ISSN 1808-057X
DOI: 10.1590/1808-057x20249047.en

Editorial

Emerging complexities in public accounting and budgeting: Reflections for a research agenda

Ricardo Rocha de Azevedo[1]
https://orcid.org/0000-0001-6302-0760
Email: ricardo.azevedo@usp.br

Patrícia Siqueira Varela[2]
https://orcid.org/0000-0002-4444-2930
Email: psvarela@usp.br

Janilson Antonio da Silva Suzart[3]
https://orcid.org/0000-0001-5623-8622
Email: suzart@suzart.cnt.br

[1] Universidade de São Paulo, Faculdade de Economia, Administração, Contabilidade de Ribeirão Preto, Departamento de Contabilidade, Ribeirão Preto, SP, Brazil
[2] Universidade de São Paulo, Faculdade de Economia, Administração, Contabilidade e Atuária, Departamento de Contabilidade e Atuária, São Paulo, SP, Brazil
[3] Conselho Federal de Contabilidade, Brasília, DF, Brazil

Correspondence address

Ricardo Rocha de Azevedo
Universidade de São Paulo, Faculdade de Economia, Administração, Contabilidade de Ribeirão Preto, Departamento de Contabilidade
Avenida Bandeirantes, 3900 – CEP: 14040-905
Monte Alegre – Ribeirão Preto – SP – Brazil

1. INTRODUCTION

Two well-known publications in *Accounting, Auditing & Accountability Journal* (1992; 1999) discussed the state of the art of public sector accounting research at the time (Broadbent & Guthrie, 1992; Broadbent, 1999). Among the topics addressed, one focused on developing greater standardization of international accounting information, while another explored the "boundaries of the public sector". This emerging debate extended over more than a decade, emphasizing that the boundaries of the public sector were shifting with the advent of various new arrangements for delivering public services. It called for accounting to reorganize itself to keep pace with the growing complexity and invited accounting researchers to lead in constructing such "knowledge" (Broadbent & Guthrie, 2008).

Over 30 years later, it is evident that an international accounting standard is now in place—albeit with significant challenges in adoption and implementation, as the literature demonstrates. However, the complexity of the environment surrounding accounting, or more precisely, the public financial management (PFM) cycle encompassing accounting and budgeting, continues to grow.

Numerous new arrangements have emerged for delivering public services, such as Public-Private Partnerships (PPPs), concession models, and a significant expansion of public activities in collaboration with the third sector. These arrangements are often driven by the need to meet population demands in contexts of fiscal constraints and are structured through complex

This is a bilingual text. This article was originally written in Portuguese and published under the DOI https://doi.org/10.1590/1808-057x20231962.pt

contractual designs involving rights, obligations, and financial flows between entities. Additionally, the use of sophisticated financial instruments by public sector entities to secure financial resources—such as receivables assignment and green bonds—or as a basis for exercising their tax authority has become increasingly prevalent.

The advent and rapid expansion of digital infrastructure (Agostino et al., 2022) and artificial intelligence in government, as highlighted by Burns and Igou's (2019) aptly titled publication *Alexa, Write an Audit Opinion*, have become a tangible reality within the PFM cycle, including government auditing (Aquino et al., 2022), though these developments remain underexplored. Furthermore, there is growing pressure to incorporate sustainability metrics and targets, particularly regarding climate-related issues. The urgent need for integrated reporting that combines financial and non-financial information has emerged as a critical challenge for the public sector, encompassing its regulatory role in guiding various actors toward sustainability (IPSASB, 2024).

In this increasingly complex environment, both the scope and the expected role of public budgeting and public sector accounting have undergone significant transformations, revisiting the same questions posed 30 years ago about how research in the field has kept pace with these changes.

The complexity of public budgeting in Brazil has intensified, primarily due to a series of legal changes over the past two decades. These changes have occurred in overlapping waves of reforms, assigning multiple new functions to the budget, often blurring its boundaries. Traditional (legal) concepts, such as revenue estimation and expense allocation, have come under scrutiny, raising questions about their relevance to contemporary transactions.

The budget has been assigned numerous new functions, such as tracking the performance of non-financial actions (Performance-Based Budgeting), serving as a fiscal control mechanism (Anessi-Pessina et al., 2016), determining legal and budgetary limits, and acting as a tool for governmental transparency—functions that increasingly blur with the budget itself. However, as the budget takes on these expanded roles, it loses relevance and credibility as a budgeting instrument. This decline is evidenced by significant inaccuracies in revenue and expenditure forecasts (Rezende & Cunha, 2013) and the growth of off-budget transactions. The traditional view of the budget as a tool for planning revenues and expenditures demands renewed discussion. Research is thus called to address questions such as "what are the boundaries of public budgeting?" and "which transactions are genuinely off-budget, and what are their implications?".

In the case of public sector accounting, the rising complexity stems from adopting and implementing the International Public Sector Accounting Standards (IPSAS), which, wherever possible, are based on the International Financial Reporting Standards (IFRS) used in the private sector. IPSAS, however, has faced criticism regarding its adequacy in addressing the specificities of the public sector and meeting the needs of accounting information users (Oulasvirta, 2021).

In recent years, several accounting standards have been issued to align IPSAS with IFRS and address gaps related to specific public sector transactions and events, such as cultural heritage assets, infrastructure assets, subsidized leases, measurement bases for specialized public sector assets, and natural resources. During the development of IPSAS, it was challenging to account for all the relevant factors affecting different countries, leading to potential discrepancies between the standards' intended objectives and their implementation outcomes.

Research studies (Abdulkarim & Umlai, 2024; Polzer et al., 2023; Gómez-Villegas et al., 2020) have examined the adaptations made by countries when implementing IPSAS, highlighting that these standards are not a "one size fits all" solution. Progress in this area could be achieved through the critical examination and empirical assessment of whether the proposed changes are meaningful (Hepworth, 2017), particularly regarding the principles underpinning specific standards. It is crucial to note that such changes may stem from factors other than aligning these principles with the substance of economic events and transactions.

In addition to accounting standards, growing pressures for the disclosure of sustainability information from environmental, social, and governance (ESG) perspectives have emerged. In this context, the integration of financial and non-financial information resurfaces as a significant research topic, accompanied by questions regarding the limitations of the IPSAS framework. Research in this area should build on the progress already achieved in the literature and through public sector initiatives, which can serve as valuable subjects for future studies. Frequently, a topic is presented as entirely novel, posing the risk of "reinventing the wheel" and disregarding the knowledge already developed within the field.

Research can take on a more engaged and proactive role, contributing to accounting standard-setters and policymakers' work. Studies in public sector accounting have historically offered limited practical contributions to contemporary public finance challenges (Ferry et al., 2018).

There is a prevailing perception among public sector accounting professionals that research often remains disconnected from the field's practical realities, rendering it underutilized and raising questions about its impact on the evolution of accounting practices.

There is no shortage of current topics and pressing issues. Specific assets (e.g., currency, monetary gold, cultural heritage assets, natural resources, and military equipment), liabilities (e.g., social benefits, obligations arising from legislative changes, and social security through an insurance-based approach), and public sector transactions (e.g., non-compensatory transfers of assets and rights, financial asset and liability offsetting, rights-for-assets swaps, and donations) represent current areas of interest for accounting standard-setters and legislators. These topics offer fertile ground for research, provided accounting standards are critically examined rather than adopted without reflection (Lapsley et al., 2009). Additionally, the public sector shares common concerns with the private sector, such as the presentation structure of period results and intangibles—particularly those emerging from significant technological advances.

There is an urgent need to develop a proactive research agenda that fosters greater alignment between the practical requirements of public sector accounting and theoretical robustness. Such alignment has the potential to inform discussions on future standards, while also encouraging the review and even revocation of existing ones where necessary.

This editorial aims to present and critically examine current complex events and transactions that have significant implications for the scope and role of budgeting and public sector accounting. It seeks to contribute to the identification of research avenues in public accounting and finance that are better aligned with the complexities of the contemporary landscape.

2. EMERGING COMPLEXITIES IN PUBLIC BUDGETING

The literature indicates that public budgeting is multifaceted and capable of being analyzed in terms of its various functions, such as allocative, managerial, and even as a mechanism for controlling public expenditures (Caiden, 2010). It can also be considered and analyzed as a political tool and a space for resource bargaining. As Rubin (2015) discussed, traditionally, the budget should reflect resource allocations in public policies, mirror the result of the bargaining over public resources, and indicate to society the taxes that the public administration seeks to collect.

Traditional research agendas on budgeting have focused on themes related to the PFM cycle, including digital transformation and digital tools, transparency and accountability, decentralization and subnational finance, performance-based budgeting, the political economy of budgeting, fiscal sustainability and long-term planning, participatory budgeting and social inclusion, fiscal federalism and intergovernmental transfers, and the impact of crises and economic uncertainties (Yu & Zhang, 2023).

Although relevant and timely, this agenda does not address the current complexities to which budgeting has been exposed, with implications for what is included or excluded from its scope. Thus, meaningful contributions from scientific research require clarity regarding what is or is not within the budget's scope and, consequently, the implications for a specific topic—for instance, digital transformations and the processes inherent to performance-based budgeting.

Focusing specifically on public budgeting as a tool for 'budgeting', it traditionally presents the anticipated revenues to be **collected**, juxtaposed with the expenses the government intends to **execute** based on a specific scope, such as cash, modified cash, modified accrual, or accrual. When new transactions or arrangements with private sector entities are structured, questions arise about how to incorporate them into the budget. In some cases, there may be changes in its foundational bases, meaning modifications to its scope due to a lack of clarity in the definitions or principles that support it. Consequently, transactions may be included or excluded from the budget without conceptual or technical justification.

Taking Brazil as a reference, the public budget has been subject to several legal changes in recent decades, expanding its traditional scope. It has become in charge of various additional functions, such as controlling fiscal limits that now incorporate elements based on the accrual basis, creating inconsistencies with the budgetary base.

Apparently, resolved and tacitly accepted issues regarding the definitions of revenues and expenditures in the budget are now being questioned with respect to the transactions they encompass. For decades, the meaning of **collected** revenue has been tacitly assumed and unquestioned as representing cash inflows and equivalents in the budget. Similarly, it has been assumed that budgetary expenditure (in its various stages – credit allocation and budget execution) represents immediate or future sacrifices of cash and equivalents. The self-evidence of these concepts may explain their absence in Federal Law No. 4,320/1964, which still governs the budgeting process in the country. After all, budgetary revenue should be recorded on a cash basis, meaning only when **collected**, and budgetary expenditure should follow the commitment basis, meaning when the budget is committed (budgetary stages).

However, recent complexities have begun to cast doubt on these traditional budgetary elements' definitions (which are absent, as previously mentioned). First, several transactions have started to be recorded in the public budget without any actual cash flow in public administration, as operationalized by the *Manual of Accounting Applied to the Public Sector* (*Manual de Contabilidade Aplicada ao Setor Público* – MCASP). Although it is a guidance manual rather than a regulatory instrument, the MCASP has been considered mandatory for public entities, acting as a 'normative filter' between the period of validity of accounting standards and the requirements of control agencies.

Among the various transactions without actual cash flow that have been considered mandatory for registration by the MCASP, one can mention the receipt of overdue debts through payment in kind, where the government ceases to receive overdue debts from taxpayers in cash and instead accepts real estate. Other transactions have been treated similarly, such as offsets between overdue debts, court-ordered payments (*precatórios in Portuguese*), and offsets of social security credits with social security obligations. These transactions have in common that they are subject to what is conventionally called "budgetary washing", in which virtual revenues and expenses are recorded in the budget, even if no cash flow occurs. This will support future decisions regarding public expenditure allocation since it has already been concurrently recorded.

One of the arguments presented by the MCASP for recording transactions without cash flow is that the concept of a financial asset in §1 of article 105 of Law No. 4,320/1964 is not limited to cash but also includes credits. The MCASP further argues that the absence of registration in budgetary and control accounts leads to various implications, such as distortions in fiscal results (both primary and nominal), personnel expenses, the golden rule, tax allocation, spending caps, and compliance with various earmarks, such as those for health and education. In other words, the primary argument employed by the MCASP for the budgetary recording of transactions without an actual cash flow **pertains to the impact** of omitting these transactions from the budget rather than strictly adhering to a specific definition.

On the other hand, some transactions that also lack cash flow do not need to be processed through the public budget. For example, the Federal Court of Accounts (Tribunal de Contas da União —TCU) recently concluded that the integration of shares in real estate investment funds, through the declassification and de-incorporation of real estate from the Union's assets, does not require budgetary registration and is treated merely as a property exchange event (Decision No. 1,771/2022 – TCU—Plenary).

To further complicate matters, other transactions typically involve cash flows but are not recorded in the public budget. For instance, among the various types of tax benefits, tax expenditures are classified as 'indirect expenditures' and do not appear in the main document of the Federal Government's Budget (OGU—*Orçamento Geral da União* in Portuguese) but are presented in the "Federal Statement on Subsidies" document. Therefore, they are not subject to scrutiny by the National Congress, as they do not pass through the budget since they reduce the revenue collected (which is recorded on a net basis), and they do not require the registration of budgetary expenses (Accounting Procedures Instruction—*Instrução de Procedimentos Contábeis* – IPC 16/2020).

Another example is the transaction "cross-investments" (Federal Law No. 13,448/2017), which involves financial outlays made by a concessionaire in infrastructure assets distinct from the concession's object, as a countermeasure to an early extension of concession contracts. In other words, a concessionaire receives an early extension of a concession contract and, instead of making a payment in cash or cash equivalents, builds infrastructure, such as railways.

These examples raise an important question: what does the public budget represent today? The budgetary impact of various transactions has been defined based on understandings that do not follow a clear conceptual framework, typically decided without consensus through decisions made by bodies operating within a legal context, such as the TCU, rather than adhering to a general concept of revenue **collected** and expenses **incurred**. We are in an almost eternal period of waiting for the approval of the public finance bill, which has been under discussion in the House of Representatives since 2016, after its approval in the Federal Senate. Research in this area can actively contribute to the project during its discussion, offering empirical results based on lessons learned and unexpected outcomes from current practices.

As Rubin (2015) noted, theoretical discussions about the budget seem to be stagnating, even as its complexity has increased. Research can directly contribute to this issue by analyzing the impacts of (non) registration of these items in the budget or by attempting to theorize and develop definitions that address current complexities. This could enable research to have a social impact by assisting the legislative and regulatory processes of contemporary transactions.

These examples of transactions highlight the need for a new, broader definition of "public revenue" and "collection", which is not solely linked to cash flow. Using this mechanism only for transactions without actual cash flow and the lack of records for those with cash flow underscores the need for a discussion and conceptualization of what constitutes extrabudgetary transactions (off-budget items).

The transactions presented here, such as public service concessions and tax expenditures, are not limited to the Brazilian context. Therefore, they are of international relevance. However, the differences between countries regarding their budgetary and accounting regimes are significant and must be treated carefully in research.

3. EMERGING COMPLEXITIES IN THE PUBLIC SECTOR ACCOUNTING

The budget is a critical tool for decision-making and accountability in the public sector. Consequently, transactions resulting from budget execution fall within the scope of public sector accounting and align with the standards applied in this domain. However, significant differences in budgeting and accounting principles can lead to distinctions in what is identified, recognized, measured, and disclosed. This is particularly evident in contexts where budgets operate on a cash basis while accounting adopts an accrual basis, as in many countries.

In such cases, despite discussions about transactions that diverge from established recognition points for cash inflows and budgetary expenditures, budgetary principles aim to ensure that cash outflows align with inflows. However, this temporal perspective is limited, as it excludes cash flows that are not yet encompassed by the budget and its execution. An example is the reliably estimated future cash transfers needed to fulfill pension obligations for public sector employees.

Public sector reform initiatives, particularly those adopting the accrual basis, expand the scope of information regarding public entities' cash flows. This is because transactions and other events are recognized when they occur rather than solely when they affect cash balances. Consequently, accounting's informational power increases as a broader range of transactions are identified and recorded, providing more detailed financial statements. These statements offer users insights into short-, medium-, and long-term cash flows. For instance, on a cash basis, taxation would only be recorded upon the actual receipt of funds. Under an accrual basis, the tax receivable is recorded when the taxable event occurs, with subsequent adjustments reflecting actual receipt, reclassification as outstanding receivables, debt relief, or other outcomes.

Despite broadening the informational scope of accounting, the accrual basis, specifically based on the IPSAS, remains focused on cash flows. This is because the IPSAS are, whenever possible, based on the IFRS, whose primary focus is on economic benefits, which, ultimately, refers to cash flows. One of the most significant changes in the accounting model when transitioning from the private to the public sector is the inclusion of the service potential in the definition of resources, an element in the definition of assets. However, the measurement criteria used to assess assets based on operational capacity—i.e., for achieving public sector objectives through providing goods and services—continue to centralize cash flows. The most widely used bases for asset measurement in the IPSAS are historical cost, fair value, and, more recently, current operational value, the latter representing the costs incurred to acquire, construct, or develop the asset.

For businesses, cash flows have served as reliable proxies for benefits from the perspective of the primary users of financial information (investors), and the IFRS model has been globally adopted, though not without modifications over time, as seen in the ongoing discussions about standards related to intangible assets and investments in associates and joint ventures.

Changes in standards may arise from their limitations identified by national standard-setters and professionals who apply them in preparing and auditing financial statements, limitations that were not captured during the international standard-setting process or that no longer align with current public sector transactions. Moreover, these changes might result from the divergence between the numbers produced and those that align with the decision-making models of accounting information users. It is essential to recognize that accounting standardization is in continuous evolution, as Broadbent and Guthrie (2008) highlight, the social context influences how accounting technologies are shaped, and at the same time, accounting constitutes that very context.

Despite the emphasis on financial flows, due to a growing interest in the interactions between businesses and society and the risks and opportunities arising from this interaction in financial flows, the International Sustainability Standards Board (ISSB) is issuing sustainability reporting standards in addition to accounting standards. Like the International Accounting Standards Board (IASB), the ISSB is a committee linked to the IFRS Foundation.

For sustainability reports, a key issue arises concerning the primacy of investors, given that when a company generates negative outcomes for the environment and society, it does not bear the full costs of its actions. As Dechow (2023, p. 481) points out, "[...] providing sustainability disclosures that are relevant to investors misses the point that sustainability disclosures are motivated by the desire of other stakeholders to learn about externalities." This highlights one of the fundamental differences between companies and governments, as all actions taken by governments affect society, and it is expected that, as a whole, these actions have a positive impact, with results measured through outcome indicators. Furthermore, governments are responsible for establishing the "rules of the game" for societal actors, including businesses and the governments themselves, to increase positive and/or reduce negative externalities.

The information disclosed in sustainability reports should reflect the integration or lack thereof of environmental, social, and governance dimensions (the latter already more prevalent in businesses) into the strategies, operations, and decision-making processes of organizations. To achieve this, in addition to traditional financial information, data that captures organizational performance across these other dimensions is required, such as CO^2 emissions metrics in the S2 standard issued by the ISSB on climate-related disclosures.

For example, questions regarding accounting challenges in the context of climate change, such as the measurement of the costs of transitioning to a green agenda, have been recurring (Lapsley & Miller, 2018; Dabbicco, 2021), as well as discussions about the link between accounting and the Sustainable Development Goals (SDGs).

The advancements in the maturity of financial information based on the accrual basis are greater in the private sector than in the public sector (Grossi & Steccolini, 2015), but the experience with the disclosure of non-financial information to reflect impacts on the environment, society, and economy is more prominent in the public sector, particularly after the incorporation of results-based management principles derived from New Public Management. In both sectors, significant challenges remain in demonstrating the integration of financial information based on the accrual basis with non-financial information in a sustainability report.

Studies indicate that the heterogeneity in the adoption and implementation of IPSAS, particularly in the comparison between low- and high-income countries; voluntary and mandatory adoption of sustainability reporting, including the association between financial and non-financial information; the process of standardization and guidance of the standards for use; and the manipulation and management of results remain on the international research agenda (Heise & Gross, 2024). Furthermore, in their literature review, Heise and Gross (2024) highlight the predominance of articles from Europe and the United States and the need to broaden the use of theoretical lenses in research.

The scope of the accounting model has also been a topic on the research agenda, with questions about the extent to which accounting standards and technical characteristics remain relevant and whether the "traditional" system of public sector accounting should be replaced by a more "interactive" one, with a broader scope where decisions regarding principles, such as measurement, would be made in collaboration with citizens (Bisogno et al., 2024). In this regard, the authors suggest considering both perspectives rather than replacing one with the other and identifying avenues for future research (Bisogno et al., 2024).

Beyond the previously dominant agenda concerning the factors that facilitate or hinder the adoption and implementation of the accrual basis, research on Brazil from an international perspective could contribute to advancements in the literature and generate positive societal impacts, as it is a country with continental dimensions, operating in a federal context, conducting complex financial transactions, with results-based management at the heart of various actions, and climate as one of the priority issues for certain governments.

The International Public Sector Accounting Standards Board (IPSASB) will focus on maintaining the IPSAS during the 2024-2028 period, including those IPSAS that are not based on IFRS, and aim to address the need for specific standards for the public sector. To this end, inputs on the requirements of standards that have not adequately aligned with the transactions or events they refer to, present an unfavorable cost-benefit relationship, or are facing resistance from some stakeholders regarding their adoption, are strong candidates for the research agenda of Brazilian scholars, which may include:

- Recognition of tax revenues and adjustments for losses on tax receivables;
- Employee benefits from the perspective of the employer and the entities managing the social security plans of the public pension system;
- Retirement benefits from the general social security system, which do not fall under the employee benefits and social benefits standards;
- Application of fair value, particularly as an imputed cost in the initial recognition of assets, and adherence to its underlying assumptions;
- Application of the impairment test for cash-generating and non-cash-generating activities;
- The scope of consolidation in financial statements and discrepancies in accounting policies between the public sector and private sector entities subject to consolidation;
- Information used for decision-making compared to that provided by financial statements, such as on natural resources or cultural heritage assets;
- Transactions involving public sector-specific financial instruments, such as currency issuance, the commercialization of rights derived from state regulatory power, non-compensatory transfer of usage rights, etc.;
- Rights and obligations arising from partnerships with private sector entities, including the third sector, concerning the requirements of recently issued standards on revenues and expenses;
- Explanatory notes and the application of materiality requirements.

The association between financial and non-financial information has been the subject of studies for several decades in Brazil, particularly following reforms based on performance management and performance-based budgeting. However, financial information is predominantly derived from budget execution processes, and thus, is primarily based on the cash basis.

Research on the state of the art of the literature regarding the association between financial and non-financial information is desirable, as its findings could significantly contribute to the development of sustainability reporting in the public sector. This is exemplified by studies on program evaluation and its relationship with the performance of budgetary units, as well as studies on financial condition that aim to relate endogenous and exogenous variables for the evaluation of governments, which are strongly linked to the assessment of fiscal sustainability.

Additionally, studies on implementing cost information systems can reveal essential elements regarding the preparation and use of accrual-based information in conjunction with indicators related to the delivery of goods and services to the population, with expected impacts on the environment, society, and economy.

The study of measurement bases used in decision-making processes but not included in the accounting standards for financial statements, such as opportunity cost, can contribute to the expansion of the accounting standard in alignment with the expectations of its users.

Additionally, within the scope of topics related to financial statements, there are studies aimed at generating technological innovations to overcome the factors hindering the adoption of the accrual basis. This includes studies that promote easier and more user-friendly access to standards, more timely diagnostics on the adoption and implementation by countries at the level of specific IPSAS requirements, and the sharing of solutions, such as system codes and Application Programming Interfaces (APIs).

4. FINAL CONSIDERATIONS

The gap between academic research in accounting and public budgeting and the contemporary complexities may be one explanation for the divide between academia and accounting practice. Research projects could consider the existence of a broad agenda stemming from international standardization and contribute actively to both the literature and accounting practice by analyzing the implications of decisions made, and even intervening during the stages of norm development. However, to achieve this, the emerging complexities within the entire PFM cycle in the public sector must be integrated into traditional research themes, thereby expanding their contribution. Referring to the recent provocations by Vollmer et al. (2024), researchers in the field could enhance their contributions by considering values beyond the traditional ones, such as analyzing facilitative and anticipatory controls instead of focusing on traditional coercive controls, cooperation instead of competitiveness, resilience and social equity instead of efficiency and performance metrics.

Researchers in the field (including ourselves in this self-reflection) should strive for a closer engagement with emerging issues, as there are no shortages of relevant topics, as presented and discussed in this editorial. Researchers are encouraged to adopt a more proactive stance, aligned with key accounting themes, seeking to offer timely contributions using the concept brought by the Conceptual Framework, which emphasizes "having information available for users before it loses its usefulness". However, this should be done without losing sight of the still-needed development of conceptual frameworks and theorization within the realm of public accounting and budgeting research.

REFERENCES

Abdulkarim, M. E., & Umlai, M. I. (2024). Social identity and IPSAS adoption: cross-national evidence, *Public Money & Management, 44*(7), 639–649. https://doi.org/10.1080/09540962.2024.2306588

Agostino, D., Saliterer, I., & Steccolini, I. (2022). Digitalization, accounting and accountability: A literature review and reflections on future research in public services. *Financial Accountability & Management*, *38*, 152–176. https://doi.org/10.1111/faam.12301

Anessi-pessina, E., Barbera, C., Rota, S., & Steccolini, I. (2016). Public sector budgeting: A European review of accounting and public-management journals. *Accounting, Auditing & Accountability Journal*, *29*(3), 20. https://doi.org/10.1108/AAAJ-11-2013-1532

Aquino, A. C. B. de, Lino, A. F., Azevedo, R. R. de, & Silva, P. B. da. (2022). Digital affordances and remote public audit practice. *Financial Accountability & Management*, *38*, 447–467. https://doi.org/10.1111/faam.12337

Bisogno, M., Caperchione, E., Caruana, J., Jorge, S., & Manes-Rossi, F. (2024). Editorial: Public sector accounting current developments—insight, critique and transformative redefinitions. *Public Money & Management*, *44*(8), 651–654. https://doi.org/10.1080/09540962.2024.2414579

Broadbent, J. (1999). The state of public sector accounting research: The APIRA conference and some personal reflections. *Accounting, Auditing & Accountability Journal*, *12*(1), 52–58. https://doi.org/10.1108/09513579910259915

Broadbent, J., & Guthrie, J. (2008). Public sector to public services: 20 years of "contextual" accounting research. *Accounting, Auditing & Accountability Journal*, *21*(2), 129–169. https://doi.org/10.1108/09513570810854383

Burns, M. B., & Igou, A. (2019). "'Alexa, Write an Audit Opinion'": Adopting Intelligent Virtual Assistants in Accounting Workplaces. *Journal of Emerging Technologies in Accounting*, *16*(1), 81–92. https://doi.org/10.2308/jeta-52424

Caiden, N. (2010). Challenges confronting contemporary public budgeting: Retrospectives / prospectives from Allen Schick. *Public Administration Review*, *70*(2), 203–210. https://doi.org/10.1111/j.1540-6210.2010.02148.x

Dabbicco, G. (2021). Emerging accounting patterns: Accounting for natural resources. *Public Money & Management*, *41*(3), 213–222. https://doi.org/10.1080/09540962.2021.1873614

Dechow, P. M. (2023). Understanding the sustainability reporting landscape and research opportunities in accounting. *The Accounting Review*, 98 (5), 481–493. https://doi.org/10.2308/TAR-2023-0145

Ferry, L., Saliterer, I., Steccolini, I., & Tucker, B. (2018). The Research-Practice Gap on Accounting in the Public Services. In *The Research-Practice Gap on Accounting in the Public Services*. Palgrave Macmillam. https://doi.org/10.1007/978-3-319-99432-1

Gómez-Villegas, M., Brusca, I., & Bergmann, A. (2020). IPSAS in Latin America: innovation, isomorphism or rhetoric? *Public Money & Management, 40*(7), 489-498. https://doi.org/10.1080/09540962.2020.1769374

Grossi, G., & Steccolini, I. (2015). Pursuing Private or Public Accountability in the Public Sector? Applying IPSASs to Define the Reporting Entity in Municipal Consolidation. *International Journal of Public Administration*, *38*(4), 325–334. https://doi.org/10.1080/01900692.2015.1001239

Heise, J.-I., & Gros, M. (2024). Lost in the maze? Public sector accounting and reporting—A structured literature review.

Public Money & Management, *0*(0), 1–15. https://doi.org/10.1080/09540962.2024.2409500

Hepworth, N. (2017). Is implementing the IPSASs an appropriate reform? *Public Money & Management*, *37*(2), 141–148. https://doi.org/10.1080/09540962.2016.1266174

International Public Sector Accounting Standards Board (PSASB). (2024). IPSASB SRS Exposure Draft, Climate-related Disclosures. Recuperado por https://www.ipsasb.org/publications/ipsasb-srs-exposure-draft-1-climate-related-disclosures

Lapsley, I., Mussari, R., & Paulsson, G. (2009). On the adoption of accrual accounting in the public sector: A self-evident and problematic reform. *European Accounting Review*, *18*(4), 719–723. https://doi.org/10.1080/09638180903334960

Lapsley, I., & Miller, P. (2019). Transforming the public sector: 1998–2018. *Accounting, Auditing and Accountability Journal*, *32*(8), 2211–2252. https://doi.org/10.1108/AAAJ-06-2018-3511

Oulasvirta, L. (2021). A consistent bottom-up approach for deriving a conceptual framework for public sector financial accounting. *Public Money & Management*, *41*(6), 436–446. https://doi.org/10.1080/09540962.2021.1881235

Polzer, T., Adhikari, P., Nguyen, C. P., & Gårseth-Nesbakk, L. (2023). Adoption of the International Public Sector Accounting Standards in emerging economies and low-income countries: A structured literature review. *Journal of Public Budgeting, Accounting & Financial Management*, *35(*3), 309-332. https://doi.org/10.1108/JPBAFM-01-2021-0016

Rezende, F. & Cunha, A. (2013) A reforma esquecida: Orçamento, Gestão Pública e desenvolvimento. Rio de Janeiro: Ed. FGV.

Rubin, I. S. (2015). Past and Future Budget Classics: A Research Agenda. *Public Administration Review*, *75*(1), 25–35. https://doi.org/10.1111/puar.12289

Vollmer, H., van Helden, J., & Steccolini, I. (2024). Keeping up with accounting in society—Public sector challenges. *Public Money & Management, 44*(8), 733–736. https://doi.org/10.1080/09540962.2024.2364451

Yu, J., & Zhang, Z. (2023). In *Research Handbook on Public Financial Management,* Dzigbede, K., & Hildreth, W. B. (Orgs.). Edward Elgar Publishing. https://doi.org/10.4337/9781800379718