Revista de Educação e Pesquisa em Contabilidade
Journal of Education and Research in Accounting

Periódico Trimestral, digital e gratuito publicado pela Academia Brasileira de Ciências Contábeis | Available online at www.repec.org.br

REPeC, Brasília, v. 17, n. 4, art. 3, p. 411-430, Oct./Dec. 2023 | DOI: http://dx.doi.org/10.17524/repec.v17i4.3335 | ISSN 1981-8610

Impression management during the COVID-19 pandemic: a study addressing companies in the commercial sector listed in [B]3

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Abstract

Objective: To investigate the relationship between the COVID-19 pandemic and Impression Management (IM) in the reports of relevant facts disclosed by companies in the commercial sector listed in [B]3.

Method: The Relevant Facts (779 observations) disclosed by companies in the Commerce Sector (Wholesale and Retail) listed in [B]3 between 2017 and 2022 were analyzed. The tone of the words used in the reports was considered a proxy for IM. The periods before the pandemic and during the term of the Public Health Emergency of National Concern (ESPIN in Portuguese) were compared using correlation tests and multiple linear regression.

Results: No differences were found in IM before and during the period ESPIN was in force. A correlation was found between IM and the number of days the businesses remained closed. Studies indicate a relationship between the reports' tone and the companies' size, indicating that larger companies adopt IM more frequently.

Contributions: This study supports the literature in the accounting field, providing evidence of the relationship between IM and the economic crisis caused by ESPIN. Those using accounting information also benefit as this study's results enable them to better assess the disclosure of accounting information in the context of an economic crisis, supporting decision-making.

Keywords: impression management; pandemic; COVID-19.

Published in Portuguese and English. Original Version in Portuguese.

Round 1: Received in 5/26/2023. Review requested on: 7/10/2023. Round 2: Resubmited on 7/28/2023. Accepted on 9/30/2023 by Gerlando Augusto Sampaio Franco de Lima, PhD (Editor). Published on 12/22/23. Organization responsible for the journal: Abracicon.

1. Introduction

The accounting literature has investigated the emergence of opportunistic practices within the scope of accounting narratives (Beattie, 2014), also known as Impression Management (IM). Studies on the topic generally investigate whether the information portrayed in accounting reports describes actual facts or has been manipulated to influence readers' perceptions, aiming to influence their investment decisions (Cen & Cai, 2013).

In the context of Accounting and Finance, the literature highlights IM as a purposeful intervention in financial disclosures to control the stakeholders' perceptions (Mohamed, Gardner & Paolillo, 1999). In this context, Beattie (2014) emphasizes that managers' discretion when writing accounting reports (which should be written with simple and accessible language to reach the highest number of users) allows the use of IM practices (Lang & Stice-Lawrence, 2015).

Previous studies reinforce that managers adopt an optimistic tone when reporting their companies' financial performance, as investors react strongly to the language disclosed in accounting-financial reports (Li, 2011; Loughran & McDonald, 2011; Huang, Teoh & Zhang, 2014; Buchholz, Jaeschke, Lopatta & Maas (2018).

Thus, IM may be considered a manifestation of agency conflict (Beattie, 2014). Therefore, whenever there is a divergence of interests between managers and shareholders, the first can maximize utility by managing information in financial reports, as they have the autonomy to choose the words, narrative, and language used in the company's communication with stakeholders. Cunha and Silva (2009) note reports in which such narratives are not within the scope of independent auditing, such as "Earning Release."

Such situations are aggravated when economic impacts are threatening a company's performance. In this sense, events marked by high levels of uncertainty and risk can harm organizations. Crises such as the one triggered by the COVID-19 pandemic have the potential to lead to a vulnerable and unstable environment from an economic and social point of view, besides the biological threat (Câmara, Pinto, Silva & Gerhard, 2020), which directly influence the performance of organizations.

Government actions, including decrees limiting the market's normal functioning and restricting the movement of people, worsened the economic crisis. The Brazilian federal government declared a Public Health Emergency of National Importance (ESPIN in Portuguese) in February 2020 (Ordinance No. 188) to fight COVID-19. This normative act arises from situations requiring urgent measures to prevent, control, and contain risks, damage, and harm to public health. Among many actions, ESPIN ordered the closure of non-essential businesses, impacting several sectors and increasing unemployment.

The impacts of crises on organizations tend to lead to lower growth, as companies are inclined to seek remuneration from investment assets instead of expanding market share (Dias, Silva & Silva, 2020). In this context, accounting's role is to assist organizations in preparing and disseminating information to their various contractors, bearing in mind that greater levels of informational asymmetry between agents may occur in uncertain and crisis environments.

Accounting reports are expected to be neutral, clear, and concise though, with low levels of IM. Nonetheless, the impact caused by the restrictions imposed by the COVID-19 pandemic may lead companies to change their behavior when disclosing information.

Beattie (2014) notes that the literature on IM is not well established, though it can be seen as an integrating part of research on earnings management. She explains that manual analyses were conducted in the past due to the limitations in technology and software, preventing automatic content analysis.

In this context, this study sought to answer the following research problem: **What is the impact of the COVID-19 pandemic on the impression management practices of commercial companies listed in [B]³?**

Given the previous discussion, this study's main objective is to investigate the relationship between the COVID-19 pandemic and impression management when reporting relevant facts among companies listed in the commercial sector of [B]³.

Hence, the following specific objectives were established: (i) analyze the textual sentiment adopted in the disclosure of companies in the commercial sector listed on the Brazilian stock exchange; and (ii) study changes in these companies' impression management, comparing the period before the COVID-19 pandemic with the period in which a Public Health Emergency of National Importance (ESPIN) was in force.

Therefore, a descriptive, empirical, and quantitative study addressed the relevant facts disclosed by companies in the commercial sector listed on the Brazilian stock exchange. Such documents are an essential communication tool between a company and its external users, given the need to disseminate timely information to support stakeholders' decision-making. Therefore, these statements would rapidly reflect the consequences of actions taken to combat COVID-19.

Nonetheless, it is important to note that the commercial sector accounts for a considerable portion of the Gross Domestic Product (GDP), and its representation has increased over the years. According to the Brazilian Institute of Geography and Statistics [IBGE] (2019), its added value grew more than that of other economic sectors. Additionally, it is important to mention that, as disclosed by the United Nations (UN) through the Economic Commission for Latin America and the Caribbean [CEPAL] (2020), the commercial sector was strongly affected by the pandemic, losing 1.4 million companies and 4 million formal jobs in these regions.

This study's contribution lies in investigating how Brazilian commercial companies responded during the crisis caused by the COVID-19 pandemic in terms of IM and whether the market conditions imposed by ESPIN influenced how relevant facts were disclosed. This study's findings help assess narratives using IM and verify whether companies' disclosure patterns changed from disclosure patterns before the pandemic and during social isolation. This study's results are relevant in Financial Accounting given the few studies addressing IM and, mainly, because the studies assessing the impacts of the pandemic on the economy, a relevant and current topic, are not yet consolidated.

2. Theoretical Foundations

Much has been said about actions aimed at corporate communication to leverage results based on data released by organizations. Companies may adopt speech management practices in their communication channels to control the external public's interpretation and that of the organization though. These strategies may emerge in corporate advertisements, interaction with the media, financial information, and relationships established with the government and community, besides employees (Argenti, 1996; Mendonça & Amantino-de-Andrade, 2003).

Goffman (1959) highlights that IM is an attempt to establish a purpose in social interactions, to direct one's actions, and to meet expectations. Impression management can be defined as an idea, a feeling, or an opinion an individual may hold about someone or something. Therefore, corporate communication is based on choices that may be purposeful and opportunistic (Merkl-Davies & Brennan, 2007).

Therefore, these communication actions are intended to attract the attention of stakeholders and transform them into economic resources. An example is when organizations understand that they need to leverage their results, obtaining a prominent position in the corporate world and adopting socio-environmental measures to gain credibility and build a solid image. Such measures prioritize political interests, which, in turn, are aimed at obtaining profits (Bussler, Sausen, Baggio, Froemming & Fernandez, 2017).

Thus, given that organizations may experience instability concerning their previously obtained legitimacy, they are more likely to increase the frequency of disclosures and prepare their corporate reports emphasizing positive rather than negative aspects (Penteado, 2013).

Impression management at the organizational level deals with actions that positively influence the opinion of a group of people to the detriment of the organization as a whole (Mendonça & Andrade, 2003). In general, organizations need to attract the interest of new investors, and for it to happen, they need to discuss their actions and actual situation. Omitting information regarding a company's situation puts investors in a disadvantageous position.

Therefore, IM allows organizations to influence stakeholders' perceptions by using a sometimes positive and other times negative tone to express information in accounting reports, which tend to either overestimate or underestimate financial results, also using less regulated disclosure reports (Brennan, Guillamon-Saorin & Pierce, 2009; Tan, Wang & Zhou, 2015).

Regarding this specific aspect, Huang et al. (2014) found that managers start using more optimistic language to present results regarding their companies' poor financial performance, which indicates the practice of opportunistic action.

Furthermore, corporate documents, such as annual and sustainability reports, do not usually undergo an audit process, which may be convenient for adopting organizational impression management (Penteado, 2013; Souza, 2013; Theiss, 2019). However, presenting facts is a valid resource to facilitate the analysis of IM in the disclosure of financial, social, and environmental information.

Merkl-Davies and Brennan (2007) and Buchholz et al. (2018) mention that accounting narratives tend to emphasize good news instead of bad news, manipulating the discourse of financial statements and thus interfering with shareholders' perceptions and decisions. Therefore, they add that accounting communication is provided in corporate documents that are supposed to deliver objective and transparent information to the external public, but instead present statements according to a company's agenda or to confuse users.

Thus, Sobreira, Silva, Garcia, and Teodósio (2021) state that financial statements must reflect the potential effects of the COVID-19 crisis on the organization. However, they note that only quantitative information may not be sufficient for the various contractors, especially in times of crisis.

This is why Accounting should not be limited to merely disclosing numbers through its statements but should seek to explain such numbers and the potential risks arising from unforeseen events, such as the COVID-19 pandemic. Risks may include decreased revenue, lack of inputs, non-payment on the part of customers, and decreased payment capacity, among others, which must be portrayed in financial reports to expand information dissemination, supporting managers' decisions regarding potential risks, improving the informative capacity of financial reports and decreasing informational problems between contracting agents.

In the meantime, Silva (2020) investigated the relationship between the quality of accounting information and IM found in the management reports of Brazilian companies from 2010 to 2018. The results indicated that companies with low-quality accounting information tended to adopt IM more frequently, presenting more optimistic language in their management reports. These findings show that IM can be adopted to manipulate the users' perceptions.

Meanwhile, Cabral, Pain, Souza, and Bianchi (2021) analyzed the relationship between IM in the managers' messages contained in Administration Reports and forecast errors of analysts from 15 Brazilian public companies registered in the ABRASCA Award between 2016 and 2019, using analyst forecast data from that period. The findings showed that pessimistic forecasts imply a tendency towards a more neutral or higher quality discourse in the message directed to shareholders.

Cavalheiro, Victor, Lerner, and Grando (2021) studied the characteristics of impression management, investigating the use of an abnormal tone in the management reports of public companies listed on [B]³ from 2010 to 2017. They found that companies that usually present a low financial performance are less likely to adopt an abnormal positive tone. Furthermore, the tests showed a relationship between the companies' size and IM.

A factor that possibly explains the incipient research on MI is the lack of information, as no databases present IM variables, requiring the need to collect and process data manually, as Adam, Tene, Cunha, and Silva (2019) noted.

Silva (2018) highlights that the performance of the commerce sector is boosted by increased private consumption. It absorbs approximately 20% of the current workforce despite informal jobs. Therefore, it is a sector more sensitive to economic variations in consumption or employability (Florêncio, Batista & Reis, 2020).

Given the study design and the model used by Henry (2008) and Carlsson and Lamti (2015), besides the economic crisis resulting from government decrees that restricted business activities, the following research hypothesis is proposed: (H1) the tone of the narratives describing relevant facts during the ESPIN differ from the tone adopted in the period prior to social isolation measures. Additionally, we propose that (H2) the number of days non-essential economic activities were closed negatively affected the tone adopted when disclosing relevant facts.

3. Methodological Procedures

The changes in IM practices that occurred (after ESPIN) due to the economic impact on companies were investigated. Therefore, this study's timeframe comprises the period in which the decree was in force, from February 4th, 2020, to May 22nd, 2022, with the same amount of months immediately before the pandemic, from October 18th, 2017, to February 3rd, 2020.

Considering the consequences of sanitary measures (social isolation was imposed, and only essential services were allowed), which included drastic changes in commercial activities in general during the companies' financial year, this study analyzes the disclosure of relevant facts because it involves rapid communication between companies and the market and would certainly reflect the impacts caused by ESPIN.

Research addressing relevant facts revealed that such documents are challenging, and users find them difficult to understand (Silva & Fernandes, 2009). At the same time, the volume of these documents has increased over time (Espíndula & Costa, 2008); hence, the communication established with stakeholders deserves further investigation, especially regarding the discourse adopted in the financial statements concerning the use of IM.

Thus, this study's sample comprised all publicly traded companies classified under the sector "Commerce (Wholesale and Retail)" listed on [B]³ – Brasil, Bolsa e Balcão. According to Florêncio et al. (2020), the sector's economic representativeness in the national context was considered when the sample was selected. A total of 47 companies were analyzed between 2017 and 2022, totaling 779 documents, as shown in Table 1.

Table 1
Study's sample

Company	Before ESPIN			During ESPIN			Total
	2017	2018	2019	2020	2021	2022	
Agrogalaxy Participações S.A					9	2	**11**
Allied Tecnologia S.A.					7	4	**11**
AMERICANAS S.A.		2	2	2	11	2	**19**
Cencosud Brasil Com. S.A.						1	**1**
Cia Brasileira de Distribuição		5	22	20	10	7	**64**
CM Hospitalar S.A.					13	7	**20**
D1000 Varejo Farma Part. S.A.				1		2	**3**
DIMED S.A. Distr. de Medic.	1	3	5	9	5		23
Empreend. Pague menos S.A.		4	1	5	5	1	**16**
Enjoei S.A.					4	1	**5**
Farmácia e Drogaria Nissei S.A.					1		1
General Shop. e Out. do BR. S.A.	1	8	11	2	4		26
Grazziotin S.A.		2	2	9	5		18
Grupo SBF SA			5	10	1	2	**18**
Humberg Agribrasil S.A.					6	2	**8**

Company	Before ESPIN			During ESPIN			Total
	2017	2018	2019	2020	2021	2022	
Iguatemi Emp. de Sh. Centers S.A.		3	2	26	10	1	**42**
Infracommerce CXAAS S.A.					11	3	**14**
Intelbras S.A.					3	2	**5**
JHSF Malls S.A.		1	3	2	2		8
Kalunga S.A.					1		1
Livetech da Bahia Ind. Com. S/A.					7	6	**13**
Lojas Americanas S.A.		2	3	3	9		17
Lojas Le Biscuit S.A.						1	**1**
Lojas Quero-Quero S.A.					1	2	**3**
Lojas Renner S.A.		1	1	6	6	2	**16**
Magazine Luiza S.A.	1	1	15	3	6		26
Marisa Lojas S.A.		6	11	8	7	4	**36**
Mobly S.A.					1		1
Multiplus S.A.		10	6				16
Pet Center Com. e Part. S.A.				1	8	4	**13**
Privalia Brasil S.A.					4		4
Profarma Dist. Prod Farm. S.A.	1	1		3	2	4	**11**
Raia Drogasil S.A.		1	4	2	3	1	**11**
Raizen S.A.					7	3	**10**
Saraiva Liv. S.A. – em Rec. Jud.		3	3	1	13	3	**23**
SBF Com. de Prod. Esport. S.A.						1	**1**
Sendas Distribuidora S.A.				2	16	4	**22**
Smiles Fidelidade S.A.	2	9	10	15	13		49
Smiles S.A.	1						1
Technos S.A.		2	4	2	1	2	**11**
Trocafone S.A.						2	**2**
Unidas S.A.	2	4	4	1	4	2	**17**
Via S.A		6	11	15	5		37
Vibra Energia S.A.		18	36	22	25	5	**106**
Vivara Participações S.A.				4	2	2	**8**
W2W E-commerce de Vinhos S.A.					3	1	**4**
Westwing Com. Varejista S.A.					5	1	**6**
Total	**9**	**92**	**161**	**174**	**256**	**87**	**779**

Source: Securities and Exchange Commission (2023).

In terms of variables, this study aimed to address MI, considering the abnormal tone of the words adopted in the relevant facts disclosed between 2017 and 2022 as a proxy. Hence, the words were classified as negative or positive and summed up to calculate the tone of the reports. The words' classification was based on the dictionary proposed by Henry (2008) and later complemented by Carlsson and Lamti (2015). Additionally, keywords concerning the pandemic context were included, as shown in Table 2.

Table 2
Keywords included

Confinement	Covid-19	Isolation	OMS
Contagion	Disease	Lethality	Pandemic
Coronavirus	Closing	Ministry of Health	Quarantine
COVID	Infection	Mortality	Vaccine

Source: Developed by the authors (2023).

MAXQDA12 software was used to do the counting, allowing all reports to be inserted into the program and analyzed individually. The indicator of the reports' tone followed the scheme developed by Henry (2008) and proposed through Equation 1.

$$TOM = \frac{N° \text{ de Palavras Positivas} - N° \text{ de Palavras Negativas}}{N° \text{ de Palavras Positivas} + N° \text{ de Palavras Negativas}} \quad (1)$$

Translate: TONE = No. of Positive Words – No. of Negative Words; No. of Positive Words + No. of Negative Words

The result of Equation 1 concerns the indicator of tone that ranges on a scale with an interval between -1 and +1. A result equal to 0 provides evidence that the document was written using neutral language. A result between -1 and 0 suggests that more negative words were used, whereas a result between 0 and +1 suggests that more positive words were adopted (Carlsson & Lamti, 2015).

Because this study aims to assess the impact of ESPIN and its relationship with IM, a dummy variable was included. It concerns the period in which relevant facts were disclosed, i.e., whether relevant factors were disclosed "before" or "during " the pandemic period when ESPIN was in force.

The statistical data analysis included Kruskal-Wallis and Mann-Whitney tests to verify differences between the means. A multiple linear regression test was conducted to study the explanatory capacity of the pandemic on IM, considering the reports' tone as the explanatory variable, and the sector, number of days the businesses remained closed, the companies' size, and when the reports were published as the control variables.

These control variables were adopted because they can show how the crisis evolved given the duration of ESPIN, considering the period the businesses remained closed. The segment of the business was adopted following the same methodology used by Cavalheiro et al. (2021).

Like Cabral et al. (2021), the total value contained in the assets of the companies' balance sheets published in 2021 was used as a proxy for the companies' size. Additionally, 2021 was chosen because it is the only year that accounting reports covered an entire year within the pandemic period. All the aspects were analyzed by comparing the period before the ESPIN and the period when it was in force in Brazil.

4. Results

Data were tabulated in spreadsheets and exported to the statistical software in which the analyses were performed with a 95% confidence interval. The absolute quantities and percentages concerning the frequency of tones were calculated before and during the ESPIN period and then associated using Pearson's Chi-square test.

The means and standard deviations of the tones were also calculated, subjected to the Kolmogorov-Smirnov normality test, and compared using the Mann-Whitney or Kruskal-Wallis/Dunn tests (non-parametric data). The results of the mean tests are presented in Table 3.

The number of publications concerning relevant facts showed a significant increase during the pandemic compared to the period before; it increased from 273 documents/period to 506 documents/period, approximately 1.85 to 1.00 (Table 3).

Regarding the number of documents released by segment, an overwhelming majority of relevant facts came from exploration, refining, and distribution (n=57), followed by travel and entertainment (n=40) and programs and services (n=39). Beverages, household appliances, audio and video equipment, computers, and equipment did not disclose any relevant fact in the pre-pandemic period (Table 3).

However, during the ESPIN, most of the documents became linked to pharmaceuticals and other products (n=76), miscellaneous products (n=61), and food (n=59). Agriculture, sporting products, programs and services, and office and school supplies had not disclosed reports when ESPIN was in force (Table 3).

A significant difference was found in the profile of relevant facts ($p<0.001$) from the period before the lockdown to during the lockdown. Agriculture, sporting products, programs and services, and office and school supplies showed a decrease of 200% in the number of documents disclosed. On the other hand, the computer and equipment and beverage segments presented the most substantial increase – 500% and 400% respectively (Table 3).

The average tone before the pandemic was +0.00±0.59, not significantly different from the pandemic period (-0.04±0.56, $p=0.388$). The Real State segment showed a significant drop in the tone of its news from +0.25±0.55 to -0.41±0.43 from the pre- to during the pandemic ($p<0.001$). Likewise, miscellaneous products (+0.31±0.45 to -0.03±0.59, $p=0.029$) and fabrics, clothing, and footwear (+0.33±0.60 to -0.08±0.69, $p=0.013$) also showed a drop in their news' tone. In contrast, only the incorporation segment showed a significant increase in the reports' tone from the period before (-0.68±0.14) to the period during (-0.35±0.14) the pandemic ($p=0.029$) (Table 3).

Table 2

Mean Test and Descriptive Statistics

	Period		p-	Variation		Tone		p-
	Before	**During**	**Value**	**Raw**	**Relative**	**Before**	**During**	**value[b]**
Number of news	**273** (35.0%)	**506** (63.2%)	**<0.001**	**233**	**-15%**	**+0.00 ±0.59**	**-0.04 ±0.56**	**0,388**
Industry classification								
Accessories	7 (36.8%)	12 (63.2%)*	<0.001	5	-29%	+0.24 ±0.50	-0.03 ±0.62	0,261
Agriculture	29 (100.0%)*	0 (0.0%)		-29	-200%	-	+0.08 ±0.52	-
Food	28 (32.2%)	59 (67.8%)*		31	11%	-0.03 ±0.59	+0.17 ±0.43	0,093
Car rent	10 (58.8%)	7 (41.2%)		-3	-130%	+0.16 ±0.29	+0.27 ±0.28	0,695
Beverage	0 (0.0%)	4 (100.0%)*		4	400%	-	+0.22 ±0.52	-
Computers and equipment	0 (0.0%)	5 (100.0%)*		5	500%	-	+0.00 ±0.43	-
Home appliances	35 (47.3%)	39 (52.7%)		4	-89%	+0.20 ±0.55	+0.05 ±0.47	0,197
Home appliances and audio and video equipment	0 (0.0%)	2 (100.0%)		2	200%	-	+0.00 ±1.41	-
Real State	26 (38.2%)	42 (61.8%)		16	-38%	+0.25 ±0.55	-0.41 ±0.43	<0,001
Exploration, Refining, and Distribution	57 (53.8%)	49 (46.2%)		-8	-114%	-0.35 ±0.63	-0.14 ±0.59	0,074
Incorporations	4 (50.0%)	4 (50.0%)		0	-100%	-0.68 ±0.14	-0.35 ±0.14	0,029
Pharmaceuticals and Other Products	22 (22.4%)	76 (77.6%)*		54	145%	-0.16 ±0.34	-0.01 ±0.57	0,158
Miscellaneous Products	20 (24.7%)	61 (75.3%)*		41	105%	+0.31 ±0.45	-0.03 ±0.59	0,029
Fabrics, Clothing, and Footwear	24 (32.4%)	50 (67.6%)		26	8%	+0.33 ±0.60	-0.08 ±0.69	0,013
Travel and Entertainment	40 (60.6%)	26 (39.4%)*		-14	-135%	-0.12 ±0.54	+0.05 ±0.42	0,477
Sporting Goods	1 (100.0%)	0 (0.0%)		-1	-200%	-0.62 ±0.00	-	-
Programs And Services	39 And Services	0 (0.0%)		-39	-200%	-0.09 ±0.54	-	-
Office and School Supplies	1 (100.0%)	0 (0.0%)		-1	-200%	+0.45 ±0.00	-	-

* *p<0.05, aChi-square test (n, %); bMann-Whitney Test (mean±SD).

Source: Developed by the authors (2023).

The findings in Table 3 indicate no statistically significant changes in IM in any of the companies in the "Commerce (Wholesale and Retail)" sector between the periods before and during the ESPIN.

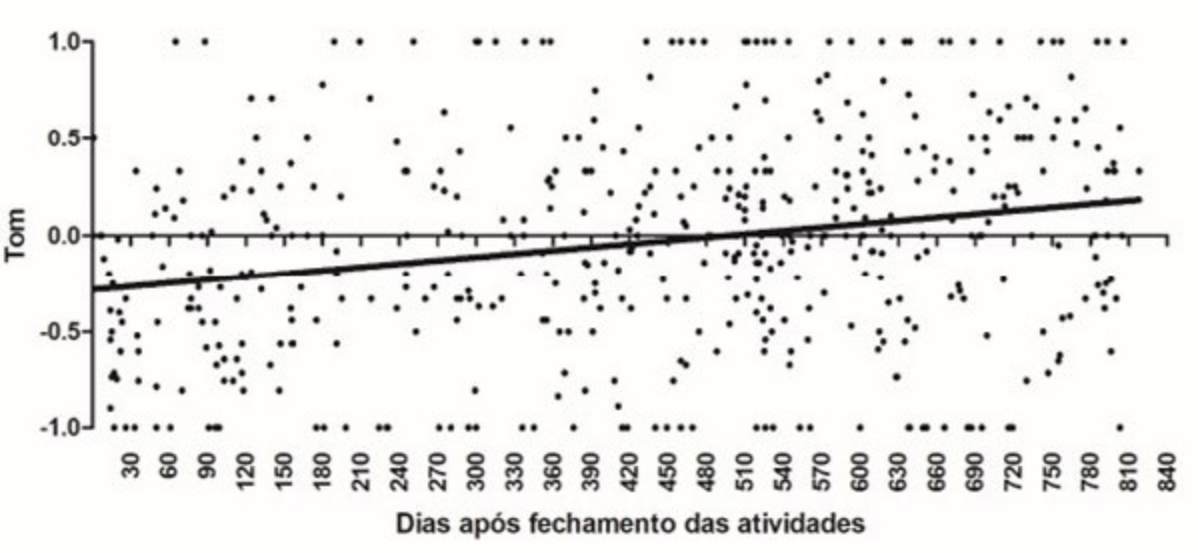
Some segments did not present sufficient data to be analyzed, such as sporting goods and office and school supplies, while others presented less than five observations. Therefore, the sample was stratified according to the classification of segments published by B^3 as a parameter to assess the behavior of IM separately, as shown in Table 3.

As a result, significant changes were found in some of the segments. For example, "Real State," "Products and Services," and "Fabric, Clothing, and Footwear" showed important changes in IM during the ESPIN period compared to the time before the social isolation measures (Table 3). The tone of the reports disclosing relevant facts became more pessimistic in these segments during the pandemic, suggesting that the crisis caused by decreased economic activity directly affected some non-essential segments.

Conversely, according to Table 3, "Incorporations" showed significant changes, but this time indicating that the tone of the reports disclosing relevant facts improved after ESPIN. This result may indicate that, during the economic crisis, in which the acquisition of essential items to ensure survival was a priority, incorporation companies had market opportunities to increase their investments and expand the business, considering there was growth in the Brazilian real estate sector. During the pandemic, changes in people's lifestyles and the need to stay at home led to greater investment in housing, which reflected in the economy and the growth of companies, favoring positive publicity.

Note that the difference in tone between the segments in the commercial sector addressed here may be related to how they were impacted by ESPIN restrictions.

The preliminary results suggest a relationship between ESPIN and IM for some specific segments only; hence, this study sought to verify how the tone of reports behaved when disseminating relevant facts, specifically considering the period in which the isolation decree was in force in Brazil. Thus, the Spearman correlation test was performed, and its result is shown in Graph 1.



Translate: Tone; Number of days the business was closed.

*p<0.001, Spearman's correlation (r=0.239, 95%CI = 0.152 to 0.323).

Source: Developed by the authors (2023).

Graph 1. Correlation between the reports' tone and the number of days businesses were closed during ESPIN

Graph 1 shows a linear correlation between the tone of the companies' reports and the number of days the businesses remained closed. At the beginning of the ESPIN's period, IM adopted a negative tone. As the days went by, around mid-June 2021 (480 days after the beginning of the social isolation decree), it became clear that the tone of the relevant facts disclosed became positive.

Note that linear regression models are commonly used to predict the value of a variable based on another by estimating coefficients of the linear equation involving one (simple linear regression) or more independent variables (multiple linear regression) that best predict the value of the dependent variable. Therefore, the model enabled predicting when the reports' tone becomes positive and from what moment it will become 100% favorable.

This finding shows that the market adapted during the crisis caused by social isolation measures and the closure of non-essential economic activities. The rules imposed by the government were relaxed as vaccination began in January 2021, leading the market to respond positively and the companies to provide optimistic reports.

Proceeding with the data analysis and seeking to understand the behavior of the sample addressed here in greater depth, we also assessed the reports' tone separately. Hence, we considered when the relevant facts were disclosed to understand whether there would be an IM pattern in the year or month the facts were disclosed. The findings are shown in Table 4.

Table 4

The reports' tone depending on when the relevant facts were disclosed

	Tom		
	Antes	**Durante**	**p-Valor[a]**
Time of the month			
1st fortnight	0.03±0.56	-0.05±0.53	0,115
2nd fortnight	-0.03±0.62	-0.03±0.58	0,860
p-Value[a]	0,212	0,686	
Month			
January	-0.11±0.80	0.02±0.54	0,635
February	0.08±0.53	0.12±0.60	0,474
March	-0.01±0.53	-0.17±0.55	0,169
April	-0.12±0.56	-0.11±0.50	0,880
May	-0.02±0.52	0.06±0.55	0,648
June	0.22±0.57	-0.23±0.56*	**0,004**
July	0.03±0.73	0.09±0.41	0,762
August	-0.10±0.61	-0.10±0.54	0,973
September	0.03±0.64	0.03±0.62	0,679
October	0.01±0.65	0.07±0.55	0,602
November	0.04±0.56	-0.02±0.50	0,670
December	-0.09±0.49	-0.07±0.67	0,984
p-Value[b]	0,822	**0,028**	
Semester			
1st semester	0.01±0.60	-0.06±0.56	0,194
2nd semester	-0.02±0.59	-0.01±0.55	0,896
p-Value[a]	0,510	0,337	

*p<0.05 versus the remaining groups; aMann-Whitney test; bTest Kruskal-Wallis/Dunn (mean±SD)

Source: Developed by the authors (2023).

The results in Table 4 indicate no changes in the reports depending on the fortnight or semester in which a relevant fact was published, compared to IM before the social isolation measures. However, the reports' tone worsened in June.

Additionally, data were correlated with the pandemic period, and all variables were subjected to a multiple linear regression model (analysis multivariate) to assess the capacity of social isolation to explain IM when disclosing relevant facts. The results are shown in Table 5.

Table 5
Linear Regression

		β adjusted (IC95%)
Tone		
Segment	0.700	-0.019 (-0.013 a 0.009)
Number of days after closing	*<0.001	0.245 (0.038 a 0.709)
Company's size (total assets)	*0.030	0.105 (0.028 a 0.541)
The day of the month	0.489	0.030 (-0.003 a 0.007)
Month	0.954	-0.003 (-0.015 a 0.014)

*p<0,05, regression

Source: Developed by the authors (2023).

The results presented in Table 5 show that the number of days after businesses were closed (ESPIN) and the companies' size presented collinearity with the reports' tone. Such behavior occurs regardless of the variables "segment," "day of the month," or "month." The positive adjusted β found in both cases with significance indicates that the longer after the closing, the stronger the reports' tone, and the larger the companies' size, the more positive the tone adopted.

Hence, corroborating the findings reported by Huang et al. (2014), Cabral et al. (2021), and Cavalheiro et al. (2021), the larger the company, the more frequently the use of IM in the context addressed here. These findings may be related to the sudden drop in these companies' financial performance. Cavalheiro et al. (2021) note that companies with regularly low financial performance are less likely to adopt an abnormally positive tone. In other words, the crisis that resulted from the lockdown period may have caused these companies' financial performance to deteriorate, reflecting more negative reports.

This study addressed 47 companies; a positive tone predominated in their reports (n=34, 71.7%), as only 13 adopted a predominantly negative tone (28.3%). The companies' segment played a significant role (p=0.049), as the agriculture, food and beverages, car rental, travel and entertainment, accessories, appliances, and equipment segments presented predominantly positive reports. On the contrary, incorporations, exploration, refining and distribution, pharmaceuticals and other products, miscellaneous products, and programs and services adopted a predominantly negative tone (Table 6).

Table 6
Assessment of the tone predominantly adopted in the companies' reports

	Predominant tone		p-Value
	Negative	**Positive**	
Sector			
Accessories	0(0.0%)	2(6.1%)	0,356
Agriculture	0(0.0%)	3(9.1%)	
Food	0(0.0%)	3(9.1%)	
Car rental	0(0.0%)	1(3.0%)	
Beverages	0(0.0%)	1(3.0%)	
Computer and Equipment	0(0.0%)	1(3.0%)	
Home appliances	0(0.0%)	3(9.1%)	
Home appliances and Audio and Video Equipment	0(0.0%)	1(3.0%)	
Real State	1(7.7%)	1(3.0%)	
Exploration. Refinement and Distribution	1(7.7%)	0(0.0%)	
Incorporations	1(7.7%)	0(0.0%)	
Pharmaceutical and Other Products	4(30.8%)	4(12.1%)	
Miscellaneous products	2(15.4%)	4(12.1%)	
Sporting goods	1(7.7%)	0(0.0%)	
Programs and Services	2(15.4%)	3(9.1%)	
Fabric, Clothing and Footwear	1(7.7%)	3(9.1%)	
Travel and Entertainment	0(0.0%)	3(9.1%)	
Segment			
Real State	1(7.7%)	1(3.0%)	**0,049**
Agriculture, Food, and Beverages	0(0.0%)	7(21.2%)*	
Car Rental, Travel and Entertainment	0(0.0%)	4(12.1%)*	
Accessories, Home Appliances, Equipment	0(0.0%)	7(21.2%)*	
Incorporations, Exploration, Refinement, and Distribution	2(15.4%)*	0(0.0%)	
Pharmaceuticals and Others	4(30.8%)*	4(12.1%)	
Miscellaneous Products	3(23.1%)*	4(12.1%)	
Programs and Services	2(15.4%)*	3(9.1%)	
Fabric, Clothing, and Footwear	1(7.7%)	3(9.1%)	
Total Assets	5720241±8876734	13796138±21558815	
	4	58815	0,200

Source: Developed by the authors (2023).

A change in tone was found at the beginning of vaccination in January 2021; hence, this period was analyzed separately. There was an increase in relevant facts after January 2021 in the agriculture, food and beverages, pharmaceuticals and others, miscellaneous products, and programs and services segments. On the contrary, companies in the real estate, car rental, travel and entertainment, accessories, appliances, equipment and developments, exploration, refining, and distribution segments witnessed a decrease in the number of relevant facts ($p<0.001$). The reports show that a moderate tone was significantly more frequently adopted in this period ($p=0.004$), and the total assets of companies that disclosed relevant facts

in this period were substantially lower (p=0.021) (Table 7).

Table 7

Assessment of the period in which the reports' tone changed (January, 2021)

	Period (January 2021)		
	Before	**After**	
Tone	-0,08±0,58	0,04±0,55	**0,004**
Sector			
Real State	51(11.6%)	17(5.0%)	**<0,001**
Agriculture, Food and Beverage	49(11.1%)	71(21.0%)*	
Car Rental, Travel and Entertainment	66(15.0%)*	17(5.0%)	
Accessories, Home Appliances, and Equipment	64(14.5%)*	36(10.7%)	
Incorporations, Exploration, Refinement, and Distribution	84(19.0%)*	30(8.9%)	
Pharmaceuticals and Others	43(9.8%)	55(16.3%)*	
Miscellaneous products	37(8.4%)	46(13.6%)*	
Programs and Services	1(0.2%)	38(11.2%)*	
Fabrics, Clothing and Footwear	46(10.4%)*	28(8.3%)	
Fortnight			
1st fortnight	198(44.9%)	170(50.3%)	0,135
2nd fortnight	243(55.1%)	168(49.7%)	
Quarter			
1st	107(24.3%)	92(27.2%)	0,228
2nd	113(25.6%)	91(26.9%)	
3rd	103(23.4%)	86(25.4%)	
4th	118(26.8%)	69(20.4%)	
Semester			
1st	220(49.9%)	183(54.1%)	0,239
2nd	221(50.1%)	155(45.9%)	
Total Assets	20102179±17689161	16824255±21800593	**0,021**

Source: Developed by the authors (2023).

An assessment considering only the companies that published relevant facts before and after ESPIN reveals a significant decrease in the tone adopted in the reports (from 0.00±0.60 to -0.10±0.58) from before the pandemic to the pandemic period (p=0.029), suggesting that the lack of difference previously seen between the periods is explained by the inclusion of positive reports disclosed by companies that had not previously disclosed information.

When the analysis considers only the pandemic period, the number of days the businesses were closed explains the tone of relevant facts. Therefore, no statistically significant differences were found in IM between "before" and "during" the time ESPIN was in force. However, considerable changes occurred in IM when the decree was in force, i.e., it went from a negative tone at the beginning of the social isolation measure to a more optimistic tone as time passed and new treatments were implemented to control COVID-19.

5. Final Considerations

This study's general objective was to investigate changes in the companies' IM due to the crisis triggered by the COVID-19 pandemic, focusing on the period in which ESPIN was in force. Hence, we addressed data concerning the relevant facts disclosed by the companies in the Commerce sector listed in [B]³. Correlation and multiple linear regression tests were performed to identify the relationship between IM and the period when non-essential businesses were closed.

The results concerning the analysis of the entire commercial sector do not confirm a statistically significant relationship between IM "before" and "during" the decree. However, relevant differences emerged when the sector's segments were analyzed separately. Perhaps the differences in some segments are explained by the social isolation imposed by the decree demanding the businesses to close.

Additionally, the analysis of IM, specifically focusing on the period in which ESPIN was in force, showed that the tone adopted in reports gradually went from negative to positive as time passed. Finally, the analysis also suggests that larger companies more frequently adopted IM, corroborating previous studies, such as Cabral et al. (2021) and Cavalheiro et al. (2021), also showing that the pandemic period (ESPIN) explains IM in the model proposed here.

Hence, the results reveal the market's ability to adapt during the crisis triggered by the closure of businesses. The reports on relevant facts started to adopt an optimistic tone as the days passed, possibly motivated by the vaccination and relaxed measures, allowing the businesses to reopen. Hence, this study is expected to support a better understanding of how IM behaves to assist researchers, accounting professionals in general, and stakeholders. A greater understanding of this topic enables individuals to interpret information more accurately and encourages organizations to improve their internal accounting process to disseminate clear, transparent information, avoiding manipulations. Thus, this study's results are expected to guide more responsible and accurate Accounting practices.

Finally, note that the analysis presented here considered only one specific sector; hence, generalization requires caution. Further research is suggested to improve knowledge about this subject by addressing a more significant number of sectors and including the number of deaths recorded in the period as an additional variable.

References

Adam, C., Tene, J. K., Cunha, P. R. & Silva, A. (2019, junho). Influência dos traços de personalidade no gerenciamento de impressão da divulgação da informação contábil. In *Anais do 13º Congresso Anpcont*, São Paulo, SP.

Argenti, P. A. (1996). Corporate communication as a discipline: toward a definition. *Management communication quarterly*, *10*(1), 73-97. https://doi.org/10.1177/0893318996010001005

Beattie, V. (2014). Accounting narratives and the narrative turn in accounting research: Issues, theory, methodology, methods and a research framework. *The British Accounting Review*, *46*(2), 111-134. https://doi.org/10.1016/j.bar.2014.05.001

Brennan, N. M., Guillamon-Saorin, E. & Pierce, A. (2009). Impression management: Developing and illustrating a scheme of analysis for narrative disclosures – a methodological note. *Accounting, Auditing & Accountability Journal*, *22*(5), 789-832. https://doi.org/10.1108/09513570910966379

Buchholz, F., Jaeschke, R., Lopatta, K. & Maas K. (2018). The use of optimistic tone by narcissistic CEOs. *Accounting, Auditing & Accountability Journal, 31*(2), 531-562. https://doi.org/10.1108/AAAJ-11-2015-2292

Bussler, N. R. C., Sausen, J. D. F. C. L., Baggio, D. K., Froemming, L. M. S., & Fernandez, S. B. V. (2017). Responsabilidade social e a governança corporativa: perspectivas de gestão socioambiental nas organizações. *Revista de Gestão e Organizações Cooperativas*, *4*(8), 91-108. https://doi.org/10.5902/2359043227199

Cabral, P. H. D., Pain, P., Souza, R. B. L. & Bianchi, M. (2021). Relação da Previsão de Analistas Financeiros com o Gerenciamento de Impressão. In *Anais do 21º USP International Conference In Accounting*, São Paulo, SP.

Câmara, S. F., Pinto, F. R., Silva, F. R. & Gerhard, F. (2020). Vulnerabilidade Socioeconômica à Covid-19 em Municípios do Ceará. *Revista de Administração Pública*, *54*(4), 1037-1051. http://dx.doi.org/10.1590/0034-761220200133

Carlsson, S. & Lamti, R. (2015). *Tone management and earnings management*: *a UK evidence of abnormal tone in CEO letters and abnormal accruals*. (Dissertação de Mestrado). Universidade de Gotemburgo, Gotemburgo, Suécia.

Cavalheiro, M. O., Victor, F. G., Lerner, A. F. & Grando, R. M. (2021). Gerenciamento de impressão nas companhias abertas listadas na Brasil, bolsa, balcão [B]^3: o uso do tom anormal nos relatórios de administração. *Revista Gestão E Desenvolvimento*, *18*(3), 184–211. https://doi.org/10.25112/rgd.v18i3.2453

Cen, Z. & Cai, R. (2013). 'Impression management' in Chinese corporations: a study of chairperson's statements from the most and least profitable Chinese companies. *Asia Pacific Business Review*, *19*(4), 490-505. https://doi.org/10.1080/13602381.2013.811825

Comissão Econômica para a América Latina e o Caribe. (2020). *Sectores y empresas frente al Covid-19: emergencia y reactivación*. Recuperado em 19 julho, 2023, de http://repositorio.cepal.org/bitstream/handle/11362/45734/S2000438_es.pdf?sequence=4&isAllowed=y.

Cunha, R. K. C. & Silva, C. A. T. (2009). Análise da facilidade de leitura das Demonstrações contábeis das empresas brasileiras: uma investigação do gerenciamento de impressões nas narrativas contábeis. In *Anais do 9º Congresso USP Controladoria e Contabilidade*, São Paulo, SP.

Dias, A. T., Silva, J. T. M. & Silva, W. A. C. (2020). Análise dos efeitos da rivalidade e do dinamismo na posição competitiva da firma. *Brazilian Business Review*, *17*(4), 362-380. https://doi.org/10.15728/bbr.2020.17.4.1

Espíndula, R. P. & Costa, P. S. (2008). Análise da influência da publicação e da legibilidade dos atos ou fatos relevantes no preço da ação das empresas brasileiras de capital aberto no período de 2002 a 2006. *Revista Horizonte Científico*, *1*(1), 1-21.

Florêncio, W., Batista, F. F. & Reis, C. Q. (2020). Governança Corporativa e desempenhos das ações de empresas do setor comercial em ambiente de crise econômica. *Revista Catarinense da Ciência Contábil*, *19*. https://doi.org/10.16930/2237-766220202977

Goffman, E. (1959). *The presentation of self in everyday life*. Garden City: Doubleday Anchor Books.

Henry, E. (2008). Are investors influenced by how earnings press releases are written? *Journal of Business Communication*, *45*(4), 363-407.

Huang, X., Teoh, S.H. & Zhang, Y. (2014). Tone management. *Accounting Review, 89*(3), 1083-1113. https://doi.org/10.2308/accr-50684

Instituto Brasileiro de Geografia e Estatística. (2019). *Em 2017, PIB cresce 1,3% e chega a R$ 6,583 trilhões.* Rio de Janeiro: Estatísticas Econômicas.

Lang, M. & Stice-Lawrence, L. (2015). Textual analysis and international financial reporting: Large sample evidence. *Journal of Accounting and Economics*, *60*(2-3), 110-135. https://doi.org/10.1016/j.jacceco.2015.09.002

Li, F. (2011). Textual analysis of corporate disclosures: a survey of the literature. *Journal of Accounting Literature, 29*(1), 143-165.

Loughran, T. & McDonald, B. (2011). When is a liability not a liability? Textual analysis, dictionaries, and 10-Ks. *Journal of Finance, 66*(1), 35-65. https://doi.org/10.1111/j.1540-6261.2010.01625.x

Martins, G. A. & Theóphilo, C. R. (2009). *Metodologia da investigação científica para ciências sociais aplicadas*. São Paulo: Atlas.

Mendonça, J. R. & Amantino-de-Andrade, J. (2003) Gerenciamento de impressões: em busca de legitimidade organizacional. *Revista de administração de empresas*, *43*(1), 1-13. https://doi.org/10.1590/S0034-75902003000100005.

Merkl-Davies, D. & Brennan, N. (2007). Discretionary disclosure strategies in corporate narratives: Incremental information or impression management? *Journal of Accounting Literature*, *26*, 116-194.

Mohamed, A. A., Gardner, W. L. & Paolillo, J. G. P. (1999). A taxonomy of organizational impression management tactics. *Journal of Competitiveness Studies*, *7*(1), 108.

Penteado, I. A. M. (2013). *Gerenciamento de impressão em relatórios de sustentabilidade no Brasil: Uma análise do uso de gráficos* (Dissertação de Mestrado). Faculdade de Economia, Administração e Contabilidade de Ribeirão Preto, Universidade de São Paulo, Ribeirão Preto, São Paulo, Brasil.

Silva, C. A. (2018). *Breve panorama sobre o setor de comércio no Brasil*. Recuperado de: https://economiadeservicos.com/ 2018/06/12/breve-panorama-sobre-o-setor-de-comercio-no -brasil/.

Silva, C. A. T. & Fernandes, J. L. T. (2009). Legibilidade dos fatos relevantes no Brasil. *Revista de Administração Contemporânea – RAC Eletrônica*, *3*(1), 142-159.

Silva, V. M. (2020). *Gerenciamento de Impressão e Qualidade das Informações Contábeis: Análise das Empresas Listadas na B3.* (Dissertação de Mestrado). Universidade Federal da Paraíba, João Pessoa, PB.

Sobreira, K. R., Silva, A. M., Garcia, E. A. & Teodósio, I. R. M. (2021). Reflexos da Pandemia do Coronavírus para a Contabilidade à Luz da Teoria Contratual da Firma. In *Anais do 21º USP International Conference in Accounting*, São Paulo, SP.

Souza, A. C. (2013). *Gerenciamento de impressão no Brasil: uma análise das mensagens dos presidentes publicadas nos relatórios anuais.* (Dissertação de Mestrado). Universidade Federal de Santa Catarina, Florianópolis, SC.

Tan, H., Wang, E. Y. & Zhou, B. (2015). How Does Readability Influence Investors' Judgments? Consistency of Benchmark Performance Matters. *The Accounting Review, 90*(1), 371–393. https://doi.org/10.2308/accr-50857.

Theiss, V. (2019). *Alinhamento entre as racionalidades da teoria da atribuição e da legitimidade no gerenciamento de impressão: Uma análise das narrativas contábeis da Samarco Mineração S.A*. (Tese de Doutorado). Universidade Federal de Santa Catarina, Florianópolis, SC.