

Performance assessment in budgetary practices: what does the literature teach us?

THIAGO BRUNO DE JESUS SILVA¹

SANDRA ROLIM ENSSLIN²

CARLOS EDUARDO FACIN LAVARDA²

¹ Universidade Federal da Grande Dourados (UFGD) / Faculdade de Administração, Ciências Contábeis e Economia, Dourados – MS, Brazil

² Universidade Federal de Santa Catarina (UFSC) / Programa de Pós-Graduação em Contabilidade, Florianópolis – SC, Brazil

Abstract

Performance assessment (PA) in budgetary practices has traditionally focused on monitoring and evaluating actual and budgeted performance. However, PA started to consider indicators consistent with the organization's strategic objectives to serve different internal and external stakeholders and discuss different purposes. This study aims to analyze the characteristics of the international investigations on a fragment of literature dedicated to performance assessment in budgetary practices, generating knowledge, and identifying gaps to be addressed in future research. The study adopted the Knowledge Development Process-Constructivist (ProKnow-C), and the bibliographic portfolio was composed of 23 articles. As results, the qualitative information in the bibliographic portfolio suggested the need to (i) use other paradigms in the investigations, (ii) address the budget execution to conduct performance assessment, (iii) design the performance assessment in budget practices to meet the needs of a broad public, and (iv) encompass more purposes of performance evaluation in budgetary practices.

KEYWORDS: Performance assessment. Budgetary practices. Gaps. Search Opportunities.

Article submitted on October 09, 2019 and accepted on November 16, 2020.

[Translated version] Note: All quotes in English translated by this article's translator.

DOI: <http://dx.doi.org/10.12660/rgplp.v19n3.2020.80312>



Avaliação de desempenho nas práticas orçamentárias: o que a literatura nos ensina?

Resumo

A Avaliação de Desempenho (AD) nas Práticas Orçamentárias tem sido, de forma tradicional, baseada apenas em controlar e avaliar o desempenho real e o orçado. Contudo, a AD passou a incluir indicadores coerentes com os objetivos estratégicos, atender a distintas partes interessadas no âmbito interno e no externo e a discutir diferentes propósitos. Desta forma, o objetivo deste estudo analisar as características das investigações internacionais em relação a um fragmento de literatura sobre a utilização da Avaliação de Desempenho nas Práticas Orçamentárias, ao ter como intenção a geração de conhecimento e identificação de lacunas para apontar possibilidades de futuras investigações. Empregou o *Knowledge Development Process-Constructivist* (ProKnow-C) para fins de orientação. O portfólio bibliográfico foi composto de 23 artigos. Como resultados, constatou-se, nas informações qualitativas no portfólio bibliográfico, a necessidade de (i) utilizar outros paradigmas nas investigações; (ii) abordar a execução do orçamento para se obter a Avaliação de Desempenho; (iii) projetar a Avaliação de Desempenho nas Práticas Orçamentárias para atender às necessidades de amplo público; e (iv) buscar abranger mais propósitos de Avaliação de Desempenho nas Práticas Orçamentárias.

PALAVRAS-CHAVE: Avaliação de desempenho. Práticas orçamentárias. Lacunas. Oportunidades de pesquisa.

Evaluación de desempeño en las prácticas presupuestarias: ¿qué nos enseña la literatura?

Resumen

La evaluación de desempeño (ED) en las prácticas presupuestarias tradicionalmente se ha basado solo en controlar y evaluar el desempeño real y lo presupuestado. Sin embargo, la ED pasó a incluir indicadores coerentes con los objetivos estratégicos, a atender a distintas partes interesadas en el ámbito interno y externo y a discutir diferentes propósitos. Así, el objetivo de este estudio es analizar las características de las investigaciones internacionales en relación con un fragmento de literatura acerca de la utilización de la evaluación de desempeño en las prácticas presupuestarias, al tener como intención la generación de conocimiento e identificación de lagunas para señalar posibilidades de futuras investigaciones. Se empleó la metodología ProKnow-C (proceso de desarrollo del conocimiento constructivista) con fines orientativos. El portafolio bibliográfico estuvo compuesto por 23 artículos. Como resultado, se constató, en la información cualitativa del portafolio bibliográfico, la necesidad de (i) utilizar otros paradigmas en las investigaciones; (ii) abordar la ejecución del presupuesto para obtener la evaluación de desempeño; (iii) proyectar la evaluación de desempeño en las prácticas presupuestarias para satisfacer las necesidades del amplio público; y (iiii) tratar de abarcar más propósitos de evaluación de desempeño en las prácticas presupuestarias.

PALABRAS CLAVE: Evaluación de desempeño. Prácticas presupuestarias. Lagunas. Oportunidades de investigación.

INTRODUCTION

The budget is one of the most important coordination and control mechanisms for organizations (ARNOLD and GILLENKIRCH, 2015). However, there is a debate about the traditional budget. While proponents claim that it should continue to be used as proposed, naysayers say it must be converted to new budgetary approaches (NEELY, BOURNE and ADAMS, 2003; LIBBY and LINDSAY, 2013).

Although these approaches have different solutions, they share many of the concerns of the traditional budget (JONES, 2008). Despite this discussion of the role of the budget, the evidence suggests that the “traditional budget” is still alive in the industry and will continue to be important in the future, with organizations that report a commitment to continue with their budgetary practices (JONES, 2008).

The central aspect of these debates is related to the desire that the budget process is effective in order to obtain the majority of the possible benefits (NEELY, BOURNE and ADAMS, 2003), which are: predicting the future; assist in maximizing profit; provide the manager with a means of communication; calculate rewards; motivate employees; and evaluate and control performance by investigating its variations (JOSHI, AL-MUDHAKI and BREMSER, 2003; AHMAD, SULAIMAN and ALWI, 2003; CRUZ, 2007).

Neely, Gregory and Platts (1995) explain that the measures used are inadequate, mainly because they encourage the short term and lack a strategic focus. In addition, they do not incorporate the strategy, they are based on outdated traditional accounting, are intended for managers and have metrics fed with data already outdated; make use of past measures, such as sales volume, while managers need predictive measures; also, they are built in a non-contextualized way, that is, they are not in conformity with the organizational goals, without considering the return on investment of interested parties, without building measurement scales aligned with organizational activities and without providing an approach (theory), which leads to the loss of the benefit of synergy (GHALAYINI and NOBLE, 1996; NEELY, 1999; CHOONG, 2014).

In this sense, Performance Assessment (PA) in budgeting practices has traditionally been based only on controlling and evaluating actual and budgeted performance (HAKTANIR and HARRIS, 2005). However, PA started to include indicators that are consistent with strategic objectives, serve different stakeholders internally and externally and discuss different purposes (NEELY, GREGORY and PLATTS, 1995; BEHN, 2003; CHOONG, 2014).

PA suffered influences and interactions with several management areas during its evolution, and, thus, some trends were identified, such as strategic orientation of the models, multidimensionalities of these to incorporate organizational complexity, inclusion of external aspects and stakeholders. The most current models are associated with the strategic field, in which the challenge is to facilitate the management of information (CARNEIRO-DA-CUNHA, HOURNEAUX JUNIOR and CORRÊA, 2016).

In view of this context and given the importance of Performance Assessment to Budgetary Practices, the following research problem arises: **How can the knowledge resulting from the analysis of the literature on Performance Assessment be synthesized in contributions to Budgetary Practices?** In the meantime, the objective was to analyze the characteristics

of international investigations in relation to a fragment of literature on the use of PA in Budgetary Practices, by intending to generate knowledge and identify gaps to point out possibilities for future investigations. To conduct the process of selecting publications, we adopted the Knowledge Development Process-Constructivist (Proknow-C) (DUTRA, RIPOLL-FELIU, GINER FILLOL et al., 2015; THIEL, ENSSLIN and ENSSLIN, 2017) as a theoretical intervention tool due to its scientific-constructivist approach, aligned with the research objective and its structured process.

This investigation is justified regarding the importance, originality and viability (CASTRO, 1977). The importance is due to the contribution to the scientific and practical community that studies budgetary practices in order to highlight, in a single study, the investigation of the content of the studies over the years, the responsible institutions and the main criticisms found in a set of international works (articles), scientifically recognized, and relevant in clarifying the bases that inform the theme and what its results represent. It is considered original because there are no investigations in the literature consulted that intend to present the characteristics of these studies. In this sense, it is perceived to be viable due to access to the data, considering that the analyzed articles are searched on the CAPES Journal Portal and because it only requires the involvement of researchers to analyze the articles.

THEORETICAL FRAMEWORK

Performance Assessment

For Ghalayini and Noble (1996), PA had two main phases: beginning of 1880 until the 1980s, when the emphasis was on financial measures; the second phase started in the late 1980s, in which the change in globalized and competitive commerce demanded that organizations reflect on their strategic priorities, implement new technologies and management philosophies.

According to Bititci, Garengo and Nudurupati (2015), performance measurement and management is a topic that has become important for academia and practice, which was evident since the review presented by Neely (2005) and until the recent review that was presented by Choong (2014).

In this context, Neely, Gregory and Platts (1995) state that PA is a topic discussed, however it is rarely defined. For Lebas (1995), measuring is complex, difficult, challenging, important and misused. Neely, Gregory and Platts (1995) define PA as a complex activity that consists of a process of quantifying the efficiency and effectiveness of actions, through the analysis of a set of individual indicators that interact with the environment, called Performance Assessment Systems (PAS). It is worth noting that this investigation is in line with this theoretical definition.

Globerson (1985) presents some central criteria of the indicators of a PAS: needs to be defined based on the company's objectives; should allow comparison with other organizations of similar activities; it must be unambiguous; and the organization must have control. For Lebas (1995), performance measures should primarily empower and engage stakeholders; create a basis for discussion, which provides continuous improvement; and, above all, support the decision. In the scope of Management Accounting, a PAS is considered synonymous with planning and

budgeting (OTLEY, 1999). However, Cosenz and Noto (2016) suggest that the PAS indicators should be in adequate numbers, so that they evaluate the performance of the organization's decision-making processes.

According to Bourne, Mills, Wilcox et al. (2000), the development of PAS must be conceived in these three phases: design of performance measures (derived from the organizational strategy); implementation of measures; and use of performance measures. To these phases is added the review of all of them. After the development of the PAS, it must be implemented, which will interact with the internal and external environment. However, Bourne, Mills, Wilcox et al. (2000) explain that specific factors, such as manager commitment and the involvement of IT specialists, are needed to continuously align PAS with the strategy. When combined, this System can achieve a better level.

Maskell (1991) states that PAS should incorporate non-financial measures that need to be taken, offer quick feedback and be designed to stimulate the continuous improvement process instead of just monitoring.

Based on the manifestations of these theorists and those cited below, it is concluded that traditional PA has many limitations. According to (i) Neely, Gregory and Platts (1995), the measures used are inadequate, mainly because they encourage the short term and lack a strategic focus; (ii) according to Ghalayini and Noble (1996), PA does not incorporate the strategy, it is based on outdated traditional accounting, is aimed at managers and has metrics fed with data already outdated; (iii) according to Neely (1999), it makes use of past measures, such as sales volume, while managers need predictive measures; (iv) according to Choong (2014), PA is built in a non-contextualized way, that is, it is not in conformity with the organizational goals, without considering the relevance of the interested parties, without building measurement scales in line with organizational activities and without providing an approach (theory) that leads to loss of synergy benefit. In this context, the mentioned authors conclude that managers use PA to monitor and look for predictive measures that show that something is out of control. However, Behn (2003) states that PA can be useful to assess, control, budget, motivate, promote, celebrate and learn what to improve.

Thus, maintaining the alignment of PAS with the organizational strategy is not a simple task. It takes time, resources and energy to reformulate the metrics, which also considers time for these changes to be communicated, assimilated and put into practice in the organization (MELNYK, BITITCI, PLATTS et al., 2014). Considering that behaviors (organizational and individual) are shaped by feelings, values, beliefs and perceptions of individuals, the organization and stakeholders, as Bititci, Garengo, Dörfler et al. (2012), any reformulation and change impacts and is impacted by the behavior of individuals. From where it appears that PA is a social phenomenon.

Bititci, Garengo, Dörfler et al. (2012) explain that this field has developed over several phases, such as budget control, productivity management, integrated assessment and integrated performance management. Knowledge in the area has suffered influences and interactions with several management areas during its evolution, and, given this, some trends were identified, as strategic orientation of the models, multidimensionality of incorporating organizational complexity, including external aspects and stakeholders. The current models are associated with the strategy, in which the challenge is to facilitate

the management of the information that these models generate (CARNEIRO-DA-CUNHA, HOURNEAUX and CORRÊA, 2016).

In this sense, there are three conclusions: the amount of research conducted shows the general interest in the subject; the number of questions left unanswered gives an indication of the complexity of performance measurement as a research topic; or points to a number of more fundamental problems that inhibit effective progress in the field (VAN CAMP and BRAET, 2016). Bititci, Garengo, Dörfler et al. (2012) concluded that the research community is aware of the challenges, however it has paid little attention to this complexity. These trends will change the way performance is measured, managed and evaluated. Empirical research also represents another challenge.

Performance assessment in budgeting practices

According to Arnold and Gillenkirch (2015), budgets are often used simultaneously for different planning and performance assessment purposes. Its uses can also be described as (1) planning (planning, coordination, allocation of resources and determination of operating volumes) and (2) dialogue (communication, awareness raising and motivation), as discussed by Silva and Lavarda (2020). For Bruns and Waterhouse (1975), the budget can be defined as financial plans that provide a basis for directing and evaluating the performance of individuals or organizations.

Horngren, Datar and Foster (2006) define the budget as the quantitative expression of an action plan proposed by management for a specific period and an aid to coordinate what needs to be done to implement that plan. Blumentritt (2006, p. 73) puts the budget as “the process of allocating an organization’s financial resources to its units, activities and investments”. In literature, participatory budgeting is called a “bottom-up” approach; and the authoritarian budget is called a “top-down” approach” (JONES, 1998, 2008).

During the budgeting process, if the goals given to employees are very difficult to meet, can lead to some gambling budgetary actions, such as lower sales estimates to make the budget goal easier to achieve and spend the entire budget at the end of the budget period so as not to lose their “right” when the next budget is established, (LIBBY and LINDSAY, 2013). To avoid these game actions, goals must be rational and defined by communication with subordinates. In other words, participation in the budget process is essential to avoid gambling. Other benefits of participation prevent information asymmetry between senior managers and lower level managers, provide motivation to heads of department and committee, which improves employees’ work attitudes and results in a higher level of goal commitment by lower level managers (YUEN, 2007).

However, there are other practices to measure, control, manage and evaluate performance, such as: continuous forecasting, Balanced Scorecard, activity-based costing, activity-based management (CRUZ, 2007). Otley (1999) explains that, in management accounting, a PAS is considered synonymous with planning and budgeting. In the meantime, Arnold and Gillenkirch (2015) explain that the studies contributed to the understanding of the budget effects used for PA. However, Franco-Santos, Kennerley, Micheli et al. (2007) argue that the field of PA should

develop, become more relevant between theory and practice, and researchers need to be more specific and explicit about the characteristics of the systems, because it compromises the generalization and comparability of research.

For Neely, Bourne and Adams (2003), the predominant theme in the literature is that the planning and budgeting processes traditionally used in many organizations fail to deliver results. The problem is that they add limited value to business management. They are very time-consuming and expensive to undertake and encourage internal politics and gambling behavior, rather than boosting business performance. In addition, one of the biggest problems with budgets is that they tend to promote a short-term culture, which focuses on achieving a budget, rather than implementing business strategy and creating shareholder value over the medium to long term. Much of the literature argues that collectively these weaknesses lead to poor business performance.

To be effective, budgets must be aligned with the organization's strategies, with the appropriate strategic planning and performance management processes introduced. They must also involve processes based on values, that is, focused on identifying and managing the drivers of shareholder value, that explain the links between these value drivers and that promote a continuous process of questioning and contesting the premises inherent to the strategy. Nonetheless, few meet these criteria for effectiveness (NEELY, BOURNE and ADAMS, 2003).

METHODOLOGICAL PROCEDURES

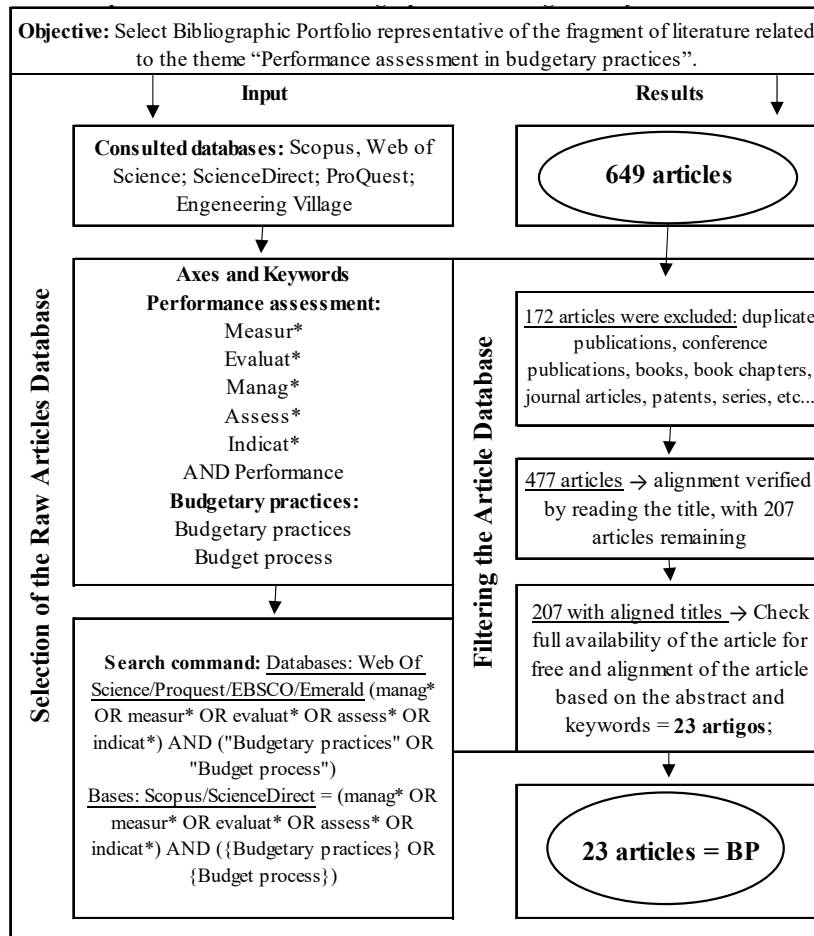
Methodological framework, procedures for data collection and intervention instrument

The present investigation, according to the problem, is characterized as qualitative; and, as for the objective, it is characterized as descriptive and exploratory. For data collection, we use primary and secondary data. Thus, the selection of articles, for the formation of the Bibliographic Portfolio (BP), uses primary data, since the delineations are made by the investigators in all circumstances necessary during the process and in the analysis carried out. Bibliometric analysis, in this sense, uses secondary data to identify and analyze the highlights of the characteristics that are extracted from the selected BP.

It is worth mentioning that we used ProKnow-C for guidance purposes. Meanwhile, ProKnow-C aims to promote knowledge through the following steps: (i) selection of the bibliographic portfolio (BP); (ii) bibliometric analysis; (iii) systemic analysis; and (iv) formulation of research questions (DUTRA, RIPOLL-FELIU, GINER FILLOL et al., 2015). The first step is the selection of the bibliographic portfolio. The results of the operationalization of this stage are shown in Figure 1.

FIGURE 1

Steps for Selection of the Bibliographic Portfolio guided by ProKnow-C



Source: Elaborated by the authors.

The study consulted the main bases for the selection of articles. Data collection took place between March 21-28, 2018, and the final BP on the theme Performance Assessment in Budgetary Practices selected was 23 articles. These articles are listed in the References section between [] marked with the letter E for empirical articles, and with the letter T for theoretical articles.

DATA ANALYSIS PROCEDURES

After defining the Bibliographic Portfolio, we carried out the second stage of ProKnow-C, bibliometric analysis, which brings the researcher closer to the topic and generates sufficient knowledge to identify gaps and propose challenges for future work.

Bibliometric analysis aims to generate knowledge about relevant points of the topic in question and, for that, some characteristics of the BP are selected, which turns them into variables and details their occurrence to aid the researcher’s arguments (THIEL, ENSSLIN and ENSSLIN, 2017). In basic bibliometry, the variables investigated in the present study were: (i) evolution

of studies over the years; (ii) collaboration network between co-authors and institutions; (iii) public or private context of studies; and (iv) tools used.

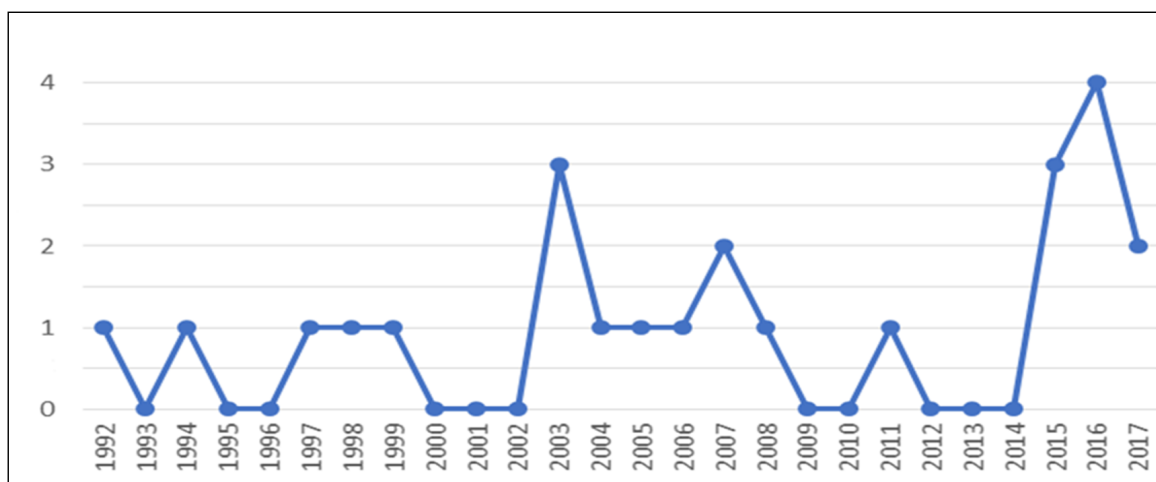
In advanced bibliometry, the investigated variables were: (i) paradigms that guided the studies: the use of the Positivist paradigm to analyze whether the phenomenon is unique, if statements and generalizations are independent of time and imply scientific and precise, fixed and invariant concepts and if there are cause and effect relationships; and the use of the Interpretativist paradigm is considered to understand the world from the point of view of those who experience it (LUKKA, 2010); (ii) elements present in the concepts used by the authors of the BP articles: we adopted as a basis the proposal by Neely, Gregory and Platts (1995), in which the characteristics and functions were observed; (iii) the strategic objectives, the relations of internal and external environment and the levels of analysis performed, according Neely, Gregory and Platts (1995), Behn (2003) and Choong (2014); and (iv) purposes of Performance Assessment in Budgetary Practices, according to Behn (2003). Finally, there were research opportunities and gaps for the academic and corporate community.

DATA ANALYSIS AND DISCUSSIONS

Bibliometric analysis of basic variables

The first investigation in the BP articles concerns the evolution of the content of the studies over the years.

FIGURE 2
Evolution of Performance Assessment Studies in Budgetary Practices



Source: Elaborated by the authors.

In general terms, the temporal evolution refers to the periodicity in which the researchers directed efforts to identify developed and emerging themes, and also draw perspective for future investigations. In temporal analysis, Lyne (1992) was the first to research the theme,

examined the perceptions of different groups of users (accountants and managers) on the role of budget, budgetary pressure and budgetary participation according to dysfunctional behavior. It is noticed that the interest of researchers on PA in budgeting practices grew, considering that, between 2014 and 2016, nine articles were found for this purpose, such as studies by Kasdin (2017) who proposed an analytical framework to assess budget and its inefficient areas; and by Elhamma (2015) which analyzed the impact of company size on budget and performance assessment; and by Leach-Lópes, Stammerjohan, Lee et al. (2015) who analyzed the effect of conflict on budget participation on job performance in a Korean environment; and by Arnold and Gillenkirch (2015) who investigated how a planning task that conflicts with the PA task affects the behavior in budget negotiations and their results.

It is worth mentioning that these studies did not follow up on previous investigations and did not propose definitions. Only the study by Kasdin (2017) proposed a framework in the public area. These articles stand out for using theoretical framework from other areas, such as Psychology, Sociology and Economics in PA in Budgetary Practices. Thus, some RESEARCH agendas for the evolution of the theme were identified, such as the role of the budget in interorganizational arrangements (ANESSI-PESSINA, BARBERA, SICILIA et al., 2016; DAMAYANTHI and GOONERATNE, 2017), budget integration in performance management (ANESSI-PESSINA, BARBERA, SICILIA et al., 2016) and contingency variables such as environmental uncertainty, culture, in addition to strategy and leadership style should be studied to explain PA within the budget (ELHAMMA, 2015).

According to Anessi-Pessina, Barbera, Sicilia et al. (2016), new questions were raised to put the theme back in the spotlight, which is an area that has been remarkably under-investigated and under-theorized.

Then, we analyze the historical evolution of the BP. Thus, a relationship between the year of publication and the objectives of the articles was examined. We realized that the first empirical studies (LYNE, 1992; JONES, 1998), in the 1990s, sought to examine users' perceptions and attitudes about budget and PA. As for the theoretical studies (FAUCETT and KLEINER, 1994; BARSKY and BREMSER, 1999) addressed new developments in performance measures, such as non-financial measures, Balanced Scorecard and Control Levers by Simons (1995).

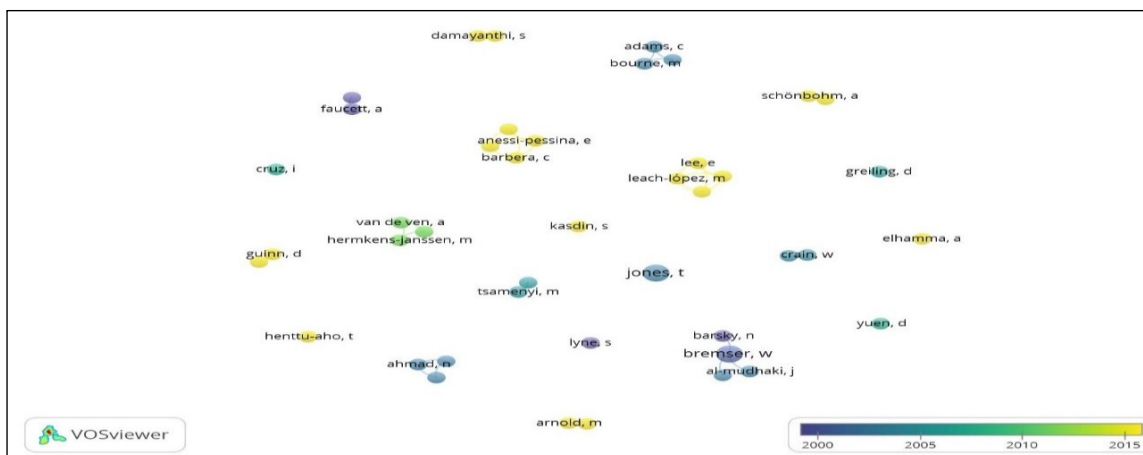
As of 2000, the only theoretical study (GREILING, 2006) addressed how PA could be an efficiency driver. Neely, Bourne and Adams (2003) investigated whether companies adopted best budget practices, finding that some organizations waived the budget; and Uddin and Tsamenyi (2005) and Waal, Hermkens-Janssen and Ven (2011) investigated the acceptance of changes in the budget process in monitoring performance.

As of 2010, Kasdin, (2016) proposed an analytical framework for assessing the public sector budget; Anessi-Pessina, Barbera, Sicilia et al. (2016) presented a literature review on public budget; and Damayanthi and Gooneratne (2017) reviewed the literature on management control that is based on the logical perspective as the theoretical lens to understand the current basis of this perspective in management control research. In empirical studies, Elhamma (2015) examined the size of the organization in the PA of the budget; Leach-Lópes, Stammerjohan, Lee et al. (2015) and Arnold and Gillenkirch (2015) researched the conflict in budget participation over job performance; and Henttu-Aho (2016) researched characteristics that facilitate new practices and their implications.

In this sense, the works consider design, planning, to the detriment of budget execution and management to obtain the PA. We highlight the gap between theoretical studies that address new developments in the area and empirical studies that present discussions about use, acceptance of changes and conflicts in budgetary participation on work performance.

Then, we analyze the collaboration network between co-authors in the BP.

FIGURE 3
Author collaboration network



Source: Elaborated by the authors.

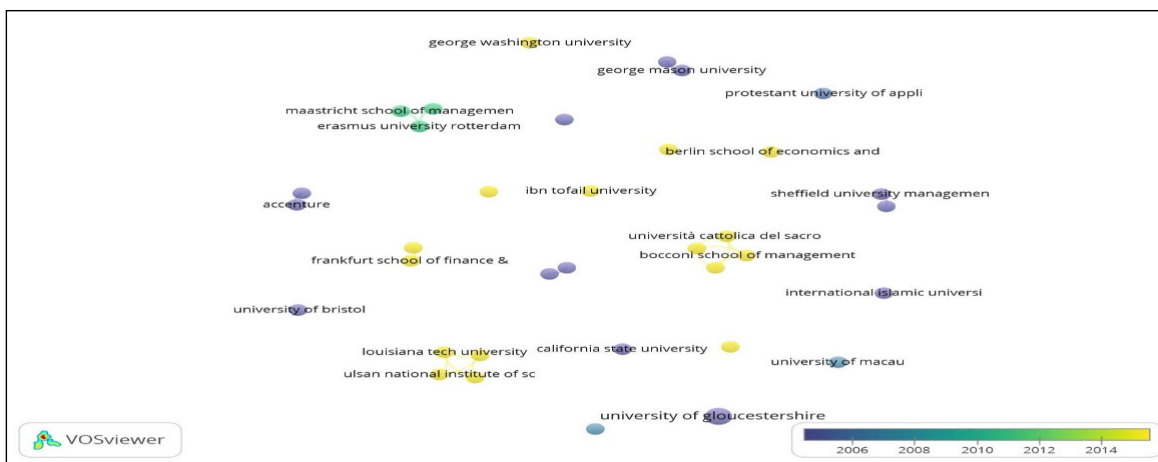
Regarding the network of co-authors, 43 authors were identified who research/researched on the topic. Tracy Jones and Wayne Bremser appear as the authors highlighted in PB, each with two articles. Tracy Jones, currently, she is the leader of the Management Accounting and Research Methods group and a professor in the Accounting and Finance course at University of Gloucestershire (England). She started her career in the hospital area, however she was drawn by Accounting and Performance Assessment. She holds a PhD in Budget from the same university. Her research areas are in management and Performance Assessment, budget, hospitality and hospital. In 1998, the author investigated the use of budgeting in hotels in the United Kingdom, as it is used mainly to assess performance. In order to observe changes over time, in 2008 the author repeated the investigation and obtained a similar conclusion. It is worth mentioning that she has the most cited works in the hospital area, the first most cited article was published in 2015.

Professor Wayne Bremser, from Villanova University, had his training at Drexel University, and his Ph.D. at the University of Pennsylvania. He is a professor of Accounting and Information System. His research areas are balanced scorecard, Performance Assessment system and innovation. The author has two articles in the BP. The first, dates back to 1999, addresses the implications for budget and performance measurement of the emphasis on strategic human resources and information management to gain competitive advantage in multinational companies. In the second article, in 2003, professors PL Joshi and Jawahar Al-Mudhaki, both from the University of Bahrain, examined budget planning, implementation and Performance Assessment practices in organizations located in Bahrain. As the most cited article by the author, is what addresses the use of the balanced scorecard for measuring

performance in B&P, published in 2004. After the research was concluded, it was found that Tracy Jones and Wayne Bremser did not continue their investigations in the area of Performance Assessment in Budgetary Practices; which signals the need for new researchers in the area, which can raise the considerations by Anessi-Pessina, Barbera, Sicilia et al. (2016) regarding new questions with the intention of reinstating the theme in evidence again.

Based on Figure 4, we analyzed the collaboration network between institutions. Regarding the prominent institutions, 35 institutions were identified, including universities and research institutes. The university with the most authors and articles is the University of Gloucestershire, to which Tracy Jones is part of; Università Cattolica Del Sacro, Bocconi School of Management, Louisiana Tech University and Ulsan National Institute of SC.

FIGURE 4
Network collaboration network between institutions (from authors)



Source: Elaborated by the authors.

The characteristics of the organizational context, such as the public sector and the private sector, reinforce the different ways of approaching DA in Budgetary Practices, since there are aspects that are relevant and that highlight the organizational context as a variable that should be discussed.

TABLE 1
Organizational context – public sector and private sector in the bp

Organizational context	Theoretical BP	Empirical BP
Private Sector	2	13
Public Sector	4	4
	6	17

Source: Elaborated by the authors.

In the BP, four theoretical studies were identified in the public sector, among eight in the BP, while two were carried out in the private sphere. For Greiling (2006), to accompany the budget and PA represents more transparency of results in the public sector. These aspects admit the adoption of management practices, which may have been driven by the process of convergence of Public Accounting to International Standards. In the private sector, Damayanthi and Gooneratne (2017) explain that social (such as institutional theory) and field factors impacted management control practices, what influences PAS in Budgetary Practices, which increased the interest of researchers. When considering the 17 empirical articles of the BP, 13 were carried out in private companies and four in the public sector. Thus, 15 studies were carried out in the private context and eight in the public sector. These studies differ in their approach. Public sector articles seek to identify change in budget control, performance monitoring, as well as erroneous policies and perceptions in the budget. In the private sector, studies seek to identify the use of the budget and the conflict relationship in the participation of the budget and performance.

As for the tools used by these BP studies, 05 articles did not present or mention any tool, instrument or indicators. However, 18 studies did present it. As tools mentioned among theoretical studies, there is the Economic Value Added, Balanced Scorecard and Simons' Levers (BARKSKY and BREMSER, 1999) and Analytical Framework for Assessing the Public Budget (KASDIN, 2017). At the empirical level, there are investigations that used the Budgetary Performance Variable (LEACH-LÓPEZ, STAMMERJOHAN, LEE et al., 2015), Activity Based Budgeting (NEELY, BOURNE and ADAMS, 2003), Model of Accounting Valuation Measures (ELHAMMA, 2015), Value-Based Management (NEELY, BOURNE and ADAMS, 2003), Balanced Scorecard (JONES, 1998, 2008; CRUZ, 2007) and Evolutionary Adoption Structure (WAAL, HERMKENS-JANSSEN and VEN, 2011).

Bibliometric analysis of advanced variables

First, we sought to identify, in the theoretical and empirical articles of the BP, the research paradigms (Positivist, Interpretivist and Critical).

We analyzed the theoretical articles of the BP (23), when the predominance of the Positivist paradigm was identified (17); the Interpretivist paradigm is identified only in six investigations.

TABLE 2
Research paradigm – public sector and private sector in the bp

Research paradigm	Theoretical BP		Empirical BP	
	Private	Public	Private	Public
Positivist	1	3	11	2
Interpretivist	1	1	2	2
Critical				
Total	6		17	

Source: Elaborated by the authors.

In their analysis of research paradigms, the authors approach Performance Assessment in Budgetary Practices in their investigations from a Deterministic perspective. In other words, generalist organizational contexts are considered, aimed at practical conclusions that present guided discussions in comparison of theory and practice. However, the need to explain the analyzed elements and anticipate future situations in an organizational context is highlighted, which shows the cause and effect relationships of the objects of study. The data also demonstrate that studies in the area have evolved. Thus, the Positivist paradigm is identified, while the Interpretivist aspects are little explored, as well as the lack of a critical approach as a way of looking at social reality.

As for the characteristic elements of the BP Budgetary Practices, we verified whether the empirical studies addressed tool or PAS. Of the 23 articles belonging to the BP, nine had measures, instruments or indicators. Of these, most did not have an integrated system, but only individual performance measures, without signaling if they belong to a system or if the organization adopted only those individual measures. We highlight that two presented the PAS that could be examined by individual and joint measures. The tools found were Budget Participation Desired (BPD) and Balanced Scorecard.

In studies, analysis of commonly used terms indicates that there is no consensus on their meanings and, sometimes, the meaning is the same for different things (CHOONG, 2014). The articles that presented only individual performance measures dealt with operating profit indicators, budgeted and executed comparisons and sales volume. These indicators measured the performance of the variable to which they were related, which provided management information. When analyzing how to measure performance — if it is diagnosed, compared with other performance and if it offers information to management (NEELY, GREGORY and PLATTS, 1995) — carried out in the BP article was identified: six reported performance diagnoses, two seeking to offer information to management, and one compared performance with another.

These verified and described previously considered, mostly, only the internal environment. As an exception, Yuen (2007) states that the external variable (business environment and economic changes) can influence the internal scope. As for the tools, BPD and Balanced Scorecard, none showed interaction with the external environment, even with some articles that were from the public sector.

It was not possible to verify the existence of alignment of the indicators with the company's strategy or objectives, a criterion cited as important by Neely, Gregory and Platts (1995) and Choong (2014). Most articles did not provide sufficient information on the strategic objectives of organizations. Among the three studies that had alignment, Faucett (1994) states that public program management, like the private sector, should measure performance to achieve goals and objectives; Yuen (2007) asserts that job performance is affected by the business strategy; and Henttu-aho (2016) presented evidence that the group controller had an understanding of strategic priorities and was able to build some goal scenarios to be discussed with management.

As for the public to which the PA is communicated (CHOONG, 2014), most articles do not provide enough information for this analysis. Some investigations recognize that the PA must consider the different stakeholders in its theoretical foundation (NEELY, BOURNE and ADAMS, 2003; JOSHI, AL-MUDHAKI and BREMSER, 2003; AHMAD, SULAIMAN and ALWI, 2003; CRUZ, 2007; LIBBY and LINDSAY, 2013), however, these surveys address the

internal environment as collaborators and/or managers (ARNOLD and GILLENKIRCH, 2015; LEACH-LÓPEZ, STAMMERJOHAN, LEE et al., 2015).

In the public sector, the Performance Assessment in Budgetary Practices is geared to government (CRAIN and O'ROARK, 2004; GREILING, 2006; KASDIN, 2017), society (FAUCETT, 1994; CRAIN and O'ROARK, 2004; GREILING, 2006), collaborators (FAUCETT, 1994; CRAIN and O'ROARK, 2004; GREILING, 2006), public manager (FAUCETT, 1994) and political (UDDIN and TSAMENYI, 2005). In this sense, given the diversity of stakeholders, it must be designed to meet the needs of a wide public (CHOONG, 2014).

Based on Table 3, we analyzed the purposes of PA, according to Bhen (2003), in budgetary practices.

TABLE 3
Purposes of performance evaluation in budgeting practices
– public and private sectors in BP

Purposes	Source (Theorists - T)		Source (Empirical - E)	
	Public	Private	Public	Private
Assess	T1; T5; T6	T2	E3; E6; E15; E17	E1; E2; E4; E5; E7; E8; E9; E10; E11; E12; E13; E14; E16
Control	T1; T5; T6	T2	E3; E6; E15; E17	E1; E2; E4; E5; E7; E8; E9; E10; E11; E12; E13; E14; E16
Budget	T1; T5; T6	T2	E3; E6; E15; E17	E1; E2; E4; E5; E7; E8; E9; E10; E11; E12; E13; E14; E16
Motivate		T2	E17	E2; E4; E8; E11; E12; E13
Promote		T2	E17	
Celebrate				
Learn		T2	E17	
Improve	T1; T5; T6	T2	E3; E6; E17	E2; E3; E4; E8; E9; E11; E12; E13

Source: Elaborated by the authors.

In relation to studies carried out in the public sector, the purpose of Performance Assessment in Budgetary Practices was to assess, control, budget and improve. In the private sector, they were assessing, controlling, budgeting, motivating and improving. Based on the identified purposes, the private sector has greater purposes than the public sector, as pointed out by Behn (2003), where the private sector is more comprehensive than the public. However, in the BP articles, none sought celebrating, few promoted and obtained learning in Performance Assessment in

Budgetary Practices. In this sense, the author states that managers need to reflect on managerial purposes so that PA contributes and can implement these measures. In this way, the manager can use performance measures to assess, control, budget, motivate, promote, celebrate, learn and improve as part of their management strategy.

Contributions to the advancement of the area

By analyzing this fragment of the scientific literature, it was possible to highlight opportunities and research gaps in the Performance Assessment in Budgetary Practices, for the academic and corporate communities, as shown in Table 4. In this way, these scientific and practical assumptions open scenarios for future research.

TABLE 4
Academic and practical contribution to future research

Gaps from variables	Academic Opportunities	Practical Opportunities
Basic	Follow up on previous investigations and propose definitions.	Integrate budgeting into performance management.
	Investigate contingency variables, culture, strategy and leadership style to explain Performance Assessment in Budgetary Practices.	Identify the role of the budget in interorganizational arrangements.
	Address budget execution to obtain PA.	Seek to develop alliances with the academic environment to develop or improve Performance Assessment tools in Budgetary Practices, according to their particularities.
	Use other paradigms in investigations.	Diagnose the indicators used in the Performance Assessment.
Advanced	To signal the existence of PAS or if the organization adopts only individual measures	Use information from Performance Assessment in Budgetary Practices.
	Highlight the environment to which the organization reports.	Align the indicators with the organization's strategy or objectives.
	Provide information to the parties with whom the Performance Assessment in Budgetary Practices communicates.	Design the Performance Assessment in Budgetary Practices to meet the needs of a wide audience.
	Identify the purposes of Performance Assessment in Budgetary Practices.	Seek to cover more purposes of Performance Assessment in Budgetary Practices.

Source: Elaborated by the authors.

It is noteworthy that these horizons of new investigations can lead researchers in the area to form collaboration networks, which minimizes the existing shortfall, as well as highlighting the concerns of organizations when targeting PA as an instrument to manage budgetary practices.

FINAL CONSIDERATIONS

The results described in relation to the basic variables allow us to identify that most studies address planning, management functions and budget allocations. The works consider design over execution and budget management to obtain PA. In terms of theoretical and practical studies, there is a mismatch between them. Theoretical studies address new developments, while the practical ones discuss the use of budget, of acceptance and changes and conflicts in budget participation on job performance.

The analysis of the advanced variables describes the paradigms adopted in the investigations, in which the predominance of the Positivist paradigm was identified. In this regard, the need for studies under the Interpretivist and Critical lenses is reinforced for the expected advances in the area, which highlights the low incidence of studies using these paradigms. The study also found that, of the 23 articles belonging to the BP, nine had measures, instruments or indicators. It was not possible to verify the existence of alignment of the indicators with the company's strategy or objectives. As the purpose of Performance Assessment in Budgetary Practices, none sought to celebrate, few promoted and obtained learning.

In order to promote advances in this area of knowledge, based on the gaps identified, what the challenges would be, for researchers and managers to meet the requirements that give validity and legitimacy to the evaluation process were listed. Among the main challenges, we mention investigating contingency variables of organizations to explain the Performance Assessment in Budgetary Practices; address budget execution to obtain PA; align the indicators with the organization's strategy or objectives; design the Performance Assessment in Budget Practices to meet the needs of a wide audience; and seek to cover more Performance Assessment purposes in Budgetary Practices.

This investigation does not intend to exhaust the discussion on the subject, considering that other studies need to be carried out and different approaches may differ from the results. Some limitations of the research can be cited, such as the formation of BP being restricted to publications in journals indexed in the databases of the CAPES Portal; to articles written in English, published in scientific journals indexed in the selected databases and freely available on the internet; and the analysis of the BP articles, regarding the investigated variables, was informed by the authors' judgment and interpretation. When aiming at future investigations, we suggest (i) the expansion of this research to other databases, other languages and other characteristics; and (ii) the development of works that aim to fill the gaps, take advantage of the opportunities and challenges identified.

REFERENCES

- AHMAD, N. N. N.; SULAIMAN, M.; ALWI, N. M. Are budgets useful? A survey of Malaysian companies. **Managerial Auditing Journal**, v. 18, n. 9, p. 717-724, 2003.
- ANESSI-PESSINA, E. et al. Public sector budgeting: a European review of accounting and public management journals. **Accounting, Auditing & Accountability Journal**, v. 29, n. 3, p. 491-519, 2016. [PB][T1].
- ARNOLD, M. M. C.; GILLENKIRCH, R. R. M. Using negotiated budgets for planning and performance evaluation: an experimental study. **Accounting, Organizations and Society**, v. 43, p. 1-16, 2015. [PB] [E2].
- BARSKY, N. N. P.; BREMSER, W. W. G. Performance measurement, budgeting and strategic implementation in the multinational enterprise. **Managerial Finance**, v. 25, n. 2, p. 3-15, 1999. [PB] [T2].
- BEHN, R. D. Why measure performance? Different purposes require different measures. **Public administration review**, v. 63, n. 5, p. 586-606, 2003.
- BITITCI, U. S. et al. Performance measurement: challenges for tomorrow. **International Journal of Management Reviews**, v. 14, n. 3, p. 305-327, 2012.
- BITITCI, U. S. et al. Value of maturity models in performance measurement. **International Journal of Production Research**, v. 53, n. 10, p. 3062-3085, 2015.
- BLUMENTRITT, T. T.; DANIS, W. W. M. Business strategy types and innovative practices. **Journal of Managerial Issues**, v. 18, n. 2, p. 274-291, 2006.
- BOURNE, M. et al. Designing, implementing and updating performance measurement systems. **International Journal of Operations & Production Management**, v. 20, n. 7, p. 754-771, 2000.
- BRUNS, W. J.; WATERHOUSE, J. J. H. Budgetary control and organization structure. **Journal of Accounting Research**, v. 13, n. 2, p. 177-203, 1975.
- CARNEIRO-DA-CUNHA, J. J. et al. Evolution and chronology of the organizational performance measurement field. **International Journal of Business Performance Management**, v. 17, n. 2, p. 223-240, 2016.
- CASTRO, C. M. **A prática da pesquisa**. São Paulo: McGraw-Hill do Brasil, 1977.
- CHOONG, K. K. K. Has this large number of performance measurement publications contributed to its better understanding? A systematic review for research and applications. **International Journal of Production Research**, v. 52, n. 14, p. 4174-4197, 2014.
- CHOONG, K. K. K. Understanding the features of performance measurement system: a literature review. **Measuring Business Excellence**, v. 17, n. 4, p. 102-121, 2014.
- COSENZ, F.; NOTO, G. Applying system dynamics modeling to strategic management: a literature review. **Systems Research and Behavioral Science**, v. 33, n. 6, p. 703-741, 2016.
- CRAIN, W. M.; O'ROARK, J. B. The impact of performance-based budgeting on state fiscal performance. **Economics of Governance**, v. 5, n. 2, p. 167-186, 2004. [PB][E3].

CRUZ, I. How might hospitality organizations optimize their performance measurement systems? **International Journal of Contemporary Hospitality Management**, v. 19, n. 7, p. 574-588, 2007. [PB] [E4].

DAMAYANTHI, S.; GOONERATNE, T. Institutional logics perspective in management control research: A review of extant literature and directions for future research. **Journal of Accounting & Organizational Change**, v. 13, n. 4, p. 520-547, 2017. [PB][E3].

DUTRA, A. et al. The construction of knowledge from the scientific literature about the theme seaport performance evaluation. **International Journal of Productivity and Performance Management**, v. 64, n. 2, p. 243-269, 2015.

ELHAMMA, A. The relationship between budgetary evaluation, firm size and performance. **Journal of Management Development**, v. 34, n. 8, p. 973-986, 2015. [PB] [E5].

FAUCETT, A.; KLEINER, B. H. New developments in performance measures of public programmes. **International Journal of Public Sector Management**, v. 7, n. 3, p. 63-70, 1994. [PB] [T4].

FRANCO-SANTOS, M. et al. Towards a definition of a business performance measurement system. **International Journal of Operations & Production Management**, v. 27, n. 8, p. 784-801, 2007.

GHALAYINI, A. M.; NOBLE, J. S. The changing basis of performance measurement. **International Journal of Operations & Production Management**, v. 16, n. 8, p. 63-80, 1996.

GLOBERSON, S. Issues in developing a performance criteria system for an organization. **International Journal of Production Research**, v. 23, n. 4, p. 639-646, 1985.

GREILING, D. Performance measurement: a remedy for increasing the efficiency of public services? **International Journal of Productivity and Performance Management**, v. 55, n. 6, p. 448-465, 2006. [PB] [T5].

GUINN, D. E.; STRAUSSMAN, J. D. Improving the Budget Process in Fragile and Conflict-Ridden States: Two Modest Lessons from Afghanistan. **Public Administration Review**, v. 76, n. 2, p. 263-272, 2016. [PB] [E6].

HAKTANIR, M.; HARRIS, P. Performance measurement practice in an independent hotel context: A case study approach. **International Journal of Contemporary Hospitality Management**, v. 17, n. 1, p. 39-50, 2005.

HANSEN, S. C.; OTLEY, D. T.; VAN DER STEDE, W. A. Practice developments in budgeting: an overview and research perspective. **Journal of Management Accounting Research**, v. 15, n. 1, p. 95-116, 2003.

HENTTU-AHO, T. Enabling characteristics of new budgeting practice and the role of controller. **Qualitative Research in Accounting & Management**, v. 13, n. 1, p. 31-56, 2016. [PB] [E7].

HORNGREN, C.; DATAR, S.; FOSTER, G. **Contabilitatea costurilor, o abordare managerială**. Moldávia: Editura Arc, 2006.

JONES, T. A. UK hotel operators use of budgetary procedures. **International Journal of Contemporary Hospitality Management**, v. 10, n. 3, p. 96-100, 1998. [PB] [E8].

JONES, T. A. Changes in hotel industry budgetary practice. **International Journal of Contemporary Hospitality Management**, v. 20, n. 4, p. 428-444, 2008. [PB][E9].

- JOSHI, P. L.; AL-MUDHAKI, J.; BREMSER, W. G. Corporate budget planning, control and performance evaluation in Bahrain. **Managerial Auditing Journal**, v. 18, n. 9, p. 737-750, 2003. [PB] [E10].
- KASDIN, S. An evaluation framework for budget reforms: A guide for assessing public budget systems and selecting budget process reforms. **International Journal of Public Administration**, v. 40, n. 2, p. 150-163, 2017. [PB][T6].
- LEACH-LÓPEZ, M. A. et al. Relationship of budget participation conflict and job performance of South Korean managers. **Cross Cultural Management**, v. 22, n. 4, p. 608-629, 2015. [PB][E11].
- LEBAS, M. J. Performance measurement and performance management. **International journal of production economics**, v. 41, n. 1-3, p. 23-35, 1995.
- LIBBY, T.; LINDSAY, R. M. Budgeting — an unnecessary evil. **CMA Magazine**, v. 77, n. 1, p. 30-30, 2013.
- LUKKA, K. The roles and effects of paradigms in accounting research. **Management Accounting Research**, v. 21, n. 2, p. 110-115, 2010.
- LYNE, S. R. Perceptions and attitudes of different user-groups to the role of the budget, budget pressure and budget participation. **Accounting and Business Research**, v. 22, n. 88, p. 357-369, 1992. [PB][E12].
- MASKELL, B. H. **Performance measurement for world class manufacturing**: A model for American companies. Boca Raton: CRC Press, 1991.
- MELNYK, S. A. et al. Is performance measurement and management fit for the future? **Management Accounting Research**, v. 25, n. 2, p. 173-186, 2014.
- NAZLI NIK AHMAD, N.; SULAIMAN, M.; ALWI, N. M. Are budgets useful? A survey of Malaysian companies. **Managerial Auditing Journal**, v. 18, n. 9, p. 717-724, 2003. [PB] [E1].
- NEELY, A. The performance measurement revolution: why now and what next? **International Journal of Operations & Production Management**, v. 19, n. 2, p. 205-228, 1999.
- NEELY, A. A evolução da pesquisa de medição de desempenho: desenvolvimentos na última década e uma agenda de pesquisa para a próxima. **Revista Internacional de Operações e Gestão da Produção**, v. 25, n. 12, p. 1264-1277, 2005. [PB] [E13].
- NEELY, A.; BOURNE, M.; ADAMS, C. Better budgeting or beyond budgeting? **Measuring business excellence**, v. 7, n. 3, p. 22-28, 2003.
- NEELY, A.; GREGORY, M.; PLATTS, K. Projeto de sistema de medição de desempenho: uma revisão de literatura e agenda de pesquisa. **Jornal Internacional de Operações e Gestão de Produção**, v. 15, n. 4, p. 80-116, 1995.
- OTLEY, D. Performance management: a framework for management control systems research. **Management Accounting Research**, v. 10, n. 4, p. 363-382, 1999.
- SCHÖNBOHM, A.; ZAHN, A. Reflective and cognitive perspectives on international capital budgeting. **Critical Perspectives on International Business**, v. 12, n. 2, p. 167-188, 2016. [PB] [E14].
- SILVA, T. B. J.; LAVARDA, C. E. F. Relação da utilidade do orçamento no empoderamento e na criatividade. **Contextus – Revista Contemporânea de Economia e Gestão**, v. 18, n. 7, p. 81-91, 2020.

SIMONS, R. Control in an Age of Empowerment. **Harvard business review**, v. 73, n. 2, p. 80-88, 1995.

THIEL, G. G.; ENSSLIN, S. R.; ENSSLIN, L. Street lighting management and performance evaluation: opportunities and challenges. **Lex Localis**, v. 15, n. 2, p. 303, 2017.

UDDIN, S.; TSAMENYI, M. Public sector reforms and the public interest: a case study of accounting control changes and performance monitoring in a Ghanaian state-owned enterprise. **Accounting, Auditing & Accountability Journal**, v. 18, n. 5, p. 648-674, 2005. [PB] [E15].

VAN CAMP, J.; BRAET, J. Taxonomizando falhas de sistemas de medição de desempenho. **Revista Internacional de Produtividade e Gestão de Desempenho**, v. 65, n. 5, p. 672-693, 2016.

WAAL, A.; HERMKENS-JANSSEN, M.; VAN DE VEN, A. The evolutionary adoption framework: explaining the budgeting paradox. **Journal of Accounting & Organizational Change**, v. 7, n. 4, p. 316-336, 2011. [PB][E16].

YUEN, D. Antecedents of budgetary participation: enhancing employees' job performance. **Managerial Auditing Journal**, v. 22, n. 5, p. 533-548, 2007. [PB] [E17].

THIAGO BRUNO DE JESUS SILVA

ORCID: <https://orcid.org/0000-0002-0682-0881>

Ph.D. in Accounting from Universidade Federal de Santa Catarina (UFSC); Professor of the Accounting Sciences course at Universidade Federal da Grande Dourados (UFGD). E-mail: thiagobruno.silva@yahoo.com.br

SANDRA ROLIM ENSSLIN

ORCID: <https://orcid.org/0000-0001-7420-8507>

Ph.D. in Production Engineering from Universidade Federal de Santa Catarina (UFSC); Professor of Accounting and Production Engineering Programs at Universidade Federal de Santa Catarina (UFSC). E-mail: sensslin@gmail.com

CARLOS EDUARDO FACIN LAVARDA

ORCID: <https://orcid.org/0000-0003-1498-7881>

Ph.D. in Accounting from Universidade de Valência; Professor at the Department of Accounting Sciences at Universidade Federal de Santa Catarina (UFSC) in Undergraduate and Graduate Studies. E-mail: elavarda@gmail.com