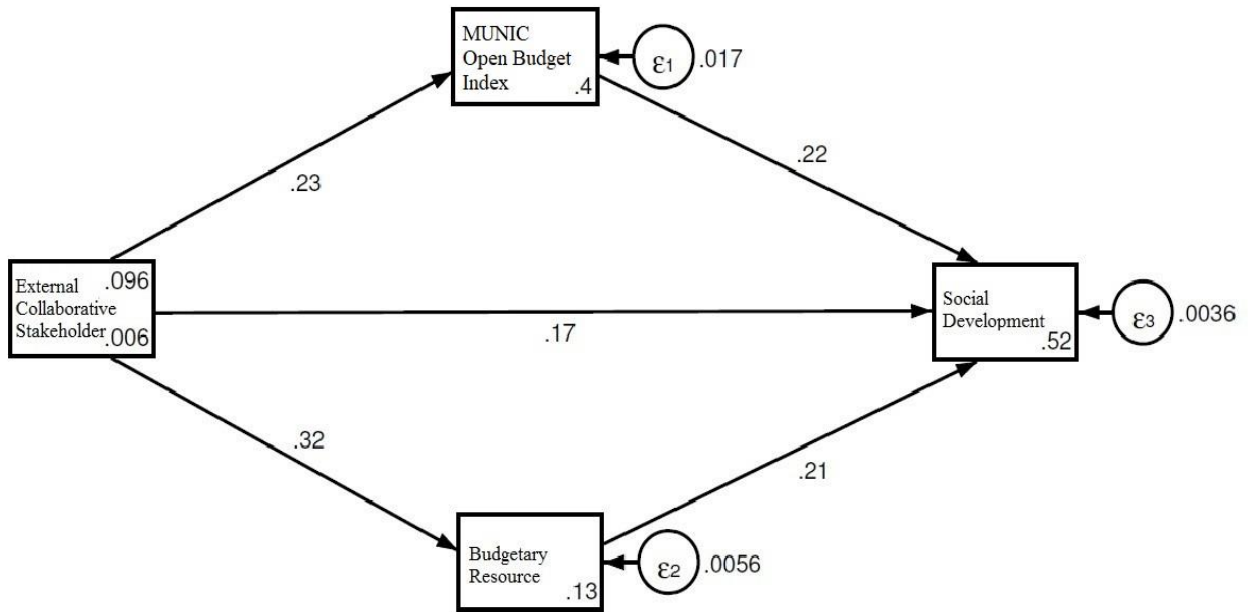
Source: Author

It was used the maximum likelihood estimation method. The three structural equations have coefficients and constants which are statistically significant at the $p < 0.001$ level. The equations explain 30%, 2%, and 10%, and of social development in terms of external collaborative stakeholder involvement, MUNIC open budget index, and budgetary resources, respectively. The overall explanation is 15%. Therefore, all the structural equations make a relevant contribution to explaining social development.

The result of the Chi-squared test (model vs. saturated) is 2.55 (p -value = 0.1103), meaning that the difference between the covariance matrices is not statically significant at the 0.05 level. Moreover, all residuals of covariance and observed variables are less than 0.001, and the structural equation modelling satisfies the stability condition (stability index = 0). Hence, according to the recommendations of Hair et al. (2006), these tests suggest sufficient goodness of fit.

Figure 10 presents the estimated model with the coefficients and errors, which I call The Collaborative Budget Model. The relationships between the variables are those that are represented by the theoretical hypotheses in figure 10.

Figure 10. Structural Equation Model: The Collaborative Budget Model



Source: Author

From the analysis of the levels of significance of the coefficients, It is possible to infer that the five theoretical hypotheses are confirmed by the empirical results of the three structural equations employed in the tests. In other words, MUNIC open budget index, external collaborative stakeholders, and budgetary resources relate to social development, and external collaborative stakeholders relate to open budgeting and budgetary resources. In combination, these results produce the model.

Table 9 shows the direct, indirect and total effects of external collaborative stakeholders, MUNIC open budget index, and budgetary resources on social development. Adding direct and indirect effects of the external collaborative stakeholders' variable, It results a coefficient of .28 and that means: adding one unity in this variable is likely to increase social development by nearly 30%. The effect sizes

in the model help to identify which independent variable has the strongest effect on the exogenous variable.

Table 9. Direct, Indirect and Total Effects of the Structural Equation Modelling

Variables of the Structural Equations	Effects on Social development		
	Direct	Indirect	Total
External collaborative stakeholder	0.166952 *** (0.0111584)	0.1162687 *** (0.006824)	0.2832207 *** (0.0119583)
MUNIC open budget index	0.2164679 *** (0.0062236)		0.2164679 *** (0.0062236)
Budgetary resource	0.2087836 *** (0.0108699)		0.2087836 *** (0.0108699)

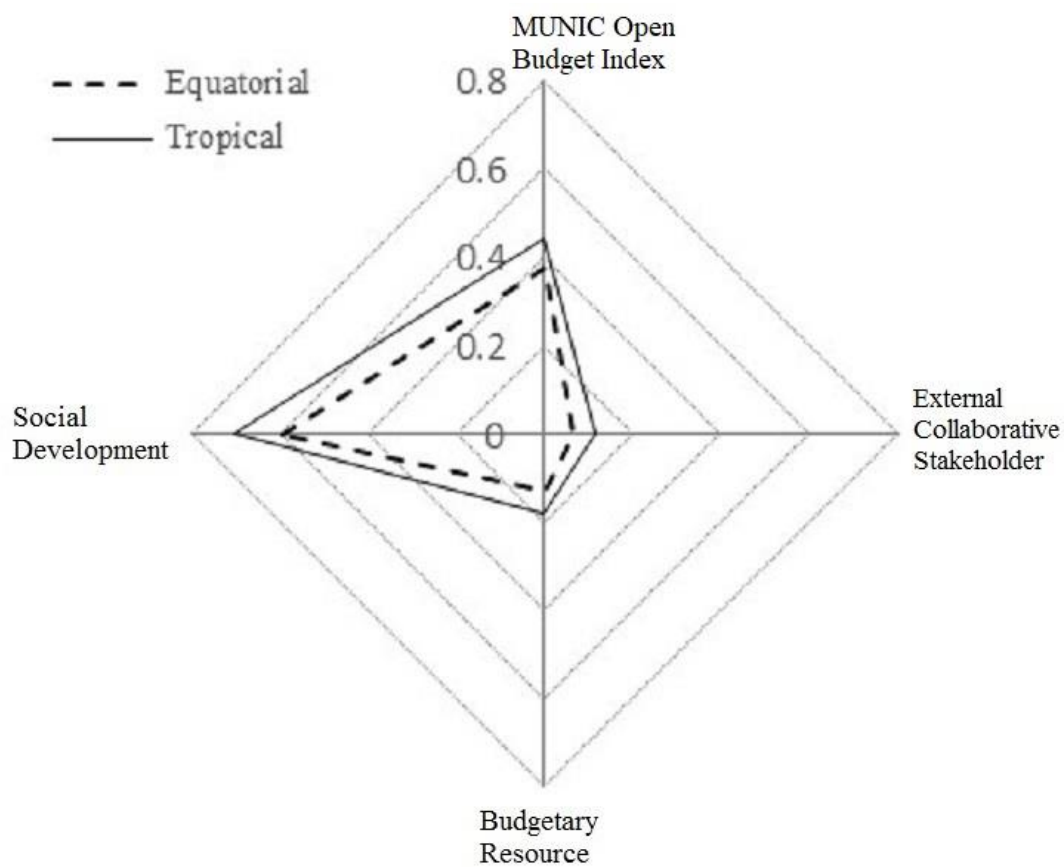
Sig Levels: '**' 0.05; '***' 0.01; '****' 0.001

Source: Author

The empirical evidence indicates that MUNIC open budget index has the strongest direct effect on social development, followed by budgetary resources and external collaborative stakeholders. However, considering the indirect effect of external collaborative stakeholders, this ranking change considerably, since external collaborative stakeholders move into the first position, followed by MUNIC open budget index and budgetary resources.

In figure 11, It was presented comparative results for aggregations of Brazilian municipalities in equatorial (northern and northeastern regions) and tropical (middle-western, southeastern, and southern regions) groups. It shows the means of MUNIC open budget index, external collaborative stakeholders, budgetary resources, and social development for both groups. According to Abreu, Gomes, and Alfinito (2015), It should be expected higher social development in the tropical group than in the equatorial group.

Figure 11. Municipal Open Budget Means



Source: Author

However, the fact is that this phenomenon (higher mean in the tropical group than the equatorial group) occurs for all the independent variables (MUNIC open budget index, external collaborative stakeholders, and budgetary resources), and the lines for the two groups do not intersect in figure 11. The variation of these means is directly related, which agrees with the results of structural equation modelling.

5. Discussion

This dissertation concentrated endeavour on achieving theoretical contributions from a background open budget knowledge. Following, are gathered the main contributions, as well as the debate on the collaborative budget model. Next, some follow-up points are presented, based on verified limitations and evidence. Finally, it is shown the scientific production developed from this work.

5.1. Theoretical Contributions

This work is grounded in public administration theories, such as governance, public budgeting, and stakeholder. However, the theoretical mainstream is related to the open budget approach.

The overall contribution in this field is to conclude on effects of open budgeting, external collaborative stakeholders, and budgetary resources in social development. There is advance in the determination of how to measure open budgeting and external collaborative stakeholders, as well as in the identification that open budgeting, external collaborative stakeholders, and budgetary resources should explain social development. Following is presented evidence (table 10) for literature expansion on these contributions.

Table 10. Theoretical Contributions to Literature Expansion

Contribution	Literature Expansion
<p>External collaborative stakeholders and open budgeting measurement forms</p>	<p>From Brazilian specialists' interviewees, can be concluded that: a. the external collaborative stakeholders' level should be gauged by the number of civil society organisations; and b. the open budgeting level ought to be determined by the occurrence mechanism of social councils, open data, participation in the budgetary process, and government's answerability.</p>
<p>Social development explained by open budgeting, external collaborative stakeholders, and budgetary resources</p>	<p>From data statistical analysis of Brazilians municipality's structural equations modelling, can be concluded that: a. external collaborative stakeholders, open budgeting, budgetary resources, and social development are interrelated and combined in three structural equations; b. the structural equations model does not present relevant difference among their covariance matrices, as well as all residuals of covariance and observed variables are insignificant; and c. the structural equations model also shows sufficient goodness of fit.</p>
<p>Open budgeting, external collaborative stakeholders, and budgetary resources effects on social development</p>	<p>In a complementary statistical test of the mentioned structural equations model on direct and indirect effects, can be concluded that the external collaborative stakeholders assume a higher strategic level to explain social development than open budgeting and budgetary resources, because of the total effects comparative analysis.</p>

Source: Author

Afterwards, it is transcript a part of the interview on accountability level: “the high levels of transparency and participation means a great approximation between ruler and electors, consequently high level of accountability as well”. Hence, the accountability level ought to be associated with the transparency and participation measurements.

Moreover, another interview transcription can be introduced, which highlights the external collaborative stakeholders' influence over social results: “the Brazilian health system (SUS) was originated from a social demand formally registered in the VIII National Conference of Health, which evidence an accomplishment of a social policy through a participatory process.” Therefore, the external collaborative stakeholders' influence was determinant to the implementation of SUS.

The complementary contributions related with how to obtain the data for the open budgeting and the external collaborative stakeholders' measurements can be highlighted, such as: a. Open Budget Index methodology and E-GOV initiatives should be used as a reference to open budgeting determination; b. the IBGE surveys MUNIC and FASFIL ought to support with municipality data to gauge the open budgeting and external collaborative stakeholders' levels.

According to Lavallo *et al.* (2008), spaces of debate between government and society should create equal opportunities among civil society organizations with different strengths. The establishment of the Inter-Council Forum in 2012-2015 Brazilian medium-term planning gathered society representatives of public policy councils and civil society organizations to propose goals to 2012-2015 Brazilian medium-term planning, which received the government feedback explaining its respective motivation for each decision (DE ALMEIDA, 2015). This process can be

recognised as an example of external collaborative stakeholders' influence capacity over open budgeting, budgetary resources, and social development.

Finally, the validation of the five theoretical hypotheses stated from the literature review from the statistical tests using structural equations modelling should confirm a new governance framework, which was named as “The Collaborative Budget Model”. Next, this model is discussed with its specific features.

5.2. The Collaborative Budget Model

The Collaborative Budget Model extends the governance literature focused on social engagement. For instance, two theoretical contributions are presented:

- Social development is promoted by open budgeting, external collaborative stakeholders, and budgetary resources; and
- External collaborative stakeholders have a greater overall effect on social development than open budgeting and budgetary resources.

Therefore, not only are the open budget and budgetary resources crucial to explaining social development, but also the engagement of external collaborative stakeholders can be regarded as an innovative element of the open budget approach. Hence, collaborative participation assumes great importance in the literature, due to its ability to produce direct and indirect effects on social development. Finally, budgetary resources contribute to the model, ensuring that all variables are significant and the equations are relevant.

The comparative tests of the open budgeting, external collaborative stakeholders, budgetary resources, and social development means indicate that they are directly related. The variation in collaborative engagement is likely to affect the other variables. Hence, a concentrated effort to increase external collaborative stakeholder participation might be a strategic method to improve not only social development but also open budgeting and budgetary resources.

Therefore, it can be concluded that that collaborative stakeholder influences, as well as open budgeting, and the available resources should promote social development in an open budget approach. Following it is presented the logical model to the Collaborative Budget Model (table 11).

Table 11. The Logic Model to the Collaborative Budget Model

Collaborative Stakeholder	Open Budgeting			Budgetary Resource	Social Development
	Transparency	Participation	Accountability		
- Non- and government actors working for budgetary collaborative social commitments	- Budgetary disclose information - Government free access by citizens	- Budgetary stakeholders' engagement - Society's voice to support policy decisions	- Authorities' public answerability - Social budget controls enforceability	- The available resources, for instance, guide the level of expenditures or revenues	- Governance Outcome in a cooperative approach to the improvement of life quality and welfare state

Source: Author

The Collaborative Budget Model is based on cooperative processes. Shepsle and Bonchek (1996) state that social results become more similar over time due to the elimination of inconsistencies in a collective environment. The external collaborative stakeholder is associated with the collective behaviour of nongovernment organisations, which should produce gains in leadership performance in order to promote social progress.

Based on the Collaborative Budget Model, can be concluded that creating bridges for citizens' participation in decision-making is likely to influence social development in a great deal. External stakeholders influence open budgeting directly and indirectly. By influencing the other elements of the equation and the way local government deals with social development, the increase of one unit in the stakeholder influence is able to increase social development. That means it is worthy to put money on ways for making stakeholder influences come through.

With that hope, the Brazilian Government adopted a new act to stimulate citizen engagement from non-government organisations in order to promote social public policies. Published in 2014, the law No. 13.019 (MROSC) established forms of partnership between government agencies and non-government organisations, to form a mutually cooperative regime to execute public policies with reciprocal interests. This new Brazilian institutional initiative is based on the premise of increasing citizen engagement, grounded on transparency, participation, and accountability. In the coming years, a broad range of panel-data will be produced and create an opportunity for a panel-data study to check whether the institutional changes brought about by the MROSC result in better social development for Brazil.

5.3. Follow-up Points

Although this innovatory work produced new scientific results, some points are important to be considered as windows of opportunity for further studies. The time should be an important variable for governance consequences (DE ALMEIDA, 2015). In this line of thinking, as Shepsle and Bonchek (1996) stated, the collaborative results become more similar over time, due to eliminating inconsistencies in a cooperative and collective environment.

The use of timeline statistical analysis to validate this work is recommended. However, stakeholder conflicts are typically persistent, which could result in a condition described as “the tragedy of the commons”, in particular, because of different existing identities, insatiable desires, and competitions of primacy among stakeholders (HARDIN, 1968, p. 1243). Hence, qualitative studies to explore this phenomenon could support solutions in order to stabilize the collaborative environment.

The interviewees also contributed with topics that could be used as a reference for new studies. Therefore, from the evidence of this work on further perspectives, some important issues that need to be prioritized on the research agenda were identified:

- Which actions improve the interaction between government and external collaborative stakeholders?
- How can budgetary education support participation in budgetary issues?

- Do stakeholders have a legal right to be involved in the budgetary process according to the budget allocation laws (as amended)?
- Why do many government stakeholders not consider the power of external collaborative stakeholders to influence social results?
- Why are Brazilian audit tribunals not open-minded about accepting innovative action from an accountability perspective?
- Do social outcomes stimulate a virtuous circle from open budgets?

The collaborative perspective has a high importance in this work, as external collaborative stakeholders and open budgeting elements are directly associated with collaboration behaviour. According to De Almeida (2015), the collaborative governance could support the build of the methodological framework in order to achieve social consensus in public policy settings. Moreover, this process is very important to democracy strengthening, focused on inclusive initiatives. The classic democracy considers that the civic community is based on an active society with equity and reliable opportunities to cooperate with social policy set (DE TOCQUEVILLE, 2003; WANNA, 2008).

As Padgett (1980) argued, the budgetary decision-making process occurs in the serial judgment under a bounded rationality. The serial judgment theory suggests that beyond incrementalism evidence, the occurrence of great changes in the budgetary allocations also need to be considered in a time perspective. Therefore, it is expected that a further study uses a panel data to compare with this work results.

6. Final Considerations

It is expected that this work makes an important contribution to the public administration field presenting the theoretical background open budget approach, from a literature review, identifying measurement forms of open budgeting and external collaborative stakeholders, by using content analysis of interviews data, and checking the consequences of social development by applying statistical tests from a open budget framework.

Primarily, was provided an examination of the core elements of open budgets as determining factors of social development. This examination is based on different concepts of public administration, such as governance, social science, public budgets, and stakeholder participation. Theoretical considerations of collaborative stakeholders and open budget approaches indicate a need to extend the literature by identifying innovative ways to measure external collaborative stakeholders and open budgeting.

The evidence produced from content analyses of the interviews is relevant, and the following points are considered the core results after the use of data mining and net mapping techniques. While the number of civil society organisations is the determining factor in the measurement of the external collaborative stakeholders' level, the presence of social councils, open data, participatory budgeting, and government answerability indicates the level of open budgeting. The level of accountability,

together with the standardisation of transparency and participation, provide further insights. The Open Budget Index is a good starting point for the measurement of transparency levels.

Some practical recommendations can be highlighted for the governments's usage. Governments should create channels to interact with collaborative stakeholders, use clear specifications of budget actions, prioritise budget education and consider the power of collaborative stakeholders have a positive influence on the decision-making process.

Moreover, it can be observed that different social groups contribute more in various categories. Clusters A01 (the number of civil society organisations), B01 (measurement of the level of accountability associated with transparency and participation), and A02 (presence of social councils and their operational components) can be identified, together with the relationships between social groups.

The measurement of external collaborative stakeholders (A01) and open budgeting (B01 and A02) must include these clusters, because of their respective associations. This evidence is associated with the premises of good governance, such as public engagement and a democratic environment. Therefore, the effort to measure the external collaborative stakeholders and the open budgeting could be concentrated in these three clusters. Moreover, the evidence of external collaborative stakeholders and open budgeting is associated with governance premises, such as public engagement and democratic environment.

To help explain social development, this paper proposes ways to measure external collaborative stakeholders and open budgeting. Based on this evidence, further quantitative studies could contribute to extending the theory of governance,

compensating for the lack of consideration given to the consequences of the open budgeting that were mentioned by Khagram et al (2013).

This development of effective approaches to measure elements of open budgets focuses on the gaps in the literature identified by Ling and Roberts (2014). At the same time, complementary qualitative investigations are needed to explore the functions of external collaborative stakeholders and open budgeting more fully. The governments could use the empirical findings of such studies to improve governance outcomes.

Based on this qualitative phase research results, the influences of stakeholder cooperation and the stronger open budget actions can be gauged and considered in a governance approach. For instance, in the quantitative phase, the application of the qualitative phase research results was crucial to check the social development consequences using statistical tests.

The literature review of governance, stakeholders and public budgeting suggests that open budgeting impacts social development. Nevertheless, more than checking this preliminary suggestion, this innovative study verified if the existence of external collaborative stakeholders is related to development. Moreover, considering that the availability of a budgetary resource moderates the governance process by the constraints on the budget's capacity to meet social policy needs (AMES, 1990; VON HAGEN and HARDEN, 1996; GRUBER, 2009).

In this framework, the structural equations' modelling was used as a methodological tool to help test the complex links suggested by theory. This work expands the public administration literature by considering the participation of external collaborative stakeholders as a core element of the open budget approach, because

of its direct and indirect effects to explain social development.

Therefore, the government endeavour to stimulate the rise of external collaborative stakeholders should be the best way to achieve the social development gains, because of the sum of its direct and indirect effects. The external collaborative stakeholder is also associated with impacts on open budgeting and budgetary resources, which contribute to social development as well. Hence, the external collaborative stakeholders are the drivers who have the leadership to achieve social development from different ways, what can explain the conclusion that external collaborative stakeholder is strategic in the collaborative budget model.

Although this study prioritized the participation of external collaborative stakeholders in government decision-making processes because of their cooperative view of social commitments, the starting point was open budgeting from its socially inclusive perspective. Moreover, the budgetary resource was a relevant element as a control variable of the tested model, with the power to limit the social progress results. Altogether, the endeavor focused on social development through a pioneering study that used a new methodological framework with new variables based on governance and stakeholder theories.

From the empirical results, open budgeting is strategically used as a tool to stimulate social development (BOVAIRD and LÖFFLER, 2009; KHAGRAM, FUNG and DE RENZIO, 2013; LING and ROBERTS, 2014; DE RENZIO and WEHNER, 2015). The stakeholder management style influences the performance of public organizations (O'TOOLE and MEIER, 1999), by which the participation of collaborative stakeholders is connected to mutual gains, promoting open budgeting, improving social

development and increasing the availability of budget resources (GOMES and GOMES, 2008; KHAGRAM and ALI, 2008; GOMES, LIDDLE and GOMES, 2010). However, the scarcity of budgetary resources can limit the achievement of social policy results (OSBORNE, 2006; HOLLAND *et al.*, 2012).

Therefore, it was identified that open budgeting, external collaborative stakeholders, and budgetary resources are related to social development. Hence, not only are open budgeting and budgetary resources important, in the governance perspective, to explain social development, but also the external collaborative stakeholder participation as an innovative element of the open budget approach. Furthermore, the external collaborative stakeholder's participation assumes relevant importance in the literature because of its ability to produce direct and indirect effects on social development, which in turn is in the first position of the overall effect among all endogenous variables in the model. Finally, budgetary resource contributes to validate the model, verifying that all variables are significant and the equations are relevant.

From the comparative analyses of the variables, it was concluded that the variations of open budgeting, external collaborative stakeholders, budgetary resources, and social development are directly related. Nevertheless, according to the model's hypotheses, the variation of external collaborative stakeholder participation should affect the other variables. Hence, the concentrated effort in the increase of external collaborative stakeholder participation might be a strategic alternative to improve not only social development consequences but also open budgeting and budgetary resource results. Altogether, the external collaborative stakeholders are the

drivers who have the leadership to promote open budgeting initiatives, to influence its allocation, and to achieve social development gains.

Overall, the open budget approach remains an incomplete subject. The understanding of how the collaborative processes work continues to be a conundrum; however, unfortunately, bad social conditions remain a great problem throughout the world. Hence, further studies of the possibility of stakeholder conflicts could be a window of opportunity to expand public administration theories, for instance, using panel data sets or analysing collaborative platforms (such as the sustainability projects of Global Environmental Facility). Finally, although there needs to have further research on the open budget approach, there are hopes that this empirical work provides some critical insights into the public administration and development fields.

References

ABREU, W. M.; GOMES, R. C. Public budget: analysis of the strategies' formulation under the perspective of the emancipatory and developmentist planning. **Revista do Serviço Público**, v. 61, n. 3, p. 269-286, 2010.

_____. The Brazilian public budget and the emancipatory perspective: is there any empirical evidence supporting this approach? . **Revista de Administração Pública**, v. 47, n. 2, p. 515-540, 2013.

ABREU, W. M.; GOMES, R. C. Do Open Budget Institutional Changes Improve Social Development? **Contabilidade, Gestão e Governança**, v. 19, n. 3, p. 422-439, 2016.

ABREU, W. M.; GOMES, R. C.; ALFINITO, S. Can Fiscal Transparency explain Social Development in Brazilian States? **Revista Sociedade, Contabilidade e Gestão**, v. 10, n. 2, p. 54-69, 2015.

ABRUCIO, F. L. Reforma do Estado no federalismo brasileiro: a situação das administrações públicas estaduais. **Revista de Administração Pública**, v. 39, n. 2, p. 401-422, 2005.

ACEMOGLU, D.; ROBINSON, J. A. **Why nations fail: the origins of power, prosperity and poverty**. Rio de Janeiro, RJ: Campus, Elsevier Brasil, 2012. ISBN 8535263292.

ALT, J. E.; LOWRY, R. C. Transparency and accountability: empirical results for U.S. states. **Journal of Theoretical Politics**, v. 22, n. 4, p. 379-406, 2010.

AMES, B. **Political survival: politicians and public policy in Latin America**. Univ of California Press, 1990. ISBN 0520069471.

ANSELL, C.; GASH, A. Collaborative governance in theory and practice. **Journal of public administration research and theory**, v. 18, n. 4, p. 543-571, 2008.

_____. Collaborative Platforms as a Governance Strategy. **Journal of Public Administration Research and Theory**, p. 16-32, 2018.

AVRITZER, L. **Democracy and the public space in Latin America**. Princeton University Press, 2009. ISBN 1400825016.

BARDIN, L. Content analysis. **Editions Lisbon**, 1977.

BOAZ, A.; NUTLEY, S. **Evidence-based policy and practice**. London, Routledge, 2003.

BOVAIRD, T. Public Governance: balancing stakeholder power in a network society. **International Review of Administrative Sciences**, v. 71, n. 2, p. 217-228, 2005.

BOVAIRD, T.; LÖFFLER, E. **Public management and governance**. Taylor & Francis, 2009. ISBN 0415430429.

BOWEN, G. A. Local-level stakeholder collaboration: A substantive theory of community-driven development. **Community Development**, v. 36, n. 2, p. 73-88, 2005.

BRAZIL. Brazilian Government. <http://www.brasil.gov.br/>, 2017. Acesso em: 30/7/2015.

BRESSER-PEREIRA, L. C. Da Administração Pública Burocrática à Gerencial. **Revista do Serviço Público**, v. 47, 1996.

_____. Nação, Sociedade Civil, Estado e Estado-Nação: Uma Perspectiva Histórica. **Textos para Discussão**, v. 189, 2009.

_____. Democracia, estado social e reforma gerencial. **Revista de Administração de Empresas**, v. 50, n. 1, p. 112-116, 2010.

BRYMAN, A. **Social research methods**. Oxford university press, 2012. ISBN 0199588058.

BURGE, R. Final Report Learning from DFID's Governance and Transparency Fund (GTF): Tools, methods and approaches. **Unpublished Report. TripleLine/KPMG. June**, 2010.

CLARK, D.; FOX, J. A.; TREAKLE, K. **Demanding Accountability: Civil Society Claims and the World Bank Inspection Panel**. Rowman & Littlefield Publishers, 2003. ISBN 0742576566.

CORE, F. G. Reformas orçamentárias no Brasil: uma trajetória de tradição e formalismo na alocação dos recursos públicos. Trabalho apresentado ao IX Congresso Internacional Del CLAD sobre la Reforma del Estado y de la Administración Pública, 2004. Madrid, España. CLAD. p.2-5.

CRESWELL, J. W. **Research design: Qualitative, quantitative, and mixed methods approaches**. Sage publications, 2013. ISBN 1483321479.

DARBISHIRE, H.; CARSON, T. Transparency and Silence: A Survey of Access to Information Laws and Practices in 14 Countries. New York: Open Society Institute. **Ann Florini, The Right to Know: Transparency for an Open World**, 2006.

DAVIS, G. **A history of the social development network in The World Bank, 1973-2003**. The World Bank. 2004

DAVIS, O. A.; DEMPSTER, M. A. H.; WILDAVSKY, A. A theory of the budgetary process. **The American Political Science Review**, v. LX, n. 8, p. 529-547, 1966.

DE ALMEIDA, R. A. Título: Gestão Democrática na Formatação de Políticas Públicas. 2015.

DE HAAN, A.; HOLLAND, J.; KANJI, N. Social funds: an effective instrument to support local action for poverty reduction? **Journal of International Development**, v. 14, n. 5, p. 643, 2002.

DE RENZIO, P.; GOMEZ, P.; SHEPPARD, J. Budget transparency and development in resource-dependent countries. **International Social Science Journal**, v. 57, n. 1, p. 57-69, 2009.

DE RENZIO, P.; MASUD, H. Measuring and promoting budget transparency: The open budget index as a research and advocacy tool. **Governance**, v. 24, n. 3, p. 607-616, 2011.

DE RENZIO, P.; WEHNER, J. The impacts of fiscal openness: A review of the evidence. **Available at SSRN 2602439**, 2015.

DE TOCQUEVILLE, A. **Democracy in america**. Regnery Publishing, 2003. ISBN 089526160X.

DENHARDT, J. V.; DENHARDT, R. B. **The new public service: Serving, not steering**. ME Sharpe, 2007. ISBN 0765621819.

DFID. **Governance, Development and Democratic Politics**. Department for International Development. 2006

DOH, J. P.; GUAY, T. R. Corporate social responsibility, public policy, and NGO activism in Europe and the United States: an institutional-stakeholder perspective. **Journal of Management Studies**, v. 43, n. 1, p. 47-73, 2006.

DYE, R. F.; HUDSPETH, N. W.; MERRIMAN, D. F. **Transparency in State Budgets: A Search for Best Practices**. Institute of Government and Public Affairs. Chicago, IL. 2011

ELSON, D.; CAGATAY, N. The social content of macroeconomic policies. **World Development**, v. 28, n. 7, p. 1347-1364, 2000.

EMERSON, K.; NABATCHI, T.; BALOGH, S. An integrative framework for collaborative governance. **Journal of Public Administration Research and Theory**, v. 22, n. 1, p. 1-29, 2012.

FERREIRA, M. A. M. *et al.*. Integration of Planning and Budgeting at the State Level of Public Administration: the Case of Minas Gerais. **Contabilidade, Gestão e Governança**, v. 19, n. 1, p. 3-22, 2016.

FOSTER, M.; FOZZARD, A. **Aid and public expenditure: a guide**. Overseas Development Institute London. London: Oct, p.86. 2000. (0850035031)

FREEMAN, R. E. **Strategic management: A stakeholder approach**. Massachusetts: Pitman, 1984. ISBN 0521151740.

FRIIS-HANSEN, E.; COLD-RAVNKILDE, S. M. **Social accountability mechanisms and access to public service delivery in rural Africa**. DIIS Reports, Danish Institute for International Studies. Copenhagen, p.96. 2013. (8776056309)

FRIIS-HANSEN, E.; KYED, H. M. **Participation, Decentralization and Human Rights: A Review of Approaches for Strengthening Voice and Accountability in Local Governance**. WB. Washington, DC. 2009

FUNAKI, Y.; GLENCORSE, B. Anti-corruption or accountability? International efforts in post-conflict Liberia. **Third World Quarterly**, v. 35, n. 5, p. 836-854, 2014.

FUNG, A.; WRIGHT, E. O. **Deepening Democracy: Institutional innovations in empowered participatory governance**. Verso, 2003. ISBN 1859846882.

GAVENTA, J.; BARRETT, G. Mapping the outcomes of citizen engagement. **World Development**, v. 40, n. 12, p. 2399-2410, 2012.

GAVENTA, J.; MCGEE, R. The impact of transparency and accountability initiatives. **Development Policy Review**, v. 31, n. s1, p. s3-s28, 2013.

GEF. <http://www.thegef.org/>. 2017.

GENTIL, D. L.; MICHEL, R. Estratégia de Desenvolvimento e Intervenção Fiscal do Estado. In: SICSÚ, J. and CASTELAR, A. (Ed.). **Sociedade e Economia: Estratégias de Crescimento e Desenvolvimento**. Brasília: IPEA, 2009. p.131-142.

GOMES, R. C.; GOMES, L. D. O. M. Who is supposed to be regarded as a stakeholder for public organizations in developing countries? **Public Management Review**, v. 10 (2), p. 263-275, 2008.

GOMES, R. C.; LIDDLE, J.; GOMES, L. O. M. A Five-Sided Model Of Stakeholder Influence: A cross-national analysis of decision making in local government. **Public Management Review**, v. 12, n. 5, p. 701-724, 2010.

GRUBER, J. **Finanças públicas e política pública**. 2. Rio de Janeiro: LTC, 2009.

HAIR, J. F. *et al.* . **Multivariate data analysis (Vol. 6)**: Upper Saddle River, NJ: Pearson Prentice Hall 2006.

HARDIN, G. The tragedy of the commons. **Science**, v. 162, n. 3859, p. 1243-1248, 1968.

HAZELL, R.; WORTHY, B. Impact of Freedom of Information on central government'. **Unpublished end of award report to the Economic and Social Research Council. London: Constitution Unit, University College London, 2009.**

HOLLAND, J. *et al.* . Tackling the governance of socially inclusive service delivery. **Public Management Review**, v. 14, n. 2, p. 181-196, 2012.

HUGHES, O. **Public management and administration: an introduction.** Palgrave MacMillan, 2003.

HYDE, A. C. **Government budgeting: theory, process, and politics.** Wadsworth Publishing Company, 2002. ISBN 0155066951.

JINGUANG, H.; XIANYONG, Z. On the Value and Path of Open Budget. **Nankai Journal (Philosophy, Literature and Social Science Edition)**, v. 2, p. 011, 2011.

KASYMOVA, J. T.; SCHACHTER, H. L. Bringing Participatory Tools to a Different Level. **Public Performance & Management Review**, v. 37, n. 3, p. 441-464, 2014.

KAUFMANN, D.; BELLVER, A. Transparenting transparency: Initial empirics and policy applications. Preliminary draft discussion paper presented at the IMF conference on transparency and integrity, 2005. IMF, Jul. p.73.

KEIJZERS, G. Creating sustainable directions: evolving stakeholder approach in seven multinationals. **The Journal of Corporate Citizenship**, p. 79-89, 2003.

KEY, V. O. The Lack of a Budgetary Theory. **American Political Science Review**, v. 34, n. 06, p. 1137-1144, 1940.

KHAGRAM, S.; ALI, S. Chapter 8 -Transnational Transformations: From Government-Centric Interstate Regimes to Cross-Sectoral Multi-Level Networks of Global Governance? In: LARK, J.; CONCA, K., *et al.* (Ed.). **Globalization and Environmental Governance: Toward a New Political Economy of Sustainability**. London: Routledge, 2008.

KHAGRAM, S.; FUNG, A.; DE RENZIO, P. **Open budgets: The political economy of transparency, participation, and accountability**. Washington, DC: Brookings Institution Press, 2013. ISBN 0815723377. Disponível em: <http://books.google.com.br/books?hl=pt-BR&lr=&id=XGhv5Btkc6cC&oi=fnd&pg=PP1&dq=Open+budget+sanjev&ots=WOI7Axny4&sig=lyAJTetkgY6dcL7h23qm5VZbChA>.

KLUGMAN, J. **Human development report 2010: the real wealth of nations: pathways to human development**. Palgrave Macmillan, 2010. ISBN 0230284450.

KNOPP, G. Governança social, território e desenvolvimento. **Revista Perspectivas em Políticas Públicas**, v. 4, n. 8, p. 53-74, 2011.

KOONTZ, T. M. We finished the plan, so now what? Impacts of collaborative stakeholder participation on land use policy. **Policy Studies Journal**, v. 33, n. 3, p. 459-481, 2005.

LAVALLE, A. G.; CASTELLO, G.; BICHIR, R. M. Atores periféricos na sociedade civil: redes e centralidades de organizações em São Paulo. **Revista Brasileira de Ciências Sociais**, v. 23, n. 68, p. 73-96, 2008.

LEE, N.; LINGS, I. **Doing business research: a guide to theory and practice**. Sage, 2008. ISBN 1446259617.

LING, C.; ROBERTS, D. K. **Evidence of development impact from institutional change: a review of the evidence on open budgeting**. WB. Washington, DC, p.32. 2014

MANSURI, G.; RAO, V. Community-based and-driven development: A critical review. **The World Bank Research Observer**, v. 19, n. 1, p. 1-39, 2004.

MARCH, J. G. **Primer on decision making: How decisions happen**. 1. São Paulo: Leopardo, 2009.

MEIJER, A. Understanding modern transparency. **International Review of Administrative Sciences**, v. 75, n. 2, p. 255-269, 2009.

_____. Understanding the complex dynamics of transparency. **Public Administration Review**, v. 73, n. 3, p. 429-439, 2013.

MEIJER, A. J.; CURTIN, D.; HILLEBRANDT, M. Open government: connecting vision and voice. **International Review of Administrative Sciences**, v. 78, n. 1, p. 10-29, 2012.

MIKUT, R.; REISCHL, M. Data mining tools. **Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery**, v. 1, n. 5, p. 431-443, 2011.

MISRA, V. Pilot Study 1, Andhra Pradesh, India: Improving Health Services through Community Scorecards. **Learning Notes, Social Accountability Series**. Washington, DC: World Bank, 2007.

MITCHELL, R. K.; AGLE, B. R.; WOOD, D. J. Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts. **Academy of management review**, v. 22, n. 4, p. 853-886, 1997.

MONTEIRO, C. A. A dimensão da pobreza, da fome e da desnutrição no Brasil. **Estudos Avançados**, v. 9, n. 24, p. 195-207, 1995.

NOORBAKHS, F. A modified human development index. **World Development**, v. 26, n. 3, p. 517-528, 1998.

NORTH, D.; WALLIS, J.; WEINGAST, B. **Violence and Social Orders**. 1. Cambridge: Cambridge University Press, 2009. Disponível em: <http://journals.cambridge.org/abstract_S0022050709001314>.

NOWAK, R. **Transparency and good governance in transition economies**. UN, p.10. 2000

O'TOOLE, L. J.; MEIER, K. J. Modeling the impact of public management: Implications of structural context. **Journal of Public Administration Research and Theory**, v. 9, n. 4, p. 505-526, 1999.

OECD. **OECD Best Practices for Budget Transparency**. Paris. 2002

OSBORNE, D. **Reinventando o Governo**. Brasília, DF: MH Comunicação, 1994.

OSBORNE, S. P. The New Public Governance? 1. **Public Management Review**, v. 8, n. 3, p. 377-387, 2006.

PADGETT, J. Bounded Rationality in Budgetary Research. **American Political Science Review**, v. 74, p. 354-372, 1980.

PECI, A.; PIERANTI, O. P.; RODRIGUES, S. Governança e New Public Management: convergências e contradições no contexto brasileiro. **Organizações & Sociedade**, v. 15, n. 46, p. 39-55, 2008.

PETRIE, M. **Towards Stronger Incentives for Increased Fiscal Transparency, Participation and Accountability.** GIFT, p.52. 2012

POLLARD, A.; COURT, J. **How civil society organizations use evidence to influence policy processes: a literature review.** Overseas Development Institute London, 2005. ISBN 0850037468.

RAMKUMAR, V.; PETKOVA, E. Transparency and environmental governance. **The Right to Know: Transparency for an Open World (Columbia University Press, New York)**, p. 279-308, 2007.

RAMOS, A. G. Administração e Política à Luz da Sociologia. **Revista do Serviço Público**, v. 3, p. 5-11, 1946.

_____. **A Nova Ciência das Organizações: Uma Reconceituação da Riqueza das Nações.** Rio de Janeiro: Fundação Getúlio Vargas, 1981.

_____. **Administração e Contexto Brasileiro: Esboço de Uma Teoria Geral da Administração.** Rio de Janeiro: Fundação Getúlio Vargas, 1983.

RUBIN, I. S. **The politics of public budgeting: Getting and spending, borrowing and balancing.** CQ Press, 2009. ISBN 1452278598.

SANCHES, O. M. O Ciclo Orçamentário: Uma Reavaliação à Luz da Constituição de 1988. In: GIACOMONI, J. and PAGNUSSAT, J. L. (Ed.). **Planejamento e Orçamento Governamental**, v.2, 2007. p.187-217.

SARKER, A. E.; HASSAN, M. K. Civic engagement and public accountability: an analysis with particular reference to developing countries. **Public Administration and Management**, v. 15, n. 2, p. 381, 2010.

SAVAGE, G. T. *et al.* . Strategies for Assessing and Managing Organizational Stakeholders. **Academy of Management Executive**, v. 5, n. 2, p. 61-75, 1991.

SHADISH, W. R.; COOK, T. D.; CAMPBELL, D. T. **Experimental and Quasi-Experimental Designs for Generalized Causal Inference**. New York: Houghton Mifflin Company, 2002.

SHAH, A. **Participatory Budgeting**. WB. Washington, DC. 2007

SHEPSLE, K.; BONCHEK, M. **Analyzing Politics**. New York, NY: WW Norton, 1996. Disponível em: <<http://www.openisbn.org/download/0393935078.pdf>>.

SICCÚ, J. A Construção de Uma Estratégia de Desenvolvimento. In: SICSÚ, J. and CASTELAR, A. (Ed.). **Sociedade e Economia: Estratégias de Crescimento e Desenvolvimento**. Brasília, DF: IPEA, 2009. p.19-28.

SICSÚ, J. Planejamento Estratégico do Desenvolvimento e as Políticas Macroeconômicas. **Texto para Discussão**, v. 1346, 2008.

SILVERMAN, D. **Qualitative research**. Sage, 2010. ISBN 1446201554.

SVENDSEN, A. **The stakeholder strategy: Profiting from collaborative business relationships**. Berrett-Koehler Publishers, 1998. ISBN 1609943937.

TANAKA, S. Engaging the Public in National Budgeting. **OECD Journal on Budgeting**, v. 7, n. 2, p. 139-177, 2007.

TOUCHTON, M.; WAMPLER, B. Improving social well-being through new democratic institutions. **Comparative Political Studies**, v. 47, n. 10, p. 1442-1469, 2014.

UNDP. <http://www.pnud.org.br/IDH/DH.aspx>. 2014a. Acesso em: 14/04/2014.

_____. **Human Development Report.**
<http://www.br.undp.org/content/brazil/pt/home/library/relatorios-de-desenvolvimento-humano/relatorio-do-desenvolvimento-humano-200013/>. 2014b

VANGEN, S.; HUXHAM, C. Enacting leadership for collaborative advantage: Dilemmas of ideology and pragmatism in the activities of partnership managers. **British Journal of Management**, v. 14, n. s1, p. S61-S76, 2003.

VON HAGEN, J.; HARDEN, I. Budget processes and commitment to fiscal discipline. 1996.

WAMPLER, B. **Participation, Transparency and Accountability: Innovations in South Korea, Brazil, and the Philippines.** GIFT, p.61. 2012

WANNA, J. **Collaborative Governance: A New Era of Public Policy in Australia?** ANU E Press, 2008. ISBN 1921536411.

WB. World Bank. <http://www.worldbank.org/en/topic/socialdevelopment/overview>, 2014. Acesso em: 13/12/2014.

WILLIAMS, C.; AGUILERA, R. V. Corporate social responsibility in a comparative perspective. 2008.

WILLIAMS, L.; VANDENBERG, R.; EDWARDS, J. **Structural Equations Modeling in management research: A guide for improved analysis.** *The Academy of Management Annals*, 3 (1), 543-604 2009.

YILMAZ, S.; BERIS, Y.; SERRANO-BERTHET, R. Linking local government discretion and accountability in decentralization. **Development Policy Review**, v. 28, n. 3, p. 259-293, 2010.

YOU, J.-S.; LEE, W. A Mutually Reinforcing Loop: Budget Transparency and

Participation in South Korea. **Open Budgets: The Political Economy of Transparency, Participation, and Accountability**, p. 105, 2013.

Appendix

I. Interview Questionnaire (IN PORTUGUESE, THE ORIGINAL LANGUAGE)

ROTEIRO PARA A ENTREVISTA SOBRE ORÇAMENTO ABERTO

Considerando que:

- ✓ A partir de uma perspectiva de governança, com a inclusão de *stakeholders* colaborativos no processo decisório orçamentário, as iniciativas de transparência, participação e *accountability* (também reconhecidas como ações colaborativas) são as bases de um orçamento aberto com foco na busca de melhoria da qualidade de vida dos cidadãos (RAMKUMAR and PETKOVA, 2007; SHAH, 2007; FRIIS-HANSEN and COLD-RAVNKILDE, 2013; GAVENTA and MCGEE, 2013; KHAGRAM, FUNG and DE RENZIO, 2013; FUNAKI and GLENCORSE, 2014; LING and ROBERTS, 2014);
- ✓ A transparência é estabelecida com a disponibilização de informações relacionadas com políticas públicas aos cidadãos, assim como a garantia de que as mencionadas políticas sejam aplicadas de forma uniforme, imparcial e razoável (NOWAK, 2000; KAUFMANN and BELLVER, 2005; DYE, HUDSPETH and MERRIMAN, 2011);
- ✓ A participação cria incentivos para articulação e agregação de cidadãos interessados, promovendo canais de recrutamento de líderes, com vistas a julgar disputas com conflito de interesses, e engajar cidadãos no processo decisório governamental

provendo uma ligação entre os governantes e os governados, ou os formuladores de políticas e os cidadãos (POLLARD and COURT, 2005; SHAH, 2007; LING and ROBERTS, 2014);

- ✓ *Accountability* diz respeito a responsabilização exercida pelas autoridades governamentais durante o período político entre as eleições em um ambiente democrático (CLARK, FOX and TREAKLE, 2003; DARBISHIRE and CARSON, 2006; MISRA, 2007; HAZELL and WORTHY, 2009), e pode também se relacionar com a habilidade dos *stakeholders* de promover a prestação de contas dos governantes para as suas ações de transparência (FRIIS-HANSEN and COLD-RAVNKILDE, 2013; GAVENTA and MCGEE, 2013); e
- ✓ Os *stakeholders* colaborativos são os que se juntam ao governo para ajudar na entrega de serviços ou bens, e, conseqüentemente, eles são capazes de influenciar a alocação de recursos durante o processo de alocação de recursos orçamentários (GOMES and GOMES, 2008; GOMES, LIDDLE and GOMES, 2010). Desta forma, cabe destacar que a relação formada entre os *stakeholders* colaborativos e os agentes governamentais apresentam dependência simétrica, porque os recursos estão simétricos, ou seja, eles precisam uns dos outros para alcançar suas metas comuns, tais como as relacionadas com as políticas sociais (GOMES, LIDDLE and GOMES, 2010).

Pergunta-se:

No âmbito do processo orçamentário aberto, ou seja, com foco na melhoria da qualidade de vida para a sociedade, como pode-se medir a abertura orçamentária (transparência, Participação e *Accountability*)? Bem como as influências dos *stakeholders* colaborativos?

Observações: Existem questões complementares? Favor indicar perspectivas futuras.

II. Scientific Production

The contribution to scientific society demands participations in research events and submissions in academic outlets. In this process, I expect to have obtained improvement and dissemination of these work results. Next, I show the list of research events where I presented papers of my work in progress (table 12).

Table 12. Participation in Research Events

Year	Scientific Event	Research Paper	Location
2017	Public Service Innovation Conference 2017	Democratic Innovation in Governance: Open Budget Core Elements as Determinant Factors to Social Development	Lillehammer (Norway)
2017	ANPAD Annual Conference	Demystifying Social Development: Open Budget Core Elements as Determinant Factors; and The Diamond Model of Governance: Impacting Social Development from an Open Budget Perspective	São Paulo (Brazil)
2017	GIGAPP 2017 Conference	Measuring Collaborative Stakeholder Influence and Open Budget Actions	Madrid (Spain)
2017	PMRC 2017 Conference	The Diamond Model of Governance: Impacting Social Development from an Open Budget Perspective	Washington (US)
2016	ASPA Annual Conference	The Open Budget Framework of Governance: From Theory to Practice	Seattle (US)
2016	ANPAD Annual Conference	What, Who, Why and How: A Framework of Transparency, Participation, Accountability Toward Social Development	Salvador (Brazil)
2016	ANPAD Public Administration Conference	Unlocking the Government Door to Society: An Open Budget Framework as a Governance Key	Sao Paulo (Brazil)
2016	IRSPM Conference	An Open Governance Framework from a Budgetary Perspective; and Open Budget's What, Who, Why and How: A Framework from Transparency, Participation, Accountability	Hong Kong (China)
2015	IIAS Congress	What Do We Expect from Open Budget Institutional Changes?	Rio de Janeiro (Brazil)
2015	IRSPM Conference	Countries Open Budget, Democracy, and Social Progress	Birmingham (UK)
2014	ANPAD Public Administration Conference	Does Fiscal Transparency Explain Social Development in Brazilian States?	Belo Horizonte (Brazil)

Source: Author

The suggestions obtained in research events were taken into consideration. Moreover, the research products also considered discussions in the Governance and Public Management Research Group, coordinated by my Supervisor, Professor Ricardo Corrêa Gomes, PhD. Afterwards, I present the research products submitted in academic outlets (table 13).

Table 13. Products of this Research Work

Year	Product	Type	Outlet	Observation
2017	Improving Social Development from an Open Budget Perspective: Does Collaborative Stakeholder Engagement Matter?	Quantitative (Main Study)	Book Chapter (International Cooperation)	Accepted
2017	Demystifying Social Development: Open Budget Core Elements as Determinant Factors of Social Development	Qualitative (Main Study)	Cadernos EBAPE	In evaluation
2017	Unlocking the government door to society: an open budget framework as a governance key	Theoretical Essay (Main Study)	Revista de Administração Pública	In evaluation
2016	Do Political Participation and Fiscal Management Explain Social Development in Brazilian Municipalities?	Quantitative (preliminary)	Revista do Serviço Público	Accepted
2016	Do Open Budget Institutional Changes Improve Social Development?	Quantitative (preliminary)	Contabilidade, Gestão e Governança	Published
2015	Does Fiscal Transparency Explain Social Development in the Brazilian States?	Quantitative (preliminary)	Sociedade, Contabilidade e Gestão	Published

Source: Author

Hereafter, I hope that this work contributed to the research production, as well as stimulated further studies, in the public administration field. This production is based on the presentation of study results in important scientific events and the submission in recognized academic outlets.