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Readability of the explanatory notes to the public financial statements of the states of Northeast Region and socio-economic and financial variables based on regression with panel data

Legibilidade das notas explicativas das demonstrações contábeis públicas dos estados da Região Nordeste e variáveis socioeconômico e financeiras a partir de regressão com dados em painel

Legibilidad de las notas explicativas de los estados de contabilidad pública de los estados of the Northeast Region and socioeconomic and financial variables from regression with panel data

Authors

Cibele Pires de Matos
Master's degree in Administration and Controllership, Federal University of Ceará (UFC). Address: Av. da Universidade, 2431, Benfica, Fortaleza – CE, Cep. 60.020-180. Identifiers (ID):
ORCID: https://orcid.org/0009-0007-7263-7739
Lattes: http://lattes.cnpq.br/9048850040021083
E-mail: cibele.pmatos@gmail

Roberto Sérgio do Nascimento
PhD in Accounting. Public Accounting and Auditing, Federal University of Ceará (UFC). Address: Av. da Universidade, 2431, Benfica, Fortaleza – CE, Cep. 60.020-180, Federal Court of Accounts (TCU). Address: R. Barão de Aracati, 909, L2, Fortaleza -CE, Cep. 60115-081. Identifiers (ID):
ORCID: https://orcid.org/0000-0001-8217-9267
Lattes: http://lattes.cnpq.br/1325557671064860
E-mail: robertosdn75@gmail.com

Naiara Leite dos Santos Sant'Ana
PhD in Administration. Federal University of Ceará (UFC). Department of Accounting. Address: Av. da Universidade, 2431, Benfica, Fortaleza – CE, Cep. 60.020-180. Identifiers (ID):
ORCID: https://orcid.org/0000-0002-6529-3284
Lattes: http://lattes.cnpq.br/4606819804784902
Email: naiarasantana@ufc.br

Nélida Astezia Castro Cervantes
PhD in Political Science. Federal University of Ceará (UFC). Department of Private Law. Address: Rua Meton de Alencar S/N. Benfica, Fortaleza – CE, Cep. 60.020. Identifiers (ID):
ORCID: https://orcid.org/0000-0003-0614-9300
Lattes: http://lattes.cnpq.br/9345318158988105
E-mail: nelidacervantes@hotmail.com

Francisco Felipe Ramos Rodrigues Lima
Master's degree in Public Administration, Federal University of Ceará (UFC). Department of Accounting. Address: Av. da Universidade, 2431, Benfica, Fortaleza – CE, Cep. 60.020-180. Identifiers (ID):
ORCID: https://orcid.org/0000-0002-9029-3980
Lattes: http://lattes.cnpq.br/8043955334774176
Email: fcofelipe.rodrigues@gmail.com

Abstract

Objective: Analysis of the influence of previously selected social, economic and financial variables on the quality of disclosure of explanatory notes by the governments of the Northeastern states in the period between 2012 and 2021 based on the elaboration of the Flesch Index.

Methodology: Uses the Flesch index, which estimates the degree of readability of texts, applied to the explanatory notes of the public financial statements of the nine northeastern states from 2012 to 2021 and a multiple linear regression test with panel data, with the calculated Flesch index as the dependent variable and the Human Development Index (HDI) as independent variables, Public Debt (PE), Liquidity, Index of Development of Basic Education (IDEB) and Value of the Approved Budget (VOA).

Results: Considering the period analyzed (2012 to 2021), the model revealed consistency only in relation to the period from 2017 to 2021, but without any of the proposed variables having a significant impact on the independent variable. The best readability indices were obtained in the states of Pernambuco (72.4%) and Paraíba (66.7%) and the least favorable indices in the states of Maranhão (45.3%) and Piauí (42.7%).

Contributions of the Study: The research by testing socio-economic and financial variables and attempts to link them to the dissemination of explanatory notes in the public sector. Although the results were not positive, the lack of correlation among the variables analyzed suggests that others could be validated in future work. This study contributes to the analysis of social, economic and financial variables and their relationship to the elaboration of explanatory notes.

Keywords: Explanatory notes. Readability. Accounting disclosure. States of the Northeast.

Resumen

Objetivo: Analizar la influencia de variables sociales, económicas y financieras previamente seleccionadas en la calidad de la divulgación de las notas explicativas por parte de los gobiernos de los estados del nordeste, en el período comprendido entre 2012 y 2021, a partir de la elaboración del Índice Flesch.

Metodología: Utiliza el índice de Flesch, que estima el grado de legibilidad de los textos, aplicado a las notas explicativas de los estados financieros públicos de los nueve estados del noreste de 2012 a 2021 y prueba de regresión lineal múltiple con datos en paneles, teniendo como variable dependiente el índice de Flesch calculado y como variables independientes el Índice de Desarrollo Humano (IDH), el Endeudamiento Público (PE), la Liquidez, el Índice de Desarrollo de la Educación Básica (IDEB) y el Valor del Presupuesto Aprobado (VOA).

Resultados: Considerando el período analizado (2012 a 2021), el modelo reveló consistencia solo en relación con el período de 2017 a 2021, sin embargo, sin ninguna de las variables propuestas. Los mejores índices de legibilidad fueron obtenidos por los estados de Pernambuco (72,4%) y Paraíba (66,7%) y los índices menos favorables por los estados de Maranhão (45,3%) y Piauí (42,7%).

Contribuciones del Estudio: La investigación innova al evaluar variables socioeconómicas y financieras, buscando asociarlas con la divulgación de notas explicativas en el sector público. Si bien los resultados no fueron positivos, la falta de relación entre las variables analizadas sugiere que otras podrían validarse en trabajos futuros. Este estudio contribuye al análisis de variables sociales, económicas y financieras y su relación con la elaboración de notas explicativas.

Palabras clave: Notas explicativas. Legibilidad. Divulgación contable. Estados del Nordeste.

Resumo

Objetivo: Analisar a influência de variáveis sociais, econômicas e financeiras previamente selecionadas na qualidade da evidenciação das notas explicativas pelos governos dos estados nordestinos, no período compreendido entre 2012 a 2021, a partir da elaboração do Índice de Flesch.

Metodologia: Utiliza o índice de Flesch, que estimativa o grau de legibilidade de textos, aplicado às notas explicativas de demonstrações contábeis públicas dos nove estados nordestinos do período de 2012 a 2021 e teste de regressão linear múltipla com dados em painéis, tendo como variável dependente o índice de Flesch calculado e como variáveis independentes: o Índice de Desenvolvimento Humano (IDH), o Endividamento Público (EP), a Liquidez, o Índice de Desenvolvimento da Educação Básica (IDEB) e o Valor Orçamentário Aprovado (VOA).

Resultados: Considerado o período analisado (2012 a 2021), o modelo revelou consistência somente em relação ao período de 2017 a 2021, porém, sem que nenhuma das variáveis propostas apresentasse influência significante sobre a variável independente. Os melhores índices de legibilidade foram auferidos pelos estados de Pernambuco (72,4%) e Paraíba (66,7%) e os índices menos favoráveis pelos estados do Maranhão (45,3%) e Piauí (42,7%).

Contribuições do Estudo: A pesquisa inova ao testar variáveis socioeconômico-financeiras procurando associá-las a divulgação das notas explicativas no setor público. Embora, os resultados não tenham se mostrados positivos, a inexistência da relação por parte das variáveis testadas aponta para que outras possam ser validadas em trabalhos futuros.

Palavras-chave: Notas explicativas. Legibilidade. Evidenciação contábil. Estados do Nordeste.

1 Introduction

The explanatory notes (NE) help to disclose and supplement the information contained in the financial statements and help to clarify or understand the relevant data contained therein (Araújo & Callado, 2020). In the private sector, accounting information plays a prominent role in market economies. Holtz and Santos (2020) recall that investment opportunities are linked to the possibility of investors to evaluate the potential return, associated with the fact that these same investors track the capital invested.

While the public sector is not directly about capital investment, managers' attention is focused on accountability for the services provided to society. This movement to improve information in public accounting is more recent. It began in 2008 with the adoption of the *International Public Sector Accounting Standards* (IPSAS) in Brazil (Williams & Hussein, 2019) as a result of the *New Public Management* (NPM) movement that began in the 1980s.

The benefits of improving *disclosure* are related to strengthening the transparency of governments' budgetary, asset and financial management acts, as well as expanding the forms of communication of public results. In this context, the explanatory notes, as an integral part of the financial statements, are not only able to contextualize the most relevant information, but also to reduce the information asymmetry between managers, the population and other users of accounting information (Borges, 2020; Costa & Pelech Júnior, 2021; Zobaran, 2019).

In view of the above, this study aims at answering the following research problem: **Would the quality of disclosure of the explanatory notes to the financial statements applicable to the public sector (DCASP) of the states in the Northeast region be influenced by socio-economic and financial variables?** As a general objective, it is expected that the quality of disclosure of the explanatory notes to the DCASP of the states of the Northeast region will be analysed in terms of possible relationship with socio-economic and financial variables.

The present study is justified from an academic perspective, as the work developed tends to focus on the corporate sector (Borges & Rech, 2019; Holtz & Santos, 2020) and only a few studies are focused on the public sector (Marcolin et al., 2021). In relation to the social aspect, the work is able to strengthen the tools of citizen participation, as it evaluates the range of information available to society in relation to the use of allocated public resources, as well as the respective results. In this sense, society acts both as the provider of the necessary resources and as the main recipient of public services, and the information disclosed represents the way in which the communication process between agents (performers) and principals (citizens) takes place.

As far as the structure of the work is concerned, in addition to this introduction, there is also a section dedicated to the theoretical review of the topic, the methodology, the analysis and the discussion of the results, as well as a final section devoted to the final considerations.

2 Literature Review

2.1 Brazilian Public Accounting: from evolution to the process of international convergence

Lato sensu, the introduction of Brazilian public accounting began during the colonial period, precisely in 1549, with the establishment of the first tax office in the country. With the growth of the economy, Decree No. 4,475 (1870) was published, which made the profession of accountant official in the country. In 1922, the Public Accounting Law (Decree No. 4,536 [1922]) was instituted and in 1964, Law No. 4,320 (1964), which is still in force today and is also known as the Finance Law, whose main feature was its strong budgetary and non-patrimonial emphasis on accounting records.

In 1988, a new constitution was promulgated, which brought with it the intention to rewrite the old Finance Act and create many other laws to improve public finances: LRF (LC 101 [2000]), Transparency Law (LC n. 131 [2009]) and Law on Access to Information (LAI) (Law n. 12.527 [2011]).

During this interregnum, corporate accounting was also reformulated. With the adoption of International Financial Reporting Standards (IFRS) through the amendment of the Companies Act by Law No. 11,638 (2007), the country entered the process of international harmonization of accounting. In the public sector, Decree MF No. 184 (2008) was issued, initiating the process of convergence of Brazilian public accounting with the International Public Sector Accounting Standards (IPSAS).

In contrast to the corporate accounting system - which took advantage of the amendment to the existing law - the Brazilian public sector took a different path, which incidentally is of dubious legality. Since Law No. 4320 (1964) was still in force – and there was no indication of any legislative inclination to repeal it – the strategy adopted was assumed to fill in all the gaps in relation to IPSAS and to present in tables and statements the information that conflicted with Law No. 4320 (1964), thus both adopting the international standard and not complying with the national law.

The adoption of IFRS (by companies) and IPSAS (in the public sector) has triggered a consistent and silent revolution in Brazilian accounting, especially in the disclosure of accounting in the country, more specifically in the public sector – without affecting accounting records from an equity perspective. In addition, with the inclusion of new rules, measurement standards and changes to existing standards, it was found that the shift from rules-based to principles-based accounting significantly increased the degree of judgment of those responsible for preparing the financial statements (Borges & Rech, 2019; Vieira et al., 2023).

Indeed, the fundamental issue raised by the authors was translated into the impact of adopting rules from different accounting systems: While the accounting systems based on common law - the Anglo-Saxon influence - are based on free enterprise, market value and the promotion of transparency and disclosure, in the systems influenced by Roman law or civil law, there is a greater interest in legalism, accounting formalism, focus on tax authorities, little transparency, tendency towards secrecy and reduced disclosure. In other words, the adoption of IFRS and IPSAS into national systems with a focus on civil law has only produced what was to be expected: a shock to the accounting culture with an impact on current accounting systems.

It has been noted that the adoption of the international global standard has led to an excess of information, much of which is not relevant to users (Caldas, 2019; Castro, Leôncio, Silva et al., 2020; Zobaran, 2019), culminating in the so-called information overload or excess of irrelevant information (Santos et al., 2019). The consensus is that this increase in the volume of information is due to the greater degree of judgment on the part of accounting professionals, based on the complexity of the rules and principles established in the standard of international standards (Araújo, 2019; Caldas, 2020; Sena et al., 2023), in contrast to the previous form of judgment based on pre-established rules and predominantly without professional judgment. For many authors (Holtz & Santos, 2020; Vieira et al., 2023), there has been an increase in transaction costs, an increase in the amount of information disclosed and the production of reports in an opaque manner as a technique to manipulate accounting narrative information.

2.2 Scientia est potentia

Financial statements and explanatory notes must be understood in the context of the outcome of the financial and economic performance of companies (Jales et al., 2020) and, in the case of the public sector, as one of the means of *accountability* of public agents in the accountability process (Caldas, 2019).

For Oliveira et al. (2020) and Vieira et al. (2023), the main objective of financial statements is to provide useful information for decision-making and for the evaluation of managers in general. ENs, on the other hand, must aggregate and enrich financial statements by serving as a complement and not a substitute for any information (Mesquita et al., 2022). As ENs are seen as spaces to promote *accountability* (Marcolin et al., 2021), the data and information they contain are an important part of accounting research (Ferreira et al., 2019), thus in line with the expression *scientia est potentia* (knowledge is power).

The comprehensibility of technical reports sometimes depends on the linguistic structure in which they are written (Carvalho et al., 2023; Monteiro et al., 2020; Sena et al., 2023), sometimes on those who read them (Smith & Taffler, 1992). Readability studies - as well as the technique that assesses the syntactic difficulty of the text, the fluency of reading and not its comprehension - focus more on documents written in English than on other languages, such as Portuguese (Holtz & Santos, 2020).

For Sena et. al (2021), readability is not to be confused with the meaning of comprehensibility, but with the attributes of the text (short words, without jargon, simple sentences, active voice and present tense, instructions in the imperative and neutral gender – Zorbaran, 2019), while comprehensibility, the ability to understand, is aimed at the reader. If, on the one hand, long, poorly written and confusing texts are capable of preventing communication between the parties - thus increasing the asymmetry of information between the client and agents (poor readability) - the lack of knowledge of the subject, although the text is understandable, also prevents the information from reaching the recipient.

There are several readability indices worldwide, of which the following are highlighted: Flesh and Dale-Chall in the 1940s, Gunning Fog and Coleman-Liau in the 1950s, SMOG in the 1960s, Automated Readability in 1967 and Linsear-Write in 1970 (Moreno et al, 2022). Although there is no specific index for Portuguese accounting texts, the indices of Flesch for Portuguese (Camacho et al., 2022; Carvalho et al., 2023), Fernandez-Huerta (1959) for Spanish and Gunnning Fog (Araújo, 2019; Carvalho et al., 2023) tend to be used to evaluate the clarity and readability of accounting information.

It is argued that improving the readability of accounting information has several benefits. In companies, increased readability is indicated because it would help individual investors and analysts to assimilate the relevant information for the evaluation of financial disclosure (Monteiro et al., 2020), in addition to the fact that good accounting disclosure would be an indication of transparency, which would generate greater credibility (Mesquita et. al., 2022).

In the public sector, readability is becoming more important due to the scope that published information must have, and increasing attention is being paid to using simple and citizen-friendly language in published reports (TCU, 2020a; TCU, 2020b). It is stated: In contrast to narrowing down the stakeholders of a company (customers, employees, investors, banks, etc.), government action goes further and reaches an entire population, society, etc. in terms of the public policies that governments elect and the understanding of the results of public managers. In this sense, the consideration of Salehi et al. (2020) is appropriate when they emphasize that complexity can also be considered a risk factor for the audit that will evaluate SD.

Therefore, it is understandable that obscure, omitted or deliberately withheld information can undermine a country's economy, favor corrupt politicians, promote inefficient policies and enable the capture of the State by interest groups serving private ends. On the other hand, the transparent performance of government institutions can go in the opposite direction. It can contribute to public accountability and strengthen the foundations of a country's democracy.

2.3 Previous studies

Compared to the international literature, studies on the readability of financial reports in Brazil are considered relatively recent and focus more on lexical and volumetric analysis than on content (Marcolin, 2021).

The issue of readability was increasingly discussed in the country after the adoption of IFRS under the Brazilian accounting legislation (Law No. 11.638 [2007]), which expanded the scope of information required by the new accounting framework. In this context, the concept of relevance of information was not properly understood by those responsible for the preparation of financial reports and there was a massive publication of irrelevant information, which was referred to as information overload (Santos et al., 2019).

The change from a system usually based on parameters to a system based on judgments may have contributed to this problem, as it runs counter to one of the central aspects of accounting disclosure, namely the relevance of information, an attribute of quality rather than quantity (Castro et al., 2019). The issuance of OCPC 07 (CPC-OCPC 07 [2014]) attempted to mitigate this issue and highlight the key points to help with accounting and financial reporting disclosures, as the overabundance of information prevents the knowledge of relevant information and also increases transaction costs. It is considered that this is an element that can affect decision-making (Borges & Rech, 2019), while some defend the possibility that the lack of disclosure causes the so-called adverse selection, when good and bad companies are confused (Akerlof, 1970).

Studies show that readability is influenced by a wide variety of factors. Size, operational complexity, time of listing, corporate governance, audit by one of the Big Four and expansion of reporting are mentioned (Borges & Rech, 2019). Even in the public sector, there are more studies on readability in front of companies compared to the private sector (Borges & Rech, 2019; Holtz & Santos, 2020; Mesquita et al, 2022; Santos et al, 2019; Silva et al, 2020; Oliveira, 2022).

One possible argument for this lack of progress in the public sector is the fact that the improvement in communication has occurred more recently, with the introduction of IPSAS. A second explanation refers to the fact that many public institutions have managers who are backed by a mandate, elected or not by popular vote, as opposed to companies that have investors. When these representatives are reappointed, it is only logical that they are tempted to highlight only the results that are most favourable to them and leave out those that do not seem so advantageous to them. This reminds us of the observation by Holtz & Santos (2020) and Vieira et al. (2023) about the link between readability and manipulation as something that needs to be discussed, especially when there are no norms and rules.

Readability is also linked to accountability. They are linked in that the first drives the second by presenting to society the results of the application of the means used, making the executors of the figures used responsive and strengthening the chosen system of government. In general, readability – by reducing information asymmetry – would work against distrust of institutions (Albareda & Torres, 2022; Fonseca & Costa, 2023) and increase trust and involvement of citizens as pillars of public administration (Pederson & Johannsen, 2018).

In terms of low readability, Villoria (2021) points out that there is a gap between nominal and effective transparency that needs to be assessed for the effectiveness of transparency and *accountability*. This could be solved by using (*enforcing*) better financial and management reporting structures (Alves et al., 2023) to improve public *accountability*, confirming Saldanha's (2022) call to advance the discussion on readability, *accountability* and *enforcement.*

3 Methodological procedures

The present research is to be characterized as explanatory, with a quantitative approach and the use of document analysis based on public financial reports collected from the official websites of the sampled states of the Northeastern region for the period between 2012 and 2021. The time span refers to the period between 2015 (mandatory deadline for the convergence rules) and 2021, the date when all financial statements were fully collected.

To measure readability, the Flesch Index was used, which consists of a metric whose lower scores represent greater difficulty in reading comprehension, while the higher scores signify greater ease in reading:

Table 1
Readability levels of the Flesch Index

FLF Score	Readability level
0 – 30	Very difficult
31 – 50	Difficult
51 – 60	Reasonable
61 – 70	Standard/Intelligible
71 – 80	Reasonably easy
81 – 90	Easy
91 – 100	Very easy

Source: *adapted from Flesch (1974).*

The formula used for texts in Portuguese was the one suggested by Souza et al. (2023), presented below:

$$\text{FLF} = 226 - 1{,}04\text{x}\frac{\text{Number of Words}}{\text{Number of Phrases}} - 72\text{x}\ \frac{\text{Number of silables}}{\text{Number of Words}}$$

Once the index was calculated, it was used as the dependent variable in the following proposed model:

$$Y_{it} = \beta_0 + \beta_1 IDH_{it} + \beta_2 EndPúb_{it} + \beta_3 Liq_{it} + \beta_4 IDEB_{it} + \beta_5 VOA_{it} + \varepsilon_{it}$$

Where:

Yit represents the readability metric and the proxies are given by: FLF: calculated according to Equation 1, where is the number of words divided by the number of sentences, represented by the natural logarithm of the explanatory notes file, for federative unit i in period t;

HDI represents the indicators for assessing the well-being of the population, where the proxy is the natural logarithm of investments in income, health and education for the federal unit i in period t;

EndPúbit represents the unit's performance, indicated by a dummy with outcome 1 when it has resources to pay its debts in its period, and 0 in other cases, for the federated unit i in period t;

Liqit represents the market liquidity resulting from the information available in Economática® for the federative unit i in period t;

IDEBit represents the indicators for the evaluation of investments in education, where the proxy is the natural logarithm for the federal unit i in period t; and

VOAit represents the resources approved in the budget law for the federal unit i in period t, where the proxy is the natural logarithm.

Table 2

Classification and correlation of research variables

Description	Nature	Kind	Expected ratio	Sources
Flesch index (IF)	Quality of information	Explained	-	Borges & Rech (2019); Gomes et al (2018)
Human Development Index (HDI)	Social	Explanatory	Positive	Andrade & Nascimento (2017); Brito et al. (2011); Costa & Tavares (2014)
Basic Education Performance Indicator (IDEB)	Social	Explanatory	Positive	Andrade & Nascimento (2017); Brito et al. (2011); Costa & Tavares (2014)
Public indebtedness (EndPub) = Consolidated debt/Net Current Revenue	Financial	Explanatory	Negative	Abreu & Bezerra Filho (2017); Holtz & Santos (2020)
Liquidity (Liq) = Financial obligations/Cash availability	Financial	Explanatory	Positive	Abreu & Bezerra Filho (2017); Holtz & Santos (2020); Souza (2015)
Approved budget amount (VOA)	Economic	Explanatory	Positive	No studies were found for this variable

Source: *Survey Data.*

4 Results and Analysis

4.1 Analysis Results

The results of the application of the Flesch index to the data collected regarding the public financial statements of the 9 (nine) northeastern states that made up the sample are shown in the table below:

Table 3
Flesch index of the northeastern states - period 2012 to 2021

State	Alagoas				Bahia				Ceará				Maranhão				Paraíba			
Year	Flesch Index	Rank-year	Readability	Complexity	Flesch Index	Rank-Year	Readability	Complexity	Flesch Index	Rank-Year	Readability	Complexity	Flesch Index	Rank-Year	Readability	Complexity	Flesch Index	Rank-Year	Readability	Comple-xity
2012	86,0	3	4	14,1%	47,0	8	10	15,2%	38,5	9	14	13,6%	53,7	6	10	15,6%	85,6	4	4	9,2%
2013	90,4	4	3	7,6%	53,8	5	8	15,3%	49,0	7	12	11,4%	35,6	9	14	10,2%	91,5	3	2	6,2%
2014	85,1	4	4	8,1%	51,6	5	8	13,7%	51,2	7	11	11,9%	41,8	9	10	13,3%	87,2	3	4	8,0%
2015	63,2	4	8	10,4%	89,3	1	3	7,6%	47,2	7	8	11,0%	36,2	8	14	9,5%	83,9	3	4	7,4%
2016	64,4	4	9	20,3%	88,4	2	2	6,4%	50,3	7	11	11,6%	53,7	6	10	15,6%	87,4	3	4	7,9%
2017	35,2	9	12	14,1%	53,7	2	6	10,2%	48,3	4	12	11,5%	51,8	3	6	11,0%	43,6	5	12	11,5%
2018	30,9	9	15	17,7%	53,8	2	7	11,1%	61,0	1	9	11,1%	47,4	5	7	13,2%	44,6	7	11	10,7%
2019	41,7	6	11	13,6%	51,9	2	7	11,8%	44,2	5	11	15,3%	45,0	4	9	12,2%	48,8	3	11	9,2%
2020	43,4	7	11	14,0%	54,9	4	6	10,8%	49,2	5	8	11,7%	46,2	6	8	13,2%	37,4	9	13	12,1%
2021	53,4	3	9	14,0%	56,1	2	6	10,9%	51,2	5	8	12,0%	42,0	7	9	14,8%	56,6	1	9	10,0%
Mean	**59,4**	**5o**			**60,1**	**4o**			**49,0**	**6o**			**45,3**	**8o**			**66,7**	**2o.**		
SD	22,04				15,38				5,7				6,57				22,16			
CV	37%				26%				12%				14%				33%			
Estado	**Pernambuco**				**Paiauí**				**Rio Grande do Norte**				**Sergipe**				**Flesch Index - Northeast**			
Year	Flesch Index	Rank-Year	Readability	Complexity	Flesch Index	Rank-Year	Readability	Complexity	Flesch Index	Rank	Readability	Complexity	Flesch Index	Rank-Year	Readability	Complexity		Mean	Standard Deviation	Coefficient of Variation
2012	94,6	2	0	5,3%	62,9	5	8	12,6%	95,2	1	1	8,9%	50,3	7	10	11,7%		68,2	22,18	33%
2013	92,9	2	2	7,0%	53,7	6	10	15,6%	95,0	1	1	8,8%	46,5	8	10	13,2%		67,6	24,19	36%
2014	88,9	2	2	7,7%	15,6	6	16	15,5%	92,0	1	2	9,7%	41,6	8	11	13,9%		61,7	27,37	44%
2015	84,2	2	3	8,5%	36,1	9	15	15,0%	60,5	5	7	13,1%	49,4	6	10	13,5%		61,1	20,7	34%
2016	91,6	1	2	11,1%	39,6	9	14	15,4%	57,5	5	8	11,0%	47,4	8	10	13,8%		64,5	19,72	31%
2017	63,3	1	6	11,9%	39,5	7	13	14,7%	42,1	6	9	13,4%	38,8	8	12	14,4%		46,3	8,86	19%
2018	52,4	4	7	12,6%	45,7	6	11	13,2%	53,8	3	7	12,7%	41,8	8	10	13,3%		47,9	8,69	18%
2019	56,8	1	7	13,3%	24,7	9	9	15,6%	32,0	8	12	13,2%	38,8	7	12	14,4%		42,7	9,89	23%
2020	55,0	3	7	14,1%	55,7	2	8	12,7%	39,4	8	11	19,9%	63,9	1	6	12,1%		49,5	8,67	18%
2021	44,3	6	9	14,2%	53,0	4	8	13,1%	40,8	9	10	13,5%	41,1	8	12	13,9%		48,7	6,6	14%
Mean	**72,4**	**1o**			**42,7**	**9o**			**60,8**	**3o**			**46,0**	**7o**				**55,8**	**15,0**	**27%**
SD	19,75				14,66				24,55				7,58							
CV	27%				34%				40%				16%							

Source: *Survey Data*

In general, the state with the highest average value of the Flesch Index (IF) was Pernambuco with 72.4 average points, appearing in the ranking three times in first place and three times in second place, followed by Paraíba with an average value of 66.7 and, in third place, Bahia with an average value of 60.1 points. Among the three states with the lowest average is Piauí with an average of 42.7 points, followed by Maranhão with an average of 45.3 and, in third place, Sergipe with an average of 46.0 points.

The results presented also show that the states with the most homogeneous Flesch Index (FI) during this period were: Ceará, Maranhão and Sergipe, with coefficients of variation of 12%, 14% and 16%, respectively, and the most heterogeneous states were: Rio Grande do Norte, Alagoas and Piauí, with coefficients of variation of 40%, 37% and 34%, respectively.

The result of homogeneity in comparison with the number of years studied and the other results of the sample, in turn, made it possible to conclude that there was little progress in relation to the readability index of the public financial statements analyzed. In addition, the results indicate, on average, adequate readability and, in general, difficult and reasonably easy readability, which is still not considered a satisfactory indicator.

The second part of the study consisted of verifying whether there is a correlation between the results of the Flesch index and the socioeconomic-financial variables chosen. For this purpose, the following indicators were selected: HDI, EndPúb, Liq, IDEB and VOA. After the normality test was performed, Pearson's coefficient was adopted to examine the relationship between the proposed variables (Table 2):

Table 4

Pearson's correlation test of model variables (n = 90)

		HDI	**Public indebtedness**	**Liquidity**	**IDEB**	**VOA**	**FLESCH**
HDI	Pearson's correlation	-					
Public indebtedness	Pearson's correlation	-0.238 (**)	-				
Liquidity	Pearson's correlation	0,168	-0,164	-			
IDEB	Pearson's correlation	0.270 (***)	-0,038	0,053	-		
VOA	Pearson's correlation	0.299 (***)	-0.212 (*)	0,180	0,135	-	
FLESCH10	Pearson's correlation	-0,103	0,046	-0,183	-0,036	-0,079	-

Legend: HDI = Human Development Index; IDEB = Basic Education Development Index; VOA = Resources approved by the budget law.
Note: (*) Significant at 90%, (**) Significant at 95% and (***) Significant at 99%.
Source: *Survey Data.*

Table 2 shows that the HDI has a positive correlation with the BDI and the VOA, i.e. when the HDI increases, the IDEB and the VOA also increase, as the correlation index coefficient is positive. On the other hand, the HDI shows a negative correlation with public indebtedness (EndPub) and the latter with the VOA, as the increase of one implies a decrease in the result of the other.

It can also be deduced from this table that the variables HDI and VOA show a significant (0.004) and positive (0.299) correlation, which means that with a higher HDI, the VOA also increases. The same applies to HDI and IDEB (0.0010) and (0.270). For the variables HDI and public indebtedness, the correlation was significant and negative, i.e. when HDI increases, public indebtedness decreases (-0.238).

There is also a negative and significant correlation between VOA and public indebtedness (0.024) and (-0.212). The correlations with the Flesch index and liquidity, on the other hand, are not consistent with the other variables in terms of significant and positive correlation.

Despite the above-mentioned lack of significant correlation, it was necessary to investigate the existence of an influence between these variables using the regression test. Next, we attempted to determine the explanatory power of the model based on the selected variables:

Table 5
Adjusted R2 Calculation

R	R²	R² adjusted	Standard Estimate Error
0,542	0,294	0,162	1,813

Source: *Survey Data.*

According to the results achieved, R² indicated that the independent variables explain 29.4% of the dependent variable.

Table 6
Analysis of variance (ANOVA)

Model	Sum of squares	Degrees of freedom	Medium Square	F	P-value
Regression	102,416	14	7,315	2,226	0,014
Residue	246,474	75	3,286		
Total	348,890	89			

Source: *Survey Data.*

The result of the analysis of variance (ANOVA) attempted to synthetically determine whether at least one of the variables was significant for the proposed model (p-value < 0.05). This can be expressed in the form of the following hypotheses: Ho - there is no difference between the variables included in the model; H1 – there is at least one variable with different power.

Table 7
Multiple linear regression model with the Flesch index as the dependent variable

Model	Non-standard coefficients		Standardized coefficients	T	P-value
	B	Standard error	Beta		
(Constant)	0,051	5,361	-	0,009	0,992
HDI	6,320	7,104	0,126	0,890	0,377
Public indebtedness	-0,013	0,118	-0,012	-0,107	0,915
Liquidity	-0,116	0,088	-0,137	-1,307	0,195
IDEB	4,405	3,281	0,147	1,343	0,183
VOA	-1,756	1,999	-0,095	-0,878	0,383
2012	0,318	0,947	0,049	0,336	0,738
2013	0,392	0,889	0,060	0,441	0,660
2014	-0,447	0,887	-0,068	-0,503	0,616
2015	-0,700	0,905	-0,107	-0,773	0,442

2017	-2,009	0,954	-0,306	-2,106	0,039*
2018	-2,123	0,911	-0,324	-2,331	0,022*
2019	-2,722	0,906	-0,415	-3,004	0,004*
2020	-2,164	0,924	-0,330	-2,342	0,022*
2021	-2,126	0,906	-0,324	-2,347	0,022*

Note: (*) significant at 5%.
Source: *Survey Data.*

The model was therefore run using the Enter method, which includes all variables. Variables with coefficients with a positive sign indicate that the higher the variable, the higher the Flesch index tends to be. Variables with a negative sign, on the other hand, indicate a correlation in which the higher the value of the independent variable, the lower the Flesch index. In the case of years, the variable is a dummy variable with a value of 1 when the data relates to that year and a zero value in the other years. The method excluded the year 2016 from the regression, which means that it was not significant for the analysis and is therefore not included in the results table.

4.2 Discussion of Results

Readability is a qualitative aspect of accounting information, especially public information, the results of which are capable of explaining the process of public decision-making. On the one hand, satisfactory readability indices indicate an improvement in public transparency and accountability; on the other hand, low scores suggest an erosion of the relationship between citizenship and public power and accountability of public administration.

On the contrary, the readability scores obtained in the survey were not considered satisfactory even after the country started the convergence of public accounting standards with the international standard (IPSAS) in 2008 (MF Decree No. 184/2008). Of the 9 (nine) states analyzed, only 2 (two) (Bahia and Ceará) have improved in terms of readability, albeit in inconsistent percentages; for the others (AL, MA, PB, PE, PI, RN and SE), the indices have decreased compared to the period analyzed. Interestingly, the result obtained goes in the same direction as the experience of the corporate sector, which recorded a significant increase in the amount of irrelevant information after the introduction of IFRS, even after the introduction of the OCPC 07 (Santos et al., 2019).

As for the documents analyzed (DCASP's NE), it is evident that the public administration continues to lack a quality standard for its published NE. The occurrence of transcriptions of the legal regulation, the disclosure of information, sometimes in excess or the absence of information, including non-relevant ones, were reviewed. These findings indicate non-compliance with the MCASP guidelines on the subject (item 8.2), in addition to other rules of the Brazilian legal system that provide for public transparency and the improvement of governance instruments of the federal public administration (LC No. 131/2009 and Decree No. 9,203/2017).

As previously mentioned, low levels of readability lead to deficiencies in the system of accountability and transparency (Villoria, 2021), increased risk for audits conducted - due to the increase in asymmetry of information disclosed and adverse selection - with implications for public administration (Pederson & Johanssen, 2018). In particular, they also show a lack of harmony among public managers in relation to citizenship in terms of what should be made public and show signs of the level of preparation of the professionals involved in the preparation of the reports. Finally, in terms of who should supervise the performance of public management – in this case, the internal and external control bodies – there is a lack of apathy towards the issues in question, underlining Saldanha's (2022) call for further development of the discussion on readability, accountability and enforcement.

As for the proposed variables (authorized budget amount, liquidity, IDEB, HDI and public indebtedness), three of the five are closely related to public finance management (public indebtedness-EndPub, liquidity-Liq and authorized budget value-VOA) and it can be expected that managers will place more emphasis on the quality and quantity of published information in relation to these variables. The VOA variable indicates how much is available for the implementation of public policy and its more realistic estimation contributes directly to the provision of public services. The liquidity variable creates the necessary conditions for the expansion of goods and services provided to the population, while low indebtedness (EndPub) can ensure the continuity of the portfolio of chosen policies over the years.

When examining these indicators, it became clear that they do not yet predominate in the list of explanations to be provided by the State, especially the one relating to public indebtedness. It should be recalled that since 2000 (LRF), the federal entities have been obliged to pay special attention to this modality of financing public expenditure, but the results of the NE point in the opposite direction.

Despite the study of the correlation between the readability index and the variables proposed in the study, the results proved to be insignificant, being predominantly negative. Although the explanatory value obtained (R2 = 29.4%) is considered low, it is nevertheless important as it forces the proposal of other indicators on the one hand and does not completely discard the work done on the other.

And it is in this sense that the work of Borges and Rech (2019), Caldas (2020), Camacho et al. (2022), Santos et al. (2019), Sena et al. (2021) and Riley and Yen (2019) have attempted to determine the existence of possible relationships between the readability of financial reports and different variables (GDP, re-election of the mayor, OCPC 07 issue, corporate governance and profitability MHDI, level of education, quality of authorship, time as a listed company, growth potential, etc.). It is concluded that it is necessary to test other independent variables that can also increase the degree of intensity or effectiveness of each variable in explaining the dependent variable.

Although the variables did not provide a satisfactory explanation, part of the years studied (years 2017 to 2021) showed changes in behavior. The result was significant, with a negative sign, which is consistent with the individualized consideration of the ranking of states, which was inconsistent in terms of the progress of the CASP convergence process.

The research results pointed to two key findings. First, there was an increase in the readability index shortly after the convergence of mandatory accounting standards in 2015, although it was actually expected that the level of readability would increase due to the improved public accounting standards. Secondly, the consistency of the readability index, which was indicated downwards, occurred in relation to most states, which makes the result of the survey more sensitive and worrying.

This last finding is in line with what happened in the private sector (Santos et al, 2019; Silva et al., 2020), when legibility became more complex after convergence with IFRS, even persisting with the edition of OCPC 07, which aimed to improve the level of information to be published. Although the orientation of OCPC 07 in relation to the public sector has not been precisely tested, the results are similar to those of companies, given that the periods are similar, reinforcing the idea that in the public sector the issue goes beyond the simple use of converged norms, but also *enforcement.*

5 Final Considerations

The objective of this study was to analyze whether the disclosure quality of the notes to the public sector financial statements (DCASP) of the states of the Northeast region is influenced by socio-economic and financial variables (approved budget value, liquidity, public debt, IDEB and HDI). The sample included all states of the Northeast region in the period from 2012 to 2021, i.e. before and after the process of convergence of public accounting with IPSAS, which became mandatory from 2015.

The best readability indices were achieved by the states of Pernambuco (72.4%) and Paraíba (66.7%) and the least favorable indices by the states of Maranhão (45.3%) and Piauí (42.7%). On average, the study indicated a low readability in the order of 55.8%, which was classified as difficult to somewhat difficult when examining the participating states individually. This was confirmed by the statistical results, which showed heterogeneity before 2015 and homogeneity with increasing reading complexity after that year.

It was noted that these results run counter to the progress of the country's public accounting convergence process, although they are consistent with those of the corporate sector and confirm the lack of public asymmetry that permeates the financial reports of both sectors and affects the level of public accountability and transparency. In line with this finding, a lack of harmony between managers and citizens was identified, as the latter were deprived of relevant information on service delivery, while a possible solution for the control bodies is to jointly address readability, accountability and enforcement.

With regard to the variables tested (authorized budget value, IDEB, HDI, indebtedness and liquidity), unlike previous studies, no statistical significance was found. Despite the lack of statistical significance, it was considered that research of this type is relatively new in the public sector compared to companies and researchers do not yet have a consensus on the ability of the variables to have an impact on the readability of public financial statements, which opens room for progress in the research.

The researchers were made aware that some of the years included in the study (2017 to 2021) behaved significantly and negatively in relation to the readability indices pointed out. The interpretation of these results was that the progress of convergent standards has increased the complexity of the readability of financial reports and not the other way around.

The contribution of the study is to test socio-economic and financial variables and attempt to relate them to the prevalence of explanatory notes in the public sector. Although the results were not positive, the lack of association in the variables tested suggests the possibility that others can be validated in future studies.

Finally, the non-timely availability of financial statements on the websites of parts of the federated entities studied was noted as a limitation of the work. For future studies, it is suggested to continue the studies with other variables and to evaluate the performance of the internal and external control bodies as institutions capable of improving the communication process of the government entities to their stakeholders.

Referencies

Abreu, M. H., & Bezerra Filho, J. E. (2017). Notas explicativas às demonstrações contábeis aplicadas ao setor público: proposta de estrutura mínima para atendimento à convergência com as normas internacionais, transparência das contas públicas e instrumentalização do controle social. *Revista Caderno de Finanças Públicas*, 17(1), 1-69.

Akerlof, G. A. (1970). The Market for "Lemons": Quality Uncertainty and the Market Mechanism. *The Quarterly Journal of Economics*, *84* (3), 488-500. https://doi.org/10.2307/1879431

Albareda, A., & Torres, R. L. (2022). Quebra de contrato social e desconfiança nas instituições públicas: desafios para o desenvolvimento socioeconômico no Brasil. *Desenvolvimento em Questão, 20*(58), 1-20. http://dx.doi.org/10.21527/2237-6453.2022.58.11865

Alves, M. A., Bonfim, M. P., Silva, C. A. T., & Soares, J. M. M. V. (2023). Legibilidade dos Relatórios de Gestão no Setor Público Brasileiro. *Revista Contabilidade, Gestão e Governança*, *26*(2), 213-248. https://doi.org/10.51341/cgg.v26i2.3016

Andrade, M. E., & Nascimento, M. M. L. S. (2017). Diferenciais de desenvolvimento econômico intermunicipal no Estado do Rio Grande do Norte – BR. *Revista Espacios*, *38*(28), 20.

Araújo, J. P. (2019). Complexidade e legibilidade das notas explicativas: uma proposta para aplicação do índice Fog. [Trabalho de conclusão de curso]. Universidade Federal de Uberlândia, Uberlândia. https://repositorio.ufu.br/handle/123456789/28392

Araújo. R. H. M., & Callado, A. A. C. (2020). Características Qualitativas da Informação Contábil: Percepção de Profissionais de Controle Interno do Setor Público. *Management Control Review, 5*(1), 47–65. https://doi.org/10.51720/mcr.v5i1.3696

Borges, G. F. (2020). Análise da legibilidade dos BR_GAAP versus legibilidade das notas explicativas de empresas brasileiras abertas. [Tese de Doutorado]. Universidade Federal de Uberlândia. http://orcid.org/0000-0002-2217-8438

Borges, G. F., & Rech, I. J. (2019). Determinantes da legibilidade das notas explicativas de companhias brasileiras. *Revista Gestão, Finanças e Contabilidade*, *9*(3), 31-51. https://doi.org/10.18028/rgfc.v9i3.7522

Brito, M. A., & Nascimento, J. S., & Lima, J. E. (2011). Diferenciais de desenvolvimento econômico entre os municípios brasileiros: uma análise sob o prisma da regressão quantílica. *I Circuito de Debates Acadêmicos*.

Caldas, O. V. (2020). Ensaios sobre legibilidade das prestações de contas e de relatórios de auditoria e seus impactos no processo de accountability no setor público do Brasil. [Tese de Doutorado]. Universidade de Brasília.

Camacho, E. U., Weffort, E. F. J., Garcia, A. S., & Gonçalves, A. O. (2022). (In)compreensibilidade das demonstrações contábeis aplicadas ao setor público pelos usuários externos. *Advances in Scientific and Applied Accounting*, *15*(2), 63-75. https://doi.org/10.14392/asaa.2022150203

Carvalho, H. L. M., Leroy, R. S. D., Ávila, L. A. C., & Roque, J. V. R. (2023). Legibilidade das notas explicativas: uma análise dos maiores municípios mineiros. *Revista de Auditoria, Governança e Contabilidade*, *11*(45), 83-94.

Castro, L. A., Silva, R. B., Leôncio, Y. J. dos S., Domingos, S. R. M., & Ponte, V. M. R. (2019). Aspectos quantitativos de materialidade das informações divulgadas nas demonstrações contábeis e nas notas explicativas de empresas brasileiras da indústria de alimentos processados. *Enfoque: Reflexão Contábil*, *38*(2), 15-32. https://doi.org/10.4025/enfoque.v38i2.43096

Costa, O. A., & Pelech Júnior, J. de A. (2021). Notas Explicativas: práticas dos governos locais do Brasil e dos Estados Unidos. *Revista do TCU*, 147, 20-55.

Costa, T. B., & Tavares, M. (2014). Estudo da relação entre variáveis socioeconômicas e a gestão dos municípios do Estado de Minas Gerais por meio do índice Firjan. *Contabilometria*, *1*(2), 1-14.
Comitê de Pronunciamentos Contábeis (CPC). (2014). *Orientação Técnica OCPC 07*: Evidenciação na Divulgação dos Relatórios Contábil-Financeiros de Propósito Geral. http://static.cpc.aatb.com.br/Documentos/488_OCPC_07_Orienta%C3%A7%C3%A3o.pdf

Decreto n. 4.475, de 18 de fevereiro de 1870. Aprova os Estatutos da Associação dos Guarda-Livros estabelecida nesta corte.

Decreto n. 4.536, de 28 de janeiro de 1922. Organiza o Código de Contabilidade da União. https://www.planalto.gov.br/ccivil_03/decreto/historicos/dpl/dpl4536-1922.htm

Decreto n. 9.203, de 22 de novembro de 2017. (2017). Dispõe sobre a política de governança da administração pública federal dieta, autárquica e fundacional. https://www.planalto.gov.br/ccivil_03/_ato2015-2018/2017/decreto/d9203.htm

Fernández-Huerta, J. (1959). Medidas sencillas de lecturabilidad (simple readability measures). *Consigna*, 214, 29-32.

Ferreira, F. R., Fiorot, D. C., & Motoki, F. Y. S., Moreira, N. C. (2019). Evidenciação voluntária: análise empírica sobre o tom usado em audioconferências. *Revista de Administração de Empresas,* v. 59(4), 271-283. http://dx.doi.org/10.1590/S0034-759020190405

Flesch, R. (1974). *The art of readable writing*. New York: Harper & Row.

Fonseca, P. M., Costa, A. L. V. (2023). A democracia sob pressão: crise e sequência de autocratização no Brasil, 12-40. *Debates.* https://doi.org/10.22456/1982-5269.130991

Gomes, M. C., Ferreira, R. R., & Martins, V. A. (2018). O impacto da OCPC 07 sobre o tamanho e a legibilidade das notas explicativas de companhias brasileiras. *Revista Universo Contábil, 14*(2), 162-184. https://doi.org/10.4270/ruc.2018216

Holtz, L., & Santos, O. M. (2020). Legibilidade das notas explicativas das empresas brasileiras de capital aberto. *Enfoque: Reflexão Contábil*, *39*(1), 57-73. https://doi.org/10.4025/enfoque.v39i1.45275

Lei Complementar n. 101, de 4 de maio de 2000. (2000).
Estabelece normas de finanças públicas voltadas para a responsabilidade na gestão fiscal e dá outras providências. https://www.planalto.gov.br/ccivil_03/leis/lcp/lcp101.htm

Lei Complementar n. 131, de 27 de maio de 2009. (2009).
Acrescenta dispositivos à Lei Complementar nº 101, de 4 de maio de 2000, que estabelece normas de finanças públicas voltadas para a responsabilidade na gestão fiscal e dá outras providências, a fim de determinar a disponibilização, em tempo real, de informações pormenorizadas sobre a execução orçamentária e financeira da União, dos Estados, do Distrito Federal e dos Municípios. https://www.planalto.gov.br/ccivil_03/leis/lcp/lcp131.htm

Lei n. 11.638, de 28 de dezembro de 2007. (2007). Altera e revoga dispositivos da Lei no 6.404, de 15 de dezembro de 1976, e da Lei no 6.385, de 7 de dezembro de 1976, e estende às sociedades de grande porte disposições relativas à elaboração e divulgação de demonstrações financeiras. https://www.planalto.gov.br/ccivil_03/_ato2007-2010/2007/lei/l11638.htm#:~:text=Lei%20n%C2%BA%2011.638&text=LEI%20N%C2%BA%2011.638%2C%20DE%2028%20DE%20DEZEMBRO%20DE%202007.&text=Altera%20e%20revoga%20dispositivos%20da,e%20divulga%C3%A7%C3%A3o%20de%20demonstra%C3%A7%C3%B5es%20financeiras.

Lei n. 12.527, de 18 de novembro de 2011. (2011).
Regula o acesso a informações previsto no inciso XXXIII do art. 5º, no inciso II do § 3º do art. 37 e no § 2º do art. 216 da Constituição Federal; altera a Lei nº 8.112, de 11 de dezembro de 1990; revoga a Lei nº 11.111, de 5 de maio de 2005, e dispositivos da Lei nº 8.159, de 8 de janeiro de 1991; e dá outras providências. https://www.planalto.gov.br/ccivil_03/_ato2011-2014/2011/lei/l12527.htm

Lei n. 4320, de 17 de março de 1964. (1964).
Estabelece normas de finanças públicas voltadas para a responsabilidade na gestão fiscal e dá outras providências.
https://www.planalto.gov.br/ccivil_03/leis/l4320.htm#:~:text=LEI%20No%204.320%2C%20DE%2017%20DE%20MAR%C3%87O%20DE%201964&text=Estatui%20Normas%20Gerais%20de%20Direito,Munic%C3%ADpios%20e%20do%20Distrito%20Federal.

Marcolin, C. B., Momo, F. S., Riva, E. D., & Becker, J. L. (2021). Notas explicativas explicam? Análise da comunicação do gerenciamento de risco a partir de técnicas de text mining. *Revista Contemporânea de Contabilidade*, *18*(48), 138-155. https://doi.org/10.5007/2175-8069.2021.e78104

Mesquita, N. R., Bonfim, M. P., Soares, J. M. M. V., & Silva, C. A. T. (2022). Legibilidade das notas explicativas das empresas do setor elétrico brasileiro. *Sociedade, Contabilidade e Gestão, 17*(3), 21-39. https://doi.org/10.21446/scg_ufrj.v0i0.53649

Monteiro, J. J., Rengel, R., Sousa, A. M., & Borba, J. A. (2020). Não basta ler, é preciso compreender: um enfoque na legibilidade do resultado e do EBITDA. *Revista Universo Contábil*, *16*(3). https://doi.org/10.4270/RUC2020314

Moreno, G. C. L., Souza, M. P. M., Hein, N., & Hein, A. K. (2023). ALT: um software para análise de legibilidade de textos em Língua Portuguesa. *Policromias – Revista de Estudos do Discurso, Imagem e Som, 8*(1). https://doi.org/10.61358/policromias.v8i1.54352

Oliveira, C. M., Altoé, S. M. L., & Suave, R. (2020). A importância das demonstrações contábeis na tomada de decisão e gestão de micro e pequenas empresas. *Revista de Administração e Contabilidade-RAC*, *7*(13), 1-15.

Oliveira, N. A. J. (2022). Análise da legibilidade das notas explicativas das empresas do setor elétrico: das demonstrações contábeis do exercício de 2013 e 2021. [Dissertação de Mestrado]. Pontifícia Universidade Católica de São Paulo.

Pedersen, K. H., & Johannse, L. (2018). Nova governança pública nos Estados Bálticos: administração flexível e flexibilização das regras. *Avaliação de Desempenho Público e Gestão*, *41*(3), 648-667. https://doi.org/10.1080/15309576.2018.1465828

Portaria 184, de 25 de agosto de 2008. (2008). Dispõe sobre as diretrizes a serem observadas no setor público (pelos entes públicos) quanto aos procedimentos, práticas, elaboração e divulgação das demonstrações contábeis, de forma a torná-los convergentes com as Normas Internacionais de Contabilidade Aplicadas ao Setor Público.

Riley, T. J., & Yen, A. C. (2019). Accounting Narratives. In: Oxford Research Encyclopedia of Business and Management. Oxford University Press. https://doi.org/10.1093/acrefore/9780190224851.013.169

Saldanha, D. M. F., Dias, C. D., & Guillaumon, S (2022). Transparency and accountability in digital public services: Learning from the Brazilian cases. *Government Information Quarterly*, *39*(2), 101680. https://doi.org/10.1016/j.giq.2022.101680

Salehi, M., Bayaz, M. L. D., Mohammadi, S. Adibian, M. S., & Fahimifard, S. H. (2020). Resposta dos auditores à legibilidade das notas das demonstrações financeiras. *Revista Asiática de Contabilidade, 28*(3), 463-480.

Santos, E. S., Calixto, L., & Bispo, M. F. (2019). Impacto da OCPC 07 no enxugamento das notas explicativas das companhias brasileiras. *Revista de Contabilidade e Finanças*, *30*(79), 58-72. https://doi.org/10.1590/1808-057x201806650

Sena, T. R., Santana Júnior, J. L., & Freitas, S. C. (2021). Determinantes da legibilidade das notas explicativas: novas evidências de empresas abertas no Brasil. Anais do XV Congresso AnpCont. chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://anpcont.org.br/wp-content/uploads/2022/05/316_merged.pdf

Sena, T. R., Santana Júnior, J. L., & Freitas, S. C. (2023). Gerenciamento de resultados e legibilidade das notas explicativas: manipulações nas evidenciações contábeis. *Revista de Educação e Pesquisa em Contabilidade*, *17*(1), 84-109. https://doi.org/10.17524/repec.v17i1.3214

Silva, G. D. M., Lemes, S., & Reina, D. (2020). Notas explicativas sob a ótica da OCPC 07: Um estudo em empresas do segmento IBRX-50. *Revista de Administração, Contabilidade e Economia da Fundace, 11*(3). http://dx.doi.org/10.13059/racef.v11I3.620

Silva, R. B., Castro, L. A., Domingos, S. R. M., & Ponte, V. M. R. (2020). Nível de disclosure e forma de apresentação das notas explicativas: um estudo à luz da OCPC 07. *Revista Contabilidade Vista & Revista, 31*(3), 74-96. https://doi.org/10.22561/cvr.v31i2.5354

Smith, M., & Taffler, R. (1992). Readability and understandability: Different measures of the textual complexity of accounting narrative. *Accounting, Auditing & Accountability Journal, 5*(4). https://doi.org/10.1108/09513579210019549

Souza, M. P. de., Moreno, G.G. de L., Hein, N., & Kroenke. (2023). A. ALT – Análise de Legibilidade Textual. https://legibilidade.com/

Souza, M. R. (2015). Notas explicativas nos entes brasileiros: uma análise de aderências às IPSA, às NBCASP e à Lei 6.404/76. [Trabalho de conclusão de curso]. Universidade de Brasília.

Tribunal de Contas da União (TCU). (2020a). *Referencial básico de governança organizacional*. (3a ed.). https://portal.tcu.gov.br/governanca/governanca-no-tcu/

Tribunal de Contas da União (TCU). (2020b) *Cartilha: Relatório de Gestão na forma de relato integrado*. https://portal.tcu.gov.br/contas/contas-e-relatorios-de-gestao/prestacao-de-contas/relatorio-de-gestao.htm

Vieira, L. G., Salotti, B. M., & Sarquis, R. W. (2023). Impacto da IFRS 15 – Receita de Contratos com Clientes – nas Notas Explicativas de Empresas Abertas no Brasil. *Revista de Educação e Pesquisa em Contabilidade*, *17*(2), 219-241. http://dx.doi.org/10.17524/repec.v17i2.3273

Villoria, M. (2021). Que condiciones favorecen una transparencia pública efectiva? Artículo de Revisión. *Revista de Estudios Políticos*, *4*(194), 213-247. https://doi.org/10.18042/cepc/rep.194.08

Williams, A. A., & Hussein, S. (2019). Impact of IPSAS adoption on transparency and accountability in managing public funds in developing countries: Evidence from Liberia. *Journal of Accounting and Taxation*, *11*(6), 99–110. https://doi.org/10.5897/jat2019.0345

Zobaran, R. (2019). *Legibilidade (Readability) das demonstrações contábeis: uma análise da facilidade de leitura das notas explicativas das companhias abertas*. [Dissertação de Mestrado]. Pontifícia Universidade Católica de São Paulo.