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THE INFLUENCE OF THE VARIATION IN THE RESULTS ON THE READABILITY OF THE MANAGEMENT REPORT IN THE PERIOD OF THE COVID-19 PANDEMIC

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ABSTRACT
The Covid-19 pandemic, which began at the end of 2019, significantly affected the world economy, causing numerous consequences on the financial performance of companies and consequently on the quality of the information disclosed. In this scenario of uncertainties and economic volatility, this study sought to analyze the Influence of the Variation of Results on the Readability of Management Reports (Ras) in the Covid-19 Pandemic Period, having as a sample 67 companies present in the Bovespa Index, analyzing the readability of their Management Reports and the variation of the results for the years 2019, 2020 and 2021. The results showed that, on average, companies with a negative variation in their results during the pandemic period made it difficult to understand their RAs, reducing the readability of the information, showing that there is a significant influence of the variation in the results on the readability of the RAs. For future studies, it is suggested to use a larger sample and to deal with other methodologies, for more in-depth conclusions.

Keywords: Comprehensibility. Covid-19. Readability. Pandemic. Management Report.

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INTRODUCTION

The pandemic of the new Coronavirus that has occurred in recent years has brought numerous impacts to the world. The Covid-19 virus had its first recorded case in China in December 2019, spreading rapidly around the world. It is estimated that over a little more than 2 years of the pandemic, the highly lethal and contagious virus has led to the death of 14.9 million people in the world, and infecting about 681,267 people in Brazil, according to data released by the World Health Organization (WHO) by Exame magazine. Even with the adoption of countless measures to stop the spread of the virus, the consequences were inevitable.

The impacts of the advance of the pandemic were felt not only in health but in the entire economy and financial markets. The closure of commerce, industries and the shutdown of almost all non-essential services in an attempt to contain the spread of the virus meant that many companies were unable to get through the period of health crisis. According to the Ministry of Economy, more than 1.410 million formal businesses in 2021 were closed. Within this statistic, the segments that suffered the most impacts were retail trade, sales promotion and snack bars.

However, due to a scenario of high volatility and economic fluctuations, there is an increase in several types of risks for operations. For Brandt et al. (2021), an organizational environment consists of a series of physical and social factors that hinder internal processes related to decision-making, and consequently risks do not behave in isolation either. Thus, the lack of stability of these factors has become a threat to the continuity of companies and also to effective risk management.

In this context of uncertainty, investors increasingly seek to understand the accounting information of companies, such as the balance sheet, explanatory notes, management report and other information disclosed on a mandatory basis. Therefore, it is necessary that the possible increase in risks, and the impacts caused by the health crisis be evidenced even more clearly and objectively in all these materials.

Thus, aiming at the more effective disclosure of accounting information during the pandemic period, several regulations were issued not only by the Brazilian Securities and Exchange Commission (CVM) but also by regulatory agencies and by the Accounting Pronouncements Committee (CPC) itself. According to SA (2021), this decision was made to ensure that users would have enough data to determine the influences of Covid-19 on the demonstrations and, therefore, help them in decision-making.

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Even with the publication of specific regulations on the effects of Covid 19 on the financial statements and the requirement that the statements represent the real impacts and uncertainties generated on the business by the health crisis, there is not sufficient guarantee that this information was disclosed in a clear and legible manner. For Miranda et al. (2018), "The understanding of the information disclosed by companies partly depends on the level of complexity with which this information is conveyed".

In this sense, the understanding of the term legibility is increasingly necessary. The readability of some material, data and any other information, can be understood as the degree of difficulty in understanding a text, being used to evaluate the quality, based on the compressibility of the information, according to Curto (2014). It is usually analyzed by variables such as text size, sentence size, number of syllables and letters, punctuation and among other aspects in which content is more or less difficult to understand.

For Holtz (2019), effective communication is based on the fact that the messages sent by the sender are received by readers and interpreted in the same way. In the same sense, we have that comprehensibility is one of the particularities of improvement for the use of accounting information that aims to expose the elements in a clear and objective way, being understandable to its users, according to Zobaran (2019). In line with the authors Holtz and Zobaran, we have Borges and Rech (2019) who point out that the complexity of information can lead to low readability, and consequently affecting decision-making by investors and analysts.

Many factors can affect the readability of accounting information, such as the economic performance of the company. Rutherford (2003) states that the complexity of the text, using the obfuscation of information, is usually carried out with the aim of covering up data and making it difficult to understand in the case of companies with low performance. Companies with lower performance choose to use more complex language in communication, precisely to hide relevant information, complement the authors Sheikh, Bakar and Ameer (2011). In the same line of thought, Holtz (2019) brings evidence that the impact of performance affects readability, exposing that companies with poor performance tend to hide the results by preparing less readable reports.

In a health crisis scenario, due to the pandemic of the new Coronavirus, companies have suffered major impacts on their financial performance and possibly on the readability of their information. In this context, this study aims to answer the following question: Did the Management Report of companies that had a negative variation in their results during the

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pandemic period have their readability affected? To answer the question of the study, the readability of the Management Reports of companies with greater liquidity, and the variation of their results in the years 2019, 2020 and 2021 were analyzed.

Given the evidence found in the literature review regarding how the economic performance of companies affects the readability of the information disclosed, and the tendency of underperforming companies to obfuscate relevant information, this research aims to analyze the influence of the variation of the results on the readability of Management Reports in the period of the Covid-19 pandemic.

As the main hypothesis, it is expected that the companies that were most impacted by the pandemic and that, consequently, had a negative variation in their results in the period, make it difficult to understand their reports in a possible attempt to hide information about the impact caused by the health crisis, which consequently reduces the readability of the information. As a secondary hypothesis, it is believed that a positive average of the variation of the results would represent greater comprehensibility of the Management Reports and, consequently, a better readability index.

Therefore, the study on the subject is relevant not only as an update of the literature on studies that confirm the transparency of the information provided by management, but also as a complement to analyses in the pandemic period and how the way to evidence the impact of companies' performance affects the readability of accounting reports in periods of crisis, as occurred with the Covid-19 pandemic. Thus contributing to the various users of accounting information.

LITERATURE REVIEW

READABILITY

Readability can be defined as the clarity with which information is written and directed to the reader. For Cunha (2008), the quality with which the text is written determines the comprehensibility of its reading, and can be represented in terms of the magnitude of the complexity of the interpretation, which leads to the fact that one text is easier to read than another.

Miranda et al. (2018) state that: "The readability of information refers to the degree of difficulty in understanding a text". The authors also add that the ability to understand any reading is related to the fact that the text is clear, crisp and easy to understand, allowing the disclosure of financial reports to achieve a good interpretation by its users.

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Thus, the importance of legibility in the disclosure of accounting information is notorious. Moreno and Casasola, (2016) analyzed in their research the evolution of the readability of the financial reports of Spanish companies, showing that although there is an improvement in the readability of the reports over time, they are still difficult to read. In consonance, Soper and Dolphin (1964) state that annual reports are not becoming easier to read over the years, which hinders the decision-making potential of the users of the information.

For the authors Borges and Rech (2019), the difficulty in understanding accounting information in the current accounting scenario is clear. Her research aims to understand the understanding of practices and their consequence in society and in decision-making by its users. Junior (2018) adds that learning about the ability of companies to disclose financial reports through their texts corroborates the understanding of how information serves the purpose of assisting the decision-making process of its users.

Another important study on the subject is that of Rodrigues (2012), in which the author analyzed what are the determining factors that have influenced the evolution of the information disclosed in the Management Reports of Brazilian publicly-held companies from 1997 to 2010. The author used three research techniques: content analysis, format analysis and readability analysis, concluding that there are reports that ranged from "very difficult" to "very easy" to read. She also concluded that over the years, companies on average have been increasing the volume of information (letters and words) and graphs and tables, disclosed in the Management Reports.

In order for comprehensibility to be effective and useful to its users, Zobaran (2019) presents that even though accounting information is relevant and reliable, it is believed that there is a considerable degree of understanding of economics, accounting, and business for the information to be understandable. In addition, the author adds that the decision-maker must be willing to study more about the financial statements, for greater clarity and readability. In his perception, no information should be purposely concealed using the argument that the information would have a greater degree of difficulty for some users to understand.

In the same line of thought as Zobaran (2019), about information being purposely concealed with the difficulty of reporting, Iudicibus (2000) brings in his research that, in an unethical way, managers end up having the possibility of controlling and manipulating the

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information transmitted to users, since managers can use the Management Report to satisfy their own interests, given the fact that the RA is an unaudited narrative disclosure.

In addition to Zobaran (2019) and Iudicibus (2000) on the concealment of relevant information in Financial Reports on purpose due to the lack of comprehensibility of the information, Boo and Simnett (2002) show as a consequence that companies with difficult financial situations and that tend to omit relevant information in their report have a greater possibility of bankruptcy than others.

In order to measure the sharpness and clarity of the information, there are several methodologies in the literature. A well-known methodology for assessing readability is the Flesch readability method. Through it, the readability of the information is rated on a scale from zero (difficult) to 100 (very easy). In this model, the main variables taken into account are the number of syllables per word and the number of words per sentence. If many words are used with larger lengths, and long sentences, the more difficult it will be to understand the text.

A good example of the use of Flesch's methodology to assess readability is the study by Linsley and Lawrence (2007) who tested the level of readability of accounting disclosures associated with risk events in the Annual Report of 25 UK companies and analyzed whether negative risk-related news was hidden from the Annual Report. The authors came to the conclusion that information about risks was difficult or very difficult to understand.

Another widely used methodology is the Gulpease Index (Gulpease Index), the formula was developed in 1982 by the Pedagogical Linguistic University Group within the Institute of *Philosophy of the Università degli Studi di Roma La Sapienza*. This formula's main advantage is the fact that it calculates the length of words per letter, and not syllables, as analyzed in the Flesch index, according to Leonardi (2014).

The Flesch-Kincaid grade level can also be considered a methodology for analyzing the legibility of the information. Moreno et al. (2022) state in their article that, "in 1975, J. Peter Kincaid and collaborators recalculated three readability indices for texts related to the United States Navy." In addition, the Flesch formula was also presented, rewritten in the scale of level of education, now known as Flesch-Kincaid grade level.

The same authors also explain the methodology of the Gunning fog index and the Automated Readability Index (ARI). The Gunning Cloudiness Index was created by Robert Gunning in 1952, in which he was the first person to develop a readability formula that measures the years of formal education that a person must have for the text to be

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understood clearly. The Automated Readability Index was developed by Smith and Senter in 1967. Its main objective was to provide a readability index for reports, books and technical manuals of the US Air Force, with the intention of minimizing the time to extract information from these documents.

Finally, the methodology is the Coleman-Liau index, developed with the purpose of being an index that is easy to implement computationally, according to Moreno et al. (2022).

Recently, Moreno et al. (2022) developed software to analyze the readability of information. The ALT tool - Textual Readability Analysis, provides evidence of readability for information in Portuguese using as a basis formulas that were adapted from the English language, taking into account all the six indexes mentioned above, which were adapted to Portuguese.

IMPACT OF THE COVID-19 PANDEMIC

The new virus, popularly known as Covid-19, emerged at the end of 2019, directly impacting the global economy. As it is a highly contagious and easily spread virus, basically all countries have established measures in an attempt to contain the spread of the virus, with social isolation being the main policy adopted.

The measures taken by governments in an effort to prevent the increase in cases of the new coronavirus resulted in a financial and operational disruption of enormous importance for the entities, according to Machado (2020). The author adds that the quarantine established for society caused several problems for the economy, and there is no economic sector that has not been impacted by the health crisis, especially in a negative way, given the closure of trade in services considered non-essential.

Machado (2020), also, in his study, points out the disclosure of accounting practices following the regulations. The author explains that given the scenario of insecurity and instability generated by the pandemic, it is necessary that the provision of qualitative information is done adequately, clearly highlighting the impacts on companies.

In order for the impacts of Covid-19 on economic activities to be effectively evidenced, the Brazilian Securities and Exchange Commission (CVM) issued several regulations. For Sá (2021), the main purpose of these regulations was to ensure that the effects of the uncertainty caused by the new virus are disclosed in the financial statements in a way that is sufficient to estimate the impacts of the pandemic on the results and consequently support the decision-making of the users of the information.

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The Secretariat of Economic Policy of the Ministry of Economy (2020) released an informative note on the economic impacts of the Covid-19 pandemic in Brazil. According to her, the increase in indebtedness in organizations due to the isolation measures and stoppage of commerce has also caused an increase in the default rate, consequently leading to the bankruptcy of many companies and also unemployment. Nevertheless, the note shows that there was a reduction in the Brazilian economy of 1.5% in the first quarter of 2020, compared to the last quarter of 2019, and a decrease of 0.3% compared to the same period of the previous year.

Another study on the impacts of the pandemic on Brazilian companies is that of Silvia (2021), which analyzes the impact of the new Coronavirus on the performance of indicators in two companies from different segments. In his analysis, it is evident that both companies analyzed, even though they are from different segments, suffered negatively from the impacts of the health crisis. However, these impacts were greater on the company in the tourism segment than on the food sector.

MANAGEMENT'S REPORT

Accounting, for Murcia and Carvalho (2007), is defined as the ability to reduce the informational asymmetry between internal and external users of the business, providing useful and public information to users. The financial statements and all the reports that encompass the set of information made available, such as the Management Report, the Explanatory Notes and the Audit Opinion, are intended to contribute to investors having more information about the company.

The Management Report (RA), according to Rodrigues (2012), is an important part of the information that publicly traded companies make available to the public. It has a flexible and less technical content, in which the management presents information about the current economic situation, its performance, investments and capital structure. For the author, the RA is one of the documents most used by users to evaluate the performance of companies. It is a tool of great value for investors and other users.

In addition, according to Springer (1992), the RA is the part of the annual reports that most contributes to shareholders' exploration of the financial analysis of the company's results from previous years and future forecasts. The authors Silva, Rodrigues and Abreu (2007) add that, because the Management Report is less technical and more descriptive

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than other documents, it can be communicated in a clearer way and reach a larger number of users.

On the other hand, the authors Silva and Rodrigues (2010) present that precisely because the Management Report is less technical and is not audited, many reports have offered biased, inconclusive or even empty information, which does not help users' decision-making because it is not relevant. The authors observed in their analysis that the presence of RA influenced users' understanding of the company's ability to pay off its debts, but the same impact was not observed on the intensity of the investment decision.

For Kos, Espejo and Raifur (2014), the disclosure of accounting information plays an important role in the performance of the capital market. In their study, the authors analyzed the existence of a change in the focus of the information presented in the Management Report (RA) due to the variation in the company's performance, concluding that the informational content of the RA is influenced by performance.

In Brazil, the management report is based on Law No. 6,404/76, which requires its publication together with the Financial Statements at the end of the fiscal year. The Law presents some items that are mandatory to be disclosed in the report, such as the need to describe the business, products and services, comment on the current economic situation, mention the main factors and influences that affected performance and among other information.

METHODOLOGY

ASPECTS OF THE RESEARCH

To achieve the objective of the research, which consists of analyzing the influence on the variation of companies' results on the readability of Management Reports (Ras) in the period of the Covid-19 pandemic, the RAs and financial results of Brazilian companies present in the Bovespa Index (Ibovespa B3), in the portfolio as of August 30, 2022, were considered. which is made up of 89 companies. For a better quality of the analyses, preferred shares were disregarded, reducing the sample to a total of 67 companies to be analyzed.

To prepare the analyses, the ALT software - Textual Readability Analysis was used to collect the readability indexes of the reports, in which it is a verification of the readability of online texts, taking into account several methodologies that were previously mentioned, with

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indexes adapted to Portuguese, and the Economática software to collect information about the financial results of the companies analyzed.

The analysis period includes the years 2019, 2020 and 2021, with the variation of the results between the years 2019 and 2020, which will reflect the legibility of the management reports in 2020, and the variation of the financial results between the years 2020 and 2021, which will reflect the legibility of the reports in the year 2021.

Reviews

To analyze the relationship between the readability and result indicators, the average readability of the management reports for each year were calculated separately. Subsequently, the 67 companies in the sample were classified in ascending order of readability, from the lowest to the highest score. It is worth mentioning that the indicators are inversely proportional, that is, the lower readability score means that the text is easier to read and understand the information, that is, greater readability.

With the data classified, the sample was divided into 2 groups, the first group being the companies that had legibility below the total average and the second the companies that had the legibility score above the average. To obtain the results, a simple average of the variations in the financial results of each group was calculated and analyzed separately.

Analysis by the Average Test

To verify the results obtained, the non-parametric mean test, the Mann-Whitney test, was used. This test consists of comparing two independent groups evaluated by means of a quantitative variable without normal or qualitative ordinal distribution.

To verify the hypotheses that companies that experienced a large variation in their results obtained a worsening in the readability of the information and the hypothesis that companies that did not suffer a significant variability in their results also did not have a variability in the readability index of their reports, the variations in the results between 2019 and 2020 were compared, with the average readability score of 2020. The same analysis was made for the variation between the years 2020 and 2021.

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STUDY VARIABLES

Readability

To carry out the research, the ALT software, developed by Moreno et al. (2022), uses the following metrics:

1. Flesch reading ease; 2. Gulpease Index (Gulpease Index); 3. Flesch-Kincaid grade level; 4. Gunning fog index; 5. Automated Readability Index (ARI); 6. Coleman-Liau index.

The readability calculator provides indices for all metrics individually and also the average of the 6 indicators together.

The indicators are classified in ascending order and in an inversely proportional manner, with the lowest scores representing the best readability indices and the highest referring to the lowest readability. The classification according to the software is made into 3 main groups, namely: levels from 1 to 12 mean high readability, between 13 and 17 average readability, and from level 18 and onwards low readability. Within each of the 3 groups there are numerous variables that were not discussed in this study.

Accounting results

As a study variable, regarding the variation in the financial results of the companies analyzed, the consolidated net income for the period of 2019, 2020 and 2022 was used. This indicator represents the company's real result, being the difference between the company's total revenue and total cost. Net income aims to measure the amount in which a company truly receives as remuneration for its work.

RESULTS

RESULTS 2020

When analyzing the readability indicators of the Management Reports for the year 2020, an average readability of 10.99 was obtained. The companies in the sample were classified in ascending order of readability indicators and the sample was divided into 2 main groups, the first group being composed of companies with legibility below the average readability according to Table 1.

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Table 1 - Group 1 of 2020 - Companies with a readability index below the average total readability for the year 2020

Company Name	Variation in the result between 2019 and 2020 (thousands of reais)	Readability 2020
Minerva	680.935	4
Carrefour BR	1.658.000	5
Dexco	48.248	5
Bradesco	-6.036.038	5
RaiaDrogasil	-287.796	5
SLC Agrícola	177.160	5
Magaz Luiza	-530.119	5
Soma Group	-195.430	6
Ambev S/A	-400.571	6
Weg	726.292	6
Eneva	406.808	6
Qualicorp	-655	6
Energias BR	170.161	6
Positivo Tec	174.512	6
BRF SA	1.085.952	7
MRV	-140.105	8
Locaweb	1.669	8
JBS	-1.470.057	8
Way	2.437.000	8
National Sid	2.005.228	8
D Or Network	-738.742	9
Cvc Brazil	-1.192.723	9
Natura Group	-805.663	10
Petz	34.811	10
P.Sugar-Cbd	1.389.000	11
Valley	20.041.268	11
CCR SA	-1.247.223	11
Tim	-1.778.437	11

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3r Petroleum	-227.267	11
Rumo S.A.	-481.074	11
Engie Brazil	487.166	11
Equatorial	559.459	11

Source: Survey data

The companies presented in Table 1 belong to group 1 in 2020, that is, a group with high legibility, with readability indicators below the total average.

When calculating the average of the variation in financial results for this group, a value of 517,243 reais is positive. This means that the companies that had the best readability scores for the Management Report and that are below the total average, were the ones that had a positive variation in their results, thus being able to assume the secondary hypothesis that an average of the positive variation of the results, the greater the readability as true.

For the analysis of the second group of companies, identified as group 2 in 2020, with readability indicators above the average total readability, Table 2 is available.

Table 2 - Group 2 of 2020 - Companies with a readability index above the average total readability for the year 2020.

Company Name	Variation in the result between 2019 and 2020 (thousands of reais)	Readability 2020
Eletrobras	-4.358.436	12
Assai	351.000	12
American	107.480	12
Telef Brasil	-230.487	12
Petrobras	-33.029.000	12
JHSF Part	321.478	12
Renner Stores	-2.824	13
Cosan	-1.573.547	13
Finds	214.242	13
CPFL Energia	940.478	13
Hapvida	-66.361	13
B3	1.438.138	14

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Marfrig	3.083.667	14
Multiplan	493.176	14
Cogna ON	-6.041.079	14
Yduqs Part	-547.959	14
Irbbrasil Re	-2.731.383	14
Brazil	-5.464.682	14
BBSeguridade	-2.808.010	14
Embraer	-2.299.217	14
BR Malls Par	-1.540.284	14
Suzano S.A.	-7.907.310	14
Vibrates	1.694.000	14
Hypera	131.076	14
Sabesp	-2.394.199	14
Csn Mining	366.447	15
Totvs	85.163	15
Fleury	-55.356	15
Petrorio	-389.580	15
Ecorodovias	-238.528	15
Meliuz	4.695	15
Ultrapar	519.857	15
Cielo	-2.072.332	15
Eztec	124.129	16
Cyrela Realt	1.344.416	18

Source: Survey data

When calculating the average variation in financial results for group 2 of 2020, that is, the group with companies with the readability indicator above the total average readability, a value of negative 1,786,604 reais is reached.

This figure shows us that, on average, companies with a large variation in their results in a negative way, possibly caused by the impacts of the pandemic, made it difficult to understand their reports in an attempt to hide information about the impact of the health crisis, negatively affecting the readability of Management Reports, increasing readability

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indicators and decreasing the comprehensibility and readability of information, Proving the main hypothesis, companies that were most impacted by the pandemic make it difficult to understand their reports, reducing the readability of the information, as true.

In addition to these analyses, the hypotheses were also proven using the Mann-Whitney test. To analyze the results, obtained through this test, a significance level of 5% was used.

The average test was used to compare the variations in the financial results of the companies with the average readability of the Management Reports during the pandemic period. The result obtained for this analysis, in 2020, was a p-value of 0.036. This shows that the variation has statistical significance, since the value obtained was lower than the established significance level. Therefore, the test of means proves the hypotheses to be true.

RESULTS 2021

Following the same line of reasoning for the year 2020, in 2021 the average readability of the RAs was 10.81. With the classification of the companies, the first group is the companies with legibility below the average readability of the year 2021, identified as Group 1 of 2021, according to Table 3.

Table 3 - Group 1 of 2021 - Companies with a legibility index below the average total legibility for the year 2021

Company Name	Variation in the result between 2020 and 2021 (thousands of reais)	Readability 2021
Carrefour BR	473.000	3
Dexco	1.271.595	4
MRV	254.805	4
Bradesco	5.399.111	5
BRF SA	-964.109	5
Soma Group	369.506	5
Ambev S/A	1.291.574	6
Weg	1.245.074	6
Eneva	165.694	6
RaiaDrogasil	267.490	6
P.Sugar-Cbd	-1.377.000	6

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Qualicorp	-26.289	6
Eletrobras	-692.547	7
Energias BR	651.821	7
SLC Agrícola	573.442	7
Minerva	-98.213	7
Locaweb	-35.489	7
JBS	15.888.250	8
Way	-1.301.000	8
D Or Network	1.146.977	9
Assai	212.000	9
National Sid	8.464.333	9
Valley	94.515.287	10
American	754.553	10
Csn Mining	2.340.256	10
Cvc Brazil	720.284	10
Positivo Tec	9.287	10
B3	564.793	11
Telef Brasil	1.468.837	11
CCR SA	504.599	11
Totvs	73.532	11
Magaz Luiza	198.952	11
Tim	1.113.484	11
3r Petroleum	258.328	11

Source: Survey data

When calculating the average variation of the financial results, for this group, a value of 3,991,242 positive reais is reached, being a positively high variation, confirming the secondary hypothesis that a positive average of the variation of the results would represent greater comprehensibility of the RAs.

For the analysis of the second group of companies, with readability indicators above the average total readability for the year 2021, identified as Group 2 of 2021, Table 4 is used.

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Table 4 - Companies with a readability index above the average total readability for the year 2021

Company Name	Variation in the result between 2020 and 2021 (thousands of reais)	Readability 2021
Petrobras	99.560.000	12
Renner Stores	-463.157	12
Rumo S.A.	-146.625	12
Cosan	5.271.358	12
Engie Brazil	-1.233.366	12
Marfrig	1.040.242	12
Finds	995.497	13
Equatorial	719.438	13
Multiplan	-511.075	13
CPFL Energia	1.104.900	13
Fleury	92.965	13
Cogna ON	5.316.710	13
Yduqs Part	59.990	13
Irbbrasil Re	838.562	13
JHSF Part	359.755	13
Brazil	7.013.017	14
Hapvida	-285.669	14
Petrorio	880.280	14
BBSeguridade	82.446	14
Natura Group	1.698.156	14
Embraer	3.341.195	14
BR Malls Par	480.844	14
Ecorodovias	796.030	14
Meliuz	-57.537	14
Suzano S.A.	19.351.214	15
Vibrates	-1.408.000	15
Hypera	35.092	15
Eztec	24.916	15
Ultrapar	-42.920	16

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Cielo	-16.569	16
Cyrela Realt	-845.901	16
Petz	16.649	16
Sabesp	1.332.551	18

Source: Survey data

When calculating the average variation in financial results for Group 2 of 2021, that is, the group with companies with the readability indicator above the total average readability, a value of positive 4,406,091 reais is reached.

When comparing the mean variation of the results of the second group with the mean variation of the results of the first, it can be seen that the mean of the second group is higher than the first. This shows that the highest scores of the readability index, i.e., the lowest readability, in this case are from the companies with the highest positive variation of the result, denying the secondary hypothesis, that a positive average of the variation of the results would represent greater comprehensibility of the RAs, as true.

Thus, it was evidenced that there was a positive increase in the average variation of the results compared to the averages of the results of the year 2020, however, the difference between the averages of each of the groups was smaller if compared to the previous year, showing that possibly the companies were able to identify any errors in the preparation of the reports for the year 2020 in which they hinder the readability of the information, and adjusted the dissemination and preparation of reports in 2021, making the information clearer and more legible even with the evolution of the impacts caused by Covid-19.

In addition to these analyses, the hypotheses were proven using the Mann-Whitney Test, with the same premises used for the year 2020, that is, a significance level of 5%.

The result obtained for this analysis, in 2021, was a p-value of 0.0826. This result shows, unlike in 2020, that the variation in the averages in 2021 was not statistically significant, as the value obtained was higher than the established level of significance. Therefore, according to the average test, it cannot be said that the hypotheses are true.

FINAL CONSIDERATIONS

The Covid-19 pandemic, which began at the end of 2019, claiming its first victims in Brazil at the beginning of 2020, significantly affected the world economy. The impacts of the advance of the pandemic and the attempts to stop the spread of the virus, such as the closure of commerce for services considered non-essential, caused the vast majority of companies to suffer several consequences in their financial performance and, consequently, in the disclosure of their financial reports.

In this scenario of uncertainty and economic volatility, this study analyzed whether companies that had a variation in their results during the pandemic period also had the legibility of their information affected, more specifically analyzing the readability of the Management Report, in the years 2020 and 2021.

It was presented, in the research, that for Group 1 of 2020, with the companies with the best readability indexes, the average variation of the results was positive, exposing that in general, the companies that did not have negative impacts on their financial results had a good readability of the information in their Management Reports, thus assuming the secondary hypothesis, of companies with a positive average of the variation of the results would have a greater comprehensibility of the Management Reports and consequently greater readability, as true,

For Group 2 of 2020, with the companies with the worst readability indexes, the average variation in the results was negative, showing that, in general, the companies most impacted by the pandemic, with a drop in their financial results, made it difficult to understand the information in their reports, leading to a higher readability index, assuming the main hypothesis, that companies that were most impacted by the pandemic with a negative variation in their results, make it difficult to understand their reports by reducing the readability of the information, as true.

Nevertheless, the main and secondary hypotheses for the year 2020 were also proven by the statistical mean test, showing that the analyzed variation has statistical significance.

Analyzing Group 1 of 2021, there is a positive average of the variation in the results, similar to the previous year, and the secondary hypothesis can again be assumed as true. For Group 2 in 2021, unlike what occurred in 2020, the average variation in the results of the companies classified in the group with the lowest legibility, that is, the highest index, was also positive. Thus, none of the hypotheses can be concluded as true, since even the companies with positive variations in their results in 2021 had a low readability of the information in their Management Reports. By performing the mean test, also, none of the

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hypotheses can be assumed to be true for the year 2021, since the result obtained shows that the variation in the mean was not statistically significant.

Thus, it is concluded that the main hypothesis, about which companies that were most impacted by the pandemic and with a negative variation in their results in the period, made it difficult to understand their Ras, in a possible attempt to hide information about the impact caused by the health crisis, reducing the readability of the information, as true.

Regarding the secondary hypothesis, in which the idea is that companies with a positive average of the variation of the results represent a better readability index of the Management Reports, it is inconclusive, since although for Groups 1 of the year 2020 and 2021 it is veridically evidenced, for Group 2 of the year 2021 it is not proven.

In general, it is concluded that the Management Report of the companies that had a negative variation in their results, in the period of the Covid-10 pandemic, had the legibility of the Management Reports affected, showing that there is a significant influence of the variation in the results on the readability of the RAs. However, it cannot be stated with certainty that companies with a variation in positive results represent a better readability index of the Management Reports.

Finally, it is emphasized that this study did not intend to exhaust this theme, but rather to initiate a line of research that deepens this discussion. Thus, it is suggested, for future research, to deepen the present analysis with a larger sample by applying other data analysis methodologies to better obtain the results and analyses.

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