The Disclosure and Assurance of Corporate Social Responsibility

A Growing Market

Edited by
Isabel-María García-Sánchez
and Jennifer Martínez-Ferrero

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PREFACE

For some years, there has been a consistent belief that traditional financial reports do not adequately represent the different dimensions of corporate activity. This belief has resulted in the addition of non-financial measures of performance (Simnet, Vanstraelen and Chua, 2009[1]). This has led companies worldwide to disclose non-financial information, among which it is possible to note the general use of stand-alone reports regarding social and/or environmental concerns—termed "sustainability reports." In this respect, "sustainability performance refers to an organization's total performance—which might include its policies, decisions, and actions that create" positive (or negative) social, environmental, and/or economic, including financial outcomes" (Institute of Social and Ethical Accountability, 2003, p. 31)[2]. There has been an increasing trend towards reporting such performance via the voluntary disclosure of a sustainability report that assesses the three main components of the triple bottom line: environmental protection, economic growth, and social equity. However, there is no regulation that requires the disclosure of this information; and companies publish their sustainability reports voluntarily.

Over the last few years, there has been an increasing trend towards reporting socially responsible performance via the voluntary disclosure of a sustainability report that assesses the three main components of the triple bottom line: environmental protection, economic growth, and social equity. This voluntary disclosure can be conceived as as being a viable mechanism through which (per the current trend) the usefulness and accuracy of firm-specific information has improved over the last few years. Nonetheless, the considerably growing trend towards such sustainability reporting in recent decades has not been accompanied by a corresponding increase in the credibility and accuracy of information. This divergence is due to a perceived lack of consistency and completeness with regard to the content and scope of sustainability reports. In the

[1] Simnett, R., A. Vanstraelen, and W. F. Chua. (2009). Assurance on sustainability reports: An international comparison. Accounting Review 84: 937–967.
[2] Institute of Social and Ethical Accountability (ISEA) (2003). AA 1000 Assurance Standard. ISEA London

context of this lack of credibility, stakeholders demand external assurances as a means of enhancing their degree of confidence in the outcomes of the evaluation of a particular subject matter.

Within a context in which sustainability information may be hardly credible at all, companies can voluntarily initiate a process of verifying this self-reported information. This check will benefit a variety of agents. The company will legitimize the credibility of the information reported by building an effective dialogue with the different stakeholders. To them, meanwhile, a process of external checking guarantees the reliability of the information while reducing the potential asymmetry of information known between managers, shareholders, and stakeholders. However, such assurances are not a legal requirement; and no universal standard for such assurances exists. Indeed, there is substantial heterogeneity in the subject matter of sustainability reports and their objectives, levels, and criteria of assurance. This heterogeneity leads to differences between reports. Such differences make the study a relevant research topic about the "who" and the "how" in relation to assurance. This heterogeneity in assurances of services provided leads to scepticism concerning an assurer's work. This is because the nature and content of assurance statements can vary significantly—thus influencing assurance quality.

In this vein, this research monograph focuses specifically on the new trends of sustainability performance and sustainability reporting— with its particular focus being on the demand for assurance and on and on the characteristics of that assurance. In the following chapters, the authors provide theoretical argumentation and concrete evidence around sustainability performance along with the determinants of the voluntary disclosure and external assurance of that performance. Moreover, descriptive and empirical analyses will be developed and shared. Overall, this book aims to reinforce the understanding about sustainability performance, voluntary disclosure, and external assurance as follows:

The nine chapters included in this book center around three aspects: (i) socially and responsible performance; (ii) voluntary disclosure; and (iii) external assurance. Regarding the first issue, Chapter One focuses on analyzing the industry's role as an institutional factor. It provides explanatory information on the capacity of the company to promote sustainability. For this, the authors study the behaviour of the ten main (most frequently coded) industries – Basic Materials, Utilities, Oil & Gas, Industrials, Consumer Goods, Technology, Health Care, Telecommunications, Financials, and Consumer Services – included among a sample of data of 6,600 observations of 600 large international companies. The dataset listed companies by industry category according to the Industry Classification Benchmark (ICB) system. It comprised the 2004-2014 period. The main objective is the characterization of each of the industries based on their sustainable commitment through the study of 26 CSR practices that encompass sustainability from different perspectives – the environment, human rights, employees, stakeholders, and ethics – seeking to find important discrepancies that corroborate the relevance of the activity sector in socially responsible behaviour. The authors make use of multivariate statistical analyses known as X-COSTATIS, through which they analyze the co-structure of social sub-dimensions together with the environment.

Together, Chapters Two through Seven focus on the second topic examined in this book: sustainability disclosure.

As an introductory chapter to this issue, Chapter Two provides support of disclosure information to justify that corporations deal with complexity as a consequence of different accounting information systems, reports, and other information disclosure that have increased throughout the years. The quality of information disclosed by corporations is already an issue discussed in the literature; and in practice, assessing the quality of that information is a job for auditors and chartered accountants. This chapter validates its results on panel data – drawn from the 1991 to 2004 period – of corporations listed on the Euronext Lisbon. It shows that corporations include the social dimension in accounting strategies, due to the increasing demands of stakeholders. According to the empirical analysis, this chapter promotes the discussion, dissemination, and exchange of ideas about social responsibility and corporate value as a potential dimension of strategies and practices implemented and developed by each corporation. It is acknowledged that investors increasingly want to know about sustainability and their goal´s influence on the accounting information system.

Meanwhile, Chapter Three develops a descriptive analysis of sustainability disclosure and assurance at the international level. The authors use an international sample of analysis composed of 1,127 listed firms, from 2007 to 2016. The main findings of this chapter support the hypothesis that the continuing calls to achieve the disclosure of CSR performance have led companies to voluntarily disclose CSR reports—viewing them as being a part of an effective sustainable strategy that meets the need the level and quality of information demanded by stakeholders. These calls translate into a higher CSR disclosure rate and a higher quality and assurance of CSR information over last few years. Moreover, there is substantial variation across countries in terms of CSR reporting, the quality of that reporting, and assurances.

This substantial variation across countries is also examined in Chapters Four, Five, and Six.

In Chapter Four, under the assumption that one of the actions that companies can use to communicate their CSR activities includes the United Nations Global Compact platform (UN-GC), the authors aim to analyze the influence of the variety of capitalistic-oriented approaches taken by international companies. Chapter Four provides a concrete analysis of how liberal market economies and coordinated market economies influence the varieties of capitalistic-oriented approaches taken by certain international companies. The companies reviewed are members of the Organization of Cooperation for Economic Development (OCED) and are participants in the Global Compact. The authors use a sample of companies (from different countries) contained in the database of the United Nations Global Compact. Companies were grouped according to how their variety of capitalism had been classified. The focus was given to liberal market economies, coordinated market economies, and UN-GC participants. The main results obtained suggest that companies from countries with a coordinated market economy tend to be part of the Global Compact to a greater extent than are companies from countries with a liberal market economy.

In Chapter Five, the authors focus their study on Brazil, Russia, India, China, and South Africa. The authors examine these countries because of their growing relevance within the worldwide economy; and their different reactions to the economic crisis. Also, there is a gap in the literature about them; therefore, it is quite interesting to know how they are implementing these practices. The aim of this chapter is to identify the relevant factors that influence sustainability-reporting practices (their complexity and the GRI level they have achieved) in these five countries. The sample of analysis is composed of 3,582 listed companies from Brazil, Russia, India, China, and South Africa whose financial data are available in the Thomson Reuters ASSET4 Database. This chapter provides evidence that in those normative and cultural contexts in which disclosure of CSR information really is an option for companies, firms that decide to report about these issues will do so responsibly—and they will try to implement best practices. This finding will help disclosure to cease being a simple strategic legitimisation tool and become a device which contributes to the creation of value. In such cases, the CSR report would not be carried out in order to be the effect of a cause (socially irresponsible firm behaviours). Instead, the CSR report would be the cause that will have an effect in the future (higher satisfaction of different stakeholders and a better image and reputation of the companies, which implies an improvement in their competitiveness). The divergences identified between CSR disclosures in this chapter could be a response adapted to the cultural and normative environments, even among countries that (*a priori*) share certain economic features.

Subsequently, in Chapter Six, the authors focus on Latin American organizations because of the significant growth of a number of GRI reports disclosed in recent years. In this chapter, the authors seek to contribute to knowledge of the social dimension of sustainability reporting in Latin American countries—examining Argentine, Chilean, and Peruvian organizations. The authors use a content analysis technique to codify the social information present in the sustainability reports of the year 2015 as released by the organizations of Argentina, Chile, and Peru. Then, reticular or social network analysis was used on the data codified in the previous phase. The main result of this chapter is the finding that there is no homogeneity in the sustainability reporting for the selected countries – specifically in terms of social performance disclosure – in spite of the influence of the GRI G4 Guidelines.

In Chapter Seven, the authors – moving beyond attending to country-level factors – propose a descriptive study about the impact of ownership structure on sustainability disclosure as firm-level factors. Concretely, the authors provide descriptive evidence about the frequency of sustainability disclosure, its quality, and its external verification—making a comparison between non-family and family firms. For these descriptive analyses, the authors use an international sample of analysis (from 2006 to 2014) of listed financial firms. In general, the authors report the higher propensity to report a sustainability disclosure in family firms, as well as the higher quality of these reports in comparison to those of non-family business. However, the authors cannot provide significant differences in the stakeholders' demands for assurances between family and non-family firms.

Finally, the third issue of this book – external assurance – is examined in Chapters Eight and Nine. As the authors highlight, sustainability assurance is shown as being a way to enhance the credibility and reliability of the social and environmental information disclosed by companies.

The aim of Chapter Eight is to examine the assurance market in Spain. The chapter focuses on companies listed on the Madrid Stock Exchange in September 2017. It analyzes a total of 1,140 observations in a sample of 95 companies (that remained listed throughout 2005-2016). The main results of the chapter show that there is an increasing trend towards sustainability reports being assured. Most of the companies in the sample obtain assurance of their sustainability reports; and most of these, in turn, obtain assurance from one of the Big Four accounting firms (Ernst & Young, Deloitte & Touche, KPMG, and PricewaterhouseCoopers), KPMG and Deloitte being the leaders (Deloitte is the industry's top leader).

Finally, in Chapter Nine the authors aim to identify the current academic literature on assurance of Integrated Reporting. By means of the Web of Science database, the authors obtained a sample of papers to synthesize the main characteristics and trends in the field. This chapter identifies an emerging academic interest on assurance of the integrated reporting. For them, the reasons that explain the increasing number of studies about the assurance of integrated reporting perhaps lie in the activities of the IIRC.

The findings of this research monograph have implications for companies, managers, shareholders, stakeholders, and public bodies directly related to sustainability performance, the voluntary disclosure of sustainability information, and the adoption of an external assurance process. First, understanding the reasons for the disclosure of socially responsible commitment and for the subsequent assurance is interesting for different information users such as companies. By doing so, in part, they may legitimize the corporate actions and strategies in the context in which they operate. Furthermore, the evidence obtained in this book provides useful information for investors and stakeholders regarding the evaluation of how voluntary disclosure and external assurance increases the credibility of sustainability performance and reporting—thereby decreasing any lack of confidence in it. Moreover, investors should be aware of the use of sustainability disclosure and assurance to enhance credibility and confidence about sustainability performance as a signal for future investment decisions; moreover, they assess the quality of these reports highly.

In any case, sustainability disclosure and assurance may add value for shareholders and stakeholders by showing managerial commitment to engaging in socially responsible business practices. For policy markets and regulatory organisms, the findings of the book may be informative—given the increase in the number of social responsibility reports and related assurance services. For example, such stakeholders could collaborate with companies in the promotion of institutional support programmes so as to ensure that the information quality of, and the assurance of, sustainability reports truly represent the firm's actual sustainability performance. Public authorities must be able to provide new national laws and requirements, legislative reforms, institutional programmes, and financial support relevant to influencing increased production of sustainability reports, their quality and reliability as verified by assurance checks. Such verification adds value to organizations without imposing costly regulations. Moreover, in general, the sustainability disclosure and assurance practices are unregulated and thus (given the absence of regulatory laws) are non-standardized. Thus, the findings of this book show that it should be in the interests of governments, policy makers and public institutions to provide institutional support for the different sustainability reporting practices currently in use.

Isabel-María García-Sánchez and Jennifer Martínez-Ferrero
The Editors

CHAPTER ONE

A MULTIVARIATE VISION OF THE INDUSTRY SPECIFICITY AS AN EXPLANATORY FACTOR OF COMPANIES' SOCIAL PERFORMANCE

VÍCTOR AMOR-ESTEBAN,
Mª-PURIFICACIÓN GALINDO-VILLARDÓN
AND FÁTIMA DAVID

Abstract

This paper focuses on analysing the importance of the industry specificity with regard to company sustainability. It corroborates the hypothesis that local interest groups – and society in general – perceive different social and environmental risks according to the economic activity developed by the organizations. This fact is reflected in the Corporate Social Responsibility (CSR) policies and initiatives adopted by them. For this, the behaviour of the data set's ten main industries is studied from the coding of a data sample of 6,600 observations of 600 large international companies. These companies were listed according to the industry category of the Industry Classification Benchmark (ICB) system, for the 2004–2014 time period. Based on multivariate statistical methods, the industry is shown as being an institutional factor with an explanatory capacity in terms of CSR practices. This demonstrates that companies vary their behaviour according to the risks, pressures, and specific expectations of each industry. Thus, we point out how the industries dedicated to basic materials and utilities, which are considered to have a strong impact on the environment, present the highest environmental levels. Oil and gas companies focus their efforts on human rights, since their actions have a strong impact on human health. Telecommunications, along with personal-intensive companies, presents social concerns as being greater than environmental ones—prioritizing their practices towards labour rights and

stakeholders deals. Financial services (focused on employees) and consumer services (oriented towards human rights) are considered as being the most delayed in CSR terms. Their companies are comparatively less studied by the public, since they are not considered to have a strong impact on the environment, and are therefore less competitive in terms of sustainable practices. These results answer one of the oldest questions in the CSR debate, corroborating that social demands are a main point to be taken into account. Even in certain industries, social concerns outweigh environmental concerns.

Keywords: Corporate Social Responsibility (CSR), industry specificity, social performance, multivariate statistics, company sustainability, environmental management

1 Introduction

There is a growing international interest in Corporate Social Responsibility (CSR)—in particular, of the large multinational companies that are being asked for an ever-increasing commitment and measures to prevent environmental pollution, human rights violations, and unethical behaviour. This has generated the conclusion that concern about social responsibility is no longer an isolated event but a common practice, in particular, between larger companies (KPMG, 2011). Wood (1991) suggested that 'the basic idea of corporate social responsibility is that business and society are interwoven rather than being distinct entities; therefore, society has certain expectations for appropriate business behaviour and outcomes'.

Company sustainability and the dissemination of information in the environmental and social dimensions has been studied in an increasing number of investigations over the last decades (Deegan and Gordon, 1996; Deegan et al., 2002; Habisch et al., 2005; Welford, 2005; Aguilera et al., 2006; Chen and Bouvain, 2009). In this line of research, many studies show that although CSR has the stamp of being a truly global idea, it is applied in a different way by different companies, depending on the institutional characteristics of the environment in which they operate (Campbell, 2007; Gjølberg, 2009). This is because the different political, economic, legal, and cultural contexts offer a series of facilities for or barriers to sustainable development (Ortas et al., 2015; Halkos and Skouloudis, 2016). In general, most of these studies focus on analysing the country as being the institutional factor with the greatest explanatory capacity in terms of company sustainability. This points mainly to the normative pressures that make reference both to the differences in the cultural values of the countries (Ringov and Zollo, 2007; García-Sánchez et al., 2013) and to the coercive pressures corresponded to the functioning of the legal system (Kolk and Perego, 2010; Demirbag et al., 2017). However, few investigations have revealed that the industry can be defined as an organizational field from which institutional pressures arise (Aerts et al., 2006), because companies depending on the industry in which they operate face different risks to society, with different expectations of their stakeholders and consumer behaviour. A good example is the oil companies sector, considered as having a greater risk and impact on the environment than other companies, such as banking or financial services, have (Jackson and Apostolakou, 2010). Stakeholders will impose greater pressure on the oil companies to get them to adopt CSR policies aimed at protecting the environment and at protecting the health and safety of their employees.

This research focuses on analysing the industry as an institutional factor with an explanatory capacity on company sustainability. For this, the behaviour of the ten main industries – Basic Materials, Utilities, Oil & Gas, Industrials, Consumer Goods, Technology, Health Care, Telecommunications, Financials, and Consumer Services – is studied. This is based on the coding of a data sample of 6,600 observations of 600 large international companies listed according to the industry category of the Industry Classification Benchmark (ICB) system, for the 2004–2014 time period. The main objective is the characterization of each of the industries based on their sustainable commitment through the study of 26 CSR practices that encompass sustainability from different perspectivees – environment, human rights, employees, stakeholders, and ethics – seeking to find important discrepancies that corroborate the relevance of the industry in socially responsible behaviour. In addition, we direct the research towards answering one of the oldest questions in the debate on CSR: the question of whether it is worthwhile for organizations to pay attention to social demands. All of this will be carried out through a multivariate statistical analysis known as CO-X-STATIS, through which we will study the co-structure of the social sub-dimensions with regard to the environment. That is, we will interpret the importance that each industry gives to social practices as compared to their environmental commitment.

This work is structured as follows: The first section, which refers to the theoretical background, is focused on CSR and institutional contexts. The second details the structure of the data and describes the methodology used. The following sections present the results obtained from the empirical analysis; a discussion of those results; and the main conclusions of the study.

2 Theoretical Framework

2.1 Corporate Social Responsibility (CSR) and Institutional Contexts

The extensive research that exists in the field of CSR, strategic management, or international business has shown that the origin of companies is a relevant factor because it affects the way they interact with the government, its customers, suppliers, employees, and society (Kolk, 2005). The so-called ‘country of origin effect’ (Sethi and Elango, 1999) – which consists of the resources of the countries as their government policies, cultural values, and institutional laws – is exerting a different pressure on companies. As far as social responsibility is concerned, these differences can be very relevant—since it has been found that companies improve their sustainable commitment in response to expectations and social pressures to obtain or maintain their legitimacy (Ortas et al., 2015).

In this sense, several authors demonstrate the importance of institutional characteristics at the national level as a very influential role in the sustainable commitment of companies, as systematically explained by normative and coercive pressures (Martínez-Ferrero and García-Sánchez, 2016). The authors study the relevance of normative pressures by referring to the cultural values of each country (values obtained from the Geert Hofstede ™ website). They do so because, according to the cultural dimensions of Hofstede, (2001) local stakeholders, as a result of different cultural conditions, have different expectations regarding business behavior. Thus, previous research has shown that companies show a greater interest in sustainability in countries characterized as feminist and collectivist—and, to a lesser extent, in countries with long-term orientation, low power distance, indulgent and tolerant to uncertainty (García-Sánchez et al., 2013; Frías-Aceituno et al., 2013; Mar Miras-Rodríguez et al., 2015; Garcia-Sanchez et al., 2016; Halkos and Skouloudis, 2017; Esteban et al., 2017). In relation to coercive pressures, these correspond to laws, norms, and standards that define the legal system of a country. Additionally, among the main measures for analyzing the role of the legal system, the authors focus on whether it is governed by the civil law – or, on the contrary, whether it is governed by common law; or if the orientation of the country is more directed towards stakeholders or shareholders. Among other characteristics, they are also based on civic commitment, regulatory effectiveness, or competitive conditions. Thus, previous research shows that companies are more likely to behave in a socially responsible way when they belong to countries with a strong application of the law, governed by civil law and with a legal system oriented towards stakeholders protection (Perego, 2009; Boiral and Gendron, 2011; Kolk and Perego, 2010; Zhou et al., 2013; Garcia-Sanchez et al., 2016; Halkos and Skouloudis, 2016; García-Sánchez and García-Meca, 2017; Demirbag et al., 2017; Amor-Esteban et al., 2017).

Most such studies, which address the relationship between the sustainability of the company and institutional contexts, forget the effect that the industry can have on business behaviour. However, few investigations have revealed that the industry can be defined as an organizational field from which institutional pressures arise (Aerts et al., 2006). This is because companies depending on the industry in which they operate face different risks to society, with different pressures such as those exerted by external suppliers of resources that force or limit the company to adopt certain behaviours (Mizruchi and Fein, 1999). In addition, company survival depends on its success in managing relationships with interested parties (Hess, 2008), whose concerns vary depending on the industry to which they belong. This is due to the current concept of transparency which not only covers the economic part, but which extends to the social and environmental aspects of corporate behaviour (Gray et al., 1987; Frias-Aceituno et al., 2013). Accordingly, productive efficiency is not only defined by the level of success but also by the level of social acceptance (Ortas et al., 2015).

In this line of reasoning, several authors show that as a result of more demanding regulations and specific pressures exerted by the main interest groups of each industry, there are important differences in sustainability reports between companies from different industries (Branco and Rodrigues, 2008; Parsa and Deng, 2008; Wanderley et al., 2008; Bayoud et al., 2012; Young and Marais, 2012). Thus, companies belonging to the same industry will face similar challenges and, therefore, are likely to develop a similar pattern of behaviour with respect to CSR standards, norms, and practices—which implies a degree of convergence in their sustainability commitments (DiMaggio, 1991). That is, companies can disclose information or adopt CSR initiatives due to the fact that their competitors are doing so; they may be motivated to follow the behaviour carried out by another organization that is accepted as being a leader or a model of their industry, with the aim of acquiring social legitimacy (Larrinaga, 2007).

In addition, the market characteristics of certain industries can explain possible differences with respect to CSR practices adopted by companies – differences associated with consumer preferences and demands. (Park et al., 2014). Therefore, consumers behave differently in each industry depending on the risks that are perceived by society. For example, oil companies are perceived by consumers as being high risk in relation to their impact on environmental issues, as well as the health and safety conditions of employees. Therefore, these actors are comparatively more likely to pressure oil companies to adopt CSR policies. In addition, companies that are choosing the rules themselves and are controlling their own activities instead of leaving that responsibility to the State could have more to gain by being considered proactive. Precisely because of their impact on society and because of the scrutiny given to them by government or stakeholders, companies within such industries – higher risk; more polluting – will tend to adopt more codified and explicit CSR policies. CSR can, therefore, become an institutionalized feature of industrial management structures. This could either be as a result of coercive regulations of government authorities, regulatory pressures created by NGOs, or consumer behaviour, or through their own efforts to imitate proactively to competitors in the industry to protect their reputation. It is important to note that this type of industrial pressure should not be considered as being strictly national, but can produce isomorphism among the competitors of the same industry on an international scale (Jackson and Apostolakou, 2010).

Previous research analysing the relationship between CSR and institutional contexts only analyses the influence of national characteristics; and few of them study the industry specificity. This work shows the industry as an institutional factor with an explanatory capacity on company sustainability. To do this, we will conduct a comparative multivariate analysis, characterizing each industry according to its strengths and deficiencies. The characterization is based around 26 CSR practices that encompass environmental and social issues – human rights, employees, stakeholders, and ethics. The analysis shows the most important industrial discrepancies and, therefore, demonstrates that companies vary their behaviour according to the risks, pressures, and specific expectations of each industry. In addition, we will interpret the importance that each industry gives to social practices in comparison with its environmental commitment.

3 Methodology

3.1 Population and Sample

In sustainable terms, the most active companies correspond to the largest companies internationally listed on the stock exchange—and, therefore, this will be our target population (Martínez-Ferrero and García-Sánchez, 2016). The information about these companies was taken from the *Ethical Investment Research Services (EIRIS)* database (an independent research organization that provides non-financial information on the environmental, ethical, and social practices and policies of companies). The largest number of companies was selected, with the sole criterion being that their reports were complete—since one of the main problems of the sustainable rating agencies is the loss of data. This research refers to the 2004–2014 decade with a final sample of 600 listed organizations per year, which makes a total of 6,600 observations of international origin with a predominance of the data coming from four geographical areas: Europe, North America, Japan, and Australia, with percentages of 50.50, 25.83, 16.67, and 7.00, respectively. In view of the objectives of the work, we will group companies according to the industry category of the *Industry Classification Benchmark (ICB)* system. We will study the industrial roots of sustainability through the data of the ten main industries (see Table 1). The distribution finding a comparatively greater number of companies in industries related to industrial products (18.80%), financial services (17.30%), and consumer goods (13.50%). The rest have proportions close to 10%, with a smaller number of companies being focused on technology, utilities, and telecommunications.

Table 1. Distribution of companies by industry, following the Industry Classification Benchmark (ICB) system

Industry		Frequencies Absolute	Relative (%)
1	Basic Materials	704	10.7
2	Consumer Goods	891	13.5
3	Consumer Services	792	12.0
4	Financials	1144	17.3
5	Health Care	495	7.5
6	Industrials	1243	18.8
7	Oil & Gas	462	7.0
8	Technology	319	4.8
9	Telecommunications	264	4.0
10	Utilities	286	4.3
	Total	**6,600**	**100.0**

It is important to highlight that the selection of the 2004–2014 period is due to the fact that this decade marks the most prolific period of the academic and corporate CSR. In this period, companies – due to great advances in technological development or due to a greater facility of accessing information on corporate behaviour – have taken comparatively greater risks in terms of sustainability (Martínez-Ferrero and García-Sánchez, 2016).

3.2 CSR practices— Variables to Quantify Sustainable Commitment

In order to quantify sustainable business behaviour in a complete, balanced, and reliable way, companies were selected with information from 26 CSR practices—which evaluate the development and commitment to sustainability on a scale of 0-4, being '0-Inadequate', '1-Weak', '2-Moderate', '3-Good', and '4-Exceptional'. These practices include many possible aspects that a company can encompass in its commitment to sustainability in terms of social and environmental dimensions. The social dimension is made up of four sub-dimensions:

- **Human rights—**a dimension which includes policies, systems, and reports in the struggle for the defence of citizens' rights;

- **Employees—**a dimension constituted by practices that evaluate the policies and systems of the company when promoting equal opportunities and better working conditions, such as the health and safety of its employees, their training and the creation of employment;

- **Stakeholders—**a dimension which includes everything related to maintaining the company's good external relations; the treatment of the company in relation to the community, customers, consumers, contractors, suppliers, etc. As well as maintaining those stakeholders' responsibilities related to their participation in the decision-making process; and

- **Ethics—**a dimension that includes practices which value the existence of a code of ethics in the company and its policies, systems, and reports in the fight against bribery.

The environmental dimension implies policies, systems, and reports oriented towards the care and preservation of the environment (Table 2). The specific selection of these practices was due to the fact that they are commonly used in research work to analyse the social and environmental performance of companies (Boudt et al., 2013; León, 2015; Martínez-Ferrero and García-Sánchez, 2016; García-Sánchez and García-Meca, 2017).

Table 2. CSR practices—measures to quantify sustainable business behaviour

Social dimension		
	Human Rights	
Human Rights policy	/	What is the extent of the Company's policy addressing human rights issues?
Human Rights systems	/	What is the extent of systems addressing human rights issues?
Human Rights reporting	/	Does the Company report on human rights issues?

Employees		
Equal opportunities policy	/	How good is the Company's policy on equal opportunity and diversity issues?
Equal opportunities systems	/	How clear is the evidence of systems and practices to support equal opportunities and diversity?
Health & safety systems	/	How clear is the evidence of health & safety systems?
Trade unions and employee participation	/	How clear is the evidence of systems to manage employee relations?
Training	/	How clear is the evidence of systems to support employee training and development?
Job creation and security	/	How clear is the evidence of systems and practices to advance job creation and security?
Stakeholders		
Community relations	/	How clear is the Company's commitment to community or charitable work?
Customer/supplier relations policy	/	Does the Company have policies on maintaining good relations with customers and/or suppliers?
Community involvement	/	How clear is the evidence of systems to maintain good relations with the community?
Responsibility for stakeholders	/	How many stakeholder issues have been allocated to board members?
Stakeholder engagement	/	What level of engagement with stakeholders is disclosed by the Company?
Stakeholder policy	/	How good are the Company's policies towards its stakeholders overall?
Stakeholder systems	/	How good is the Company's quantitative systems on stakeholder relationships?
Stakeholder reporting	/	How good are the Company's management reporting for stakeholders overall?
Ethics		
Codes of ethics	/	Does the Company have a code of ethics – and if so, how comprehensive is it?
Codes of ethics systems	/	Does the Company have a system for implementing a code of ethics – and if so, how comprehensive is it?
Countering bribery policy	/	What is the extent of the Company's policy for countering bribery?
Countering bribery systems	/	What is the extent of the Company’s system for countering bribery?
Countering bribery reporting	/	What is the extent of the Company’s reporting on countering bribery?

Environmental dimension		
	Environment	
Environmental policy	/	How does EIRIS rate the Company's environmental policy and commitment?
Environmental systems	/	How does EIRIS rate the Company's environmental management system?
Environmental reporting	/	How does EIRIS rate the Company's environmental reporting?
Environmental performance	/	What level of improvements in environmental impact can the Company demonstrate?

3.3. Statistical Multivariate Analysis

3.3.1 CO-X-STATIS Method

Thiolouse (2011) presents the COSTATIS, which is a technique that combines STATIS and co-inertia analyses. In this investigation, a CO-X-STATIS analysis (X-STATIS and co-inertia, which we describe below) is performed. This method is used to simultaneously analyse two successions of tables with the same variables within each sequence and between the same individuals in both sequences. It is based on the co-inertia analysis of two compromise tables (a matrix that summarizes a set of matrices). The first step is to use two X-STATIS analyses, one for each succession, to calculate the two compromise tables; the second step consists of a co-inertia analysis to examine the relationships between these two compromises.

Figure 1 shows the procedure scheme on which the CO-X-STATIS is based, where a pair of sequences of T tables is used. Y_t is a sequence of T tables with information on n individuals measured on q variables, and X_t is another sequence of T tables that measures the same n individuals on p variables. A X-STATIS analysis is applied to each sequence, obtaining a compromise matrixY_C representative of Y_t tables and another X_C representative of X_t tables. On these two compromise matrices, Y_C and X_C, a co-inertia analysis is carried out, obtaining the matrix of cross products $Z = Y_C' D_n X_C$ through which it is possible to study the co-structure of these two compromises.

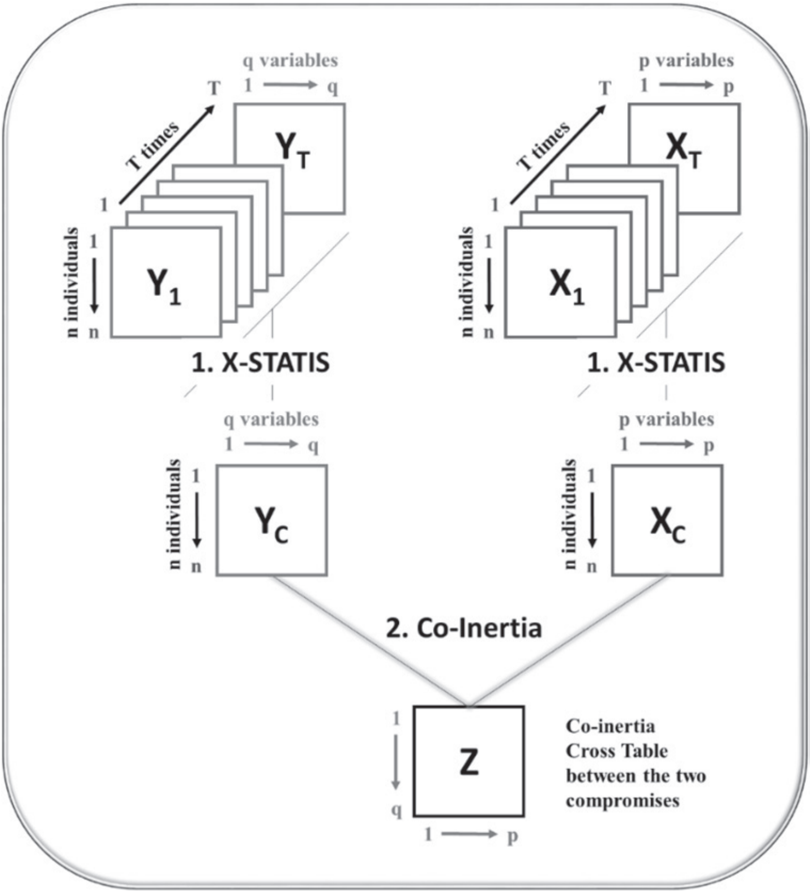

Figure 1. Outline of the CO-X-STATIS analysis

In this research, the CO-X-STATIS analysis is used to interpret the importance that each industry gives to the practices that evaluate social welfare in relation to its environmental commitment and, therefore, its characterization according to each of the practices of RSC. This will be done through a comparison of the environmental dimension (Env) with each of the social sub-dimensions – human rights (HR), employees (Emp), stakeholders (Sth), and ethics (Eth) – trying these in pairs, which will result in four CO-X-STATIS analyses (Env-HR, Env-Emp, Env-Sth, and Env-Eth). In any of these four analyses, the data will be arranged in two successions of T tables where t will refer to the years 2004–2014. The first succession of X_t tables will correspond to the social commitment, and each X_t matrix will carry the information of n individuals (industries) measures on p variables (social practices referring to a sub-dimension) and another succession of Y_t tables with information on the same n individuals measures on q variables (environmental practices). The first step is the application of an X-STATIS analysis to each succession.

The STATIS—*Structuration de Tableaux A Trois Indices de la Statisque*-family methods was developed by L'Hermier des Plantes (1976), although the theoretical basis of these methods belong to Escoufier (1976). In synthesis, the STATIS methods consist of making a study of the relationship between the T matrices so as to later determine a compromise matrix, which is the closest of all the T original matrices and is representative of all of them, and which is obtained from scalar products between configurations. In this work, however, we use the X-STATIS method (Jaffrenou, 1978). This is a method within the STATIS family with the difference that it is only applicable to successions of tables with the same individuals and the same variables (since it has the advantage of working directly with the original matrices without using operators provided that it is in compliance with the said condition). Thus, the procedure of this method is simpler and provides more representations. It follows the same scheme of the STATIS methods, which (as a general rule) are composed of three stages: interstructure, compromise, and intrastructure. However, in view of the objectives of this study, we will only focus on the first two stages.

(i) Interstructure (see Figure 2): In this stage, the relationship between the different tables is studied by comparing their structure in a global way. For this, a matrix of vectorial covariances between tables is constructed, so that the element in row t and column l is $Covv\,(X_t, X_l) = Traza\,(X_t' D_n X_l D_p)$ where X_t is the t-table of the sequence and D_n, D_p are the two metrics for the rows and columns, respectively. This will lead to a matrix TxT where each value will represent the covariance between two tables (years in this study). From the decomposition of this matrix into singular values, we look for a Euclidean representation in low dimension where each matrix (each year) is represented as a point in the plane. Thus, the proximity between two points will correspond to two tables of similar structures. In this way, the study of the interstructure will allow us to show the similarities and differences between years before performing the co-inertia analysis and which therefore correspond to interstructures from the point of view of each dimension and sub-dimension (separately): environment, human rights, employees, stakeholders, and ethics.

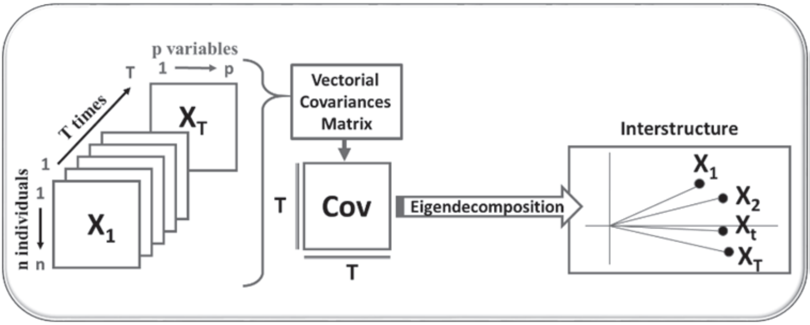

Figure 2. Outline of the Interstructure (X-STATIS analysis)

(ii) Compromise (see Figure 3): The next stage of the method is to create, from the initial T matrices, a matrix Z that is constructed in the following way: It starts from the T matrices, each with n rows (individuals) and p columns (variables), and is constructed a new matrix Z where each column vector is one of the T matrices extended; that is, where the p columns are stacked in a vector column X_t. So we have the vectors $X_1, \ldots, X_t$ that make up the matrix Z. The Z matrix will consist of $n\ x\ p$ rows and T columns. The next step is to apply a principal component analysis to the created Z matrix, which we will call ZV. In this table, each column represents a main component, and these components are linear combinations of the Z columns—therefore, they contain the common information, stable of the original matrices. In this way, by unfolding the first column of ZV which is the one with the greatest variability, we will obtain a matrix that returns to obtain the dimensions of the original matrices X_t with n rows x p columns. This matrix X_c is called 'compromise' and is a global summary of the set of tables. Therefore, the compromise matrix summarizes all the information provided by all the configurations over time.

The objective of this method is to calculate the compromise matrix of each succession of tables: environment, human rights, employees, stakeholders and ethics. Thus, each of the compromises will synthesize the information of the $n = 10$ industries analysed on p CSR practices (the number of practices depends on the succession chosen) during the $T = 11$ years of study (2004–2014), filtering the noise and representing the stable information.

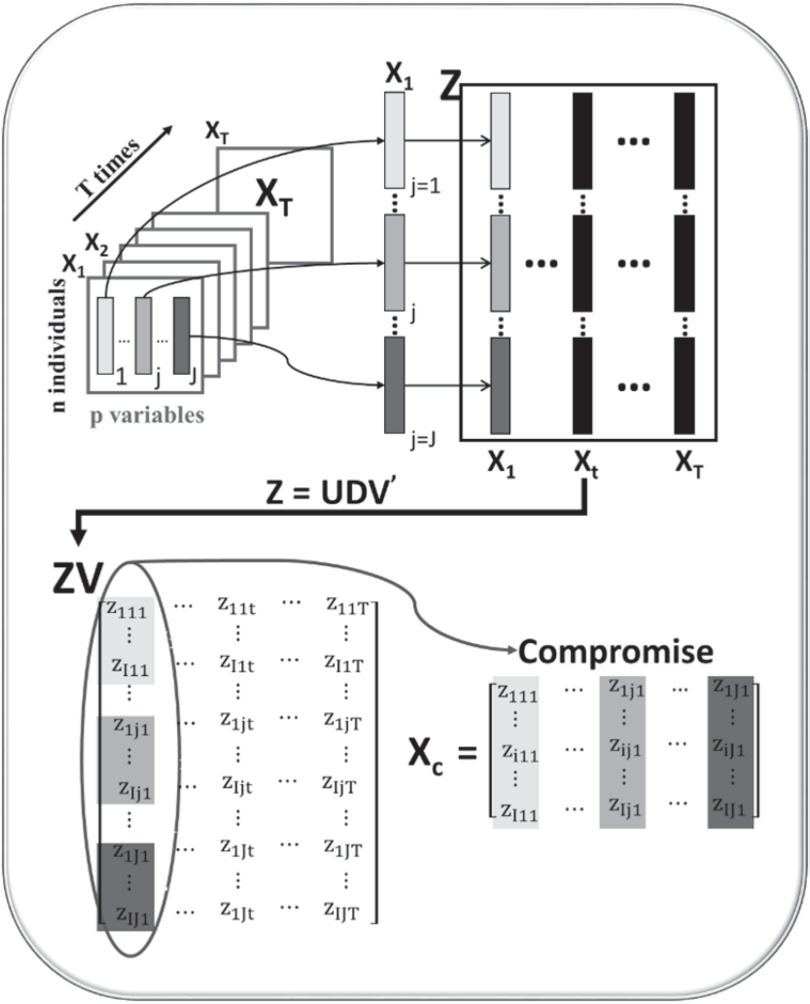

Figure 2. Outline of compromise analysis (X-STATIS analysis)

The next step of the CO-X-STATIS method is a co-inertia analysis of these compromises, taking into account these in pairs. That is, we will highlight the relationships between two 'stable structures'. The analysis of co-inertia allows us to find the common structure between two groups of variables (Dolédec and Chessel, 1994). This technique aims to find a pair of co-inertia axes – that is, a vector a_1 of the first set of variables and a vector b_1 of the second – on which to project the individuals with maximum co-inertia. If the data is centered, this analysis will maximize the covariance squared between the projections of the individuals on the said co-inertia axes (see Figure 4).

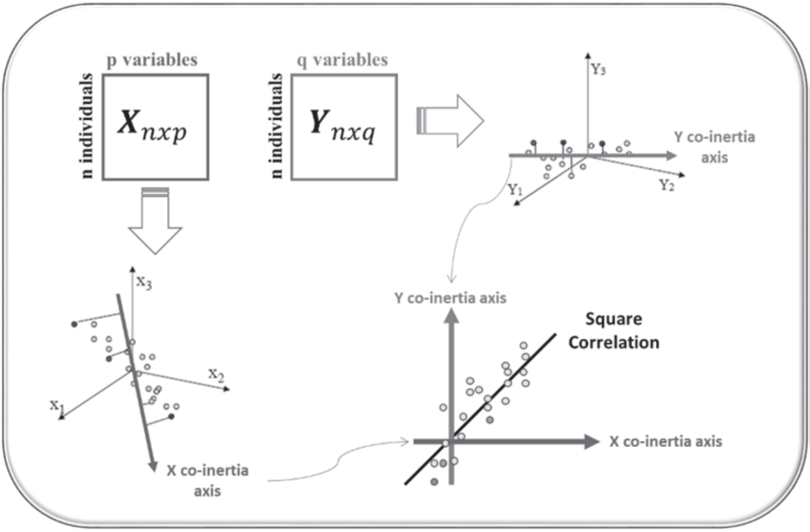

Figure 4. Outline of Co-inertia Analysis

Let X_{nxp} represent the first table and let Y_{nxq} represent the second table—two data matrices with the same n individuals according to which p and q variables are measured, respectively. Let D_n represent the diagonal matrix $n\ x\ n$ of the weights of the rows:

$$D_n = diag(\omega_1, \cdots, \omega_n),$$

and let D_p and D_q represent two metrics in $\mathbb{R}^p$ and $\mathbb{R}^q$, respectively.

Before carrying out the co-inertia analysis, it is necessary to analyse each table separately. If D_n is the uniform row weights matrix ($\omega_1 = 1/n$), and if D_p and D_q are identities (Euclidean metrics), then these will be simple principal component analyses. Considering the columns of both tables are centered, the total inertia of each table will simply be the sum of the variances:

$$Iner_X = \sum_{j=1}^{p} Var(X_j) \qquad\qquad Iner_Y = \sum_{k=1}^{q} Var(Y_k)$$

Inertia is a measure of the variability in the data, and is defined as being the distance between an element and its average profile, taking into account the weight of each element. In the context that concerns us, the expression of inertia is:

$$Iner_X = traza(XD_PX'D_n) \qquad\qquad Iner_Y = traza(YD_qY'D_n)$$

The co-inertia between X and Y is, in this case, a sum of squares of covariances:

$$\begin{aligned} Co - Iner_{XY} &= \sum_{j=1}^{p}\sum_{k=1}^{q}\left(Cov\left(X_j, Y_k\right)\right)^2 = \sum_{j=1}^{p}\sum_{k=1}^{q}\left(\frac{1}{n}\sum_{i=1}^{n} x_{ij}y_{ik}\right)^2 \\ &= \sum_{j=1}^{p}\sum_{k=1}^{q}\left(\frac{1}{n}\sum_{i=1}^{n}(X')_{ji}(Y)_{ik}\right)^2 = \\ &= \sum_{j=1}^{p}\sum_{k=1}^{q}\left((X'D_nY)_{jk}\right)^2 \\ &= \sum_{j=1}^{p}\sum_{k=1}^{q}(Y'D_nX)_{kj}(X'D_nY)_{jk} = \sum_{k=1}^{q}(Y'D_nXX'D_nY)_{kk} \\ &= = traza\left[Y'D_nXD_pX'D_nYD_q\right] \end{aligned}$$

Therefore, the co-inertia analysis is the analysis of eigenvectors and eigenvalues of $Y'D_nXD_pX'D_nYD_q$ and $X'D_nYD_qY'D_nXD_p$ and it is possible to graphically represent both the rows and the columns of the two original matrices in a subspace of dimension r obtained with the analysis, calculating the different coordinates:

rows of X:	XD_pV_r	rows of Y:	YD_qU_r
columns of X:	$X'D_nYD_qU_r$	columns of Y:	$Y'D_nXD_pV_r$

with U_r and V_r representing the first r columns of the eigenvector base of the decompositions of $Y'D_nXD_pX'D_nYD_q$ and $X'D_nYD_qY'D_nXD_p$, respectively.

The co-inertia analysis maximizes the covariances between the coordinates of the rows of the two tables. If both structures covariate in a similar way (either directly or inversely), co-inertia will be high, otherwise; we will obtain a low value. This is the meaning of the co-structure between the two data tables. The results can be represented as their own name indicates, in the form of graphs of co-structures that greatly facilitate the interpretation of the analysis. We show the following figure as an example (see Figure 5).

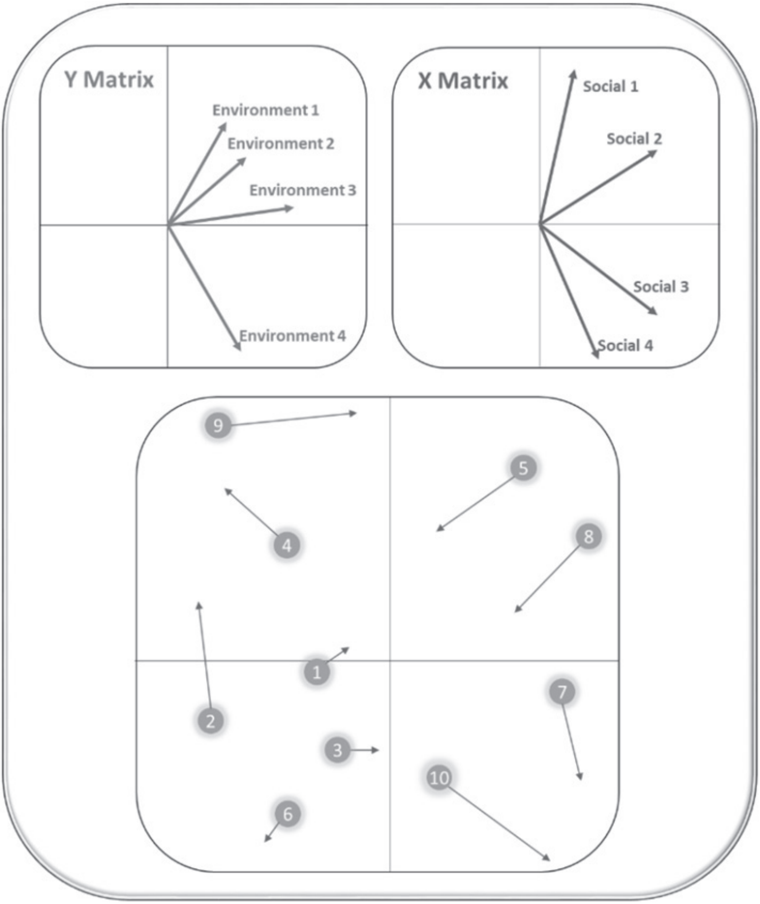

Figure 5. Co-structure graph of a hypothetical study with information on 10 individuals in relation to two sets of variables

In this figure, it is possible to observe the projection of two new sets of standardized coordinates of a study with information on 10 individuals in relation to two sets of variables on their axes of co-inertia. We can extrapolate this example to our context, so that individuals would correspond with $n = 10$ industries measures on p social variables and q environmental variables. Thus, each industry is represented as a circular number accompanied by a vector. The circle in green tone marks the position according to the order of the matrix of environmental practices (Y_{nxq}). And the end of the blue vector marks the position according to the order of the matrix of social practices (X_{nxp}). Therefore, individuals with short vectors indicate that, for those individuals, the variables of the Y matrix explain the structure found in the X matrix (and vice versa) well. Applied to the present context, those industries that obtain short vectors will grant similar importance to their social practices in relation to their environmental commitment (e.g., industries 1, 3, and 6). In addition, with this information we will characterize each one of the industries according to their relative position in the plane by observing the quadrants. Thus, for example, industry '10' prioritizes the practices of 'Environment 4' and 'Social 3 and 4'; and we can also observe with respect to the variables, a positive relationship between 'Environment 4' and 'Social 3 and 4'.

In synthesis, the CO-X-STATIS is a co-inertia analysis of the compromise between two analyses of T tables. Therefore, it highlights the relationships between two stable structures and is easy to interpret (as a standard co-inertia analysis), because it retains the optimality properties of the commitments of two X-STATIS analyses. In this research, we use it with the objective of knowing the importance that each industry gives to social concerns as compared to its environmental commitment. More specifically, we study the variation of our n industries measured on q environmental variables and p_1 human rights variables, p_2 of employees, p_3 stakeholders, and p_4 ethics referencing social sub-dimensions – that is, four different analyses. To suppress the time dimension, we perform X-STATIS three-way analysis and we work with the matrix called "commitment" that synthesizes all that information. So, through four co-structure graphs on these compromises (environment with human rights-employees-stakeholders-ethics) we verify the importance that each industry gives individually to social practices in relation to its environmental practices.

4 Results of Empirical Analysis

Through the application of a CO-X-STATIS analysis, a comparison of the environmental dimension with each of the social sub-dimensions is carried out in order to assess the importance that each industry attaches to social practices in reference to environmental commitment. The data for this analysis are arranged in five 10-row cubes (the industries), with 11 repetitions (the years 2004–2014): a cube with 4 columns, corresponding to environmental practices; another cube with 3 columns, related to human rights; another with 6 variables that refer to labour rights; another composed of 8 practices concerning stakeholders; and the last, formed by 5 practices in relation to business ethics (Figure 6).

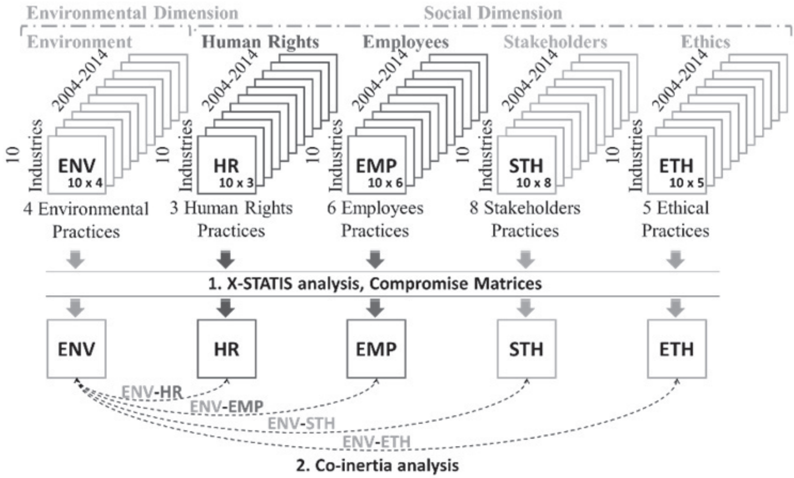

Figure 6. Outline of CO-X-STATIS Analysis

As a first point, an X-STATIS analysis is performed on each of the cubes with the main objective of building the compromise matrix of each of them—a matrix that synthesizes and summarizes the information during the 2004-2014 decade, 'filtering the noise' and keeping the information more stable. Likewise, through its study of the interstructure, the ordering of the years will be shown from the point of view of each type of variable, separately. As a second point, a co-inertia analysis is performed on the compromise matrices obtained through the X-STATIS, taking into account these in pairs. That is, the relationships between two 'stable structures' are highlighted. This information is presented through co-structure graphs.

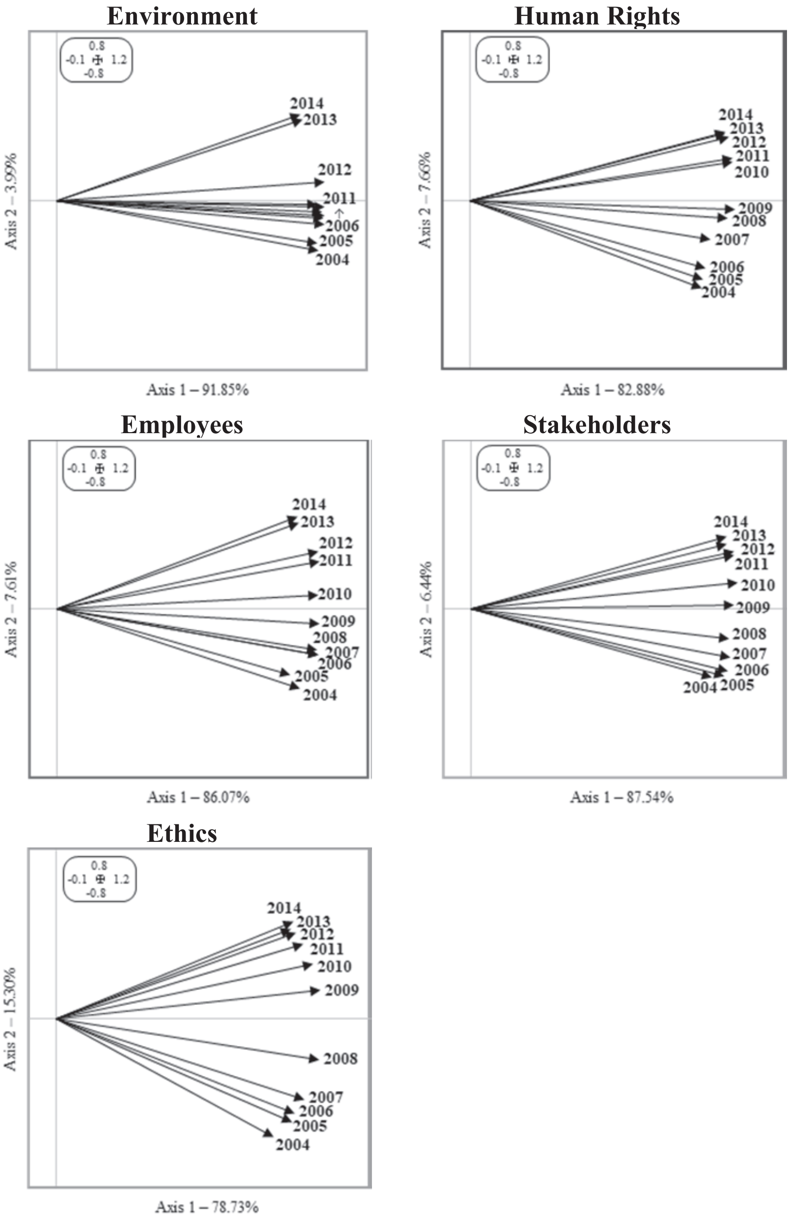

Figure 7. Study of the Interstructure for each type of CSR practice (X-STATIS analysis)

The study of the interstructure of the X-STATIS analysis shows the similarities and differences between years before the analysis of co-inertia for each of the cubes: environment, human rights, employees, stakeholders, and ethics (Figure 7). The relationships between the years occur gradually – the first and the last year of study being the ones with the greatest differences – showing constant growth in CSR practices during this period in each of the dimensions. The arrangement of the years in the different practices shows a strong degree of similarity. Thus, the 'average years' vary between the years 2008–2010. That is, in all of them, one of the intermediate years of the study is the one that most closely approaches the abscissa axis. However, we find some differences. Human rights and ethics practices divide the study decade into two groups, accentuating a jump in this sustainable growth from 2009 to 2010 and from 2008 to 2009, respectively. In the case of the practices of employees or stakeholders, this growth occurs more gradually. Finally, for the environment, very strong relationships occur during most years, separating the latter two (2013-2014) from the rest.

Given that the objective is to compare social sub-dimensions with environmental commitment, a co-inertia analysis is carried out between the environmental compromise matrix and each of the social commitment matrices obtained through the X-STATIS analysis. This information is presented through co-structure graphs, where it is possible to observe the projection of two new sets of standardized coordinates, referring to the industries on the co-inertia axes of the two data sets. Thus, we represent four figures: the first corresponds to environmental practices with those of human rights; the second, environment-employees; the third, environment-stakeholders; and, the fourth, environment-ethics. In the co-structure graphs, each industry is represented by a vector, where the circle or start of the vector marks the position according to the order of the first compromise matrix, and the vector arrow marks the position according to the ordering of the second matrix.

Prior to the presentation of the said graphs, we show some measures of absorbed inertia and correlations that provide us with the information absorbed by the co-inertia axes of each pair of matrices. Table 3 shows these values, so its last two columns 'Iner1' and 'Iner2', correspond to the maximum inertias resulting from the separate analyses, of which 'Varian1' and 'Varian2' represent the inertia projected on the co-inertia axes. Thus, comparing these values, it can be seen that the first factorial plane (axes 1 and 2) of co-inertia extracts a quantity of variability that is similar to that of the analyses separately. The 'Correlation' column gives us a value of the correlation between the first co-inertia factor of the first matrix and the first co-inertia factor of the second matrix (equal to the second axis). In this way, we can see how each of the social sub-dimensions receives a strong relationship with the environment.

Table 3. Absorbed inertia and correlations with the co-inertia axes (CO-X-STATIS analysis)

Axis	Covariance	Varian1	Varian2	Correlation	Iner1	Iner2
Environment – Human Rights						
Axis 1	2.330	3.576	2.701	0.750	3.624	2.713
Axis 2	0.093	0.145	0.199	0.486	0.165	0.216
Environment – Employees						
Axis 1	2.242	3.589	2.619	0.731	3.624	3.787
Axis 2	0.200	0.108	0.568	0.807	0.165	1.041
Environment – Stakeholders						
Axis 1	3.386	3.575	5.156	0.789	3.624	5.357
Axis 2	0.409	0.138	1.295	0.806	0.165	1.705
Environment – Ethics						
Axis 1	2.933	3.607	3.927	0.779	3.624	4.047
Axis 2	0.203	0.165	0.511	0.700	0.165	0.554

Next, we show the corresponding co-structure graphs through which we can make a multivariate characterization of each industry in relation to its social and environmental practices. The first represents the relationship between environmental and human rights practices (Figure 8). All of them are positioned in the right semi-plane (quadrants I and IV), so that they maintain a positive relationship. In reference to the industries, the figure on the left represents, through circles highlighted in green, its environmental position; and the prolongation of the red-coloured vectors marks their position according to human rights practices. In the figure on the right the situation is the opposite. The circles highlighted in red show the position according to human rights practices and the green vectors mark their position according to the environmental variables. In this way, industries that present short vectors give similar importance to both practices.

The practices of both dimensions are located in the right semi-plane, so that the abscissa axis orders the industries according to their commitment to all practices. The basic materials and utilities industries present the highest environmental levels. In human rights, only these industries and the one dedicated to oil and gas are positioned on the right side, showing notable differences with the rest of the industries. Although it is possible to observe long vectors, most of them are produced vertically—which explains the correlation value of the second axes of co-inertia (see *Table*). However, it is important to highlight the difference in the practices of the industry dedicated to oil and gas—which obtains medium-high values with regard to the environment and very strong in human rights. These companies adhere to CSR practices as a way to legitimize their operations, since its actions have a strong impact on human health – an impact that clearly threatens the rights of citizens. The opposite is found in the telecommunications and consumer goods industries, which prioritize their environmental commitments; although the latter have high levels of disclosure on human rights (foreseeably so for companies dedicated to the manufacture and distribution of tobacco).

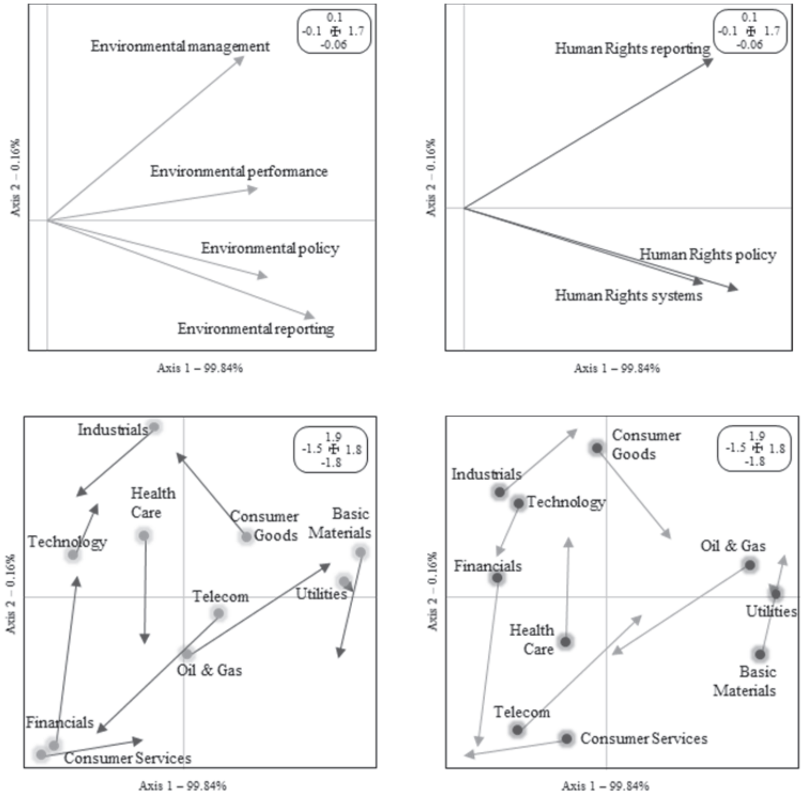

Figure 8. Environment-Human Rights co-structure (CO-X-STATIS analysis)

The following co-structure graphic (Figure 9) represents the relationship between environmental and employee practices. All of them are positioned on the right side, obtaining a strong correlation value (see Table 3), in large part due to the practice directed towards the health and safety systems, which presents the greatest variability and relationship with the abscissa axis. Regarding the industries – utilities (with greater orientation towards the policies of equal opportunities), telecommunications (more oriented to the training and participation of its employees), and basic materials (oriented towards the systems of equal opportunities) – the highest levels of employee practices are presented, highlighting their systems' orientation towards health and safety. It should be noted that the telecommunications, consumer services, and financial services industries give higher priority to their employee practices than to their environmental commitment. The opposite situation is found in consumer goods and basic materials.

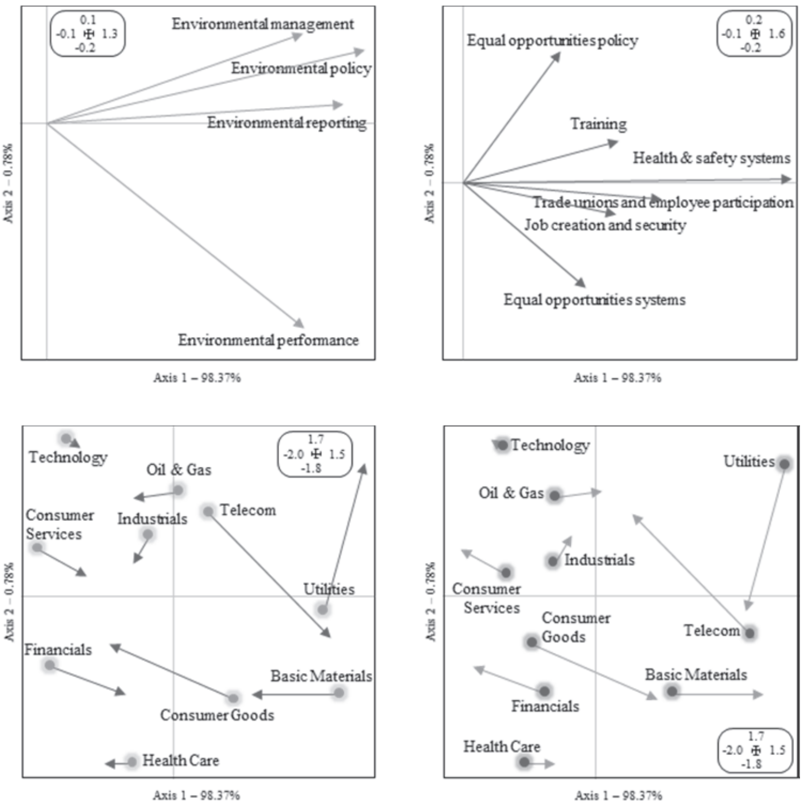

Figure 9. Environment-Employees co-structure (CO-X-STATIS analysis)

The relationship between stakeholder practices and environmental commitment is a relationship represented in the following co-structure graph (Figure 10), where we found a strong relationship (somewhat less so with the practice related to policies to maintain good relations with customers/suppliers). Telecommunications, utilities, and basic materials industries are presented as the strongest in stakeholders practices. It should also be noted that the telecommunications, financial services, and consumer services industries attach greater importance to these practices than to those related to the environment. The reverse situation is found in the consumer goods and basic materials industries. Likewise, the technology, health care, and industrials industries (quadrant II) emphasize their practices in community relations and environmental management; and the consumer services, financial services, and oil and gas industries prioritize community involvement.

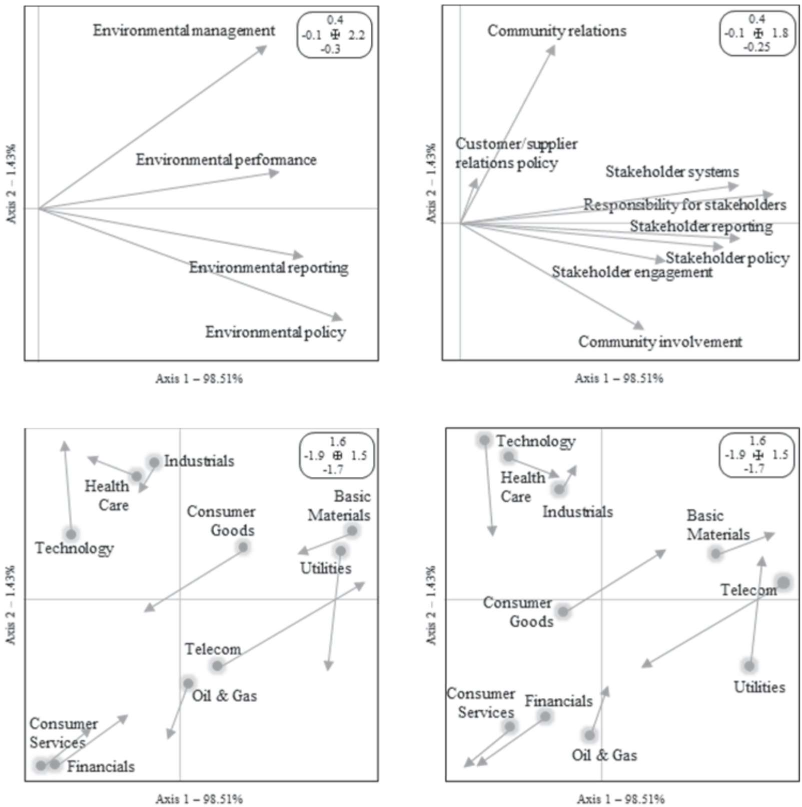

Figure 10. Environment-Stakeholders co-structure (CO-X-STATIS analysis)

Finally, in relation to ethical and environmental practices (Figure 11), we find a relationship between environmental policies and the countering of bribery, as well as with the systems for the implementation of a code of ethics, where the Oil and Gas and Telecommunications industries stand out (quadrant I). Likewise, we find another relationship between the environmental reports and the fight against bribery, highlighting the industries dedicated to utilities and basic materials (to a lesser extent, Health Care) (quadrant IV). It is worth highlighting the commitment of the consumer goods industry to the environment – a commitment which is far superior to the rest of the non-environmental practices of that same industry. The industrials' industry presents a similar importance with average values for all practices (values somewhat smaller for human rights). Financial services and consumer services present the lowest values of the study; increasing these values in human rights for consumer services and in employees for financial services.

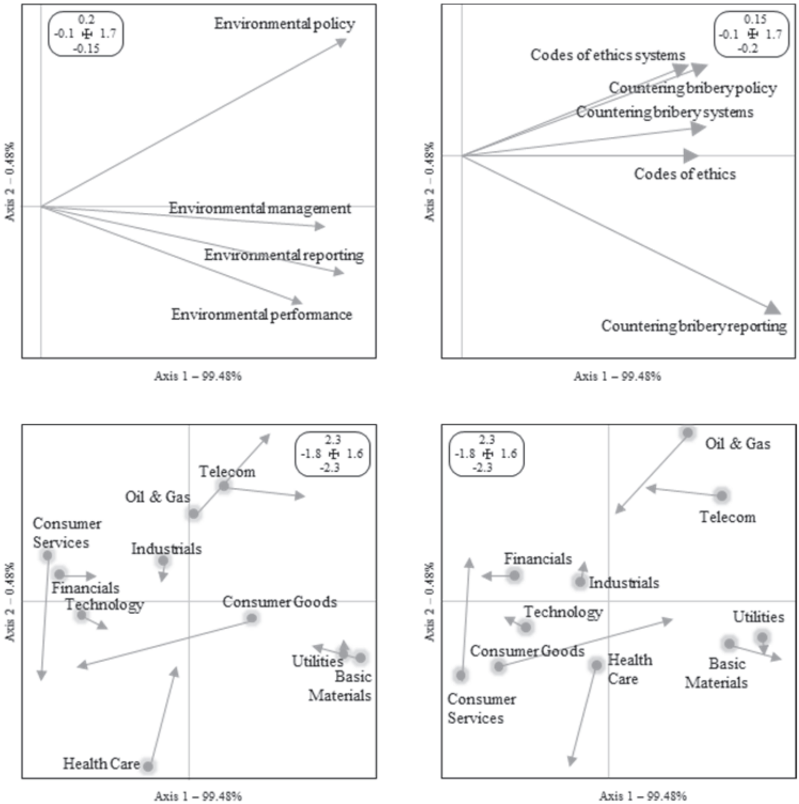

Figure 11. Environment-Ethics co-structure (CO-X-STATIS analysis)

5 Discussion

This research is aimed at answering one of the oldest questions in the debate on CSR: the question of whether it is worthwhile for organizations to pay attention to social demands. For addressing this question, this study works with the environmental and social dimensions of sustainability and evaluates the behaviour of companies with regard to the protection of the environment; the preservation of human rights; the defence of employees' rights; the treatment of, and relations with, stakeholders; and business ethics. Following the results obtained, it is possible to verify the existence of important industrial discrepancies. This is due to the fact that the specific interest groups of each industry, and the society in general, perceive different social and environmental risks according to the economic activity developed by the organizations. This is a fact that is reflected in the CSR policies and initiatives adopted by them. So, the companies adopt more codified and explicit CSR policies and systems of the industry in which they operate. This is done with the aim of improving their image by controlling the standards they must meet in order to be considered proactive and thus to increase their benefits (Jackson and Apostolakou, 2010).

The differences found between industries lead to determining the industry as an institutional factor with an explanatory capacity in terms of CSR practices—thus demonstrating that companies vary their behaviour according to the risks, pressures, and specific expectations of each industry. Following this line of reasoning, we can point out how the industries directed towards basic materials and utilities are presented as leaders in CSR, with notable differences over the rest in terms of their environmental and human rights levels. These industries are made up of polluting companies – producers and distributors of chemical products; mining (including coal extraction); and generators and distributors of electricity or natural gas – considered as being high risk and impactful on the environment. Therefore, due to the social pressure of disclosing unfavorable environmental news, such companies seek to increase the confidence of users by managing the company's risks through engaging in CSR practices (Semenova and Hassel, 2008; Casey and Grenier, 2014).

The industry dedicated to oil and gas presents its highest levels in terms of human rights, because its actions have a strong impact on human health that clearly undermines the rights of citizens. Their companies – being engaged in efforts ranging from the extraction to the supply of oil and gas products – are considered as being high impact, since their activity has a great risk in terms of pollution or degradation. These companies adhere to CSR practices by adopting broader policies responding in this way to the pressures of their stakeholders (Young and Marais, 2012; Ekelenburg, 2016; Halkos and Skouloudis, 2016).

Other companies which are considered to have a lower impact – companies such as those employed in telecommunications services – present social concerns that are greater than those of the environment. In fact, these companies, intensive in personnel, prioritize their practices towards the labour rights of their employees and good relations with their stakeholders, such as their participation and responsibility in decision-making. Involving stakeholders in corporate activities results in an improvement in sustainable development, since the basis of this process is the dialogue aimed at getting to know each other's expectations and possibilities from all interested parties (Salem et al., 2017).

The industries dedicated to financial services -banks, insurance companies, investment funds ...- and consumer services -travel companies, media, retailers ...- show the lowest levels, slightly increased in employees for financial services and in human rights for consumer services, they are considered to be the most delayed in terms of CSR. Their companies are less controlled by the public and therefore less competitive in terms of sustainable practices (Belu, 2009; Scholtens, 2011; Weber, 2014).

6 Conclusions

The 2004-2014 decade shows steady growth in terms of sustainability, highlighting that this growth was more noticeable in the first half of the period, and lower in the second, the years 2010-2014 show greater similarities. More specifically, separating by dimensions, there are some differences, human rights and ethics practices divide the study decade into two groups, highlighting a jump in this sustainable growth from 2008 to 2010; in the case of the practices of employees or stakeholders, this growth occurs more gradually; and, finally, for the environment very strong relationships are produced during most years, separating the last two 2013-2014 from the rest.

This research responds to one of the oldest questions in the debate on CSR, corroborating that social demands are a main point to take into account—since in certain companies, social concerns outweigh environmental concerns. Thus, it is possible to specify as:

- The industries whose business focus is directed towards basic materials and utilities are presented as leaders in the sustainability of the company—demonstrating best practices in this regard. Together with oil and gas, their record with regard to their environmental and human rights levels is outstanding—showing notable differences over those of the rest. In addition, it highlights the commitment of both towards health and safety systems.

- Companies dedicated to oil and gas -due to their high impact on human health- give preference to human rights practices, though without forgetting their environmental commitment. They also encourage community participation and the implementation of an ethical code.

- Industrials: strength in practices related to systems and environmental performance; practices related to the health and safety of employees; and practices aimed at maintaining good community relations.

- Consumer Goods: prioritizes its environmental practices over the rest of its other existing practices, and presents high levels of reports on human rights, foreseeably by companies dedicated to, for instance, the manufacture and distribution of tobacco.

- Technology and Health Care: Industries oriented towards technology and health care emphasize their practices in terms of community relations and environmental systems due to this sector's being composed of manufacturing companies and distributors of electronic equipment or those employed in the research and development of biological substances. In addition, health care companies disclose information in the fight against bribery.

- Telecommunications: In companies in this industry, social concerns exceed environmental concerns. Thus, they prioritize their practices in the training and participation of their employees and in everything related to external relations—presenting the highest levels in these fields. At the same time, they emphasize systems for the implementation of a code of ethics and the fight to counteract bribery.

- Financial Services and the Consumer: Those industries dedicated to financial services or to the consumer show the lowest environmental levels. They comprise companies with fewer concerns for society. They present themselves as the least progressiveindustries in terms of sustainability, slightly increasing their levels with regard to human rights as it relates to services to the consumer and with regard to employees of financial services.

This study addresses the importance of the industrial root of the socially responsible behaviour of companies and contrasts this with the finding of important industrial discrepancies in sustainability. It defines the industry as being an institutional factor with explanatory capacity in terms of the sustainability of the company. This occurs since different interest groups and society in general perceives, different social and environmental risks according to the economic activity developed by organizations between such industries. This is reflected in the CSR policies and initiatives adopted by such organizations.

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CHAPTER TWO

BEYOND CORPORATE VALUE AND SOCIAL RESPONSIBILITY

RUTE ABREU[1]

Abstract

This chapter contributes in three ways to the domain of the theoretical analysis of corporate value and social responsibility: First, this chapter has been validated on a panel of data of listed corporations in a specific period (from December 31, 1991 through December 31, 2004) of Euronext Lisbon. Second, this chapter provides evidence, in the form of accounting and market information disclosures to justify the assertion that corporations deal with complexity as shown by the different accounting information systems, reports, and other information disclosures that have increased over the years. Third, this chapter shows that corporations include the social dimension into their accounting strategies, due to the increasing demands of stakeholders. According to empirical analysis, this chapter promotes the discussion, dissemination, and exchange of ideas about social responsibility (as it relates to corporate value) as a potential dimension of strategies and practices implemented and developed by each corporation—knowing that investors increasingly want to know about sustainability and their influence on the accounting information system.

Keywords: corporate social responsibility, corporate value, stakeholders

1 Introduction

Social Responsibility (SR) strategies and practices are supported by legislation, norms, and rules (in accordance with accounting legislation).

[1] Polytechnic Institute of Guarda, Portugal (email: ra@ipg.pt)

In the context of the corporation, the absence of SR strategies and practices is a factor that is critical. Such factors risk leading to the collapse of several corporations, because managers misappropriate and misallocate efforts and resources. The reason is a lack of social responsibility. All of these aspects raise, because information is a crucial part of the decision-making process. This may explain the gap between market price and corporate value.

This chapter is justified by the classification process of the corporation in the capital market. When businesses are classified as being “socially responsible”, they perform well financially. Others, however, classified as being “not socially responsible”, present several insufficiencies (Pava and Krausz, 1996). In this context, the shareholders recognize that the corporation influences the external environment through its actions, and that its economic decisions must then produce effects (Fernández, 2002; Joyner and Payne, 2002). Several authors, writing from the perspective of the investor’s decision-making process, support the impact of Social Responsibility (SR) on Corporate Value (CV). Such authors include Barnett and Salomon (2006), Berman et al. (1999), Easton (1999), and Windsor (2001). Relevant to assessing CV, the consultable literature includes well-defined methods based on share-price, equity, net result, dividends, and return on capital, among other factors; see Collins et al. (1997), Francis and Schipper (1999), and Core et al. (2003). The question is choosing the most appropriate one to correlate with Corporate Value.

Depending on the indicator chosen, and depending on the time perspective over which it is viewed, different findings may emerge. Clearly, the methodological axioms of research projects in which such an indicator is based should have reliability, representativeness, generalizability, and validity (McNeil, 1990). Thus, this chapter addresses the annual corporate reports of Portuguese corporations (Hopkins, 1997) from within a specific period of analysis, showing evidence of the relevance of SR on CV. Also, this chapter aims to promote the discussion, dissemination, and exchange of ideas about social responsibility (as it relates to corporate value) as a potential dimension of strategies and practices implemented and developed by the corporation (knowing that a specific economic period is relevant to the analysis.

Consequently, the chapter is organized as follows: Section 2 begins by addressing corporate social responsibility and then goes on to address corporate value. It shows evidence of corporate social responsibility disclosure from annual reports. It also presents a content analysis from the corporate annual reports, as a way to try to capture the essence of SR. Section 3 begins by addressing accounting and then goes on to address corporate value. It examines the empirical evidence of corporate value as shown from annual reports. Furthermore, these results of the exploratory regression analysis aim to assess corporate value. Finally, Section 4 promotes the discussion of several findings, implications, and conclusions. Knowing that, the implication is clear. The author concludes that the standard normative interpretation (found frequently in the literature) has not been subject to manipulation. As a separate question: to what extent is the empirical data in certain annual reports of struggling companies intentionally presented and deliberately framed in such a way so as to, shall we say, 'manipulate' potential investors into viewing the company as being a good investment. Then, it relates them to the legitimization of the stakeholder's participation in the management process decision. This is seen as being the only way to promote minimum disadvantage.

2 From Social Responsibility to Corporate Value

A substantial body of literature has emerged concerning CSR and CSP. Yet the renewed interest in the value of firms has not generated a plenitude of empirical studies into corporate social responsibility—a dimension which is more difficult to assess. As Aupperle et al. (1985) observe,

> assessing profitability is a relatively clear-cut process, but assessing social responsibility is not.

So, the bridge from CSR to firm value is designed on findings based in the empirical correlation between financial performance and social, economic, or environmental performance. There are a great number of well-defined methods of assessing firm value – for instance, doing so based on dividends, return on capital, share price, total shareholder return, and market value added, among other methods. Thus, one research question is choosing the most appropriate one to correlate with social performance. Depending on the indicator chosen, and depending on the time perspective over which it is viewed, different findings may emerge. It is generally understood that the methodological axioms of research projects based on the reputable work of McNeil (1990: 14-16) should have reliability, validity, representativeness, and generalizability.

Given all these conditions, collecting information from the firms themselves may be an obvious way to learn about the relevance of CSR to firm value, since their CSR's effects provide backward-forward information about the firm behaviour. In this perspective, several authors agree that the cross-sectional studies carried out between social accounting and financial reporting are important sources of information. The author of this chapter gives some examples of the literature review that, in this area, can assess the responsiveness of a firm devoted to this. For instance:

- Solomons (1974) considers the reasons for objectively measuring the corporate social performance of a business and suggests that while one reason is to aid in rational decision-making, another reason is of a defensive nature.

- Fetyko (1975) defends social accounting as being an approach to reporting a firm's activities and the identification of socially relevant behaviour; the determination of those to whom the firm is accountable for its social performance; and the development of appropriate measures and reporting techniques.

- Klein (1977) considers that social accounting recognises that different stakeholders are interested in different aspects of areas of performance.

- Birnbeg (1980) states that accounting is engaged in attempting to supply various diverse groups, each of which have different informational needs, with what each needs; and that there is a need for several distinct types of accounting so as to perform such a function.

- Gray et al. (1987, 1991) consider social reporting in terms of responsibility and accountability and distinguish between a business's internal needs (catered to by management accounting) and its external needs (which are addressed for shareholders through financial reporting but which are largely ignored due to the prominence of other stakeholder interests).

- Chrisman and Carroll (1984) judge that social activity can lead to economic rewards; and business should attempt to create such a favourable situation and short-term profit maximization orientation.

- Rubestein (1992) introduces a whole new concept (one that appears consistent with the growing reality) to the area of accounting for environmental obligations; positing that, along with intended effects, every economic event has effects that are unintended.

- Till and Symes (1999) suggest that the inclusion of such information does not demonstrate an increasing concern with the environment but rather some benefits to the company itself. One trend which, nevertheless, is also apparent in many parts of the world is the tendency of companies to produce separate social and environmental reports.

Nevertheless, the purpose of financial reporting is to provide users with information as a basis for discussing the implications and the relationship between firm value, CSR, and CSP. When it is no longer able to perform the task of providing, by itself, enough relevant information to satisfy the needs of this research, it is a logical reaction to look for different methodologies that will have the potential of bridging the gap by adapting the existing framework.

So, the author has analysed several studies that focus on a revisionary period of the literature during a long period of time (1985–2006). The goal has been to obtain an overview of the diversity of fields that related firm value, CSR, and CSP in a way designed to find meaningful variables, structures, and patterns. However, the following studies try to capture trends that will increase the range of the debate that account for corporate social responsibilities. For instance:

> Aupperle et al. (1985) reviewed 10 studies to discuss the frequent ideological biases and limited methodological procedures relative to studies on the relationship between CSR and profitability.
>
> Ullmann (1985) reviewed 13 studies that prove the relationships among social performance, social disclosure, and economic performance that can be best characterized by the concept of "empirical data in search of an adequate theory".
>
> Griffin and Mahon (1997) reviewed 51 studies and extend the research concerning the relationship between CSP and corporate financial performance, placing particular emphasis on methodological inconsistencies.
>
> Preston and O'Bannon (1997) reviewed 8 studies to analyse the relationship between indicators of CSP and financial performance within a comprehensive theoretical framework.
>
> Roman et al. (1999) reviewed 37 studies to modify and extend Griffin and Mahon's (1997) research review by investigating a relationship between CSP and CFP.

Rowley and Berman (2000) reviewed 55 studies to investigate the conditions under which stakeholders will take action to influence the organizational focus and when those actions will influence the link between CSP and financial performance.

Orlitzky et al. (2003) reviewed 52 studies and argued that CSP appears to be more highly correlated with accounting-based measures of CSP than are market-based indicators, and CSP reputation index designations are more highly correlated with CFP than are other indicators of CSP.

De Bakker et al. (2005, 2006) reviewed studies to develop a bibliometric analysis of 30 years of research and theory on CSR and CSP.

McWilliams et al. (2006) reviewed 24 studies, subdivided by theoretical and empirical research studies, to develop a framework for consideration of the strategic implications of CSR.

Schuler and Cording (2006) reviewed 51 studies to present a model that links the CSP model and the corporate social performance behavioural model.

The pressure on firms to disclosure relevant and credible information is increasing as its role for determining future benefits increases. However, for practical purposes, the relationship may therefore seem to be a chaotic one, in the (formal) sense that small changes in CSR may have disproportionately large effects (whether good or bad) on firm value. Yet, data collection difficulties depend on the variables formulated by the exploratory model and depend on its availability and accessibility. Thus, it may be susceptible to the developing of an empirical analysis, because there may be so many variables influencing them, that it is possible to examine the relevance of CSR.

In this scenario, any firm might enjoy a competitive advantage through CSR and its relevance on firm value. It is imaginable that some firms can continuously over-fill all of the stakeholders' expectations, because some limit reflex with a (more-or-less) significant linkage with its external environment would (positively or negatively) change it through its own activities (Galan, 2006; Luo and Bhattacharya, 2006; Siltaoja, 2006). So, the author assumes an adaptation from the proposed models made by Griffin and Mahon (1997: 8-9) and presents several of them made by researchers in the period of 1938 till 2007. They related CSR and CFP in three different senses:

Firstly, the finding of a positive linkage between CSR and CFP may be seen in Belkaoui (1976), Anderson and Frankle (1980), Turban and

> Greening (1997), Preston and O'Bannon (1997), Waddock and Graves (1997), Berman et al. (1999), and Johnson and Greening (1999), among others.
>
> Secondly, the finding of a negative linkage between CSR and CFP may be observed in Vance (1975), Freedman and Jaggi (1982), Kedia and Kuntz (1981), and Shane and Spicer (1983).
>
> Thirdly, the finding of no significant linkage or an inconclusive linkage between CSR and CFP may be confirmed in Alexander and Buchholz (1978), Abbott and Monsen (1979) and Aupperle et al. (1985).

The character of SR linked to CV is examined using an axiomatic framework based in statistical theory to demonstrate that properties such as distribution and variance could affect their usefulness in general; and it may be studied separately. Therefore, in this research, the author does not have the intention of presenting a complete definition of SP. But, the author suggests that various researchers, by means of their arguments and definitions, could prove that this field of study needs more applied research investigating real-world scenarios. Such studies are needed to convince more people of the importance of this field of study—helping more people to understand that a firm with socially responsible behaviour is a necessary prerequisite of economic activity. For example:

Preston (1988: xii) argues that:

> corporate social performance was intended to suggest a broad concern with the impact of business behaviour on society. The concern is with ultimate outcomes or results, not simply with policies or intentions; moreover, there is some implication that these outcomes are to be evaluated, not simply described.

Wartick and Cochran (1985: 767) comment that corporate social performance is:

> a business organization's configuration of principles of social responsibility; processes of social responsiveness; and policies, programs, and observable outcomes as they relate to the firm's societal relationship.

Wood (1991: 693) observes that corporate social performance presents:

> the degree to which principles of social responsibility motivate actions taken on behalf of the company; the degree to which the firm makes use of socially responsive processes; the existence and nature of policies and

> programs designed to manage the firm's societal relationship; and the social impacts … of the firm's actions, programs, and policies.

All of these studies, based on a review of academic and practitioner-oriented literature in this area, show that in the conceptual field, no claim can be made, because the respective expectations are fully covered and the variables are able to fully capture how well this relevance is met. As it is inherent in every variable, debates concerning its validity may arise. It is to these questions that the author now turns her attention.

Furthermore, the bridge between SR and CV shows the agreeing and disagreeing nature of the above arguments presented by the research studies. In addition, SR and CV needs further proves based in empirical analysis, but the limited works about this perspective of research suggest to examine the relationship carefully and expected that the results will be convergent. Also, it is these questions that now the author turns her attention.

This chapter is designed to engage with the concept of the relevance of SR to CV, according to the increased pressure that corporations face in the reporting process (Clarkson et al., 2008). At the same time, the general objective of the reporting process is seen as being that of corporate image management, because it provides information to the stakeholders and to a wide range of users (or, in some cases, only to existing common shareholders). Also, the International Organization of Securities Commissions (IOSCO) publishes a statement that provides investors with appropriate and complete information on accounting frameworks used to prepare financial statements (IOSCO, 2018). This is result of the fact that each corporation publishes different kinds of annual reports. Furthermore, IOSCO is concerned with investor protection and the fairness, efficiency, and transparency of the securities market; and its goal is to reduce systemic risk. For example, some firms start to publish environmental reports, then change them to social responsibility reports. Actually, they are disclosure sustainability reports; and they have their own corporate web pages on the internet.

All over the world, several public entities and non-profit organizations such as FASB, IASB, the World Commission on Environment and Development, the International Federation of Stock Exchanges, and the European Union have actively promoted the disclosure, by firms, of such information so as to improve the transparency of financial information. This concern is extended to all stakeholders, knowing that greater disclosures of value-relevant accounting information are more likely to result in higher international capital mobility (ETHOS, 2006; Young and Guenther, 2003).

So, the level and availability of information is increasing; and that is one of the reasons that this chapter evaluates social responsibility disclosure practices in the annual reports of the largest listed corporations of the PSI-20 in the Euronext Lisbon, with the main objective being to assess corporate value. Then, researchers are interested in learning about the use of accounting information (Schipper, 1991). It appears that potential investors' uncertainty with regard to assessing the statistical validity of voluntarily disclosed information allow encourage stakeholders to use their own privately information in interpreting such annual reports (Dutta and Truman, 2002). Inevitably, this implies that corporations face an increasing risk of being misunderstood by both due to potential limitations in, for instance, the degree of informational availability with regard to the results of external audits. Those concerned about implementing SR in all areas of corporate strategy should develop corporate transparency at the same time. However, these initiatives could face some difficulties in their implementation. Bushman et al. (2004) argue that corporate transparency can be captured by the intensity and timeliness of their disclosures. They note that such data differ between countries, because of differences between various financial accounting environments. So, financial transparency is primarily related to political economy.

Similarly, the previous empirical models show the introduction of simplified assumptions regarding corporate value that impact on estimates of that value. The assumptions made, the hypotheses developed, and the language used (as well as interpretations applied) in the measurement of economic decisions requires instruments of a certain specificity. It is conventional, and surely uncontested, to claim that taking measurements requires instruments of measurement such as methods, models, and approaches equal to all situations.

3 From Corporate Value to Accounting Disclosure

In the valuation models, corporate value is designed from a heterogeneous and diversified understanding of reality that needs a hypothesis to confirm its association with relevance. The author develops an exploratory regression analysis; and then, she combines more than one independent variable as a multivariate regression model represented in equation [1] where α is the interception coefficient, χjit is the jth independent variable for the ith corporation at t year, βjit is the coefficient of the jth independent variable for the ith corporation at t year, and εit is the error term:

$$Y_{it} = \alpha + \beta_{1it}\,\chi_{1it} + \beta_{2it}\,\chi_{2it} + \varepsilon_{it} \qquad [1]$$

Foster (2001) proposed the application of a stepwise method of determining, saying that it:

> is a combination of forward and backward procedures examines each variable for entry or removal.

The author is monitoring the progress of developing performance measures that she hopes will help to achieve the implementation of SR strategies and practices (Tangen, 2004; CEC, 2005; and McWilliams et al., 2006). This monitoring process identifies indicators by means of an iterative process, because the bridge from SR to CV is designed on findings of an empirical analysis between financial performance and social, economic, or environmental performance (Pintér et al., 2005). So, the chapter explores the potential information on CV that will help assist the investor in making her or his economic decision.

The first model is presented in Equation [2]. In the accounting-oriented information, the variable represents that of equity from the Balance Sheet presented on the annual accounts of the corporation. Additionally, in the market-oriented information, the variable represents that of share price on the closing date (December 31st). This model is defended by different researchers (Collins et al., 1997; Easton, 1985). It presents Pit as being the share price i at moment t, and Eit as being equity i at moment t:

$$P_{it} = \alpha + \beta\, E_{it} + \varepsilon_{it} \qquad [2]$$

Equation 2 had increased the estimate of the methods and models based on the balance sheet. The estimate in the first model for all parameters is significantly different from zero in light of the contrast of the statistical t-student, but is affected by the effects of extreme values and large scale of the variable values in books that does what follows refer to the difference, the effect, the values, the large scale, the variability, or the accounting can be justified by the inequitable dimension of business in the capital market.

The second model is presented in Equation [3]. In accounting-oriented information, the variable represents the result, before tax, from the Balance Sheet, as presented in a report of the annual accounts of the corporation. Additionally, in market-oriented information, the variable represents the share price on the closing date (December 31st). This model has been developed by various researchers, such as Easton (1985) and Mora and Arce (2002). They determine the impact on the share price and the result before tax, on the same date. Pit represents share price i at moment t, and Rit represents the result before tax i at moment t:

$$Pit = \alpha + \beta\ Rit + \xi it \qquad [3]$$

The third model is presented in Equation [4]. In accounting-oriented information, the variables represent the result, before tax, from the Balance Sheet and the equity from the Balance Sheet – both of which are presented in the annual accounts of the corporation. Additionally, in market-oriented information, the variable represents the share price on the closing date (December 31st). The influence of the result and the equity on the share price has been discussed by several authors such as Francis and Schipper (1999), Barth et al. (1998), Burgstahler and Dichev (1997), and Rees (1997). This model assumes that corporation value is represented by the share price, on the same date as that of the accounting variables. Pit represents share price i at moment t, Rit represents the result before tax I, and Eit is equity i at moment t:

$$Pit = \alpha + \beta\ Rit + \gamma\ Eit + \xi it \qquad [4]$$

This chapter reflects the relevance of SR to the analysis of the CV –but in a specific period of time, in order to better understand how the relevance and the impact on value should be perceived through financial performance and social performance and, similarly, by the strategies adopted by the same in a global society. Thus, the author seeks to answer the following questions, a specific period of time:

- Is corporate value explained by the equity of the corporation?
- Is corporate value explained by the corporation's result before tax?
- Is corporate value explained by the corporation's equity and the result before tax?

The investor has a different position—one that is related to difficulties in valuating the risk inherent in whether to make an economic decision as a whole. This is especially so because this decision is complex and her or his formal opinion and decision. Such a decision takes into account emotions, beliefs, formal education, and other information attached to each corporation. Shareholders recognize that the corporation, through its actions, influences the external environment and that its economic decisions must produce effects. The recognition of the impact of these practices will produce three different effects on corporate value.

The corporate value methods proposed by several researchers over time demonstrate scientific progress (Whittington, 1986); technical changes in the environment (Pratt et al., 1998); and differences between the accounting information system and market-orientation information (Barth et al., 2001; Brammer et al., 2006). All of these arguments show the heterogeneity of the corporation. This is one of the reasons why the European Commission is concerned over the need to improve knowledge regarding the impact of CSR on corporate performance and continuous to develop with further studies such as CEC (2005), Cooper and Sherer (1984) and EC (2001, 2002, 2007). The level of, and the extent of, the accounting information system can potentially improve the relevance of CSR to the process of valuation of the corporation. For example, it can do so when the corporation is classified as offering social benefits or as providing or delivering or itself functioning as a public service (Dahl, 1972), or thereupon to differentiate their products and services (McWilliams and Siegel, 2001; Waddock and Graves, 1997) or to reduce their exposure to risk (Godfrey, 2005).

The evidence of CV from annual reports is based on exploratory regression analysis based on corporation/year observations. It explores different variables that are robust and are statistically validated (Greene, 2018). The availability and accessibility of the accounting, market, and social data has been the main difficulty faced. However, the compilation also involved assembling retrospective and prospective data to prepare the corporate taxation report and procedures conducted to ascertain whether the assumptions and development were appropriate.

The empirical analysis is focused on several tasks:

- **1st task:** Collect information from several sources;
- **2nd task:** Identify the population used in the empirical analysis;
- **3rd task:** Select the sample;
- **4th task:** Present the technique adopted in the empirical study, which will allow confirmation of the objectives;

- **5th task:** Choose the hypothesis and variables that will allow the model to be built and tested;
- **6th task:** Discuss difficulties in the model of the relevance of the RSC to corporate value, according to the models tested earlier by various authors in the literature review (Damodaran, 2002; De Bakker et al., 2005; Griffin and Mahon, 1997; McGuire, 1988; Trotman and Bradley, 1981; Clarkson, 1995).

The population includes all corporations listed on Euronext Lisbon in the period ranging from December 31, 1991 to December 31, 2008 (Euronext Lisbon, 2018). This population of 291 corporations with officially quoted shares from 1991-2004 is identified in Table 1. From 2005 till 2018 is another part of an ongoing study project.

Table 1. Evolution of the Portuguese Stock Market, 1991-2004

Year	Corporations (number)				Market capitalization 106 Euros			
	Total	Official Market	Secondary Market	Other Market	Total	Official Market	Secondary Market	Other Market
1991	180	153	-	27	6.406	6.245	0	161
1992	193	100	6	87	7.137	6.370	50	717
1993	183	89	9	85	10.939	10.262	128	549
1994	195	83	16	96	12.903	11.575	367	961
1995	169	78	15	76	13.682	12.467	325	890
1996	157	73	16	68	19.095	17.953	375	767
1997	148	75	12	61	35.722	34.956	221	545
1998	135	76	12	47	53.613	52.522	266	825
1999	125	73	12	40	67.992	67.314	245	433
2000	110	62	9	39	64.658	63.317	105	1.236
2001	99	57	8	34	53.210	52.637	111	462
2002	72	52	-	20	73.239	72.844	153	242
2003	83	50	7	26	91.365	91.073	108	184
2004	82	48	7	27	113.264	112.612	113	539

Source: Euronext Lisbon (2008).

Table 1 shows the total number of companies with listed shares has decreased by 98—which is nearly 55% of the 1991 total. The Second Market starts negotiating with six corporations in 1992 – a figure which has risen to twelve corporations by 1997. Since 1991-1997, the total number of listed shares has decreased nearly 18% or 32 of the 1991 total. In the period of 1998-2004, the Secondary Market almost disappears—because although in 1998 it has twelve corporations, in 2002 it has none; and in 2004, it only has seven corporations. Market Capitalization increases in value from M€ 6.406 in 1991 to M€ 35.722 in 1997 (+458%). Also, Market Capitalization increases from M€ 53.613 in 1998 to M€ 113.264 in 2004 (+111%).

The Portuguese Stock Exchange – Euronext Lisbon – and the securities market exchange commission – Comissão de Mercado de Valores Mobiliários – regularly publish accounting and market-oriented information and make it available for helping stakeholders to make their decision-making process (CMVM, 2018). This information is important because markets normally have sellers and buyers, and their agreement point is achieved at the market price. This insight helps stakeholders understand that the assessed value of the corporation – an assessment generated by an application of the valuation model proposed in the literature – is affected by corporate characteristics and by market-oriented information as well as by accounting-oriented information.

The next step of this gathering of empirical evidence is a depuration process, the results of which are presented in Table 2. This process starts from the panel data and then results in the final sample being obtained. The depuration process is justified by differences of the Accounting Plan. It is important to detail that since December 31, 2005, the financial statements have been issued in accordance with the International Accounting Standards, applicable to the financial reporting adopted pursuant to the Article 6 regulation of the European Parliament and of the Council (EC) Nº 1606/2002 of July 19 (CE, 2002). Also, the securities code has recently been republished (CMVM, 2018) in revised form which includes several changes such as the introduction of “quoted share”—a concept based on laws from other countries. This has also been excluded from the sample, because it generates law legal bias.

Table 2. Depuration Process, 1991-2004

Tasks	Corporation number	%
Corporation with shares listed on Euronext Lisbon on 31 December between 1991-2004	291	100.0
Corporations with different Accounting Plans:		
Minus: Banks and financial Accounting Plan	60	
Minus: Insurance Accounting Plan	10	
Minus: Football Accounting Plan	3	
Minus: Foreign Accounting Plan	4	26.5
Sample after the first treatment	214	73.5
Corporation with different closing data of accounts:		
Minus: Start at March 31	1	0.3
Sample after the second treatment	213	73.2
Minus: Corporation with overlapping, contradictory, and inconsistent data	99	34.0
Final Sample	114	39.2

One justification for there being such a large number of corporations (99) with overlapping, contradicting and inconsistent data is the potentially confounding presence of insufficiencies with regard to transparency in the Corporate Annual Reports. It is necessary to promote an increase in transparency within annual reports; because in the Corruption Perceptions Index (CPI) published by Transparency International in 2017, this (the need for more transparency in corporate annual reports) occupied 29th place between 180 countries; in 2005, it occupied 27th place between 145 countries; and in 1995, it occupied 23rd place between 41 countries (TI, 1995, 2005, 2017). This CP Index is related to perceptions of the degree of corruption as seen by business people and by country analysts. It has a range between 10 (highly clean) and 0 (highly corrupt).

Table 2 presents the final sample with 114 corporations described over a set of m evaluation criteria with n variables. The variables entered in the exploratory regression analysis are presented in Table 3 along with their correlation coefficients (Hair et al., 2017). Such results allow for year-by-year, cross-sectional period analyses to be made. In general, the Pearson coefficient shows a degree of linear relationship between those variables in the upper-right-hand quadrant. The Spearman coefficient shows a degree of direct association between them in the lower-left-hand quadrant. To mitigate the harmful effects of collinearity among the variables, the author also tested each of the components one-by-one to verify the consistency of the results. Table 3 presents descriptive statistics and a correlation coefficients matrix of the share price, net result, and equity as of December 31. Pit represents share price i at moment t, Rit represents the net result, Eit represents equity i at moment t, and (*) signifies $p<0.01$.

Table 3. Descriptive statistics and correlation matrix

Variables		Pit (December)	Rit	Eit
Central tendency	Mean	12.277	0.792	12.282
	Median	9.128	0.4	8.842
Dispersion of variability	Standard deviation	14.984	6.221	19.741
	Maximum	169.59	83.163	302.309
	Minimum	0.33	-130.606	-125.618
Shape Distribution	Skewness	5.632	-5.059	6.629
	Kurtosis	49.021	230.539	73.309
Correlation Coefficient	Pit (December)	1	0.568*	0.528*
	Rit	0.364*	1	0.563*
	FPit	0,590*	0,692*	1

Table 3 shows several accounting limitations, because all variables present leptokurtic distribution. The data, with the exception of the negative results, exhibit a considerable amount of skewness and kurtosis, as is normal for which either the hypothetical or the actual results are exceptional and are therefore abnormal. A growing number of corporations on the stock market have negative equity as a result of their having experienced a negative net result—something which some of them suffered during the whole period of analysis. During an economic crisis, this trend is not of general concern. However, it was possible to relate these imbalances to their having presented sufficient cause for the collapse of several corporations.

The first model is presented in Equation [2] and in Table 4. The results of the exploratory model presented show consistency over time with regard to predicted signs. This table also reveals that corporate value does not significantly influence new strategies and practices related to CSR. The Durbin-Watson statistics detail the statistical significance of the models, by yielding an upper limit equal to 2.364 and a lower limit equal to 1.691.

In addition, the intervals for determining the existence of the error term autocorrelation are between [0, 1.664] when it is positive; among [2.336, 4.000] when it is negative; and between [1.684, 2.336] when there is no autocorrelation. Accordingly, in general, this stresses that the statistical models for the three D-W statistics provide evidence that there is no autocorrelation. Consequently, for all the above reasons, Hypothesis 1 is not supported.

Table 4. Results of the first regression model

Sample	α	t-student	β	t-student	R2 ADj.	D-W	N
1991	4.139	2.54**	0.487	4.46*	0.214	1.925	70
1992	3.207	1.88***	0.366	2.93*	0.116	2.056	59
1993	4.957	1.77***	0.333	1.61	0.027	2.151	59
1994	4.727	1.92***	0.360	1.94***	0.045	2.364	59
1995	3.391	2.21**	0.436	3.57*	0.147	2.280	69
1996	5.116	3.14*	0.379	2.96*	0.101	2.121	70
1997	5.670	2.71*	0.585	3.37*	0.126	1.882	73
1998	8.322	2.83*	0.435	1.96***	0.037	2.299	75
1999	5.775	2.92*	0.662	4.58*	0.222	2.010	71
2000	6.525	3.68*	0.419	3.54*	0.149	1.733	67
2001	3.224	3.24*	0.390	5.12*	0.307	1.691	58
2002	1.430	1.07***	0.912	9.13*	0.495	1.926	85
2003	4.654	2.83*	0.561	5.25*	0.257	1.909	78
2004	5.834	3.20*	0.416	2.93*	0.113	1.948	71
Total	5.902	13.30*	0.488	24.28*	0.373	1.845	964

Notes: * is significant at the 1% level, ** is significant at the 5% level, and *** is significant at the 10% level. The standard errors are calculated using VIF and tolerance.

The second model is presented in Equation [3], and the results are presented in Table 5. This table also reveals that corporate value does not significantly influence new strategies and practices related to CSR. Consequently, Hypothesis 2 is not supported.

Table 5. Results of the second regression model

sample	α	t-student	β	t-student	R2 ADj.	D-W	N
1991	8.052	7.03*	1.850	3.36*	0.150	1.891	70
1992	6.052	6.93*	2.087	4.72*	0.269	1.901	59
1993	8.361	5.16*	0.593	1.20**	0.007	2.148	59
1994	5.744	4.35*	4.951	4.84*	0.279	2.044	59

1995	7.285	8.33*	2.393	4.00*	0.181	2.121	69
1996	8.324	8.80*	2.219	3.29*	0.124	2.110	70
1997	9.429	7.70*	3.552	3.19*	0.113	1.850	73
1998	8.925	4.52*	5.317	3.63*	0.141	2.198	75
1999	10.592	7.91*	1.238	5.31*	0.280	2.013	71
2000	9.562	6.31*	1.151	2.03*	0.045	1.605	67
2001	5.495	7.76*	3.077	6.02*	0.382	1.704	58
2002	8.666	7.17*	1.201	5.37*	0.249	1.979	85
2003	8.509	6.20*	2.321	3.39*	0.158	2.173	78
2004	8.603	6.23*	1.866	2.35*	0.061	1.809	71
Total	9.992	25.06*	1.410	21.75*	0.323	1.909	964

Notes: * is significant at the 1% level, ** is significant at the 5% level, and *** is significant at 10% level. The standard errors are calculated using VIF and tolerance.

The third model is presented in Equation [4], and the results are presented in Table 6. This table also reveals that corporate value does not significantly influence new strategies and practices related to CSR. Consequently, Hypothesis 3 is not supported.

Table 6. Results of the third regression model

Sample	α	t-student	β	t-student	γ	t-student	R2 ADj.	D-W	N
1991	3.850	2.46**	1.322	2.69*	0.400	3.64*	0.280	1.817	70
1992	3.828	2.49**	1.811	3.90*	0.204	1.70***	0.293	2.017	59
1993	5.439	1.84***	0.297	0.54	0.276	1.18	0.014	2.141	59
1994	3.681	1.72***	4.677	4.49*	0.201	1.22	0.285	1.987	59
1995	3.853	2.69*	1.991	3.41*	0.342	2.93*	0.264	2.276	69
1996	5.646	3.56*	1.739	2.49**	0.271	2.08**	0.165	2.056	70
1997	5.609	2.75*	2.541	2.20**	0.441	2.44**	0.171	1.879	73
1998	7.468	2.67*	4.868	3.06*	0.168	0.74	0.136	2.230	75
1999	8.103	3.96*	0.898	2.86*	0.299	1.59	0.295	2.061	71
2000	6.523	3.61*	-5.6E-03	0.008	0.420	2.79*	0.136	1.734	67
2001	3.936	4.27*	2.213	3.69*	0.210	2.49**	0.434	1.851	58
2002	1.853	1.29***	0.198	0.82*	0.843	6.49*	0.493	2.315	85
2003	4.890	2.84*	0.042	4.91*	0.504	3.19**	0.249	2.293	78
2004	6.167	3.29*	0.071	7.01***	0.336	1.857**	0.093	1.966	71
Total	6.916	14.32*	0.528	4.99*	0.305	10.27*	0.388	1.864	964

Notes: * is significant at the 1% level, ** is significant at the 5% level, and *** is significant at the 0% level. The standard errors are calculated using VIF and tolerance.

Tables 4, 5, and 6 show that in 1993 and 1998, the equity and the net result explain the share price very little; and there appears to be a linear relationship between variables, because the adjusted R2 is very low. In 1991 and 2001, the model seems to generate a better influence of the share price in terms of equity, because the adjusted R2 is higher. The total model (1991–2004) has led to a very small adjusted R2 (37.3% in the first model, 32.3% in the second model, and 38.8% in the third model), which shows the need to introduce another variable to assess its impact. Given the lack of relevance of dependent variables to explain the behaviour of the share price, the author has approached the problem from the perspective of Popper (1934). The indicators used were highly pertinent to measuring relevance; but corporations listed on the Euronext Lisbon show a great deal of divergence. Finally, this study has accomplished its main objective, because both hypotheses have been able to be successfully tested based on a robust sample of primary-source-derived longitudinal data that increase the consistency in consequence of the being before (the strong financial and) economic recession. In addition, the objective of this chapter has been to ascertain whether exploratory regression analysis could suggest the potential for a calibration analysis with more effective and stable results over the given period.

Managers promote the disclosure of information as a “free-rider” phenomena, because they develop corporate social responsibility practices in the context of knowing that corporate behaviour must be balanced between facing minimum disadvantages and getting maximum advantages. Technically, CSR reporting and disclosure is not mandatory in Portugal, nor is there any indication that it will be in the near future. However, several corporations are making increased use of Global Report Initiative Model G2 (GRI, 2002), Model G3 (GRI, 2005), and Model G4 (GRI, 2016) and are publishing sustainability reports (GRI, 2018) in response to public pressure (Walden and Schwartz, 1997), media pressure (Brown and Deegan, 1998), and stakeholder pressure (Belal and Owen, 2007). For instance, see the Brundtland Report (WCED, 1987) along with other related sources such as CEU (2005), Guthrie and Parker (1990), Boyatzis (1998), Ingram (1978), and Boron and Murray (2004). Nearly twenty percent of corporations in the sample have implemented EMAS System and ISO 14001 environmental management systems (IPQ, 2012). The CO^2 emission certification is clearly regulated, as is the auditing process—with its assessments of procedures and competencies being made by external auditors. As a result of this increased pressure, corporations fulfil these rules by expending all the investments and expenses necessary to implement them. In many corporations, the sustainability management system has developed SR practices both because of team enlargement and because of the application of the same tools used in both.

4 Discussion

This chapter contributes to the domain of social responsibility and corporate value in three ways.

Firstly, this chapter has been validated on a panel data of listed corporations in the specific period ranging from December 31, 1991 through December 31, 2004. During this period, the number of corporations listed on Euronext Lisbon has decreased as result of bankruptcy, insolvency, and strong reduction of economic activity. However, the data is still representative, the data is strengthened by the fact that it provides real-world snapshots of how the governing bodies of corporations actually respond strategically to a range of economic situations. Certain other corporations that still remain in the stock market have had levels of disclosure with regard to the public availability of the annual report, sustainability report, environmental report, corporate social responsibility report, and labour report which have increased. In this sense, the requirements demanded by EU Directives are very important; as is the adoption of IFRS by the corporations on the stock market, and the SEC rules for several corporations quoted in US stock markets.

Secondly, this chapter provides evidence of disclosure information to justify that corporations deal with complexity as a consequence of different accounting information systems, reports, and other information disclosures —a practice that has increased over the years. The quality of information disclosed by corporations is already an issue discussed in the literature; and in practice, it is a job for auditors and chartered accounts. One of the reasons is that regulation of non-financial information, reporting, and auditing does not exist. Portugal is a code-law country and there is a natural feeling of following rules and standards. In this context, each corporation has an increasing awareness of sustainability issues, knowing that such issues could influence their value (Aupperle et al., 1985). Investigating the determinants of SR disclosure, the author finds that the SR disclosure level cannot be attributed to the market value of equity (Patten, 1990). Also, it seems that investors fail to immediately incorporate the informational content of SR disclosure level into their information set; and that investors do not react more quickly to corporations with less levels of disclosure (O'Connor and Meister, 2008).

Thirdly, corporations include the social dimension within their accounting strategies, due to the increasing demands of stakeholders. The investors increasingly want to know about sustainability issues and the influence of such issues on the accounting information system. In the Portuguese context, these concerns produce several accounting limitations (Yin, 2009; Riley et al., 2001). For example, the financial statements also, on the whole, elaborate on the data in ways seemingly designed more for the reporting corporation's management rather than for the stakeholders.

As a result of the introduction of international accounting standards, future research questions – which have been for investigating the next period of the economic evolution of the accounting information system (2005-2018) – will focus on the following:

- How is social performance to be quantified in a way that is relevant to corporate value?
- How is the financial performance to be quantified in a way that is relevant to corporate value?
- Are SR practices that are promoted by the corporation associated with the corporation's social performance?
- Are SR practices that are promoted by the corporation associated with the corporation's financial performance?

SR strategies and practices have a strong restrictive influence on corporate value. So, the author asks two open-ended questions:

1. Should we measure corporate social responsibility? (See Korhonen, 2003.)
2. What is the future of corporate social responsibility? (See Crowther and Rayman-Bacchus, 2004.)

It is a known fact that managers, by implementing SR strategies and practices, could reduce their companies' risk assessments—and that subsequent changes in the corporate value would be inevitable. A lengthy research process is welcomed to (assess whether the data would) provide even further empirical validation of this perspective.

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CHAPTER THREE

A DESCRIPTIVE ANALYSIS OF SUSTAINABILITY DISCLOSURE AND ASSURANCE AT THE INTERNATIONAL LEVEL

ISABEL-MARÍA GARCÍA-SÁNCHEZ
AND JENNIFER MARTÍNEZ-FERRERO

Abstract

The aim of this chapter is to develop a descriptive analysis of sustainability disclosure and assurance at the international level. For this aim, an international sample of analysis composed of 1,127 listed firms from 2007–2016 is used. The main findings of this chapter support the hypothesis that the continuing calls to achieve the disclosure of CSR performance have led companies to voluntarily disclose CSR reports—such reports being a part of an effective sustainable strategy that meets the need for providing information demanded by stakeholders. These calls translate into a higher CSR disclosure rate, and a higher quality and increased assurance of CSR information over recent years. Moreover, there is substantial variation across countries with regard to CSR in terms of its reporting; its quality; and its assurance. Specifically, countries where the CSR disclosure rate is higher is headed by Finland and followed by Italy, Luxemburg, Mexico, and South Africa; whereas Belgium and Luxemburg are those with the highest quality of CSR disclosure. For the assurance market, the countries with firms whose CSR reports are most likely to be externally verified are Italy followed by Spain and France; whereas Belgium and Finland are those countries whose firms most prefer to obtain assurance services from accountancy firms.

Keywords: corporate social responsibility, voluntary disclosure, assurance

1 Introduction

Social activism, globalization, transparency, and so on, have increased the requirements of companies beyond the aspects of business, giving importance not only to economic, but also to social and environmental, issues (Jamali, 2008). The focus on economic, social, and environmental issues constitutes the most-used approach to corporate social responsibility (CSR), known as the triple bottom line. Following this approach, CSR achieves a threefold impact through the development of systems and policies designed to promote relationships with different stakeholders. In this respect, prior literature agrees in presenting CSR as an emerging alternative model of management which defines the company as a set of relationships, involving not only owners and managers, but also other stakeholders who are likewise interested in the evolution of the company (Morsing and Schultz, 2006).

In this vein, sustainability performance has achieved remarkable development over the last few years (Fifka, 2015)—thus increasing the trend of reporting such performance via voluntary disclosure (Clarkson et al., 2008) in a sustainability report that assesses the three main components of the triple bottom line: economic growth, social equity, and environmental protection (Morimoto et al., 2005). Companies usually disclose information about their social and environmental practices in their CSR reports. This information may be useful for different stakeholders, since the reports are expected to contain information about a wide range of topics and practices related to suppliers, customers, employees, social contributions, public safety, health in the workplace, and so on (Williams and Pei, 1999). Over the past decade, the number of firms engaging in voluntary CSR disclosure has increased greatly; attracting considerable attention from the research community (Wang et al., 2017).

However, the upturn in the number of sustainability reports as well as integrated reports has not been accompanied by an increased level of public trust (Hodge et al., 2009). Voices of concern over the lack of credibility, transparency and consistency with regard to sustainability reporting have led to the need for assurance processes (Simnett et al., 2009). According to the General Reporting Initiative (GRI, 2006), the "assurance" of a sustainability report is defined as being "activities designed to result in published conclusions on the quality of the report and the information contained within it".

It must be noted that CSR disclosure and assurance strategies may be influenced by the choices, motives, and values of managers and directors, but also by internal or external institutional forces. In this vein, the growth of multinational companies – and their growing importance in the economic and social spheres of emerging countries – implies that firms are economic units which operate within contexts formed by a nexus of institutions that affect their behaviour and which impose expectations on them (Campbell, 2007). In other words, any company can modify its behaviour towards sustainability practices, disclosure, and (subsequent) assurance—according to the social environment within which it develops (Meyer and Rowan, 1977). Similar to the findings of Frías-Aceituno et al. (2013) regarding the disclosure of CSR performance by means of integrated reports, it is expected that the ensuring of legitimacy via sustainability disclosure and assurance may be strongly influenced by internal or external institutional factors (Simnett et al., 2009; Kolk and Perego, 2010).

On the basis of the previous ideas, the aim of this paper is twofold:

1. Firstly, we aim to provide descriptive data about the propensity to disclose a sustainability report, the quality of information contained in it, and external assurance engagement by year.

2. Secondly, we aim to provide descriptive data of these indicators at the country level.

Our research focuses on international listed firms. Specifically, the paper analyses a sample of 1,127 companies that remained listed throughout the period of analysis (2007–2016), with a total of 9,341 firm-year observations. Our results support the higher propensity to offer the disclosure of CSR performance by means of sustainability reports, as well as the higher quality and assurance of the information contained therein. Moreover, we confirm that there is great variation across countries with regard to CSR in terms of its reporting; its quality; and its assurance. Specifically, countries where the CSR disclosure rate is higher is headed by Finland and followed by Italy, Luxemburg, Mexico and South Africa; whereas Belgium and Luxemburg are those with the highest quality of CSR disclosure. For the assurance market, the countries in which the firm's CSR reports are most likely to be externally verified are Italy followed by Spain and France; whereas Belgium and Finland are those countries where firms most prefer to obtain assurance services from accountancy firms.

The rest of this paper is structured as follows: After this introduction, the second section describes the background to this research. The third and fourth sections then provide the empirical details of the study, after which the fifth (and final) section summarises the main conclusions drawn.

2 Theoretical Background

For some years, there has been a constant belief that traditional financial reports do not adequately represent different dimensions of corporate activity, resulting in the need for additional non-financial measures of performance and disclosure to assess them (Kaplan and Norton 1992; Simnett et al., 2009). Among these non-financial aspects, sustainability performance has acquired a significant role. It is understood as representing "an organisation's total performance, which might include its policies, decisions, and actions that create social, environmental and/or economic, including financial outcomes" (AccountAbility 2005, 16). This voluntary performance, together with the demands of investors who pay more attention to social and environmental issues in their decision making (Dhaliwal et al., 2012) and of employees, customers, suppliers and other stakeholders who express a comparatively greater concern for socially responsibility performance (Clarkson et al., 2008), have led companies to disclose non-financial information voluntarily.

In doing so, they show their concern for social and environmental aspects, generally doing so through a stand-alone report termed a sustainability report (Simnett et al. 2009). According to the GRI (2013), this report shows a better understanding of the link between sustainability issues and the company's strategies, goals, and performance, combining profitability with social and environmental responsibility. Therein, it seeks to meet the information needs of participants other than merely the shareholders, managers, or directors; being more oriented towards other stakeholders.

In other words, sustainability reports or CSR reports can be conceptualized as being documents intended to inform all stakeholders of the economic, social, and environmental impacts of corporate performance with respect to a given period of time. These disclosures represent the management's communication with its stakeholder groups on issues that exceed the company's profits (Gray, 2000), providing information on how the profits are being generated—in addition to traditional financial statements. The growing in the number of CSR reports arise as a result of the remarkable development of CSR practices and performance over the last few years

(Fifka, 2015)—thus increasing the trend of reporting such performance via voluntary disclosure (Clarkson et al., 2008) in sustainability reports that assess the three main components of the triple bottom line: economic growth, social equity, and environmental protection (Morimoto et al., 2005).

Moreover, the continuing calls to achieve the disclosure of sustainability performance have led companies beyond sustainability reports. Some companies have begun to pair financial data with social and environmental information and combine it all into a single document (integrated reporting), as part of an effective sustainable strategy that meets the need for providing information demanded by stakeholders (Frías-Aceituno et al., 2013). Social and environmental information, both in sustainability reports as in integrated reports, is valuable for investors; and such data is incorporated into valuation models, generating benefits such as a lower level of analyst forecast error, a higher firm value and reputation, and a lower cost of equity capital (Dhaliwal et al., 2012).

However, the upturn in the number of sustainability reports as well as integrated reports has not been accompanied by an increased level of public trust (Hodge et al., 2009). Voices of concern about the lack of credibility, transparency, and consistency with regard to sustainability reporting have led to the need for assurance processes (Adams and Evans, 2004; Simnett et al., 2009). According to the GRI (2013), the "assurance" of a sustainability report is defined as being "activities designed to result in published conclusions on the quality of the report and the information contained within it".

Similar to the auditing of financial information; and as a result of stakeholders' pressure to enhance the credibility of sustainability information; assurance is perceived by external scrutiny as being the key element of the social and/or environmental information being issued. Regarding this point, assurance may provide credibility and transparency with regard to such information (Adams and Evans, 2004; O'Dywer and Owen, 2005; Deegan et al., 2006; Simnett et al., 2009). Assurance increases the trust of stakeholders not only in terms of the quality of the information but also in terms of corporate commitment to sustainability (Hodge et al., 2009; Simnett et al., 2009). Moreover, it acts as a monitoring tool used by managers (Wong and Millington, 2014), since sustainability reporting can address agency relationships and decrease information asymmetries and uncertainty (Moroney et al., 2012). In summary, the voluntary demand for assurance is, in part, intended to increase the credibility of sustainability information (Perego and Kolk, 2012) as well as being intended to catalyse an effective and constructive dialogue with the company's stakeholders (KPMG, 2002).

Sustainability assurance results in higher quality, transparency and confidence in information about sustainable performance (Adams and Evans 2004). However, assurance should not be seen solely as being an independent review of corporate systems for transparency, responsibility, risk management, and good governance. It should also be seen as the way in which corporate social performance is reported, ensuring the accuracy of the outcomes that may affect stakeholders in the decision-making process and the protection of uniformed stakeholders' interests (Craswell et al., 1995; Adams and Evans 2004). Thus, similar to the auditing of financial information, sustainability reporting assurance is perceived as being the key element of external scrutiny of social and environmental information.

Nonetheless, despite the prevalence of traditional financial auditing, the assurance market is not restricted to the accountancy profession. In the case of sustainability assurance, there has been considerable growth of sustainability assurance among numerous companies which had formerly specialised in traditional financial accounting (Hodge et al., 2009). In general, accountancy/auditing firms, engineering firms, and sustainability consultants provide external assurance services. The debate is focused on accountants versus non-accountants, since auditing firms have traditionally carried out the verification of financial statements.

Previous research about the type of assurance provider agrees that a higher level of credibility is given to accounting professionals (traditionally known as the Big 4 auditing firms) by investors (Pflugrath et al., 2011). Accountancy firms are subject to independent and professional conduct requirements (Peters and Romi, 2015)—providing more detailed and consistent statements; transferring auditing techniques to the assurance process (Power, 2003); and being more effective monitors as a result of their reputational capital (Simnett et al., 2009). Moreover, their skills, abilities, and competences have been widely recognized in the financial auditing market; this confidence is perfectly transferable to the sustainability assurance market (Hodge et al., 2009), increasing investors' trust in their credibility.

Meanwhile, engineering and consultancy firms as assurance providers of qualitative statements have greater subject matter expertise on specific sustainability issues (Huggins et al., 2010), providing assurance statements that are more informative, complete, and clear (Hasan et al., 2003). As a fundamental difference from accountancy firms, they include recommendations and comments on processes and systems (Deegan et al., 2006). Nonetheless, they do not benefit from the independence of accountancy firms (Huggins et al., 2011) and their global knowledge of multidisciplinary industries and multiple jurisdictions (Simnett et al., 2009).

Once we have described the process of CSR disclosure along with the necessary demand of external assurance as a means of increasing the credibility and the reliability of CSR information and of increasing the different types of assurance providers, in the following sections of this chapter we provide brief descriptive evidence of the previous concepts in the international context.

3 Method

3.1 Samples of Analysis

The data for this study are the result of a combination of information availability in two databases for a period of analysis from 2007 to 2016. Firstly, archival data were collected from Thomson Reuters Eikon. In this study, we took into consideration information from all the firms from the global benchmark stock indices from America, Europe, the Middle East, Africa (EMEA), and Asia, comprising 3,594 companies from 31 stock indices (once duplicated companies were removed). Secondly, we combined the firms' disclosure data from the GRI database, a database that compiles information on companies' social and environmental disclosure. After excluding observations with missing financial, economic, or CSR disclosure information, a final sample of 9,341 firm-year observations (1,127 firms) spanning ten years (2007–2016) was available. The sample was unbalanced because not all companies were represented in all time periods. The firms were engaged in activities in different sectors and were from 24 different countries (Australia, Belgium, Canada, China, Finland, France, Germany, Hong Kong, the Republic of Ireland, Italy, Japan, Luxembourg, Mexico, the Netherlands, New Zealand, Papua New Guinea, Russia, Singapore, South Africa, Spain, Sweden, Switzerland, the United Kingdom, and the United States of America).

In order to examine the quality of CSR disclosure, we remove out of the initial sample those firm-year observations belonging to those companies that do not offer CSR report disclosures. Thereupon, after excluding observations of firms that do not report CSR disclosure information, we are left with a sample of 5,725 firm-year observations spanning the same period of analysis.

Similarly, for examining external assurance, we remove some firm-year observations where data is not availability. After excluding them, a sample of 5,422 firm-year observations spanning the same period of analysis. Given the availability of assurance information, descriptive analysis about the type of assurance provider is performed for a sample of 1,174 firm-year observations spanning the same period of analysis.

3.2 Measurement Variables

Regarding the issuing of CSR disclosure, we represent it as a dummy variable "**CSR report**" that takes the value of 1 if the firms report a voluntary CSR report—and takes the value of 0 otherwise.

Regarding the disclosure variable, the CSR report is the main channel for communicating CSR performance (Hogner, 1982), and it is expected to contain information that is also useful for making investment decisions (Chau, 2006). Although the publication of such a report is not compulsory, and although there is no universal model for compiling and presenting CSR information, the spectacular increase in attention paid to CSR issues has led companies to increase both the volume and the quality of their CSR information, while international standards such as the GRI guidelines have been issued to facilitate this task. These guidelines have also been widely used by researchers to represent the degree of CSR disclosure (e.g. Clarkson et al., 2008; Prado-Lorenzo et al., 2009; Nikolaeva and Bicho, 2011; Legendre and Coderre, 2012; García-Sánchez et al., 2014; Cuadrado-Ballesteros et al., 2015).

The GRI guidelines were proposed by the Coalition for Environmentally Responsible Economies (CERES) in 1997, in response to the widely varying content and format of published information related to companies' social and environmental performance (a wide variance which had led to inconsistency and to an impedance of comparability). To redress this situation, a global standardisation of format and content for CSR reporting was proposed. These became the GRI guidelines.

To create the independent variable (*GRI*), we first reviewed the CSR reports of every company in the sample population for each year of the analysis, obtaining these reports from the corporate website. The information obtained was then measured against the recommendations of the G3.1 and G4 GRI standards[1]. This was done by awarding a score to each company for each year considered, according to the number of indicators and the supplementary information included in its CSR report—thus determining the degree to which the GRI guidelines had been applied attending to GRI G3.1: C, B, or A; ranked from low to high levels of usefulness and comparability; or attending to GRI G4: core and comprehensive levels.

Examining GRI G3.1., Level C represents a very basic report with minimal indicators; Level B corresponds to a medium-high-quality report; and Level A reflects a high-quality report. This scoring process, which is summarised in Table 1, has been previously used by García-Sánchez et al. (2014), Cuadrado-Ballesteros et al. (2015) and by Martínez-Ferrero et al. (2016), among other researchers. Firstly, we discriminated between companies that do not disclose any quantitative data (assigning 0 points to each) and those companies that do publish some information but whose reports do not comply with the GRI guidelines (assigning 25 points to each). These two values remain when we examine GRI G4. When the company discloses CSR information in accordance with the GRI guidelines (Level C), 50 points are awarded; for Level B, 75 points are awarded, and for the companies with the best CSR reporting (Level A), 100 points are awarded. Thus, the variable representing the degree of CSR disclosure is one of the following ordinal values: 0, 25, 50, 75, or 100.

Examining GRI G4, it must be noted that the recent G4 Sustainability Report Guidelines offer two options to an organization in order to prepare its sustainability report ‘in accordance’ with the guidelines: the *Core* option and the *Comprehensive* option. Each option can be applied by all organizations, regardless of their size, sector, or location. The focus of both options is on the process of identifying material aspects. Material aspects are those that reflect the organization’s significant economic, social, and environmental impacts; or those which substantively influence the assessments and decision- making process of stakeholders.

In this respect, we assign a value of 75 for those companies that disclose CSR information adapted to the GRI guidelines and which state that it is “in accordance” with either the core option. The Core option contains the essential elements of a sustainability report. The Core option provides the

[1] See https://www.globalreporting.org/standards

background against which an organization communicates the positive impacts of its economic, social, environmental, and governmental performance. Finally, we assign the value of 100 for those companies that disclose CSR information adapted to the GRI guidelines and which state that it is "in accordance" with the comprehensive option. The Comprehensive option builds on the core option by requiring additional standard disclosures of the organization's strategy and analysis; governance; and ethics and integrity. In addition, the organization is required to communicate its performance more extensively by reporting all indicators related to identified material aspects.

Several previous studies have represented the level of CSR disclosure by counting the number of words, sentences, or pages of the CSR report (Samaha et al., 2012). However, this 'content-based' approach has an important limitation, as observed by Clarkson et al. (2008) and Cho and Patten (2007): Companies with low levels of CSR performance tend to disclose (possibly large amounts of) qualitative, but imprecise, CSR information in order to manipulate shareholders' and stakeholders' perceptions. To overcome this limitation, we use a quantitative approach, focusing on the number of GRI indicators included in the report, thus ensuring the harmonisation of such reports, both nationally and internationally. In addition, according to García-Sánchez et al. (2014), under the GRI guidelines (to be awarded Level A, B, or C), a certain minimum number of indicators must be reported. In other words, companies whose report corresponds to a given level must incorporate the same indicators—a requirement that facilitates comparability between companies over time. Moreover, to comply with the GRI standards, companies cannot decide which indicators to report. Therefore, the real level of CSR performance – whether good or bad – is reported.

Table 1. Categories of the GRI variable

GRI values	Type of CSR report
GRI = 0	Companies that do not disclose CSR information
GRI= 25	Companies that disclose CSR information which does not comply with GRI guidelines.
GRI = 50	Companies that disclose CSR information following the C level of the GRI guidelines; i.e., their reports are very basic. Specifically, the report incorporates information on: Profile Disclosures: statement numbers 1.1; 2.1–2.10; 3.1–3.8; 3.10–3.12; 4.1–4.4; 4.14–4.15 (see GRI guidelines version 3.1). Disclosures on management approach: not required. Performance indicators and sector supplement performance indicators: a minimum of any 10 performance indicators, including at least one from each of the economic, social, and environmental categories. Performance indicators may be selected from any finalised Sector Supplement, but 7 of the 10 must be from the original GRI guidelines.
GRI = 75	Companies that disclose CSR information following the B level of the GRI guidelines; i.e., their reports are complete. Specifically, the report contains information on: Profile Disclosures: statement numbers 1.1; 1.2; 2.1–2.10; 3.1–3.13; 4.1–4.17 (see GRI guidelines version 3.1). Disclosures on management approach: for each indicator category. Performance indicators and sector supplement performance indicators: a minimum of any 20 performance indicators, including at least one from each of the economic, environmental, human rights and labour, society, and product responsibility categories. Performance indicators may be selected from any finalised Sector Supplement, but 14 of the 20 must be from the original GRI guidelines.

	* Companies that disclose CSR information adapted to the GRI guidelines and states that it is "in accordance" with either core option. The Core option contains the essential elements of a sustainability report. The Core option provides the background against which an organization communicates the positive impacts of its economic, environmental, social, and governmental performance.
GRI = 100	Companies that disclose CSR information following the A level of the GRI guidelines; i.e., their reports are very advanced. Specifically, the report incorporates information on: Profile Disclosures: 1.1; 1.2; 2.1–2.10; 3.1–3.13; 4.1–4.17 (see GRI guidelines version 3.1). Disclosures on management approach: for each indicator category. Performance indicators and sector supplement performance indicators: incorporates each core and sector supplement indicator. * Companies that disclose CSR information adapted to the GRI guidelines and states that it is "in accordance" with the comprehensive option. The Comprehensive option builds on the core option by requiring additional standard disclosures of the organization's strategy and analysis; its governance; and its ethics and integrity. In addition, the organization is required to communicate its performance more extensively by reporting all indicators related to the identified material aspects.

Source: García-Sánchez et al. (2014), Cuadrado-Ballesteros et al. (2015) and Martínez-Ferrero et al. (2016).

"Assurance" is a dummy variable coded with a value of 1 if a firm's sustainability report is assured, and coded with a value of 0 otherwise. This is a common measure in management and accounting research (Simnett et al., 2009; Wong and Millington, 2014; Peters and Romi, 2015). Meanwhile, "Accountant" is a dummy variable that takes a value of 1 when a company discloses its sustainability report with an assurance statement provided by professional accountants (Big-4 auditing firms – PricewaterhouseCoopers, Ernst and Young, Deloitte, and KPMG – along with other, smaller, accountancy firms), and which is coded with a value of 0 otherwise (Kolk and Perego, 2010).

4 Descriptive Results

In the following section, we aim to examine the descriptive data regarding CSR disclosure, the quality of this CSR reporting, the frequency of external assurance, and the type of practitioner involved. However, in addition, descriptive analyses attending to the country level are also provided. Why? The reason is clearly linked to the growth of multinational companies in the global marketplace, and to the growth of their importance in the economic and social sphere of emerging countries—growth which implies that firms are economic units that operate within contexts formed by a nexus of institutions that affect their behaviour and which impose expectations on them (Campbell, 2007). That is, organizations operating in countries with similar institutional structures will adopt homogeneous forms of behaviour (La Porta et al., 1998; Campbell, 2007). DiMaggio and Powell (1983) name this process "isomorphism" and argue that it enhances companies' stability and survival—facilitating political power and institutional legitimacy. In other words, any company can modify its behaviour towards CSR practices, disclosure, and (subsequent) assurance—according to the social environment within which it develops (Meyer and Rowan, 1977). It is expected that the ensuring of legitimacy via CSR with regard to its disclosure, its quality of information, and its assurance may be strongly influenced by internal or external institutional factors (Simnett et al., 2009; Kolk and Perego, 2010). In addition, and following the neo-institutional approach, ensuring corporate long-term survival and social legitimacy may represent one of the major reasons for an organization to adopt an assurance process (DiMaggio and Powell, 1983; Kolk and Perego, 2010). Similar to the findings of Frías-Aceituno et al. (2013) for the disclosure of CSR performance by means of an integrated report, we analyse descriptive data at the country level—assuming that CSR disclosure, quality, and assurance may be influenced by external pressures in the search for legitimacy (Kolk and Perego, 2010); as CSR strategies (disclosure, quality, and assurance) show great variability between countries.

On the one hand, Table 2 reports descriptive evidence regarding the frequency of CSR reports; that is, it reports the frequency of a firm's disclosure (or not) of a CSR report for an international sample of 9,341 firm-year observations for 2007–2016. Panel A provides evidence regarding the proportion of CSR reports. Specifically, for our sample of analysis, 61.29% of the observations count with a CSR report—thereby showing the greater growth of CSR voluntary disclosure.

Meanwhile, Panel B provides evidence of what, by country, in percentage form. This panel shows that there is substantial variation across countries. Note the list of countries where the CSR disclosure rate is higher is headed by Finland followed by Italy, Luxemburg, Mexico and South Africa, both accounting for about 100% of observations with CSR reporting. Meanwhile, voluntary CSR reporting within New Zealand and Canada remains limited—being 29.73% and 34.33%, respectively.

From the above data, we can affirm that the continuing calls to achieve the disclosure of CSR performance data have led an increasing number of companies to voluntarily disclose CSR reports—such reports being a part of an effective sustainable strategy that meets the need for providing information demanded by stakeholders (Frías-Aceituno et al., 2013). So, we support the upturn in the number of CSR reports and the variability across countries as being the result of institutional pressures that have had an impact on firms' decisions.

Table 2. CSR reports distribution

Sample of 9,341 observations regarding the 2007–2016 period.

Panel A. CSR reports—sample observations		
	CSR report = 0	**CSR report = 1**
Freq.	3,616	5,725
Percentage (%)	38.71	61.29

Panel B. CSR reports by country, in percentage form				
Country	**CSR report = 0**		**CSR report = 1**	
	Freq.	Percentage (%)	Freq.	Percentage (%)
Australia	525	53.25	461	46.75
Belgium	1	10.00	9	90.00
Canada	790	65.67	416	34.33
China	200	56.66	153	43.34
Finland	0	0	4	100.00
France	26	9.15	258	90.85
Germany	12	5.91	191	94.09
Hong Kong	90	41.10	129	58.90

Republic of Ireland	35	33.33	70	66.67
Italy	0	0	20	100.00
Japan	60	6.71	834	93.29
Luxembourg	0	0	4	100.00
Mexico	0	0	6	100.00
Netherlands	18	10.71	150	89.29
New Zealand	26	70.27	11	29.73
Papua New Guinea	2	25.00	6	75.00
Russia	30	21.43	110	78.57
Singapore	69	36.70	119	63.30
South Africa	0	0	126	100.00
Spain	6	3.57	162	96.43
Sweden	35	16.91	172	83.09
Switzerland	26	18.57	114	81.43
United Kingdom	100	16.53	505	83.47
United States	1,565	47.9	1,698	52.04

On the other hand, considering only those firm-year observations with voluntary CSR reporting (the indicator variable being “CSR”=1), Table 3 reports descriptive evidence regarding the quality of this reporting. That is, it reports descriptive evidence of the informational quality of CSR reporting, attending to the GRI guidelines, for an international sample of 5,725 firm-year observations for 2007–2016. Panel A provides evidence regarding the frequency of each “GRI” value (note that the GRI takes values between 0 and 100, as is described in Table 1). Because of we have removed those firms without CSR reporting, “GRI” does not take the value of 0 (firms that do not report a CSR disclosure). Specifically, for our sample of analysis, a full 74.76% of the observations belong to firms that disclose CSR information which does not comply with the GRI guidelines, showing a comparatively lower level of utility and comparability with regard to CSR information—in other words, a comparatively lower quality of CSR reporting. Adaptation to the GRI guidelines remains insufficient at this time. A mere 2.55% of the observations belong to firms that disclose CSR information following the C level of the GRI guidelines—i.e., their reports are very basic. 6.78% of the observations belong to firms that disclose CSR information following the B level of the GRI guidelines—i.e., their reports are complete. Finally, 15.91% of the observations belong to firms that disclose CSR information following the A level of the GRI guidelines—i.e., their reports are very advanced. As such, those firms that issue CSR reports attending to the GRI guidelines tend to offer the disclosure of CSR performance by means of CSR reports that incorporate more complex, useful, and comparable information—data of greater informational quality.

Meanwhile, Panel B provides evidence by country, in percentage form. Note the list of countries where the higher quality of CSR disclosure is headed by Belgium and Luxemburg (as a result of the frequency of observations belong to "GRI"=100 with respect to the total). Meanwhile, the quality of voluntary CSR reporting remains limited in Mexico and New Zealand. So again, we support the variability in quality of CSR reports across countries as a result of institutional pressures that impact on firms' decisions.

Table 3. Quality of the distribution of CSR reports

Sample of 5,725 observations regarding the 2007–2016 period.

Panel A. Quality of CSR reports—sample observations

	GRI=25	GRI=50	GRI=75	GRI=100	Total
Freq.	4,280	146	388	911	5,725
Percentage (%)	74.76	2.55	6.78	15.91	100.00

Panel B. Quality of CSR reports by country

Country	GRI=25	GRI=50	GRI=75	GRI=100	Total
Australia	309	8	45	99	461
Belgium	4	0	0	5	9
Canada	295	8	35	75	413
China	137	0	4	12	153
Finland	2	0	0	2	4
France	198	1	14	45	258
Germany	108	2	26	55	191
Hong Kong	68	5	5	51	129
Republic of Ireland	54	5	4	7	70
Italy	18	0	0	2	20
Japan	705	3	19	107	834
Luxembourg	2	0	0	2	4
Mexico	6	0	0	0	6
Netherlands	108	8	11	23	150
New Zealand	11	0	0	0	11
Papua New Guinea	4	1	0	1	6
Russia	103	0	2	5	110
Singapore	74	9	11	25	119
South Africa	102	0	7	17	126

Spain	112	3	19	28	162
Sweden	99	15	24	34	172
Switzerland	73	2	23	16	114
United Kingdom	433	8	18	46	505
United States	1,255	68	121	254	1,698

Given the availability of information, a sample of 5,422 firm-year observations spanning the same period of analysis was used to provide descriptive statistics regarding external assurance.

Panel A provides information about the frequency of assurance statements for our sample of analysis. In this regard, 49.76% (practically 50%) of our sample provides a CSR report with an assurance statement. This data supports the previous data of the KPMG (2013) report analysing the increase in the number of CSR reports that are certified by an assurance provider. Companies are adopting the assurance process (despite its non-mandatory aspect) to clarify the sustainability reports and to increase their own transparency and credibility.

Regarding the country distribution, Panel B shows that there is substantial variation across countries. Note that the list of countries where the assurance rate is higher is headed by Italy, followed by Spain and France, which together account for more than 80% of assurance reports. Meanwhile, the assurance of sustainability reports remains limited within New Zealand, Mexico, China and Canada.

Table 4. CSR assurance distribution

Sample of 5,422 observations regarding the 2007–2016 period.

Panel A. CSR assurance—sample observations		
	Assurance = 0	**Assurance = 1**
Freq.	2,724	2,698
Percentage (%)	50.24	49.76

Panel B. CSR assurance by country, in percentage form				
Country	**Assurance = 0**		**Assurance = 1**	
	Freq.	Percentage (%)	Freq.	Percentage (%)
Australia	205	47.67	225	52.33
Belgium	2	22.22	7	77.78
Canada	271	70.21	115	29.79

China	99	79.84	25	20.16
Finland	1	25.00	3	75.00
France	45	17.44	213	82.56
Germany	58	30.53	132	69.47
Hong Kong	54	42.86	72	57.14
Republic of Ireland	37	55.22	30	44.78
Italy	0	0	20	100.00
Japan	245	31.29	538	68.71
Luxembourg	1	25.00	3	75.00
Mexico	5	83.33	1	16.67
Netherlands	32	22.22	112	77.78
New Zealand	11	100.00	0	0
Papua New Guinea	2	33.33	4	66.66
Russia	86	84.31	16	15.69
Singapore	73	66.36	37	33.64
South Africa	59	48.76	62	51.24
Spain	22	14.01	135	85.99
Sweden	81	49.39	83	50.61
Switzerland	36	32.73	74	67.27
United Kingdom	176	35.3	322	64.66
United States	1,124	70.60	468	29.40

Finally, and considering only those firms with CSR reportage and for which assurance data is available, descriptive analysis about the type of assurance provider used is performed for a sample of 1,174 firm-year observations spanning the same period of analysis. Panel A provides evidence regarding the finding that 62.61% of assurance reports are verified by a traditional audit firm (small accountancy firms and BIG4). From the above data, we confirm that the CSR assurance market is strongly dominated by the Big 4 auditing firms—thereby supporting the relevance of their reputational capital (Simnett et al., 2009).

For the assurance market, the countries that are most likely to choose the accountancy profession to assure their CSR reports are Belgium and Finland, while Papua New Guinea and (surprisingly) United States firms most prefer to obtain assurance services from consultants or engineering firms.

Table 5. Distribution of assurance providers

Sample of 1,174 observations regarding the 2007–2016 period.

Panel A. Assurance providers–sample observations		
	Accountant = 0	**Accountant = 1**
Freq.	439	735
Percentage (%)	37.39	62.61

Panel B. Assurance providers by country, in percentage form				
Country	**Accountant = 0**		**Accountant = 1**	
	Freq.	Percentage (%)	Freq.	Percentage (%)
Australia	35	25.75	101	74.26
Belgium	0	0	2	100.00
Canada	17	26.15	48	73.85
China	6	31.58	13	68.42
Finland	0	0	3	100.00
France	16	21.92	57	78.08
Germany	2	4.08	47	95.92
Hong Kong	30	61.22	19	38.78
Republic of Ireland	12	63.16	7	36.84
Italy	2	33.33	4	66.67
Japan	46	31.08	102	68.92
Luxembourg	-	-	-	-
Mexico	-	-	-	-
Netherlands	7	25.00	21	75.00
New Zealand	2	100.00	0	0
Papua New Guinea	1	20.00	3	75.00
Russia	2	22.22	7	77.78
Singapore	16	64.00	9	36.00
South Africa	11	42.31	15	57.69
Spain	5	7.81	59	92.19
Sweden	3	7.50	37	92.50
Switzerland	20	55.56	16	44.44
United Kingdom	29	30.21	67	69.79
United States	178	64.73	97	35.27

5 Concluding Remarks

The main purpose of this chapter has been to provide descriptive evidence (at the international level) of CSR disclosure and the quality of such disclosures. Moreover (and as a result of its growth over recent years), we also examine the provision of assurance statements in CSR reports, along with the type of practitioner involved. For these analyses, we use several international samples obtained from Thomson Reuters Eikon and the GRI database for the 2007–2016 period.

Descriptive evidence provides a number of interesting insights. Firstly, we provide evidence that, according to the data, CSR performance has achieved remarkable development over the last few years (Fifka, 2015)—thus increasing the trend of reporting such performance via voluntary disclosure (Clarkson et al., 2008). Moreover, we can affirm that the data support the conclusion that the continuing calls to report CSR disclosures of superior quality have led companies to issue voluntary disclosures according to the GRI guidelines. These GRI guidelines propose a global standardisation of format and content for CSR reporting—a standardisation designed for ensuring the harmonisation of such reports, both nationally and internationally.

Moreover, since corporate disclosures are not useful if they are perceived as lacking credibility, we can affirm that the data support the conclusion that external assurance processes have become relevant and have evolved rapidly across countries (Kolk and Perego, 2010; O'Dwyer and Owen, 2005) as a means of verifying the reliability of this information. Assurance statements tend to be used to increase the credibility and the reliability of the social and environmental information they include. Regarding the type of assurance provider, we also evidence that the assurance market is strongly dominated by the traditional auditing firms—thus supporting the relevance of their reputational capital (Simnett et al., 2009).

Finally, our evidence at the international level, which supports the experimental hypothesis, allows us to conclude that the disclosure, quality, and assurance of CSR each shows great variability between countries. According to institutional and neo-institutional approaches, our descriptive evidence confirms that CSR disclosure policies are strongly influenced by internal or external institutional factors (Simnett et al., 2009; Kolk and Perego, 2010).

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CHAPTER FOUR

ANALYSIS OF THE INFLUENCE OF VARIETIES OF CAPITALISM (VC) IN THE PRESENCE (OR NOT) OF INTERNATIONAL COMPANIES IN THE GLOBAL COMPACT (GC)

TÂNIA CRISTINA AZEVEDO AND ISABEL GALLEGO-ÁLVAREZ

Abstract

Companies are faced with an increasingly international context in which to carry out their business and, due to the globalization of the economy, are involved in networks of increasingly international suppliers and customers (Ayuso and Mutis, 2010, p. 29). For example, there are several initiatives in networks aimed at supporting companies in the development, application, and communication of Corporate Social Responsibility (CSR). In this aspect, CSR can be understood as being the continuous commitment of companies to behave ethically and to contribute to economic development while improving the quality of life of their workers and their families, the local community, and society in general (Holme and Watts, 2000). In this sense, CSR practices are important in the corporate world; and the instruments adopted to implement them are varied. One of the actions that companies can use to communicate their CSR activities refers to the United Nations Global Compact platform (UN-GC). This chapter aims to analyze the influence of the Varieties of Capitalism approach in international companies. Through a literature review, recognition of Corporate Social Responsibility (CSR) and the Global Compact is made. In addition, with regard to the following two varieties of capitalism – Liberal Market Economies (LME) and Coordinated Market Economies (CME) – the studies of Chen and Bouvain (2009), Gjølberg (2009), Jackson and Apostolakou, (2010), Baptista and Castelo Branco

(2015), are verified along with the focus of this work. The methodology used was a logit model since the dependent variable is a binary-value variable (0, 1). Therefore, we used a sample of companies from different countries contained in the database of the United Nations Global Compact and members of the Organization of Cooperation for Economic Development (OCED), grouped according to the Varieties of Capitalism classification scheme, with special focus being placed on participants in the Liberal Market Economies (LME), the Coordinated Market Economies (CME), and the UN-GC. As a result, the sample of companies has been configured with 1,356 companies belonging to different sectors of activity. The results obtained suggest that companies from countries with a coordinated market economy tend to be more a part of the Global Compact than are companies from countries with a liberal market economy.

Keywords: Varieties of Capitalism, Global Compact, International Companies, Corporate Social Responsibility (CSR)

1 Introduction

Companies are faced with an increasingly internationalized context in within which to carry out their business—and, due to the globalization of the economy, are involved in increasingly international networks of suppliers and customers (Ayuso and Mutis, 2010, p. 29). For example, “there are several (such/kinds of) initiatives within networks whose primary aim is that of supporting companies in the development, application, and communication of Corporate Social Responsibility (CSR). In this aspect, CSR can be understood as the continuous commitment of companies to behave ethically and to contribute to economic development while improving the quality of life of their workers and their families, the local community, and society in general (Holme and Watts, 2000).

In this way, social responsibility requires the need for identifying the dissemination of information on the activities of companies in relation to themselves. One of the actions that companies can use to communicate their CSR activities refers to the United Nations Global Compact platform. Several methods of demonstrating the CSR initiatives of the companies listed in the Global Compact have been studied. However, a method which combines the Varieties of Capitalism approach together with the Liberal Market Economies (LME) and the Coordinated Market Economies (CME) approaches is recent. The studies by Chen and Bouvain (2009), Gjølberg

(2009), Jackson and Apostolakou, (2010), and Baptista and Castelo Branco (2015) are verified along with the focus of this paper.

Along this line of reasoning, this paper analyzes the influence of the LME and CME approaches of the Varieties of Capitalism approach among international companies that are members of the OCED and which are participants in the Global Compact. For this, a sample of companies from different countries contained in the database of the United Nations Global Compact and members of the Organization for Cooperation for Economic Development (OCED) – a sample grouped according to the Varieties of Capitalism classification – has been used, with a focus on the Liberal Market Economies (LME), the Coordinated Market Economies (CME), and participants of the UN-GC. As a result, the sample of companies has been configured with 1,356 companies belonging to different sectors of activity. The results obtained suggest that the different varieties of capitalism have a positive influence on the Global Compact, so that companies from countries with a coordinated market economy tend to be more a part of the Global Compact than are companies from countries with a liberal market economy.

Following the Introduction, the present work is structured in five additional sections. In the first such section, the theoretical framework related to Corporate Social Responsibility (CSR), the Global Compact, and the Varieties of Capitalism approaches is exposed. The following section establishes the working hypotheses regarding the influence of different varieties of capitalism as practiced by international companies in the Global Compact. Next, the methodology of the study is exposed by means of the description of the sample; the variables; and the analysis technique. The following section describes the empirical results obtained. The final section finishes with the most relevant conclusions.

2 Theoretical Framework

2.1 Corporate Social Responsibility (CSR) and the Global Compact

There is a wide variety of literature on CSR; and there are many studies related to the Global Compact. In 1999, in response to a call from different international leaders, the United Nations Global Compact was launched. According to Ayuso and Murtis (2010, p. 30), the idea of a United Nations Global Compact in the area of Corporate Social Responsibility (CSR) called the leaders and managers of companies to the need of joining in a great pact that would put into practice the commitment to meet the activities and needs of the companies and synchronize them with the principles and objectives of the political and institutional actions of the United Nations.

According to Chen and Bouvains (2009, p. 299) many companies have reported through more detailed reports about the social and environmental impacts of their activities. Currently, there is a wide variety of global reports on Corporate Social Responsibility (CSR). Organizations such as the Global Reporting Initiative (GRI) and the United Nations Global Compact aim to address this. Ayuso and Murtis (2010, p. 29) also comment that companies that have implemented CSR in a global environment have developed numerous international guidelines and standards. These include the OCED Guidelines for Multinational Enterprises, the Tripartite Declaration of Principles on Multinational Enterprises, the Social Policy of the ILO, and the United Nations Global Compact. However, Baptista and Castelo Branco (2015, p. 82) point out that empirical studies which compare CSR practices among different countries in ways that use a theoretical framework to contrast research hypotheses about differences in these practices are a relatively recent phenomenon.

For example, the studies of Gjølberg (2009) analyzed CSR practices and their performance measures in 298 companies listed in the Dow Jones Sustainability Index of 20 countries of the Organization for Economic Cooperation (OECD). Both studies investigated countries that had a comparatively greater participation of companies active in CSR. They also investigated how these activities can be measured at the national level. This was done through examining some or all of the existing CSR initiatives known to be large. To achieve its objectives, the author Gjølberg constructs two indexes: one that measures CSR practices in corporate systems and another that measures CSR performance in those systems. The results showed that the indexes reveal notable differences between countries in terms of the relative proportion of companies that practice CSR and companies that face a certain set of barriers and opportunities according to their environment. The analysis of the countries with the highest score in the performance-based index indicates that the success of CSR is determined by factors such as susceptibility to the publication of names, and the degree to which companies are inserted into society.

Another study was conducted by Chen and Bouvain (2009) when they examined CSR reports from companies in the United States, the United Kingdom, Australia, and Germany to check whether the adoption of a global standard of CSR (such as those of the Pact World) affects the adoption of a standard of performance in CSR of companies and whether it can be adequately explained through the use of institutional theory. The study was supported in companies from countries with Liberal Market Economies (LME) and Coordinated Market Economies (EMC) models. The data or the authors of the completed study suggested that adherence to the Global Compact has an effect on CSR—but only in certain areas related to the environment and for employees. Secondly, CSR practices and topics covered in the reports of companies from different countries vary significantly. For the authors of that study, such differences between countries seem to be related to institutional arrangements.

Jackson and Apostolakou (2010) carried out an investigation of the Corporate Social Responsibility (CSR) of 274 companies by using information drawn from the database of the independent asset manager Sustainable Asset Management (SAM); doing so in relation to the Dow Jones Sustainability Indexes (DJSI) from 16 countries in Western Europe. According to the authors' proposal (in accordance with the Varieties of Capitalism classification approach), the companies categorized themselves as being members of Liberal Market Economies (LME) and the Coordinated Market Economies (CME). This resulted in the following groups: Central Europe (Austria, Belgium, Germany, the Netherlands, and Switzerland); the Latin countries (France, Greece, Italy, Spain, and Portugal); the Nordic countries (Finland, Norway, Sweden, and Denmark); and the Anglo-Saxon countries (the United Kingdom and Ireland). The practice or performance of CSR was classified according to three different dimensions: economic, environmental, and social. The result of the study demonstrated the importance of institutional factors in the formation, within these countries, of the CSR norms of the CME approach. The importance of such factors in the formation, within the focus companies of EML practices of voluntary CSR, was likewise supported, as these tend to work as replacements for less voluntary forms of institutionalization. For the majority of CSR dimensions, the scores of companies located in Anglo-Saxon countries were highlighted by comparing these scores with those of companies located in Central Europe. In addition, the study revealed that CSR is more extensive in sectors where companies are more strongly impacted bystakeholders and are more prone to adopt institutionalized forms of CSR. Therefore, the authors of that study understood this to mean that these CSR practices are representative of what, and that such voluntary adoptions can be seen as being a specific form of governance—one which can act largely as a substitute for other more formal models of social regulation.

Baptista and Castelo Branco (2015) investigated CSR commitment levels in companies from European countries that joined the United Nations Global Compact. The level of commitment was measured both by the degree of non-compliance with the disclosure requirements of a report called "Communication on Progress" by the United Nations Global Compact (UN-GC) and also by the percentage of the first companies to join the UN-GC. In the view of the authors of that study, the relationship between the concepts of CSR and sustainable development has, in recent years, been widely explored; and the notion of "business sustainability" has acquired a prominent place in all research programs and in many national and international policies. These authors understand that more and more companies integrate social and environmental concerns into their business operations and their relationships with their stakeholders, not only as a way of ensuring recognition of the legitimacy of their favorably acknowledged status, but also as a way to increase their reputation, motivate their employees, etc. The result of the research indicates that in Western European countries (as compared to in Eastern Europe, and also within companies in countries with coordinated economies) companies tend to have a greater commitment to CSR. For example, the commitment to CSR is comparatively stronger in the Nordic countries.

In this sense, CSR practices are important in the corporate world; and the instruments adopted to implement the practices are varied. This chapter focuses on the proposal of the United Nations Global Compact (MP). Ayuso and Mutis (2010, p. 29) understand that the Global Compact presents the most basic commitment for companies, since it focuses on ten normative principles based on universal declarations and conventions on human rights based on the seminal Universal Declaration of Human Rights; four working groups, inspired by the ILO Declaration on Fundamental Principles; and Labor Rights; three principles working groups on the environment, taking as reference the Rio Declaration on the Environment and Development; and the principle of the fight against corruption, based on the United Nations Convention against Corruption.

2.2 A Focus on Varieties of Capitalism

Hall and Soskice (2001) introduced the concept of varieties of capitalism into their analysis of the institutional diversity of countries. They understand that this approach focuses on the strategic interactions of the actors and how such actors are conditioned by the various institutional arrangements with which they interact. Pinto (2012) reflects that there are strategic interactions where the company is at the center of the systems and by which they defines its activity and indicates that the company indicates to other actors; this approach is a micro-analytical approach to understanding the strategic interactions of the company, which is understood as being “institutionally integrated”. Thus, this approach has – as its central concern – the analysis of the behavior of companies and the way in which they interact with a particular institutional structure.

The focus on varieties of capitalism has two basic types of classification: Liberal Market Economies (LME) and Coordinated Market Economies (CME). Table 1 summarizes the context of the focus of the Varieties of Capitalism approach.

Table 1. Context of the influence of the LME and CME approaches

Context	LME	CME
Characterization	Companies coordinate their activities mainly through market competition and the legal guarantee of contracts	Companies depend on extra-market relationships to coordinate their ventures with other actors and to develop their skills
Production regime	They share characteristics such as short-term business orientation, deregulated labor markets, high general education, and high integration of what with in a highly competitive international business environment.	They engage in economic behavior through other mechanisms outside the market; emphasis on long-term finances. The levels of professional training are high; technological cooperation exists between companies
Investments	They prefer easily changeable assets	They tend to concentrate their investments on specific and co-specific assets—a concentration which depends on the active cooperation of other stakeholders.

Innovation	They specialize in the radical; in innovations with the ability to change entire sectors—innovations with the potential of encouraging the development and incorporation of new technologies. For example, they prefer to specialize in sectors of rapid technological evolution	They concentrate more on innovation of an incremental nature. Tends to be more important to maintain competitiveness in the production of capital goods.

Source: adapted from the books by Pinto (2012) and Aguirre y Rubén (2013)

Therefore, Aguirre and Rubén (2013, 48) understand that the Varieties of Capitalism (VC) approach focuses on comparing the strategic interactions of certain actors, especially companies, in explaining the way in which different varieties of capitalism are organized. Hall and Soskice (2001, 19) classified the countries governed by this approach into Liberal Market Economics (the United States, England, Australia, Canada, New Zealand, and Ireland) and ten other Coordinated Market Economies (Germany, Japan, Switzerland, Holland, Belgium, Sweden, Norway, Denmark, Finland, and Austria). In this way, it presupposes that the VC approach can be studied by the CSR perspective.

2.3 Corporate Social Responsibility (CSR) and the Focus on the Varieties of Capitalism (VC) Approach

Aguirre and Rubén (2013) established a series of general criteria of the VC approach that articulates a neo-institutional analysis of the factors that condition the relationships of the firms and presupposes the existence of a legal system to consolidate contracts and coordinate relationships, a system where the following is sought: i) to identify different typologies of capitalist economies; ii) to explain their various forms of coordination based on the study of the relationship between micro factors – especially the adaptive strategies of firms – and macro factors (economic and political); iii) to understand the differences in their performance with regard to economic, social and political matters; and iv) to analyze the different institutional structures and complementarities.

In this way, the study by Jackson and Apostolakou (2010) has contributed to the corporate social responsibility literature designed to document the role of institutional factors at the sector level, and particularly within the institutions of the countries of origin. They proposed a guided discussion based on the VC approach. In other words, did they propose a discussion based on institutional factors influencing CSR practices in different sectors and countries. Based on this understanding, the first hypothesis of this study is presented in the following terms:

> **Hypothesis 1**: *Varieties of capitalism have a positive influence on the Global Compact, so that companies from countries with a coordinated market economy tend to be more part of the Global Compact than companies from countries with a liberal market economy.*
>
> Taking into account both effects and these reflections, the authors proceed to develop the following hypothesis:
>
> **Hypothesis 2**: *Companies in countries with a focus on liberal market economies have a greater degree of exclusion from participation in the Global Compact.*

Thus, the CSR is connected to the discussion of VC due to its approach which considers factors of business strategies such as issues involving the type of production regime; along with innovation strategies; in the behavior of companies and their impact on various actors in the corporate environment.

3 Methodology

Now that the main working hypotheses have been established, in this section the sample used will be analyzed, as will the statistical technique used for its comparison.

3.1 Description of the Sample

In order to contrast the proposed hypothesis, a sample of companies from different countries has been included in the database of the United Nations Global Compact (available on the website of this entity). We studied all those member companies of the Organization for Economic Cooperation (OECD) which had been grouped according to the classification of varieties of capitalism; focusing on Liberal Market Economies (LME) and Coordinated Market Economies (CME) participants of the United Nations

Global Compact. As a result, the sample of companies which has been configured is comprised of 1,356 companies belonging to different sectors of activity. The period of analysis was carried out on data published from December 2015 to February 5, 2016.

The selection of this sample is due to different reasons. First, its selection is due to the characteristics of the varieties of capitalism model, because it is configured as a dynamic approach that acts strategically and affects many actors. Second, the sample size is representative and adequate, with enough variation to have reliable statistical inferences. Third, its study allows conclusions to be drawn about the group of companies because of the sample's focusing on the most significant varieties of capitalism.

The Liberal Market Economies (LMEs) countries used in this research are Australia, Canada, the United States, Ireland, New Zealand, and the United Kingdom. Coordinated Market Economies (CME) countries are Germany, Austria, Belgium, Denmark, Finland, Iceland, Japan, Norway, the Netherlands, Switzerland, and Sweden. As can be seen, Table 2 shows the number of companies and countries that belong to each of the classifications used in the research. In total, 17 countries and 1,356 companies have been used, of which 435 belong to EML and 921 belong to CME.

Table 2. Sample of companies and countries

SAMPLE	LME	CME	TOTAL SAMPLE
COUNTRIES	6	11	17
COMPANIES	435	921	1356

Source: The authors' own elaboration from the investigative data

Now that the description of the sample used has been defined, the dependent, independent, and control variables are described in the following section.

3.2 Variables

Dependent Variable

The dependent variable is a dummy variable that takes the value of 1 if the company is within the Global Compact and 0 if it is not.

Independent and Control Variables

The independent and control variables used in the model are those shown in Tables 3 and 4, respectively.

Table 3. Independent variables

CME	Variable that takes the value of 1 if the company belongs to a coordinated market economy country, according to country, as defined by Hall and Soskice (2001)
LME	Variable that takes the value of 2 if the company belongs to a liberal market economy country, according to country, as defined by Hall and Soskice (2001)

Source: The authors' own elaboration

Table 4. Control variables

SIZE	Numerical variable representative of the size of the company as measured by the number of employees
INDUSTRIAL	Dummy variable; takes the value of 1 if the activity of the company belongs to the aerospace sector, petroleum equipment, services and distribution, industrial engineering, general industrial products, industrial products and services, or industrial transport sectors; otherwise, it takes the value of 0
NON-CYCLIC CONSUMPTION	Dummy variable; takes the value of 1 if the activity of the company belongs to the consumer goods, retail food and drug, or beverage and tobacco sectors; otherwise, it takes the value of 0
CYCLIC CONSUMPTION	Dummy variable; takes the value of 1 if the activity of the company belongs to the household goods, home construction, cars and parts, goods and leisure products, general retailers, construction materials, personal products, life insurance, or travel and leisure sectors; otherwise, it takes the value of 0
FINANCIAL	Dummy variable; takes the value of 1 if the activity of the company belongs to the market investment products and/or investment advice (banks, real estate investment funds, investments and real estate services, investments and real estate services, equity

	instruments of investment, support services, and/or financial services) sectors; otherwise, it takes the value of 0
UTILITIES	Dummy variable; takes the value of 1 if the activity of the company belongs to the electricity, gas, or water sectors; otherwise, it takes the value of 0
ENERGY	Dummy variable; takes the value of 1 if the activity of the company belongs to the alternative energy, or to the oil and gas production, sectors; otherwise, it takes the value of 0
TECHNOLOGY	Dummy variable; takes the value of 1 if the activity of the company belongs to the electronic equipment, software and computer services, or hardware and equipment technology sectors; otherwise, it takes the value of 0
HEALTH CARE	Dummy variable; takes the value of 1 if the activity of the company belongs to the health care equipment, health care services, pharmacy, and biotechnology sectors; otherwise, it takes the value of 0
BASIC MATERIALS	Dummy variable; takes the value of 1 if the activity of the company belongs to the sector forestry and paper, industrial metals and industrial mining, production, and chemical production sectors; otherwise, it takes the value of 0
TELECOMUNICATION	Dummy variable; takes the value of 1 if the activity of the company belongs to the communication media, or fixed line or mobile telecommunications sectors; otherwise, it takes the value of 0

Source: Authors' own elaboration based on the information from INE and Visual Chart (2016)

The classificatory designations of what kinds of activity constitute each of the activity sectors were obtained based on the information available in the Global Compact platform, which distributes its designations across 43 sectors of activity. To establish the activity sector control variable, this diversity of sectors was grouped into a smaller number of sectors. For these smaller sectors, the authors used the sectoral classification of the National Statistics Institute (INE) (www.ine.es) and the sectoral indices of the Visual Chart, which is an international organization that collects information from the markets from both databases. Then, a single classification grouped into 10 activity sectors was obtained, as shown in Table 4.

The selection of the size and the sector of activity as control variables has been a consequence of the effect that such factors have on the processes of corporate social legitimization, as evidenced by several works elaborated beforehand—such as those carried out by Cetindamar and Husoy (2007), Chen and Bouvains (2009), Jackson and Apostolakou (2010), and Baptista and Castelo Branco (2015), among others.

3.3. Proposed Explanatory Model

After obtaining the necessary variables for the analysis, the established work hypotheses have been tested, analyzing the influence that various factors may have on a company's membership in the Global Compact

To achieve this objective, the following model (1) has been proposed; one in which the probability that a company either belongs to or does not belong to the Global Compact will be a function of the economy (whether a coordinated market economy or a liberal market economy) characteristic of the country to which it belongs. Coordinated market economies control various controlling factors include business size and activity sectors.

Membership of the Global Compact = f (Independent variables, control variables) (1)

Model (1) can be estimated empirically from Model (2):

$$PM_i = \beta_0 + \beta_1 EMC_i + \beta_2 EML_i + \beta_3 SIZE_i + \sum \beta_4 SECTOR_i + \varepsilon$$

in which:

PM_i is a dummy variable that takes the value of 1 if the company is within the Global Compact and 0 if it is not;

EMC_i is the variable that takes the value of 1 if the company belongs to a market economy country coordinated according to the definition proposed by Hall and Soskice (2001);

EML_i is the variable that takes the value of 2 if the company belongs to a country with a liberal market economy according to the definition proposed by Hall and Soskice (2001);

SIZE$_i$ is a numerical variable representative of the size of the company as measured by the number of its employees;

SECTOR$_i$ is a dummy variable that represents the 10 sectors of activity into which the sample of companies of the present investigation is grouped;

The model (2), given the dichotomous nature of the dependent variable (1, 0), has been tested empirically through a binary logistic regression. This type of regression is useful for cases in which the researcher desires to predict the presence or absence of a characteristic or result according to the values of a set of predictor variables. The logistic regression coefficients can be used to estimate the ratio of the advantages of the probability of success to the probability of failure—a ratio which is called the ratio of each variable independent of the model (Pérez López, 2005, p. 203).

4 Analysis of the Results

4.1 Descriptive Analysis

From their descriptive analysis, the researchers have obtained the finding (as is shown in Table 5) that the companies which belong to the Global Compact number 1,080 and represent 79.64% of the sample. Meanwhile, the analyzed companies which do not belong to the Global Compact number 276 and represent 20.35% of the sample.

Table 5: Descriptive data

	Frequency	**Percentage**
Companies that belong to the Global Compact	1.080	79.64%
Companies that do not belong to the Global Compact	276	20.35%

Source: The authors' own elaboration from the investigative data

Table 6 shows the geographical distribution of the sample of companies used in the study. As can be seen from the analysis, the United States, having 207 companies, is the country with the most companies; and New Zealand, having 3, is the country with the least number of companies.

Table 6. Geographical distribution

Country	Continent	VC Focus	Number of companies
Australia	Oceania	LME	50
Canada	North America	LME	36
United States	North America	LME	207
Ireland	Europe	LME	6
New Zealand	Europe	LME	3
United Kingdom	Europe	LME	133
Germany	Europe	CMC	189
Austria	Europe	CMC	32
Belgium	Europe	CMC	30
Denmark	Europe	CMC	130
Finland	Europe	CMC	46
Iceland	Europe	CMC	9
Norway	Europe	CMC	55
Netherlands	Europe	CMC	66
Sweden	Europe	CMC	123
Switzerland	Europe	CMC	67
Japan	Asia	CMC	174
	TOTAL		**1,356**

Source: The authors' own elaboration based on investigative data

Table 7 shows the sectoral distribution of the sample used in the study. From the descriptive analysis, we have obtained the finding that (as is shown in Table 7) the sector that contributes the most companies to the Global Compact corresponds to the financial sector with 280 companies, followed by companies in the sector of cyclical consumption in which are represented companies involved in household goods, home construction, automobiles and parts, merchandise and leisure products, general retailers, building materials, personal products, life insurance, and travel and leisure. On the other hand, those sectors that have fewer companies in the Global Compact include the energy sector, which has only 34 companies.

Table 7. Sectorial distribution

Activity sector	Quantity
Industrial	234
Non-cyclic consumption	55
Cyclic consumption	257
Financial	280
Utilities	39
Energy	34
Technology	176
Health care	49
Basic materials	171
Telecommunication	61
Total	**1,356**

Source: The authors' own elaboration from based on investigative data

Prior to the presentation of and commentary on the data obtained in the multivariate analysis, the bivariate correlations between the variables used in the estimated model are shown in Table 8.

None of the variables shows a high correlation. Only the independent variable CME shows a relation of 0.2451 with the GC, which is the dependent variable. At the same time, the SIZE variable also has a correlation of 0.2428 with the dependent variable. The rest of the variables are hardly hardly at all correlated with the dependent variable. Likewise, there are no significant correlations between the independent variables; this avoids multicollinearity problems in the dependency model.

Table 8. Matrix of correlations between variables: Pearson Correlation

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. PM	1												
2. CME	0.2451	1											
3. SIZE	0.2428	-0.0522	1										
4. Industrial	0.0079	0.0964	-0.071	1									
5. Non-cyclic consumption	0.0018	0.0052	0.061	-0.0939	1								
6. Cyclic consumption	0.0155	0.0542	0.0388	-0.2208	-0.0994	1							
7. Financial	-0.0453	-0.1178	-0.0241	-0.233	-0.1049	-0.2467	1						
8. Utilities	0.0322	0.0143	-0.0395	-0.0786	-0.0354	-0.0832	-0.0878	1					
9. Energy	-0.0126	-0.0414	-0.0261	-0.0732	-0.033	-0.0776	-0.0818	-0.0276	1				
10. Technology	0.0154	0.0163	-0.003	-0.1764	-0.0794	-0.1868	-0.197	-0.0665	-0.062	1			
11. Health care	-0.0003	-0.0108	0.0372	-0.0884	-0.0398	-0.0936	-0.0988	-0.0333	-0.031	-0.07	1		
12. Basic materials	0.01	-0.0054	0.0418	-0.1735	-0.0781	-0.1837	-0.1938	-0.0654	-0.061	-0.15	-0.074	1	
13. Telecomunications	-0.014	-0.0414	0.0008	-0.0991	-0.0446	-0.105	-0.1107	-0.0373	-0.035	-0.08	-0.042	-0.082	1

Source: The authors' own elaboration from investigative data

4.2 Multivariate Analysis

Regarding the multivariate analysis that allows the researchers to test the hypotheses of the work, the results obtained by the estimation of the logistic regression are summarized in Table 9. The global significance of said model (R2) for optimal prediction (Nagelkerke's R2) is of the 19.43%, with a confidence level of 99% (p-value <0.01).

In relation to the independent variables, the variable CME has a positive effect in the Global Compact for a confidence level of 99% (p-value <0.01). Therefore the CME variable is statistically significant, with a level of confidence of 99%, having an influence of positive character.

The previously indicated results allow the researchers to validate the proposed Hypothesis 1. Specifically, they accept the initially stated hypothesis that the various varieties of capitalism have a positive influence on the Global Compact, in such a way that companies from countries with a coordinated market economy are more likely to form part of the Global Compact than are companies from countries with liberal market economies. These results would also lead us indirectly to say that companies from countries with a focus on liberal market economies have a greater degree of exclusion from participation in the Global Compact. The result obtained in the present investigation corroborates the one previously obtained by Baptista and Castelo Branco (2015), which had confirmed the hypothesis that companies located in CME countries are stronger than ones from LME countries in their commitment to CSR.

In the case of control variables, only SIZE is statistically significant. The detected effect is positive and significant, having a confidence level of 99% (p-value <0.01). That is to say, the SIZE of the company has a great influence as to whether or not the companies are within the Global Compact. On the other hand, the ACTIVITY SECTORS are not influenced by the fact that the companies either are or are not in the Global Compact.

Table 9. Effect of varieties of capitalism in the Global Compact

	Coef.	**Std. Err.**	**Z**	**P>|z|**
CME	**1.380743**	**0.150238**	**3.978**	**0.000**
SIZE	**0.952949**	**0.104044**	**2.593**	**0.000**
INDUSTRIAL	-0.006823	0.382688	-0.993	0.986
NON-CYCLIC CONSUMPTION	-0.259954	0.495788	-0.771	0.600
CYCLIC CONSUMPTION	-0.047679	0.379912	-0.953	0.900
FINANCIAL	-0.060569	0.370499	-0.941	0.870
UTILITIES	0.680253	0.605343	1.974	0.261
ENERGY	0.122600	0.556052	1.130	0.825
TECHNOLOGY	0.05978	0.396194	1.062	0.880
HEALTH CARE	-0.241186	0.505456	-0.786	0.633
BASIC MATERIALS	-0.066444	0.397660	-0.936	0.867
Constant	-2.768274	0.492883	-0.063	0.000

R^2 Cox and Snell = **0.1236**
R^2 Nagelkerke = **0.1943**
Chi-square = **178.9178*****

Significant levels in bold

* p-value < 0.10   ** p-value < 0.05   *** p-value < 0.01

PM$_i$ is a dummy variable, that takes the value of 1 when the company is part of the Gobal Compact and 0 if it is not;

CME$_i$ is a variable that takes the value of 1 if the company belongs to a Coordinated Market Economy country, according to country as defined by Hall and Soskice (2001);

LME$_i$ is the variable that takes the value of 2 when the company belongs to a country with a Liberal Market Economy, according to country as defined by Hall and Soskice (2001);

SIZE$_i$ is a numerical value representative of the size of the company as measured by the number of its employees;

SECTOR$_i$ is a dummy variable that represents the 10 activity sectors in which the companies in the sample are grouped in the investigation (please consult Table 4).

Source: The authors' own elaboration based on investigative data

5. Conclusion

It is increasingly evident that in the corporate environment, there is a growing demand for business organizations to adopt responsible business behaviors, behaviors including the practice of CSR. In this sense, there are several international initiatives that collaborate with companies to propose guidelines, standards, and CSR instruments, among them being the UN-GC.

Various studies – including Hall and Soskice (2001), Chen and Bouvain (2009), Gjølberg (2009), Ayuso and Mutis, (2010), Jackson and Apostolakou, (2010), Aguirre and Rubén (2013, p. 48), and Baptista and Castelo Branco (2015) – show advances in the discussions on corporate social responsibility, combined with institutional aspects of the LME and CME aspects of the Varieties of Capitalism approach.

This paper analyzed the influence of the LME and CME distinctions in the Varieties of Capitalism approach in international companies that are members of the OCED and are participants in the Global Compact. Therefore, a sample of companies participating in the GC has been used. Regarding the hypotheses, we have been able to prove that Hypothesis 1 is positive and statistically significant—and that therefore, varieties of capitalism have a positive influence on the Global Compact in such a way that companies from countries with a Coordinated Market Economy tend to be more part of the Global Compact than do companies from Liberal Market Economy countries.

Finally, it seems necessary to point out the limitations of this study linked to the observation of a single geographical area – seventeen countries – as well as the impossibility of generalizing the results for companies outside the sample space of this research. The study suggests the possibility that future research might discuss compliance with guidelines relative to the recommended level of COPs (Communication on Progress) of companies participating in the Global Compact (specifically, companies from countries with either a CME or an LME focus). In addition, research into Latin American countries where other approaches to the study of capitalism have arisen – for example, the Economies of the Hierarchical Market (EHM) – can be considered as being of great interest for the future.

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CHAPTER FIVE

WHAT DRIVES CSR DISCLOSURE PRACTICES IN EMERGING COUNTRIES?

MARÍA DEL MAR MIRAS RODRÍGUEZ, DOMINGO MARTÍNEZ MARTÍNEZ AND BERNABÉ ESCOBAR PÉREZ

Abstract

Communicating CSR has become a priority for companies in order to ensure the satisfaction of the stakeholders´ demands; and the majority of companies have decided to include this information in their official written documents. Among different options available, most companies have chosen to do this through the CSR/sustainability report. A large increase in the publication of sustainability reports has taken place over recent years. This has caused some scholars to have called its credibility and quality into question. As an attempt to overcome this situation, a large set of CSR disclosure practices has been developed from the GRI application level to the CSR report assurance level. Likewise, most studies in the CSR reporting field also consider as being a determinant the influence of the country of origin, which is theoretically supported by Institutional Theory. According to this approach, we are going to consider the companies from BRICS countries because of (1) their growing relevance in the worldwide economy, (2) their different reaction to the economic crisis, and (3) there being a gap in the literature about them. Therefore, it is really interesting to know how they are implementing these practices. Additionally, most of them have serious environmental problems. Consequently, the aim of this chapter is to identify the relevant factors that influence CSR reporting practices (their complexity and their GRI level achieved) in BRICS countries. In particular, we will study the effect on the CSR disclosure practices of some business variables, industries, and countries. Our study

sample is composed of 3,582 listed companies from BRICS countries (Brazil, Russia, India, China, and South Africa) whose financial data are available in the Thomson Reuters ASSET4 Database.

Keywords: CSR reporting practices, National culture, Industry, Emerging countries

1 Introduction

The formal communication used by companies to report their socially responsible performance has become one of the main strategic mechanisms for corporate governance (Miras and Escobar, 2016). Due to the large number cases of negligence, corruption, and bad praxis uncovered during the last ten years – and due to the significant impact of such cases from an economic, social, or environmental perspective – Corporate Social Responsibility (CSR) is receiving increasing attention from academics, professionals, and society in general. Many of these practices had at their first instance been concealed from public opinion and have been reported only later (whether intentionally or unintentionally). See, for instance, the recent video on the climatic effects that the oil company Shell filmed 26 years ago, already warning of the dangers of climate change[1]; or the discovery in 2015 in relation to the illegal software used by Volkswagen in diesel engines to comply with certain pollution requirements.

The current technological revolution and permanent hyper-connectivity have certainly raised the global awareness about companies' real impact. Accessibility to information is no longer a problem; and therefore, misinformation cannot be used as an excuse of citizenship in order to justify certain passive behaviours. Instead, increased awareness, improved telecommunications, and greater accessibility to different sources of information have resulted in an increase in the demands, pressures, and expectations of those who are interested in a company's business activity. Therefore, companies should become aware of the relevance of reporting their socially responsible performance to stakeholders, because this will improve transparency (Crowther, 2000) and reduce informational asymmetries (Bushman et al., 2004).

[1] http://www.lavanguardia.com/natural/20170301/42416518337/shell-video-cambio-climatico.html

Those corporations that publish their financial economic information in accordance with established procedures and regulations – and which wish to meet some social or environmental expectations – ought to include information on their commitments and the level of performance achieved in their financial statements. In order to accomplish this task, companies have different options (Ihlen et al., 2011). However, these possibilities normally can be reduced to: i) integrating social and environmental information along with the economic information in the same document; or ii) developing a specific document for reporting this kind of information. In this regard, although in recent years there has been a growing interest in the mechanisms necessary to design a comprehensive report that brings together different types of information (Jensen and Berg, 2012). Most corporations have traditionally communicated their socially responsible management through specific reports (as stated by KPMG in a study carried out in 2011).

A large number of companies have adopted socially responsible principles, policies, and practices in order to achieve competitive advantages and so contribute to the generation of value (Husted and Allen, 2007). Due to this, many scholars have emphasised the need to challenge the quality and credibility of these documents (Amran et al., 2014). It is also important to note the high heterogeneity observed in the format and content of the first sustainability reports, with the consequent difficulty to make decisions based on comparisons. This is one of the main reasons why the Global Reporting Initiative (GRI) has been making significant efforts since 2003 in the preparation of guidelines to facilitate a standardised communication of CSR. Through its different guides, the GRI has provided managers with helpful tools for disclosing the social performance of their companies. Furthermore, the reports elaborated in accordance with the GRI recommendations can be subsequently evaluated and certified through a process of assurance.

Over the last fifteen years, many studies (some of which have used the different guides developed by the GRI) have been carried out on the different determinants that influence the dissemination of sustainable information (Dienes et al., 2016). In general, the literature suggests that the cultural environment, closely linked to the country in which the companies are located, has an important influence on CSR reporting practices. This is an unusual finding, most researchers have normally focused their attention on corporations located in similar cultural environments, using – as their main argument – the difficulty of isolating the real effects of corporate culture in an economic environment characterised by the globalisation of markets and the continuous convergence of different contextual variables. For this reason, in order to perform a study on determining factors, it could be advisable to select companies located in regions with some economic similarities.

To shed light on the study of the determinant factors of CSR communication, and taking into account the above recommendation on sample selection, for the research conducted, companies were selected, located in what Goldman Sachs denoted in 2003 as being BRICS countries (Brazil, Russia, India, China, and South Africa). These five countries have been recognised in the international economic environment as being five of the emerging markets with the greatest potential to influence global economic and political spheres.

The selection of companies from these BRICS countries is therefore motivated by (i) the relevance of these emerging markets in the international economic environment, (ii) the particular way in which these countries have faced the recent financial crisis, (iii) few researchers having developed studies on the socially responsible performance of companies in these countries; and (iv) there being no studies focused on the analysis of what factors are influencing CSR disclosure practices of companies located in this particular economic environment. In this regard, although there are no studies that exclusively focus on determinant factors, some researchers have analysed how companies from these countries manage their CSR communications (Alon et al., 2010). Accordingly, based on CSR reports for the year 2012 of companies established in the different BRICS countries, it has been analysed how some organisational characteristics contribute to explaining two specific variables: The "complexity of the CSR reporting" achieved as a proxy of transparency and the "GRI-level" achieved as a proxy of company efforts in CSR communication.

The following section reviews the main theoretical approaches identified in the literature on CSR reporting. Then, different hypotheses are proposed from the identification of the most-used determinant factors in previous research. In the next section, information about the method and the sample is provided. Finally, the results are presented and some conclusions are drawn.

2 Theoretical Perspective of CSR Reporting

Adams and Whelan (2009) point out three possible objectives pursued by organisations and which can be used for a preliminary identification of the main theoretical frameworks suggested in the literature: the maximisation of shareholder value, the social legitimacy and the risk management associated with corporate reputation. Each of these objectives respectively answers three of the key approaches to understanding the CSR disclosing activity: agency theory, legitimacy theory, and stakeholder theory. Although the last two approaches have been those most employed in explaining social and environmental reporting practices to date, in the last five or ten years some authors have suggested institutional theory as one of the theoretical perspectives with a greater explanatory capacity to understand the reporting practices and the decision-making processes of corporate governances (Islam and Deegan, 2008). Accordingly, in agreement with some authors' arguments (Gray et al., 1995; Deegan, 2006), the analysis of the different theories must be made from a complimentary perspective, considering that there are multiple overlaps among them. Therefore, from this standpoint, it would not be recommended to study the different theories as opposite approaches.

Agency Theory (Ross, 1973), probably the most classic of those mentioned, has been used by many researchers interested in the analysis of the voluntary disclosure of information, arguing as motivation the reduction of agency costs between the principal and the agent when informative asymmetries are reduced (Jensen and Meckling, 1976; Rozef, 1982; Easterbrook, 1984; Naser et al., 2006). Likewise, the commitment to social responsibility and the development of policies and practices expected from a sustainable performance can be interpreted as being the agent's reaction to the principal's concern about the negative effect of any irresponsible practice in the creation of long-term value (Margolis and Walsh, 2003, Miras and Escobar, 2016).

Based on the definition set out by Perrow (1970), Suchman (1995) asserted that legitimacy is the generalised perception or assumption that the actions of an entity are desirable, appropriate, or adequate within a system of socially designed norms, values, beliefs and definitions. In this sense, the legitimacy between company and society requires the fulfilment of a social contract by which the firm would agree to satisfy some social demands in return for some kind of rewards in the form of competitive advantages that guarantee its success or its survival (Brown and Deegan, 1998; Deegan, 2002; Williamson and Lynch-Wood, 2008). From this perspective, the CSR report is conceived as being one of the essential mechanisms available to corporations with which to communicate and guarantee the necessary transparency required by the social contract. Thus, the disclosure of social information – and particularly, sustainable reports – have become helpful mechanisms for improving social legitimation (Woodward et al., 2001). Accordingly, the most exposed organisations would be subject to greater social pressure, and better levels of CSR reporting would be expected, in order to minimise risks and convey a socially responsible image and reputation (Miras and Escobar, 2016).

The impact that the CSR management has on corporate image and reputation has typically been studied from the perspective of stakeholders, because the positioning of a company can be noticed as being the impression produced among all those who are interested in its activity. The origin of stakeholder theory is related to the concern expressed by business management theorists when studying the obligations that companies have to face with their stakeholders (that is, shareholders, employees, suppliers, customers, or any other group interested in the company for economic, social, or environmental reasons). In line with the aforementioned argument, it is inferred that business management must pursue a balance between the interests of different stakeholders as a mechanism to ensure the company's survival and the achievement of its objectives (Gray et al., 1996; Shankman, 1999). Reverte (2009) pointed out that organisational management, based on stakeholder theory, is based on the hypothesis that corporate disclosure is a control mechanism for managing the informational needs of different stakeholders.

According to the theories mentioned, the drafting and publication of sustainability reports is intended to meet the informational needs in a broad way, satisfying the interests of stakeholders and thereby contributing to forming a reciprocal relationship with them. In agreement with Freeman's approach (1984), this is the reason why CSR disclosure should have the interests, demands, and expectations of the different stakeholders at heart; as well as evaluating the relevance of each group within the network of relationships where the company operates.

Additionally, CSR reports are also essential to satisfy institutional pressures (Campbell, 2007, Kolk and Perego, 2010). Aguilera and Jackson (2003) noted the special usefulness of this approach to try to explain the way that corporate governments have to fulfil their functions—among which is the disclosure of CSR. In agreement with Institutional Theory, in a constant attempt to survive in markets, institutions are in a permanent adaptation of their structures, policies, and practices to the normative and cultural context in which they operate (Di Maggio and Powell, 1983; Scott and Meyer, 1994). After all, this permanent adaptation to the institutionally established norms, along with the satisfaction of social expectations, is still a mechanism for corporate legitimacy (Suchman, 1995; Claasen and Roloff, 2012; Du and Vieira, 2012).

The literature which focused on the analysis of explanatory factors that affect CSR reporting – either through assessments of the quantity of information, its quality, or simply with a view to the publishing (or not) of a report – has highlighted CSR among some factors identified as being associated with the organisational profile size, profitability, and international sales (Belkaoui and Karpik, 1989; Hackston and Milne, 1996; Larrán and Giner, 2002; Prencipe, 2004) along with the industry itself (Sweeney and Coughlan, 2008; Simnett et al., 2009; Kolk and Perego, 2010; Fifka, 2013).

Most studies in the CSR reporting field consider the influence of the company´s country of origin (Adams, 2002; Wanderley et al., 2008; Clarkson et al., 2011; Fortanier et al., 2011) which is theoretically supported by Institutional Theory (DiMaggio and Powell, 1983). For this reason, it is interesting to evaluate whether the factors previously identified in similar studies are also determinants of the CSR reporting activity of companies located in the BRICS environment. To accomplish this task, the following hypotheses are proposed:

> H1: The characteristics associated with the company's profile are explicative of the divergences in the CSR reporting practices.
>
> H2: The existence of a normative that obliges companies to report about CSR is explicative of the divergences in the CSR reporting practices.

3 Methodology

The sample used is composed of listed companies located in BRICS countries (Brazil, Russia, India, China, and South Africa) whose data are available in the ASSET4 Thomson Reuters database. The final sample includes 3,582 companies. Then, the CSR disclosure practices carried out by each one was analysed based on the information of their CSR/sustainability reports, their annual financial statements, or their Integrated Reports. Except for a few companies, most of these documents were directly downloaded from the Global Reporting Initiative website[2]. In this way, the reports from 2012[3] were available for the study.

The study of the determinants of the CSR reporting practices of companies from BRICS countries was carried out with consideration of two dependent variables.

First of all, "Complexity of CSR report" is used as a dependent variable to evaluate the level of commitment assumed by each company concerning the disclosure of their social and environmental behaviours. Then, following Moneva et al. (2007), the elaboration of this index is based on the aggregation of four items (dummy variables): (a) the disclosure of CSR information in any company written report; (b) the compliance with the GRI guidelines; (c) the presentation of an "in accordance" level, and (d) the presence of an external assurance. Consistent with Muñoz et al. (2008), every firm is classified in a way dependent on the score obtained in the Complexity of the CSR Report as being either Opaque (0 points), Pro-translucid (1 point), Translucid (2 points), Pro-transparent (3 points), or Transparent (4 points).

Secondly, another variable – the "GRI level" – was designed based on Rodríguez-Ariza et al. (2014) to assess the scope of the CSR disclosures carried out by firms according to the GRI standards. Thereby, focused on the CSR report, we proceeded to evaluate a having a score of "0" those companies which did not receive any GRI application level score, "1" those that received a "C" application level score, "2" for firms which received a "B" application level score, and finally, "3" for organisations received an "A" level score.

The information and the references about independent and control variables considered are presented in Table 1.

[2] http://database.globalreporting.org/search/. It is necessary to clarify that companies could upload their reports to this website regardless of whether or not they follow the GRI standards.
[3] This was the last financial year with information available for the complete sample.

Table 1: Independent and control variables analysed

Variables	Factors		Measures	References
Independent	Organisational Characteristics	Size	Total Assets	Said et al. (2009); Drobetz et al. (2014); Amran et al. (2014)
		Profitability	ROA	Michelon and Parbonetti (2012); Drobetz et al. (2014); Rodríguez-Ariza et al. (2014)
		International Sales	Total International Sales	Chaple and Moon (2005)
	Regulation		0 (Voluntary) 1 (Mandatory)	KPMG (2013)
Control	Country		BRICS	Alon et al. (2010)
	Industry		ASSET 4	Miras and Escobar (2016)

4 Regression Models Proposed

Considering the proposed objectives of the research, we have used ordinal regression models instead of other more complex statistical models due to (1) the reduced number of hypotheses and (2) the lack of abstract variables that would have required more than one measure to have been evaluated.

Therefore, a multiple regression model was proposed to test the hypotheses, taking into account the sample's limitations that have previously been pointed out. Each model was carried out for the two variables used for measuring CSR reporting practices: "Complexity of the CSR Report" and "GRI level of application". The estimated model is:

$$\text{CSR reporting practices} = \beta_1 + \beta_2\ \text{Company Size} + \beta_3\ \text{Profitability} + \beta_4\ \text{International Sales} + \beta_5\ \text{Mandatory} + \text{Industry effect} + \text{Country effect} + \varepsilon$$

5 Results

From Tables 2 and 3, we can see that more than half of the 3,582 companies selected for the current study are Indian; one third of them are Chinese; and the others are from Brazil, South Africa, and Russia.

Table 2: Descriptive analysis of the quantitative variables related to corporate profile by country

	Complete Sample N=3,582		Brazil N= 178		China N=1,128		India N=2,068		Russia N=88		South Africa N=120	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Total Assets (millions)	79.55	660.86	28.70	114.35	53.01	699.83	73.91	520.22	684.47	2210.93	56.96	182.61
ROA	5.00	13.66	4.73	9.89	4.91	5.84	4.83	16.97	5.75	7.01	8.74	10.01
International Sales (millions)	7.08	90.69	1.82	8.18	2.68	26.18	5.71	67.62	106.71	458.42	6.98	15.88

Estimated data, based on the information from ASSET4.

The descriptive analysis of the complete sample presents an overview of the analysed firms. Statistics values related to size, profitability, and internationalisation show significant differences among the company profiles from the countries selected, even when all of them are considered as being emerging countries and as sharing certain socioeconomic and contextual factors as BRICS components. Something which should be pointed out is that in comparison to the rest of the companies under study, the Russian companies are of larger size; have a larger total amount of international sales; and publish a much higher volume of CSR data and also, what is their level of exporting activity. Likewise, it is necessary to highlight that South African corporations are the most profitable of all. By contrast, corporations from Brazil are the smallest, least profitable, and have the lowest exporting activity of the BRICS and also, what is the volume of data they publish.

Regarding the mean scores of each dependent variable, firstly, it is important to highlight the paucity of engagement with CSR disclosures of companies located in BRICS countries. In this sense, a high percentage of the corporations (88.3% of 3,582 firms) were categorised as being “Opaque”, as they did not publish any CSR report in 2012. Even in Russia – a country located in Europe, where most listed companies have to face significant transparency requirements – more than three quarters of the corporations under study decided not to publish any report about their sustainable performance.

It is particularly necessary to point out the lack of commitment to the disclosure of CSR information in China and India, where more than 90% of companies do not publish any such report. This finding in reference to China is unusual—because this country, along with Brazil and South Africa, is one of the three countries where there had been some regulations in 2012 regarding listed companies and CSR reporting. In fact, as could be expected, the percentages of "Opaque" companies in Brazil and South Africa are lower than the rest—especially in the latter country, where only 5.8% of companies did not publish any CSR report. Additionally, this higher commitment with regard to CSR disclosure activity in South Africa and Brazil can be appreciated in light of the higher number of companies classified as being – at the very least – Pro-Transparent or Transparent.

On the other hand, considering that 88.3% of firms analysed did not publish any report, the percentage of companies that disclosed CSR information following the GRI guidelines is lower than those which did not chose this standard as a reference – despite the international recognition given to it by academia and professionals (4.8% versus 6.9%).

Among Brazilian and South African companies, there is a relevant difference regarding the use (or not) of the GRI guidelines. In particular, while 72.60% of Brazilian companies which published a CSR report used this standard as a reference and achieved an "A", "B", or "C" level designation, only 37.15% of South African firms preferred to disclose CSR information in accordance with the GRI standards. After Brazilian corporations, Russian companies interested in publishing CSR reports are those that showed an increased tendency to follow the GRI recommendations; together, Brazilian and Russian companies comprised, respectively, 15.9% of the 23.9% that published a CSR report in 2012. Russian firms' greater interest in the GRI guidelines in comparison with the interest shown by firms elsewhere is probably due to the outstanding relevance of this institution in most European partner countries. Something similar to the analysis of Russian corporations happens with Indian companies as well. In spite of only 5.8% disclosing a CSR report, more than half did so in accordance with the GRI (probably due to the historic British influence in this country).

Table 3: Descriptive analysis of the CSR reporting practices by country

	Complete Sample N=3582	Brazil N= 178	China N=1128	India N=2068	Russia N=88	South Africa N=120
Complexity of the CSR reporting:						
Opaque	88.3%	48.9%	93.3%	94.2%	76.1%	5.8%
Pro-Translucid	6.8%	14%	6.1%	3.5%	8%	58.3%
Translucid	1.4%	11.8%	0.4%	0.2%	4.5%	13.3%
Pro-Transparent	1.5%	8.4%	0%	0.6%	10.2%	13.3%
Transparent	2.1%	16.9%	0.3%	1.5%	1.1%	9.2%
GRI level:						
A	2.2%	14 %	0.1%	0%	5.6 %	5.8%
B	2.5%	12.4%	0.2%	0.1%	8%	15%
C	0.1%	10.7%	0.1%	2.1%	2.3%	14.2%
Non-GRI	95.2%	62.9%	99.6%	97.8%	84.1%	65%

Estimated data, based on the information from ASSET4.

The results from the statistical tests of the two regressions carried out are presented in Table 4.

Table 4: Determinants of CSR disclosure—Results from regressions

	Complexity		GRI level	
	Coefficient estimation	T-Student	Coefficient estimation	T-student
Company Size	0.103	13.06***	0.053	8.12***
Profitability	0.001	0.74	0.001	0.91
International Sales	1.19e-09	2.77***	1.06e-09	3.29***
Mandatory	0.179	1.23	-0.190	-1.29
Country	Controlled ***		Controlled***	
Industry	Controlled		Controlled***	
N	3582		3582	
R^2	0.3901		0.2907	

Significance test *** < 0.005, **<0.01,*<0.05, †<0.1
All the regressions have been controlled by both the industry and the country.

The analysis of the results related to the Complexity of the CSR report show that the explanatory power is 39%. Additionally, company size is the best predictive variable in both models and also presents a strong relation with the CSR report's level of complexity.

From the study of the GRI level, we need to firstly point out the loss of predictive power in the model (29%). Moreover, most coefficients of the variables present slight decreases which reflect the comparatively less strong relationship between the predictive variables and the scope of the CSR report as evaluated through the level of GRI adoption. "Mandatory reporting" is the only variable whose coefficient increases its value; however, it becomes negative. Thus, the non-significant negative coefficient of this variable (when the GRI level is analysed) shows a negative correlation and suggests that the existence of mandatory regulations regarding CSR reporting discourages firms from following the GRI guidelines.

Finally, the importance of controlling the economy by country should be pointed out— since in both models, its variable is statistically significant. This finding stresses how important it is to consider the differential effect of culture on engagement with CSR disclosure activity – even when countries share social economic features.

5 Conclusions

The analysis of the determinant factors of CSR reporting from companies listed in emerging countries such as Brazil, Russia, India, China, and South Africa points out the need to be able to extrapolate conclusions from specific cultural or economic environments when the research is focused on firms. To support this idea, it can be seen that out of all the variables used as explicative factors, only one variable – “company size” – really helps to explain the level of reporting (whatever the case was).

In this sense, it has been checked and verified that even when the companies are from countries with certain economic similarities and potentialities (BRICS), the country effect also has an influence on the level of CSR reporting engaged in by the firm.

The relationship between company size and the CSR report is one of the most frequent findings in this kind of research. Nevertheless, it is one of the few determinant factors whose analysis could be carried out, considering most of the theoretical arguments that are discussed in this research work – although Legitimacy Theory and Stakeholder Theory fit better. In agreement with these two theories, the CSR report carried out by companies will be better when the company is bigger—because the pressures and the expectations are higher.

On the other hand, the influence that country has shown as a control variable contributes to reasserting the reasoning which argues that the normative and cultural peculiarities of each environment require different analyses and answers. The divergences identified in the practice of CSR disclosure could be a response adapted to the firms’ cultural and normative environments – even among countries that *a priori* share certain economic features.

A lack of interest in transparency has been identified. This has been reflected in the fact that in 2012, 88.3% of the 3,582 listed companies analysed did not publish any information in this regard.

From the statistical tests, the first deduction which should be noted is that the explicative factors studied turn out to be either determinant or not – regardless of the measure used for CSR reporting (as linked either to the complexity of the CSR report or to the scope of the CSR report according to the GRI adoption level). However, the determinants used are able to predict a higher percentage of the variance experienced by the variable that reflects the complexity of the report proposed by Moneva et al. (2007). This could be due to the scant interest, among companies in BRICS countries, in following the GRI standards.

This result suggests that future research in the area should consider the suitability of using measures of CSR disclosure which are not based exclusively on the level of adoption of the GRI standards. This is particularly relevant in the research focused on companies located in countries where this standard is not the main option for reporting about CSR.

In addition, the exposure of companies, as well as their exportations to other markets, each has a positive relationship with both CSR reporting measures: CSR reporting complexity and the level of GRI reporting.

This last argument again suggests? Or, notes as being remarkable the need to establish the appropriate legal mechanisms necessary to ensure minimum commitments in transparency. In this sense, it has been seen that for those companies which should show comparatively more commitment to CSR reporting due to their being more engaged in transparency than their counterparts are, the existence of legal imperatives of reporting about CSR issues has a negative relationship with the CSR disclosure practices analysed.

This provides evidence that in those normative and cultural contexts in which the choice to disclose information about CSR is really an option for companies, firms that decide to report about these issues will do so responsibly—and they will try to implement best practices. This will help disclosure to cease being a simple strategic legitimisation tool and become a device which contributes to the creation of value.

In these cases, the CSR report would not be carried out in order to be the effect of a cause (socially irresponsible firm behaviours) but rather the cause that will have an effect in the future (a higher satisfaction of different stakeholders and better image and a company reputation which implies an improvement in competitiveness).

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CHAPTER SIX

THE DISCLOSURE OF SOCIAL ISSUES IN LATIN AMERICAN SUSTAINABILITY REPORTS: AN EXPLORATION OF THEIR DISCLOSURE IN ARGENTINA, CHILE, AND PERU

JOSÉ M. MONEVA[1], LUIS JARA-SARRÚA, JULIO HERNÁNDEZ-PAJARES AND JUAN PABLO DEL BARCO

Abstract

During recent decades, sustainability reporting has been a widespread practice for organizations from different regions around the world, as well as for different economic sectors. Around the three aspects of sustainability, the social dimension – the aim of this research – is the most confusing concept (in comparison to the environmental and economic ones). However, different studies consider the social dimension, especially employees and human rights policies and practices. The situation regarding the sustainability reporting of Latin American organizations has, in the literature, been considered as being relevant due to a significant growth in the number of GRI reports disclosed in recent years. This research seeks to contribute to the knowledge on the social dimension of the sustainability reporting in Latin American countries—focusing on Argentinian, Chilean, and Peruvian organizations. The methodology was developed in two phases. The first consisted of the use of the content

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analysis technique to codify the social information present in the sustainability reports of the year 2015 by the organizations of Argentina, Chile, and Peru. In the second phase, reticular or social network analysis was used on the data which had been codified in the previous phase. The present study shows that there is no homogeneity in the sustainability reporting the selected countries – specifically in terms of their social performance disclosure – in spite of the influence of the GRI G4 Guidelines.

Keywords: Sustainability Reporting, Latin American, Corporate Social Responsibility, Social Aspects, Emerging Markets

1 Introduction

During recent decades, sustainability reporting has been a widespread practice for organizations from different regions around the world, as well as for different economic sectors. This type of non-financial reporting has been considered useful by managers and investors, since it is a differentiating factor for competitiveness and for improving confidence with its stakeholders (Ernst and Young, 2016; Landrum, 2017; Landrum and Ohsowski, 2018).

Several studies on global analysis of sustainability reports indicate that the main benefits of this communication are: improvement of corporate reputation; attention to employee demands; an upgrading of customer loyalty; better access to financial markets; the increase of efficiency in the processes while reducing environmental impact; and, finally, the improvement of risk management (KPMG, 2017 and 2015; Ernst and Young, 2016).

Since the voluntary adoption of sustainability reports in the 1980s in developed countries and the decade of the 1990s in developing countries (Fifka, 2013), research on sustainability reporting has been aimed at analysing and exploring the purposes of CSR; the ways of communicating sustainability aspects; the stakeholders' involvement; reputational risk management; and the legitimacy of economic activities (or, the license to operate) and its relation with financial performance (Kolk, 2004; Moneva et al., 2007; Du et al., 2010; Landrum and Ohsowski, 2018).

Other research topics on sustainability reports have been aimed at evaluating whether internal factors (such as size; industry; financial performance; and/or type of shareholders) or external factors (such as the impact of stakeholders; country or region; motivations of managers; and the strategies of information managers) influence the nature of social responsibility or sustainability reporting (Fifka, 2013; Alonso-Almeida et al., 2014).

The most widespread practice of sustainability reporting is based on the Global Reporting Initiative (GRI) Guidelines; therefore, global research has been carried out mostly on this pattern (Marimon et al., 2012; Alonso-Almeida et al., 2014; Landrum and Ohsowski, 2018). Worldwide, sustainability report studies of organizations in sectors with greater environmental and social impact and with greater visibility in capital markets find greater dissemination when conducted under the auspices of the GRI Guidelines (Kolk et al., 2001; Marimon et al., 2012; Alonso-Almeida et al., 2014).

However, these studies show that the most frequent view in the sustainability reports analysed is an inadequate conception of sustainability – usually a weak sustainability – more related to the improvement of business benefits than to its contributions to the goals of sustainable development (Moneva et al., 2006; Landrum and Ohsowski, 2018). Thus, we also share that sustainability depicted by the disclosure of policies and indicators does not have a comprehensive vision—in that it represents more of a commitment than a strong sustainability performance (Kolk, 2004).

Research studies on the different views of corporate sustainability in the reports recognize diverse approaches. Such approaches range from regulatory compliance; ways and means for creating financial value; and social and environmental contributions (up to how to conceive of the protection of survival conditions in nature) (Landrum and Ohsowski, 2018).

On the other hand, corporate sustainability reporting from developing countries – the nature of the organizations in this study – has undergone an important development during the last set of years. However, the level of research has been lower than that on developed countries. Usually these studies focus on the external factors of the sustainability reporting under study such as country, size, and business sector (Fifka, 2013; Alonso-Almeida et al., 2014; Cunha and Moneva, 2016).

Most of the research shows that two theoretical approaches have been addressed to explain the motivations of sustainability reporting. These approaches frame it either as being a response to the expectations of its stakeholders or as being a way to legitimize its sustainability performance in accordance with societal values (Adams, 2002; Parker, 2005). It could be that one can find studies under the aegis of legitimacy theory, where environmental disclosure refers to positive actions that can influence external opinions about the organization along with the opinions of its stakeholders (Deegan, 2002; Moneva et al., 2006; Husillos, 2007). However, the patterns of sustainability reporting have changed, and the most recent studies consider that the institutional theory is a more appropriate theoretical framework; thus, the managers accept the social pressure to follow the "correct" and "necessary" practices of reporting in organizations´ environments that promote sustainability (Larrinaga, 2007; Higgins and Larrinaga, 2014; Higgins et al., 2018).

These theories have been used in the analysis of organizations in developed countries. However, such theories have not been applied at the same level in developing countries where the theoretical frameworks are not widely applied and have been focused on the analysis of external factors—factors such as the external influence of the corporate group, international customers, or transnational non-governmental organizations (Belal and Momin, 2009; Ali, et al., 2017; Cunha and Moneva, 2018).

Thus, it is found that the motivations of companies respond to the influence of governmental organizations that promote and reward performance and sustainability reporting, and which allow them the opportunity to present a better image for their relations with the stakeholders or institutional influencers of transnational non-governmental organizations that encourage and regulate the disclosure of sustainability practices in developing countries (Belal and Momin, 2009; Pérez-Batres et al., 2010; Amran and Haniffa, 2011; Alonso-Almeida et al., 2015; Ali and Frynas, 2017).

Some organizations – in order to maintain their legitimacy – must follow the practices promulgated by the institutional environment of the EU, a region in which commercial relations are held. Thus, they adopt normative models of sustainability reporting and performance promoted by transnational non-governmental entities instead of by local governmental regulations that are absent and with no comparatively greater pressure from their stakeholders (Pérez-Batres et al., 2010; Momin and Parker, 2013; Ali and Frynas, 2017; Ali et al., 2017).

The research about the institutional influence, or its absence, as a determinant in the corporate sustainability reporting in developing countries can also be observed for Latin American organizations that respond to an institutional influence of stakeholders from developed countries and transnational non-governmental organizations that encourage the disclosure of environmental and social aspects (Araya, 2006; Pérez-Batres et al., 2010; Calixto, 2013).

According to the above findings, it can be understand that the external institutional influence of organizations such as the GRI or the UN Global Compact to be part of transnational groups, and the relations with international commercial parties, determine the performance and sustainability reporting of Latin American organizations, (Araya, 2006; Cetindamar and Husoy, 2007; Pérez-Batres et al., 2010; Marimon et al., 2012; Calixto, 2013; Alonso-Almeida et al., 2015; Hernández-Pajares, 2018; Cunha and Moneva, 2016).

However, in the case of Latin American organizations, government promotions and regulations have been implemented in a limited way, which probably has led to a comparatively lower interest in sustainability reporting in their countries (Jamali, 2007; Pérez-Batres et al., 2010; Marimon et al., 2012; Alonso-Almeida et al., 2015).

Various analyses on sustainability reporting in Latin America find external and internal factors to be determinants of the level or quality of sustainability reporting, as well as the influence of organizations and regulations on the type and level of sustainability reporting (Cunha and Moneva, 2018).

Thus, research into this topic finds that external factors such as the firm's country of origin and the international nature of its customers, or internal factors such as its size and sector, are the main determinants in the level of sustainability reporting among firms in Latin America (Araya, 2006; Ortas Moneva, 2011; Sierra-García et al., 2014; Alonso-Almeida et al., 2015).

At the country level, we find studies in Argentina (Murguía and Böhling, 2013; Rabasedas et al., 2016), Peru (Nakasone, 2015; Hernández-Pajares, et al., 2017; Hernández-Pajares, 2018), Brazil (Calixto, 2013; Cunha and Moneva, 2018), and Colombia (Gómez-Villegas and Quintanilla, 2012) which highlight those companies with the greatest environmental and social impact in sectors such as mining, energy, and agro-industry and the influence of their transnational group.

As a theoretical framework on sustainability reporting, other studies present Institutional Theory to explain the influence of non-governmental organizations as promoters of performance and sustainability reporting under models and standards generally accepted to be applied by large transnational corporations (Pérez-Batres et al., 2010; Gómez-Villegas and Quintanilla, 2012; Hernández-Pajares, 2018).

Around the three aspects of sustainability, the social dimension – the aim of this research – is the most confusing concept as compared to the environmental and economic dimensions (Lélé, 1991)—generating the paradox of ecological sustainability and social unsustainability (Foladori, 2007). However, different studies consider the social dimension as being a relevant aspect; and such studies tend to especially consider the sustainability practices with regard to their implementation by the firm's employees to be especially relevant instead of considering the environmental dimension which has already been extensively researched for the performance of CSR (Rothenberg et al., 2017).

The disclosure of social dimension data in the sustainability reports has not been done in a homogeneous way due to the diversity in practices by countries and, in some cases, due to the way the presentation of the data is oriented to improve the firm's reputation or legitimacy by reporting on positive aspects of its business practices without homogeneity. This is the case of labor performance indicators that go beyond regulatory compliance (Diaz-Carrion et al., 2017; Parsa et al., 2018; McCracken et al., 2018).

Another aspect of social performance considered in the reports is that of compliance with human rights principles whose disclosure is more homogeneous and less extensive; with a lower level of development and which depends on the progress of human rights policies in companies (McPhail and Ferguson, 2016; Parsa et al., 2018).

The situation of Latin American organizations regarding sustainability reporting has been considered in the literature as being relevant, due to a significant growth in the number of GRI reports disclosed in recent years (Ortas and Moneva, 2011; Alonso-Almeida et al., 2015; Hernandez-Pajares, 2016). The research points to a development in CSR performance and in the reporting of Latin American organizations due to its promotion and institutional influence by international organizations (Pérez-Batres et al., 2010, Calixto, 2013, Fifka, 2013, Alonso-Almeida et al., 2015, Hernández-Pajares, 2018).

In this context, Chile, Argentina, and Peru have undergone an important development in the promotion of CSR and its disclosure by its organizations, according to the GRI framework, due to an external institutional influence. Peru is the country which presents the least number of reports; Argentina and Chile have a greater number of sustainability reports, but less than Brazil—which has the greatest sustainability reporting experience in the region (Ortas and Moneva; 2011; Calixto, 2013; Hernández-Pajares, 2016; GRI, 2018).

The main objective of this research work is to explore the topics related to the social dimension as defined by the GRI G4 Guidelines, which were incorporated – or not – into the sustainability reports of the year 2015 by the organizations of Argentina, Chile, and Peru.

The rest of the work is developed as follows: The next section studies the context of CSR in Latin America; and in Section 3, the environment of sustainability reporting is analysed. The methodology is presented in Section 4, followed by the results and discussion. Finally, the conclusions are shown; and the bibliography completes this work.

2 Social Responsibility in Latin America

In Latin America, the owner-manager is the one who leads and directs with its values the CSR policies and the involvement with its stakeholders, all framed in a tradition dominated by philanthropy. In addition, organizations in this region are characterized by being mostly medium and small-sized and family-run or having no significant participation in stock markets (Vives, 2006; Moneva and Hernández-Pajares, 2018).

There are some issues that require special consideration in Latin America, such as the environment, human rights, child and forced labour, and working conditions. The difference arises once these issues are addressed, since the priorities of Latin America are different from those of the United States or of the European Union (Peinado-Vara, 2011).

Lower institutional capacity, weaker corporate governance, a less favourable business climate, and a smaller scale of business, in addition to limited promotion by civil society and the government, mean that CSR evolves more slowly in this region than in other places in the world (Jamali, 2007; Peinado-Vara, 2011; Alonso-Almeida et al., 2015; Hernández-Pajares, 2016).

According to Pérez-Batres et al. (2010), throughout the 20th century the economies of Latin America suffered large changes that directly affected the business world – changes such as the advent of import substitution industrialization, the debt crisis, the massive waves of trade liberalization, among others – that led Latin American organizations to continually adapt to the ever-changing rules of the game.

In 2011, the Red Forum Empresa association (a promoter of social responsibility in America) carried out a study that included 1,279 company executives and 1,927 consumers in 17 Latin American countries with the objective of surveying the status of CSR according to the perspective of leaders and consumers. As compared to 2009, the study shows an increase in the number of the organizations that present sustainability reports. This represents a notable improvement in CSR performance and the greater incorporation of sustainability strategies or policies. One aspect to be highlighted is the main obstacles to the implementation of CSR that are evident in this study. For business managers, the main barriers constitute the public attitude towards CSR and the lack of confidence in the private sector; while for consumers, they are the lack of confidence in both the private sector and the legal environment. Most organizations and consumers consider that it is necessary to increase environmental and labour regulation in each country.

In Latin America, the action of civil society is highlighted by the interest of promoting CSR. Therefore, there are several organizations that promote CSR which are distributed in almost all the countries of the continent (see Table 1).

Table 1. Major organizations promoting Corporate Social Responsibility in Latin America

Name and Website	Country	Description
Instituto Argentino de Responsabilidad Social Empresaria (IARSE) www.iarse.org	Argentina	It is a centre of national and regional reference in matters of social responsibility and sustainability of organizations. It was founded in 2002; and its mission is to generate public knowledge to promote and disseminate the concept and practice of social responsibility, in order to promote sustainable development in Argentina and in the region.
Instituto Ethos www.ethos.org.br	Brazil	It is one of the most important organizations in the region; created in 1998, its mission is

		to mobilize, sensitize and help companies to manage their businesses in a socially responsible manner.
Acción Empresas www.accionempresas.cl	Chile	Founded in 2000, this organization brings together more than 150 partner companies and collaborating entities committed to sustainable development practices in Chile.
Corporación Fenalco Solidario www.fenalcosolidario.com	Colombia	This organization has promoted CSR since 1990; its mission is to carry out socially responsible actions that contribute to the sustainability and harmony of the planet.
Asociación Empresarial para el Desarrollo (AED) www.integrarse.org	Costa Rica	It is a non-profit organization that seeks the sustainability and competitiveness of the country, through the promotion of responsible business models in companies. AED guides the productive sector to consider principles of social responsibility as part of its management—thereby reducing negative impacts and maximizing positive impacts on society, the environment, and the economy.
Eco Red www.ecored.org.do	Dominican Republic	It is a business association whose objective is to facilitate the incorporation of a culture of social responsibility and sustainable development in companies. It manages public-private partnerships to achieve a correct balance in environmental, social, and economic development in the face of sustainability in the Dominican Republic.
Consorcio Ecuatoriano para la Responsabilidad Social (CERES) http://sirse.info/consorcio-ecuatoriano-para-la-responsabilidad-social-ceres	Ecuador	It is the most important network of committed organizations that promote CSR in Ecuador. It is a non-profit organization that privileges the exchange of experiences among the different actors of society, the constructive dialogue, and the construction of capacities that allow to strengthen the socially responsible management of companies.
Fundación Empresarial para la Acción Social (FUNDEMAS) www.fundemas.org	El Salvador	It is a non-profit organization that has existed since 2000 due to the need to promote the adoption of values, policies, and practices of CSR to achieve the competitiveness of companies and the sustainable economic and social

		development of El Salvador.
Centro para la Acción de la RSE (CENTRARSE) www.centrarse.org	Guatemala	Organization founded in 2003; it has more than 100 associated companies that belong to more than 20 productive sectors of the country, becoming the coalition of promoters of the most influential CSR in the country and one of the institutions that promotes CSR in the region.
Fundación Hondureña de Responsabilidad Social Empresaria (FUNDAHRSE) www.fundarhrse.or g	Honduras	Its main objective is the promotion of CSR, understood as being a continuous commitment of companies to contribute to sustainable economic development, improving the quality of life of employees and families, as well as that of the local community and of society in general.
Centro Mexicano para la Filantropía (CEMEFI) www.cemefi.org	Mexico	It is a non-profit civil association founded in 1988, whose mission is to promote and articulate the philanthropic, committed, and socially responsible participation of citizens and their organizations to achieve a more equitable, supportive, and prosperous society.
Unión Nicaragüense para la Responsabilidad Social Empresarial (UNIRSE) www.unirse.org	Nicaragua	Founded in 2005, this organization brings together more than 70 members. Its mission is to support companies and organizations to adopt a CSR culture both in order to improve their competitiveness and as a strategy for sustainable development, generating knowledge, applying management tools, and for establishing links and alliances with national, regional, and international counterparts.
Sumarse www.sumarse.org.p a	Panama	It is an association that promotes CSR in Panama as being the meeting point between various sectors of society so as to advance the country's sustainable development. It has more than 200 members. Its mission is to facilitate the incorporation of social responsibility and the principles of the Global Compact among its members for the sake of building a more fair and sustainable society.
Perú 2021 www.peru2021.org	Peru	This organization exists with the purpose of contributing to the sustainable development of the country through the following

		principles: *connect to impact*; *innovation*; and *learn and teach*.
DERES www.deres.org.uy	Uruguay	It is an organization that promotes and disseminates good social responsibility practices in Uruguay—facilitating the incorporation of such concepts in the management of companies.

Source: The authors' own elaboration

Research carried out by the World Bank and the UN points out the importance of the participation of different social groups from a multi-stakeholder approach for the development of CSR in Latin American organizations; especially, both studies find the participation of key actors in the field of CSR – actors such as NGOs, the government, the private sector, and civil society – to be important (World Bank Institute, 2006; UNCTAD, 2010).

The government plays an important role in each of the countries of Latin America—promoting and carrying out CSR activities through the signing of international agreements and through participation in international conferences (but almost always doing so individually without much cooperation or communication between countries) (Kowszyk, et al., 2015).

Some of the Latin American governments seek to facilitate alliances between the public sector and the private sector, in order to respond to social demands, such as in the cases of Peru and Chile, being Costa Rica the only country that promotes a strong incentive policy (Kowszyk, et al., 2015).

Currently, in most of these countries, the tendency is to promote the voluntary adoption of CSR instead of regulating its application; although in several of these countries, there have already been legislative attempts at regulation—which are coming to the point of materialization in some countries (Pérez-Batres et al., 2010).

While promoting transparency and accountability, several of the Latin American countries (Argentina, Brazil, Chile and Colombia) have committed themselves to promoting the presentation of reports on sustainability – mainly, reports of listed companies. This is reflected in the growing creation of sustainability indexes in the area, such as in Brazil, where the ISE Sustainability Index – a voluntary corporate sustainability index – was created in 2005, where is proposed and promotes the "report or explain" initiative; or in Chile, where the DJSI Chile (Dow Jones Sustainability Chile Index) was created in 2015. All this is complemented by the dissemination of sustainability report Guidelines for issuers and responsible investment Guidelines for investors, in the above-mentioned countries and in Peru.

The Mexican index is also highlighted when accompanied by an external evaluation. Argentina, for its part, recently launched its first stock market sustainability index, following international parameters and based on the Index America methodology. At the beginning of 2018, the stock exchanges of the Integrated Latin American Market (MILA) – composed of Chile, Peru, Mexico, and Colombia – announced an agreement with SandP Dow Jones Indices, IFC, and RobecoSAM to develop a new ASG index for the region.

Thus, the CSR is an emerging issue in Latin America, which can be a driver for changing the business model, given the international pressure for a better environment and, especially, for different social issues. Argentina, Chile, and Peru are countries representative of engagement with these social concerns and for the relationship with the European Union.

3 Sustainability Reporting in Latin America

For several years, society has demanded that organizations, especially companies, take socially responsible actions. In this context, the accountability approach – which considers economic, social and environmental aspects of business – becomes a very important instrument for all stakeholders, in that it requires comparatively more complete descriptions of the risks and impacts generated by the organization (Ortas and Moneva, 2011).

Different authors show that there is a lack of studies that refer to the disclosure of sustainability reporting in Latin America (Alonso-Almeida et al., 2015; Jara-Sarrúa, 2017; Fifka, 2013; Hauque et al., 2016). For several years, different studies have shown that the GRI guidelines are the most widely applied and accepted non-financial reporting framework worldwide (Moneva et al., 2014; AECA, 2004; Sánchez and Gallardo, 2008; Alonso-Almeida et al., 2015; Jara-Sarrúa, 2017).

Taking the GRI database as a reference, Jara-Sarrúa (2017) shows that the Latin American and Caribbean region in 2015 ranked third with 836 reports presented, becoming one of the regions of consistent growth. However, this adoption by Latin American companies has occurred unevenly, both within countries and within sectors (Alonso-Almeida et al., 2015). Sustainability reporting in the companies of this region is notably lower than in developed countries, where there are strong regulatory development and institutional regulations (Hernández-Pajares, 2018).

Coincidentally, the sectors that give a greater push to the sustainability aspects of business are those that are more social and environmentally exposed—such as the energy, mining, and financial sectors (Alonso-Almeida et al., 2015; Hernández-Pajares, 2018; Jara-Sarrúa, 2017; Rabasedas et al., 2016). Except for the financial sector, the rest of the sectors are characterized by carrying out activities with potential environmental risks, which is reflected in the high weight of the environmental dimension in their sustainability reports, since they seek to legitimize any of their activities that may have a negative effect on sustainability (Ortas and Moneva, 2011).

On the other hand, there is a lack of standardization of the disclosed sustainability reporting. High degrees of heterogeneity are presented, which makes the comparison and analysis of such reports difficult. The standardization of reporting criteria for this type of report is a relevant requirement, minimizing (in this way) the high level of reporting optionality that the GRI guidelines offer today (Hauque et al., 2016; Jara-Sarrúa, 2017; Moneva et al., 2006).

One of the biggest criticisms of these reports is their "positivism" regarding their sustainability performance (Ortas and Moneva, 2011). Organizations must provide a balanced and reasonable organizational image with respect to their sustainability performance, which implies including not only positive contributions but also negative ones as well (Moneva et al., 2006).

The study carried out by Comunica RSE (2016) on sustainability reports in America for the 2016 period shows that:

- Regarding the legitimacy of the information, there is a tendency to obtain validation from the stakeholders rather than by means of external verification by an auditor.
- Very few organizations present policies and strategies related to human rights; this shows a delay compared to other countries.

- Trade unions are the stakeholders with the least participation in the dialogue and consultation processes.
- There is a big gap in most organizations between the reconciliation of personal and work life.

It is important to consider that organizations are currently evaluated not only for the value they create for the owners and investors, but also for the social hared value, taking into account the impact on social issues and the environment (Hauque et al., 2016).

As previously mentioned, reporting about the social dimension is the least developed concept (in comparison with the other two dimensions of sustainability), being the dimension of greatest revision in the generation of the new GRI standards (GRI, 2016). In addition, social issues are of great interest in developing countries. In this sense, the representative selection of Argentina, Chile, and Peru is intended to serve to represent the character of developing countries in general. They have also been selected because of their being part of a group of South American countries which had published the highest number of sustainability reports of country during 2015 (GRI, 2018).

4 Methodology

Sustainability reports produced in 2015 by Argentinian, Chilean, and Peruvian organizations are defined as being the object of study for exploring social-dimension-related issues, which are considered as being material or significant by those organizations. The background information was collected from the Sustainability Disclosure Database (GRI, 2018). As shown in Table 2, the total sustainability reports for the three countries amount to 232, of which 192 (82.8 percent) had been made under the GRI G4 Guidelines (GRI, 2013). It was in Chile where the greatest use of the G4 Guidelines appears (92.0 percent), while in Argentina it is the lowest with 72.3 percent. The final sample is represented by 167 organizations; this is 87.0 percent of the total number of entities that have used G4 to prepare their reports. Reports that do not contain the GRI Content Index required by the Guidelines were excluded.

Table 2. Sample Description

Country	Total Sustainability Reports 2015	G4 Reports	Ratio G4/Total (Percent)	Sample	Ratio Sample/G4 (Percent)
ARGENTINA	94	68	72.3	61	89.7
CHILE	75	69	92.0	62	89.9
PERU	63	55	87.3	44	80.0
Total	232	192	82.8	167	87.0

Source: The authors' own elaboration from Sustainability Disclosure Database (GRI, 2018)

Sustainability reports generate an information flow that can be structured as an informational network, where the information provided can be identified. It also allows for visualization of the significant sustainability areas that are managed and monitored by the organizations. Of the three sustainability dimensions – economic, environmental, and social dimensions – the social area phenomenon has been selected for study. The aforementioned dimension, due to its lower development as compared to that of the other two sustainability dimensions, is the dimension which has undergone the greatest degree of revision in the generation of the new GRI Standards (GRI, 2016). In addition, social issues are of great interest in developing countries. In this regard, the representative selection of Argentina, Chile, and Peru is intended to reflect the character of developing countries in general. They have also been selected because they are part of the group of South American countries which published the highest number of sustainability reports of any country during 2015 (GRI, 2018). The first phase of analysis consisted in the use of the content analysis technique (Krippendorff, 1990) to codify the social information present in the sustainability reports; while in the second phase, reticular or social network analysis was used (Borgatti et al., 2013; Wasserman and Faust, 2009) on the data which had been codified in the previous phase.

Content analysis has been extensively used in research related to business information (Guthrie and Parker, 1990, Gray et al., 1995, Beck et al., 2010). For the purposes of this research, a thematic content analysis was developed based on the informational structure of the social dimension required by the G4 Guidelines (GRI, 2013). Themes were defined according to subcategories and material aspects of social performance considered in the Guidelines (see Table 3). The background coding was based on the information revealed in the "GRI Index of Contents" that was included in each report. To guarantee the reliability of the coded background, as well as for the general control of the project, NVivo qualitative analysis software (Basit, 2003) was used.

Once the coding process was completed, a two-mode data or affiliation data set (Borgatti et al., 2013) was built using the NVivo coding matrix command. This type of matrix represents the actors in the rows and the events in the columns. In our case, the actors have to do with organizations and events with the 30 material aspects of the social dimension of the G4 Guidelines. The relationship that we want to analyse (actor → event) corresponds to the election by an organization (n) of the social dimension material aspect (m), which defines the type of information to be disclosed (according to indicators provided by the Guidelines). The relationship valuation was defined as being dichotomous, where zero (0) represented the non-inclusion of material aspects of social performance; while the value of one (1) meant the inclusion of social aspect information and therefore the provision of the background disclosure required by the G4 Guidelines.

Additionally, a set of characterization or attribute variables was defined. Specifically, the following variables included in the Sustainability Disclosure Database were used (GRI, 2018): a.) Size; b.) Listed/Unlisted; c.) Adherence Level; d.) External Assurance; and e.) Sector.

Once an affiliation matrix was created through codification of social information contained in the sustainability reports, the authors proceeded on to the second phase of the methodology. This is how, through use of Ucinet social network analysis software (Borgatti et al., 2002), structural aspects of the network of information about the social dimension generated in each country of the sample were evaluated. In particular, measures of cohesion, centrality, and the relationships between actors and events were analysed by dividing the social network into core/periphery categories (Borgatti et al., 2013).

Table 3. Material aspects of social performance (as itemized within the social dimension) included in the G4 Guidelines– GRI

Subcategory	Material aspects of social performance	Code
Labour Practices and Decent Work	- Employment	SA-01
	- Labour/Management Relations	SA-02
	- Occupational Health and Safety	SA-03
	- Training and Education	SA-04
	- Diversity and Equal Opportunity	SA-05
	- Equal Remuneration for Women and Men	SA-06
	- Supplier Assessment for Labour Practices	SA-07
	- Labour Practices Grievance Mechanisms	SA-08
Human Rights	- Investment	SA-09
	- Non-discrimination	SA-10
	- Freedom of Association and Collective Bargaining	SA-11
	- Child Labour	SA-12
	- Forced or Compulsory Labour	SA-13
	- Security Practices	SA-14
	- Indigenous Rights	SA-15
	- Assessment	SA-16
	- Supplier of Human Rights Assessment	SA-17
	- Human Rights Grievance Mechanisms	SA-18
Society	- Local Communities	SA-19
	- Anti-corruption	SA-20
	- Public Policy	SA-21
	- Anti-competitive Behaviour	SA-22
	- Compliance	SA-23
	- Supplier Assessment for Impacts on Society	SA-24
	- Grievance Mechanisms for Impacts on Society	SA-25
Product Responsibility	- Customer Health and Safety	SA-26
	- Product and Service Labelling	SA-27
	- Marketing Communications	SA-28
	- Customer Privacy	SA-29
	- Compliance	SA-30

Source: The authors' own elaboration from the G4 Guidelines (GRI, 2013)

5 Discussion and Results

5.1 Descriptive analysis

Some characteristics of the organizations in the sample are shown in Table 4. It shows that Argentina obtained the highest ratio of Multi-National Enterprise as compared to Chile and Peru. However, the Large Enterprise category predominated in all three countries (68.9, 83.9, and 70.5 percent for Argentina, Chile, and Peru, respectively). Regarding the participation of organizations in the stock market, in global terms, 38.9 percent corresponded to a listed company, with Peru having the highest ratio of entities in this classification (47.7 percent).

The three economic sectors with the highest predominance in Argentina are Financial Services (18.0 percent), 'Other' (9.8 percent), and Food and Beverage Products (8.2 percent). Regarding Chile, the highest concentration was in Food and Beverage Products (14.5 percent), Mining (11.3 percent) and Retailers (also with 11.3 percent). On the other hand, the most representative sectors in Peru are Mining (18.2 percent), Financial Services (15.9 percent), and Energy Utilities (9.1 percent).

About the Adherence Level of the G4 Guidelines, 75.4 percent of total organizations in the sample declare using the option of "In accordance – Core" (indicating their conformity to the core guidelines). This category presents its highest ratio among Peruvian entities (81.8 percent). On the other hand, in Argentina, the highest use (18.0 percent) of the option "In accordance – Comprehensive" (indicating their conformity to all of the guidelines) is observed.

Sustainability reports have an External Assurance at 21.0 percent, whereas organizations from Argentina presented the highest ratio (26.2 percent), while those of Peru presented the lowest (11.4 percent).

Table 4. Description of the sample

Description	ARGENTINA		CHILE		PERU		TOTAL	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
SIZE								
Multinational Enterprise	17	27.8	7	11.3	8	18.1	32	19.2
Large Enterprise	42	68.9	52	83.9	31	70.5	125	74.8
Small and Medium Enterprise	2	3.3	3	4.8	5	11.4	10	6.0
Total	61	100.0	62	100.0	44	100.0	167	100.0
LISTED/UNLISTED								
Listed	22	36.1	22	35.5	21	47.7	65	38.9
Unlisted	39	63.9	40	64.5	23	52.3	102	61.1
Total	61	100.0	62	100.0	44	100.0	167	100.0
ADHERENCE LEVEL								
Undeclared	7	11.5	12	19.4	4	9.1	23	13.8
In accordance – Core	43	70.5	47	75.8	36	81.8	126	75.4
In accordance – Comprehensive	11	18.0	3	4.8	4	9.1	18	10.8
Total	61	100.0	62	100.0	44	100.0	167	100.0
EXTERNAL ASSURANCE								
Yes	16	26.2	14	22.6	5	11.4	35	21.0
No	45	73.8	48	77.4	39	88.6	132	79.0
Total	61	100.0	62	100.0	44	100.0	167	100.0
SECTOR								
Financial Services	11	18.0	6	9.7	7	15.9	24	14.4
Mining	1	1.6	7	11.3	8	18.2	16	9.6
Food and Beverage Products	5	8.2	9	14.5	1	2.3	15	9.0
Other	6	9.8	4	6.5	2	4.5	12	7.2
Energy	2	3.3	6	9.7	3	6.8	11	6.6
Retailers	2	3.3	7	11.3	0	0.0	9	5.4
Agriculture	4	6.6	0	0.0	3	6.8	7	4.2
Energy Utilities	3	4.9	0	0.0	4	9.1	7	4.2

Logistics	2	3.3	2	3.2	2	4.5	6	3.6
Telecommunications	2	3.3	3	4.8	1	2.3	6	3.6
Commercial Services	3	4.9	1	1.6	1	2.3	5	3.0
Conglomerates	2	3.3	1	1.6	2	4.5	5	3.0
Construction Materials	1	1.6	1	1.6	3	6.8	5	3.0
Universities	0	0.0	3	4.8	2	4.5	5	3.0
Chemicals	2	3.3	2	3.2	0	0.0	4	2.4
Healthcare Products	2	3.3	1	1.6	1	2.3	4	2.4
Aviation	1	1.6	1	1.6	1	2.3	3	1.8
Construction	0	0.0	0	0.0	3	6.8	3	1.8
Water Utilities	0	0.0	3	4.8	0	0.0	3	1.8
Automotive	2	3.3	0	0.0	0	0.0	2	1.2
Healthcare Services	0	0.0	2	3.2	0	0.0	2	1.2
Non-Profit / Services	2	3.3	0	0.0	0	0.0	2	1.2
Public Agency	2	3.3	0	0.0	0	0.0	2	1.2
Tourism/Leisure	1	1.6	1	1.6	0	0.0	2	1.2
Computers	1	1.6	0	0.0	0	0.0	1	0.6
Equipment	0	0.0	1	1.6	0	0.0	1	0.6
Forest and Paper Products	0	0.0	1	1.6	0	0.0	1	0.6
Household and Personal Products	1	1.6	0	0.0	0	0.0	1	0.6
Media	1	1.6	0	0.0	0	0.0	1	0.6
Metals Products	1	1.6	0	0.0	0	0.0	1	0.6
Technology Hardware	1	1.6	0	0.0	0	0.0	1	0.6
Total	61	100.0	62	100.0	44	100.0	167	100.0

Source: The authors' own elaboration from the Sustainability Disclosure Database (GRI, 2018)

5.2 Analysis of the Social Dimension Network

The informational network of social aspects – a network that is configured in Argentina, Chile and Peru – links the organizations with the thirty relevant social issues defined in the G4 Guidelines of the GRI. In this regard, Table 5 shows the statistics related to cohesion—a structural measure that allows us to know the intensity of the relationship that exists between actors and events. High cohesion between the nodes of the bipartite network (one composed of two parts: actors and events) means that the organizations have given social issues a high degree of consideration. Remember that the actors are equivalent to the entities and events related to the social issues as defined in the Guidelines.

An ideal scenario is a network where all actors are linked to all events. In our case, this would mean that all the social issues set forth in the G4 Guidelines are relevant to all of the organizations in the sample. However, the reality is very different. From a general perspective, the informational networks of the three countries had low cohesion levels the Chilean organizations being the ones of lower performance; while those of Argentina being the highest of the three. Network density and fragmentation are two measures that can justify attribution of the results to the aforementioned reasons. Specifically, Argentina had a density of 0.5710 and a fragmentation of 0.0000. On the other hand, measures for Chile were 0.3688 and 0.0217 for density and fragmentation, respectively. A fragmentation above 0.0000 indicates the existence of disconnected nodes in the network. In the case of Chile, there is one organization that does not report on its contribution to any of the thirty material aspects of social performance, within the social dimension. The above result can be seen in the chart accompanying Table 4, which shows a red node disconnected from the Chilean network.

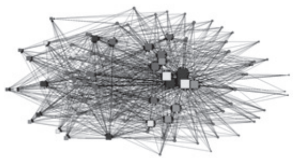
However, there is greater cohesion dispersion if analysed from the perspective of subcategories. For all three countries, the subcategory presenting with the lowest density value was the Human Rights subcategory. As compared to Argentinian and Peruvian organizations, Chilean organizations (having a density 0.1828 and a fragmentation of 0.5835 in this subcategory) considered this issue as being the least relevant.

At the opposite extreme, it is observed that the greatest amount or degree of cohesion, at the subcategory level, is found in the of Labour Practices and Decent Work. That is, for the organizations of the three countries, this topic turns out to be the most relevant of the four subcategories that make up the social dimension. However, in the case of Chile, fragmentation presented a value higher than that of zero. Specifically, two organizations did not opt to report on any social aspects of this subcategory.

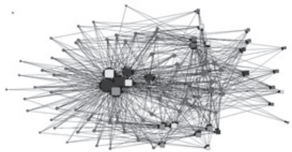
Table 5. Cohesion and graphic representation of the informational network of social aspects

Social dimension	Statistics							
	Actors (N)	Events (M)	Density	Avg. Dist.	Radius	Diameter	Fragmentation	Transitivity
ARGENTINA - Social network	61	30	0.5710	1.9365	2	3	0.0000	0.7119
Labour Practices and Decent Work	61	8	0.6926	1.9207	2	4	0.0000	0.8087
Human Rights	61	10	0.4852	2.0750	2	4	0.1630	0.7301
Society	61	7	0.5269	2.0136	2	4	0.0294	0.7230
Product Responsibility	61	5	0.6098	2.0686	2	4	0.0895	0.7822
CHILE - Social network	62	30	0.3688	2.1172	3	4	0.0217	0.5987
Labour Practices and Decent Work	62	8	0.5179	1.9838	2	3	0.0559	0.7352
Human Rights	62	10	0.1828	2.5942	3	5	0.5835	0.6108
Society	62	7	0.3871	2.2009	2	4	0.1407	0.6664
Product Responsibility	62	5	0.4097	2.1966	2	4	0.3284	0.7129
PERU - Social network	44	30	0.4386	2.0600	2	3	0.0000	0.6362
Labour Practices and Decent Work	44	8	0.5994	1.9472	2	3	0.0000	0.7641
Human Rights	44	10	0.3159	2.3531	2	4	0.3389	0.7054
Society	44	7	0.3994	2.1565	2	4	0.0776	0.6760
Product Responsibility	44	5	0.4818	2.1475	2	4	0.1582	0.7282

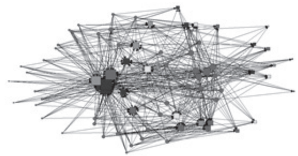
ARGENTINA Two-mode network



CHILE Two-mode network



PERU Two-mode network



Source: The authors' own elaboration

Centrality is another measure that helps us to understand the structure of the information network regarding social aspects of the business. In particular, Table 6 provides one of the measures incorporated into the measure of the centrality of a network; this is the degree. For bipartite networks like ours, the grades are related to both actors and events. In the case of actors, the greater the number of social dimensional aspects that are chosen to be reported on by an organization, the greater the degree of that actor. On the other hand, in the case of events, the more organizations that opt to report on a particular event, the greater the degree of that event. Remember that the thirty material aspects of social performance represent events where the social dimension is subdivided into the individual GRI G4 Guidelines.

Thus, in relation to the actors or organizations, the highest-grade intensity – that is, between 0.7500 and 1.0000 (75 and 100 percent, respectively) – was observed among the organizations of Argentina. In that country, there was a greater number of organizations (actors) that opted to report on between 75 and 100 percent of the social aspects as compared to Chile and Peru. The existence of three organizations that opted to report on the thirty aspects related to the social dimension (degree = 1.0000) was outstanding. Regarding Peruvian and Chilean entities, the existence of an actor that opted to report on all aspects of the social dimension was noted in Peru; while for Chile, the organization that opted to report on the largest number of them reached 90.00 percent (degree = 0.9000) of the thirty social aspects.

By contrast, actors which opted to report on few to no social aspects were concentrated in Chilean organizations. (Only one entity did not consider any social topic among its material issues with regard to social performance.) In the case of organizations in Peru, two entities opted to report on the least number (13.33%) of social aspects; whereas in Argentina, three entities opted to report on the least number (degree = 0.2000) of social aspects.

On the other hand, in terms of opting to report on a greater number of social aspects (events) (to a degree between 0.7500 and 1.000), Argentinian organizations presented seven topics in that range; while Peru presented five, and Chile, four. Common themes of the most-considered social aspects among the three countries were observed, although with different degrees of intensity. Specifically, this included three topics from the Labour Practices and Decent Work subcategory (SA-01 "Employment", SA-03 "Occupational Health and Safety", and SA-04

"Training and Education"), as well as one of the Society subcategories (SA-19 "Local Communities"). The situation of Peru and a material aspect of social performance – the SA-04 "Training and Education" – because of its having been chosen to be reported on by all (degree = 1.000) databased organizations in that country, stands out in this regard. For Chile and Argentina, one of the categories most frequently chosen to be reported on by their organizations was the SA-01 "Employment", with a rate of 96.77 and 93.44 percent, respectively. Another social aspect with a high selection rate in terms of the frequency of its being reported on by Argentinian and Peruvian companies was the SA-27 "Product and Service Labelling", belonging to the Product Responsibility subcategory (degree = 0.7541 and 0.7955, respectively). Finally, in terms of this high selection level in terms of the high frequency with which it is reported on, we observed two social aspects present only among Argentinian organizations. These were the SA-05 "Diversity and Equal Opportunity" of the Labour Practices and Decent Work subcategory (degree = 0.8852), as well as the SA-20 "Anti-corruption" belonging to the Society subcategory (degree = 0.9016).

Regarding those material aspects of the social dimension which were less frequently chosen, by organizations, to be reported on (specifically, aspects reported on merely to a degree between 0.0000 and 0.2500), it was observed that in Argentina, only the SA-15 "Indigenous Rights" of the Human Rights subcategory is in this situation; while comparatively, in Chile, fully ten social aspects are presented this lower selection range (in terms of the low frequency with which companies opt to report on such aspects of their business)—a situation that increases to eleven for Peru. For Chile, the SA-24 "Supplier Assessment for Impact in Society" of the Society subcategory is the topic least considered as being of material aspect of social performance among its organizations (degree = 0.0480). In Peru, the topics of least interest are the SA-16 "Assessment" of the Human Rights subcategory, as well as the SA-21 "Public Policy" of the Society subcategory (degree = 0.0909).

Table 6. Measurement of social information network centrality – Degree

Intensity of Degree	Actors					
	ARGENTINA (N=61)		CHILE (N=62)		PERU (N=44)	
	Entity	Degree	Entity	Degree	Entity	Degree
High [1.0000 – 0.7500]	AR-07	1.0000	CL-23	0.9000	PE-17	1.0000
	AR-17	1.0000	CL-24	0.8333	PE-04	0.8667
	AR-19	1.0000	CL-54	0.8333	PE-16	0.8667
	AR-21	0.9667			PE-44	0.8333
	AR-42	0.9667				
	AR-13	0.9000				
	AR-36	0.9000				
	AR-48	0.8333				
	AR-03	0.8000				
	AR-08	0.8000				
	AR-14	0.8000				
	AR-51	0.8000				
	AR-55	0.8000				
	AR-25	0.7667				
Low [0.2500 – 0.0000]	AR-20	0.2333	CL-14	0.2333	PE-42	0.2333
	AR-09	0.2000	CL-25	0.2333	PE-02	0.2000
	AR-57	0.2000	CL-39	0.2333	PE-11	0.2000
	AR-61	0.2000	CL-12	0.2000	PE-20	0.2000
			CL-13	0.2000	PE-26	0.2000
			CL-28	0.2000	PE-33	0.2000
			CL-49	0.2000	PE-21	0.1333
			CL-50	0.2000	PE-24	0.1333
			CL-16	0.1667		
			CL-35	0.1667		
			CL-56	0.1667		
			CL-08	0.1333		
			CL-41	0.1333		
			CL-55	0.1333		
			CL-59	0.1333		
			CL-47	0.1000		
			CL-10	0.0667		
			CL-19	0.0000		
Intensity of Degree	Events					
	ARGENTINA (M=30)		CHILE (M=30)		PERU (M=30)	
	Social Aspect	Degree	Social Aspect	Degree	Social Aspect	Degree
High	SA-01	0.9344	SA-01	0.9677	SA-04	1.0000

[1.0000 – 0.7500]	SA-04	0.9344	SA-03	0.8065	SA-03	0.9545
	SA-20	0.9016	SA-04	0.8065	SA-01	0.8864
	SA-05	0.8852	SA-19	0.7742	SA-19	0.8864
	SA-03	0.8689			SA-27	0.7955
	SA-19	0.8525				
	SA-27	0.7541				
Low	SA-15	0.2131	SA-09	0.1935	SA-08	0.2500
[0.2500 – 0.0000]			SA-12	0.1935	SA-14	0.2500
			SA-13	0.1774	SA-17	0.2500
			SA-14	0.1774	SA-18	0.2500
			SA-15	0.1452	SA-22	0.2500
			SA-16	0.1452	SA-09	0.2273
			SA-17	0.1452	SA-24	0.2273
			SA-18	0.1290	SA-28	0.2273
			SA-22	0.0806	SA-15	0.1136
			SA-24	0.0484	SA-16	0.0909
					SA-21	0.0909

Source: The authors' own elaboration

So far, we have identified the organizations and material issues related to the social dimension that have had greater and lesser incidence in the social informational network generated by 2015 sustainability reports corresponding to those published in Argentina, Chile, and Peru. Next, the analysis focuses on identifying the actors and events that are part of the core of each network, as well as its periphery. In this case, the main actors and events represent the core of each network, where a high degree of cohesion between them is expected. On the other hand, less cohesive actors and events are concentrated at the periphery. In our case, this includes the group of organizations that mostly did not opt to report on a set of events or specific social aspects of their business.

For the above, we execute the Ucinet core/periphery model function (Borgatti et al., 2013), obtaining from it the respective core/periphery matrix for each country. This function was used to divide each network into blocks or quadrants. With it, the organizations and main social aspects (core) were classified as belonging to Quadrant 1 (Q1), this classification having been determined according to the high frequency with which the organizations had opted to report on their engagement with specific social issues. At the other extreme, Quadrant 4 (Q4) represented those entities and events considered as being located on the periphery due to their having opted to report on their engagement with few to no social issues.

As shown in Table 7, models generated in the three countries presented a correlation close to or above 0.700 (final fitness). This indicated that the information network shows a strong structural differentiation (Weng, 2011) between the group of main entities that had opted to report on the main social aspects of their business, versus the group of peripheral organizations that had opted to report on few to no specific social aspects of their business. In all three countries, the organizations and events that comprised block Q1 presented high levels of density (density = 0.839, 0.832, and 0.824 in Argentina, Chile, and Peru, respectively). That is, most of the social aspects considered in this category are, to a large extent, frequently chosen by businesses as topics of discussion within their own corporate performance reports. At the other extreme, the organizations and events that comprised block Q4 presented low levels of density in the three countries (density = 0.155, 0.116, and 0.127 in Argentina, Chile, and Peru, respectively). This quadrant represented those organizations that, mostly, did not opt to discuss certain social aspects considered in the G4 Guidelines. In our case, this includes (so-called) ‘less relevant’ social topics (ones categorized thus due to the low frequency with which companies opt to report on their engagement with them).

Regarding the number of components in Q1 and Q4), a greater proportion of organizations are observed as being included in Q1 than in Q4. This relationship was very close between the three countries (55.7, 59.7, and 56.8 percent in Argentina, Chile, and Peru, respectively). However, at the level of events or social aspects classified in block Q1, the proportion differs significantly between countries. Thus, in Argentina, 56.7 percent of the thirty social aspects were classified in this main category; while in Peru and Chile, 33.3 and 26.7 percent, respectively, were. On the other hand, block Q4 is opposite Q1. Therefore, its components’ values are together equivalent to the missing proportion necessary to reach 100 percent, in terms of either actors or events. That is, for example, in the case of Chile, if 59.7 percent of the organizations were classified as comprising the Q1 group, the remaining 40.3 percent was classified as being included in block Q4. Similarly for events or social aspects, where 26.7 percent of the organizations were classified as being in the principal (Q1) group, the remaining 73.3 percent were classified as being peripheral or non-relevant.

Table 7. Density matrix and the number of core/periphery model components – Social information network

	ARGENTINA (Final fitness = 0.673)		CHILE (Final fitness = 0.707)		PERU (Final fitness = 0.699)	
	Density		Density		Density	
Position	Core	Periphery	Core	Periphery	Core	Periphery
Core	0.839(Q1)	0.535(Q2)	0.832(Q1)	0.324(Q2)	0.824(Q1)	0.438(Q2)
Periphery	0.587(Q3)	0.155(Q4)	0.556(Q3)	0.116(Q4)	0.575(Q3)	0.127(Q4)

	Components		Components		Components	
	Actors	Events	Actors	Events	Actors	Events
Extreme position	N=61 Per cent	M=30 Per cent	N=62 Per cent	M=30 Per cent	N=44 Per cent	M=30 Per cent
Core/Core (Q1)	34 55.7	17 56.7	37 59.7	8 26.7	25 56.8	10 33.3
Periphery/ Periphery (Q4)	27 44.3	13 43.3	25 40.3	22 73.3	19 43.2	20 66.7

Source: The authors' own elaboration

As indicated above, among the three countries there was dispersion in the allocation of consideration given aspects of the social dimension of the G4 guidelines. That is why it is relevant to the task of identifying the existing pattern in the classification of social topics, whether this is for a higher (Q1) or a lower (Q4) selection in terms of the company opting to report on its engagement with such topics. In this regard, Table 8 provides thirty aspects considered in the social dimension of the G4 Guidelines, all of which are classified according to the subcategory to which they belonged, as well as the block in which was included by dividing each social network into the categories of core and periphery. This is how, in Argentina, 75.0 percent of the aspects of the Labour Practices and Decent Work category were classified as being the main topic (Q1) of reports (among the total number of reports submitted by all companies); while for Chile and Peru, 62.5 and 50.0 percent of companies, respectively, had made this same category the main topic of their report. In this social dimension subcategory, two main issues considered by the organizations stand out in Argentina, but not in either Chile or Peru. In particular, we refer to SA-02 "Labour / Management Relations" and SA-06 "Equal Remuneration for Women and Men". The case of SA-07 "Supplier Assessment for Labour Practices" also stands out as having been made the main topic of reports by Chilean organizations, but having been relegated to the status of being a peripheral or non-relevant topic for the entities located in Argentina and Peru.

As for the Human Rights subcategory, the ten themes that comprise it are considered as being peripheral by the organizations of Chile. Argentina stands out in terms of its consideration of 50.0 percent of topics as being part of Q1. Specifically, the topics of greatest relevance for the Argentinian entities were SA-09 “Investment”, SA-10 “Non-discrimination”, SA-11 “Freedom of Association and Collective Bargaining”, SA-12 “Child Labour”, and SA-13 “Forced or Compulsory Labour”. Regarding Peru, only SA-10 and SA-12 were classified as being main topics of the reports.

The subcategory related to Society presented the most consistent pattern in terms of the companies’ allocation of space within their reports to address social topics that compose that subcategory of the G4 guidelines. An identical pattern in the consideration of these issues is observed in Chile and Peru. Both SA-19 “Local Communities” and SA-20 “Anti-corruption” are considered as being main topics of such reports; while the rest of the topics are classified as being comparatively peripheral or less relevant to those reports. In Argentina, the behaviour is similar (except for its organizations’ considering SA-23 “Compliance” as being a main topic, in contrast to its status in reports by Chilean and Peruvian organizations).

Finally, in the subcategory of Product Responsibility, SA-28 “Marketing Communications” and SA-29 “Customer Privacy” are considered as being non-relevant topics that stand out among all three countries.

Table 8. Social aspects classification according to core or periphery of the information network

Subcategory	Code	Q1 (Core/Core)			Q4 (Periphery/Periphery)		
		Argentina	Chile	Peru	Argentina	Chile	Peru
	SA-01	●	●	●			
Labour Practices and Decent Work	SA.02	●				●	●
	SA-03	●	●	●			
	SA-04	●	●	●			
	SA-05	●	●	●			
	SA-06	●				●	●
	SA-07		●		●		●
	SA-08				●	●	●
Percent		75.0	62.5	50.0	25.0	37.5	50.0
	SA-09	●				●	●
Human Rights	SA-10	●		●		●	
	SA-11	●				●	●
	SA-12	●		●		●	
	SA-13	●				●	●
	SA-14				●	●	●

	SA-15				●	●	●
	SA-16				●	●	●
	SA-17				●	●	●
	SA-18				●	●	●
Percent		50.0	0.0	20.0	50.0	100.0	80.0
	SA-19	●	●	●			
Society	SA-20	●	●	●			
	SA-21				●	●	●
	SA-22				●	●	●
	SA-23	●				●	●
	SA-24				●	●	●
	SA-25				●	●	●
Percent		42.9	28.6	28.6	57.1	71.4	71.4
Product	SA-26	●		●		●	
Responsibility	SA-27	●	●	●			
	SA-28				●	●	●
	SA-29				●	●	●
	SA-30	●					●
Percent		60.0	20.0	40.0	40.0	60.0	60.0

Source: The authors' own elaboration

6 Conclusions

This research seeks to contribute to the knowledge of the social dimension of sustainability reporting in Latin American countries, focusing on Argentinian, Chilean, and Peruvian organizations. In these countries, CSR reporting institutionalization is weak, but there is an emerging issue for the external influence. Content analysis was applied to the data for a comparative and social network study on the social aspects of the data disclosed in the reports. The results were analysed according to the theoretical framework developed in this paper based on the institutional influence on organizations in the performance of CSR and sustainability reporting.

We found the sustainability reports published by the organizations of the countries under study to be similarly developed and influenced by international organizations such as the GRI and non-governmental entities (Araya, 2006; Pérez-Batres et al., 2010; Alonso-Almeida et al., 2015; Cunha and Moneva, 2016; Hernández-Pajares, 2018). However, there is no homogeneity in the reporting of social indicators (Diaz-Carrion et al., 2017; Parsa et al., 2018; McCracken et al., 2018). Regarding the above, the results show a difference in the information of the economic sectors for each country in the reports of social indicators.

The results indicate a high consideration of social aspects by organizations, due to the intensity of the relationships between actors and events. Despite this, however, the informational networks of the three countries differ and present different performances. Thus, there is less cohesion in the information on Human Rights; unlike the comparatively greater cohesion among Labour Practices and Decent Work indicators. This information varies according to the size and sector of the business. For example, large businesses in the Financial Services, Mining, and Food and Beverage sectors value the practice and reporting of labour performance standards (Perez-Batres et al., 2010; Alonso-Almeida et al., 2015; Hernández-Pajares, 2016; Rabasedas et al., 2016).

Regarding the analysis of the actors, the information does not show homogeneity, either. Argentinian organizations more frequently opt to discuss social aspects than do Chilean or Peruvian organizations, although institutional influences are very similar in those countries. The organizations tend to report about social performance related to the most common practices such as standard Labour Practices and Decent Work practices typically implemented by financial or mining companies or standard Product Responsibility practices typically implemented by food and beverage companies whose management (perhaps more than that of companies in other sectors) may view such reporting as being of great importance for their stakeholders (Perez-Batres et al., 2010; Alonso-Almeida et al., 2015; Hernández-Pajares, 2016).

Regarding the authors' analysis of events which companies more frequently opt to discuss, the findings highlight the related aspects to Labour performance ("Employment"; "Occupational Health and Safety") and society-level performance ("Local Communities") for the three countries. With respect to Product Responsibility, the findings also highlight the "Product and Service Labeling" aspect in reports by Peruvian and Argentinian companies. This is consistent with the importance of information regarding products and services for clients and foreign investors with a significant institutional influence (Araya, 2006; Marimon et al.; 2012, Alonso-Almeida et al., 2015; Hernández-Pajares, 2018).

Finally, in summary of the authors' analysis of the more cohesive actors and events in each network in the three countries, the organizations frequently opt to discuss social aspects. However, the level of events differs is more dispersed) for each of the three countries. Greater cohesion was found with regard to aspects of "Labour/Management Relations" and "Equal Remuneration for Women and Men" in reports from Argentina, or with regard to aspects of “Local Communities” or of “Anti-corruption” in Peruvian and Chilean reports. This is consistent with the lack of homogeneity among the performance information social sustainability reports (Diaz-Carrion et al., 2017; Parsa et al., 2018; McCracken et al., 2018).

The present study shows that there is no homogeneity among the sustainability reporting of businesses within the selected countries – specifically in terms of such businesses’ social performance disclosures – in spite of the influence of the GRI G4 Guidelines. The institutional influence of the GRI is probably based in the globalization of activities, given that there is an absence of government regulation. Probably, other drivers must influence the nature of the reporting about social performance. For instance, businesses search for ways to improve their reputation, legitimize their activities, and meet the demands of their stakeholders. Such drivers are aspects to bear in mind for future studies.

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Chapter Seven

New Trends in Corporate Social Responsibility Disclosure and Assurance: The Role of Family Firms

Shashank Bansal,
María Victoria López-Pérez
and Lazaro Rodríguez-Ariza

Abstract

The stakeholders' demand for Corporate Social Responsibility information is an undeniable fact. The number of companies that disclose information according to the triple bottom line is growing. The decision to disclose this type of information can be a response to solving agency problems or to an alignment of the interests between companies and stakeholders. In this sense, analysis includes an assessment of whether or not companies disclose this type of information; whether such information is disclosed according to widely accepted standards (specifically, according to the GRI); and whether the information has been verified. In this context, family businesses may be having a preeminent role as compared to non-family businesses. To compare and contrast responses to this issue, a total of 2,586 data of firms from 31 countries from 2006 to 2014 were analyzed. The results show that family businesses tend to disclose more information and follow common standards to a greater extent. However, there are no differences between both in terms of report assurance. This finding supports agency theory and shows that family firms are using CSR disclosure as part of their strategic decision-making processes. It can be said that in terms of the disclosure decision, the satisfaction of the interests and well-being of the family predominates over the rest of the other groups

of interest—among which CSR assurance is not seen as being a requirement.

Keywords: Corporate Social Responsibility (CSR) disclosure, family firms, assurance, CSR guidelines

1 Introduction

We examine the influence of family ownership on the voluntary disclosure of CSR information, along with the demand for the assurance of such information, in the global sphere. The family firms discussed in this chapter are predominant businesses from around the world and play a crucial role in the economic activity of the world (Campopiano and De Massis, 2015). Due to the presence of significant family ownership, family firms enjoy great power in the firm. The presence of a family member on the board and holding the top management position helps them to play an important role in the firm's decision-making process. Their close involvement in the day-to-day activity of the business enables them to enjoy an informational advantage as compared to minority shareholders (Ali et al., 2007; Chen et al., 2008; Landry et al., 2013). In such a scenario, the classical agency problem between the management and shareholders becomes moderate to the extent that family shareholders can be more involved in the business, can have more insider information, and can control management more effectively than non-family firms can (Chen et al., 2008; Chrisman et al., 2004). However, it gives rise to the new agency problem between the majority and minority shareholders (Chau and Gray, 2010). A family firm can take advantage of the internal information as it becomes available and can take actions which are beneficial to them at the expense of the minority shareholders (Fan and Wong, 2002). However, in terms of mitigating informational differences between the majority and minority shareholders, transparency and disclosure becomes very important. Milgrom (1981) and Grossman and Hart (1980) have shown that information disclosure and effective transparency policies decrease informational asymmetry. One such disclosure can be related to CSR along with the decision about assuring the report. CSR reporting shows firms' commitment to engaging in economically, socially, and environmentally responsible corporate practices. Such reports cater to the needs of various stakeholders and help them know about internal information about the companies; while also tending to reduce informational asymmetry (Dhaliwal et al., 2012). Moreover, the socio-emotional wealth (SEW) perspective (Gomez-Mejia et al., 2007) also supports this view that non-economic aspects of the business provide more utility to family and non-family firms than alternative aspects do (Berrone et al., 2010; Gomez-Mejia et al., 2011). According to this theory, there are non-economic aspects that provide utility to family members—reinforcing affective bonds and the sense of belonging (Berrone et al., 2010). This reality leads family businesses to ascribe a great deal of importance to social and environmental information.

However, CSR reporting alone is not accompanied by an increased level of stakeholder trust (Hodge et al., 2009). Voices of concern with regard to the perceived lack of credibility, quality, and transparency demand an assurance of CSR reports. Minority shareholders view CSR reporting as being one of the strategic decisions of the majority shareholders (Coram et al., 2009) which gives rise to the credibility issue. In this situation, the external auditing of the report plays a very important role, as it ensures the quality and authenticity of the information (Simnett et al., 2009). The assurance by the external auditor reduces any potential concerns either over credibility or over informational asymmetry between the informed and uninformed shareholders (Watts and Zimmerman, 1983). For family firms, one of the major motives is to build the firm's reputation and positive brand image in the public sphere (Anderson and Reeb, 2003; Berrone et al., 2010). As compared to non-family firms, family firms will most likely be more oriented towards proactive engagement in CSR reporting— particularly, providing assurance of the report. The assurance will provide confidence to the stakeholders; and family firms will gain a good reputation in the market and will be able to build long-term relationships with different stakeholders. Moreover, the socio-emotional wealth (SEW) perspective (Gomez-Mejia et al., 2007) also supports this view that non-economic aspects of the business provide more emotional well-being to the family (Le Breton-Miller and Miller, 2016). So, family firms can respond to the stakeholder's demand for verification of the credibility of the CSR report by providing assurance. Alternatively, however, the agency hypothesis suggests that a family firm can act in a self-serving way by taking advantage of inside information and putting family interests above the stakeholders' interests which expropriate from the minority stakeholders. The family firm might use CSR disclosure as the part of their strategic decision-making process and discourage the external auditing of CSR information.

So, we analyse global data from 31 countries to examine the role of family ownership both in voluntary disclosure and in the provision of assurance of voluntary disclosures. The data corresponding to the period from 2006 to 2014 represents the performance of companies operating in different sectors. Our global sample shows that CSR reporting is achieving wide recognition in the global markets and the majority of companies show their CSR commitment by disclosing CSR reports. Moreover, the majority of firms also follow the global standard for reporting. There are firm benchmarks for CSR performance with respect to laws and specific performance standards by following the general global standard and making their report comparable with other companies' reports. However, when it comes to providing assurance of CSR reports, only 30% of firms have their CSR reports externally scrutinized. This may be because the assurance decision is conditioned by a firm's corporate governance structure (Zhou et al., 2013).

In the case of family firms, our global sample reveals that family firms disclose more CSR information than non-family firms do and that this trend continues in the case of standardizing these reports according to the GRI guidelines. This shows that family firms try to reduce the informational asymmetry that exists between the information accessible to majority and minority shareholders, doing so by disclosing the CSR information and preparing it as per the global standard which makes accessibility of CSR information convenient for the different stakeholders. Perhaps these firms are more aligned to stakeholder orientation than are non-family firms which are attending to socio-emotional theory. However, family firms are following the similar trend of non-family firms in providing external assurance of CSR information despite the fact that the issue of informational asymmetry between the majority and minority stakeholders is greater in family firms than elsewhere. This scenario becomes less applicable in the case of family firms where the family holds a majority stake (more than 50%) in the firm, in which case such families tend to provide less external assurance to the CSR information than non-family firms do. This indicates that family firms might be using CSR disclosure as a part of their strategic decision-making process and that they might be discouraging external auditing of CSR information. Perhaps the level of credibility and trust in these firms is greater than in non-family firms.

The rest of the chapter is structured as follows: The following section (the second section) represents the theoretical framework of family ownership, CSR disclosure, and CSR assurance. The third section describes the sample, collection of the data, and definition of the variables. The fourth section discusses the results and their interpretation. Lastly, the fifth section presents the concluding remarks.

2 Theoretical Framework

2.1 Family Ownership and CSR Disclosure

Family firms pose a unique agency problem when it comes to the separation between the majority and minority shareholders (Chau and Gray, 2010). The classical agency problem between the management and shareholders is comparatively less relevant, as family shareholders have more information and control management discretionary behaviour more effectively than non-family firms do (Chen et al., 2008; Chrisman et al., 2004). Family members are actively involved in the day-to-day activity of the business firms and play an important role in the decision-making process. Family firms, by virtue of their large degree of family ownership and the important managerial roles played by the family, enjoy an informational advantage over minority shareholders (Ali et al., 2007; Chen et al., 2008; Landry et al., 2013). These informational differences between the majority and minority shareholders may motivate family firms to act opportunistically and take actions which are beneficial to themselves (Fan and Wong, 2002). In such a situation, transparency and disclosure become important in reducing informational asymmetry. Studies have shown that information disclosure and effective transparency policies decrease informational asymmetry (Milgrom, 1981; Grossman and Hart, 1980). The family firms may try to decrease this informational asymmetry between the internal and external shareholders by providing voluntary disclosures of information. One such disclosure can be related to CSR. CSR information deals with information and issues across three different domains of interest—namely, the economic, social and environmental domains (Elkington, 1998). CSR information attracts various stakeholders in ways which help them gain knowledge of internal information about the companies and which, as a result, tends to reduce informational asymmetry (Dhaliwal et al., 2012). Investors nowadays use CSR information as one of the key factors they rely on in making an investment decision (Cohen et al., 2011; Chau, 2006). The voluntary disclosure of CSR information also helps firms reduce uncertainty as to the firm’s value (Cho et al., 2013). Family owners have access to more information than do minority shareholders who only have access to public information. Firms can combat this friction either by increasing the frequency or quality of CSR disclosure (per the alignment effect) or, alternatively, by extracting private benefits by means of taking advantage of information and expropriating the minority shareholders ´wealth (per the agency hypothesis). So, in considering the agency hypothesis and the alignment effect, a family firm can have an either encouraging or discouraging effect on CSR disclosure policies.

2.2 Family Ownership and CSR Assurance

We have seen in the previous section that CSR reporting may reduce informational asymmetry. However, CSR reporting is not necessary accompanied by an increased level of stakeholder trust (Hodge et al., 2009). The credibility problem arises out of the motives of the majority informed shareholders to make the internal information public. Minority shareholders may view this CSR reporting as being one of the strategic decisions of the firm (Coram et al., 2009) which give rise to the image issue. Auditing plays a very important role in this regard, in that auditing ensures the quality and authenticity of the information (Simnett et al., 2009). The assurance by the external auditor tends to reduce the concern about credibility and to reduce informational asymmetry between the informed shareholders and the uninformed ones (Watts and Zimmerman, 1983). The credibility of voluntary disclosure depends upon its assurance by an external auditor (Mercer, 2004), and providing reliable reports is an effective measure for gaining the confidence of the stakeholder (Adams and Evans, 2004; Hodge et al., 2009).

Family firms which are characterized by reputation, relationship, and the building of a positive brand image in the market (Anderson and Reeb, 2003; Berrone et al., 2010) will be more responsive than other firms will be to the calls for CSR reporting (particularly in providing assurance). Family firms are keen on providing longevity-building initiatives for the business in order to create an opportunity for the next generation of the family to continue the business. This will be possible only when they gain a good image in the public eye and only when they build long-term relationships with stakeholders by responding to their demand for assurance of CSR reporting. The socio-emotional wealth (SEW) perspective (Gomez-Mejia et al., 2007) also supports this view that non-economic aspects of the business provide a greater degree of utility and emotional well-being to the family and act as an important differential factor between family and non-family firms (Berrone et al., 2010; Gomez-Mejia et al., 2011). According to the SEW perspective, family firms are comparatively more interested in safeguarding their socio-emotional wealth than in achieving financial wealth—and are more oriented towards CSR activities in order to fulfil their SEW needs (Cennamo et al., 2012). However, SEW has its other side as well (Kellermanns et al., 2012; Cruz et al., 2014), where family firms use it as a self-serving instrument and put family interests above stakeholder interests—which expropriates the benefits of other stakeholders. Thus, SEW has two sides. Family firms can respond to stakeholder's demand for justifying the credibility of the reporting—doing so by providing assurance of the CSR reporting. Or, they might use CSR disclosure as a part of their strategic decision-making process and discouraging external auditing of the CSR information.

3 Method

3.1 Sample Selection and Data Collection

The data for this study are the result of a combination of information availability in two databases for a period of analysis from 2006 to 2014. Firstly, archival data were collected from Thomson Reuters Eikon. In this study, we took into consideration information from the global benchmark stock indices of all the firms from America, Europe, the Middle East, Africa (EMEA), and Asia—comprising 3,594 companies from 31 stock indices once duplicated companies were removed. Secondly, we combined the firms' social and environmental performance data collected from the Ethical Investment Research Service (EIRIS) database—a database that compiles information on companies' social and environmental performance, disclosure, and assurance for more than 30,000 firms. After excluding observations with missing financial, economic, or CSR information, a final sample of 2,586 firm-year observations spanning nine years (2006–2014) was available with which to test the hypotheses. The sample was unbalanced because not all companies were represented in all periods.

Table 1 lists the data according to the number of reports published in a given year.

Table 1. Data per year of the sample

Year	Frequency	Percentage	Cumulative
2006	168	6.50	6.50
2007	212	8.20	14.69
2008	251	9.71	24.40
2009	287	11.10	35.50
2010	295	11.41	46.91
2011	315	12.18	59.09
2012	339	13.11	72.20
2013	358	13.84	86.04
2014	361	13.96	100.00
Total	2,586	100.00	

Table 2 lists the CSR report data according to the country in which each company issuing a report is headquartered.

Table 2. CSR report data, listed according to the country where each company issuing a report is headquartered

Country in which each company is headquartered	Frequency	Percentage	Cumulative
Australia	170	6.57	6.57
Belgium	1	0.04	6.61
Bermuda	1	0.04	6.65
Canada	175	6.77	13.42
China	63	2.44	15.85
Denmark	7	0.27	16.13
Finland	2	0.08	16.20
France	71	2.75	18.95
Germany	60	2.32	21.27
Hong Kong	60	2.32	23.59
Ireland	43	1.66	25.25
Italy	1	0.04	25.29
Japan	458	17.71	43.00
Jersey	3	0.12	43.12
Luxembourg	1	0.04	43.16
Macau	4	0.15	43.31
Netherlands	45	1.74	45.05
New Zealand	19	0.73	45.78
Norway	8	0.31	46.09
Papua New Guinea	1	1	46.13

Russia	8	0.31	46.44
Singapore	43	1.66	48.11
South Africa	9	0.35	48.45
Spain	50	1.93	50.39
Sweden	40	1.55	51.93
Switzerland	41	1.59	53.52
United Kingdom	186	7.19	60.71
United States of America	1,016	39.29	100.00
Total	2,586	100.00	

3.2 Measures

CSR disclosure

The analysis of the disclosure of sustainability information is based on examining the contents of the CSR reports. For the purposes of analysis, our indicator variable "CSR report" is a dummy variable that takes the value of 1 if a firm has voluntarily issued a CSR report; and 0 otherwise ¡

Moreover, following the work of authors such as Clarkson et al. (2008), Martínez-Ferrero et al. (2016), and García-Sánchez and Martínez-Ferrero (2017a), CSR disclosures are measured according to the compliance of the content of these reports with the GRI recommendations. This usage is broader than that of other definitions, in that (i) it encompasses all the significant aspects of sustainability, irrespective of whether these reflect negative data or non-optimal situations; and (ii) the information is expressed in numeric and monetary terms to facilitate comparison. These standardising obligations mean that there is strong motivation within companies to ensure that the CSR reports issued by the company comply with the GRI format (Adams, 2002). Specifically, we consider "GRI" as being an indicator variable that takes the value of 1 if a firm's disclosure a CSR report issued in accordance with the GRI guidelines; and 0 otherwise.

Sustainability assurance

The external assurance of a CSR report is represented by "Assurance" as a dummy variable which is coded with a value of 1 if ¡ a firm's sustainability report is ¡ assured; and 0 otherwise (Herda et al., 2014; Peters and Romi, 2015; Simnett et al., 2009).

Family business

According to O'Boyle, Rutherford, and Pollack (2010, 311), "family involvement represents a substantial family presence in ownership, governance, management, succession, and/or employment." Among these aspects, we focus specifically on family ownership. Granted, other studies use not only family ownership, but also other indicators of family control. For instance, such indicators include the frequent involvement of family members in management (see, e.g., Block and Wagner, 2013; Dyer and Whetten, 2006; Gomez-Mejía et al., 2007; Marques et al., 2014). However, these indicators are strongly correlated with the percentage of equity ownership held by the family (Berrone et al., 2010).

Among the ample range of possibilities, in our study the explanatory variable of ownership concentration is taken as being represented by "Family_20", a dummy variable (Kashmiri and Mahajan, 2010; Landry et al., 2013) that takes the value of 1 if the largest shareholder is a family member with more than 20% of the votes; and 0 otherwise (Cruz et al., 2014; Martínez-Ferrero et al., 2016; Rodríguez-Ariza et al., 2017). A dichotomous measure of family control has been used in numerous family business studies (Berrone et al., 2010). Also, the 20% cut-off should be interpreted in light of a long stream of research on the control of large, publicly traded firms that use an ownership threshold as low as 5% to proxy a principal's capacity to exert major influence over the firm's affairs (e.g. Hambrick and Finkelstein, 1995).

As additional variable and in order to examine possible differences based on the definition of a family firm, we propose "Family_50" as a dummy variable that takes the value of 1 if the largest shareholder is a family member with more than 50% of the votes; and 0 otherwise (Martínez-Ferrero et al., 2016; Cascino et al., 2010).

4 Results

4.1 CSR reporting and assurance

The global sample of 31 countries shows that, on average, 63.84% of the companies disclose their CSR reports to the stakeholders (see Table 3).

Table 3. Globally, firms' provision of CSR reporting, adherence to the GRI guidelines, and assurance

Firm Provides	CSR Reporting	Adherence to the GRI Guidelines	Assurance
YES	63.84%	44.47%	30.20%
NO	36.16%	55.53%	69.80%

Note: The term *CSR Reporting* represents the firm's disclosure of the CSR report. *GRI Guidelines* represents the firm's following of the GRI global standard guidelines for the reporting of CSR. *Assurance* represents the firm's provision for external auditing of the CSR reports. The time period under consideration is that of 2006–2014 and represents ¡ firms from 31 countries during that time period.

It indicates that CSR reporting is receiving wide recognition in the global markets and that the majority of companies show their CSR commitment by disclosing CSR reports. Companies are going beyond business and financial aspects and are responding to market participants' increasing demand for CSR information. We have seen that companies are giving added importance to CSR information. But it is important to know whether this CSR information follows certain global standard procedures; whether these disclosures are comprehensive enough; and whether companies disclose the information in an accessible and comparable format. These issues become very significant—because if companies are not disclosing information on all aspects, and if the information that is provided is not easily understandable to different stakeholders, then such disclosures will not serve their intended purpose. So, it's very important that companies are following some CSR reporting standard or a guideline which is accepted on a global scale. One such standard is a GRI guideline which is a globally accepted standard of CSR reporting which ensures that all aspects of information related to business practices such as economic, environmental, and social factors (along with factors related to corporate governance, etc.) are being reported on. It also directs firms to disclose the information, which is comparable between firms in monetary terms and which should be understood by all of the companies' stakeholders, regardless of their location. Table 3 reports that, on average, 44.47% of the firms disclose the CSR information according to the GRI guidelines; and among the firms which disclose CSR information, 69.65% of firms follow the GRI guidelines. The rest of the firms (30.35% of them) disclose CSR information but do not follow the GRI guidelines. This shows that the majority of firms which disclose CSR information follow the global standard for reporting CSR information. It indicates that companies want to benchmark their CSR performance with respect to laws and performance standards by making their report comparable with other companies' reports and by encouraging different stakeholders to access the CSR information. Firms advocating global standardization may do so in response to the varying information and the varying format of CSR reporting having lead to inconsistencies between reports and obstruction of comparability between them. The global standardization of reporting will enable stakeholders to compare CSR performance between organizations and sectors.

However, despite the global standardization of CSR reporting has not been accompanied by an increased level of stakeholder trust (Hodge et al., 2009). There still exists the issue of the lack of credibility of an unverified report. This scepticism demands an assurance process which would ensure both the quality and the credibility of the report. This leads to the call for validation of the report by an external party similar to the financial reporting where an external auditor provides assurance of the information in the report. In this sample of companies from around the globe, 30.20% of firms offer an external auditor's assurance of the CSR report (Table 1). Among all the firms which disclose CSR information, only 47.30% of them provide assurance of that information; and a majority (52.70%) of firms disclose the CSR information but do not provide assurance of the report. This shows that the majority of firms do not opt to invite external scrutiny of their CSR reports. This may be because the decision to secure external assurance of such reports is conditioned by each firm's corporate governance structure (Zhou et al., 2013) particularly its ownership structure. The ownership structure of the firm affects the level of informational asymmetry in the firm which acts the primary motivating factor for providing assurance. External auditing improves the credibility and reliability of the information and reduces informational asymmetry between the shareholders. So, the decision regarding providing external assurance may be motivated by the ownership structure of the firm, particularly in family firms where a large degree of informational asymmetry exists between the information available to internal and external shareholders. Regarding this, in the next section, we will discuss how CSR reporting and assurance is affected by the presence of family ownership.

4.2 CSR reporting and assurance by family firms

Family firms are the leading business class around the world. In family firms, due to the presence of a significant degree of family ownership, family members are closely involved in the day-to-day activity of the business—and they play an important role in the decision-making process. The presence of family ownership may determine their interest in CSR reporting. Family firms may try to decrease informational asymmetry between the internal and external shareholders, or they might take advantage of this information advantage of theirs. The global sample reveals that, on average, 74.27% of family firms (that is, ones in which more than 20% of firm shares are owned by a family) disclose their CSR reports (see Table 4); while only 63.11% of non-family firms disclose their CSR information (see Table 5).

Table 4. Globally, family firms' provision of CSR reporting, adherence to the GRI guidelines, and assurance

Firm Provides	CSR Reporting	Adherence to the GRI Guidelines	Assurance
YES	74.27%	59.06%	30.41%
NO	25.73%	40.94%	69.59%

Note: The term *CSR Reporting* represents the firm's disclosure of the CSR report. *GRI Guidelines* represents the firm's following of the GRI global standard guidelines for the reporting of CSR. *Assurance* represents the firm's provision for external auditing of the CSR reports. The time period under consideration is that of 2006–2014 and represents firms from 31 countries during that time period.

Table 5. Globally, non-family firms' provision of CSR reporting, adherence to the GRI guidelines, and assurance

Firm Provides	CSR Reporting	Adherence to the GRI Guidelines	Assurance
YES	63.11%	43.44%	30.19%
NO	36.89%	56.56%	69.81%

Note: The term *CSR Reporting* represents the firm's disclosure of the CSR report. *GRI Guidelines* represents the firm's following of the GRI global standard guidelines for the reporting of CSR. *Assurance* represents the firm's provision for external auditing of the CSR reports. The time period under consideration is that of 2006–2014 and represents firms from 31 countries during that time period.

Table 6. Comparison of family and non-family firms' provision of CSR reporting, adherence to the GRI guidelines, and assurance

Firm Type	Family Firm	Non-Family Firm	T-Statistics
CSR Reporting	74.27%	63.11%	-2.94***
Adherence to the GRI Guidelines	59.06%	43.44%	-3.98***
Assurance	30.41%	30.19%	-0.06

Note: The term *CSR Reporting* represents the firm's disclosure of the CSR report. *GRI Guidelines* represents the firm's following of the GRI global standard guidelines for the reporting of CSR. *Assurance* represents the firm's provision for external auditing of the CSR reports. The time period under consideration is that of 2006–2014 and represents firms from 31 countries during that time period. Significance levels: * = p<.10; ** = p<.05; *** = p<.01.

Table 6 reports two sample t-tests and also shows the difference in the mean values of CSR reporting between the family and non-family firms is statistically significant (t = -2.94). This shows that family firms disclose more CSR information than non-family firms do; and this this trend continues in the case of standardizing of these reports according to the GRI guidelines. 59.06% of family firms follow the GRI guidelines in preparing CSR reports (Table 4), while only 43.44% of non-family firms follow the GRI guidelines (Table 5).

Table 6 reports two sample t-tests s and also shows the difference between the mean numbers of firms following the GRI guidelines between family and non-family firms is statistically significant (t = -3.98). This shows that family firms not only disclose the CSR information more than non-family firms do but also that they follow the GRI global standard for CSR reporting more than non-family firms do. Family firms try to reduce the informational asymmetry that exists between the internal and external shareholders, doing so by disclosing their CSR information to the stakeholders and at the same time preparing the CSR reports as per the GRI global standard. Doing so makes it easy for the different stakeholders to access the CSR information.

However, the credibility of the CSR information always remains a serious issue among the stakeholders, particularly in the case of family firms. Family members are involved in the business, and they have an informational advantage against that of the non-family shareholders. Also, the family firm's decision to voluntarily disclose the information can be viewed by the outside shareholders as being a strategic decision. In this regard, external auditing becomes very important in order to provide the credibility and reliability of the information. The assurance of this by the external auditor will help family firms reduce the informational asymmetry that exists between the majority and minority shareholders. The global sample shows that 30.41% of family firms provide assurance of the CSR report (Table 4), while 30.19% of non-family firms provide assurance of this by means of an external auditor (Table 5). We find that the percentage of companies for which assurance for the CSR report is provided is very similar for family and non-family firms. The Table 6 reports two sample t-tests and also shows no difference in mean of firms providing assurance among family and non-family firms ($t = -0.06$). This shows that family firms are following a trend similar to non-family firms in providing external assurance to the CSR information, despite the fact that the issue of informational asymmetry between the majority and minority shareholders is greater in family firms than in non-family ones. This indicates that family firms might be using CSR disclosure as part of their strategic decision-making process and that they may be discouraging the external auditing of CSR information.

Table 7. Globally, family firms' provision of CSR reporting, adherence to the GRI guidelines, and assurance

Firm Provides	CSR Reporting	Adherence to the GRI Guidelines	Assurance
YES	64.55%	54.55%	23.64%
NO	35.45%	45.45%	76.36%

Note: The term *Family Firms* represents firms in which a family owns a majority stake. *CSR Reporting* represents the firm's disclosure of the CSR report. *GRI Guidelines* represents the firm's following of the GRI global standard guidelines for the reporting of CSR. *Assurance* represents the firm's provision for external auditing of the CSR reports. The time period under consideration is that of 2006–2014 and represents firms from 31 countries during that time period.

Table 8. Family (with majority stake) and Non-Family Firm comparison of CSR reporting, GRI guidelines and Assurance

Firm Type	Family Firm	Non-Family Firm	T-Statistics
CSR Reporting	64.55%	63.81%	-0.15
GRI Guidelines	54.55%	44.02%	-2.17***
Assurance	23.64%	30.49%	1.53*

Note: The term *CSR Reporting* represents the firm's disclosure of the CSR report. *GRI Guidelines* represents the firm's following of the GRI global standard guidelines for the reporting of CSR. *Assurance* represents the firm's provision for external auditing of the CSR reports. The time period under consideration is that of 2006–2014 and represents firms from 31 countries during that time period. Significance levels: * = p<.10; ** = p<.05; *** = p<.01.

The level of informational asymmetry between the majority and minority shareholders also depends upon the stakes held by the majority shareholders. Holding a majority stake in the firms enables the family to make all of the decision discretionarily. If the family holds more than 50% of the stakes in the firm, this would be expected to increase the informational differences between what the majority and minority shareholders. So, we examine the question of whether a family's holding of majority stake in a firm changes the trends of CSR reporting and assurance in that firm. The global sample shows that, on average, 64.55% of family firms (ones within which a family holds the majority stake in the firm) disclose their CSR reports (Table 7), while 63.81% of other firms disclose their CSR information (Table 8). Table 8 reports two sample t-tests s and also shows that no difference exists in the means of CSR reporting between family and non-family firms (t = 0.15). In the case of following the GRI guidelines, 54.55% of family firms (firms where a single family holds a majority stake in the company) follow the GRI guidelines in preparing CSR reports (Table 7); while only 44.02% of non-family firms follow the GRI guidelines in doing so (Table 8). Table 8 reports two sample t-tests s and also that with regard to family-owned and non-family-owned firms (specifically, in the case of both, those which follow GRI guidelines in their CSR reporting) the difference between the means of both is statistically significant (t = -2.17). This shows that family firms with majority stake are following the similar trend of non-family firms in disclosing CSR information but in the case of following the global standard of CSR reporting, they are much ahead of non-family firms. However, family firms how enjoys a majority stake in firms provides less assurance to the CSR information as compared to other firms. On an average 23.64% family firms provide assurance to the CSR report (Table 7), while 30.49% of other firms provide assurance by the external auditor (Table 8). Table 8 reports two sample t-tests s and also shows the difference in mean of firms providing assurance among family firms with a majority stake and other firms (t = 1.53). This shows that family firms provide less external assurance of the CSR information – even though the family's majority stake in the firm increases the informational asymmetry that exists between the majority and minority shareholders. Family firms enjoy an informational advantage over the minority shareholders and might be acting opportunistically while using CSR disclosure as part of their strategic decision-making processes.

5 Conclusion

The global sample of 31 countries from the 2006–2014 period shows the influence of family ownership on the voluntary disclosure of information and on the assurance demand with regard to information voluntarily disclosed. Family firms try to reduce the informational asymmetry that exists between the majority and minority shareholders, doing so by disclosing CSR information and by standardizing it as per the GRI global standard to an extent greater than that undergone by non-family firms. This makes the accessibility of CSR information easier for stakeholders and tends to reduce the informational differences between the majority and minority shareholders. However, the demand by stakeholders for credibility – securable by providing external assurance of the report – follows the similar trend of non-family firms; and the situation become more inadequate in the case where a family holds the majority stake in a firm. This finding supports the agency hypothesis and shows that family firms are using CSR disclosure as part of their strategic decision-making process and are discouraging the external auditing of CSR information despite the fact that the issue of informational asymmetry between the majority and minority is greater in family firms than in non-family ones. It can be said that there is a predominance of commitment to the satisfaction of the interests of the family over that of the rest of the stakeholders. In this context, assurance of CSR reports is not a requirement.

In general, we find that globally, CSR reporting is becoming more and more popular and that firms are now more oriented towards CSR engagement. The majority of companies show their engagement by disclosing CSR reports; and moreover, they also follow the global standard for reporting. The global standard will ensure the reporting of all aspects of information such as the economic, environmental, and social aspects of the data. This will also remove the uncertainty inherent to there being varying kinds, amounts, qualities, or degrees of information and varying formats of CSR reporting, leading to inconsistencies and subsequent limitations in comparability. Firms' advocacy for global standardization will enable stakeholders to compare CSR performance between organizations and sectors. However, when it comes to providing assurances of CSR reports, only 30% of firms provided external scrutiny of their CSR reports.

Our results also extend the literature on family firms, by showing how the presence of family ownership affects the firm decision of voluntary disclosure and the assurance of voluntary disclosure. Our finding supports the hypothesis of Cruz et al. (2014) that family firms can be both socially responsible as well as socially irresponsible. Family firms tend to be oriented more towards safeguarding their own existing socio-emotional wealth (SEW) than in achieving a greater degree of financial wealth in order to fulfil their SEW needs. However, family firms can also use CSR as a self-serving instrument and may put family interests above the stakeholders' interests.

This finding provides practical policy implications. It offers useful insights for policymakers as to how family involvement responds to the assurance issue of CSR reporting. This will help them to determine the areas of improvement with regard to the issue of assurance. Understanding of dynamics of family firms will help regulators in their consideration of introducing the guidelines or regulations about assurance. They regulators or policymakers could also provide institutional support to the companies – particularly to family firms – in order to fulfil the stakeholders' demand for assurance as to the of voluntary disclosures.

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CHAPTER EIGHT

THE ASSURANCE OF THE SUSTAINABILITY REPORTING BY LISTED COMPANIES IN SPAIN[1]

LAURA SIERRA-GARCÍA
AND MARÍA ANTONIA GARCÍA-BENAU

Abstract

Sustainability reports have gained remarkable attention as a strategic concept in organizations. The quality of these reports is a question of great interest in the international literature. So, assurance is shown as a way to enhance the credibility and reliability of the social and environmental information disclosed by companies. The aim of this chapter is to examine the assurance market in Spain. The chapter is focused on a sample of 95 companies that had remained listed on the Madrid Stock Exchange throughout 2005-2016 and which remained listed as of September 2017. The chapter analyses a total of 1,140 observations in those companies. Our results show that there is an increasing trend for sustainability reports to be assured. Our findings show that most of the companies in the sample obtain assurance of their sustainability reports; and that most these, in turn, obtain assurance from one of the Big 4, of which KPMG and Deloitte the leaders (Deloitte being the top one in auditing). Our results show that there is a clear strategy of specialisation among the assurers.

Keywords: Assurance, Sustainability Report, Spain, Listed Companies

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1. Introduction

In recent years, companies have come to view the publication of sustainability reports as being an issue of strategic importance (Fonseca, 2010; Maroun, 2017). These reports, in their supplying of information on the company's social and environmental performance and the impact of this performance on its activities, are a fundamental means of improving communication with stakeholders (Daub, 2007).

The Global Reporting Initiative (GRI) provides authoritative guidelines for the disclosure of sustainability reports (Brown et al., 2009; KPMG, 2011) at the national and international level. The GRI framework presents standard guidelines and indicators for reporting on the company's economic, social, and environmental performance.

Markets require ever-more transparency from companies about their business affairs; and sustainability reports are a valuable channel for providing information relevant to stakeholders' interests (Lu and Abeysekera, 2014). In response to these demands, companies are increasingly publishing this information, as is reflected in the worldwide rate of global sustainability reporting by the N100 companies[2]. This rate has risen from the 18% of companies that had presented social and environmental information in 2002, to the 75% which had done so in 2015 (KPMG, 2017). The rising trend was maintained throughout these thirteen years.

However, studies have shown that the quality of sustainability reports is often unsatisfactory; they often focus only on the positive aspects of issues (Owen et al., 2000; Moneva et al., 2006; Hodge et al., 2009; Boiral, 2013; Talbot and Boiral, 2018; Nyberg et al., 2013) and sometimes wilfully seek to conceal negative elements of company performance (Cho et al., 2014; Boiral et al., 2018). In this respect, Prado-Lorenzo et al. (2009) observed a negative relationship between the amount of information disclosed and corporate economic performance.

In this context – one in which researchers have noted and criticised the tendency for companies to present an idealised image in their sustainability reports (Boiral, 2013; Hahn and Lülfs, 2014) – the reliability and quality of these reports is a question of great interest. One way to

[2] N100: the top 100 companies worldwide, according to revenue, from among a sample of 4,900 companies

enhance the reliability and credibility of the social and environmental information disclosed by companies is to contract external assurance services (Simnett et al., 2009). Thus, Perego and Kolk (2012) reported that sustainability assurance reports could strengthen a company's credibility and generate trust among its stakeholders. The independent external assurance of sustainability reports began in 1997-98 (O'Dwyer and Owen, 2005), and its impact on companies has steadily increased since then. Although GRI does not absolutely require assurance (GRI, 2013), it does consider that this additional guarantee may enhance the quality of sustainability reports.

The aim of the present chapter is to examine the assurance market for listed Spanish companies and to examine the role of providers of assurance services in this market. We also explore the relationship between service providers in the audit and assurance markets; and we reveal that these are not one and the same. Finally, we show that companies tend to hire the same external provider for both services.

The chapter contributes to the literature in this field by highlighting the increased awareness of environmental and social issues with the transformation of business sensibilities in this respect in Spain. This country provides an interesting case for study because it is currently a world leader in sustainability reporting (KPMG, 2011). Thus, previous studies have shown that a large proportion of Spanish companies publish sustainability reports (KPMG, 2011). In fact, Spain, Italy, and the UK are the European countries with the highest quality of CSR reports among those published by Global Fortune 250 companies (KPMG, 2013). Tarquinio et al. (2018) analysed the disclosure of sustainability reports by listed companies in Greece, Italy, and Spain, and concluded that Spanish companies, on average, publish the highest number of indicators in their sustainability reports.

Our research focuses on Spanish companies listed on the Madrid Stock Exchange as of September 2017. The chapter analyses a sample of 95 companies that remained listed throughout the period of analysis (2005-2016), with a total of 1,140 observations. Our results show that most of the companies in the sample obtain assurance of their sustainability reports and that most of these, in turn, obtain assurance from one of the Big Four accountancy firms (Deloitte, PWC, EY, and KPMG).

The rest of this chapter is structured as follows: After this introduction (in which we highlight the research interest addressed in this chapter), the second section describes the background to this research and presents a literature review of the field of sustainability assurance. Sections Three and Four then provide the empirical details of the study, after which the fifth and final section summarises the main conclusions drawn from the findings.

2. Background and Literature Review

Companies in Europe and elsewhere are publishing sustainability reports in increasing numbers. According to KPMG (2017), the proportion of European N100 companies presenting sustainability reports increased from 71% in 2011 to 74% in 2015. The corresponding figures for Spain are even higher, with 84% of companies in 2011 and 87% in 2015 (KPMG, 2017) having done so.

Empirical studies have analysed the publication of CSR reports by reference to certain theoretical frameworks, such as stakeholder theory, signalling theory, legitimacy theory, and institutional theory (Freeman, 1984; North, 1990; Hahn and Kühnen, 2013).

In order to enhance the credibility and reliability of sustainability reports, some organisations also obtain independent external assurance. In the assurance of sustainability reports, an independent external provider addresses a report to the company’s stakeholders, informing on the organisation's performance regarding social and environmental issues. According to the GRI (2013), external assurance is an “activity designed to result in published conclusions on the quality of the report and the information contained within it”. Thus, assurance underwrites the quality of the information disclosed in corporate sustainability reports.

There are two widely accepted frameworks for assurance services: the International Auditing and Assurance Standards Board (IAASB), which has issued the standard ISAE 3000 *International Standard on Assurance Engagement* (IAASB, 2013), and AccountAbility, which in turn has issued the *Assurance Standard* AA1000 (AccountAbility, 2008a, 2008b, 2011). Each of these standards comprises a set of principles focused on stakeholders’ interests and seeking to establish transparency on how companies are contributing to sustainable development. Prior research indicates that the Big Four usually apply the ISAE 3000 standard (Manetti and Becatti, 2009).

The 2015 KPMG survey showed that approximately 63% of the sustainability reports then published by the world's largest 250 companies were assured (Junior et al., 2014; Cho et al., 2014). Two years later, this value had risen to 67%—and the data suggest that the increase was sharper in countries where high rates of sustainability reports had already been achieved (KPMG, 2017).

However, previous studies have observed important differences in the content of voluntary assurance reports (Junior et al., 2014; Gürtürk and Hahn, 2016). In fact, the procedures used in sustainability assurance reporting are still at an initial stage, because these reports are not generally compulsory and the applicable standards are not very precise. Sawani et al. (2010) emphasised that without compulsory regulation, these reports are subject to managerial discretion (Zhou et al., 2016).

The debate about the voluntary/compulsory disclosure of sustainability reports has been on the table for years. But lately, it has acquired new nuances, which suggest there may soon be changes in their voluntary nature. Various countries are considering new regulations on corporate social, governance, and environmental disclosure (KPMG, 2017) which could lead to the voluntary disclosure of information becoming obligatory in a few years' time in many parts of the world. In Europe, Directive 2014/95/EC (EU, 2014) requires large companies in the Member States to disclose a "non-financial report" with information related to social, environmental, corruption, and diversity aspects of their business. This directive is a significant advancement in information disclosure and represents an important step forward in the global recognition of the importance of non-financial information—locating social, environmental, and human rights issues as being major concerns in the management of organisations.

The European Directive is an instrument that features great flexibility; and so, in some countries, there have been some delays in its transposition. Spain only adopted the Directive by the end of 2017 (Royal Decree-Law 18/2017). In consequence, the full effect of this new requirement cannot yet be determined. Nevertheless, it will doubtless constitute a reform of great significance in the European environment and provide much material for future research.

Research papers, in this respect, have observed that sustainability assurance:

- Improves the quality and credibility of sustainability reports (Park and Brorson, 2005; Corporate Register, 2008; Simnett et al., 2009; Pflugrath et al., 2011; Asif et al., 2012; Cheng et al. 2015),
- Reduces informational asymmetry and agency costs (Blackwell et al., 1998; Carey et al., 2000; Simnett et al., 2009; O'Dwyer et al., 2011; Perego and Kolk, 2012; Martínez-Ferrero and Sánchez-García, 2017),
- Raises stakeholder confidence (Hogde et al., 2009; Manetti and Toccafondi, 2012),
- Enhances the corporate image (Kolk and Perego, 2010; Boiral, 2013; Hummel et al., 2017) and
- Has a positive impact on reactions in the capital market (Pflugrath et al., 2011; Casey and Grenier, 2015).

Furthermore, Simnett et al. (2009) show that sustainability reports in stronger legal environments are more likely to be endorsed by assurance– although, by contrast, Herda et al. (2014) concluded that when companies are located in countries with weaker shareholder protection mechanisms, there is a greater likelihood of assurance of sustainability reports.

Other papers have analysed the relationship between report quality and the existence of assurance of those particular reports (O'Dwyer and Owen, 2005; Perego and Kolk, 2012; Boiral et al., 2018). It should be noted that in most countries, the provision of assurance is not regulated—and that consequently, in many cases, different scopes of interest are considered; different methods are employed; and different types of assurance reports are provided (O'Dwyer and Owen, 2005; Owen et al., 2009; Perego, 2009; Frost and Martinov-Bennie, 2010; Romero et al., 2010). Assurance providers are required to check the reliability of the information contained in sustainability reports; however, there is no clear agreement as to which type of assurance provider (whether auditors or certifiers) offers the highest quality of assurance (GRI, 2013; Edgley et al., 2015; Manetti and Toccafondi, 2012). The two main groups of assurance providers are accounting firms (mainly the Big Four) and non-accounting firms employing consultants and certifiers (Owen et al., 2009; Frost and Martinov-Bennie, 2010). Many research papers in this field use the term *non-accounting firms* or *non-accounting consultants*; the latter can refer to both consulting firms and to certifiers (Perego, 2009; Junior et al., 2014).

Nevertheless, most studies conclude that the assurance market is dominated by auditing firms and that the latter are more independent than consultants are (Adams and Evans, 2004; Simnett et al., 2009; Perego and Kolk, 2012; KPMG, 2015). According to Perego (2009), the higher quality of assurance in CSR reports endorsed by accounting firms resides in aspects related to the format and procedures of the reporting; whereas the higher quality of assurance in CSR reports endorsed by non-accounting firms is associated with the recommendations and opinions of the reporting. Mock et al. (2007) identified differences in the scope, the methods, and the statements of assurance reports. Frost and Martinov-Bennie (2010) found differences in the titles and objectives of assurance statements; in the descriptions of the assurance standards used; in the assurance procedures employed; and in the wording of the conclusions drawn.

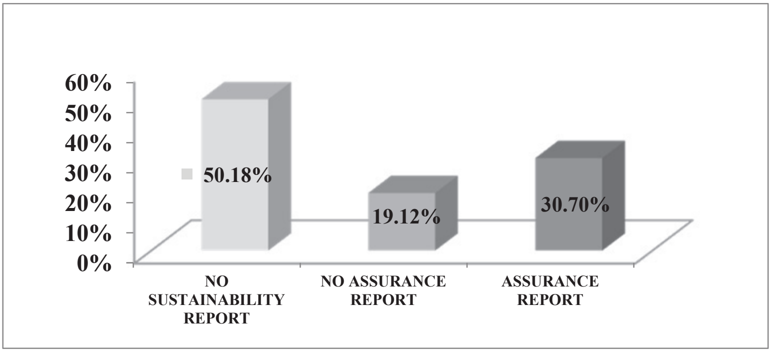
Moroney et al. (2012), Mock et al. (2013), and Simnett et al. (2009) all stressed that the size of large accounting firms enables them to obtain economies of scale. KPMG (2015) noted that auditors are the leading assurers of CSR reports among the Global 250 companies (KPMG, 2015) and among the Fortune 500 companies (Junior et al., 2014). Junior et al. (2014) also found that auditors (collaborating with non-accountants) controlled the assurance market in Europe, South America, and Russia; while consultants did so in Australasia, Asia, and North America. The Big Four firms – according to Kolk and Perego (2010), Pflugrath et al. (2011) and Martínez-Ferrero and García-Sánchez (2016) – tend to provide a higher quality of assurance; although De Beelde and Tuybens (2015) do not confirm this assertion and Moroney et al. (2012) observed no significant difference between the quality of sustainability assurance reports issued by auditors and those issued by consultants.

3. Sample and Study Method

The present study focuses on companies listed in the Spanish capital market as of September 2017. Our research covers the period from 2005 to 2016. The sample for the empirical study was composed of 95 companies that were listed throughout the period of analysis. The final sample of listed companies contained 1,140 observations. Financial information on these companies was retrieved from the DataStream database. Sustainability report data were gathered directly from the companies' websites. The identities of the assurers of each sustainability report and of the auditors of financial information were determined from the corresponding sustainability reports and auditors' reports.

As can be seen in Figure 1, in 572 observed cases (50.18%) there was no sustainability report. Of the 568 (49.82%) observations that did feature sustainability reports, 350 (30.70% of all cases) were assured.

Figure 1: Sample



Source: The authors' own elaboration

Table 1 below shows the sample, chronologically ordered. Evidently, there is a rising trend, with a maximum level of sustainability reports (60) having been reached in 2016 the most recent year studied.

Table 1: Sample (listed by year)

Year	No Sustainability Report	Sustainability Report	Total
2005	67	28	95
2006	61	34	95
2007	58	37	95
2008	50	45	95
2009	50	45	95
2010	46	49	95
2011	43	52	95
2012	41	54	95
2013	42	53	95
2014	41	54	95
2015	38	57	95
2016	35	60	95
Total	**572**	**568**	**1,140**

Source: The authors' own elaboration

Table 2 presents an analysis by industries, showing that firms in the basic materials, industry, and construction sector presented the highest numbers of sustainability reports (175).

Table 2: Sample (listed by industrial sector)

Industrial Sectors	No Sustainability Report	Sustainability Report	Total
Consumer Goods	197	115	312
Basic Materials, Industry, and Construction	137	175	312
Oil and Gas	24	72	96
Consumer Services	64	80	144
Financial Services	124	104	228
Technology and Telecommunications	26	22	48
Total	**572**	**568**	**1,140**

Source: The authors' own elaboration

3 Descriptive Results

Tables 3 and 4 describe the assurance market by year and by industrial sector. As can be seen in Table 3, there is a rising trend in assurance—a trend which has continued unabated and was only interrupted in 2009 and 2013, in both cases only slightly (by one percentage point), representing a reduction of 0.03% in each of these years.

Table 3: Assurance market (listed by year)

Year	No Assurance Report	Assurance Report	Total
2005	10	18 (64.29%)	**28**
2006	13	21 (61.76%)	**34**
2007	12	25 (67.57%)	**37**
2008	15	30 (66.67%)	**45**
2009	16	29 (64.44%)	**45**
2010	18	31 (63.27%)	**49**
2011	20	32 (61.54%)	**52**
2012	21	33 (61.11%)	**54**
2013	21	32 (60.38%)	**53**
2014	22	32 (59.26%)	**54**
2015	25	32 (56.14%)	**57**

2016	25	35 (58.33%)	**60**
Total	**218 (38.38%)**	**350 (61.62%)**	**568**

Source: The authors' own elaboration

Table 4 also shows the assurance market by industrial sector, classifying the companies in the sample into six groups:

1. Consumer Goods;
2. Basic Materials, Industry, and Construction;
3. Oil and Gas;
4. Consumer Services;
5. Financial Services; and
6. Technology and Telecommunications.

As can be seen in this table, in all industries except those based on the provision of services, the number of assured sustainability reports is greater than that of non-assured reports. Thus, the oil and gas industrial sector assured 95.83% of its reports, followed by the basic materials, industry, and construction industrial sector, which assured 69.71% of its reports. These results are consistent with those of Cho et al. (2014), who concluded that industries that produce a high environmental and social impact are more likely to obtain assurance of their sustainability reports than those which do not.

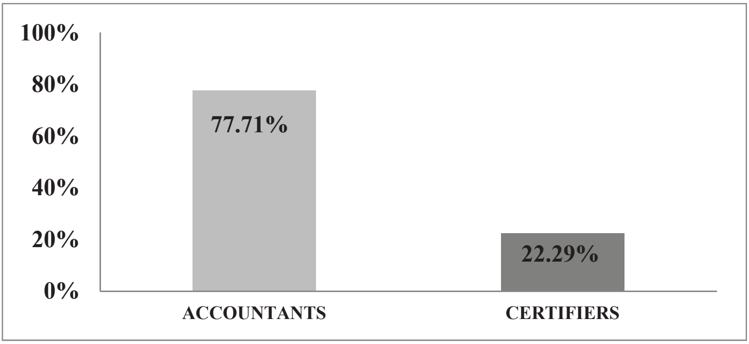
Table 4: Assurance market (listed by industrial sector)

Industrial Sector	No Assurance Report	Assurance Report	Total
Consumer Goods	89	26 (22.61%)	**115**
Basic Materials, Industry, and Construction	53	122 (69.71%)	**175**
Oil and Gas	3	69 (95.83%)	**72**
Consumer Services	34	46 (57.50%)	**80**
Financial Services	38	66 (63.46%)	**104**
Technology and Telecommunications	1	21(95.45%)	**22**
Total	**218 (38.38%)**	**350 (61.62%)**	**568**

Source: The authors' own elaboration

Figure 2 describes the providers of assurance services in greater detail, dividing them into two main groups: accountants and certifiers. Of the 350 assurance reports considered, most (77.71%) were published by accountants – in contrast to the 22.29% published by certifiers. These results, for Spanish listed companies, are in line with those obtained previously by Junior et al. (2014) and KPMG (2015), among others.

Figure 2: Providers of sustainability assurance reports



Source: The authors' own elaboration

This general trend is observed in each of the years under analysis. The study, shown in Table 5 by year, highlights the increasing preponderance of accountants in the provision of assurance reports.

Table 5: Providers of assurance sustainability reports (listed by year)

Year	Accountants	Certifiers	Total
2005	14	4	**18**
2006	16	5	**21**
2007	19	6	**25**
2008	22	8	**30**
2009	21	8	**29**
2010	23	8	**31**
2011	23	9	**32**
2012	24	9	**33**
2013	24	8	**32**
2014	27	5	**32**
2015	27	5	**32**
2016	32	3	**35**
Total	**272**	**78**	**350**

Source: The authors' own elaboration

The analysis by industrial sector (Table 6) shows that accountants provided all the assurance reports in the technology and telecommunications industrial sector, and that they had a majority presence in all other industrial sectors.

Table 6: Providers of assurance sustainability reports (listed by industrial sector)

Industrial Sector	Accountants	Certifiers	Total
Consumer Goods	15	11	**26**
Basic Materials, Industry, and Construction	80	42	**122**
Oil and Gas	59	10	**69**
Consumer Services	38	8	**46**
Financial Services	59	7	**66**
Technology and Telecommunications	21	0	**21**
Total	**272**	**78**	**350**

Source: The authors' own elaboration

Among the accountancy firms providing these services, the Big Four auditors are predominant. However, the respective market power of each of these firms has varied over the years. In this respect, Tables 7 and 8 show this trend by year and by industrial sector. Over the whole study period, KPMG – followed by DELOITTE (80), PWC (71), and EY (35) – provided assurance services for the largest number of companies in the sample (86). But during this period, the majority market share alternated between DELOITTE and KPMG. In the first year (2005), DELOITTE clearly dominated the market; but in the following year, KPMG rose to tie DELOITTE for first place. KPMG then went on to hold the first-place position exclusively until the 2012-2015 period, in which DELOITTE was slightly ahead. Only by the end of the study period (2015-2016) did PWC reach first place.

Table 7: Accountants providing assurance of sustainability reports (listed by year)

Year	DELOITTE	EY	KPMG	PWC	Total
2005	7	1	3	3	**14**
2006	6	1	6	3	**16**
2007	6	2	7	4	**19**
2008	5	3	10	4	**22**
2009	5	3	8	5	**21**
2010	6	3	8	6	**23**
2011	6	4	7	6	**23**
2012	8	3	7	6	**24**
2013	8	3	8	5	**24**
2014	8	4	7	8	**27**
2015	8	3	7	9	**27**
2016	7	5	8	12	**32**
Total	**80**	**35**	**86**	**71**	**272**

Source: The authors' own elaboration

By industry, according to Table 8, there is specialisation among the Big Four providers. Thus, KPMG occupied the first-place position in the ranking in the basic materials, industry, and construction sector and also in the oil and gas industrial sector, while Deloitte led in the financial services sector and PWC did so in the consumer services sector. These results show that audit firms tend to specialise—a finding that is in line with that of Balsam et al. (2003) and Park and Brorson (2005), among others.

Table 8: Accountants providing assurance of sustainability reports (listed by industrial sector)

Industrial Sector	DELOITTE	EY	KPMG	PWC	Total
Consumer Goods	2	5	2	6	**15**
Basic Materials, Industry, and Construction	22	3	38	17	**80**
Oil and Gas	12	7	24	16	**59**
Consumer Services	5	1	9	23	**38**
Financial Services	38	10	2	9	**59**
Technology and Telecommunications	1	9	11	0	**21**
Total	**80**	**35**	**86**	**71**	**272**

Source: The authors' own elaboration

Tables 9 and 10 focus on the 272 companies assured by one of the Big Four. They show (by year and by industrial sector) which of the Big Four audited their annual accounts. During the overall period, DELOITTE led the market with 142 audited companies. Although in recent years, the other auditors each increased their number of clients, the difference between DELOITTE and the rest has remained considerable.

Table 9: Auditors of annual accounts (listed by year)

Year	DELOITTE	EY	KPMG	PWC	Total
2005	8	1	1	4	**14**
2006	9	2	1	4	**16**
2007	11	2	1	5	**19**
2008	12	4	1	5	**22**
2009	10	4	2	5	**21**
2010	12	4	2	5	**23**
2011	12	5	1	5	**23**
2012	14	5	1	4	**24**
2013	14	5	1	4	**24**
2014	14	7	2	4	**27**
2015	13	6	3	5	**27**
2016	13	7	5	7	**32**
Total	**142**	**52**	**21**	**57**	**272**

Source: The authors' own elaboration

With respect to the sample's listing by industrial sector, as in the assurance market, the results obtained show that the audit firms have specialised. Thus, DELOITTE is strongly present in the basic materials, industry, and construction sector; as it is in the financial services sector. PWC is strongly present in the consumer services sector, EY in the oil and gas industry sector, and KPMG in the technology and telecommunications sector.

Table 10: Auditors of annual accounts (listed by industrial sector)

Industrial Sector	DELOITTE	EY	KPMG	PWC	Total
Consumer Goods	1	0	1	13	**15**
Basic Materials, Industry, and Construction	61	6	1	12	**80**
Oil and Gas	24	18	5	12	**59**
Consumer Services	14	9	1	14	**38**
Financial Services	41	10	2	6	**59**
Technology and Telecommunications	1	9	11	0	**21**
Total	**142**	**52**	**21**	**57**	**272**

Source: The authors' own elaboration

It should also be noted that most companies tend to consistently hire the same firm to provide the assurance of their sustainability reports and to audit their annual accounts. Thus, in 2005, 11 of the 14 companies hired the same firm for assurance and for auditing; while in 2016, 20 of the 32 companies did so.

4. Conclusions

In recent years, corporate reporting has undergone important changes, as managers seek to respond to the informational needs of different stakeholders and to highlight the firm's social commitments—going beyond the traditional presentation of financial data alone. In addition to these motivations, companies are increasingly required to show the relationship between their activities and financial and non-financial issues (although in many countries, the information requirements continue to be limited to financial reporting).

Like any process involving significant changes concerning information disclosure, the presentation of sustainability reports – despite their acknowledged benefits – has been subjected to various criticisms. These are based fundamentally on the fact that sustainability reports, to be worthwhile, must be underwritten by mechanisms that ensure their credibility. Assurance is the process by which an independent expert issues a report on the social and environmental information revealed, providing it with greater consistency and clearly demonstrating the company's true level of commitment to sustainability.

However, as of yet, there is relatively little experience in this assurance process. The first assurance operations only took place in the late 1990s; and many aspects of it remain to be established. The provision of this assurance is a complex process involving both qualitative and quantitative information and requiring the application of the professional criterion of the assuror.

Some authors (see, for example, Fuhrmann et al., 2016) have compared the assurance of sustainability reports with the auditing of financial statements, highlighting the need to advance the former activity to the level of the latter—in order to perfectly define the terms of the commission, the procedures to be applied, the position of the companies with respect to the social and environmental risks that may be involved, and the content of the report to be supplied to stakeholders. These reflections also suggest that specific training for the providers of this service may be needed.

To sum up, this chapter examines the assurance of sustainability reports by Spanish listed companies, of which we analysed a sample compiled in September 2017. The results obtained show that the situation in Spain is very similar to that in comparable countries, where there is an increasing trend for sustainability reports to be assured (mainly by one of the Big Four firms). The results likewise show that there is a clear strategy of specialisation among these assurers.

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CHAPTER NINE

WHAT HAVE WE LEARNT ABOUT THE ASSURANCE OF INTEGRATED REPORTS? A BIBLIOMETRIC ANALYSIS OF THE ACADEMIC LITERATURE

ELIES SEGUÍ-MAS,
HELENA-MARÍA BOLLAS-ARAYA
AND FERNANDO POLO-GARRIDO

Abstract

The purpose of this chapter is to identify the current academic literature on the assurance of Integrated Reporting. By means of the Web of Science database, we have obtained a sample of papers in an effort to synthesize the main characteristics and trends in the field. This study identifies an emerging academic interest in the assurance of integrated reporting. So, this work can be used for academic researchers to facilitate research and discussion on the topic.

Keywords: Assurance, Integrated Reporting, Combined Assurance, Non-Financial Reporting

1. Introduction

The current financial reporting model is focused on detailed historical accounting information. This model has been criticised for several reasons:

1. It is insufficient for several stakeholders;
2. It provides disconnected information;

3. It does not reflect a company's performance or capture all its value drivers; and
4. Its reporting landscape is perceived as being fragmented (Steenkamp, 2018).

Therefore, the growing need to improve the usefulness of corporate reporting draws from different initiatives in the field of voluntary reporting of non-financial information (mainly based on sustainability or corporate social responsibility reports) (Cheng et al., 2014; Cohen et al., 2012).

According to Abernathy et al. (2017) and Cohen and Simnett (2014) investors increasingly demand for CSR data to be integrated with financial reporting. Thus, the International Integrated Reporting Council (IIRC) will lead corporate reporting to the integration of financial data, CSR data, and assurance of the two (Abernathy et al. 2017).

As a result, during the last number of years, diferent corporate reports have grown in length and complexity (Wee et al., 2016). Companies need a more holistic approach to reporting (de Villiers et al., 2014)—an approach designed for integrating financial and non-financial information in only one report. Thus, this integrated report would connect the firm's strategy, its financial performance, and its performance on environmental, social, and governance issues (Steenkamp, 2018).

Thus, integrated reporting is the biggest corporate reporting innovation in the last decade in order to generate sustainable returns (International Integrated Reporting Council, 2013; Higgins, Stubbs and Love, 2014). Beyond an aggregation of the annual and CSR reports, the integrated report should be a brief document which explains the links between financial and non-financial performance (Maroun, 2017).

However, integrated reporting is subjective, since it includes historical and prospective information (both qualitative and quantitative in nature) which increases stakeholders' concerns about the validity and reliability of the report (Cohen and Simnett, 2014; IIRC, 2014a; Maroun and Atkins, 2015).

Therefore, the reliability of information should be significantly improved by means of systems of internal control and reporting systems, stakeholder engagement, and assurance services provided by internal and external assurors (IIRC, 2013).

In this sense, the recent discussion inside the IIRC confirmed that some type of assurance of an integrated report would be needed (IIRC, 2014a; 2014b).

However, although there is little research on the assurance of integrated reports, there are interesting studies about the companies' motivations to assure their sustainability reports (Fernandez-Feijoo, Romero and Ruiz, 2015; Jones and Solomon, 2010). Studies of interest also include the companies' motivations for achieving a certain level of assurance in non-financial reports (Cohen and Simnett, 2014; Mock, Strohm, and Swartz, 2007). According to Maroun (2017), several significant assurance challenges remain, specifically the need to provide a more technical approach to assure integrated reports (as noted by Cohen and Simnett, 2014; Simnett and Huggins, 2015; and de Villiers et al., 2014).

To the best of our knowledge, very few studies have focused on the scientific production of the assurance of integrated reporting. Therefore, this paper aims to bridge this gap by applying bibliometric and social network techniques to a representative collection of research studies in this knowledge field to complement and improve the findings of the above studies.

In order to achieve this, our work analyses the research on the assurance of integrated reporting published in a wide range of sources over a 7-year period (2012-2018). The metanalysis attempts to use cited references to analyse/identify:

1. The distribution patterns of papers.
2. The leading authors, institutions, and sources that contribute to the literature, whether directly (by publication) or indirectly (by citation).
3. The core articles that influence the international literature.
4. The main topics and themes used in the scientific literature (and its relations).
5. The existing social networks by means of co-occurrence authorship, keywords, and citations among studies).
6. The differences among contributions' approaches and findings through content analysis).

These research questions will aid those researchers who are interested in assurance by providing them with several benefits—such as gaining a better understanding of the relevance of the topic, and identifying the current research lines, and research gaps, to conduct future studies.

This chapter is structured into four sections. The first offers a brief introduction to integrated reporting and the assurance of non-financial information. The second section introduces the bibliometric techniques used in this study. This section explains the results of the analysis. Finally, the study concludes by discussing the study's results, limitations, and implications for future research.

2. Methodology

In this section, once the main research questions have been established, the sample used will be analyzed, as will the statistical technique used for its comparison.

2.1 Description of the sample

2.1.1 Bibliometric and Content Analysis.

A bibliometric analysis is a research technique that uses quantitative and statistical analyses to describe the distribution patterns of research articles with a given topic and within a given time period (Diodato and Gellatly, 2013).

There are two common methodological approaches to quantify information flows. The first approach uses a publication as a whole or its attributes (such as the author's name, keywords, citations, etc.). The second approach consists of identifying the links among objects, their co-occurrences, and their networks (Gupta and Bhattacharya, 2004).

In the first approach, scalar techniques are generally used. Such techniques are based on direct counts (occurrences) of specific bibliographic elements, such as articles (Gupta and Bhattacharya, 2004). They provide the major characteristics of various actors' (individual researchers, countries, fields, etc.) research performance (Verbeek et al., 2002), as well as its evolution and trends over time (Gupta and Bhattacharya, 2004). This approach is generally considered as being a satisfactory measure of scientific production; can be regarded as being only a partial indicator of contributions to knowledge (Martin, 1996).

In the second approach, we have identified and clustered related nodes of keywords to assess the relations (co-occurrences) of particular items—such as the number of times that keywords (co-words), citations (co-citations), and authors (co-authorships) are mentioned together in publications in a particular research field. This approach is concerned mainly about understanding the underlying structure of the similarities and interrelationships between items (Gupta and Bhattacharya, 2004).

A co-word analysis is based on the assumption that a paper's keywords offer an adequate description of its content and of the links between topics. Two keywords co-occurring within the same document denote a link between them (Cambrosio et al., 1993).

A co-citation analysis counts the frequency with which any paper of a given author is co-cited with another in the references of cited documents (Bayer and Smart, 1990). It assumes that the more frequently two authors are cited together, and the more similar their patterns of co-citations are with others, the closer the relationship between them is (White and Griffith, 1981).

Co-authorship is the most recognised expression of intellectual collaboration in scientific research. It implicates the participation of two authors or more in conducting research, which leads to scientific output of a higher quality or of a larger quantity than that achieved by an individual alone (Hudson, 1996).

Finally, Content Analysis is a research methodology used to make valid inferences from data to their context in order to provide knowledge, new insights, the representation of facts, and a practical guide to action (Krippendorff, 1980). A content analysis can be quantitative or qualitative, and it is a systematic and rule-guided method used to study the contents of textual data in order to make sense of it (Mayring, 2014).

In order to obtain an overview of the assurance and integrated reporting literature, we used herein a combination of all these techniques (both scalar and analytical). The use of a bibliometric analysis to evaluate and monitor research performance has become widespread (Tijssen, 1992) and has thus been used.

2.1.2 Data Collection

We conducted a search in the Web of Science (WoS) database. This database is composed of several Citation Indices in its Core Collection: The Science Citation Index Expanded (SCI-EXPANDED); the Social Sciences Citation Index (SSCI); the Arts andHumanities Citation Index (AandHCI); etc. In this work, we used SSCI from 2012 to 2018.

The following search strategy and keywords were performed in the field TOPIC (title, keywords, and abstract): ("Assurance" and "Integrated Reporting"). The search was conducted, and all results retrieved, in one single day: May 12th, 2018. Using this search strategy, a total of 35 documents were retrieved. The researchers carefully read titles and abstracts to verify that all retrieved documents matched the criteria to be included for analysis. Figure 1 provides sample characteristics.

Figure 1. Document types

The search started in 2012 because was the first publication where the terms of the search strategy appear in WoS. Figure 2 shows the complete methodological process.

Figure 2. Methodological process

The ISI Web of Science (WoS) is probably the most important database for bibliometric analyses, which is the reason for choosing it. WoS covers all the publications and corresponding citations from more than 12,000 professional journals, which constitute the core of the international scientific serial literature for many fields (Garfield, 1979; Moed et al., 1985; Tijssen, 1992; Wos, 2018).

Therty-five preliminary articles were retrieved from WoS for the study period. The second constraint was an in-depth study of the titles and abstracts of the 35 papers to detect possible articles which, despite complying with search requirements, did not relate to our study´s aim.

After this procedure, a data set of 35 articles was obtained for the period covering 2012-2018. To analyse this data set, this study used bibliometrics techniques with the Bibexcel software. In addition to displaying the network, Pajek software was used as the means of data analysis and the visualisation tool for our research.

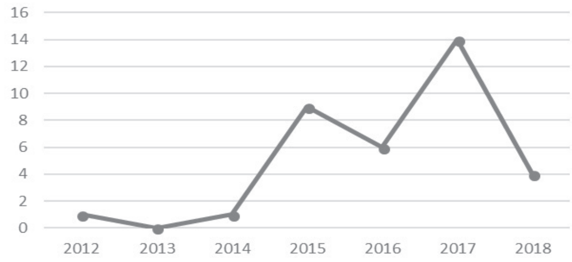
3. Results and Analysis

This section contains the results of the citation and co-citation analyses of the bibliometric references made by the 63 authors in the 35 articles published in the data set covering the 2012-20186 study period.

3.1. Distribution pattern of the literature

We firstly analysed the evolution of the publications in the years from 2012 to the present day. The results are shown in Figure 3:

Figure 3. Publication years



Despite the 7-year time span, the majority of articles have been published recently, according to Figure 3. There are several reasons for the increasing number of studies, but the activity of the IIRC seems to be the most important determinant of its development.

Regarding the languages in which the studies come in, these were published mainly in English (33; 94.3%), although we found one work published in Spanish and another one in Russian.

3.2. Most productive authors, institutions, and journals

Sixty-three different authors participated in 35 studies, of which 53 (84%) published a single article. Table 1 presents the Top-Ten researchers with two published studies or more.

Table 1. Most productive authors, countries, and institutions

Rank	No.	Authors	Institution	Country
1	4	Trucco	Università di Roma	Italy
2	4	Demartini	Università di Pavia	Italy
3	3	Zorio-Grima	Universitat de València	Spain
4	2	Garcia-Benau	Universitat de València	Spain
5	2	Rivera-Arrubla	Universidad del Valle	Colombia
6	2	Simnett	University of New South Wales	Australia
7	2	Ruiz	Universidade de Vigo	Spain
8	2	Fernandez-Feijoo	Universidade de Vigo	Spain
9	2	Maroun	University of the Witwatersrand	South Africa
10	2	Rezaee	University of Memphis	USA

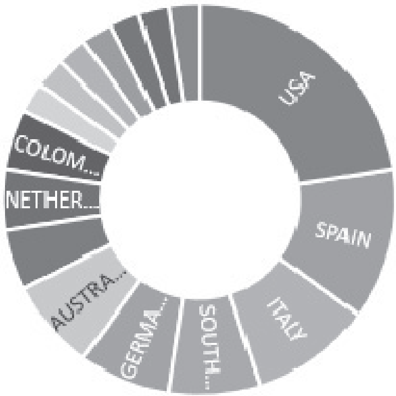
The most productive authors were Trucco and DeMartini (n=4), although it is important to highlight that all these studies are chapters of the same book. Thus, Zorio-Grima (n=3) show a comparatively more consistent production generating three different articles published in three journals).

Twenty-eight different institutions signed the 35 retrieved documents. The most productive institutions were the University of Rome and the University of Pavía (n=4) because of the same reasons explained above. The University of Valencia (n=3) appears third with three articles. So, the most productive authors in the field belong to these top three institutions.

Another way to analyse the core structure of the literature is to analyse where the authors work (based on the authors' institutional addresses). The geographic distribution of the authors' studies was identified so as to investigate whether the degree of impact of this field was local or global.

Figure 4 shows that the authors who investigated the assurance of integrated reporting in the literature were located mainly in developed economies: Europe and North America.

Figure 4. Publication per country



We found that the largest group of researchers was located in the USA (9) and that the second tier would be formed by Spain (5) and Italy (4). After these countries, we can find Australia (3), Germany (3), and South Africa (3). Finally, Colombia, the Netherlands, and Romania are the other countries with more than one work published in field. When analysed by continent, Europe (20) came in first place. The number of countries that researched in this field (11) reflects the prestige and impact of this research topic. After Europe, we can find America in second place (11). However, the most noticeable aspect of the findings was the notable absence of Asian studies in the field (there being only one Malaysian work).

3.3 Most productive sources

The 35 studies appeared in 34 different journals. The journals with two, or more than two, studies are presented in Table 2.

Table 2. Most productive sources (more than 2 publications)

Source Titles	Document type	Records	%
Contributions To Management Science	Book	4	11.429
Integrated Reporting and Audit Quality: An Empirical Analysis in the European Setting	Book	4	11.429
Business Sustainability: Performance, Compliance, Accountability and Integrated Reporting	Book	2	5.714
Journal of Cleaner Production	Journal	2	5.714
Journal of Intellectual Capital	Journal	2	5.714

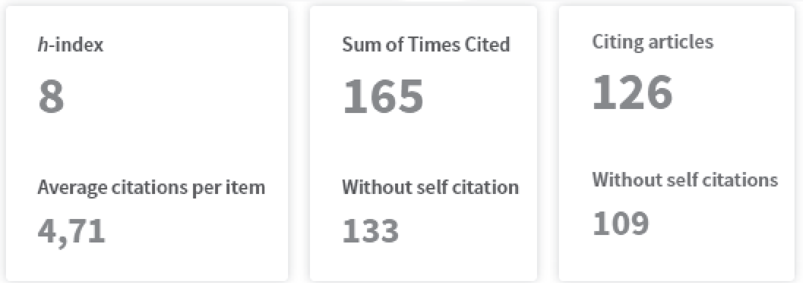
Of these, the most productive are two books, entitled *Contributions to Management Science* (n=4) and *Integrated Reporting and Audit Quality: An Empirical Analysis in the European Setting* (n=4). Among the journals, the *Journal of Cleaner Production* (n=2; SCI JIF 2016= 5.715) and the *Journal of Intellectual Capital* (n=2; Scopus CiteScore 2016= 3.05) are the most relevant in this field.

Except for the journals cited above, the most productive sources are mainly books. It shows that the topic is located in the first phase of its life cycle. However, the major part of the sources is journals (28). That shows the presence of an increasing interest for journals which is quite broad in scope.

3.4 Most frequently cited articles in the international literature

The studies of the sample have been cited 165 times (133 without self-citation) by 126 citing articles. The average of the citation per work is 4.71 (see Figure 5).

Figure 5: Main figures regarding citations



In general, eighteen (51%) of the 35 articles received at least one citation, and eight (23%) were cited more than 7 times.

Table 3 provides a ranking of the ten most cited articles. The most cited article is "Exploring the Strategic Integration of Sustainability Initiatives: Opportunities for Accounting Research" by Ballou et al., published in 2012 in *Accounting Horizons*. It obtained 34 citations.

However, there are two recent articles with more citations on average than the first one. Thus, “Integrated reporting and assurance: Where can research add value?” by Simnett and Higgins (published in 2015 in the *Sustainability Accounting Management and Policy Journal*) is the second-most cited work in the list (29), but it has the highest average (7,25 citations per year). The situation of the third-most cited work (“Stakeholder Engagement, Corporate Social Responsibility, and Integrated Reporting: An Exploratory Study” by Sierra-Garcia et al.) is very similar. It was published in 2015 in *Corporate Social Responsibility and Environmental Management*, and it has 28 citations (7 per year). These three studies are clearly the most remarkable references in the field.

Regarding the evolution of the number of citations, it has been growing since 2013; and in the last year studied, it rocketed forward.

Table 3. Ranking of the most cited articles

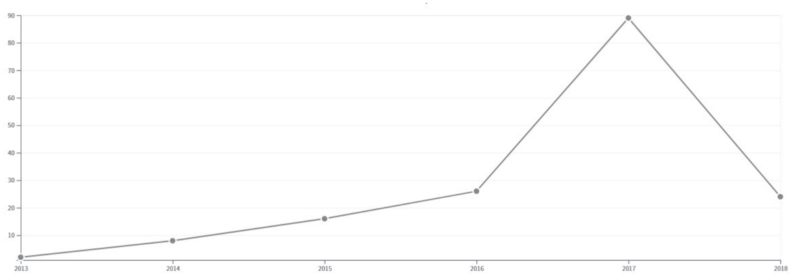
Rank	Title	Authors	Source	Year	Citations	Average
1	Exploring the Strategic Integration of Sustainability Initiatives: Opportunities for Accounting Research	Ballou, Casey, Grenier, and Heitger	*Accounting Horizons*	2012	34	4,86
2	Integrated Reporting and Assurance: Where Can Research Add Value?	Simnett and Higgins	*Sustainability Accounting Management and Policy Journal*	2015	29	7,25
3	Stakeholder Engagement, Corporate Social Responsibility, and Integrated Reporting: An Exploratory Study	Sierra-Garcia, Zorio-Grima, and Garcia-Benau	*Corporate Social Responsibility and Environmental Management*	2015	28	7
4	A Lot of Icing But Little Cake? Taking Integrated Reporting Forward	Perego, Kennedy, and Whiteman	*Journal of Cleaner Production*	2016	14	4,67
5	The Role of Corporate Social Responsibility (CSR) Assurance in Investors' Judgments: When Managerial Pay is Explicitly Tied to CSR Performance	Brown-Liburd and Zamora	*Auditing—A Journal of Practice and Theory*	2015	10	2,5
6	Multilevel Approach to Sustainability Report Assurance Decisions	Fernandez-Feijoo, Romero, and Ruiz	*Australian Accounting Review*	2015	9	2,25
7	Digitally Unified Reporting: How XBRL-Based Real-Time Transparency Helps in Combining Integrated Sustainability Reporting and	Seele	*Journal of Cleaner Production*	2016	8	2,67

	Performance Control					
8	The Business Case for Integrated Reporting: Insights from Leading Practitioners, Regulators, and Academics	Burke and Clark	*Business Horizons*	2016	8	2,67
9	Integrated Reporting: An International Overview	Vaz, Fernandez-Feijoo and Ruiz	*Business Ethics—A European Review*	2016	6	2
10	Is Integrated Reporting Really the Superior Mechanism for the Integration of Ethics Into the Core Business Model? An Empirical Analysis	Maniora	*Journal of Business Ethics*	2017	4	2

3.5. The main topics and themes used in the literature

A keyword analysis can be used in various fields. This method examines the content of scientific studies (Berelson, 1952; Kassarjian, 1977). It is used not only to identify topics and preferred statistical approaches (Helgeson et al., 1984) but also to identify trends (Roznowski, 2003; Yale and Gilly, 1988). In this study, we analysed co-keywords to describe and discover the interactions between different keywords in the core entrepreneurial ecosystems literature. This analysis reduces the keyword space to a set of network graphs that explain the strongest associations among keywords (Coulter et al., 1998). The Co-Keyword analysis used Bibexcel and analysed the co-occurrence of the keywords in the descriptors or the keywords in each article. The data presented in Figure 6 is represented by Pajek, along with the Fruchterman-Reingold 2D algorithm.

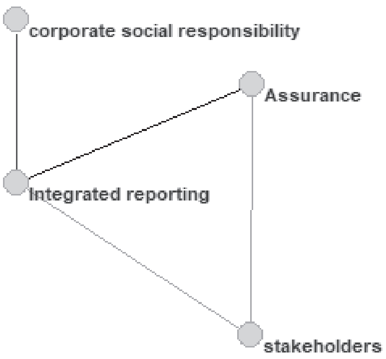
Figure 6: Citations per year



The co-occurrence matrix is formed by the co-occurrence frequency of two keywords in which these two keywords appear together in the descriptors or keyword field of each article. Several keywords are interconnected in this figure, which represents the frequency of keyword occurrences in the core literature. To obtain this result, we utilised the process described by Persson et al. (2009).

Figure 7 illustrates the analysis of the keywords and their interconnections, and depicts a network graph that represents the subjects included in the core entrepreneurial ecosystems literature.

Figure 7. Keywords (excluding the keywords in the search)



Given the objective to ensure the reliability of keyword counts, the database was refined to avoid spelling errors or the inclusion, or not, of the plural of words (so as not to distort the results). The best-studied keywords, in relative weights in the number of studies, were “Corporate Social Responsibility” (6 articles), “sustainability reporting” (4 articles), and “stakeholder” and “sustainability” (3 articles each).

The result of the algorithm produced a short picture, where “Integrated Reporting” is in the center of the graph (with connections with all the main constructs). Only “Assurance” and “Stakeholders” maintain a direct link without “Integrated Reporting”.

Table 4 shows the keyword frequency.

Table 4. Keywords (excluding the keywords in the search strategy)

No.	Keyword
6	Corporate Social Responsibility
4	Sustainability Reporting
3	Stakeholders
3	Sustainability
2	GRI
2	Combined Assurance
2	Disclosure
2	Non-Financial Disclosure
2	XBRL
2	IIRC
2	Integrated Reports
2	Audit

Table 5 shows the co-occurrence of keywords.

Table 5. Keyword co-ocurrence

No.	Keyword 1	Keyword 2
4	Corporate Social Responsibility	Integrated Reporting
2	Assurance	Audit
2	Integrated Reporting	Sustainability Reporting
2	Assurance	Stakeholders
2	Combined Assurance	Integrated reporting
2	Corporate Social responsibility	Sustainability
2	GRI	Integrated Reporting
2	IIRC	Integrated Reporting

2	Integrated Reporting	Stakeholders
2	Integrated Reporting	Non-Financial Disclosure

In the keyword co-ocurrence analysis, it is notable that "Integrated Reporting" appears the major part of the times linked to "Corporate Social Responsibility". Other keywords bound together in the literature with the "Integrated Reporting" keyword were "Sustainability Reporting", "Combined Assurance", GRI", "IIRC", "Stakeholders", or "Non-Financial Disclosure". On the other hand, "Assurance" is linked to "Audit" or "Stakeholders".

3.6. Content analysis

About half the studies use a theoretical approach, mainly by means of a literature review or a documentary analysis (see Table 6).

Table 6. Study type and methodology

Percent	Study Type and Methodology
46.66%	Theoretical study
53.33%	Empirical study

Among the empirical studies, the qualitative approach is the most general, mainly using techniques like "Content Analysis" or "Interviews".

On the other hand, quantitative studies use a wide range of techniques—ranging from descriptive statistics to Factor Analysis, Multilevel Analysis, or Logistics regressions.

It is important to state that despite assurance literature on integrated reporting is undergoing development, the studies found in it are manly empirical and qualitative see Table 6 above and Table 7 below).

Table 7. Analysis approach for the empirical studies

%	Approach
50.00	Qualitative approach
43.75	Quantitative approach
6.25	Both

4. Conclusions

The current financial reporting model is in crisis both because it is insufficient and because it does not reflect a company's performance and value. That is why increasing interest in the assurance of integrated reports is being shown in the academic literature. However, the results show a field which, in terms of its life cycle, is yet still in its "infancy", because we did not find a vast amount of literature on the topic.

These facts are closely linked to the first objective of our chapter—that of identifying the distribution patterns of the papers on this topic. The reasons that explain the increasing number of studies about the assurance of integrated reporting perhaps lie in the activities of the IIRC. These programmes have provided a wide range of services and experiences.

However, despite the significant number of countries that have researched in this field, academic debate on assurance of Integrated Reporting is located mainly in Europe and Anglo-Saxon countries (the USA, Australia, South Africa, and England). As a result, the most relevant authors belong to these areas.

In general, the assurance literature on Integrated Reporting has an increasing impact. Nowadays, 51% of the studies have received at least one citation, and 23% of them have received more than 7 citations.

The number and type of sources that have published studies in the field denotes the vitality of the subject matter, although the most productive sources so far have mainly been books. The topic is still in its infancy in terms of research. However, some of the most prestigious journals in business and management categories (such as the *Journal of Cleaner Production*) have published papers on the topic of the assurance of Integrated Reporting.

On the other hand, with regard to the core articles that influence the international literature, we identify the most relevant studies in the field: (1) "Exploring the Strategic Integration of Sustainability Initiatives: Opportunities for Accounting Research" by Ballou et al. (*Accounting Horizons*, 2012); (2) "Integrated Reporting and Assurance: Where Can Research Add Value?" by Simnett and Higgins (*Sustainability Accounting Management and Policy Journal,* 2015) and "Stakeholder Engagement, Corporate Social Responsibility, and Integrated Reporting: An Exploratory

Study" by Sierra-Garcia et al. (*Corporate Social Responsibility and Environmental Management*, 2015).

In the assurance and integrated reporting literature, the most popular topics and themes are Corporate Social Responsibility, Sustainability Reporting, Stakeholders, and Sustainability.

Regarding the type of study, we find that they were empirical in nature and that they mainly used a qualitative approach (gathering information mainly through content analysis and interviews).

Finally, this study is not without its limitations in the search, sample selection, and data analysis. One clear limitation is the possible non-inclusion of one or more of the key articles considered which was not due to a lack of rigor in the methodology.

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