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**THE DETERMINANTS OF CORPORATE SOCIAL
RESPONSIBILITY: THE PORTUGUESE CASE**

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Universidade Lusófona de Humanidades e Tecnologias

Escola de Ciências Económicas e das Organizações

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*Far better is it to dare mighty things, to win
glorious triumphs, even though checkered by
failure... than to rank with those poor spirits who
neither enjoy nor suffer much, because they live
in a gray twilight that knows not victory nor
defeat.*

Theodore Roosevelt

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Resumo

Este estudo identifica os determinantes da responsabilidade social corporativa das organizações num período de três anos, com base numa amostra de oitenta e seis observações de empresas cotadas e não cotadas consideradas no *World Business Council for Sustainable Development* e na Bolsa de Valores Imobiliários Portuguesa.

Os relatórios de sustentabilidades permitiram a construção de um índice de responsabilidade social corporativa que coadjuvasse no modelo de regressão linear com o propósito de identificação dos determinantes. Os resultados demonstram que o proprietário, a dimensão, o crescimento e a governação têm uma influência positiva e significativa na explicação da responsabilidade social corporativa e que os determinantes como a experiência, o desempenho e a forma legal têm uma relação negativa com a responsabilidade social corporativa.

Os resultados deste estudo contribuem para o desenvolvimento da contabilidade de sustentabilidade e incentiva a discussão dos benefícios da divulgação dos relatórios de sustentabilidade e o impacto financeiro de investimentos relacionados com as atividades de sustentabilidade e que incite o interesse das pequenas e médias empresas uma vez que esta metodologia não se deve circunscrever em empresas de maior dimensão.

Palavras-chave: Contabilidade; Empresas Cotadas; Empresas Privadas; Responsabilidade Social; Determinantes.

Abstract

This study identifies the determinants of corporate social responsibility of organizations over a three-year period, based on a sample of eighty-six observations of listed and unlisted companies considered in the World Business Council for Sustainable Development and the Portuguese Real Estate Exchange.

The sustainability reports allowed the construction of an index of corporate social responsibility that would aid in the linear regression model with the purpose of identifying the determinants. The results show that owner, size, growth and governance have a positive and significant influence on the explanation of corporate social responsibility and that determinants such as experience, performance and legal form have a negative relation to corporate social responsibility.

The results of this study contribute to the development of sustainability accounting and encourage the discussion of the benefits of disclosure of sustainability reports and the financial impact of investments related to sustainability activities. This incites the interest of small and medium-sized enterprises since this methodology should not be confined to larger companies.

Keywords: Accounting; Listed Companies; Private Companies; Social Responsibility; Determinants.

List of Abbreviations

ARCH	Autoregressive Conditional Heteroskedasticity
BCSD	Business Council for Sustainable Development
CICA	Canadian Institute of Chartered Accountants
CSR	Corporate Social Responsibility
CUSUM	Cumulative Sum Test
EU	European Union
GDP	Gross Domestic Product
GRI	Global Reporting Initiative
GVA	Gross Value Added
OLS	Ordinary Least Squares
SIC	Standard Industrial Classification
SMEs	Small and Medium-Sized Enterprises

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1. Introduction

In recent years, the importance of Corporate Social Responsibility (CSR) for the economy in general and for firms in particular has attracted growing interest due to the competitive success and advantages it generates (Weber, 2008; Gallardo-Vázquez & Sánchez-Hernández, 2014). The business world is encouraged to work actively towards CSR because, in addition to providing a business opportunity in today's world, it frequently reflects the expectations of firms' customers, human resources, society and stakeholders (Mark-Herbert & Von Schantz, 2007).

The importance of CSR is notable, some authors demonstrate through their studies that there is a positive correlation between the practice of CSR and the sector of competitiveness between companies that will bring assertive gains in the financial arena (Weber, 2008) since the practice of CSR-related programmes could create strategic products for companies (Burke & Logsdon, 1996). Globally competitive companies that demonstrate their CSR practices can use 21st-century consumer knowledge to their benefit, which has heightened consumer concern about the type of service or product they are purchasing. However, the studies carried out in the target area of our analysis of CSR are scarce, there are few studies undertaken and those that exist are correlated with listed companies that is, the companies that have the most global competitiveness, and those that, as a rule, have characteristics that require them to implement the so-called CSR legal norms.

In the last few years, a discussion has evolved on corporate social responsibility in medium and large businesses in an attempt to understand how accounting can respond to the challenges of sustainable development. In light of this, this study analyses the determinants of corporate social responsibility in firms that stand out for their practices related to the global reporting index. In order to rule out effects due to differences in the regulatory environment, we focus on Portuguese firms.

Although medium-sized companies try to relate to sustainability, there are few companies that use the Global Reporting Index, so our study extends to public companies other than private, with an initial data set formed by eighty-nine private and public enterprises operating in Portugal. The following determinants are included in the research model: ownership structure, firm size, sales growth, experience, corporate governance, firm performance and legal form.

The main results provide evidence of large firms investing in sustainability management and external reporting to increase visibility and to inform stakeholders. They also demonstrate that the control of power in medium-sized firms could lead to less interest in adopting a business conduct that addresses sustainability. More specifically, our study reveals that firms with higher ownership concentration and sales growth characteristics have great difficulty in accepting changes leading to greater sustainability.

Sustainability accounting is taking its first steps, so we hope to contribute to its development and knowledge by presenting weights that explain its influence on the use of sustainable practices and encourage the discussion of the benefits of non-financial reporting. The financial impact of the investments related to sustainability activities may incite the interest of small and medium-sized enterprises, since this methodology should not be restricted to only the largest companies.

This study is structured as follows: after the introduction, section two lays out the theoretical framework of sustainability and accounting and develops the hypotheses of the determinants of sustainability, in section three we present the determinants of sustainability, in section four the methodology of the study is presented and the data collection process, variables and measurement are described, in section five the results are presented and in section six gives conclusions and suggestions for further research.

2. Theoretical Framework

2.1 Corporate social responsibility

2.1.1 Concept

The term corporate social responsibility (CRS) is used universally to describe the practice of good corporate citizenship. CSR comprises a number of corporate activities that focus on the welfare of stakeholder groups other than investors, such as customers, employees, suppliers and society.

There is no common definition of CSR. Davis (1973, 312) defines CSR as the firm's considerations of, and response to, issues beyond the narrowly economic, technical, and legal requirements of the firm to accomplish social benefits along with the traditional economic gains which the firm seeks. The European Commission (2011) defines CSR as a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis.

Corporate sustainability is a common term used in association with CSR. The activities of corporate sustainability are very similar to those of CSR but somewhat broader in scope. Corporate sustainability focuses on long-term shareholder value by incorporating the best practices in the following areas: ethics, governance, transparency, business relationship, financial return, product value, employment practice and environmental protection (Epstein, 2008).

Dahlsrud (2008) indicates in his study that the information on CSR is vast and that authors argue that it is related to simple programming and others, without any empirical proof, that it is as vast as we can imagine.

Although we know several definitions, it is worth emphasizing the titleholder of the modern administration Peter Drucker, the visionary that related social responsibility of the business with the main objective of an organization: profit making. This served as a base to cover costs in the medium term, emphasizing that if this social responsibility is not fulfilled, no other responsibility can be fulfilled (Drucker, 1984). Taking into account the existence of a business where the intention to maximize profit does not last, we can agree with this author since, as mentioned by the companies that do not generate profit, they will not have pre-position for the practice of philanthropy, a practice that will certainly create added value for the organizations and new business opportunities.

There are innumerable propositions which we can identify related to the development theme. Lantos (2001) considers that there are three different types of CSR (ethical, altruistic and strategic), Bowen's (1953) new knowledge is related to the creation of an obligation for top managers and managers regarding society so that they can act in a concerted way to reach their objectives (Rahman, 2011).

2.1.2 Measurement

According to previous literature (e.g. Galbreath & Shum, 2012; Montiel, 2008; Saeidi et al., 2015), there is no universal and cohesive method to measure CSR. Previous empirical studies developed indicator-based methods for this purpose. The CSR conceptualization presented by Carroll (1979) consists of four main dimensions of CSR (legal, economic, discretionary and ethical) in order to determine the firm's CSR orientation. This is considered the first attempt to capture the multidimensional nature of CSR and was subsequently developed by Maignan and Ferrell (2000, 2001) by ranking the instruments used to assess CSR. Quazi and O'Brien (2000) designed a scale with a two-dimensional model to measure attitudes to CSR and the results of implementing socially responsible actions.

More recent studies have used accounting and reporting tools to measure the CSR orientation of firms. Schaltegger, Kleiber and Muller (2002) identified and analysed 46 different tools and divided them into three dimensions: environmental, social and integrative. This method has been extensively used to measure sustainability in empirical studies (Schaltegger et al., 2002; Passetti et al., 2014). It develops and optimizes product characteristics and operational activities in the relationship between the economic value added, use of natural resources and the firm's objectives.

Some studies developed models to measure CSR in specific contexts. Veleva and Ellenbecker (2001) presented a tool to foster business sustainability based on indicators of sustainable production for the industry sector. Along the same lines, Azapagic (2004) developed sustainability indicators as a tool for performance assessment and improvements in the metallic, construction and industrial minerals sectors. Nordheim and Barrasso (2007) developed indicators for the aluminium industry and Acosta-Alba, López-Ridaura, van der Werf, Leterme and Corson, (2012) analysed sustainability by exploring new indicator configurations for agricultural land.

Other methods for measuring CSR use content analysis of financial and accounting documents, case studies, surveys, databases or indices. For example, Ullman (1985) examined

the extent of social disclosure by analysing annual reports, and Clarkson et al. (2008) developed a content analysis index to evaluate the level of environmental disclosure in sustainability reporting. Keeble, Topiol, and Berkeley (2003) employed case studies to explore the use of proxies for business sustainability. Passetti et al. (2014) used combined data, namely database and survey, to capture the environmental, social and integrative tools of sustainability accounting. In another study, regarding the disclosure of corporate social responsibility and value of cash holdings, Lu, Shailer and Yu (2016) use the binary variable to define whether the firm issued a standalone CSR report during the year to measure corporate social responsibility.

Recently, Gallardo-Vázquez and Sanchez-Hernandez (2014) developed an overall scale to cover social, economic and environmental dimensions by analysing the cause-effect relationship with performance and competitive success. The aim of this model was to develop a fairly complete scale by defining CSR as a variable that incorporates economic, social and environmental blocks. The authors applied structural equation methodology based on partial least squares path modelling. This measure of indicators that define CSR was used in various empirical studies to analyse responsible actions taken to upgrade the success and performance of firms (Gallardo-Vázquez & Sánchez-Hernández, 2014; Castilla-Polo et al., 2016; Junior et al., 2017; Sánchez-Hernández, Bnegil-Palacios & Sanguino-Galván, 2017; Sánchez-Hernández, 2015).

Previous studies on the relationship between accounting and sustainability argue that the concept of sustainability and the associated use of accounting have been deliberately simplified and oriented towards supporting the business interests of firms. Firms only adopt a sustainability approach if it can generate economic returns. In this regard, Milne, Tregidga and Walton (2009) claim that sustainability issues are managed exclusively for the purposes of maintaining control over natural resources and technologies and boosting economic efficiency. Schaltegger, Bennett and Burrit (2006) emphasize that the basis of financial reporting is the accounting information which transmits an organization's financial performance to its stockholders. Later it was necessary to make new changes that would allow a different accounting approach, that of management, and later, in a strategic way, the use of the term sustainability report which began to impact on issues such as the ecology, economy and social issues.

This new but not recent relationship between accounting and sustainability due to the growth of communication generated a strong growth in the area, and these reports for the

transmission of information related to management and accounting methods had a new foundation: sustainability (Schaltegger, Bennett and Burrit, 2006). According to Schaltegger and Wagner (2006), the performance of sustainability can also be analysed from two perspectives, the first related to an inside-out strategy since the strategy is the accounting-driver for sustainability reporting and the second from an outsider-in perspective, through reporting-driven sustainability accounting.

2.2 Legal Framework

2.2.1 Mandatory Requirements

The application of CSR by companies is so evident and necessary that regulators have decided to create legislation related to this matter. In Portugal, the first step in the creation of associated legislation was created in 1985, known as social balance (Azevedo, Silva & Oliveira, 2015).

The social balance is a supplement to the annual report that companies have to prepare whenever they have at least one hundred employees, at the present date this minimum number is ten elements. This additional report obliges companies to disclose non-financial information, namely: relationship between the organic composition and the other collaborators, health, safety at work, salaries and other related features.

Azevedo, Silva and Oliveira (2015) indicate that until 2010 the aforementioned document was deposited in the services of the Regional Labour Inspection and the Employment and Vocational Training Observatory, without any disclosure being made to any stakeholders. Subsequently, it was submitted to the Office of Strategy and Planning of the Ministry of Labour, Solidarity and Social Security, designated as the Single Report.

In 2003, in broad view, under a modernization directive 2003/51/EC, the European Parliament and the Council informed the whole European Community of the practice of including non-financial information when drawing up reports and accounts. This directive creates the need in organizations to provide environmental and social information in reports and accounts. However, its content can be considered voluntary because, the organic representation has free will and free domain as to its importance, materiality and detail (KPMG, 2013).

In 2007, during the Resolution of the Council of Ministers no. 49 of March 28, the so-called Principles of Good Governance was approved in order to encourage the adoption of sustainability practices in order to implement corporate models that allow the use of good practices in the area of sustainability through economic, environmental and social strategies.

Portugal, in line with the other European countries, took its first steps towards sustainable development through initiatives that marked the political evolution of the environment (Dias, 2009). Let us see its chronological evolution: in 1976, Article 66 entitled Environment and Quality of Life stated in number one that everyone has the right to a healthy, healthy and ecologically balanced living environment and the duty to defend it. Law number 11/87 of 7 April 1987 was adopted on the Bases of the Environment, which defined, among other things, the specific principles of prevention, balance, participation, recovery, cooperation and accountability of all individuals as public or private law collective.

In 1992, the documents of the earth Summit were ratified and the National Council for the Environment and Sustainable Development was established.

In 1997, there was a revision of the Constitution of the Republic, where once again the participation of the State in the country's sustainable development was reinforced.

In 1998, the Portuguese State affirmed its great challenge to sustainability, initiating the National Plan for Economic and Social Development.

In 2000 came the adoption of the Millennium Declaration, in which Portugal was firmly established in achieving the objectives of this initiative and created a group for reflection and support for business citizenship, in 2001, the Business Council for Sustainable Development called BCSD – Portugal was created.

In 2002, the Portuguese Business Ethics Association was founded at the Johannesburg World Summit, with Corporate Social Responsibility in Portugal emerging, the first annual conference of BCSD – Portugal was held in 2004 and the first guidelines related to the Global Reporting Index 2002 were launched in that year and another evolution was seen in the creation of the Portuguese Institute of Corporate Governance. Since then, there have been several national sustainable development strategies, including the introduction of social responsibility weeks, the launch of the corporate governance white paper in 2006 and the creation of new partners such as EPSIS – Entrepreneurs for Social Inclusion.

2.3 The theories around CSR

According to Reverte (2009), the empirical studies about CSR are related to different theories that support the perspectives of this theme, among which are highlighted: Agency Theory, Legitimacy Theory and Stakeholder Theory.

2.3.1 Agency Theory

Meckling and Jensen were the pioneers of agency theory, whose objective is the analysis of conflicts that arise in companies and that diverge from the interests of the agents involved (Martins, 2016).

This theory is most used and best suited to CSR, having been applied for the first time by Belkaoui and Karpik (1989). Two features of private firms can determine the extent of CSR, type I and type II agency problem: ownership concentration and the opportunity of executive entrenchment. The type I agency problem consists of the separation between ownership and control, which leads to a divergence between management and owner interests (Jensen & Meckling, 1976). These agency problems arise when asymmetric information coexists with divergent objectives between managers and shareholders. Managers with little ownership may have incentives to manage accounting figures so as to increase earnings-based compensation, relax contractual constraints, or avoid debt covenants (Healy, 1985; Holthausen et al., 1995), thus originating high agency costs for owners. The type II agency problem arises from conflicts between controlling and non-controlling shareholders, which can result in executive entrenchment and large incentives to report a weak financial position (Fama & Jensen, 1983). However, social performance expenditures reduce net income. Therefore, firms that prefer conducting and disclosing social performance are more likely to have lower contracting and monitoring costs, and to have high political costs. Belkaoui and Karpik (1989) suggested that the decision to disclose social performance is positively correlated with social performance, economic performance and political visibility, and is negatively correlated with contracting and monitoring costs.

2.3.2 Legitimacy Theory

According to O'Donovan (2000), the theory of legitimacy originated in 1975 through the empirical studies that related this theory to sociology and philosophy (Weber, 1966; Vidish & Glassmans, 1979).

This theory can be evaluated from a standpoint related to accounting since the agent (accountant) can direct the information to be provided by the companies to its stakeholders. However, this information is controlled by the company given the social pressures, the demand of consumers, suppliers and others (Dias & Pinheiro, 2014). The same authors indicate that from another perspective, we can relate this theory to another paradigm, which is related to sustainability by its implication in the dissemination of environmental information.

The previous opinion is corroborated by other authors, indicating that this theory is implicit in the push for companies to continue with successively new certifications related to values of society as a whole (Islam & Deegan, 2008). Thus, contextualizing this theory we can relate that the associated accounting information of socioeconomic indicators covers the society and is seen as a whole, a company that provides information disclosure in these two areas is clearly involved with society.

2.3.3 Stakeholder Theory

The concept of the stakeholder was defined by Freeman (1984) as any group or individual who can affect or is affected by the achievement of the firm's objectives (Freeman, 1984). This general definition was given greater precision by Mitchell, Agle and Wood (1997) who adopted several identification criteria, the two most basic of which are the power exerted over the company by these groups, and their legitimacy.

The first criterion, therefore, is power. It is a necessary condition to the extent that the strategy adopted towards the stakeholders is linked to the resources they control and to their degree of interdependence with the company. This dimension comes from Pfeffer and Salancik's analysis (1978) but was also taken up by Frooman (1999), Gioia (1999) and Trevino and Weaver, (1999).

According to these authors, all companies need resources possessed by external groups. In exchange, the groups demand that certain expectations be met, which is part of the power they exercise over the company in terms of dependence. The second criterion is the legitimacy of these stakeholders, which is their moral right, over and above the legal context, to intervene in the life of the company.

The neighbours of a company likely to pollute the environment, for example, expect that ecological standards are respected. They have the moral right to observe the company's

activities. However, this type of legitimacy alone is not enough and must be associated with power in order to lead to an authoritative relationship.

This approach on the part of the stakeholders leads to an interpretation of the theory as an extension of the agency theory, by placing these groups as principals. They include shareholders, creditors, employees, customers, suppliers, local communities and the public. The behaviour of these groups is therefore perceived as a constraint on corporate strategy. They are not intrinsically hostile to the firm but may become so if their interests do not converge. Freeman (1984) and Roberts (1992) for example, reveal that the role of the directors is to evaluate the demands of the different groups and to make them coincide with the company's objectives. The directors are thereby their agents contracting for the firm (Hill & Jones, 1992; Jones & Wicks, 1999; Gioia, 1999; Bowen, Ducharme & Shores, 1995).

The stakeholder theory is used in empirical and analytical analyses of the firm and of the environment in which it operates. The difficulty in defining the pressures of these stakeholders means, however, that the studies carried out in this field identify the pressure groups but do not measure the strength of their expectations (Lerner and Fryell, 1994; Marx, 1992; Soutar, McNeil and Molster, 1995).

2.4 The importance of sustainability reporting for enterprises

The importance behind the elaboration of sustainability reports of companies is well-known, and there are countless studies and publications which support this certainty. Anderson (2015), for example, indicated that investors have a greater appetite for these reports since it has become a medium and long-term objective which defines the structure of the business and enables the increase of certifications and the demand of investors.

A study carried out by the Ernst and Young (2013) shows that there has been an extremely positive evolution in the period between 2000 and 2011 in the elaboration and respective method of organization of these reports, where there is an increase of more than three thousand reports made available by the companies and, in 2013, 51% of these reports were drawn up in line with the GRI, 18% refer to GRI and 21% have no idea whether or not they evolved by any method.

The drafting of these reports has a positive impact as companies demonstrate the transparency and rigour of their practices to their stockholders as well as rooting a new business culture and competitive advantage vis-à-vis their peers (Ernst & Young, 2013). As expected,

there are differences in the intention of elaborating and disseminating sustainability reports, namely between private and public companies: private because they are more likely than their public counterparts to see reporting as an opportunity to manage risk and public since it is considered they are influenced by stakeholders to a greater extent than privately held companies, suggesting the increased influence of stakeholder perspectives (Ernst & Young, 2013).

Wu and Li (2017) recall a practice called green washing, that is, it is not always easy to know whether companies actually do what they say in their social reports or whether they are exaggerating. The existence of this dichotomy led them to carry out a study where they indicated that private companies are more willing to disclose information related to CSR and that, because of the emerging market pressures, public companies tend to reduce CSR-related efforts, excluding those that are brand owners, given the incentive that CSR-related practices can bring to their stakeholders.

It is clear that public companies also have an increased concern about CSR. However, this impact is related to the existence of brands and the impact of their practices on the perception of their consumers. Thus, it is well known that the shareholders of the public companies are agents with interest in the disclosure of these practices and, possibly, those that are more encouraged to do so.

However, the importance of disseminating CSR practices should not by itself be the only factor influencing their disclosure and from a factual assessment by the empirical study of Wu and Li (2017), we can identify that all public companies with the brand Cargo are those that are classified as environmentally responsible, when the Forbes list naming the ten companies with the best reputation in this area of 2017 is untangled: Lego, Microsoft, Google, Walt Disney, BMW Group, Intel, Robert Bosch, Cisco system and Rolls-Royce Aerospace.

Perrini and Russo (2009) indicate that there are different approaches related to CSR in small and medium-sized enterprises and large enterprises. In fact, the business structure in Europe, particularly in Portuguese society, is very concentrated on private companies, so it is considered that this segment of company structure has an important role in society, since they provide employment opportunities and are key players for the well-being of local and regional communities. Small entrepreneurs and entrepreneurs are pillars of society and it is necessary to support and motivate SMEs to develop in a sustainable way.

Private companies need to successfully address the forces that prevail for change if they are to survive and grow, meet expectations in creating investment and also respond to the development of sustainable corporate responsibility.

Although CSR is mainly discussed in the context of public companies, it also is a strategic tool to enhance the competitiveness of this type of companies. According to previous studies, private companies normally have the following characteristics: they are owner-managed, with concentration of ownership control in the founder, and they have successive generations of family owner-managers (Poutziouris & Chittenden, 1996). These characteristics are different from those of public companies. Private companies are interested in the long-term viability of their business and in preserving their family name. The specific impact of corporate social responsibility actions often cannot be expressed in hard facts and figures and it may take some time until they become manifest.

Generally, CSR can positively influence private companies' competitiveness by means of improved products and production processes, resulting in better customer satisfaction and loyalty. These activities target customers on the one hand and, on the other hand, business partners and suppliers. Additionally, CSR can positively influence private companies' competitiveness by means of higher motivation and loyalty of employees, resulting in creativity and innovation. A focus on employees includes the improvement of working conditions and job satisfaction, equal opportunities and diversity, and training and staff development.

CSR can influence a private company's competitiveness by offering a better position in the labour market and better networking with business partners and authorities, including better access to public funds due to a better company image. CSR activities targeted at society may refer to social and labour market integration at community level, improvement of the regional infrastructure, and donations to local community institutions.

Further, market-oriented CSR activities target the customers on the one hand and, on the other hand, business partners and suppliers. Respective initiatives include activities to improve the quality or safety of products, provision of voluntary services to the clients, fair pricing, ethical advertising, and contracting local partners. For example, the Spanish medium-sized manufacturing company Ascensores Jordá was founded in 1953 and follows an active subcontracting policy with its suppliers, establishing long-term relations with them and developing a number of collaborating activities in several fields such as quality control, risk

prevention, etc. In fact, the enterprise continues to maintain business relationships with their initial suppliers (EU, 2007).

In addition, Brunsael (2009) argued that activities associated with CSR have grown as they can be analysed as a competitive advantage for companies. In spite of a historical evolution between the CSR-SME dichotomies, we can identify that public companies have a structure that allows them to prepare practices with greater emphasis on their sustainable character.

Finally, CSR activities in the field of the protection of the environment focus on designing environmentally friendly products or production processes, an efficient use of resources, the reduction of waste and pollution, applying an ecological assessment to suppliers concerning their environmental standards. All workforce, society, market and environment activities have a positive impact on cost savings and increased profitability and increased sales, and consequently improve the competitive advantage of SMEs.

3. Determinants of Corporate Social Responsibility

The strong globalization of companies is one of the factors associated with the growing evolution of ethical issues, among which issues related to social responsibility, making a concise investigation of possible determinants of CSR associated with Portuguese companies.

Considering that this theme is still under development, we intend to enhance and contribute to its evolution in order to create added value for the areas under study and their impact on the Portuguese business fabric so that analysts can have new tools beyond the existing ones.

Hahn and Kühnem (2013) point out that an important communication channel within organizations is the dissemination of sustainability reports, since several stakeholders are pursuing different economic, environmental, and social interests. The study of Lamberton (2005) emphasised when they indicate that the contribution of sustainability accounting is made indirectly since the main objective outlined by companies is the measurement of sustainability performance as the basis of sustainability reports.

3.1. Ownership

The few empirical studies on CSR have analysed its relationship with ownership concentration. Existing empirical research based on agency theory states that ownership concentration leads to closer monitoring by the owners and this improves the quality of managerial decisions and, consequently, firm value. On the other hand, greater ownership concentration may also result in more management entrenchment (Morck, Shleifer & Vishny, 1988), which may not contribute to a greater alignment of shareholder and manager interests and thus increase agency problems.

In general, is easier to obtain and maintain an undiversified and concentrated equity position, which gives them power to seek private benefits at the expense of other shareholders. It is considered that companies characterized as "publicly exposed", in part those listed on the stock exchange, are more apt to submit sustainability reports as they are obliged to comply with certain regulations (Hahn & Kühnem, 2013). Brammer and Pavelin (2006) indicate that when a company's ownership is dispersed, its stockholders have less ability to directly exercise their authority over managers and therefore only monitor them.

Taking into account poor monitoring practice, the asymmetry between the investor and the company's management will become adverse and, as reported in the Hahn and Kühnem

(2013) research, as reported in the Hahn and Kunhem (2013) research adoption and quality of reporting is negatively influenced by a concentrated ownership structure.

We are aware that foreign shareholders may not be able to obtain relevant information, but the studies carried out by Cornier and Magnan between 2003 and 2005 show that the influence of foreign ownership on the issue of sustainability reporting is positive (Hahn & Kühnem, 2013). However, the same authors indicate the existence of at least two divergent opinions of Guzmán and Monteiro (2010) and Ertuna and Tukel (2010) that demonstrate that there is no relationship between ownership and its influence on the elaboration of sustainable practices such as the dissemination of reports. A positive relationship means that companies that present a higher degree of concentration have a higher social responsibility index.

According to previous literature, we expect ownership concentration to be positively and significantly related to corporate social responsibility.

3.2. Size

Empirical studies indicate that medium-size and large companies include the sustainability factor in their business plan as it translates into community building (Alpopi, Nicolăescu & Zaharia, 2015), where a suitable balance between economic, social and environmental purposes is verified, and the company must be meticulous about the tasks to be carried out, perspectives and values.

Cohen (2013) suggests that the impact of sustainability reports prepared by SMEs will be an increase in efficiency because budgets are very controlled. However, not all SME governance members consider that the additional effort in drawing up a sustainability report is not compensatory.

Previous literature demonstrates that public firms have strong management and are concerned about reputation and visibility. Environmental performance indicators are used for waste management, natural resources, air emission and cost reduction in gas and water use.

The study of Perrini, Russo and Tencati (2007) demonstrated that public firms invest in sustainability management and external reporting to increase visibility and to inform stakeholders. Deegan (2003) concluded that the benefits of implementing environmental management accounting in Australian firms depend on firm size. Public firms attract more attention from stakeholders, analysts and society and will therefore be more sustainable. Hahn and Kühnen (2013) indicate that the content of a sustainability report is extraordinarily

influenced by the size of the company, because the larger the company, the greater its responsibility towards the elements that surround it (employees, society, suppliers, among others).

The companies with greater exposure to their stockholders have been forced to take measures directly related to sustainability, which is a positive factor for the dissemination of information related to the area, but the relationship between the provision of information and its quality is not always taken into account (Hyršlová, 2014). If a positive relationship is found, it means that larger companies have a higher CRS rate.

According to previous literature, we expect firm size to be positively and significantly related to corporate social responsibility.

3.3. Growth

Firms with high growth opportunities have greater investment opportunities, but financing future investment implies a higher cost of capital. Therefore, growth firms may reduce their sustainability to avoid raising the cost of capital or to maintain access to capital. Sheu and Shih (2007) carried out a study where they questioned whether a company applying high ethical standards will become less profitable compared to a company that adopts the least standards but at a lower level. The answer to the question is indicated by the analysis carried out by Brickley et al. (2002) that indicated that this perspective is incorrect because the company that gives greater importance to the implementation of ethical behaviour can increase consumer confidence and demonstrate that its product/service is of extreme quality, fostering a possible increase in its sales. Their empirical results also demonstrated that the firms in the US with higher levels of sustainability are rewarded by consumers, among other factors, give them an increase in their volume of business.

Empirical studies found a positive relationship between growth and sustainability (Maigan, Ferrell & Ferrell, 2005; Maron, 2006; Wu, Tsai, Cheng & Lai, 2006). Chung, Lee and Koo (2005) did their research around the Environmental Kuznets Curve and indicated that the relationship between economic growth and the environment could be positive.

However, others found a negative or neutral relationship like Teoh, Welch and Wazzan (1999), who say there is a weak evidence that institutional shareholding increased when corporations divested, exemplifying through the change of investors, in which companies with

more institutional shareholders may receive a response of slightly positive but insignificant value and its explanation may be in the actions/operations of social responsibility.

According to previous literature, we expect sales growth to be positively and significantly related to corporate social responsibility.

3.4. Experience

Firms with a longer life expectation have countless reasons to foster socially responsible actions. They have high ethical standards, positive commercial values and their actual name may be the bearer of both reputation and a sense of responsibility and therefore help maintain their business sustainability. Hence, the number of years since the founding of the firm or the oldest of its predecessor firms is an important characteristic that represents the experience of the firms (Villalonga & Amit, 2006).

It is important to highlight that the fact that experience is considered as a positive factor in terms of sustainability, there may be indications that of this way of thinking because we have to consider that there may be management differences between family and non-family businesses. Gavana et al. (2016) analysed two hundred and thirty sustainability reports of non-financial family businesses in Italy through the Legitimacy and Stakeholders Theory with the integration of members of the organization (Social Emotional Wealth). We refer that legitimacy theory is a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system norms, values, beliefs and definitions (Shuman, J. 1995) and the stakeholders theory attempts to articulate a fundamental question in a systematic way: which groups are stakeholders deserving or requiring management attention, and which are not? (Mitchell, et al., 1997).

With reference to these two theories, the authors Gavana et al. (2016) concluded that family companies are more sensitive to the information transmitted in sustainability reports than non-family companies since the regulation is carried out by the analysis of motivational tests that affect the attitude of the family company to the disclosure of the reports that also incorporate the investors, employees and consumers in selecting that company or the one in which it will invest.

We can also associate the experience of a company with its culture and image, especially through the characteristics put forward by Alton (2017), who indicates that in the last twenty years the business culture has attracted more interest from stakeholders, associating

culture with two factors: identity and values. From a labour perspective, Alton (2017) considers that a strong culture will attract better talent, making its brand image through its employees since they end up transmitting positive impressions to their consumers. Thus, it is considered that the alliance between a company's culture and experience is a great step towards its success.

According to previous literature, we expect firm experience to be positively and significantly related to corporate social responsibility.

3.5. Governance

Steiner and Steiner (2006) define governance as overall control of business activities including formulation of corporate objectives, strategies, and management structure so that various stakeholder interests can be warranted. Associating this brief definition with that transmitted by Scotland's Leading Layers (2017) we can identify that it is a factor of extreme importance in the corporate management of any company because we are indicating that in the long term, the value of the company can have positive results that will have an impact, thereby reducing risk and increasing its reputation.

Legal compliance and proactive management of any environmental issues influence the use of environmental performance indicators. Specifically, the size of the board of directors can play a significant role in developing the sustainability policy. Adams and McNicholas (2007) found that the preparation of a sustainability report increases the analysis of environmental and social issues and, consequently, firms give greater value to environmental performance and strive to improve their business actions.

Although the term of governance is associated by other authors with terms such as myopia investments or incentive alignment and even company failures and accounting fraud, as reported by Walls and Berrone (2016), they consider that more and more corporate governance is applied by its members, which has a direct impact on monetization activities an impact on society and the environment. Contrary to what Walls and Berrone (2016) argue, shareholder concentration has a negative impact on the productivity of the companies, they are not concerned with sustainability because of the strategic inflexibility of the company in the attainment of time objectives in favour of the financial, and even convey that the presence of sub-committees dedicated to social and environmental rights is not able to guarantee that a company has a bad or good social and environmental management. This situation is not always found in companies whose board composition is defined by a specific CSR committee. On the other hand, other authors consider that the governance associated with sustainability, in addition

to creating wealth, generates growth that becomes a positive challenge to its members, bringing new levels of accounting not stagnated in existing laws and regulations that may arise, sustainability is part of the company's blood (Raut, 2008).

According to previous literature, we expect the number of directors on the board to be positively and significantly related to corporate social responsibility.

3.6. Performance

There is much empirical evidence about the relationship between sustainability and firms' performance. While some positive relationships were found, namely in attracting investment (Smith, 2005), improving financial performance (Barnett & Salomon, 2006) and financial returns (Barnett, 2007), others were negative or neutral (Galbreath & Shum, 2012). However, others suggested that companies with a family structure tend to obtain improved performance compared to counterparts (Walls & Marrone, 2016).

The study realised by Vijfvinkel, Bouman and Bouman (2011) indicated that companies that also focus on sustainability may have benefits in their financial performance and exemplified that a simple internal policy could reduce costs, such as the use of recyclable materials. They are also of the opinion that the productivity of employees can be improved by communicating environmental practices. Also in a positive light, the United Nations Environment indicates in a study carried out in 2014 that sustainability is increasingly intertwined with the financial performance of companies as stated by Evans et al. (2017) since they are more concerned about the underlying risks to less positive environmental practices. From a different perspective, Vijfvinkel et al. (2011) also indicate that the study by Wagner et al. (2001) showed a negative impact on some measures of the company's financial performance, namely return on sales or return on equity, finding a less positive relationship identified in the Jaggi and Freddman's study in 1992 where there is a weak relationship between sustainability and performance if we analyse short-term financial reports.

Other authors consider that there is no homogeneity between the financial and environmental performance of the company and try to contribute to an improvement in the area, presenting new models that reveal various ratios as indispensable for the calculation of the measure in question as the return on assets or return of equity (Lassala, Apetrei & Sapena, 2017). As we can ascertain, there are several opinions underlying the financial performance of companies and their relationship with sustainability and as indicated by Gaspar (2013) the relationship between sustainability and financial performance is a complex one since a financial

measure can be analysed in different ways and in return there is no standard measure for the measurement of sustainability.

Thus, according to the findings, better financial performance is a result of firms' increased sustainability and, therefore, according to previous literature, we expect firm performance to be positively and significantly related to corporate social responsibility.

3.7. Legal

The organizational structure of a company is as relevant as or more so than the other determinants presented, since the contextualization of organizations can be influenced by its composition.

We can relate legal form to ownership structure and even to the underlying theory of property theory, which has as its primary function the creation of incentives that allow business internationalization and, according to Demzets (1967), all associated costs and benefits of social interdependence are open windows to enhance outsourcing.

Previous studies related that the legal form of the companies differ according to their typology. As a general rule, an SME is characterized as a company whose legal form may, among others, be sole proprietorship or partnership, these companies are associated with the knowledge of the term boss. On the other hand, larger companies are generally companies whose leaders are anonymous represented by members of the board of these companies, who are represented not by the figure of the bosses but by the figure of an element to which is assigned the designation chief executive officer.

A company legally determined as public tends to publicly disclose practices designated as sustainable, creating even positions aligned with the CEOs of these organizations as opposed to private companies, often with family structures, which, despite concerns about social and environmental issues, prefer to put those practices intra-company or within its area of activity. According to previous literature, we expect that legal form to be negatively and significantly related to corporate social responsibility.

4. Methodology

4.1 Sample selection and data resources

The empirical study investigates determinants of corporate sustainability in Portuguese enterprises operating from 2014 to 2016 and it was necessary to analyse eighty-nine companies published in the list of Business Council for Sustainable Development (BCSD).

It was possible to manually obtain the necessary information contained in the Sustainability Reports of these companies to verify the use of the assumptions regarding the Global Reporting Index (GRI), together with additional information from the Amadeus and Wordscope databases.

Table 1 gives an analysis of the final sample, consisting of eighty-six observations. Among other factors, we highlight that the highest exclusion rate is related to the non-applicability of the GRI index by companies and with a higher concentration in private companies because of their representativeness in the sample.

Table 1 – Global Sample Composition

Reason for Exclusion	2014		2015		2016	
Panel A: All Firms	89	100%	89	100%	89	100%
1. Sustainability report						
1.1 There is no evidence of disclosure of the report	2	0%	2	2%	2	2%
1.2 The report is available but is not bound to Portugal	11	12%	13	15%	12	13%
1.3 The report is available but without GRI-related information	18	20%	15	17%	13	15%
2. Financial Information						
2.1 Without evidence of disclosure of accounting information	3	3%	3	3%	4	4%
2.2 Disclosed financial information more than five years old	0	0%	1	1%	1	1%
3. Other Reasons						
3.1 The company is a subsidiary of another already contained in this study	5	6%	5	6%	5	6%
3.1 It was not possible to obtain the information (errors/other)	25	28%	24	27%	17	19%
Final Sample	25	28%	26	29%	35	39%
Panel B: Public Firms	18	20%	18	20%	18	20%
1. Sustainability report						
1.1 There is no evidence of disclosure of the report	2	11%	2	11%	2	11%

1.2 The report is available but is not bound to Portugal	0	0%	0	0%	0	0%
1.3 The report is available but without GRI-related information	1	6%	0	0%	0	0%
2. Financial Information						
2.1 Without evidence of disclosure of accounting information	0	0%	0	0%	0	0%
2.2 Disclosed financial information more than five years old	0	0%	0	0%	0	0%
3. Other Reasons						
3.1 The company is a subsidiary of another already contained in this study	3	17%	0	0%	0	0%
3.1 It was not possible to obtain the information (errors/other)	1	6%	0	0%	0	0%
Final Sample	11	12%	16	18%	16	18%
Panel B: Private	69	80%	69	80%	69	80%
1. Sustainability report						
1.1 There is no evidence of disclosure of the report	0	0%	0	0%	0	0%
1.2 The report is available but is not bound to Portugal	11	16%	13	19%	12	17%
1.3 The report is available but without GRI-related information	17	25%	15	22%	13	19%
2. Financial Information						
2.1 Without evidence of disclosure of accounting information	3	4%	3	4%	4	6%
2.2 Disclosed financial information more than five years old	0	0%	1	1%	1	1%
3. Other Reasons						
3.1 The company is a subsidiary of another already contained in this study	2	3%	5	7%	5	7%
3.1 It was not possible to obtain the information (errors/other)	24	35%	24	35%	17	25%
Final Sample	12	17%	8	12%	17	25%

Source: Own Elaboration

Table 2 displays the distribution of the companies in the sample based on the SIC one-digit code.

Across every year of this study, the finance, insurance and real state code has the largest percentage (28% to 37%), followed by utilities (19% to 26%) and mining and manufacturing (17% to 20%). The trade and wholesale group and service group are the least significant and smallest (11% to 16%).

Table 2 – Composition of the Sample by SIC

Industry Designation	SIC	2014		2015		2016	
		N	%	N	%	N	%
Panel A: All Firms		25	100%	26	100%	35	100%
Mining and Manufacturing	0, 1, 2 and 3	5	20%	5	19%	6	17%
Utilities	4	5	20%	5	19%	9	26%
Trade and Wholesale	5	4	16%	4	15%	5	14%
Finance, Insurance and Real Estate	6	7	28%	8	31%	11	31%
Services	7 and 8	4	16%	4	15%	4	11%
Panel B: Public Firms		12	100%	14	100%	18	100%
Mining and Manufacturing	0, 1, 2 and 3	4	33%	4	29%	4	22%
Utilities	4	3	25%	3	21%	4	22%
Trade and Wholesale	5	1	8%	1	7%	1	6%
Finance, Insurance and Real Estate	6	3	25%	5	36%	8	44%
Services	7 and 8	1	8%	1	7%	1	6%
Panel B: Private		13	100%	12	100%	17	100%
Mining and Manufacturing	0, 1, 2 and 3	1	8%	1	8%	2	12%
Utilities	4	2	17%	2	17%	5	29%
Trade and Wholesale	5	3	25%	3	25%	4	24%
Finance, Insurance and Real Estate	6	3	25%	3	25%	3	18%
Services	7 and 8	3	25%	3	25%	3	18%

Source: Own Elaboration

The objective of this study is to analyse the determinants of corporate social responsibility in the firms. Sustainability reporting communicates a firm's environmental, social and economic results to external stakeholders in order to demonstrate its commitment to sustainability determinants and therefore increases the level of transparency.

The choice of the determinants of sustainability for this study is very important for the presentation of a linear regression model to determine the sustainability associated with the sample under analysis. The following are the independent variables used: ownership, size, growth, experience, governance, performance and legal.

Further, we will also indicate our dependent variable and the way in which it was determined.

4.1.1 Dependent Variable

Sustainability is the dependent variable of our study. We used a model developed by Faria (2010) in the context of a study related to the theme of social responsibility and the Portuguese reality based on GRI guidelines.

The GRI indicators (economic, social and environmental) are associated with the importance given by each entity through a classification between 0 and 4 that will reflect the degree of importance given by the company to the factors under analysis, in detail in Table 3.

Table 3 – Classification of Indicators GRI

Scale	Scale Meaning
Zero	The company does not refer to the indicator but it may be important to the activity;
One	The company refers to the indicator as not applicable to its activity;
Two	The company refers to the indicator but does not comply with it, does not consider it relevant or the value is void;
Three	The company refers to the indicator but does not implement it in its entirety or only has the intention of verifying the risk in compliance;
Four	The company refers to the indicator and applies it. There is a concise report and compliance with the company's activity.

Source: Own Elaboration

The authors of this model considered it important to use a weighting associated with each indicator of GRI factors, by the existence of indicators designated as essential and additional based on a classification assigned in the CICA study (2008). Thus, as implemented by Faria (2010), we use four measures illustrated in Table 4.

Table 4 – Classification of GRI Indicators

Classification	Weighting	Classification Meaning
Essential	Five	The information that must be disclosed as stakeholders need it to understand the company's activities;
Important	Four	The information that must be disclosed because it helps stakeholders interpret the activities of an organization and make the appropriate trade-off risk/return analysis in resource allocation decisions;
Desirable	Two	The information is usually disclosed since it facilitates stakeholder assessment and analysis of past performance and future perspectives;
Discretionary	One	The relevance of the information to the stakeholders depends on the industry or on the specific conditions of each organization.

Source: Own Elaboration

According to Faria (2010), it is understood that the greater the disclosure of companies about their CSR practices on the basis of GRI, the higher their level of CSR considered that the indicator was not checked since it was assumed that any company will make a point of disseminating its best practices and/or positive information.

In addition, it is important to identify relevant information and limitations described by the authors underlying the model in question: (i) due to the negative sense of some indicators, an adjustment was made in their description, changing indicators with positive references to behaviours that could be interpreted in a pejorative way in order to differentiate bad practices; (ii) the determination of the sectors of activity (SIC Code) may not be directly related to the main activity of the company, since the information contained in the management and accounts reports is mostly linked to the unincorporated entities; (iii) the lack of sustainability reports available for consultation and management reports and accounts led some companies to be withdrawn from the study.

Table 11 of the appendices provides the result of the elaboration of Faria (2010) duly adapted to this study. This table allowed us to gather the information contained in the sustainability reports of each company that apply the GRI measures.

The result obtained by calculating the dependent variable allows us to find the sustainability indicator with a minimum value of 3.41% and a maximum of 4.59% and a mean of 3.90%.

4.1.2 Independent Variable

Table 5 shows the independent variables associated with this study and the form of their calculation.

Table 5 - Variable Measurement

Variable Label	Variable Name	Variable Measurement
Ownership	Ownership Concentration	The percentage of shares held by the group of owners (Amadeus, Wordscope)
Size	Ln Assets	The natural logarithm of a firm's total assets at the end of year (Amadeus, Wordscope)
Growth	Sales Increase	Change in firm's total sales at the end of year "n" and "n-1" (Amadeus, Wordscope)
Years of Activity	Experience	The number of years since the founding of firm or oldest of its predecessor firms (Amadeus, Wordscope)
Governance	Governance	The number of directors of the board of the firm at the end of year (Financial statements)
Net Income	Performance	Net income divided by total assets (Amadeus; Wordscope)
SIC	SIC Industry	Industry dummy variable (SIC_0 takes the value 0 for SIC 0000 to 0999 and 0 otherwise; SIC_1 takes the value 1 for SIC 1000 to SIC 1999 and 0 otherwise; SIC_2 takes the value 1 for SIC 2000 to SIC 2999 and 0 otherwise; SIC_3 takes the value 1 for SIC 3000 to SIC 3999 and 0 otherwise; SIC_4 takes the value 1 for SIC 4000 to SIC 4999 and 0 otherwise; SIC_5 takes the value 1 for SIC 5000 to SIC 5999 and 0 otherwise; SIC_6 takes the value 1 for SIC 6000 to SIC 6999 and 0 otherwise; SIC_7 takes the value 1 for SIC 7000 to SIC 7999 and 0 otherwise; SIC_8 takes the value 1 for SIC 8000 to SIC 8999 and 0 otherwise) (Amadeus, Wordscope)
Year	Y	Year dummy variable (Y14 takes value 1 for the year of 2014 and 0 otherwise; Y15 takes value 1 for the year of 2015 and 0 otherwise; Y16 takes value 1 for the year of 2016 and 0 otherwise)
Legal	Legal Form	Legal dummy variable (Public companies take the value 0 when companies are listed on the stock exchange; unlisted companies take value of 1) (Financial statements)

Source: Own Elaboration

4.2 Research Model

The aim of this study is to analyse whether companies are concerned about sustainability and its impact on accounting. A regression analysis studies how dependent and independent variables relate to each other, more specifically how a dependent variable is influenced by the independent variable.

The model for the study is: Sustainability = Ownership + Size + Growth + Experience + Governance + Net Income + SIC n + Year + Legal + ϵ ,

where: ϵ is the residual term and sustainability is the results of the model developed by Faria (2010) in the context of a study related to the theme of social responsibility and the Portuguese reality based on GRI guidelines. The determinants are defined in Table 3.

5. Results

The evaluation of the results that we will present in the second part will be divided into two phases.

In the first, we present descriptive statistics to describe and summarize a set of data under analysis. In the second, the eighty-six observations of non-temporal data will be analysed as continuous quantitative variables in the following assumptions: (i) measures of central tendency; (ii) measures of absolute dispersion; (iii) relative dispersion measures; (iv) asymmetry measures; (v) kurtoses measures; and others.

The second is associated with a multiple linear regression model (MLRM) that will be presented using Ordinary Least Squares (OLS), a linear regression method used in econometrics and the most used in determining the parameters that apply to the model under study.

It should be noted that for this method to be reliable, the Gauss-Markov assumptions have to be met.

5.1 Descriptive statistics

Table 6 shows the descriptive statistics of the variables used in this study. These results are consistent with previous literature and show that midsize companies are not interested in changing their business conduct to improve sustainability, underlining their reluctance to adopt this principle (Cooper et al., 2011).

The level of ownership concentration in Portugal is high compared to others. This factor has an average of 94%, corroborating the studies presented by Morck et al. (1988), which in fact presented slightly lower values.

The size of the sample is around 11%, motivated by the number of directors of the companies that usually will be two elements. In a global outlook, we have 41 years of business experience.

The variables sustainability, growth, experience and performance adopt a positive asymmetry since the average of these weights is higher than the average. There is an inverse situation for the remaining variables, which adopt a negative asymmetry.

Table 6 – Descriptive Statistic

Variable	Mean	Median	Min	Max
Sustainability	3.90	3.89	3.41	4.59
Ownership	94.22	100	32.00	100.00
Size	11.27	11.69	5.71	14.89
Growth	13.59	1.50	(83.00)	938.00
Experience	41.08	33.50	1.00	141.00
Governance	1.93	2.00	1.00	3.00
Performance	8.36	3.00	(213.00)	538.00

Source: Own Elaboration

Table 5 shows that the variables have a low correlation, with a limited indicator of the threat of multicollinearity because none of the coefficients exceeds 0.30.

Table 7 - Correlation matrix based on Pearson's coefficients

	Governance	Ownership	Size	Growth	Experience	Net Income
Governance	1.000					
Ownership	(0.349)	1.000				
Size	0.280	(0.066)	1.000			
Growth	0.163	(0.406)	0.006	1.000		
Experience	(0,126)	0.014	0.192	(0.039)	1.000	
Net Income	0.003	0.001	0.013	0.018	0.010	1.000

Source: Own Elaboration

For the diagnosis of collinearity, we adopted the Belsley-Kuh-Welsch method shown in Table 8, which reveals the absence of collinearity problems.

Table 8 – Diagnosis of Collinearity of Belsley-Kuh-Welsch

Proportions of Variance											
Lambda	Cond	Own.	Size	Grow.	Exp.	Gov.	Perf.	Legal	SIC6	Y15	Y16
5.330	1.000	0.002	0.002	0.000	0.008	0.003	0.001	0.009	0.009	0.006	0.006
1.201	2.106	0.000	0.000	0.047	0.000	0.000	0.322	0.002	0.003	0.105	0.078
1.008	2.300	0.000	0.000	0.753	0.000	0.001	0.058	0.000	0.013	0.008	0.000
0.820	2.550	0.000	0.000	0.011	0.000	0.000	0.541	0.026	0.003	0.129	0.115
0.610	2.956	0.000	0.000	0.013	0.003	0.003	0.021	0.108	0.717	0.017	0.001
0.433	3.509	0.000	0.003	0.015	0.001	0.012	0.051	0.666	0.077	0.149	0.031
0.309	4.154	0.001	0.000	0.012	0.748	0.003	0.002	0.02	0.072	0.094	0.158
0.200	5.159	0.016	0.022	0.074	0.145	0.100	0.004	0.031	0.000	0.49	0.581
0.057	9.699	0.400	0.068	0.044	0.049	0.735	0.001	0.083	0.089	0.003	0.027
0.031	13.069	0.58	0.904	0.032	0.046	0.144	0.000	0.056	0.018	0.000	0.002

Lambda = eigenvalues of $X'X$, from lowest to highest

Cond = condition index

Source: Own Elaboration

5.2 Multiple Regression Analysis

As indicated by Wooldridge (2013), linear models allow an analysis of a phenomenon that, based on several data, explains and/or anticipates a particular behaviour of the model under study, which may be composed of two or more dependent variables. Wooldridge indicates that *"the method of ordinary least squares chooses the estimates to minimize the sum of squared residuals"* and it will be necessary to interpret the base model equation $\hat{y} = \hat{\beta}_0 + \hat{\beta}_{1x1} + (...) + \hat{\beta}_{jxj} + u$, where depended variable $\hat{\beta}_0$, the slope and the dependet variables $\hat{\beta}_{jxj}$. So, it is pertinent to interpret the reliability of the model under study and presented previously through the assumptions of the Gauss-Markov Theorem to justify the use of the OLS method instead of other estimators, highlighting that upon failure to comply with one of the assumptions of this theorem, the model no longer holds.

According to Wooldridge (2013), four out of the five Gauss-Markov assumptions establish unbiasedness of OLS and the fifth is presented for concluding that OLS is the best unbiased linear in use. The first assumption linear in parameters indicates that the model

equation must have constants, such as are considered the unknown parameters of interest and no random errors or disturbance are observed – these limits are $\beta_0, \beta_1, (...), \beta_k$, the second assumption random sampling tells us that it writes from an random sample of observations, following the popularity model defined in the first assumption, where these observations are given by $\{(\chi_{i1}, \chi_{i2}, (...), \chi_{ik}, y_i) : i = 1, 2, (...), n\}$, the third assumption no perfect collinearity implies an inexistence of a constant independent variation as well as a lack of exact linear relations between these variables, the fourth zero conditional mean indicates that, autonomously of the value assigned to the independent variables, the expected value of the error is the best possible, which is zero as we can observe through the following condition $\varepsilon(u|\chi_1, \chi_2, (...), \chi_k) = 0$, finally a fifth assumption is linked to homoskedasticity where we can observe the condition $Var(u|\chi_1, \chi_2, (...), \chi_k) = \sigma^2$, that is, the error must have the same variance given any value to any of the explanatory variables.

Model Analysis:

We started this analysis with the model that we recall:
$$Sustainability = \hat{\beta}_1 Ownership + \hat{\beta}_2 Size + \hat{\beta}_3 Growth + \hat{\beta}_4 Experience + \hat{\beta}_5 Governance + \hat{\beta}_6 Net\ Income + \hat{\beta}_7 Legal + \hat{\beta}_n Year + \hat{\beta}_n SIC_n + u$$
Thus, using the least squares method we were able to obtain:

Table 9 - OLS, Model Analysis

Variable	Coefficient	Standard Error	p-value
Ownership	0.0203	0.0021	1.69e-14
Size	0.0639	0.0191	0.0013
Growth	0.0118	0.0004	0.0189
Experience	0.0010	0.0017	0.5444
Governance	0.4253	0.0789	7.59e-07
Net Income	(0.0005)	0.0007	0.4957
Legal	(0.0381)	0.1013	0.7077
SIC6	0.5485	0.0982	3.43e-07
Y15	0.2041	0.1264	0.1103
Y16	0.2136	0.1184	0.0752

Source: Own Elaboration

The independent variables have a p-value lower than the level of significance ($\alpha = 0.10$), making it meaningful to maintain these variables in our study (ownership, size, growth and SIC 6). Contrary to what was expected, the remaining independent variables presented a p-value higher than the level of significance previously identified (experience, governance, net income, legal, Y15 and Y16, so it is not possible to conclude the existence of a significant difference for these variables.

Thus, our model before the autocorrelation correction is given by: $Sustainability = 0.0203Ownership + 0.0639Size + 0.0118Growth + 0.0010Experience + 0.4253Governance + (0.0005) NetIncome + (0.0381)Legal + 0.5485SIC6 + 0.2041Y15 + 0.2136Y16 + u$.

The normality test of the residues associated with the model under analysis indicates the following preposition: Test Statistics Chi-Square (2) = 3.27952; p-value = 0.1940027, taking into account the level of significance associated with this model, we cannot reject the null hypothesis 'H0: the error has a normal distribution' since the p-value is higher than the significance level ($\alpha = 0.10$).

Another proposition that we must observe is whether we are in the presence of lags and parameter alterations. Through the ARCH test we can identify that the effect of the first is not present, since our proposition is given by: Test Statistics LM in order of one = 0.475902; p-value (Chi-Square (1) > 0.445242) = 0.504603. As for the second, the CUSUM test with a confidence interval of 95% indicates that the model doesn't have parameter alterations, since our proposition is: Test Statistics Havery-Collier t (75) = 0.806645; p-value = $P(t(75) > 0.806645) = 0.422422$. It is important to state that the mean of scaled waste is 0.0428073 and the sigma hat 0.462639.

The variance inflation factor (VIF) greater than ten indicates the presence of multicollinearity, being given by $VIF_{(j)} = \frac{1}{(1 - R_j^2)}$, with R_j being the multi-correlation coefficient between the variable and the independent variable. The judgment of multicollinearity was made through the Belsley-Kuh-Welsch diagnostic and the output returns the inexistency of this assumption, so we can identify that there is no relationship between independent variables (Ownership = 1.588; Size = 1.218; Growth = 1.287; Experience = 1.094; Governance = 1.573; Net Income = 1.062; Legal = 1.125; SIC6 = 1.479; Y15 = 1.507; and Y16 = 1.524).

In order to detect the presence of heteroscedasticity, it is necessary to implement the white test equation: $R^2\hat{u}_i^2 = \alpha_0 + \alpha_1 X_{i1} + \alpha_2 X_{i2} + \alpha_3 X_{i1}^2 + \alpha_4 X_{i2}^2 + \alpha_5 X_{i1}^2 X_{i2} + \nu_i$, which allows us to test the hypotheses associated with the model and which will indicate if we are in the presence of a homoscedastic hypothesis ($H0: \alpha_1 = \alpha_2 = \dots = \alpha_n = 0$) or heteroscedastic ($H1: \alpha_1, \alpha_2, \dots, \alpha_n \neq 0$). Subsequently, a new statistical test is carried out by $\{(nR^2 \sim X_k^2); n = \text{observations}; k = \text{degrees of freedom}\}$.

In our model, we can analyse that there is no correlation between the variables since the p-value also associated with the Chi-Square statistic is above the significance level, as we can see in this preposition: Test Statistics LM = 83.3357; p-value = $P(\text{Chi-Square (59)} > 83.3357) = 0.0201975$. We cannot reject the null hypothesis 'H0: without heteroscedasticity' since the p-value is greater than the Chi-Square.

As for the autocorrelation of the model, we applied the Durbin-Watson model, where we have the following theorem: Test Statistics Durbin-Watson = 2.39773; p-value = 0.939571. Since the Durbin-Watson statistic is higher than the significance, we are in the presence of the absence of autocorrelation, so that there is no defilement of the Gauss-Markov assumptions.

5.3 Regression Results

After carrying out all the analyses of the model under study, we met the necessary conditions to present and analyse the results obtained through the previously defined model. So, in Table 10 we have the reports of Ordinary Least Squares (OLS) regression for sustainability determinants, estimated for the total sample under analysis. Three estimations are presented: column C1, with the scope of all companies, includes all variables and legal, industry and year dummies of the regression of the research model and C2 without the industry dummies. The main findings are similar in the two estimated regression models.

Table 10 - Regression Estimates of Sustainability

Variable	Expected Value	C1 (T-Stat)	C2 (T-Stat)
Ownership	Positive	1.69e-014*** 9.470	2.64e-015 9.863
Size	Positive	0.0013*** 3.333	0.0075*** 2.744
Growth	Positive	0.0189** 2.398	0.0380** 2.111
Experience	Positive	0.5444 0.6089	0.2169 1.245
Governance	Positive	7.59e-07*** 5.392	0.0002*** 3.915
Performance	Positive	0.4957 (0.6845)	0.6860 (0.4058)
Legal	Negative	0.7077 (0.3764)	0.3754 (0.8916)
Industry dummies	-	Yes	No
Years dummies	-	Yes	No
Adj. R ²	-	0.988612	0.983933
F-Stat (p-value)	-	1.50e-69	2.97e-65

*, ** &*** indicate significance at the 1%, 5% and 10% levels, respectively

In estimations C1 and C2, the coefficient of determination assesses how the independent variables influence the variation of the dependent variable. In the study of our model and for the global analysed sample, the independent variables explain roughly 98.86% of the dependent variable in question. Since the p-value of the F-Stat is approximately zero in all of the estimations in this study and is below the level of significance, we can say that the model is significant and presents a good overall fit.

In accordance with our hypothesis, corporate social responsibility is positively and significantly related to ownership concentration, which demonstrates that the control of power in the enterprises in this study could lead to less interest in business conduct which addresses sustainability.

This is a proposed response to Morck et al. (1988), who indicated that a concentration of ownership may adversely affect the interests of the stakeholders. They also claimed that the alignment of the interests of shareholders and managers, associated with a dispersion between the structure of the ownership, means that shareholders only monitor their manager (Brammer

& Pavelin, 2006), which shows a negative impact on the correlation between ownership and sustainability. Although a foreign shareholder structure may influence reports on sustainability, it is known that there are diverse opinions. Among these is the difference in the interest shown in this practice by medium-sized companies, hence reinforcing the study carried out by Hahn and Kühnem (2013) who consider that the quality of sustainability reports have a negative impact on a concentrated ownership structure.

Additionally, our results demonstrate that size positively influences corporate social responsibility as hypothesised. This proposition is in line with the perspectives proposed by Cohen (2013), who suggested a positive effect with an impact on efficiency if companies adopt sustainable measures and make this information available to third parties through the elaboration of its report. This situation, however, is not at all adopted by some administrators since there is no compensatory consideration, a situation that may demonstrate why even though the variable is significant, it has a very low value. Also as positive aspects, we emphasize that these results also impact on the information put forward by other authors who indicate that big companies are more willing to provide information linked to sustainability than others since they have their own reputation and image in focus (Perrini, Russo and Tencati, 2007) and that the size of the company is of utmost importance since the benefits associated with environmental management are in some way interconnected by their cost structure. This proposition is also corroborated by Hahn and Kühnen (2013) in Hyršlová (2014), who indicate that a corporate social responsibility report is directly correlated with the size of the company, that is, there is a relationship between size firm and the elaboration/non-elaboration of sustainability reports.

There are several factors associated with the growth of a company, among which is a heavier cost structure, given the need for investment and associated treasury effort. However, through the analysis, we can identify that the fact that companies have a less relieved cost structure does not reduce their commitment to sustainability. Corporate social responsibility is positively and significantly related, in line with our expectations. This is consistent with previous literature and confirms that public firms invest in sustainability accounting and external reporting to increase visibility and to inform stakeholders (Perrini et al., 2007). Other authors indicate that the adoption of sustainable practices beyond the minimum required can negatively influence the profitability of the company (Sheu & Shih, 2007). This is contrary to what is transmitted by Brickley et al. (2002), who indicated that the companies that are most

predisposed to this type of practices and disclosures will have a return on their bet as they are increasing the confidence given by their consumers to their products and or services.

A variable with greater impact, but not significantly related is experience, a result initially expected since the know-how of a company is a factor with huge weight. Given its importance, this variable tends to be associated with practice of actions, measures, the standards demanded by its consumers and often the interference of the brand associated with the product and or service.

The reputation factor is also associated with this parameter since the common sense of the shareholders increases during the years of activity, and so considering the beginning of activity and the oldest of the predecessor firms is an important characteristic that represents the firm's experience (Villalonga & Amit, 2006). It makes sense to recall an existence of small and different divergences that exist between the different management practices between companies that have a family and non-family shareholder structure. Empirical studies have demonstrated that a family company tends to be more concerned about sustainable practices and consequently its dissemination to stakeholders (Gavana, Gottardo & Moisello, 2016). As in older observations, we can associate this with the image and the culture that underlies the image since the more experienced the company, the greater the demand on the part of its consumers. In recent years this has played a fundamental role in the recognition of green business practices (Alton, 2017), a situation that will have a special impact on the employee structure because a strong image will affect better talent, which in turn will give the company's experience the possibility to increase the new and best practices associated with the theme portrayed here.

The governance variable demonstrates that it has a positive and statistically significant impact on the model, even though several authors defend the positive aspects associated with the members of corporate governance and their influence on good environmental practices (Steiner & Steiner, in Shea, 2006). Of particular influence is their composition at the time they prepare their own sustainability report (Adams and McNicholas, 2007) because its elaboration entails having the perfect notion of the positive and negative impacts of your company and taking corrective measures in case of this need. Walls and Berrone (2016) argue that the degree of concentration of governance has a negative impact on the importance given to financial strategy and Raut (2008) argues that governance and CSR are positively related because companies want to create value, a factor that generates financial growth and elevates them beyond existing laws.

We found that the performance variable is not statistically significant in our study. This may demonstrate that companies cannot verify the benefits they may have in adopting environmental practices, particularly in the cost structure that can be reduced through the implementation of internal practices (Vijfvinkel, Bouman & Bouman, 2011). However, this proposition is in line with previously identified studies which convey that some companies have had a negative impact on either return on sales or equity that may influence the decision-making of current and similar shareholders (Vijfvinkel et al., 2011). Perhaps this factor is considered the most complex among those analysed for this model (Gaspar, 2013) but new studies demonstrate the associated dichotomy attempt, namely in the presentation of new models with new forms of calculation of ratios such as those we refer to throughout this work (Lassala, Apetrei & Sapena, 2017).

In our model, legal form isn't statistically significant in our study. We can identify that the legal form of the company does not affect the relevance taken by its owners or CEOs, contradicting one of the propositions initially identified that the differentiation of disclosure of this type of information does not depend on the legal factor.

6. Conclusions

In this study, we analysed a group of Portuguese companies, public and private, that publicly make available information related to CSR practices and apply the Global Reporting Index in their reports, as well as indispensable financial information for the knowledge of the influence of the factors studied in sustainability, in 2016.

The results obtained allow us to identify that ownership, size, growth and governance are determinants of sustainability in Portuguese companies that contribute positively and significantly to the explanation of the variable sustainability of companies. This can be explained as follows.

First, there are few companies that submit their CSR reports to external users and these that do not always adopt the practices associated with GRIs. This is consistent with previous literature (Cooper et al., 2011) and indicates that firms show little interest in changing their business conduct to improve sustainability. We can then show that there is a possibility that accounting departments may not be sufficiently able to engage in sustainability practices, that is, the role of accounting has little influence on their development, thus highlighting the divergences in the purpose of the sustainability report associated with public and private companies (Ernest and Young, 2013).

Second, we can identify that experience, performance and legal form doesn't present the significant influence we expected for sustainability reporting. Although there is a significant influence of corporate governance, it is not strong enough for the aforementioned indicators to become meaningful, possibly because the current organizational structures demonstrate the inexistence of an entrepreneurial experience that motivates firms to accept new practices and challenges with a view to improvement in the area of sustainability.

Third, only the companies with the most preponderant structure have a positive influence on CSR. As a result, it was concluded that family-owned companies consider that their stakeholders give greater importance to outsourcing non-financial information by demonstrating their image and values, contrary to what happens in private companies that tap this information.

Additionally, our study argues that sustainability and the associated use of accounting have been deliberately simplified and oriented towards supporting the business interests of firms.

The results of our study contribute to the ongoing debates in the accounting literature addressing the relationship between accounting and CSR, suggest directions for further research and encourage the preparation and dissemination of CSR reports by private and public companies. Future studies can use quantitative and qualitative data to analyse the external and internal characteristics of firms as determinants for sustainability reporting. It would also be useful to identify other tools or more complete measures of sustainability that are not included in this study and influence the contingency factors in sustainability accounting.

We also hope that this study develops an interest in the elaboration of CSR reports in small and medium enterprises, with preferential adaptation of the methods used in the GRI without their being obligatory under both national and European legislation.

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Glossary

Corporate Social Responsibility: a business approach that contributes to sustainable development by delivering economic, social and environmental benefits for all stakeholders. The way it is understood and implemented differs greatly for each company and country. Moreover, CSR is a very broad concept that addresses many and various topics such as human rights, corporate governance, health and safety, environmental effects, working conditions and contribution to economic development. Whatever the definition is, the purpose of CSR is to drive change towards sustainability.

Gross Domestic Product: the total value of an economy's domestic output of goods and services, also known as GDP. One of the key indicators of economic growth.

Global Reporting Initiative: an independent international organization that has pioneered sustainability reporting since 1997 and helps businesses and governments worldwide understand and communicate their impact on critical sustainability issues such as climate change, human rights, governance and social well-being. This enables real action to create social, environmental and economic benefits for everyone. The GRI Sustainability Reporting Standards are developed with true multi-stakeholder contributions and rooted in the public interest.

Gross Value Added: measures the contribution to an economy of an individual producer, industry, sector or region. It is used in the calculation of gross domestic product (GDP). GDP is commonly estimated using one of three theoretical approaches: production, income or expenditure. When using production or income approaches, the contribution to an economy of a particular industry or sector is measured using GVA.

Standard Industrial Classification: a system developed in the US in the 1930s in which each industry has a number, used to describe which group a company belongs to. It was replaced in 1997 by the North American Industry Classification System.

Attachments

Table 11 – Detail of Corporate Social Responsibility Indicators used in the ‘Table of the GRI Guidelines’

ECONOMIC
EC 1: Economic value
EC 2: Identification of financial implications and other risks and opportunities for the organization’s activities due to climate change
EC 3: Coverage of the defined benefit pension plan obligations that the organization offers
EC 4: Reference to significant financial assistance received from government
EC 5: Indication of the lowest salary value and comparison with the national minimum wage
EC 6: Reference to policies, practices and proportion of spending on local suppliers
EC 7: Procedures for local hiring and proportion of senior management recruited from the local community
EC 8: Development and impact of investments in infrastructure and services offered, mainly for public benefit, through commercial commitment
EC 9: Identification and description of significant indirect economic impacts, including extent of impacts
ENVIRONMENTAL
EN 1: Identification of the type of materials used by weight or volume
EN 2: Indication of the percentage of materials used from recycling
EN 3: Indication of direct energy consumption by primary sources
EN 4: Indication of indirect energy consumption by primary sources
EN 5: Identification of energy saved due to conservation and efficiency improvements
EN 6: Reference to initiatives to provide products and services based on energy efficiency and renewable energy, and reductions in consumption as a result of these initiatives
EN 7: Reference to initiatives aimed at reducing indirect energy consumption and reductions achieved
EN 8: Indication of total water consumption
EN 9: Indication of water sources and ecosystems affected by water consumption
EN 10: Indication of the percentage and total volume of water recycled and reused
EN 11: Non-existence of managed land in habitats rich in biodiversity *
EN 12: Description of the main impacts on biodiversity in terrestrial, water or marine environments
EN 13: Presentation of habitats protected or restored by the company
EN 14: Presentation of strategies, measures in force and future plans for managing impacts on biodiversity

EN 15: No. of IUCN Red List species and national conservation lists with habitats in areas affected by operations, broken down by the level of extinction risk
EN 16: Indication of greenhouse gas emissions by weight
EN 17: Indication of other significant atmospheric emissions
EN 18: Initiatives to reduce greenhouse gas emissions and reductions achieved
EN 19: Indication of non-emissions of ozone-depleting substances by weight *
EN 20: Indication of non-emission of other significant atmospheric emissions by type and weight *
EN 21: Indication of non-existence of water discharges, by quality and destination *
EN 22: Indication of total weight of waste, by type and method of disposal
EN 23: Identification of no significant spillage *
EN 24: Indication of weight of transported or treated waste considered hazardous
EN 25: Identification, size, protection status and biodiversity index affected by discharges
EN 26: Presentation of initiatives to mitigate the environmental impacts of products and services and the extension of the reduction of these impacts
EN 27: Presentation of the recoverable percentage of the products sold and percentage effectively recovered
EN 28: Reference to non-existence of incidents or fines for non-compliance with environmental legislation *
EN 29: Presentation of significant environmental impacts of the transport of materials and workers
EN 30: Total expenditures and investments in environmental protection, by type
SOCIAL: LABOUR PRACTICES AND CONDITIONS
LA 1: Indication of total workers by type of employment, employment contract and region
LA 2: Presentation of the total number and turnover rate of employees, by age group, gender and region
LA 3: Presentation of benefits offered to full-time workers who are offered to temporary workers *
LA 4: Presentation of the percentage of employees covered by negotiation agreements (represented by trade union organizations)
LA 5: Identification of policies and procedures for information, consultation and negotiation with employees
LA 6: Presentation of the percentage of employees represented by a health and safety group, composed of managers and workers, who help with occupational safety and health programs
LA 7: Indication of absenteeism rates, accidents and occupational diseases and number of fatalities at work

LA 8: Description of policies or programs related to serious diseases
LA 9: Reference to health and safety issues covered by formal agreements with trade unions
LA 10: Indication of average hours of training per year, per employee and category
LA 11: Indication of specific policies and programs for capacity management and lifelong learning
LA 12: Percentage of employees receiving regular performance and career development reviews
LA 13: Description of corporate governance group and description of employees by category, gender, age, minorities
LA 14: Indication of the proportion of basic salary between men and women by functional category
SOCIAL: HUMAN RIGHTS
HR 1: Indication of the percentage of significant investment contracts that include clauses referring to human rights policies
HR 2: Indication of the percentage of suppliers submitted to human rights assessments and measures taken
HR 3: Indication of total hours of employee training in human rights policies and procedures
HR 4: Indication of the total number of cases of discrimination and the measures taken
HR 5: Description of the freedom of association policy and its degree of application
HR 6: Exposure of policies excluding child labour
HR 7: Description of policies to prevent forced labour and slavery
HR 8: Indication of the percentage of security personnel trained in human rights policies
HR 9: Indication of the total number of cases of violation of indigenous peoples' rights and policies taken
SOCIAL: SOCIETY
SO 1: Presentation of the nature and effectiveness of programs that evaluate operations in the community
SO 2: Indication of percentage and total number of business units submitted to risk assessments related to corruption
SO 3: Indication of the percentage of employees trained in anti-corruption policies and procedures
SO 4: Identification of non-existence of corruption cases and prevention measures *
SO 5: Identification of the position regarding public policies and participation in the elaboration of public policies and lobbies
SO 6: Identification of non-financial and in-kind contributions to political parties and similar institutions *

SO 7: Indication of non-existence of lawsuits for unfair competition, trust and monopoly practices and their results *
SO 8: Indication of non-existence of significant fines and total number of non-monetary sanctions resulting from non-compliance with laws and regulations *
SOCIAL: PRODUCT LIABILITY
PR 1: Representation of the life cycle phases of products/services in which health and safety impacts are evaluated with a view to
PR 2: Representation of the life cycle phases of products/services in which health and safety impacts are evaluated
PR 3: Presentation of the type of product/service information required on the labels and percentage of products/services that require such labelling
PR 4: Indication of non-existence of cases of non-compliance with label regulations *
PR 5: Identification of practices related to consumer satisfaction, including results of research or studies
PR 6: Presentation of programs for adherence to laws, standards and voluntary codes related to communication and marketing
PR 7: Indication of non-existence of non-compliance with advertising and marketing regulations *
PR 8: Indication of non-existence of proven claims regarding consumer privacy and loss of customer data *
PR 9: Indication of non-existence of fines for non-compliance with regulation and laws regarding the supply and use of products/services *

* Notation of the phrase changed (positive to negative)

Table 12 – Model table used to determine the weighting of the GRI Guidelines

Type	Weighting	Indicators	Enterprise		
			Page	Points	Σ
E	1	EC1			
E	5	EC2			
E	2	EC3			
E	5	EC4			
A	2	EC5			
E	5	EC6			
E	4	EC7			
E	4	EC8			
A	1	EC9			
E	5	EN1			
E	4	EN2			
E	5	EN3			
E	4	EN4			
A	2	EN5			
A	2	EN6			
A	1	EN7			
E	5	EN8			
A	1	EN9			
A	1	EN10			
E	5	EN11			
E	4	EN12			
A	1	EN13			
A	1	EN14			
A	1	EN15			
E	5	EN16			
E	1	EN17			
A	2	EN18			
E	4	EN19			
E	4	EN20			
E	5	EN21			
E	4	EN22			
E	5	EN23			
A	1	EN24			
A	1	EN25			
E	5	EN26			
E	4	EN27			
E	5	EN28			
A	2	EN29			
A	2	EN30			
E	4	LA1			
E	4	LA2			

A	2	LA3			
E	4	LA4			
E	4	LA5			
A	1	LA6			
E	4	LA7			
E	4	LA8			
A	1	LA9			
E	5	LA10			
A	1	LA11			
A	2	LA12			
E	2	LA13			
E	4	LA14			
E	5	HR1			
E	4	HR2			
A	2	HR3			
E	5	HR4			
E	4	HR5			
E	5	HR6			
E	5	HR7			
A	1	HR8			
A	1	HR9			
E	2	SO1			
E	5	SO2			
E	4	SO3			
E	4	SO4			
E	2	SO5			
A	2	SO6			
A	2	SO7			
E	5	SO8			
E	2	PR1			
A	2	PR2			
E	4	PR3			
A	2	PR4			
A	2	PR5			
E	2	PR6			
A	2	PR7			
A	2	PR8			
E	5	PR9			



UNIVERSIDADE
LUSÓFONA

DESPACHO DE NOMEAÇÃO DE JÚRI
N.º 235/2018

ASSUNTO: Apresentação/Defesa da dissertação de Mestrado em Contabilidade e Fiscalidade, da candidata IRINA FILIPA MANJÚA DIOGO GAVANCHA.

De acordo com o Artigo 22.º do Decreto-Lei n.º 74/2006, de 24 de Março, atendendo à nova redação apresentada pelo Decreto-Lei n.º 63/2016, de 13 de setembro, e com o Artigo 44.º do Regulamento Pedagógico da ULHT, após apreciação da proposta de nomeação do Júri apresentada pelo Conselho Científico da Unidade Orgânica, cumpre-me informar que o Júri homologado para a defesa pública da dissertação de Mestrado em Contabilidade e Fiscalidade, da candidata **Irina Filipa Manjúa Diogo Gavancha**, é composto pelos seguintes docentes:

- **Presidente:** Prof. Doutor António Augusto Teixeira da Costa
- **Arguente:** Prof.ª Doutora Luísa Margarida Cagica Carvalho
- **Orientadora:** Prof.ª Doutora Inna Choban de Sousa Paiva (ISCTE-IUL)

Lisboa, 21 de junho de 2018.

O Reitor

(Prof. Doutor Mário Moutinho)



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