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Disclosure and Accountability in Public Financial Statements as Instruments for Social Control

Abstract

One of the objectives of public accounting is to support the practice of social control. Therefore, the aim in this study is to discuss: How can average citizens' understanding of the information in public financial statements be improved? Therefore, the objective is to discover the level of understanding of community leaders in the city of Curitiba about the information extracted from the Budgetary Balance Sheet. The research used documentary analysis and a field research, based on the application of a semistructured questionnaire and data treatment using uni/bivariate analysis techniques and validation by means of the statistical test χ^2 . Although most respondents do not seek information on the use of public money, the large majority affirms great or average interest in discovering the content of the statements. It is argued that the difficulty to seek information is actually due to the lack of understanding of the public accounting terminology. As a result, it is observed that the bottlenecks in accounting communication can be reduced if easily understandable language is used, mediated by complementary disclosure that presents not only the results, but also the analysis and interpretation of these results. Hence, this preliminary study is expected to contribute to the construction of a social control model and its use in society, with a view to enhancing and qualifying citizens' participation in the management of the public good. Finally, public policies are needed, essentially involving education, aiming for the true social ownership of public accounting information.

Key words: Public Accounting; Social Control; Disclosure; Accountability.

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1. Introduction

The entire institutional organization of the State is financially sustained through resources coming from the population. The primary function of this financial contribution is to promote economic and social growth and development, aiming for the common good of the people, as the "majority stockholder" of the public good.

The public agents, in compliance with the responsibility they are granted by society to accomplish the public good, are obliged to render accounts for the acts they practice on behalf of the community to accomplish the social responsibilities of the State.

In this line of reasoning, Schedler (1999) teaches that, although common sense clearly states that the essence of politics is power, the classical theoreticians already knew that, in politics, power comes first, followed by the need to control it.

Specifically concerning the financial execution of the public policies, this takes place through budgetary, financial and equity actions; and through governmental planning, as a factor deriving from the mobilization of accounting techniques and instruments, which register and control the acts and facts of public management.

Thus, public accounting is a tool of social control and empowers society in the exercise of democracy, particularly when active in the spaces of participation the State itself grants the citizens.

Nevertheless, for the transparency/disclosure in the dissemination of governmental transactions to reach two of its goals - (i) inform about the results achieved and (ii) support decision making (National Secretary of the Treasury (STN), 2012) – citizens, as the users of the public accounting information, also need to understand its message and be able to exercise social control over the use of public resources.

Based on the Fiscal Responsibility Law, the public administration found itself obliged to practice management with full transparency, with a view to enabling the citizens to monitor the application of public resources. In that case, the accounting information reveals to be a fundamental attribute to permit the achievement of this objective. In that context, at least one issue should be taken into account: is the accounting information truly presented in an understandable form to common citizens? (Dias, 2009, p. 3).

One of the citizens' constant concerns with regard to the state is related to the tax volume consumed to render services to society. This concern is related to the fact that public accounting presents results the citizens are not prepared to understand, thus increasing the asymmetry between the information produced by the agent (State) and the its understanding by the principal (citizen) (Slomski, 2009, p. 99).

Thus, the extremely technical language in the financial statements presupposes that anyone not used to universe of accounting science and technique is unable to understand and assimilate it.

According to Dias and Nagakawa (2001), many terms employed in the financial statements are not understood by their addressees or interpreted differently from what was intended. For the authors, if that is the case for users who are more familiar with the accounting terminology, what about the less traditional users, like common citizens?

Thus, the guiding question of the research proposed for this study is: how can the average citizens understand the accounting information in the public financial statements?

To respond to this proposal, initially, it needs to be investigated: i) what the citizens understand about the basic terminology in the public financial statements; ii) what interest the citizens take in seeking public accounting information; and iii) what complementary presentation forms could be used to improve the understanding of these statements from the information users' perspective.

Based on the considerations by Batista (2010), for whom the contemporary excess of information should not be detached from knowing how to get informed, a process that involves constant learning, the following hypothesis (h) is raised: formal education influences the understanding of the public accounting information shared by the State.



Hence, in view of the importance of information for correct decision making and considering the objective of Accounting, which is to communicate, the general objective in this research is to get to know the level of understanding of community leaders in the city of Curitiba about the accountability of public agents based on the information extracted from the Budgetary Balance Sheet.

This study is structured in six parts: the first is this short introduction, followed by the theoretical background. In the third part, the research method is presented, while the fourth part contains the analysis of the research results. Next, in part five, the final considerations are presented and, finally, in the sixth part, the references that sustain the study are listed.

2. Theoretical Background: From the State/Society to Accounting Information Semiotics

2.1. The Triangulation Among State, Society and Accountability

The human relations created the State, as the regulatory and sovereign agent of life in society. In addition, the State is the instrument man uses to accomplish certain goals, which lead to the common good in compliance with the continuity principle of the State.

To achieve its objective, the State is politically structured in the form of a government and organized through the use of its public functions, including the administrative function of the State, put in practice through the Public Administration.

Therefore, while the functions of the government are political, the functions of the Public Administration – as the expression itself indicates – are administrative, activities the government uses to comply its objectives, aimed at the public interest and the execution of public policies.

Thus, it is through the delivery of public services that the public interest gains concreteness and representation. In that sense, Fuhrer and Fuhrer (2002, p. 52, authors' translation) define the public service "as the activity the public power exercises direct or indirectly to accomplish what it considers to be in accordance with its ends and attributions".

As the entire state apparatus is financially sustained by society, the State should not only improve the quality of life of the population through the coercive power to collect public resources, but also prove, in the elaboration of public accounts, the good and regular use of these resources to the owners of its capital, the citizens. In that sense, Camargo (2010, p. 33, authors' translation) considers that:

No matter from what perspective the relation between the State and its citizens is observed, the public agents' comprehensive and transparent accountability cannot be neglected to permit assessing the public managers' performance, guiding the state's action on behalf of the public good with efficacy and efficiency.

The public agents' accountability permits protecting the interests of the governed in terms of the resources that fund the state's activity, at the same time as the executors are held accountable. In that respect, the *International Federation of Accountants* (Ifac) defines accountability as being:

[...] a process through which the public entities and the people within them are responsible for their decisions and actions, including their management of public funds and all performance aspects, and submit to appropriate external scrutiny.

The same Ifac assesses that the Executive power's efforts to demonstrate responsibility generally start with an appropriate financial report which, in full compliance with the accounting standards, increases the public managers' financial responsibility, as it contributes to the trustworthiness, consistency and transparency of the financial information, which are core elements of good and regular accountability.



Hence, considering that, often, in compliance with the constitution, the people are represented in the exercise of their power, accountability is an inherent condition of anyone who exercises the expression of the public desire at any power level. In that sense, Young (2006, p. 151, authors' translation) argues that:

In the quality of an extended relationship between the voters and their agents, the representation shifts between moments of authorization and of accountability: it is a cycle of anticipation and recovery between the voters and the representative, in which the discourse and actions should carry on remnants.

Hence, in the exercise of their public function, the legality and goal of the agents' actions should be controlled.

Therefore, it is important to get to know who supervises and controls the application of the public money. According to Di Pietro (2001, p. 735, authors' translation): "in the exercise of its functions, the Public Administration is subject to control by the Legislative and Judiciary Powers, besides exercising control over its own actions".

In addition, as the legal obligation of public agents to render accounts originates in the responsibility to delegate the power granted by society, an essential part of external control is social control, as Di Pietro herself (2001, p. 735, authors' translation) records, observing that:

[...] although control is the responsibility of the state, the administration participates in it to the extent that it can and should provoke the control procedure, not only to defend its individual interests, but also to protect the collective interest. The Constitution grants the individual certain action instruments to be used for that purpose. That is probably the most effective means to control the Public Administration: popular control.

In fact, the public agents, in the management of public resources, assume the responsibility to render accounts, an activity that cannot be dissociated from control. In that sense, responsibility, accountability and control are directly related.

2.2. Public Budget and Public Accounting: Instruments of Social Control

The accountability of the public agents is put in practice through its main and most relevant disclosure documents: the financial statements, whose contents reveal the execution of the public budget, which society authorizes indirectly, that is, through its parliamentary representatives, with a view to the effective achievement of the public policies.

Concerning civil participation and practice, Gallo (2003, p. 30, authors' translation) emphasizes that:

Democratic action involves everyone taking care of the decision process about what will affect the life of the community. Who is allowed to say what is good for everyone? The same people who will prove it – the human beings. If not directly, at least through representatives, provided that they remain active and alert, monitoring the work of the people they elected.

This active alertness, in turn, is equipped by the mechanisms of popular participation and control. According to Bresser-Pereira (1998, p. 141, authors' translation):

In the primitive societies and in patrimonialism, the public and private space were mixed up; in liberal capitalism, the private space is separated from the public and gains autonomy; in bureaucratic capitalism, the public space grows again, but in the form of the state; in twenty-first century capitalism, the public space will grow again, but now at the non-state level of social control.



In view of Bresser-Pereira's words (1998), it is confirmed that social control goes beyond representative democracy and precedes the means and tools for social participation the Federal Constitution offers. In the same sense, Moroni (2005, p.40, authors' translation) clarifies that:

When we talk (*sic.*) of social control, we do not simply refer to the civil society's consultation of the State. It does not only refer to the matter of information access either. Social control refers to the citizen's right to participate in the destinies of the nation, besides the already consolidated right to representation.

To be effective, however, social control depends on the effectiveness of public management transparency, arousing society's awareness and motivation for the exercise of citizenship.

In that perspective, Heald (2006) teaches that, for the sake of effective transparency, the users of the information the government discloses should be capable of processing, understanding and using that information. The author also affirms that, if the citizen does not assimilate the disseminated information, the government but intended to be transparent.

In that sense, Moroni (2005) highlights the public budget as a relevant element in social control. The author highlights that the budget involves the five sustainability axes of social control, related to the rights to participation: (i) in the elaboration, (ii) in the deliberation, (iii) in the implementation, (iv) in the monitoring and (v) in the assessment of the public policies.

The public budget is a planning instrument that aims to respond to the society's demands and is put in practice through the budgetary process, a procedure that comprises a cycle that "includes the elaboration, discussion, approval of the budgetary bill, its programming and execution, and the control and assessment of the execution" (Rosa, 2011, p. 75, authors' translation).

It is public accounting, when the budget is executed, that puts in practice what the budgetary law authorized and permits, through the transparency and disclosure of the acts and facts the Public Administration practiced, the accomplishment of the two final phases of the budgetary process: the control and assessment of the results of the public actions.

In short, public accounting, by processing the execution of the budget and producing economic, budgetary, financial and physical information on the public budget, turns into a tool for society to monitor governmental spending, through the public agents' proper accountability, which puts society forward as an instrument of social control.

2.3. Public Accounting as a Tool for Communication Between the State and Society

Illustrating the complexity of the relation between the issuer and receiver of the financial information, McNellis (2013) considers that one of the most important – and most difficult – aspects in the composition of accounting is the definition of the target public. That is so because Accountancy uses procedures and techniques that entail implications for the public in general. Therefore, a writing style that only fits into the limits of accounting and the accountants' understanding will hardly affect anyone who sees the world from a different perspective. On the other hand, a style that lacks substance reduces the validity of the writing, and potentially the credibility of its author.

This complexity also affects the accounting communication between the State and society. Thus, for public accounting to be able to effectively achieve the objective of serving as a management performance assessment tool for citizens, the public financial statements need to be elaborated in understandable language, adapting the accounting communication to the understanding of the main stockholder, which is the citizen owning the public good.



Understandability is an essential requisite for social control, in line with the concept of this expression put forward in NBC T 16.1 (Conselho Federal de Contabilidade [CFC], 2008), which defines it as "the commitment based on professional ethics, which presupposes the daily exercise of providing information that is understandable and useful to citizens in the performance of their sovereign activity of controlling the public agents' use of resources and public equity".

Oliveira (2005), in a study about the level of understanding of the teaching staff at the Department of Applied Social Sciences of Universidade Estadual de Feira de Santana of the financial statements elaborated by the public administration, concluded that this group of users faced difficulties to understand the terminologies employed in those statements and that, in view of that result, the respondents would be unable to analyze and interpret the public balance sheets.

Miranda, Silva, Ribeiro and Silva (2008) investigated the level of understanding of the information in the Budgetary Balance Sheet among citizens whose education level surpasses the average level of the Brazilian population, found that the information produced in public accounting is not clear to most citizens, independently of the level of education.

In that sense, Dias (2009) considers that different studies prove the inconvenience of using more complex terms in messages directed at non-specialized audiences. According to the author, these users tend to neglect information with excessively technical expressions; at the same time, they are rarely able to arouse meanings compatible to the intended meanings.

In line with Oliveira (2005, p. 14), the lost understandability of the accounting terminologies results from the non-observance of the determinant factors in the fidelity of the communication process, which is conditioned by: "the investigation of the message issuer and receivers' objectives, their communication skills, their levels of knowledge on the subject disseminated, the sociocultural context involved, the appropriateness of the message and compatibility of the channel".

Concerning the accounting language and communication process, Dias (2009) and Dias and Nakagawa (2001) use the Communication Theory in their studies, considering that, for this theory, the meanings are not properties of the words, but of the individuals.

The transfer of the structural elements of Communication Theory to the accounting communication process can be represented as follows: (i) issuer: producers of accounting information; (ii) receiver: information user; (iii) message: set of economic and financial information, verified through an articulated system of data and accumulation techniques, promoted by accounting standards and principles; (iv) code: terminology of financial statements; and (v) channel: physical support for information, such as financial statements (Vasile, Aristita, Cristina & Mihaela, 2009).

In this communication process, the relation between the issuer and receiver of the information is focused on, minimizing possible noise that interferes in the understanding of the message. Thus, Platt, Cruz, Ensslin and Ensllin (2007) consider that, to achieve effective popular participation in issues related to public activity, concern is needed with the understanding of the information the State disseminates, aiming for appropriate and simple language that is accessible to common citizens as well.

According to Batista (2010), citizens need to understand the dynamics of the relation State-society, which are revealed in the understanding and consequent appropriation of the public information.

In that sense, Barreto (1994, p. 3, authors' translation) argues that "the information, when assimilated appropriately, produces knowledge, modifies the individuals' mental information inventory and offers benefits to their development and the development of the society they live in".

In Brazil, however, although the 1988 Federal Constitution became known as the "citizens' constitution", no constitutional guidelines were established that were aimed at guaranteeing education as a tool to develop civil awareness (Batista, 2010).

In fact, the challenge is to adapt the accounting message, its content and communication channel to the users' characteristics. Approaching this task is what drives this study, through the hypotheses raised and the method employed, further detailed in the next topic.



3. Method

In view of the general research objective, the study population consists of the community leaders in the city of Curitiba, totaling about 1,150 entities in August 2012 according to the Community Federation of Housing Associations in Curitiba and the Metropolitan Region (Femoclam).

The choice of this research universe is justified as the respondents, in theory, attended to the characteristics of average citizens, whom Reis (2007, p. 1) defined as "the literate Brazilian, increasingly wanting to understand the enigma his own country represents, which advances in so many aspects without moving forward in others".

It is also argued that the housing associations intrinsically encourage and contribute to the establishment and development of community life, which also happens through clarification and contextualized information dissemination, granting quality to social control. In addition, they are active in the defense of the citizens' interests in different public organizations, representing approximately 30% of the service sector entities that work in the development and defense of rights in Brazil, according to data from the Brazilian Institute of Geography and Statistics (IBGE), (2010).

In that context, the housing associations contribute to the promotion of clarification and contextualized information dissemination, which grants quality to the social control applicable to the State's activities through the implementation of public policies demanded by the citizens who are members of these civilly organized groups.

The sample was chosen by convenience and access (Yin, 2010), considering: i) the operational applicability of the questionnaire and ii) the management coverage area of the regional branches of the selected housing associations.

Applying the formula elaborated by Lax and Phillips (2009) and considering the population of 1,150 entities, the minimum sample size of 92 housing associations was reached, as shown by the calculation (Equation 1), for a 10% tolerable sampling error (n_0) (0.10).

$$n = \left[(N \times n_o) / (N + n_o) \right]$$

$$n = \left[(1150 \times 100) / (1150 + 100) \right] = 92$$
(Equation 1)

What the elaboration of the questionnaire is concerned, it contains closed answers, distributed in multiple-choice types on a nominal or ordinal scale, the latter based on a Likert scale. Thus, the assertions were scored on a scale from 1 to 4, on which the respondents indicated their level of knowledge on the presented terminology (high, reasonable, little or no knowledge).

In view of the research problem and the population chosen to apply the questionnaire, the intention when constructing the instrument was to make it easy to understand and apply. The tool was forwarded to the community leaders of the housing associations in the regional branches of the neighborhoods Santa Felicidade, Cajuru, Bairro Novo, Boa Vista e Pinheirinho and to three internal coordinators of Femoclam, all of whom were randomly chosen for the application of the pretest.

According to Gil (2002, pp.119-120, authors' translation), the pretest "is centered on the assessment of tools as such, aiming to guarantee that they measure exactly what they intend to measure". Concerning the individuals selected for the pretest, as the author affirms, "these individuals need to be typical of the research universe".

In addition, in view of the characteristics of the sample population, the tool was applied in the print version. Hence, the research variables were inserted in the database mechanically.

The collection tool was applied to the respondents personal and directly on six occasions during the meetings at Femoclam, held in August and September 2013. During those meetings, held at the regional coordination offices of the housing associations, the participants received oral explanations about



the nature of the research, its importance and the need to answer the tool. Next, the questionnaires were distributed for return by the end of the meeting.

In total, 116 questionnaires were distributed, 107 of which were answered. Four of these were considered invalid due to incomplete answers. At the end, 103 valid questionnaires were obtained.

As regards the measuring of the data, ordinal and nominal variables were used. In the nominal variables, the data can be categorized, counting only how frequently they occur, without any ranking or assessment. The ordinal variables go somewhat beyond the nominal variables and can provide information about the ranking of the categories (Rea & Parker, 2002).

Finally, to study the distribution of the variables, uni and bivariate analyses were employed. Univariate analysis involves the observation of one variable separately. In the bivariate analysis, on the other hand, hypotheses are tested that compare the characteristics of two or more variables with a view to verifying the inter-relation between them (Hair, Wolfinbarger, Ortinau & Bush, 2010).

Hence, to test the hypotheses raised, the statistical treatment of the data collected in the field research was interpreted using the χ^2 test.

The χ^2 test was applied using the statistical software "R", an open-coded software that is distributed free-of-charge to any interested users through the Universidade Federal do Paraná (UFPR).

4. Analysis of Research Results

After organizing and summarizing the data collected in the field research, exploratory analysis is applied to grant them meaning and obtain information with a view to answering the research question, based on the general objective.

In that sense, two aspects are investigated in the data: in the first, the goal is characterize the sociodemographic profile of the research population; and in the second, each variable is analyzed descriptively, including inferences about the characteristics of the population that attend to the research objective.

This initial analysis was based on the construction of the frequency distribution of the research variables. In a second analysis, χ^2 test was applied to the study sample in order to verify the relation among the variables that are considered important to test the research hypothesis.

4.1. Characterization of the Sociodemographic Profile of the Sample

The sociodemographic profile permits knowing the individual attributes of the research population. For this research, knowing the gender, education level, age range and occupation was considered important. This set of information can be observed for the research sample in Tables 1, 2 and 3.

Table 1 Distribution per Gender

Gender	Frequency	%
Female	35	34
Male	68	66
Total	103	100

Source: field research. The sum of the parts differs from the whole due to rounding criteria.



Table 2

Distribution per Education Level

Education Level	Frequency	%
Unfinished Primary Education	16	16
Finished Primary Education	11	11
Unfinished Secondary Education	6	6
Finished Secondary Education	39	38
Unfinished Higher Education	11	11
Finished Higher Education	10	10
Graduate Education	10	10
Total	103	100

Source: field research. The sum of the parts differs from the whole due to rounding criteria.

Table 3

Distribution per Age Range

Age Range	Frequency	%
20 to 30 years	10	10
31 to 40 years	15	15
41 to 50 years	29	28
51 to 60 years	38	37
61 to 70 years	9	9
71 years or older	2	2
Total	103	100

Source: field research. The sum of the parts differs from the whole due to rounding criteria.

As regards the sociodemographic characteristics, the smaller share of women among the community leaders is highlighted, according to Table 1, considering that women represent only 34% of this category, despite their demographic share of almost 57% in the city of Curitiba (IBGE, 2010).

Concerning the age range, Table 3 demonstrates the preponderance of community leaders between to so-called mature age and middle age (40 to 60 years).

Another observation relates to the heterogeneous education levels in the sample (Table 2), highlighting the percentage of people who finished higher education, corresponding to 20%, slightly higher than what was found in the country for people over 25 years of age, corresponding to 11.03% in this education level (IBGE, 2010).

4.2. Descriptive Analysis

To obtain a global view of the research variables and evidence relevant results with regard to the research population, each variable observed in the field research was subject to descriptive analysis, based on its summarized values.

Hence, with regard to the use of public money, the frequency in Table 4 reveals that the majority (60%) affirms that they never or rarely seek information on the use of public money.



Table 4

Frequency Distribution of Search for Information on the Use of Public Money

Frequency	Frequency	%
Always	19	18
Sometimes	22	21
Rarely	34	33
Never	28	27
Total	103	100

Source: field research. The sum of the parts differs from the whole due to rounding criteria.

Among the people who seek information on the use of public money, the Courts of Auditors represents the least indicated source, with 18 answers, while public hearings were the most indicated source (33), as observed in Table 5.

Table 5

Distribution according to Information Sources Consulted to have Access to Accountability of Public Agents

Source	Frequency	%
Public hearings	34	33
Municipal chambers	22	21
Official websites	28	27
Courts of auditors	19	18
Total	103	100

Source: field research. The sum of the parts differs from the whole due to rounding criteria.

In this respect, it should be highlighted that the fact that public hearings are the main source of consultation is not surprising, as this is the main mechanism for this population's direct participation in discussions on governmental decisions and on the elaboration of public policies, especially hearings by the municipal public power.

As observed in Table 6, among the 103 interviewees, 73 declared great interest in the content of the accounts rendered, while only one affirmed no interest whatsoever in this information.

Table 6Distribution according to Level of Interest in Accounts of Public Agente

Level of Interest	Frequency	%
High	73	71
Medium	20	19
Low	9	9
None	1	1
Total	103	100

Source: field research. The sum of the parts differs from the whole due to rounding criteria.

Based on the data, it can be inferred that, although 71% of the respondents were very interested in knowing the content of the accounts, only 39% seek information, always and sometimes (Table 4) about the use of the public resources.



Two main points in the application of the questionnaires and appointed during the meetings can partially explain this apparent contradiction: i) the respondents' lack of knowledge on the ways to get access to the accounts, and ii) lack of knowledge about the content that can be extracted from the public accounting information.

Another observation that can clarify the contradiction in the data found is related to the respondents' little or no declared knowledge on the public accounting information, totaling 57% of the sample, according to Table 7.

Table 7Distribution according to Knowledge Level on Public Accounting Information

Knowledge Level	Frequency	%
High	6	6
Medium	38	37
Low	35	34
None	24	23
Total	103	100

Source: field research.

In addition to this declaration, there is the difficulty to understand the terminology employed in the financial statements, considering that only 34% of the respondents consider the Budgetary Balance Sheet of the Municipal Government of Curitiba understandable to people without accounting education (data revealed in Table 8).

Table 8

Distribution according to Assessment of Understanding of Budgetary Balance Sheet Language in the City of Curitiba in 2012

Assessment	Frequency	%
Understandable	35	34
Reasonable to understand by non-accountants	33	32
Not understandable to non-accountants	35	34
Total	103	100

Source: field research.

As observed, these findings are in line with the results of the research by Oliveira (2005) and Miranda *et al.* (2008) regarding citizens' difficulties to understand the accounting terminology employed in the governmental financial statements. This difficulty not only induces the users to ignore the information, and by itself discourages diligent information seeking behavior, independently of the citizen's life context.

Proceeding with the objective to discover the population's level of understanding about the public accounting information, in this study, some basic public accounting terms were presented to the research population for assessment.

These terms were chosen because they represent technical terms that are commonly used in mass communication media and, therefore, the chance of assimilation by the general population is higher. At the same time, they objectively demonstrate the behavior of the public budget, through the collection (revenue), spending (expense) and governmental management of public resources, as expressed by its possible results (surplus and deficit).



	Knowledge Level									
Terms	Hi	gh	Reaso	nable	Lo	w	No	ne	То	tal
	f.	%	f.	%	f.	%	f.	%	f.	%
Surplus	6	6	32	31	34	33	31	30	103	100
Deficit	6	6	34	33	42	41	21	21	103	100

Table 9Distribution according to Knowledge Level of the Terms Surplus and Deficit

Source: field research.

Table 9 reveals that 31% of the respondents affirm no knowledge of the term surplus, while 21% declared no knowledge on the term deficit. Nevertheless, 37% of the respondents allege reasonable/high knowledge on the term.

The trajectory of the public accounts in Brazil can justify the lower level of ignorance regarding the term deficit when compared to surplus.

The public deficit turned into a central issue in the country's economic debate, particularly to explain the inflation process, when the government spends more than it collects. Consequently, the term ends up appearing more frequently in the national news, naturally becoming more known to the general population.

When compared to the levels in Table 9, the respondents' understanding of the terms "public revenue" and "public expenses" was moderately satisfactory, as 15% and 17%, respectively, declared no knowledge on these terms, as observed in the data in Table 10.

Table 10

Distribution according to Knowledge Level on the Terms Public Revenue and Public Expenses

	Knowledge Level									
Terms	Hi	gh	Reaso	onable	Lo	w	No	ne	То	tal
	f.	%	f.	%	f.	%	f.	%	f.	%
Public Revenue	7	7	49	48	32	31	15	15	103	100
Public Expenses	4	4	49	48	33	32	17	17	103	100

Source: field research. The sum of the parts differs from the whole due to rounding criteria.

These percentages do not only reveal the research population's knowledge level on the basic public accounting terminology, but also support the perception that the citizens learn when they take part in public life. That is so because the respondents participate frequently in public hearing, particularly regarding discussions on the Annual Budgetary Law (LOA), when the terms "public expenses" and "public revenue" are more commonly used and discussed.

As regards the type of presentation that would improve the understanding of the public accounting information, the data in Table 11 highlight the preference for accessible language (51%), in line with the highlights from the Communication Theory in this study, indicating the need to adapt the codes of the public accounting message to the understanding of the receivers, in this case average citizens.



Table 11

Distribution per Preferred Type of Presentation to Improve the Understanding about the Public Accounting Information

Level of Utility	Frequency	%
Accessible language	53	51
Folder	21	20
Link to events related to people's daily life	10	10
Summarized statement	9	9
Tables	6	6
Graphic representation	4	4
Total	103	100

Source: Field research.

As regards the folder, its second place (20%) may be due to the fact that it is a customary means to train community leaderships, as well as a pedagogical communication vehicle in the dissemination of information from governmental entities to society in general.

Hence, once again, the result is in line with the Communication theory regarding the channel used to transmit the message to the receiver, that is, it reveals the need to adapt the presentation of the financial reports in a communication medium the individual is already familiar with and that presents not only the result, but also the analysis and interpretation of this result, in a didactical form, mediated by verbal language that is accessible to the citizens' understanding.

To evidence other relevant information based on the level of association between the variables of interest, and aiming to test the research hypothesis, the $\chi 2$ test was applied, in which the level of association between two or more variables analyzed is measured by the p-value inferior to 0.05.

Thus, to verify whether there is a difference between the frequencies observed for the education level and the level of knowledge on the public accounting information, the distribution is displayed in Table 12.

Table 12

Distribution of level of education per level of knowledge about public accounting information

Level of education	Level of Knowledge about Public Accounting Information					
	None	Little	Reasonable/High	Total		
Unfinished and finished primary education	14	8	5	27		
Unfinished and finished secondary education	8	18	19	45		
Unfinished and finished higher education and graduate education	2	9	20	31		
Total	24	35	44	103		

Obs.: X-squared = 21.8175, p-value = 0.0002179.

Source: field research

In this case, for a p-value of 0.0002179, it can be affirmed that the education level is related to the level of knowledge on the public accounting information, indicating that, the higher the education level, the higher the level of knowledge presented.

This assertion can be extended to the test scores for the variables level of knowledge about the terms surplus and deficit and respondents' level of education, Tables 13 and 14, p-values = 8.05e-06 and 0.006949, respectively.



The findings displayed in Tables 12, 13 and 14 support the studies by Weibenberger and Holthoff (2013), which indicate that a person's formal knowledge level seems to be a determinant of the connotations it attributes to the accounting terms. The connotation is the particular meaning for an individual or a given group within a community (Dubois, Gicamo, Guespin, Marcellessi, Marcellessi & Mevel, 2022, p. 142).

Table 13

Distribution of Level of Education per Level of Knowledge about Basic Public Accounting Terms - Surplus

Level of Education	Level of Knowledge about the Term Surplus			Total
	None	Little	Reasonable/High	
Unfinished and finished primary education	17	5	5	27
Unfinished and finished secondary education	12	20	13	45
Unfinished and finished higher education and graduate education	2	9	20	31
Total	31	34	38	103

Obs.: X-squared = 28.9374, p-value = 8.05e-06. Source: field research.

Table 14

Distribution of Level of Education per Level of Knowledge about Basic Public Accounting Terms - Deficit

Level of Education	Level of Knowledge about the Term Deficit			Total
	None	Little	Reasonable/High	
Unfinished and finished primary education	11	10	6	27
Unfinished and finished secondary education	7	22	16	45
Unfinished and finished higher education and graduate education	3	10	18	31
Total	21	42	40	103

Obs.: X-squared = 14.1109 p-value = 0.006949.

Source: field research.

Based on these inferences, the research hypothesis can be tested: formal education influences the understandability of the public accounting information the State shares. Thus, the correlation between the variables "level of education" and "level of knowledge about the public accounting information" is established.

In the same sense, Abrajano (2005) affirms that, although education and commitment are not the same, they are strongly correlated, and education represents one of the main means through which citizens learn to receive and process information on the political context.

In view of the above, it can be inferred that the respondents face difficulties to understand the public accounting terminology, considering that most of the interviewees declare little or no knowledge. This inference is also based on the significant part of the respondents who consider that the financial information is not fully understandable to people without an accounting education background.

In addition, it can be argued that it is more probable for the citizens to be relatively well informed when they effectively participate in public life, through the means the State itself puts at society's disposal, like the public hearings.

Also, the average citizens' understanding of the public agents' accountability, based on the public financial statements, can be enhanced by adapting the terminology of the financial reports to the citizens' ability to understand.



Finally, the country's social development needs improvement by putting in practice the essential public policy of education, which according to the constitution is a fundamental right of citizens, aiming for the population's better understanding of the public information shared by the State.

5. Final Considerations

This research originated in the interest in investigating how one of the premises of new Brazilian public accounting, the improvement of the transparency and disclosure of governmental information, can influence the social function of accounting applied to the public sector, which is that of being a tool of social control of the acts of the public management, the State and the Government.

Considering that transparency presupposes not only information disclosure, but also its understandability, the first step should be to get to know the average citizens' level of understanding about the public accounting information, represented by community leaders from the city of Curitiba in this research.

The questionnaire was used as a data collection technique and tool in the field, which was applied during the monthly meetings of the selected housing associations' regional branches.

As identified, 57% of the subjects have little or no knowledge on the public accounting information. In addition, 30% indicate no knowledge of the term surplus, and 21% do not know the meaning of the term deficit, which are determinant items in the results of the public administrator's public resource management.

It should also be highlighted that, although 60% of the respondents do not seek information about the use of public money, 90% consider they are averagely or highly interested in knowing the contents of the accounts rendered. Based on observations during the meetings of the associations, it is inferred that they often do not do this due to a lack of basic knowledge on where to find this information or because they do not know the contents of the accounts and their meaning.

Hence, in view of the importance of publicizing public management, it is equally essential to share it, so as to allow the citizens to appropriate this knowledge (transparency), which is truly of interest to put in practice social control.

In view of the elements obtained in the field, it is concluded that most of the respondents are unable to appropriately interpret the information deriving from the data published in the public financial statements, which are part of the public agents' accountability, a tool whose primary function is to communicate the public agent and generate social confidence.

This discussion gains relevance in view of the wide range of people interested in the public accounting information, whose characteristics are distinct from traditional accounting users.

In addition, the general standard that "financial-accounting reports are elaborated for users with reasonable knowledge about business and economic activities who review and analyze the information diligently" (Resolution 1.374, CFC, 2011) should be applied moderately with regard to citizens, users driver by social control who are the main stockholders of the State and who are entitled to accountability.

Hence, to answer the research question on how to improve the citizens' understanding of the information in the public financial statements, based on the diagnoses reached, it is considered that the accounting communication bottlenecks can be reduced if presented in easily understandable language, mediated by complementary forms of disclosure that include verbal and non-verbal language and present not only the results, but also their analysis and interpretation.

Therefore, the variables observed could be summarized in a product society can use, in the form of a flexible information system that permits research based on data extracted from the analysis and interpretation of the public financial statements, so that the results are also displayed in the form of graphs, figures and other forms of non-verbal communication. This system should be available in a web environment, for access through the governmental entities' public transparency websites.



Finally, there is a need for essential public policy development through education for the true social appropriation of public accounting information, in view of the fact that the results validate the hypothesis raises. Thus, formal education, as a determinant in the development of people's intellectual capacity, tends to influence a higher level of understanding about the information the State shares.

Hence, the main contribution of this study is that it raises the discussion about the need for a proposed instrument of social control that facilitates the population's understanding of the public financial statements. In addition, the results found can serve as a reference for other studies focused on the equipment of social control through public accounting information.

In general, the governmental entities need to share information published in a comprehensible manner, with a view to permitting the Public Power's interaction with society and the citizens' construction of knowledge about the logic ruling the accountability process, thus facilitating the social appropriation of public information.

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