

# Covid-19 pandemic related disclosures in corporate reports of Portuguese listed companies

An interpretation of evidence provided by accounting information systems

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**Abstract** — This work analyzes how Portuguese listed companies disclosed pandemic-related information in their annual reports in the years 2019 and 2020, focusing on the sections where information was presented, the Corporate Social Responsibility (CSR) actions implemented, and the risks disclosed. Based on a manual content analysis, this work provides preliminary evidence on corporate disclosures made in the pandemic context, suggesting that institutional forces and stakeholder groups may have influenced the information disclosed and provided by accounting information systems.

**Keywords** - coronavirus, risk reporting, CSR disclosures, sustainability reporting.

## I. INTRODUCTION

The pandemic context has brought about social, economic, political, and cultural changes increasing the pressure for ethical and socially responsible behavior by both businesses [1] and consumers [2]. The year 2020 was marked by the outbreak of Covid-19 pandemic which led to a serious health crisis with economic repercussions worldwide. In Portugal, the first state of emergency was declared on 18 March 2020 considering the increasing number of cases and the experiences of neighboring countries. The restrictions imposed to control the virus led to the closure of schools, public services, and businesses, resulting in unprecedented disruptions to daily life and economic activities.

The implementation of Corporate Social Responsibility (CSR) measures by companies contributes to ensuring long-term business sustainability, whereby it is expected that the

pandemic has contributed to companies engaging in more CSR activities [3]. Since disclosure of CSR information reduces information asymmetry and mitigates the perceived risk by investors, and legitimizes the managers' conduct towards stakeholders [4], the pandemic context is expected to have brought about an increase in CSR disclosures.

Since the 2017, Portuguese listed companies, which are large undertakings and exceed in their balance sheet dates the criterion of the average number of 500 employees during the financial year, are required to report the non-financial information required by Directive 2014/95/EU. In addition, at the very beginning of the pandemic, the Portuguese Standards Board (Comissão de Normalização Contabilística – CNC) and the Portuguese Securities Market Commission (Comissão do Mercado de Valores Mobiliários – CMVM) issued recommendations for companies regarding the disclosure of risks associated with the pandemic in their 2019 financial reports and the adoption of sustainability principles regarding dividend policies and remunerations in order to ensure operational and financial resilience in a context of increased uncertainty [5] [6].

In this context, this work intends to analyze how Portuguese listed companies disclosed pandemic-related information in their 2019 and 2020 annual reports, particularly, the CSR actions implemented, and the risks identified. For this purpose, a manual content analysis of the annual reports was conducted to provide answers to the following research questions: RQ1 – In which sections of the annual reports was information about the Covid-19 pandemic disclosed? RQ2 –

Which risks related with the Covid-19 pandemic were disclosed? RQ3 – What CSR actions related to the Covid-19 pandemic were implemented?

## II. LITERATURE REVIEW

This paper falls within the strand of studies on corporate disclosure practices in economic crisis contexts. Crises can be related to war and terrorism, disasters and pandemics, financial problems and politics, and its impact can be global, national, local, or organizational [7]. Most of the existing studies were developed in the context of the subprime financial crisis triggered in 2007 (known as the global financial crisis) focusing, particularly, on risk disclosures [8]. The evidence provided showed an increase in risk disclosures as a way of mitigating information asymmetry between investors and management, reducing investor's perceived risk and, thus, the cost of capital [9] [10] [11]. Also in the global financial crisis context, but regarding CSR information, some studies have shown an increase in the level of disclosure, as a way of companies to improve their market position and differentiate themselves from competitors to gain stakeholder trust [12] [13] [14] [15]. However, other studies reported a decrease in CSR disclosures which could be attributed to a more conservative management behavior, a consequent lack of engagement in CSR projects and the avoidance of the additional financial burden of reporting [16] [17].

The crisis caused by the Covid-19 pandemic has the particularity of affecting all sectors of the economy [4] and requiring managers to apply social and ethical measures to protect their workers and customers [18]. In this context, companies' financial reporting and disclosure practices are shaped by financial factors, such as increased exposure to credit risk; changes in the terms and conditions of business contracts; and the need to communicate with stakeholders and keep the company legitimate in the eyes of society [19]. Sustainability reporting may have been driven by external forces that affect corporate reporting (institutional forces); information that would be relevant to the pandemic (stakeholder groups); and strategies that characterize effective crisis communication (legitimacy theory) [20].

Covid-19 was not the first pandemic to affect the world in recent years and various sources have pointed to the inevitability of future pandemics. However, empirical evidence shows that before the public awareness of the Covid-19 outbreak, information on pandemic risk was absent from most corporate reports [21] [22] [23]. From January 2020, and as the number of confirmed Covid-19 cases increased, corporate disclosures begin to echo the pandemic. In New Zealand, it was observed an increase of CSR information disclosed by listed companies in their press releases by [24]. In the context of the public sector, specifically Swedish municipalities, annual reports issued in a later stage of the pandemic and in regions with a higher number of confirmed cases, were more likely to disclose Covid-19 information as a subsequent event [7]. Based on a sample of Italian listed companies, [25] concluded that the effects of the pandemic were mostly disclosed in the management report compared with the explanatory notes to financial statements.

The empirical evidence also shows the positive economic effects from disclosure in the pandemic context. Based on the year 2020 reports of UK non-financial listed companies, [4] observed a positive relationship between Covid-19-related disclosures and performance disclosure, concluding that managers seek to reduce information asymmetry and show stakeholders their management capabilities. In Australia, it was found by [26] that companies disclosing sustainability practices in their annual reports and sustainability reports exhibit higher market valuations relative to other companies and loss-making companies engaging in sustainable practices exhibit higher market valuation during the COVID-19 crisis relative to prior period. In a conceptual paper, [27] advocated the idea that risk reporting can become a valuable tool for companies to legitimize their actions during a global crisis, such as the Covid-19 pandemic.

Despite the aforementioned economic benefits, companies may refrain from disclosing information about the pandemic for three main reasons: uncertainty makes it difficult to assess the impacts of the pandemic on business and operations; negative news, such as the Covid-19 virus, may hurt the stock prices; and, in the initial days of the pandemic, companies might not have perceived it to be a major disruptor of their businesses [28]. In the US, [28] observed that Innovation and Technology (IT) services companies are less likely to make Covid-related disclosures in their annual reports, compared with other companies, and the risk sentiment of those who mentioned coronavirus is lower than the risk sentiment of companies from other industries. Annual reports of a sample of European listed companies in the period before (2017-2018) and during the Covid-19 pandemic (2019 and 2020) were content analyzed by [29] showing that in the Covid-19 pandemic period the reports had a smaller number of pages and lower readability and, for companies listed in less mature stock exchanges, the annual reports exhibit a more prominent tone of uncertainty.

As far as we know there is no study developed in the Portuguese context that provides evidence on corporate disclosures made by companies, in the pandemic context.

## III. METHODOLOGY

To answer the research questions presented, a manual content analysis was carried out on the 2019 and 2020 annual reports of 18 companies belonging to the Portuguese Stock Index (PSI). Annual reports are generally considered to be the most important source of corporate information and content analysis is the most widely used method to interpret the information reported therein [30] [31] [32] [33] [34] [35] [36].

The analysis of Covid-19 related information disclosure (RQ1) was based on the frequency of words on the topic, identified from the word list created by [37]. The words were counted with the support of the search function of pdf files and for each section of annual reports. The words searched and the sections of the annual reports analyzed are presented in Table I and Table II. To identify the pandemic-related risks disclosed (RQ2) we followed the categorization of risks presented by [38], using the following categories: operational risks, market risks, financial risks, and government regulatory risks. Finally, the categorization of CSR initiatives implemented by

companies (RQ3) was based on the Reporting Model for the disclosure of non-financial information required by Directive 2014/95/EU, proposed by the Portuguese Securities Market Commission [40], according to which CSR actions may fall into the following areas: environmental; social and tax; employee, gender equality and non-discrimination; human rights; and combating corruption and bribery attempts.

TABLE I. SECTIONS OF THE ANNUAL REPORTS

Abbreviation	Description
CHAIR	Chairman's messages.
MNGR	Management report (excluding sustainability/non-financial information)
GOVD	Corporate governance disclosures.
SUSTD	Sustainability/non-financial information (in the management report or in a separate report).
FSTAT	Financial statements.
AUDIT	Assurance/audit reports.

TABLE II. LIST OF WORDS

Corona#
Covid#
Epidemic
Face mask
Hand Washing
Infectious
Isolation
Lockdown
Outbreak
Pandemic
Pneumonia
Quarantine
Reopen
Respiratory
Safety measures
Sars-cov-2
Social distancing
Virus
Working from home

#### IV. RESULTS AND DISCUSSION

##### A. Pandemic-related disclosures in the sections of the annual reports (RQ1)

Table III presents the total word count, for each of the years analyzed, noting a considerable increase from 2019 to 2020. In both years the most frequently mentioned words were "Covid" and "pandemic". The words "Lockdown" and "working from home" stand out for their increase from 2019 to 2020, witnessing the lockdowns enacted throughout the year and the resulting compulsion to work remotely. Non-tabulated results show that, in both years, the entity recording the largest number of words was a bank.

TABLE III. PANDEMIC-RELATED WORDS DISCLOSED

	2019	2020
Corona#	37	85
Covid#	141	1618
Epidemic	11	22
Face mask	0	3

Hand Washing	2	3
Infectious	0	10
Isolation	18	49
Lockdown	3	186
Outbreak	18	93
Pandemic	136	2221
Pneumonia	0	3
Quarantine	3	25
Reopen	8	32
Respiratory	6	7
Safety measures	6	19
Sars-cov-2	2	25
Social distancing	1	33
Virus	34	110
Working from home	2	106
<b>Total</b>	<b>428</b>	<b>4650</b>

Table IV presents the total number (and percentage) of words in each section of annual reports, respectively, for the years 2019 and 2020.

TABLE IV. PANDEMIC-RELATED WORDS DISCLOSED BY SECTION

Sections of the annual reports	2019		2020	
	N	%	N	%
CHAIR	39	9%	164	3%
MNGR	130	30%	1750	38%
GOVD	6	2%	171	4%
SUSTD	31	7%	1450	31%
FSTAT	150	35%	1010	22%
AUDIT	72	17%	105	2%
<b>Total</b>	<b>428</b>	<b>100%</b>	<b>4650</b>	<b>100%</b>

In year 2019, the results suggest that most of information on Covid-19 was disclosed in the financial statements section. This evidence is in line with the use of the Notes to the financial statements to disclose Covid-19-related information as a subsequent event in the early stage of the pandemic [7] and with the recommendations of the Portuguese Standards Board, concerning the preparation of the financial statements for the year ending 31 December 2019 [6].

The total number of words increased from 428 in 2019 to 4.650 in 2020, which was already expected considering that it was in 2020 that the consequences of the pandemic became visible. In 2020 it was the management report that recorded the highest number of words related to the pandemic, suggesting that disclosures related to business evolution, prospects, risks, and uncertainties, have come to consider the pandemic context. By analyzing the percentage of words in each section, we denote that it was the sustainability (non-financial) information section that observed the largest increase in the weight of Covid-19-related disclosures, from 2019 to 2020.

Since sustainability information can be presented in a separate report or in the management report, the results for the year 2020 show an increasing importance of the management report in communicating the effects of the pandemic, compared

to the notes to the financial statements, in line with the evidence found by [25].

*B. Disclosure of pandemic-related risks (RQ2)*

Table V presents the number of companies that provided disclosures on risks associated with the pandemic, for the year 2019 and 2020.

In 2019, most of companies disclosed market risks that stemmed essentially from the slowdown in the economy, due to the restrictive measures imposed. Operational risks refer to those that directly affect the daily businesses and operations of companies, such as managing the workforce and supply chain disruptions in a context of extended lockdowns, quarantines, social distance, work from home, border closures and strict travel restrictions. Financial risks are essentially related to credit risk and lack of liquidity.

In 2020 the number of companies disclosing pandemic-related risks increased. Several companies have identified operational risks related to cybersecurity, resulting from the increase in remote working and the massive use of computer networks. Regarding financial risks, the companies mention the increase in credit risk due to government regulations that prevent companies providing essential services from cancelling contracts for non-payment. Both in 2019 and 2020, the most disclosed risks in the context of the pandemic were market risks.

Companies not only described the risks, but also the strategies adopted to mitigate them, in particular, how they adapted their business models to the new context. Several companies mentioned setting up home delivery services, creating platforms for e-commerce, and investing in products related to the imposed sanitary measures.

TABLE V. COMPANIES DISCLOSING PANDEMIC-RELATED RISKS

Types of risk	2019	2020
Operational risks	7	11
Market risks	13	16
Financial risks	4	11
Government regulatory risks	3	4

*C. Pandemic-related CSR actions (RQ3)*

Table VI presents the number of companies that disclosed CSR actions implemented in the context of the pandemic, in the years 2019 and 2020.

In the 2019 only 6 companies disclosed the CSR actions in their annual reports, all of which related to employees. Specifically, companies describe the protocols introduced regarding hygiene measures taken, disinfection of spaces, promotion of remote working, and dissemination of Directorate-General for Health (Direção Geral de Saúde) recommendations on respiratory etiquette procedures, highlighting the brevity with which solutions were found by management to protect their employees.

In 2020, as the pandemic progressed, CSR actions disclosed regarding employees and social matters increased. Policies related to employees include guaranteeing their health and safety through the promotion of remote working, time mismatches, reduced travelling, and access to medical care. Social actions involve measures related to customers, suppliers, and projects supporting the community.

It should be noted that no company in any of the years disclosed information regarding human rights or combating corruption and bribery attempts.

TABLE VI. COMPANIES DISCLOSING PANDEMIC-RELATED CSR ACTIONS

Area	2019	2020
Environmental	0	1
Social and tax	0	17
Employee, gender equality and non-discrimination	6	17
Human rights	0	0
Combating corruption and bribery attempts	0	0

Table VII shows excerpts taken from the reports illustrating some of the CSR actions disclosed by the companies.

TABLE VII. EXAMPLES OF CSR ACTIONS DISCLOSED

Area	Disclosure
Environmental	“We are also part of the Race to Zero, a global coalition set up by UN Global Compact, the Science Based Targets initiative, and We Mean Business, to support a zero-carbon recovery that prevents future threats, creates decent jobs, and unlocks inclusive, sustainable growth.” [40, p. 14]
Social and tax	“Naturally, observing the impacts of the pandemic, Altri could not remain indifferent, and in this sense and with the purpose of promoting the well-being of the community, some actions were carried out, of which the offer of digital radiology equipment to the District Hospital of Figueira da Foz stands out, which reduces the time of diagnosis and the risk of infection, elevated in patients with the new coronavirus and the donation of portable computers to students in Constância and Torres Novas, tools that became extremely important for the effective continuity of studies in times of pandemic.” [41, p. 80]
Employee, gender equality and non-discrimination	“Internal medicine appointments were extended to digital channels, new conditions with the insurance company, within the scope of health insurances at employee’s choice, were negotiated, with enhanced coverage for Covid-19, and new benefits were designed to support employees in purchasing office and wellness equipment to create a comfortable home office. In addition, and considering the risks associated with remote work which may impact employee’s mental health, several webinars delivered by experts on emotional health and performance were held, also counselling sessions with psychologists and physical and mental well-being activities online were made available.” [42, p. 19]

## V. CONCLUSIONS

This paper analyzed the pandemic-related disclosures made by Portuguese listed companies in their annual reports. The results show that the section where more information on the pandemic was disclosed in 2019 was the financial statements, more specifically in the Notes, and the management report in 2020. The section that reported the largest increase in pandemic-related disclosures from 2019 to 2020 was sustainability information. The number of companies disclosing pandemic-related risks from 2019 to 2020 also increased, with the focus on operational risks and financial risks. Market risks are those mentioned by a greater number of companies in both years. As for CSR disclosures, as expected, it was the year 2020 that showed a greater number of companies with CSR actions, with the chosen areas being those related to employees, customers, suppliers, and the community.

Our results suggest that at an early stage of the pandemic, in the 2019 reports, Covid-related disclosures were shaped by external forces (institutional forces), specifically the recommendations of the Portuguese Standards Board and the Portuguese Securities Market Commission. In the 2020 reports, at a more advanced stage of the pandemic, the disclosures made were guided by the need for management to provide relevant information to stakeholders and legitimize their actions.

This study contributes to the knowledge of the disclosure practices of Portuguese companies in the context of the pandemic crisis, being a preliminary step towards further research on this topic in the Portuguese context. This work is not without limitations, which opens avenues for further research on more detailed aspects of the quality and quantity of information disclosed and on the specific characteristics of companies that may have determined these disclosures.

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