

ARTICLES

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DISSEMINATION OF INFORMATION ON SOCIAL RESPONSIBILITY BY COMPANIES IN THE PORTUGUESE STATE-OWNED BUSINESS SECTOR

Divulgación de información sobre responsabilidad social por parte de las empresas del sector empresarial estatal portugués

Divulgação de informação sobre responsabilidade social pelas empresas do sector empresarial do estado português

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ABSTRACT

The aim of this study is to ascertain the extent to which information on Corporate Social Responsibility (CSR) is disclosed by companies in the state business sector in Portugal, through a content analysis of their websites. It seeks to contribute to those Sustainable Development Goals (SDGs) that promote transparency, good governance, sustainable economic growth and partnerships. The results show that the overall disclosure rate is 69.01%, demonstrating that the companies studied disclose information on CSR. However, the information disclosed through websites in the area of social responsibility and ethics, both mandatory and voluntary, still needs some improvement.

Keywords: social responsibility, state-owned business sector, information disclosure, Portugal, websites.

RESUMEN

El objetivo de este estudio es conocer el grado de divulgación de información sobre responsabilidad social empresarial (RSE) por parte de las empresas del sector empresarial estatal en Portugal, a través de un análisis de contenido de sus páginas web. Persigue contribuir a aquellos objetivos de desarrollo sostenible (ODS) que promuevan la transparencia, la buena gobernanza, el crecimiento económico sostenible y las alianzas. Los resultados muestran que, el índice de divulgación global es del 69,01 %, lo que demuestra que las empresas estudiadas divulgan información en materia de RSE. Sin embargo, la información divulgada a través de las webs en el ámbito de la responsabilidad social y la ética, tanto obligatoria como voluntaria, todavía necesita algunas mejoras.

Palabras clave: responsabilidad social, sector empresarial estatal, divulgación de información, Portugal, páginas web.

RESUMO

O objetivo deste estudo é conhecer o grau de divulgação de informação sobre Responsabilidade Social das Empresas (RSE) pelas empresas do Sector Empresarial do Estado em Portugal, por meio de uma análise de conteúdo dos seus websites. Pretende-se contribuir para os Objetivos de Desenvolvimento Sustentável (ODS) que promovem a transparência, a boa governação, o crescimento económico sustentável e as parcerias. Os resultados mostram que a taxa de divulgação global é de 69,01%, o que demonstra que as empresas estudadas divulgam informação sobre RSE. No entanto, a informação divulgada nos sites web no domínio da responsabilidade social e da ética, tanto obrigatória quanto voluntária, carece ainda de algumas melhorias.

Palavras-chave: responsabilidade social, sector empresarial do Estado, divulgação de informação, Portugal, sites web.

INTRODUCTION

Beyond their legal obligations, the following question arises: should companies adopt a socially responsible stance just because it is the right thing to do or, nevertheless, because it can bring them benefits? This question introduces a moral dilemma that is relevant to business ethics. On the one hand, a moral and socially responsible stance leads to a successful and long-lasting relationship between the company and its stakeholders, and there are arguments that a bad social, moral and ethical stance of the company can be detrimental to its sustainability, namely through loss of recognition. On the contrary, the adoption of environmental policies, such as the use of renewable resources or "in-house" policies, social responsibility, equality, job offers, training, and promotion opportunities, translates into recognition of the company and added value. In this line, [Casanova and Dumas \(2010\)](#) mentioned these opposing approaches: a mandatory approach to social responsibility, which should be implemented universally, which could lead to a complex procedure and therefore provoke an unwillingness and predisposition to participate in both the public and private sectors; and, on the other hand, a voluntary approach, which, although it could condition the achievement of results, would contribute to building trust between companies, governments, communities and the rest of the stakeholders.

On the other hand, whether more explicitly or less directly, this study involves essential issues evidenced in the Sustainable Development Goals (SDGs) defined by the United Nations (UN) in the 2030 Agenda, which identifies several goals directly related to the moral and socially responsible stance of companies. In turn, an increasing number of companies are promoting CSR strategies as a reaction to social, environmental and economic pressures, as a way to signal to various stakeholders (workers, shareholders, consumers, authorities) their commitment to sustainability with common benefits. It can therefore be said that this study aims to contribute to those SDGs that promote transparency, good governance, sustainable economic growth, and partnerships. The most relevant SDGs in this context are SDG 16 (peace, justice, and strong institutions), SDG 17 (partnerships to achieve the goals) and SDG 8 (decent work and economic growth).

Information disclosure has become one of the most important business decisions due to the advantages derived from it. Thus, perspectives such as agency theory consider information as a decisive factor in decision-making and in the managerial decision-making and control process ([Jensen & Meckling, 1976](#)). This practice, increasingly common in organisations, has been increasing due to the growing demand for information that has been generated in recent years ([Rodríguez et al., 2010](#)). In this context, information and communication technologies (ICT), especially the Internet, provide a way to disseminate information and thus interact with their stakeholders ([Moraes & Barbosa, 2015](#)).

The aim of this paper is to analyse the relevance that CSR acquires in companies of the state-owned business sector in Portugal, observing the information they disclose through their websites, as well as to know the accessibility to information and identify what actions they develop in the social, environmental, and economic dimensions. To this end, an exhaustive

analysis of the websites of the companies in the sample is carried out based on a series of indicators constructed using existing literature as a reference. In order to achieve the proposed objective, the content analysis technique is used. This technique is often used to identify, code and categorise models from primary data with the ultimate aim of providing the researcher with an objective and precise knowledge of a company or organisation through the resources that they disseminate, in this case, through their websites.

The work is structured as follows. After this introduction, a review of the literature on the evolution of CSR in Portuguese state-owned companies is carried out. This is followed by the methodology used and, finally, the results and conclusions of the study are discussed. The study involves, in addition, essential issues evidenced in the Sustainable Development Goals (SDGs) defined by the United Nations (UN) in the 2030 Agenda, which identifies several goals directly related to the moral and socially responsible stance of companies.

LITERATURE REVIEW

Social responsibility in the corporate public sector

The beginnings of the evolution of CSR are associated with periods prior to the Second World War. However, the exponential emergence of CSR began in the 1950s. In recent years, it has developed into a more progressive approach to the co-regulation of society (Steurer, 2010). This joint approach is due to the difficulty of governments alone having the capacity to fulfil their traditionally assumed responsibility to improve the living conditions of the population (Jamali & Mirshak, 2007). In this sense, social and environmental issues have also been placed in state-business relations. Public CSR policies began to incorporate multi-stakeholder strategies on a voluntary basis, a spirit that reflects how the ability of governments to regulate corporate actions was transformed into social and environmental issues (Albareda et al., 2007).

State-owned business sector enterprises are an important instrument of national economic policy that, according to Amaral (2015), aim to satisfy collective needs, ensuring parameters of quality, effectiveness, economy and efficiency of the human and financial resources available to them for the exercise of their attributions. These companies, owned or participated in by the State, are responsible for the management of the country's fundamental infrastructures and the provision of essential public services, which in broad terms means managing public money and assets. Therefore, good governance of SOEs is of utmost importance.

By Decree-Law no. 133/2013 of 3 October, the Portuguese Government established the principles and rules applicable to public sector enterprises, including the general bases of the Statute, in order to promote an improvement in the performance of the activity of public enterprises. This defines the principles and rules applicable to the supervision and control to which public sector companies are subject, as well as the good governance practices to be

observed, including the prevention of conflicts of interest, the adoption of a code of ethics and the disclosure of information. The NP4469-1:2019 (2019) standard introduces a very important concept in the framework of public companies, as managers of public affairs: ethical and transparent behaviour, integrated throughout the organisation, taking into account the expectations of stakeholders and the well-being of society.

Thus, public authorities have an important role to play in supporting and encouraging companies to conduct their business in a responsible manner, where the European Union has, in recent years, introduced a combination of voluntary and mandatory actions to promote social responsibility. In this framework, the European Commission reflects on social responsibility. On its website, you can find information on CSR, whose actions have a significant impact on the lives of citizens, whether through the products and services they provide, the jobs they create, working conditions, human rights or the environment. Therefore, citizens increasingly consider the role that companies play in terms of their impacts on society, whether positive or negative, and that, in addition, they carry out optimal management capable of mitigating these negative impacts, to be of growing importance.

Disclosure of information by companies is a crucial aspect of promoting transparency in the communication of organisations with their stakeholders. The disclosure of CSR practices, i.e., the voluntary provision of information beyond the mandatory ones, has become a differentiation strategy for companies (Conde & Gallardo, 2016). Large companies recurrently invest time and money in disclosing information on their social and environmental performance (Gamerschlag et al., 2011). On the other hand, the dissemination of information through websites is a practice increasingly adopted by organisations, allowing greater proximity between institutions and citizens (Joseph & Taplin, 2011; Moneva & Martin, 2012; Nevado et al., 2013; Pache & Nevado, 2019). This practice allows a better approach to citizens' needs, due to the increasing demand for information verified in recent years (Rodríguez et al., 2010).

There is a growing interest on the part of citizens regarding the transparency of entities that are part of the public sector in terms of sustainability (Montecalvo et al., 2018; Tavares & Rodrigues, 2018, 2019), as it is necessary for them to disclose this information (Nevado & Gallardo, 2016). Ultimately, the disclosure of social responsibility practices will depend, in most cases, on the sector in which it operates and its size. It is also important to know the most commonly used means to disseminate the information they adopt or intend to adopt, such as sustainability reports and their websites, thus becoming the main means of supporting disclosure. Therefore, publishing environmental, social and governance (ESG) metrics in real time or in regular reports, as well as conducting external audits to verify these sustainability practices, are some of the practical steps that companies can take to build trust and achieve these sustainability goals.

The literature review shows an increase in the number of studies focused on analysing the information disclosed in various sectors. In Spain, for example, we find works such as those by Pache and Nevado (2021), who analyse the SR of the websites of local councils with more than 5,000 inhabitants in the province of Malaga; or Prado-Lorenzo et al. (2012), who analyse 78

municipalities in Spain with more than 100,000 inhabitants. Other studies include Frías-Aceituno et al. (2013), who study the content of 25 websites of Brazilian, Colombian, Mexican, Portuguese and Spanish municipalities; Mir et al. (2015), who analyse the dissemination of information of 85 local governments in New Zealand; and Navarro et al. (2015), who analyse the websites of 21 local governments in Nordic countries.

Dissemination media: Reports and the Internet

In 1997, in the United States of America, the Global Reporting Initiative (GRI) published guidelines for the harmonisation of corporate social and environmental performance reporting, which would eventually be adopted as an international standard. These guidelines provide a reporting framework that includes interrelated social, environmental and economic issues to be considered in corporate reporting disclosures (Gamerschlag et al., 2011). Disclosures based on the GRI guidelines follow the triple bottom line (Elkington, 1994), as it combines economic, environmental and social indicators. Despite being globally accepted, it is a reporting model that is criticised for being too extensive, given the high number of indicators (84) involved and the cost of its elaboration following the GRI standards, which discourages some companies from adopting this standard (Bonsón & Bednárová, 2015).

According to Ribeiro et al. (2018), the Sector Supplement for Public Bodies (SSPA) also issued by the Global Reporting Initiative, is presented as more appropriate for the public sector, indicating a more uniform reporting structure considering the type of information that is increasingly needed to assess the economic, environmental and social performance of companies (Williams, 2011). On the other hand, as far as the public corporate sector is concerned, Portugal, in its Decree Law 133/2013 of 3 October 2013, obliges public companies to disclose various information regarding their social performance:

- (Art 44) disclosure of the company's governance structure and accountability;
- (Art 45) annual report on transparency, i.e. on how the corporate social responsibility policy has been fulfilled;
- (Art 46) annual report on the occurrence, or risk of occurrence, of acts of active or passive corruption as defined by the Council for the Prevention of Corruption - Law no. 54/2008 of 4 September;
- (Art. 47) disclosure, by all employees, customers, suppliers and the general public, of the adoption of codes of ethics that provide for ethical and deontological behaviour;

Conde and Gallardo (2016) admit that these reports are among the most sought-after sources of information for academic research. However, in an increasingly modern world, it is important

for stakeholders to have quick access to this information, for which ICT is a privileged vehicle to obtain it in a more convenient and faster way for users. At the national level, Decree Law No. 133/2013 already advocates, through its Article 53, that public disclosure information is disclosed on the website of the Technical Unit, but also on the website of the company itself, with access to this information being free and open. In this way, each company reports annually to the state shareholder and the general public on the way in which its mission has been carried out and the degree of compliance with its objectives, as well as on compliance with its social responsibility policy.

The objective of transparency in the management of SOEs through the legal recommendation of the duty of information through the Internet is in line with the observation of Nevado and Gallardo (2016), in which ICTs have been contributing to a greater dissemination of the public information of organisations through their websites. As technological development and its contribution to communication increase, it is also becoming increasingly necessary to position technological tools as a source of information, and companies must bet on the Internet as a platform for disseminating information that can be useful to all stakeholders (Albitar, 2015).

The dissemination of information has been increasingly transmitted through new media and technological formats, so the Internet is increasingly becoming a key element for the dissemination of information (Bonsón et al., 2012). Moreover, new technologies are emerging as a means to facilitate the transmission and dissemination of information between companies and their stakeholders (Nevado & Gallardo, 2016). Companies now have an auxiliary means to share information, in a direct, instantaneous and bidirectional communication, to the point that, in most cases, *feedback* or reaction can be received from the readers who access the information.

METHODOLOGY

CSR issues cut across society and all sectors of activity. For this study, 24 companies were selected from the Portuguese state business sector, based on a criterion of diversity of sectors, such as finance, transport and infrastructure, culture, fishing, water and sanitation, and information, among others. Adding a regional affinity criterion to the diversity criterion, preference was given to companies with a presence in the Setúbal district, due to their headquarters or operations in this region. All these companies have institutional websites, which were analysed for evidence of their social responsibility practices. In some cases, some of the information is available on the website of the parent company, such as, for example, the Águas de Portugal website, which hosts information from other affiliated companies - Águas de Santo André, Simarsul and eleven other companies. In these cases, some of the information, such as that related to contracting, is hosted on the parent company's site, and the user is directed to that page. For the purposes of this study, the information is considered to be provided by the company itself. Data can

be obtained via the companies' corporate websites (all data can be made public and used by other researchers, as an open science format is being adopted). Although all the companies in the sample have institutional websites, the way of presenting information related to social responsibility is not standardised and, in most cases, it is aggregated in accounts or management reports, some of them scanned in image format and therefore difficult to search or even read, a factor that detracts from the potential of this means of communication, capable of responding to criteria such as the quality of the information provided by the companies.

Once the sample was defined, we proceeded to the content analysis of the websites of the selected companies, a method used in other research of identical nature, such as Larrinaga and Pérez (2008), Bravo et al. (2012), Kuo et al. (2012), Andrikopoulos and Krikilani (2013), Nevado et al. (2013), Nevado and Gallardo (2016) and Carvalho et al. (2018), among others. The originality of the study lies in the analysis of company websites, unlike the study by Tavares and Rodrigues (2019), where a CSR disclosure index was constructed from the sustainability reports of 58 public sector entities. The study is carried out over the period from May to December 2021, using a questionnaire proposed by Nevado and Gallardo (2016). The adaptation of the questionnaire resulted in a total of 87 indicators divided into five axes of analysis (Table 1). The process used to analyse the level of CSR disclosure was to identify the presence or absence of the item disclosed by the company studied, i.e. a dichotomous scale where a value of 1 is assigned if the item is disclosed by the company, or 0, otherwise (Carvalho et al., 2018; Frías-Aceituno et al., 2013; Gandía & Archidona, 2008; Nevado et al., 2013; Pache & Nevado, 2020; Pache et al., 2022; among others).

Table 1. Scoreboard

Axis of analysis	Number of indicators	Index weight	Weighting
1. General Information	24	27.6 %	20 %
2. Social Information	24	27.6 %	20 %
3. Procurement of Public Works and Services	7	8.0 %	20 %
4. Economic Information	16	18.4 %	20 %
5. Environmental Information	16	18.4 %	20 %
Total	87	100 %	100 %

Note: Adapted from Nevado & Gallardo, 2016.

The aim of the present study is to analyse the responsible information provided by Portuguese state-owned companies from their websites, using the content analysis technique. Therefore, the following research questions have been posed: 1. Do Portuguese state-owned companies disclose responsible information through their websites? 2. What is the extent of the information disclosed? 3. In order to analyse the degree and type of responsible information,

disclosure indices are constructed based on those proposed in the studies by Nevado et al. (2013) and Nevado and Gallardo (2016), and developed by Carvalho et al. (2018). These items are based on research works on information dissemination in local administration, such as Navarro et al. (2010) and Nevado et al. (2013). In view of the above, a measurement of information disclosure in SR is carried out in two phases. First, the percentage of total disclosure of each company with respect to each dimension (IDX) is evaluated. Then, another index is calculated in order to obtain the total information disclosure of each company (IDE). Secondly, the total disclosure of each item established with the indicator (IDI) is obtained, which allows the elaboration of a new indicator for each of the dimensions (IDD). Finally, the percentage of total disclosure of the sample (TDI) is calculated (Table 2). In addition, an internal consistency analysis has been carried out through Cronbach's alpha coefficient (Cronbach, 1951), and a value of 0.872 has been obtained, which indicates a high reliability with respect to the proposed indicators, since its value is higher than 0.7 (George & Mallery, 2003, p. 231).

Table 2. Disclosure Indices

Indices	Concept	Expression
Disclosure index per company per axis of analysis (IDX)	Measures the percentage of total disclosure of each company (j) in each dimension (X)	$IDX_j = \left(\frac{\sum_{i=1}^M (A_{ij})}{M} \right) * 100$
Disclosure index per company (IDE)	Measures the total disclosure of each company (j) in terms of the dimensions (X) analysed	$IDE_j = \sum_{i=1}^B (IDX_j * \gamma)$
Disclosure index per company (IDI)	Measures the percentage of companies that report each item	$IDI_i = \frac{\sum_{j=1}^N (A_{ij})}{N} * 100$
Disclosure index by dimension (IDD)	Measures the total disclosure of all companies for each dimension	$IDB_i = \frac{\sum_{j=1}^M (IDI_i)}{m} * \gamma$
Total Disclosure Index (IDT)	Measures the total disclosure of the sample	$IDT = \sum_{i=1}^B (IDD_i)$

Note: Adapted from Carvalho et al., 2018.

M= number of items that make up each axis of analysis; D= number of axes of analysis; A_{ij} = takes the value of 1 if the characteristic that defines indicator (i) is present in company (j), and 0 otherwise; N= number of companies; γ = weight assigned to each axis of analysis, according to its number of indicators; X = each of the axes that make up the IDX disclosure index (G: general; S: social; C: recruitment; E: economic; A: environmental).

RESULTS

As can be seen in Figure 1 (see Table 3), there is heterogeneity in the values obtained in each of the axes of analysis, showing that the general and social information components are the

most disseminated, 21.02 % and 19.03 %, respectively, with information on procurement and public works being the least disseminated, with a value of 4.41 %. It is worth noting that this low level of disclosure of information on procurement and public works can be seen on company websites, although most companies use e-procurement platforms; however, this information is not made available directly on the company website, and the use of e-procurement platforms requires additional registration and searching, a process which makes the information less available or more difficult to obtain. This is followed by the components of disclosure of information on economic aspects, with 13.79%; and the environmental aspect, which, with 10.49%, reflects little concern for a fundamental issue of our times. In fact, the commitment of companies to the social, economic and environmental dimensions is fundamental for sustainable economic development, whether in the perspective of the triple bottom line based on these three dimensions (Elkington, 1997 as cited in Conde & Gallardo, 2016) or in a perspective of the strategic importance of social responsibility in corporate management (Hoo & Olaerts, 2011 as cited in Conde & Gallardo, 2016).

Table 3. Disclosure indices by item and by axis of analysis

Axis 1: General Information		IDI
1.1	There is an area on the website dedicated to SR only	79.17
1.2	The person responsible for the sustainability area is indicated	95.83
1.3	The priorities and strategies to be achieved in the area of sustainability are made known	62.50
1.4	Discloses information on company developments, achievements and failures in this area	79.17
1.5	Biographical details of the chairman and members of the executive body are published.	95.83
1.6	The email addresses of the president and members of the executive body are published.	4.17
1.7	The salaries of the president and the members of the executive body are published	79.17
1.8	Regulations on the prevention of conflicts of interest, prevention of corruption risks and related infractions are published	91.67
1.9	The register of interests or conflicts of interest of the chairman and executive members is published.	79.17
1.10	Representation expenses of governing bodies are published	95.83
1.11	Lists of members of governing bodies are published	79.17
1.12	Reports from the company's technical offices are published	95.83

Continue

Table 3. Disclosure indices by item and by axis of analysis

Axis 1: General Information		IDI
1.13	Information on personnel selection processes is published	66.67
1.14	Service contracts are disclosed on e-recruitment platforms	70.83
1.15	Information on the different executive bodies, directorates and their functions is published	79.17
1.16	The company's code of ethics or good governance is published.	87.50
1.17	Monitoring reports on the application of ethical conduct are published	62.50
1.18	The calendar of meetings of the governing bodies or general management is published.	58.33
1.19	Identification of the person or body responsible	75.00
1.20	Governance programme is published	79.17
1.21	Management commitments made by the Board of Directors are identified	83.33
1.22	Information on adherence to social and environmental initiatives, such as Agenda 21, UN Agenda 2030, and UN Global Compact Network, is published.	70.83
1.23	Stakeholders and their relationship with the company are identified	87.50
1.24	Meetings, workshops, conferences, round tables or others with stakeholders are publicised	70.83
Disclosure index for axis of analysis 1 (IDB)		21.02
Axis 2: Social Information		IDI
2.1	There is a map on the company's own website	79.17
2.2	There is an internal search engine within the site	91.67
2.3	There are links to social networks	79.17
2.4	There is an information system on the updated status of the services provided (timetables, maps, status of the means made available).	75.00
2.5	On the website, there is the possibility to carry out administrative procedures, authorisations or licences (online) or to purchase services.	41.67

Continue

Table 3. Disclosure indices by item and by axis of analysis

Axis 2: Social Information		IDI
2.6	There is information on the company's suppliers (e-mail addresses, contact details, etc.)	33.33
2.7	The conditions (opening hours, prices, etc.) of the services provided are published.	70.83
2.8	There is a citizens' mailbox or a complaints and suggestions section	91.67
2.9	Information on personal training courses is published	54.17
2.10	News and highlights are published	95.83
2.11	A customer/supplier/investor support area is in place	75.00
2.12	Public employment offers are published	54.17
2.13	There is a participatory space for collecting opinions	70.83
2.14	Information on aspects related to the social area is published	83.33
2.15	Aids and subsidies granted are published	66.67
2.16	There is information on the awarding of social responsibility prizes or distinctions	50.00
2.17	Information is disseminated on community involvement actions in the field of social responsibility.	62.50
2.18	Information on partnerships with other entities, NGOs, and civil society	62.50
2.19	Participation channels exist, such as forums or chat services, via forms, complaints/complaints/suggestions	75.00
2.20	News and notices about the company's activities, nature and purpose are published.	100.00
2.21	Whistleblowing channel for unethical behaviour (whistleblowing)	75.00
2.22	Information on measures for reconciling work and family life	54.17
2.23	Information on measures to encourage employee participation in social responsibility activities	54.17
2.24	information on equal participation in recruitment, training, career advancement and management personnel	83.33
Disclosure index for axis of analysis 2 (IDB)		19.30

Continue

Table 3. Disclosure indices by item and by axis of analysis

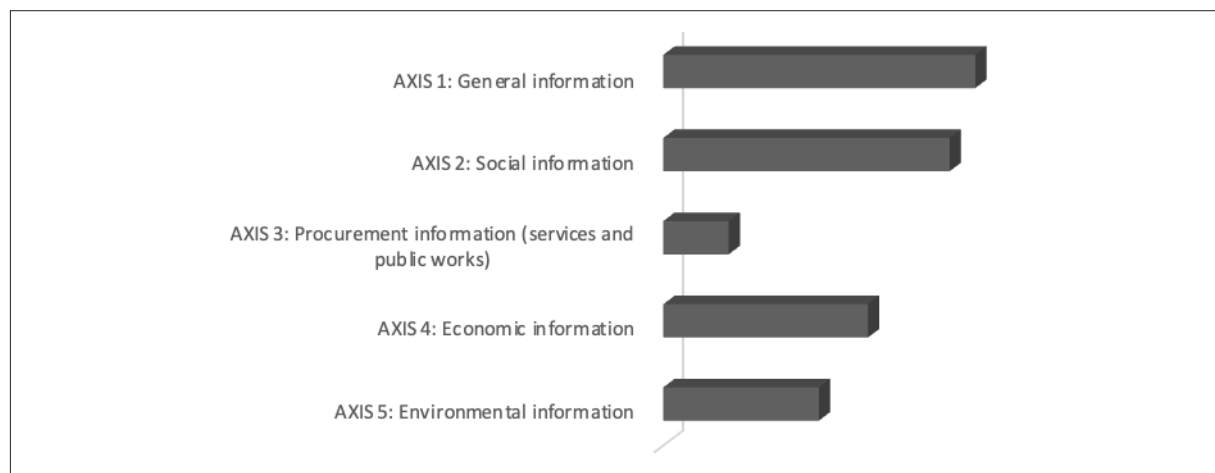
Axis 3: Procurement information (services and public works)		IDI
3.1	Goods and services procured without tendering (by direct award or other procedures), suppliers and values justifying this modality are published.	45.83
3.2	Ongoing tenders for the procurement of goods and services are published.	87.50
3.3	Bidders and competing entities are published	79.17
3.4	Signed contracts are published	79.17
3.5	Monitoring and/or evaluation reports on the performance of suppliers/service providers/contractors are published.	4.17
3.6	The number of contracts awarded by each supplier is published	66.67
3.7	Audit reports are published	20.83
Disclosure index for analysis axis 3 (IDB)		4.41
Axis 4: Economic information		IDI
4.1	The company's budget is disclosed	75.00
4.2	Balance sheet or consolidated balance sheet is published	91.67
4.3	Individual or consolidated profit and loss accounts are published	100.00
4.4	Management reports are published	100.00
4.5	Cash flow statements are published	100.00
4.6	Regular budget performance reports are published	87.50
4.7	Annual implementation of the Multi-Annual Investment Plan published	70.83
4.8	Annual investment plans are published	70.83
4.9	Reports on budget modifications	83.33
4.10	List of suppliers' debts published	50.00
4.11	Lists of bank loans and their maturities are published	37.50
4.12	Debts / other accounts payable are published	87.50

Continue

Table 3. Disclosure indices by item and by axis of analysis

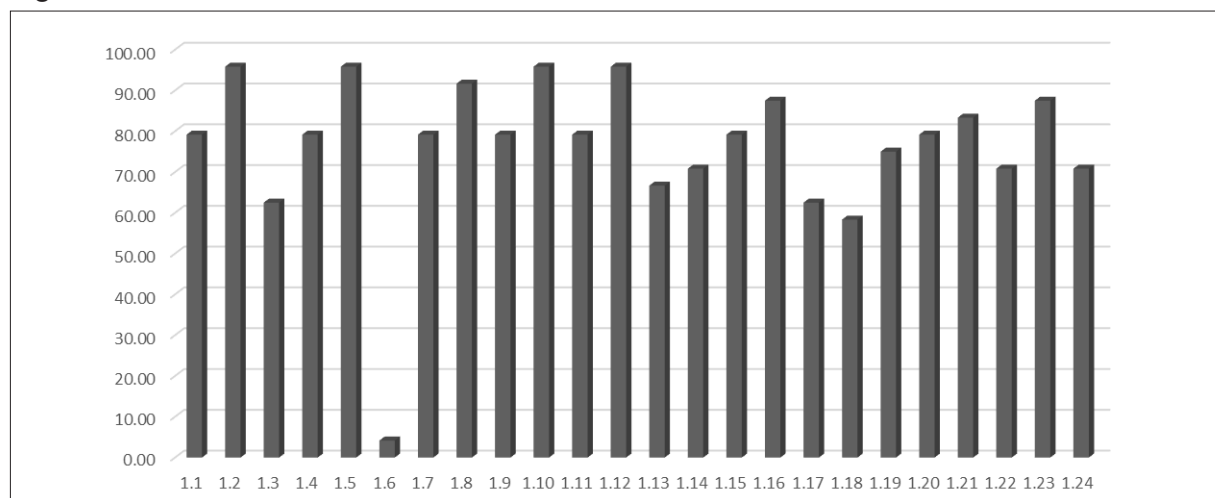
Concludes

Axis 4: Economic information		IDI
4.13	Information on debt development is provided	91.67
4.14	Grants received and allocated are published	66.67
4.15	Tax revenues for services provided by the company are published.	29.17
4.16	Lists of the value of services provided by the company are published.	58.33
Disclosure index for axis of analysis 4 (IDB)		13.79
Axis 5: Environmental information		IDI
5.1	Environmental status update	58.33
5.2	Dissemination of initiatives undertaken to mitigate environmental impacts	83.33
5.3	Information on the degree of reduction of environmental impact is made public	50.00
5.4	Dissemination of measures taken to increase energy saving	75.00
5.5	Information on initiatives to promote efficient energy consumption	66.67
5.6	Information on the impact of previous initiatives on energy saving	50.00
5.7	Information on total environmental expenditure and investments	62.50
5.8	Actions to promote environmental awareness among citizens	58.33
5.9	Information on energy consumption	66.67
5.10	Information on total water consumption	66.67
5.11	Information on penalties and non-compliance with environmental legislation	16.67
5.12	Information on total greenhouse gas emissions	45.83
5.13	Information on environmental policies is disclosed	75.00
5.14	Information on the environmental management system is disclosed	50.00
5.15	Information on environmental awards is available	37.50
5.16	Information on environmental pollution (atmospheric, acoustic, maritime) is disseminated.	50.00
Dissemination index for axis of analysis 5 (IDB)		10.49

Figure 1. Dissemination by Axis of Analysis

Note: n:24

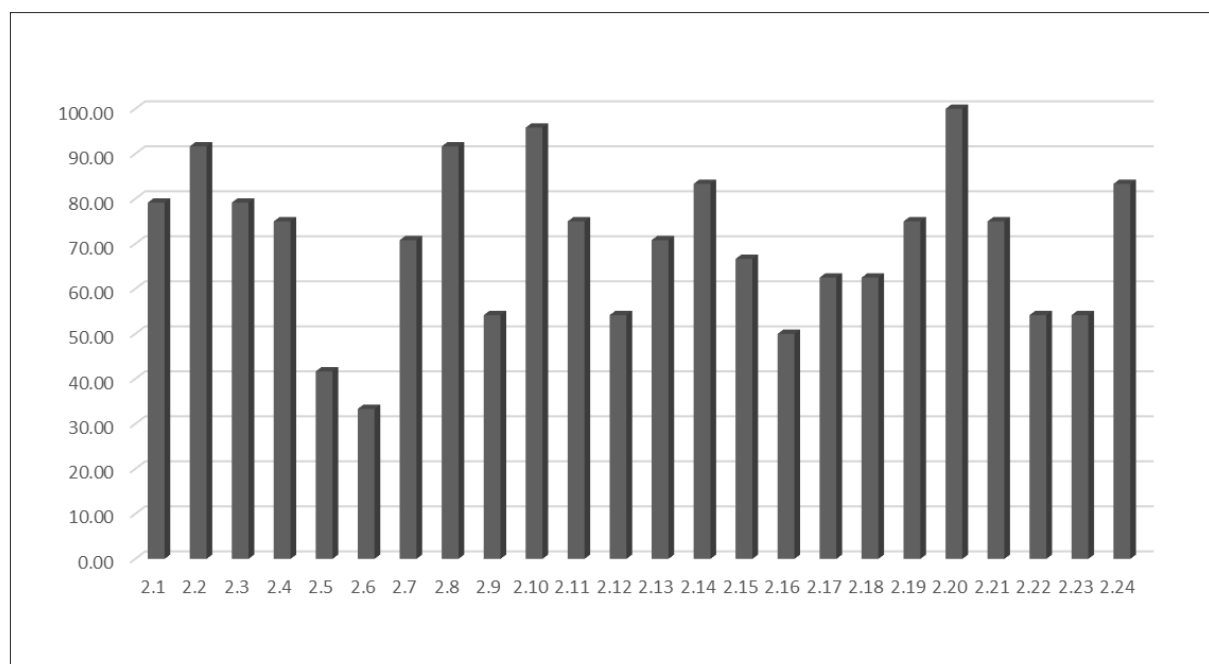
The index of disclosure by item (IDI) allows us to know, in each axis of analysis, the availability of information, the percentage of companies that disclose each of the items analysed. With regard to axis 1, general information (Figure 2), most companies disclose information on their websites about the code of ethics (87.5%), conflict of interest prevention rules (91.67%), biographical details of the chairman and members of management (95.83%), management commitments (83.33%) and the identification of stakeholders (87.50%). In contrast, only 4.6 % of companies disclose the e-mail address of the Chairman and members of the Executive. 79.17% of companies disclose the salaries of the CEO and other members of management. Information on recruitment processes (66.67%), ethical conduct monitoring reports (62.50%) or sustainability priorities and strategies (62.50%) is disclosed by slightly more than half of the companies.

Figure 2. Axis 1. General Information

Note: n:24

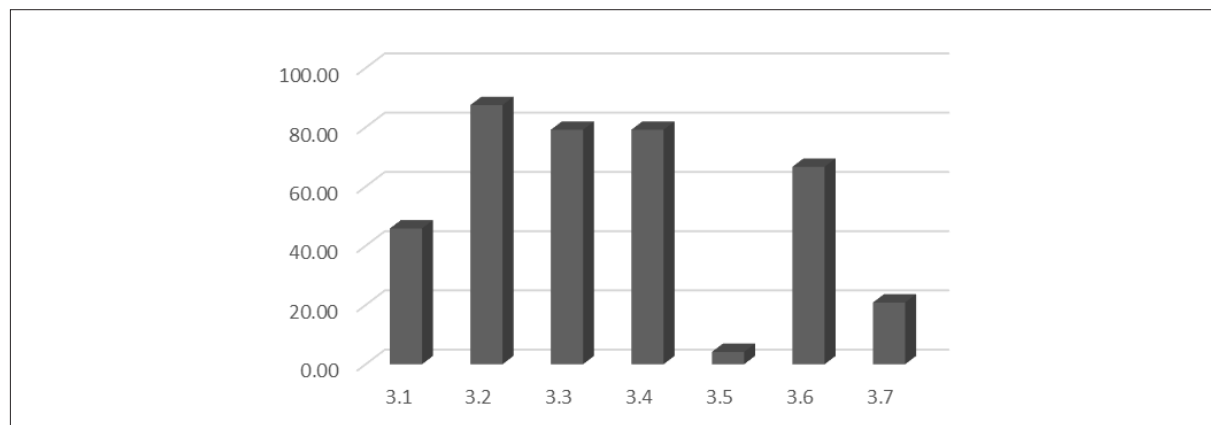
In the second axis, Social Information (Figure 3), it is verified that all companies (100 %) publish information on their websites about the nature and purpose of their activities. Most of the websites (91.67 %) offer an internal search engine and, in the same proportion, a citizens' mailbox or a complaints and suggestions section. Disclosure of aspects related to the social area and information on equal participation in recruitment, training and career progression are present in 83.33% of the information made available on their websites. Approximately half of the companies publish information on job offers (54.17%), community involvement actions in the area of social responsibility (62.50%), work-life balance measures (54.17%), measures to encourage employee participation in social responsibility activities (54.17%) and on the awarding of prizes or recognition in the area of social responsibility (50%). Only 41.67% of the websites allow administrative procedures or purchasing services online, and 33.33% of the companies publish information about their suppliers on their websites.

Figure 3. Axis 2. Social Information



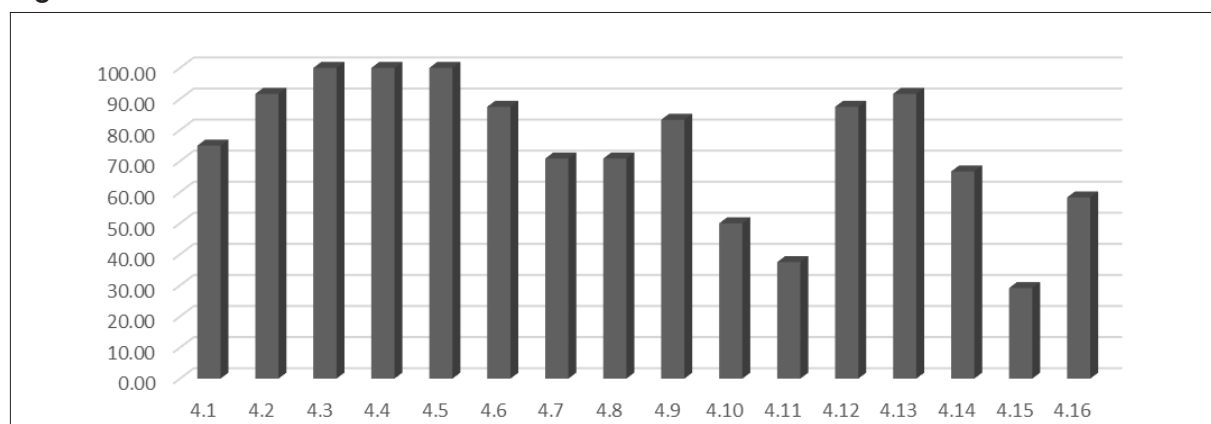
Note: n:24

Analysing Axis 3, Information on Procurement of Services and Public Works (Figure 4), we find that 87.5 % of the companies publish tenders for the procurement of goods and services on their websites, as well as 79.17 % of the companies publish competing entities and signed contracts, albeit on electronic procurement platforms. 66.67% of the companies publish the number of contracts awarded per supplier on their websites, and 45.83% publish goods or services procured without a tender. The audit reports are published by 20.83 % of the companies. Only 4.17 % publish monitoring or evaluation reports on the performance of their suppliers.

Figure 4. Axis 3. Information on Procurement of Public Services and Works

Note: n:24

As shown in Figure 5, in Axis 4, Economic Information, the disclosure rate for each item showed that the vast majority of companies disclose relevant economic information. All of them (100%) publish management reports, profit and loss accounts and cash flow statements; between 80% and 90% publish the balance sheet (91.67%), reports on budget execution (87.5%) and budget modifications (83.33%), debts to third parties (87.5%) and debt evolution (91.67%). Investment plans and multiannual investment plans are disclosed by 70.83% of companies. Half of the companies publish the list of debts owed to suppliers.

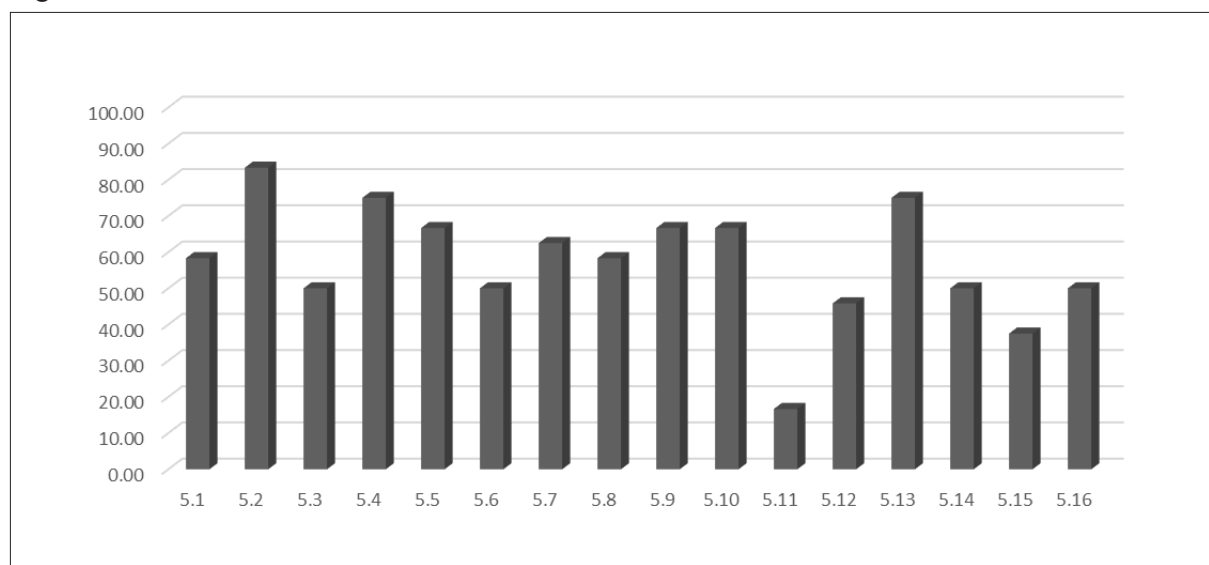
Figure 5. Axis 4. Economic Information

Note: n:24

As for the environment (Figure 6), the IDI calculation on the indicators established for the analysis showed an average slightly above 50 % in the disclosure of information on the environment. In fact, it is found that half of the companies (50 %) report online on the degree of reduction of environmental impact, the impact of previous measures on the reduction of energy consumption, and their environmental management system. However, 83.3 % of

the companies report on initiatives carried out to mitigate environmental impacts, and 75 % disclose information on environmental policies and also on actions carried out to reduce energy consumption. 66.67 % of the companies provide information related to topics such as initiatives to promote efficient energy consumption, water consumption or total energy consumption. 62.5% of companies provide information on environmental expenditures and investments on their websites. 45.8% of companies provide information on greenhouse gas emissions, and 37.5% on environmental awards.

Figure 6. Axis 5. Environmental Information



Note: n:24

The total disclosure index (TDI) obtained (Table 4) indicates that the companies in the sample report, on average, 69% of the total CSR information surveyed. The value obtained is therefore between half and three quarters of the total value expected from the disclosure to the community of information on the CSR practices of the companies in the sample. The TDI of each company allows for a ranking of the degree of information disclosure that companies provide through their websites. However, given that the selection of the sample was based on a criterion of diversity of economic activity sectors of the companies in the state business sector, it is beyond the scope of this study to establish a ranking of the companies in terms of the degree of disclosure on their websites.

With regard to the *ranking* of the companies analysed, Infraestruturas de Portugal and Caixa Geral de Depósitos stand out, followed by Comboios de Portugal and Rádio e Televisão de Portugal, all with an index of over 90%. At the bottom of the *ranking* are Parque Escolar, Baía do Tejo, ENATUR - Empresa Nacional de Turismo and ECOSAÚDE with an index below 50%. There is, therefore, a high level of responsible information disseminated through the companies' websites.

Table 4. Total disclosure index

	IDI	M	γ	IDD
Axis 1: General information	1829.17	24	27.6 %	21.02
Axis 2: Social information	1679.17	24	27.6 %	19.30
Axis 3: Procurement information (services and public works)	383.33	7	8.0 %	4.41
Axis 4: Economic information	1200.00	16	18.4 %	13.79
Axis 5: Environmental information	912.50	16	18.4 %	10.49
		87	IDT =	69.01

Note: Where M = number of items in each block; γ = weight assigned to each block.

CONCLUSIONS

Theoretical and social implications of the main research findings

With the aim of contributing to expanding the literature on the subject of CSR information disclosure through websites by companies in the state business sector, this paper aims to obtain evidence of the disclosure of this type of information through the data collected during the direct consultation of the institutional websites of these companies (Romano et al., 2014), as the Internet is increasingly becoming a key element for the dissemination of information (Bonsón et al., 2012). On the one hand, the disclosure of information in this aspect is framed within the duties of management transparency (DL N° 133/2013) in pursuit of the objectives of administration and public goods (Amaral, 2015), which companies in the state-owned business sector must observe. On the other hand, the disclosure of CSR practices can be seen as a differentiation strategy for companies (Conde & Gallardo, 2016).

Although all the companies in the sample have institutional websites, the way of presenting CSR-related information is, in most cases, aggregated in accounts or management reports, some of them scanned in image format and, therefore, difficult to search or even read, a factor that detracts from the potential of this means of communication, capable of responding to criteria such as the quality of the information provided by the companies (Conde & Gallardo, 2016). Due to the diversity of stakeholders, the quality of the information disclosed by companies takes on considerable importance for their reputation and for stakeholder decision-making (Conde & Gallardo, 2016), a factor that the Internet can facilitate as a means of communication between parties and as a reference source for searching for corporate information (Conde & Gallardo, 2016).

Based on the results obtained, the total disclosure index (TDI) shows that, overall, companies disclose more than half of the information on social responsibility investigated, a value of 69 % that reaches almost three quarters of the expected information, which will be proportional to the degree of proximity between companies and citizens (Joseph & Taplin, 2011; Moneva & Martín,

2012; Nevado et al., 2013) provided by the disclosure of information through websites. The axes of general and social information (40 %), economic information (14 %), environmental information (10.5 %) and information on public procurement (4.5 %) contribute heterogeneously to this result.

This heterogeneity is partly explained by company characteristics, such as branch of activity (Gamerschlag et al., 2011), size (Mohamad et al., 2011; Briano & Rodríguez, 2012 as cited in Conde & Gallardo, 2016), performance (Darmadi, 2010; Eccles et al., 2011 as cited in Conde & Gallardo, 2016), where potentially more polluting companies make more effort to disclose information related to social responsibility, and where others in areas such as service provision tend to disclose less information. Even so, the degree of information on the environmental aspect is considered to be quite low, given the importance and relevance of this issue today.

The study differs in the analysis of company websites, in contrast to the study by Tavares and Rodrigues (2019). The study does not corroborate the findings that show that it is the same for public companies; rather, the results of the study show that there is heterogeneity in the values obtained in each of the axes of analysis, proving that the general and social information components are the most disseminated, with information on procurement and public works being the least disseminated, and the environmental aspect reflecting little concern for a fundamental issue of our times. The study also suggests that potentially more polluting companies make more effort to disclose information on social responsibility, and that others, in areas such as service provision, tend to disclose less information.

Finally, information is considered to be generally available, but in an indirect and diffuse form, spread across several reports, making access indirect and inaccessible to a user/citizen with less availability or facility to search through the various reports and related pages where the information is found. Companies in the state-owned business sector overwhelmingly adhere to the guidelines established by the current law (D.L. 133/2013) by disclosing essential information through triple bottom line reports, through which they disclose information on social and environmental aspects in addition to economic information, according to the international standards Global Reporting Initiative.

However, on websites, data is not always available in a practical form that allows for quick and direct consultation by ordinary users of relevant information on corporate social responsibility in this sector. To this end, it would be interesting to that the design of websites goes beyond the function of a repository of the reports to which companies are legally obliged, which is natural and legitimate, but also provides direct links to more sensitive information, such as that related to the use of public money by companies in the state business sector and other issues related to corporate management and practice, evolving the information in a way that meets the demand for information by stakeholders in a more comprehensive way. Other ways to improve their CSR dissemination practices would be to use social networks, blogs or *newsletters* in an attractive way for the public, implement a specific microsite on the company's website with dynamic and updated content on CSR or include accessible materials (infographics, videos, clear language) for different audiences, among others.

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CONFLICTS OF INTEREST

The authors have no conflicts of interest to declare.

DATA AVAILABILITY

The entire dataset supporting the findings of this study is published within the article.

AUTHOR CONTRIBUTIONS

María Pache Durán: Supervision; Validation; Visualization; Writing – original draft; Writing – review & editing.

Luísa Cagica Carvalho: Conceptualization; Investigation; Methodology; Software; Supervision; Validation; Visualization; Writing – original draft; Writing – review & editing.

Bogusława Maria Barszczak Sardinha: Investigation; Supervision; Validation; Visualization; Writing – original draft; Writing – review & editing.