



UNIVERSITY OF MESSINA  
DEPARTMENT OF ECONOMICS  
PH. D. COURSE IN ECONOMICS, STATISTICS AND MANAGEMENT  
XXXII CYCLE

---

**CORPORATE GOVERNANCE, SUSTAINABILITY AND  
ACCOUNTABILITY: A WIN-WIN PARADIGM FOR  
SUSTAINABLE DEVELOPMENT**

Candidate

VALERIA NACITI

SUPERVISORS:

Prof. FABRIZIO CESARONI

Prof.ssa LUISA PULEJO

---

A. Y. 2018-2019

*There is a great need for the introduction of new values in our society,  
where bigger is not necessarily better,  
where slower can be faster,  
and where less can be more.*

*– GAYLORD NELSON*



# INDEX

---

## *Acknowledgments*

### **CHAPTER 1: INTRODUCTION ..... 7**

<b>1.1 THEORETICAL FRAMEWORK .....</b>	<b>7</b>
<b>1.2 MOTIVATIONS AND OBJECTIVES OF THE RESEARCH.....</b>	<b>10</b>
<b>1.3 STRUCTURE OF THE THESIS.....</b>	<b>12</b>
<b>1.4 ABSTRACTS.....</b>	<b>13</b>
<b>1.5 OVERALL CONTRIBUTIONS DURING THE PH. D.....</b>	<b>16</b>

### **SECTION 1: QUALITATIVE ANALYSIS ..... 19**

### **CHAPTER 2: CORPORATE GOVERNANCE AND SUSTAINABILITY: A REVIEW OF THE LITERATURE 20**

<b>2.1 INTRODUCTION .....</b>	<b>20</b>
<b>2.2 METHODOLOGY.....</b>	<b>22</b>
2.2.1 CRITERIA USED FOR EXTRACTING THE LITERATURE.....	22
2.2.2 ANALYTICAL METHODS USED FOR CLUSTERING .....	22
<b>2.3 RESULTS .....</b>	<b>25</b>
2.3.1 OVERVIEW OF THE SAMPLED LITERATURE.....	25
2.3.2 CLUSTER ANALYSIS RESULTS.....	26
<b>2.4 A BRIEF REVIEW OF THE LITERATURE .....</b>	<b>30</b>
2.4.1 CORPORATE SOCIAL RESPONSIBILITY.....	30
2.4.2 CORPORATE GOVERNANCE STRATEGY.....	32
2.4.3 BOARD COMPOSITION .....	34
<b>2.5 DISCUSSION AND CONCLUSION .....</b>	<b>35</b>

### **CHAPTER 3: SUSTAINABILITY REPORTING AS A TOOL TO IMPROVE TRANSPARENCY TOWARDS STAKEHOLDERS. EXPLORING REPORTING PRACTICES IN THEIMAGING INDUSTRY..... 100**

<b>3.1 INTRODUCTION .....</b>	<b>100</b>
<b>3.2 CORPORATE SOCIAL RESPONSIBILITY AND SUSTAINABILITY REPORTING .....</b>	<b>102</b>
<b>3.3 CORPORATE REPUTATION: AN ADDITIONAL INTANGIBLE ASSET .....</b>	<b>104</b>
<b>3.4 SUSTAINABILITY REPORTING AND LCA .....</b>	<b>109</b>
<b>3.5 DATA AND METHODOLOGY.....</b>	<b>112</b>
<b>3.6 RESULTS .....</b>	<b>112</b>
<b>3.7 CONCLUSION .....</b>	<b>117</b>

**SECTION 2: QUANTITATIVE ANALYSIS ..... 125**

**CHAPTER 4: CORPORATE GOVERNANCE AND BOARD OF DIRECTORS: THE EFFECT OF A BOARD COMPOSITION ON FIRM SUSTAINABILITY PERFORMANCE..... 126**

**4.1 INTRODUCTION..... 126**  
**4.2 THEORY AND HYPOTHESES DEVELOPMENT ..... 129**  
4.2.1 CORPORATE GOVERNANCE AND SUSTAINABILITY .....129  
4.2.2 BOARD OF DIRECTORS AND SUSTAINABILITY PERFORMANCE ..... 131  
**4.3. DATA AND METHODOLOGY ..... 136**  
4.3.1 SAMPLE AND DATA ..... 136  
4.3.2 MEASUREMENT OF VARIABLES ..... 138  
4.3.3 METHODOLOGY ..... 140  
**4.4 RESULTS ..... 141**  
4.4.1 DESCRIPTIVE RESULTS ..... 141  
4.4.3 ROBUSTNESS CHECK ..... 144  
**4.5 CONCLUSION AND DISCUSSION ..... 146**

**CHAPTER 5: CORPORATE GOVERNANCE PRACTICES AND FIRMS’ GREENHOUSE GAS EMISSIONS ..... 156**

**5.1 INTRODUCTION ..... 156**  
**5.2 CLIMATE CHANGE AND PRIVATE SECTOR ..... 157**  
**5.3 EFFECTIVENESS OF CORPORATE GOVERNANCE PRACTICES IN ADDRESSING CLIMATE CHANGE ..... 160**  
5.3.1 INCENTIVES..... 161  
5.3.2 PUBLIC POLICY ..... 162  
5.3.3 DISCLOSURE ..... 163  
5.3.4 BOARD OF DIRECTORS ..... 164  
**5.4 RESEARCH DESIGN ..... 164**  
**5.5 RESULTS ..... 168**  
5.5.1 DESCRIPTIVE STATISTICS..... 168  
5.5.2 MULTIVARIATE ANALYSIS ..... 170  
5.5.3 ROBUSTNESS CHECK ..... 171  
**5.6 CONCLUSIONS AND DISCUSSION ..... 174**

## *Acknowledgments*

I thank Professor Luisa Pulejo for having followed me in these years without ever letting me lack her support and her valuable advice, helping me and accompanying me in the realization of the thesis. Her overall view and her capacity to always think out of the box led me to the process of learning. She was the first who believed in me and initiated in me the interest in the field of corporate social responsibility.

I thank Professor Fabrizio Cesaroni that in this work had a fundamental role. He accompanied me step by step on this journey, teaching me and clarifying doubts and uncertainties whenever I needed them. Thanks, because in moments of difficulty and despair he spurred and encouraged me. He allowed me, with this thesis, to work alongside him and made me feel proud and proud of this work every day.

A special thanks to Professor Sangwon Suh, who gave me the opportunity to spend almost a year at the Bren School of Environmental Science and Management for a research visiting. He welcomed me, making me feel immediately an integral part of his research group. A sincere and profound thanks for showing me and passing on his passion and dedication to this wonderful job, making me understand even more that this is my way.

To my parents, who are my point of reference and who have me emotionally supported and that allowed me to walk and finish this journey.

Thanks to my father who, before every exam, conference, submission he always told me “Good luck and don’t worry!” And on hearing those words I always answered with a smile “thank you, don’t worry I will be okay”, but I wasn't okay!

Thanks to my best friend, “my mom”: my most trusted councilor and my point of reference. She always supported me in dealing with every difficulty, she advised me in the most difficult choices, she wiped away my tears during the defeats, she spurred me on to give my best, always!

To my little but big brother, who despite being my “little one” is a great man. Always ready to listen to me and give me advice. To seek at every opportunity to raise my self-esteem, teaching me to walk every day with my head held high without being afraid of the judgments of others.

Thanks to my flat mate Catarina, the best companion of adventures I've ever had. She has always been present without being either intrusive or inappropriate and who has endured and appreciated me for how I am. A sincere and loyal friend who made me rediscover the beauty of having a person who I can trust without “reservations”.

Thanks to my four colleagues/friends Valeria, Sumit, Annunziata and Simona with whom I spent these wonderful years of doctorate.

Thank you because without all of you I would never have reached this difficult, long and tortuous path.

# CHAPTER 1: INTRODUCTION

---

## 1.1 THEORETICAL FRAMEWORK

Corporate Governance (CG) topic has long interested and continues to attract the attention of scholars belonging to different disciplinary fields.

In a context of globalization and constantly changing, effective governance becomes a strategic imperative for companies and, in this perspective, the analysis of the characteristics that distinguish it is included. In fact, on the one hand, CG is one of the fundamental drivers to the competitiveness of companies through the link that is established between governance and performance, on the other it affects the accountability of companies, since it is from the governance model that the breadth of responsibilities attributed to corporate decision makers and the effectiveness of control depend to which they are subjected. Corporate governance is a complex and multidisciplinary subject.

It is no coincidence that in the literature there are different visions and definitions of corporate governance, depending on the privileged aspects. There are studies that attribute to corporate governance the purpose of exclusively protecting the interests of shareholders (Stapledon and Stapledon 1997, Gilson, 2005) and others according to which, instead, the corporate governance activity must contemplate the interests of all stakeholders (Green, 1993; Lenseen et al., 2010;). A common element of many of the studies on the subject, however, is the search for some relationship between corporate governance and company performance.

A large part of the economic literature, in fact, has compared and continues to compare the different possible arrangements, in an analysis between the governance mechanisms and the effects on the performance of companies (Core et al, 1999; Brown and Caylor, 2004; Bhagat and Bolton, 2008).

Recently, the idea has come forward that sustainability must be considered as another important performance of the company as well as firm financial performance (Artiach et al., 2010; Scahaltegger et al., 2006) The term sustainability derives from the verb to sustain and



implies the process aimed at maintaining a certain state over time (Bologna, 2008). According to a more recent interpretation, the concept of corporate sustainability includes three dimensions, the economic, the social, and the environmental dimensions (WSSD, 2002). In literature, it is possible to recognize a growing consensus about a notion of corporate sustainability based on the idea of including three dimensions, the economic, the social and the environmental in strategic management (Benn et al.,2014). The basic idea is that the three pillars are linked as to influence each other.

The idea of corporate sustainability was born in the literature on business ethics since the mid-nineties, as a consequence of the common belief that the sustainable development survey should also involve companies.

The social, environmental, and ethical dimensions of the business sector have become relevant in the twenty-first century. The dominant aspect of profit is reduced, and the need for enrichment is widened from a social, cultural, and environmental point of view. The law is imperfect and insufficient: even when it is excellent, it is static by nature and therefore hardly meets the current and above all future needs of citizens (UN, 2002). It is precisely in this context that ethics drives companies to one proactive attitude: overcoming compliance with applicable laws and making more responsible choices.

Since the 1987 Brundtland Report, and successive UN Conferences on Environment and Development at Rio de Janeiro in 1992, companies have been implicated in debates about sustainable development policy (Kolk, 2005).

In the early 1990s there was an increase in interest in sustainable entrepreneurship, given the increase in business opportunities offered by alternative lifestyles, new environmental legislation and competitive advantages deriving from being green (Marrewijk and Werre, 2003). During this period, in particular, green start-ups were encouraged to create more sustainable business models, demonstrating greater attention to environmental issues (Larson, 2000). Sustainability is in fact a young principle that has had, in the last period, some external pushes for the diffusion in the company, but it is, in any case, still far from a widespread management culture.

In the year 2000, companies from all over the world were invited to participate in the United Nations Global Compact. They agreed to work with the UN to help achieve the 2015

Millennium Development Goals (MDGs). The link between business and the MDGs is based on the fact that business produce wealth. They can count on the increase of the GDP, and create new jobs and services that improve the conditions of life and health of the community. In 2012, the United Nations General Assembly decided to organize the United Nations Conference on Sustainable Development (UNCSD), also called Rio + 20. It ended with a mainly programmatic document entitled "The Future We Want", which launches numerous international and national processes on topics considered crucial for the future of the Planet. Primarily, these include the processes of defining new Global Sustainable Development Goals, and the creation of a high-level political forum on Sustainable Development. The member states attending Rio started to come to a consensus regarding the definition of these new sustainable development goals. They were no longer seen as a possible competitor of the MDGs, but rather as a way to contextually integrate them in universal applications, building a new legacy together (UN, 2012). In 2014, the UN Member States, following a decision made at the Rio+20 Conference, proposed a set of Sustainable Development Goals that will supersede the MDGs (UN, 2014).

What differentiates the SDGs from the MDGs is the importance of their environmental and social dimensions of sustainable and economic development with a strong focus on inclusive growth. Moreover, the SDGs are addressed to all States, regardless of the level of development within them. MDG's differ in that they are exclusively for developing countries.

The new goals for 2030, although addressed to different categories of players - governments and institutions, civil society, and non-profit organizations - are specifically intended to be a boost for the business world. The SDGs recognize that companies play a key and decisive role as they are the main motivators of sustainable and economic development. A strongly proactive approach to sustainable development is required for the next 15 years through the development of new models of responsible business. Pursuing sustainable development goals will certainly benefit the private sector, as companies would have new business opportunities, as well as the ability to strengthen relationships with stakeholders.

One challenge that most companies face is linking new development to core business. Building on already solid foundations, while directing each new project towards sustainable

development is crucial in this phase. In the near future, the private sector will become an ever-growing part of global development, which is why it is crucial that companies are progressively involved with international agencies to develop a comprehensive and shared vision on how to monitor and coordinate all the stakeholders' needs.

The SDGs allow companies to contribute to the roadmap for sustainable development, impacting the socio-economic context from which they depend. The SDGs require business to strategically commit to developing products, services, and economic models for the benefit of society. If the objectives are set in the strategic level, the emphasis on progress and sustainable contribution are convincingly justified for a company.

Companies from all over the world are trying to implement sustainability strategies as a driver battleground for a competitive advantage (Porter and Reinhardt, 2007). Therefore, sustainability variables assume a strategic value in the management of the company, both for the need to comply with the regulatory system and for the competitive advantage that can derive from an eco-efficient management. CG is crucial to the oversight and policy choices. It consists of a set of rules and best practices aimed at the correct balancing of relations between the various stakeholders, which, by defining the functions and responsibilities of the top management, allows the company to make decisions aimed at creating value, appreciated by the market. The quality of the governance system has become a crucial aspect to ensure the sustainability of results and business continuity.

The challenge of the management is to guarantee primary stakeholders the achievement of their objectives, while for other stakeholders it is sufficient to obtain a good level of interests' satisfaction. A win-win result is reached, in which all the subjects involved achieve satisfactions through the realization of their own interests (Porter and Reinhardt, 2007). Undoubtedly, having to meet the expectations underlying stakeholder management presupposes much more complex and expensive decision making processes.

## **1.2 MOTIVATIONS AND OBJECTIVES OF THE RESEARCH**

The innovative assumption of the present work is expressed in the proposal of a different interpretative key, even if parallel and complementary to the previous ones used: to set up,

describe and analyze the performances by aggregating them to the common matrix of responsibility, it allows to retrace and connote the data reprocessing giving it a new significance in terms of corporate social responsibility (CSR).

In fact, the social responsibility is not functional to an, in retrospect, evaluation of the effects that the business activity, considered as an open system and a center of exchange of multiple and changing relations of interest, produces in the context of reference. Nor is social responsibility a threshold of tolerance or a mere qualitative barrier imposed in the evaluation of results or strategic choices.

In this discussion, CSR constitutes a proactive starting point, at the same time a tool for investigating reality and the main glue to which operators and actions are linked in the sequential time frames and in the different experiences of corporate architecture that reflect the respective socio-cultural models of the geographical areas examined.

The interest on the topic of gender diversity on a board of directors has contributed to the identification of the key point of the work itself, namely the concept of role and how the variations and implications of the same can invalidate the complex system of decisions.

It is precisely starting from the superficial sociological definition of convergence of obligations, behavioral patterns and attitudes that connote the "role", that we begin to glimpse the vector of transposition from human to social of what constitutes the origin and nature of an action which, in the case of human cases, as in programmatic activities, is implemented through a decision.

Where, the role succeeds in influencing the decision and, on the other hand, the decision manages to decline its effects in the various company areas that are involved and chained in the ordinary course of management, social responsibility begins to become the protagonist of a complex scene and, in the best cases, it can go on to earn directing.

Studying the composition of the board of directors serves to outline how the mixing of certain qualitative requisites, which do not end, therefore, are able to humanize the company system, proposing on large scenarios, dynamics more banally associated with small environments.

Through this process of humanization, the role, increasingly in company contexts combined with its intrinsic sense of power, is also analyzed with regard to the other side of the coin, in

the concept of responsibility. How much can the same role affect the perception of responsibility in decisions and evaluations? As the person and the groups of people, the first centers of the expression of the will in the individual and in the aggregation, can strengthen the energy of their strategies through sensitivity to responsibility. How much sustainability can be pursued through an awareness of the social advantage that can derive from the attention of the individual, in a philanthropic and not mildly altruistic or opportunistic sense of collaboration.

One of the objectives of the work is, therefore, to succeed in making the question on how the ethics in the role of the individual that becomes multitude succeed in contributing to the methodical accumulation of functional knowledge to establish a high-performance system as worthy of note.

Moreover, this work wants to understand how and to what extent corporate governance mechanisms manage to influence the ability of companies to produce value and to achieve certain results in terms of overall performance, fundamental to understanding and addressing further changes and developments.

### **1.3 STRUCTURE OF THE THESIS**

The thesis is composed by two sections and five chapters. Section 1 is dedicated to qualitative analysis and includes the second and third chapters; section 2 refers to empirical analysis and includes the fourth and fifth chapters.

The chapters are developed as follows:

- The first chapter is the present introduction in which I gave a general overview of the dissertation explaining the aim of the research, the context in which is conducted and the contributions.
- The second chapter is a literature review paper in which I set the theoretical framework of the entire dissertation, by going through the literature on “corporate governance” and “sustainability”. I investigated the publications issued in accordance with these two keywords, by performing a co-citation and a text meaning network analysis.

- The third chapter presents a multiple case study on the main competitors of the imaging industry: Canon, Epson, Nikon and Sony. The purpose of the study is to contribute to strengthening the understanding, promotion discussion on the current state of the art of sustainability reports and to verify the development of the tools of corporate sustainability management to assess the environmental and social impact.
- The fourth chapter presents a qualitative analysis on the effect of specific characteristics of a board of director on firm's sustainability performance. Specifically, I analyzed if independent directors, gender and cultural diversity on board, and separation between chairperson and CEO roles influence positively firm's social and environmental performance.
- In the fifth chapter, I investigate the relationship between corporate governance practices on climate change and the amount of greenhouse gas emissions. In particular, four specific practices for the analysis were taken into consideration: management incentive, engaging in public policy on climate change, placing climate change-related responsibilities to executives and stakeholder's engagement.

#### 1.4 ABSTRACTS

Here following the abstracts of the papers:

- **Paper 1** (Chapter 2): Over the last two decades, the literature on corporate governance and sustainability has grown substantially, while the evolution of the literature in terms of the co-citation and keyword networks has not been assessed. In this study, we extracted 468 unique items published between 1999 and 2019 and analyzed them employing three visualization techniques of clustering analysis, namely keyword network clustering, co-citation network clustering, and overlay visualization. In addition, we provided a brief review of the intellectual history for each of the major keyword network clusters identified. We found that the number of published items fall under our search criteria have been generally following an upward trend, while surged at a number of points including 2014. We identified three keyword clusters, which we named as (1) corporate social responsibility and

reporting, (2) corporate governance strategies, and (3) board composition. The weighted average years that major keywords appear in the literature published over the last two decades fall into the four years of window between 2014 and 2017 due to the massive increase in the number of publications on corporate governance and sustainability in recent years. From the chronological analysis of keywords, we observed a transition from more abstract concepts such as ‘society,’ ‘ethics,’ and ‘responsibility’ to more tangible and actionable terms such as ‘female director,’ ‘board size,’ and ‘independent director.’ Our review suggests that corporate governance and sustainability literature is evolving from a more conceptual studies to more strategic and practical discussions, while its theoretical roots can be traced back to a number of foundational studies in stakeholder theory including Freeman (1984), Di Maggio (1983), Carroll (1979), and Jensen (1976).

Keywords: Corporate Governance, Stainability, Board of Directors, Sustainability Reporting, Clustering analysis.

- **Paper 2** (Chapter 3): The complexity that characterizes the international competitive system has enhanced the call for transparent reporting and the dissemination of information concerning social and environmental impact being implemented by firm. Recently, Life Cycle Assessment (LCA) methodology was developed in order to respond to the specific needs to measure the environmental impact of firm’s products and processes in terms of resources consumption and pollution along their entire life cycle. This study can contribute to strengthening of the understanding, to promote discussion on the current state of the art of sustainability reports and to verify the development of the tools of corporate sustainability management to assess the environmental and social impact, in particular in the imaging industry. The paper proceeds as follows. First, it examines the literature on the sustainability reporting, corporate reputation as an intangible asset. Second, after the literature review it provides a descriptive and critical knowledge linking LCA, corporate reputation and sustainability reporting. Finally, the attention will be focused on the analysis of Canon, Epson, Nikon and Sony’s sustainability reports in order to better understand if sustainability reporting tools based on LCA approach are useful to improve

transparency towards stakeholders and if these tools are suitable to generate value and improve corporate reputation. Conclusions and implications for further research will end the paper.

Keywords: Corporate Sustainability, Sustainability Reporting, Stakeholder Involvement, Corporate Reputation, Life Cycle Assessment

- **Paper 3** (Chapter 4): Sustainable Development Goals are setting a new global target on sustainability, for which corporates are expected to play an important role through sustainable practices. One of the approaches to engaging corporate to sustainable practices focuses on the board composition. The literature shows that the composition of board influences corporate's financial performance. However, the relationships between the composition of boards and corporate's sustainability practices are not empirically examined. This study empirically analyzes whether the composition of the Board of Directors affects firms' sustainability performance. Specifically, the analysis focuses on key corporate governance characteristics – namely board diversity, board independence and CEO duality – and seeks to assess the effect they have on social and environmental sustainability components. Hypotheses are developed based on the agency theory and stakeholder theory. Using a system generalized method of moment two-step estimator, with data from Sustainalytics and Compustat databases for 362 firms in 46 different countries, we find that firms with more diversity on the board and a separation between chair and CEO roles show higher sustainability performance. Moreover, our findings reveal that a higher number of independent directors leads to lower sustainability performance. This study contributes to the literature on corporate governance and the firm's performance by demonstrating that the composition of the board of directors affects the firm's sustainability performance.

Keywords: Sustainable Development Goals, Corporate Social Responsibility, Corporate Governance, Board of Directors, Sustainability Performance.

- **Paper 4** (Chapter 5): Climate change is widely recognized as one of the most important challenges of our time. In the effort to mitigate their impacts to climate change, some corporates are implementing new governance practices, such as



instituting managerial incentives, engaging in public policy on climate change, and placing climate change-related responsibilities to executives. However, literature offers limited evidence on the relationship between firm's governance practices and the changes in greenhouse gas (GHG) emissions. Here, we examine the relationship using Scope 1 and Scope 2 GHG emissions data from 1,612 firms that covers 11 industries and 56 countries between 2011 and 2015. Our results show that implementing three governance practices, including devising managerial incentives, stakeholder engagement, and placing the climate change-related responsibilities to executives, are related to firms' GHG. However, our analysis also shows that the firms in the U.S. and those in the rest of the world exhibit different patterns indicating the potential influence from political institutions. Our results offer an evidence that implementing new corporate governance practices for climate mitigation help reduce firms' GHG emissions.

Keywords: Corporate Governance, Climate Change, Corporate Sustainability, GHG emissions.

### **1.5 OVERALL CONTRIBUTIONS DURING THE PH. D.**

- Naciti, V. (2019). Corporate governance and board of directors: The effect of a board composition on firm sustainability performance. *Journal of Cleaner Production*, 237, 117727. <https://doi.org/10.1016/j.jclepro.2019.117727>
- Naciti V., Suh S. (2019), "Does incentives to managers reduce greenhouse gas emissions of an organization? an empirical analysis". 10th International Conference on Industrial Ecology, Beijing. Conference proceedings.
- Naciti V., Cesaroni F., Pulejo L. (2019), "Agenda 2030: Board of Directors and Firm Sustainability Performance". R&D Management Conference, Paris. Conference proceedings.
- Naciti V., Centorrino G. (2019), "Sustainable Voluntary Disclosure and European Emission Trading System: Evidences from Italian Companies" in *Contemporary*

trends and transformations of economies and enterprises. Economic, Social and Legal Aspects, Foundation of the Cracow University of Economics (being published).

- Pulejo L., Naciti V., Rappazzo N. (2018), “The European Directive of disclosure of non-financial information: Italian evidences” in Enterprises and economies in the face of contemporary challenges. Management –Restructuring –Innovation, edited by Marek Dziura, Andrzej Jaki, Tomasz Rojek, Foundation of the Cracow University of Economics, ISBN 978-83-65907-27-1 (printed version), ISBN 978-83-65907-28-8 (pdf on line), [281-289].
- Naciti V., Pulejo L., Rappazzo N. (2017), “Sustainability Reporting as a Tool to Improve Transparency towards Stakeholders. Exploring Reporting Practices in the Imaging Industry”, American Journal of Applied Sciences. ISSN Print: 1546-9239; ISSN Online: 1554-3641; DOI: 10.3844/ajassp.2017.
- Barresi G., Marisca C., Naciti V., Rappazzo N. (2016), “Social Reporting of Large Firms and SME’s in Italy and Poland. A Cross–Country Analysis”, in Centorrino G. (a cura di) Azienda Economia e Territorio. Prospettive di analisi. Aracne Editrice, Canterano (RM). ISBN 978-88-255-0444-6. pp. 27-43.

## **References**

- Artiach, T., Lee, D., Nelson, D., & Walker, J. (2010). The determinants of corporate sustainability performance. *Accounting & Finance*, 50(1), 31-51.
- Benn, S., Edwards, M., & Williams, T. (2014). *Organizational change for corporate sustainability*. Routledge.
- Bhagat, S., & Bolton, B. (2008). Corporate governance and firm performance. *Journal of corporate finance*, 14(3), 257-273.
- Brown, L. D., & Caylor, M. L. (2004). Corporate governance and firm performance. Available at SSRN 586423.
- Bologna, G. (2008). *Manuale della sostenibilità: idee, concetti, nuove discipline capaci di futuro*. Ed. Ambiente.

- Core, J. E., Holthausen, R. W., & Larcker, D. F. (1999). Corporate governance, chief executive officer compensation, and firm performance. *Journal of financial economics*, 51(3), 371-406.
- Gilson, R. J. (2005). Controlling shareholders and corporate governance: Complicating the comparative taxonomy. *Harv. L. Rev.*, 119, 1641.
- Green, R. M. (1993). Shareholders as stakeholders: Changing metaphors of corporate governance. *Wash. & Lee L. Rev.*, 50, 1697.
- Larson, R. (2000). Temporal modification in nominals. *International Roundtable on the Syntax of Tense*, University of Paris VII, France, 3.
- Lenssen, G., Bevan, D., Fontrodona, J., Spitzbeck, H., & Hansen, E. G. (2010). Stakeholder governance: how stakeholders influence corporate decision making. *Corporate Governance: The international journal of business in society*.
- Porter, M. E., & Reinhardt, F. L. (2007). A strategic approach to climate. *Harvard Business Review*, 85(10), 22-+.
- Schaltegger, S., & Wagner, M. (2006). Integrative management of sustainability performance, measurement and reporting. *International Journal of Accounting, Auditing and Performance Evaluation*, 3(1), 1-19.
- Stapledon, G. P., & Stapledon, G. P. (1997). *Institutional shareholders and corporate governance*. Oxford: Oxford University Press.
- Van Marrewijk, M., & Werre, M. (2003). Multiple levels of corporate sustainability. *Journal of Business ethics*, 44(2-3), 107-119.
-

# **SECTION 1: QUALITATIVE ANALYSIS**

---

# **CHAPTER 2: CORPORATE GOVERNANCE AND SUSTAINABILITY: A REVIEW OF THE LITERATURE**

---

## **2.1 INTRODUCTION**

Corporate governance (CG) is a set of rules and organizational structures that are at the base of a correct business operation, understood as compensation for the interests - sometimes divergent - of the stakeholders. CG encompasses different areas in a company, in fact it can refer as much to a series of activities and rules aimed at making a company follow specific codes, as to the processes through which the companies are directed and controlled; the rules include both the laws of the country in which the company operates and the internal company rules.

Therefore, the concept of CG of a company includes all those rules and processes through which decisions are made in a company; it also indicates the path to follow to achieve corporate objectives and consequently the means to achieve them and to measure the results achieved.

Very often, corporate governance is intended as a model designed to protect the investment of shareholders from the "claws" of opportunistic managers. Nevertheless, governance is increasingly applied to a more extensive form of monitoring of corporate activities that includes the impact on society and the environment. This additional aspect often arises in response to stakeholder requests.

Indeed, sustainability is increasingly becoming an integral and decisive part of the strategies of many companies. A clear stance towards the environmental and social impact of one's business implies, for a company, extending this attention to all supply chain partners.

Until a few years ago, there was a widespread belief that attention to environmental impact was part of the company's social responsibility, with purely legal or even ethical and moral implications, while disconnecting possible impacts on the business model and market

expectations. Today, however, companies are aware that there is a growing link between green practices and success. In short, sustainability ceases to be merely environmental and broadens its boundaries to the company's sustainable business model. Several aspects are leading to a growing interest in this issue and to the constant increase in investments. Among these, the sensitivity towards sustainable goals of the companies themselves, the need to adapt to the regulatory evolution, the need to increase the quality of the products and the simultaneous reduction of the costs necessary for their production, the improvement of the image and reputation in the eyes of consumers – increasingly sensitive to environmental changes – and, finally, new market opportunities.

Although corporate governance and sustainability has been researched, less attention has been paid on the evolution of studies that analyze their relationship, since over time both concepts of corporate governance and sustainability have changed.

Accordingly, the objective of the paper is to shed lights on how the literature on corporate governance that accounts for sustainability has evolved. Following the methodology proposed by Eck and Waltman (2017), this paper employs text mining and co-citation-based clustering analysis of the literature over the last two decades from 1999 to 2019. This methodology allows to identify the main theoretical building blocks of the studied field (in this case, CG and sustainability), by revealing the type and intensity of connections existing among them, thus uncovering the different paths that scholars have taken in the past to connect the area of CG with that of sustainability. Based on the results of such an analysis, this paper then proposes possible theoretical extensions that might be explored by future research.

The rest of this paper proceeds as follows. Section 2 explains the criteria used for identifying past publications on corporate governance from Web of Science, and the three analytical methods employed to analyze them. Section 3 presents the results of the analysis. Section 4 briefly reviews the history of the three major clusters identified in the previous section. Finally, section 5 discusses the implications of findings and draws conclusions.

## **2.2 METHODOLOGY**

### **2.2.1 Criteria used for extracting the literature**

We used the Web of Science core collection by Thomson and Reuters and extracted the literature on corporate governance and sustainability. It is a comprehensive interdisciplinary, bibliographic database with article references from journals, books and proceedings. We conduct the research using the tag “TS= (“Corporate Governance” AND “Sustainability”)”, where TS= topic. We restricted to items published between 1999 and 2019. The result is a set of 468 publications.

### **2.2.2 Analytical methods used for clustering**

In this paper, we used the approach proposed by Waltman, Eck and Noyons, (2010), which is referred to as the ‘unified approach’ for mapping and clustering of bibliometric networks. This approach provides a basis for analyzing large bibliometric data and clustering and visualizing them. We used the Vos Viewer software (version 1.6.11), which incorporates the ‘unified approach’, for the analysis and visualization.

#### ***2.2.2.1. Keyword clustering***

One of the main questions of our study is to identify the main topics—in terms of keywords—that were the most frequently appeared in the literature on corporate governance and sustainability, and how they are connected with each other. In other words, the occurrence of a topic in the literature and their co-occurrence structures represent the prominence of the topic and the strengths of the connections between them, respectively. Both the prominence of topics and the strength of their connections can be represented as a network, where the former is depicted by the size of nodes (circle), and the latter by the thickness of the lines between them. In this paper, the prominence of a keyword is simply the frequency of the publications (‘items’ hereafter) that contains the keyword. The strength of the connections between two keywords, say  $i$  and  $j$  is the number of items, each of which contains both keywords in its title, abstract, or the list of keywords. Let us denote the

frequency of co-occurrence for keywords  $i$  and  $j$  as  $c_{ij}$ , which is identical to  $c_{ji}$  (Van Eck & Waltman, 2009).

There are various approaches to clustering networks that can be applied to bibliometric analysis. The ‘unified approach,’ uses both distance and the strength of association between nodes as the basis for clustering, where the following term is minimized:

$$V(x_1, \dots, x_n) = \sum_{i < j} s_{ij} d_{ij}^2 - \sum_{i < j} d_{ij}, \quad (1)$$

with respect to  $x_1, \dots, x_n$ .  $d_{ij}$  denotes the distance between node  $s_{ij}$ , where  $s_{ij}$  represents the strength of association between keywords  $i$  and  $j$  calculated by

$$s_{ij} = \frac{2mc_{ij}}{c_i c_j}. \quad (2)$$

where  $c_i$  is the total number of co-occurrences of keyword  $i$  with all other keywords such that:

$$c_i = \sum_{j \neq i} c_{ij}, \quad (3)$$

whereas  $m$  denotes the total number of co-occurrence for all keywords such that:

$$m = \frac{1}{2} \sum_i c_i \quad (4)$$

Note that  $\frac{1}{2}$  in the equation removes the double counting between  $c_{ij}$  and  $c_{ji}$ .

Finally,  $d_{ij}$  represents:

$$d_{ij} = \begin{cases} 0 & \text{if } x_i = x_j \\ 1/\gamma & \text{if } x_i \neq x_j \end{cases} \quad (5)$$



where  $\gamma$  is the resolution parameter, an arbitrary positive integer, that determines the number of clusters to be obtained (Van Eck & Waltman, 2007; Van Eck et al., 2010)

#### **2.2.2.2 Chronological analysis**

Another key question that our study is aiming to answer is whether the occurrence of the keywords in the literature changed over time. Chronological analysis of keywords shows the weighted average of the years that the items containing a keyword occur. The average year of occurrence for a keyword  $i$  is calculated by:

$$y_i = \frac{\sum_t (n_{it}t)}{\sum_t n_{it}} \quad (6)$$

Where  $n_{it}$  denotes the number of items that keyword  $i$  occurs in year  $t$  ( $t = 1999, 2000, \dots, 2019$ ).

For a mature field with no significant change in the volume of the literature, the average years of keyword occurrence tend to be concentrated toward the midpoint of the temporal window from which the literature is sampled. For the field with an upward trend in the volume of the literature, however, the average year of occurrence has a tendency to be skewed toward more recent years.

#### **2.2.2.3 Co-citation network clustering**

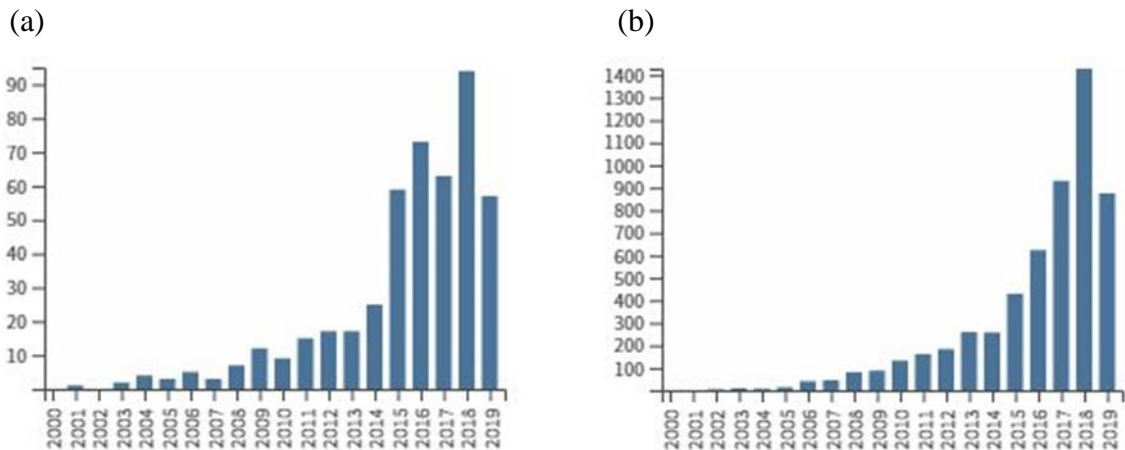
Lastly, we analyzed the most frequently cited items and corresponding journals in the literature on corporate governance and sustainability and their co-occurrence network. The co-citation network is then clustered using the same method explained in section 2.2.1. All the equations used in 2.2.1 apply to co-citation network clustering; the quantity in question here, however, is the citation in the references of the literature instead of keywords.

## 2.3 RESULTS

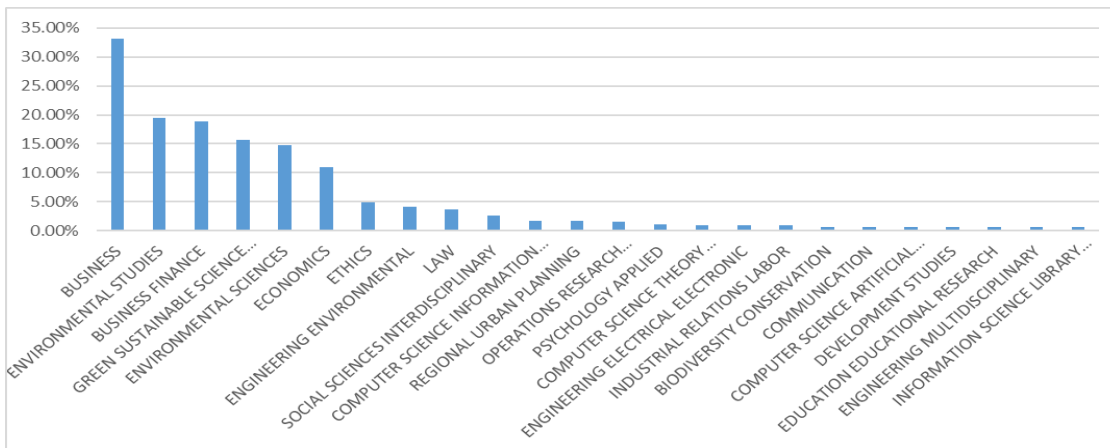
### 2.3.1 Overview of the sampled literature

Using the criteria explained in section 2.1, we obtained a total of 468 items (see appendix), including 375 journal article, and 78 proceedings. About half of these items were published over the last three years. These items have been cited 5,579 times until 2019, with the average citations per items of 11.92 (Figure 1). The Web of Science categories that harbor the majority of these items are ‘Management’ and ‘Business’ categories followed by ‘Environmental Studies’ and ‘Business Finance’ (Figure 2).

**Figure 1. Total number of publications by year (a) and the sum of times that these items were cited by year (b).**



**Figure 2. Web of Science Categories to which the 468 items belong.**

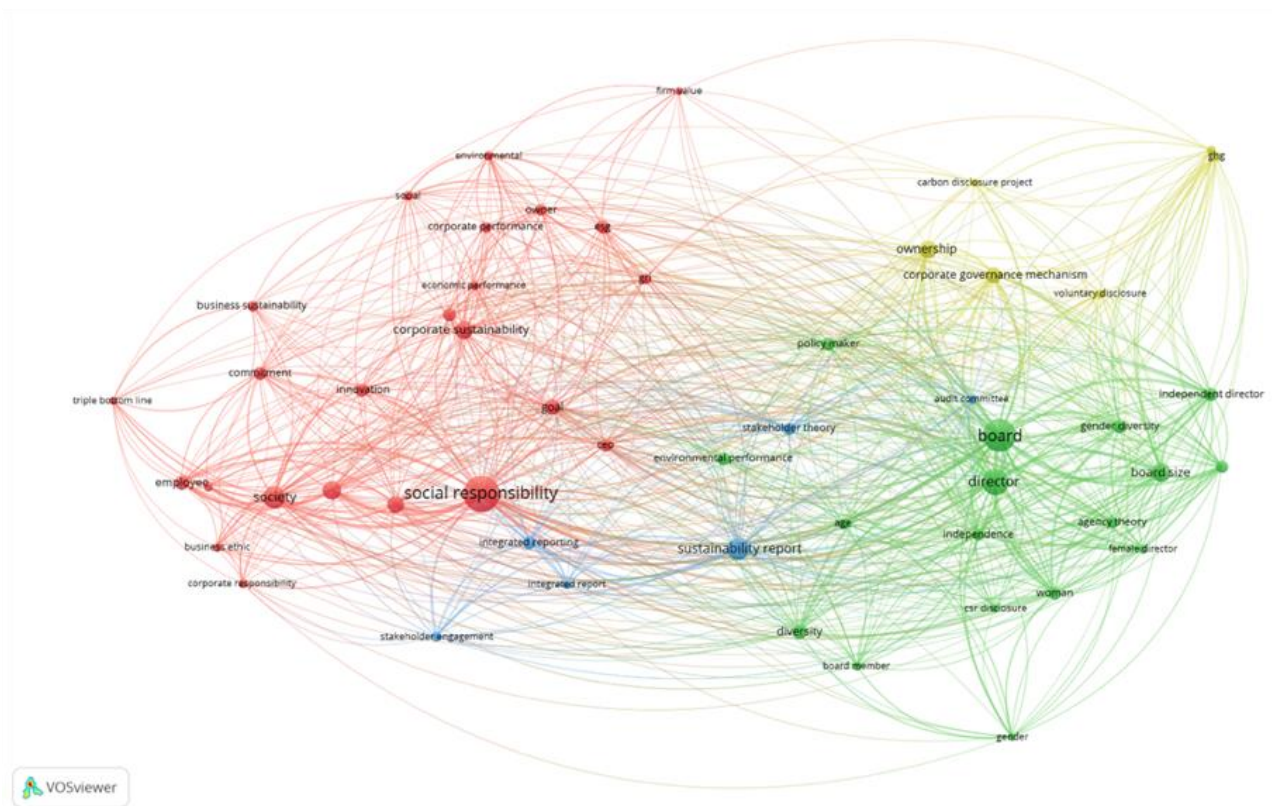


### 2.3.2 Cluster analysis results

Figure 3 shows the results of the keyword co-occurrence network clustering. The figure highlights 48 major keywords selected out of over 400 non-generic words (such as ‘results’ or ‘shows’) appeared at least five times in the titles and the abstracts of the 468 publications extracted from the Web of Science database. The size of the circle represents the times of occurrence and the colors represent to which cluster keywords belong. As shown in Figure 3, the most frequently appeared keywords are ‘Social Responsibility,’ ‘Board,’ and ‘Directors.’

For our clustering analysis, we identified four closely knit clusters that are colored in red, yellow, blue and green in Figure 3. Although these clusters are closely connected with overlapping topics, we named the main themes of these clusters as ‘Corporate Social Responsibility’ (red), ‘Sustainability Reporting’ (blue), ‘Board of Directors’ (green), and ‘Corporate Governance Mechanism’ (yellow). Overall, we observe two main structures in the network, namely ‘Corporate Social Responsibility’ and ‘Board of Directors,’ of which the nodes (keywords) are connected directly and indirectly through ‘Sustainability Reporting’ cluster. The ‘Corporate Governance Mechanism’ cluster is more closely aligned to ‘Board of Directors.’

**Figure 3. Keyword network clustering results**



The next result shows the weighted average year of keyword occurrence among the 468 items (Figure 4). The transition from blue to dark green, light green and yellow represents the average year of keyword occurrence from 2014 to 2017. Due to the substantial increase in the volume of the items published in recent years, the average years of occurrence lies within the four-year window, 2014-2017. The transition within this window, nevertheless, reflects the evolution of topics in the corporate governance and sustainability literature over the last two decades.

Overall, we observe that the main keywords of the literature evolved from ‘Society,’ ‘Innovation,’ and ‘Commitment’ to ‘Social Responsibility,’ ‘Sustainability Report,’ ‘Director,’ ‘Board,’ and to ‘Board Size,’ ‘Independent Director,’ and ‘Female Director’ (Figure 4), thus revealing how the focus of attention has shifted from more general and broader research questions (such as the impact of firms on society) to more specific aspects

related to the inner mechanisms that explain and drive firms' sustainable behavior (such as the role played by the composition of board of directors).

**Figure 4. Overlay visualization for chronological analysis of keywords**

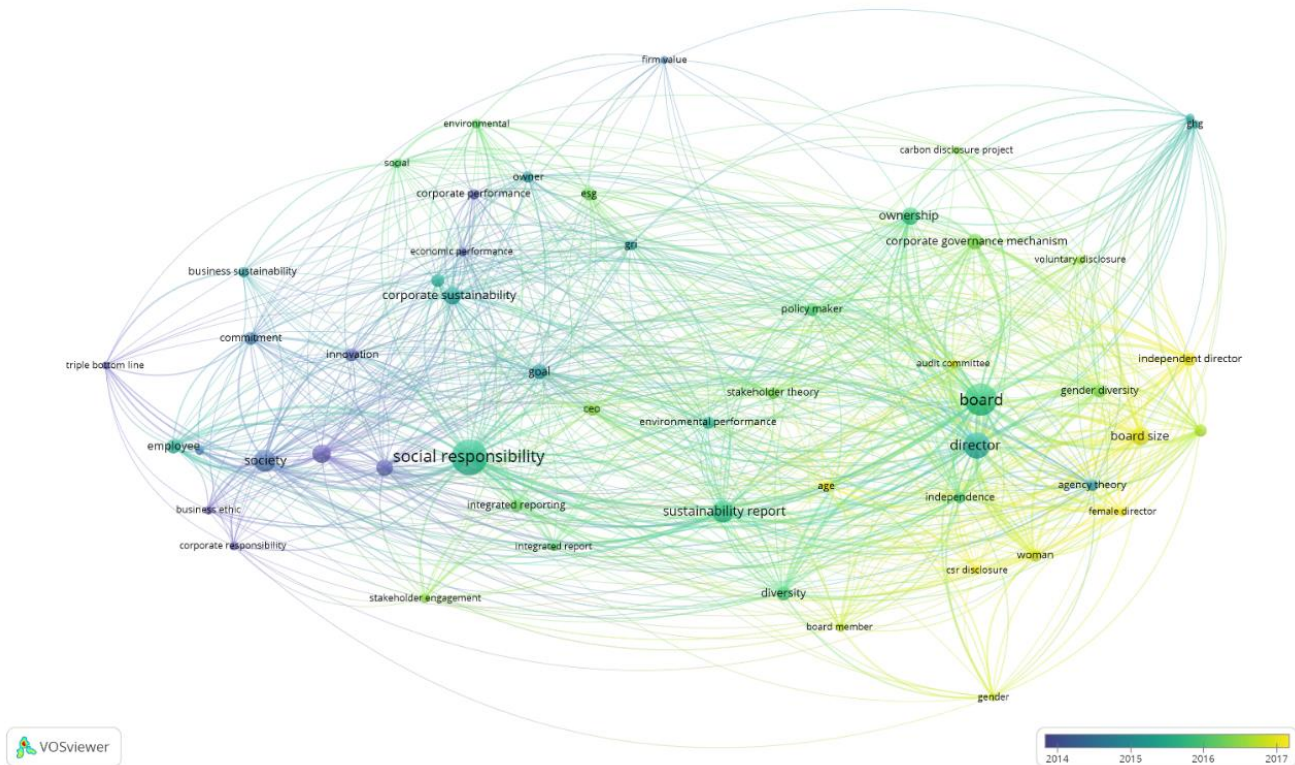


Figure 5 shows the clustering results of co-citations network. As highlighted in figure 5, we distinguish three clusters within the co-citation network. Overall, Jensen (1976) is the most frequently cited item in the corporate governance and sustainability literature followed by Freeman (1984). The green cluster, which includes most notably Jensen (1976), and the red cluster, which includes most notably Freeman (1984), form the two largest clusters, whereas the blue cluster that contains Clarkson et al. (2008) is more closely connected to the green cluster.

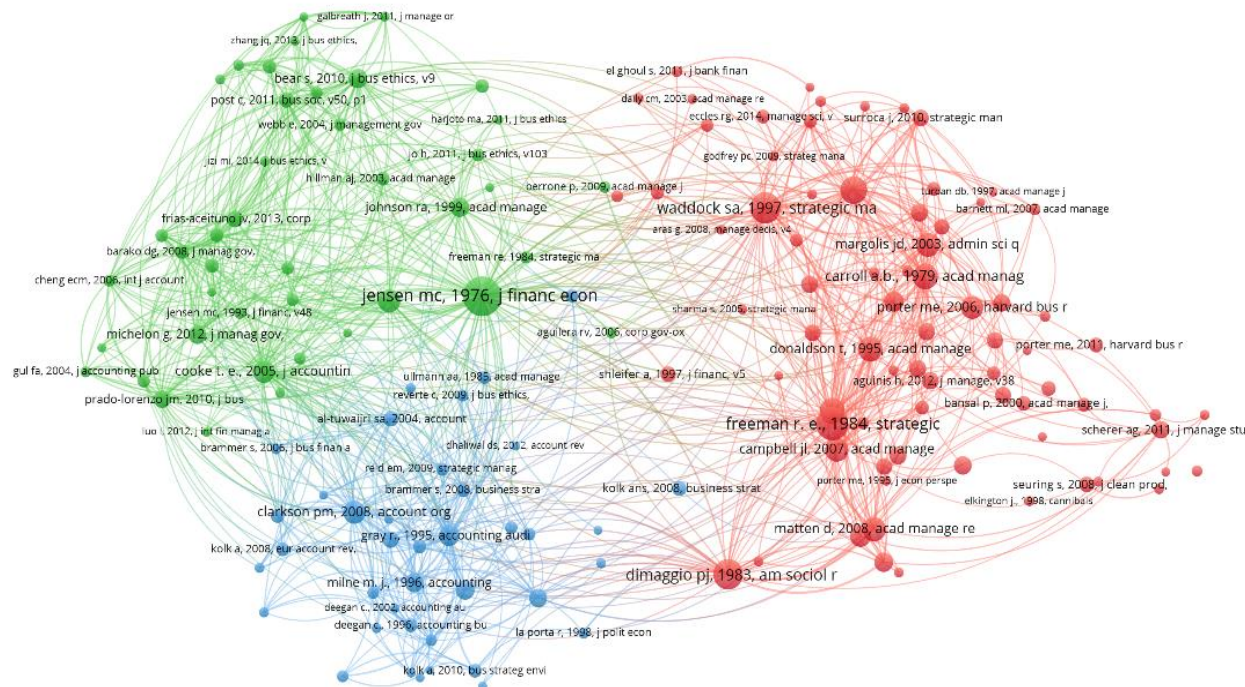


Each of these clusters cover diverse topics within corporate governance and sustainability literature, and therefore identifying the main subject of each is a challenge. However, we see that the red cluster centered around the three studies: Freeman (1984), Waddock and Graves (1997), and Di Maggio and Powell, (1983) is closely connected to the topics around corporate social responsibility.

The green cluster that includes Jensen (1976) entitled “*Theory of the firm: Managerial behavior, agency costs and ownership structure,*” is connected to the subjects around corporate governance mechanism.

The blue cluster, which contains Clarkson et al. (2008), Gray et al. (1995) and Milne (1996), is mainly composed of the items that cover sustainability report and related subjects.

**Figure 6. Co-citation network clustering result**



## **2.4 A BRIEF REVIEW OF THE LITERATURE**

Keyword network clustering result in Figure 3 is grouped into the following three blocks:

- Corporate social responsibility and reporting (Red and Blue in Figure 3).
- Corporate governance strategy (Yellow).
- Board composition (Green).

Connecting the keyword clusters with co-citation clusters is not straightforward, because many of the highly cited studies shown in the co-citation network clusters had influences across multiple keyword clusters. Some of the obvious associations among them, however, can be discussed. For example, the red co-citation cluster in Figure 5 around, most notably, Freeman (1994), Waddock and Graves (1997), and Di Maggio and Powell (1983) is closely associated with the 'Corporate Social Responsibility' cluster (red) in Figure 3. Likewise, the green co-citation cluster in Figure 5 around, most notably, Jensen (1976), Cooke and Haniffa (2005), and Michelon and Parbonetti (2012) is closely aligned with 'Corporate Governance Strategy' (yellow) and 'Board of Directors' (green) clusters in Figure 3.

In the following sections the evolutions of the link between these topics are briefly analyzed.

### **2.4.1 Corporate social responsibility**

In the 1960s there was a debate about social responsibility and the relationship between the business and society (Friedman, 2007). Acclaimed economist, Milton Friedman (1970), defended the free market by asserting that the company's sole responsibility is to use its resources and devote itself to activities aimed at increasing their profits as long as they remain within the rules of the game. Essentially, businesses are free to compete as long as they refrain from deceit or fraud (Friedman, 1970). However, Friedman's thesis, defined by some as "moral minimalism" (Freeman and Werhane, 2005), has given rise to a vast literature on business ethics concerning the extent and content of social responsibility of economic subjects.

The first theoretical framework strongly focused on the concept of stakeholders is due to Freeman (1984) in the “*Strategic Management volume: A stakeholder approach*”, which outlines the stakeholder theory. The stakeholder theory, based on a vision closer to the role of the company in the socio-economic context, allowed to shift the perspective on the satisfaction of the expectations of the most relevant stakeholders (Freeman, 1984). A company should be considered as an economic and social system, in which a plurality of actors take part, which must be guided in operating a right balance between economic objectives and social responsibilities. In 1992, Hill and Jones proposed a stakeholder-agency paradigm; from their point of view, managers can be seen as the agent of the stakeholders. The focal point of this new vision is that stakeholders enter into relationship with managers to carry out the tasks of the company as efficiently as possible; therefore, the stakeholder model is connected to the performance of the company.

The role of managers within the stakeholder framework described in the literature is contradictory. Aoki (1984), for example, only recognized investors and employees as significant stakeholders and saw managers essentially as judges between these two groups of stakeholders. Williamson (1985), instead, emphasized the fact that managers were one of the most important and powerful groups and that they behaved opportunistically, which allowed them to increase their power. Moreover, according to Carroll (1991), managers have legal duties toward the company and moral responsibilities regarding all the company's stakeholders. A bidirectional communication, between the managers and stakeholders, is an essential element in order to make the results of sustainable strategies known and it is implemented through social reporting (Haniffa and Cooke, 2005). The financial statements, being exclusively focused on economic and financial assessments, do not appear to be exhaustive to the satisfaction of the information need perceived by the stakeholders (Gray et al., 1988).

In the last decades, many researchers have focused their attention on the profile of corporate social responsibility and sustainability reporting (Morhardt, 2010; Amran et al., 2014; Epstein, 2018). It represents a transversal theme that recalls different aspects. In particular, the need to be accountable to stakeholders for the results achieved, and the broad responsibility for the impacts of different nature that their activity determines on the



reference context. The growing diffusion of social accountability tools is attributable to the recognition of corporate social responsibility (Kolk, 2003).

The activity of the companies, in fact, besides having a strictly economic dimension, also has a socio-environmental dimension that impacts on the reality of the various subjects, the stakeholders. Moreover, according to Invernizzi (2004), the communication function, through his role defined strategic-reflective is able to affect much more in depth than in the past on the behavior of companies, allowing to strengthen the reputation through a high degree of coherence and synergy between all the communication initiatives, external expectations and management and production actions. Therefore, the sustainability report assumes the dual value. First, it is an effective tool for informing about company policy (Schaltegger and Wagner, 2006) in terms of enhancing and safeguarding human, natural and social resources, making it possible to judge corporate social responsibility (Aras and Crowther, 2009), to promote an image of business management that obtains the consensus of the community (Kolk, 2008). Second, it allows to generate the reputation which in turn is the basic element for the generation of the broadest public trust towards the firm (Zadek, 2001).

#### **2.4.2 Corporate governance strategy**

Strategic management of the company in relation to sustainability is essential to set long-term goals (Figge et al., 2002). According to Aras and Crowther (2008), there are two main reasons to think that corporate governance mechanisms are important for sustainability performance. First, considerable investment and long term strategies are required for sustainability performance and this implies a major impact on the company's capital structure and profitability (Hart and Ahuja, 1996). Secondly, the natural environment requires multiple levels of coordination; not only therefore at the organizational level but also on the supply chain and stakeholder involvement (Marcus and Geffen, 1998). Therefore, governance is increasingly applied to a more extensive form of monitoring of corporate activities that includes the impact on the environment and society (Giddings et al.). This

additional aspect often arises in response to stakeholder requests and can potentially create tensions and priorities in conflict between the traditional roles of shareholders, boards of directors and managing directors, as it asks them to assume corporate responsibilities in a new way (Maignan,2001). The benefit deriving from the adoption of sustainable strategies in the company context is represented by the so called sustainable profit. (Lankoski, 2006). The sustainable profit is linked to the creation of a direct economic value, therefore the practice of enhancing the environmental and social impact has become increasingly widespread (Seelos and Mair, 2005).

There has been a variety of researcher over time investigating the relationship between corporate strategies and firm sustainability performance. For example, Kolk and Pinkse (2008) evaluating how the firms' strategy management addresses climate change, found that corporate climate strategy is related with firm's management approach in relation to their stakeholders. Su-Yo Lee (2012) examined the relationship between corporate carbon strategies in developing countries and firm performance. He demonstrated that firms that implement more innovative strategies on climate change are able to explore new business opportunities and improving their competitive advantage without compromising their productivity.

Therefore, pushing companies to adopt sustainable strategy is not just the desire to take on an ethical responsibility, but rather the positive returns that derive from this in terms of economic performance, organizational efficiency, competitive ability and improved reputation that make it particularly attractive (Kotabe and Murray, 2004). As a result of this, it is clear that sustainability can become an integral part of governance strategies by being part of the best practice analysis (Cetinkaya et al., 2011). The difficulty in quantifying the spillovers in sustainable terms of sustainable strategies is due to the nature of the benefits that derive from them, which are mostly made up of intangible assets (REF). They allow the company to create a profile based on image enhancement, product quality or brand reliability.

### **2.4.3 Board composition**

Boards have usually been studied as a homogeneous group, which has similar viewpoint in business practices (Useem, 1986). In the last decade, researchers have been focusing on evidence regarding the role of the boards of directors, in particular on their efficiency (Hall,1993).

Within the company, corporate governance reflects a balance between various proposed solutions and according to the theory of social and psychological dynamics (Adams et al., 2008), within the board of directors there may be compensatory effects among the directors belonging to minority entities (and gender) such as to affect the performance of a company. Many authors have found that the diversity of boards of directors can provide organizational benefits ranging from competitive advantages such as marketing strength and the ability to attract human resources strategically and to improve performance (Cox and Blake, 1991). According to several studies (Erhardt et al., 2003; Kang at al., 2007; Pelled, 1996), diversity can be defined as the variety of board composition related to observable demographic aspects such as gender, age, ethnicity, nationality, cultural background, religion and degree of independence (Aguilera et al. 2008; Filatotchev and Wright 2005; Uhlener et al. 2007) and those less visible (education, professional experience in the sector, skills). Diversity management has started to be part of the organizations' agenda since the early Nineties, with numerous managers and scholars on these issues who have argued that diversity has an impact both long and short term on different companies' ways (Robinson and Dechant, 1997).

According to John and Senbet (1998) the most important features in determining a corporate governance model capable of protecting the holders of property rights are the number of independent directors and the presence of any subcommittees; the separation of the positions of CEO and Chairman and, the number of shares held by the directors. In fact, a board composed of a large number of administrators would have difficulty in coordinating and would not allow an active participation of all, discouraging it from carrying out an effective monitoring action. Furthermore, the division into subcommittees increases the supervisory power of non-executives and the separation of CEO and Chairman positions should ensure greater independence of the administrative body.

Recently, scholars have demonstrated that corporate governance structure should allow mechanisms to improve performance, both financial and sustainable, capable of supporting stakeholder participation (Rao and Tilt, 2016; Carter et al., 2010; Naciti 2019). Moreover, the financiers will be more inclined to interface with companies that show greater sensitivity to sustainability initiatives. Through the concept of corporate sustainability, the role of the Board of Directors is drawn up, going beyond the only idea of maximizing the well-being of the shareholders, as it also includes an ethical vision towards stakeholders (Burke and Mattis, 2013).

## **2.5 DISCUSSION AND CONCLUSION**

This paper reviews the literature on corporate governance and sustainability in terms of the keyword co-occurrence and co-citation networks. We selected 468 unique items from the Web of Science that contain both “Corporate Governance” and “Sustainability” published between 1999 and 2019. The items were analyzed by using three visualization techniques: keyword co-occurrence network clustering, chronological evolution of the keywords, and co-citation network clustering. Moreover, we conducted a brief review of the literature for each of the major keyword network clusters identified.

We observed that the number of items that fall under our screening criteria increased over time; about half of the 468 articles selected from the period between 1999 and 2019 have been published in the last three years. We believe that the increasing volume of the literature on corporate governance and sustainability reflects not only the growing attention on sustainability in general but also the growing recognition of the role to be played by corporates in sustainability. Such a trend can also be observed from the corporate commitments under, e.g., the Sustainable Development Goals (SDGs) framework, where corporate leaders committed to address such issues as safety and environmental protection, climate change, innovative solutions to community needs and sustainable value creation approaches (UN, 2015). We also believe that the increasing awareness of climate change and the Paris climate agreement reached in 2015 by 195 countries provide another impetus for corporate governance literature to focus on sustainability (Rogelj et al, 2016). Under the

Paris agreement, countries committed to reduce their greenhouse gas emissions following Nationally Determined Contributions (NDCs), many of which involve corporate participations (UN, 2008).

Furthermore, the chronological analysis of keywords shows a transition from more conceptual topics to more strategic and actionable discussions. For example, more abstract keywords as 'society,' 'business ethics,' and 'corporate responsibility' show average years of occurrence close to 2014, while the average years of occurrence for more tangible keywords such as 'independent director,' 'board size,' and 'female directors' are close to 2017. We believe that this trend reflects the increasing stakeholder demands on tangible actions in sustainability (Barnett et al., 2018). Companies that implement sustainability strategies are increasing at a rate of annual growth of more than 20 percent. Over the next 15 years the millennials will inherit \$ 24 trillion overall - the greatest transfer of wealth in history (Hildebrand e Deese, 2019).

The co-citation network clustering shows that stakeholder theory still forms the basis of the growing literature on corporate governance and sustainability. In Freeman's stakeholder theory, the company is seen as a mix of different and conflicting interests due to the multitude of subjects that are part of the 'family' of stakeholders, and it is the nature of the entity itself, which has the ability and the duty to coordinate and to cooperate with various stakeholders. The early emphasis on corporate social responsibility and business ethics and the prominence of Freeman (1984) in the network reflect the foundational influence of stakeholder theory in the early development of the corporate governance and sustainability literature, while the emergence of the keywords related to board compositions such as board of directors, independent directors, and female directors is reflective of the more recent influence of stakeholder/agency theory in the literature.

We believed that the literature on corporate governance and sustainability is likely to see a continued growth. It would be an important future research question whether and to what extent alternative corporate governance practices improve sustainability. Our review identified few empirical analyses on the performance of governance practices on corporate sustainability in the literature, and more effort to link governance questions to sustainability performance metrics would be desirable. In particular, we believe that future research will

need to respond to the urgent call for the corporate community to address global climate change and SDGs.

## **References**

- Adams, B. (2008). *Green development: Environment and sustainability in a developing world*. Routledge.
- Aguilera, R. V., Filatotchev, I., Gospel, H., & Jackson, G. (2008). An organizational approach to comparative corporate governance: Costs, contingencies, and complementarities. *Organization science*, 19(3), 475-492.
- Amran, A., Lee, S. P., & Devi, S. S. (2014). The influence of governance structure and strategic corporate social responsibility toward sustainability reporting quality. *Business Strategy and the Environment*, 23(4), 217-235.
- Aoki, M. (1984). *The co-operative game theory of the firm*. Oxford university press.
- Aras, G., & Crowther, D. (2009). Corporate sustainability reporting: a study in disingenuity?. *Journal of business ethics*, 87(1), 279.
- Barnett, M. L., Henriques, I., & Husted, B. W. (2018). Governing the void between stakeholder management and sustainability. In *Sustainability, Stakeholder Governance, and Corporate Social Responsibility* (pp. 121-143). Emerald Publishing Limited.
- Burke, R. J., & Mattis, M. C. (Eds.). (2013). *Women on corporate boards of directors: International challenges and opportunities* (Vol. 14). Springer Science & Business Media.
- Carroll, A. B. (1979). A three-dimensional conceptual model of corporate performance. *Academy of management review*, 4(4), 497-505.
- Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business horizons*, 34(4), 39-48.
- Carter, D. A., D'Souza, F., Simkins, B. J., & Simpson, W. G. (2010). The gender and ethnic diversity of US boards and board committees and firm financial performance. *Corporate Governance: An International Review*, 18(5), 396-414.

- Cetinkaya, B., Cuthbertson, R., Ewer, G., Klaas-Wissing, T., Piotrowicz, W., & Tyssen, C. (2011). *Sustainable supply chain management: practical ideas for moving towards best practice*. Springer Science & Business Media.
- Clarkson, P. M., Li, Y., Richardson, G. D., & Vasvari, F. P. (2008). Revisiting the relation between environmental performance and environmental disclosure: An empirical analysis. *Accounting, organizations and society*, 33(4-5), 303-327.
- Cox, T. H., & Blake, S. (1991). Managing cultural diversity: Implications for organizational competitiveness. *Academy of Management Perspectives*, 5(3), 45-56.
- DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American sociological review*, 147-160.
- Elkington, J. (2006). Governance for sustainability. *Corporate Governance: An International Review*, 14(6), 522-529.
- Epstein, M. J. (2018). *Making sustainability work: Best practices in managing and measuring corporate social, environmental and economic impacts*. Routledge.
- Erhardt, N. L., Werbel, J. D., & Shrader, C. B. (2003). Board of director diversity and firm financial performance. *Corporate governance: An international review*, 11(2), 102-111.
- Figge, F., Hahn, T., Schaltegger, S., & Wagner, M. (2002). The sustainability balanced scorecard—linking sustainability management to business strategy. *Business strategy and the Environment*, 11(5), 269-284.
- Filatotchev, I., & Wright, M. (2005). *The life cycle of corporate governance*. Edward Elgar Publishing.
- Freeman, R. E. (2010). *Strategic management: A stakeholder approach*. Cambridge university press.
- Friedman, M. (1970). A theoretical framework for monetary analysis. *journal of Political Economy*, 78(2), 193-238.
- Friedman, M. (2007). The social responsibility of business is to increase its profits. In *Corporate ethics and corporate governance* (pp. 173-178). Springer, Berlin, Heidelberg.

- Giddings, B., Hopwood, B., & O'brien, G. (2002). Environment, economy and society: fitting them together into sustainable development. *Sustainable development*, 10(4), 187-196.
- Gray, R., Kouhy, R., & Lavers, S. (1995). Corporate social and environmental reporting: a review of the literature and a longitudinal study of UK disclosure. *Accounting, Auditing & Accountability Journal*, 8(2), 47-77.
- Gray, R., Owen, D., & Maunders, K. (1988). Corporate social reporting: emerging trends in accountability and the social contract. *Accounting, Auditing & Accountability Journal*, 1(1), 6-20.
- Hackston, D., & Milne, M. J. (1996). Some determinants of social and environmental disclosures in New Zealand companies. *Accounting, Auditing & Accountability Journal*, 9(1), 77-108.
- Hall, R. (1993). A framework linking intangible resources and capabilities to sustainable competitive advantage. *Strategic management journal*, 14(8), 607-618.
- Haniffa, R. M., & Cooke, T. E. (2005). The impact of culture and governance on corporate social reporting. *Journal of accounting and public policy*, 24(5), 391-430.
- Hart, S. L., & Ahuja, G. (1996). Does it pay to be green? An empirical examination of the relationship between emission reduction and firm performance. *Business strategy and the Environment*, 5(1), 30-37.
- Hildebrand, P. & Deese, B. (2019). Il futuro degli investimenti è sostenibile. *Il sole 24ore*.
- Hill, C. W., & Jones, T. M. (1992). Stakeholder-agency theory. *Journal of management studies*, 29(2), 131-154.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of financial economics*, 3(4), 305-360.
- Kang, H., Cheng, M., & Gray, S. J. (2007). Corporate governance and board composition: Diversity and independence of Australian boards. *Corporate Governance: An International Review*, 15(2), 194-207.
- Kolk, A. (2003). Trends in sustainability reporting by the Fortune Global 250. *Business strategy and the environment*, 12(5), 279-291.



- Kolk, A. (2008). Sustainability, accountability and corporate governance: exploring multinationals' reporting practices. *Business strategy and the environment*, 17(1), 1-15.
- Kotabe, M., & Murray, J. Y. (2004). Global sourcing strategy and sustainable competitive advantage. *Industrial marketing management*, 33(1), 7-14.
- Lankoski, L. (2006). Environmental performance and economic performance: The basic links. In *Managing the business case for sustainability: The integration of social, environmental and economic performance* (pp. 32-46). Greenleaf Publishing.
- Maignan, I. (2001). Consumers' perceptions of corporate social responsibilities: A cross-cultural comparison. *Journal of business ethics*, 30(1), 57-72.
- Marcus, A., & Geffen, D. (1998). The dialectics of competency acquisition: Pollution prevention in electric generation. *Strategic Management Journal*, 19(12), 1145-1168.
- Massa, L., Farneti, F., & Scappini, B. (2015). Developing a sustainability report in a small to medium enterprise: process and consequences. *Meditari Accountancy Research*, 23(1), 62-91.
- Michelon, G., & Parbonetti, A. (2012). The effect of corporate governance on sustainability disclosure. *Journal of Management & Governance*, 16(3), 477-509.
- Milne, M. J. (1996). On sustainability; the environment and management accounting. *Management Accounting Research*, 7(1), 135-161.
- Morhardt, J. E. (2010). Corporate social responsibility and sustainability reporting on the internet. *Business strategy and the environment*, 19(7), 436-452.
- Naciti, V. (2019). Corporate governance and board of directors: The effect of a board composition on firm sustainability performance. *Journal of Cleaner Production*, 237, 117727.
- Pelled, L. H. (1996). Demographic diversity, conflict, and work group outcomes: An intervening process theory. *Organization science*, 7(6), 615-631.
- Rao, K., & Tilt, C. (2016). Board composition and corporate social responsibility: The role of diversity, gender, strategy and decision making. *Journal of Business Ethics*, 138(2), 327-347.
- Robinson, G., & Dechant, K. (1997). Building a business case for diversity. *Academy of Management Perspectives*, 11(3), 21-31.

- Rogelj, J., Den Elzen, M., Höhne, N., Fransen, T., Fekete, H., Winkler, H., ... & Meinshausen, M. (2016). Paris Agreement climate proposals need a boost to keep warming well below 2 C. *Nature*, 534(7609), 631.
- Schaltegger, S., & Wagner, M. (2006). Integrative management of sustainability performance, measurement and reporting. *International Journal of Accounting, Auditing and Performance Evaluation*, 3(1), 1-19.
- Seelos, C., & Mair, J. (2005). Entrepreneurs in service of the poor: Models for business contributions to sustainable development. *Business Horizons*, 48(3), 241-246.
- Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *The journal of finance*, 52(2), 737-783.
- Uhlaner, L., Wright, M., & Huse, M. (2007). Private firms and corporate governance: An integrated economic and management perspective. *Small Business Economics*, 29(3), 225-241.
- United Nations (UN)., 2015. Countries Reach Historic Agreement to Generate Financing for New Sustainable Development Agenda. <http://www.un.org/esa/ffd/ffd3/press-release/countries-reach-historic-agreement.html>
- United Nations Framework Convention on Climate Change (UNFCCC). 2008. Kyoto Protocol Reference Manual on Accounting of Emissions and Assigned Amount. UNFCCC: Germany.
- Van Eck, N. J., & Waltman, L. (2007). VOS: A new method for visualizing similarities between objects. In *Advances in data analysis* (pp. 299-306). Springer, Berlin, Heidelberg.
- Van Eck, N. J., & Waltman, L. (2017). Citation-based clustering of publications using CitNetExplorer and VOSviewer. *Scientometrics*, 111(2), 1053-1070.
- Van Eck, N. J., Waltman, L., Dekker, R., & van den Berg, J. (2010). A comparison of two techniques for bibliometric mapping: Multidimensional scaling and VOS. *Journal of the American Society for Information Science and Technology*, 61(12), 2405-2416.
- Van Eck, N., & Waltman, L. (2009). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, 84(2), 523-538.

- Waddock, S. A., & Graves, S. B. (1997). The corporate social performance–financial performance link. *Strategic management journal*, 18(4), 303-319.
- Waltman, L., Van Eck, N. J., & Noyons, E. C. (2010). A unified approach to mapping and clustering of bibliometric networks. *Journal of Informetrics*, 4(4), 629-635.
- Werhane, P. H., & Freeman, R. E. (2005). *The Blackwell encyclopedia of management: Business ethics*. Blackwell.
- Zadek, S. (2001). *Third generation corporate citizenship*. London: The Foreign Policy Centre.

## Appendix

TITLE	AUTHORS	SOURCE TITLE	PUBLICATION YEAR	Total Citations	Average CITATIONS per Year
Maximizing shareholder value: a new ideology for corporate governance	Lazonick, W; O'Sullivan, M	ECONOMY AND SOCIETY	2000	675	33,75
Corporate Governance and Corporate Social Responsibility Synergies and Interrelationships	Jamali, Dima; Safieddine, Assem M.; Rabbath, Myriam	CORPORATE GOVERNANCE-AN INTERNATIONAL REVIEW	2008	231	19,25
Governance of the entrepreneurial threshold firm: A knowledge-based perspective	Zahra, SA; Filatotchev, I	JOURNAL OF MANAGEMENT STUDIES	2004	146	9,13
Institutional ownership and corporate social performance: The moderating effects of investment horizon, activism, and coordination	Neubaum, DO; Zahra, SA	JOURNAL OF MANAGEMENT	2006	134	9,57
Critical Management Studies	Adler, Paul S.; Forbes, Linda C.; Willmott, Hugh	ACADEMY OF MANAGEMENT ANNALS	2007	124	9,54
The Role of the Board in the Dissemination of Integrated Corporate Social Reporting	Frias-Aceituno, Jose V.; Rodriguez-Ariza, Lazaro; Garcia-Sanchez, I. M.	CORPORATE SOCIAL RESPONSIBILITY AND ENVIRONMENTAL MANAGEMENT	2013	114	16,29
Social indicators for sustainable project and technology life cycle management in the process industry	Labuschagne, C; Brent, AC	INTERNATIONAL JOURNAL OF LIFE CYCLE ASSESSMENT	2006	110	7,86
Is corporate sustainability a value-increasing strategy for business?	Lo, Shih-Fang; Sheu, Her-Jiun	CORPORATE GOVERNANCE-AN INTERNATIONAL REVIEW	2007	105	8,08

Governance for sustainability	Elkington, John	CORPORATE GOVERNANCE-AN INTERNATIONAL REVIEW	2006	99	7,07
Governance and sustainability - An investigation into the relationship between corporate governance and corporate sustainability	Aras, Gueler; Crowther, David	MANAGEMENT DECISION	2008	91	7,58
The Case of Sustainability Assurance: Constructing a New Assurance Service	O'Dwyer, Brendan	CONTEMPORARY ACCOUNTING RESEARCH	2011	89	9,89
Corporate goodness and shareholder wealth	Krueger, Philipp	JOURNAL OF FINANCIAL ECONOMICS	2015	86	17,2
Explanatory Factors of Integrated Sustainability and Financial Reporting	Frias-Aceituno, Jose V.; Rodriguez-Ariza, Lazaro; Garcia-Sanchez, Isabel M.	BUSINESS STRATEGY AND THE ENVIRONMENT	2014	75	12,5
The cultural system and integrated reporting	Garcia-Sanchez, Isabel-Maria; Rodriguez-Ariza, Lazaro; Frias-Aceituno, Jose-Valeriano	INTERNATIONAL BUSINESS REVIEW	2013	74	10,57
The informational contribution of social and environmental disclosures for investors	Cormier, Denis; Ledoux, Marie-Josee; Magnan, Michel	MANAGEMENT DECISION	2011	74	8,22
Corporate Governance and Performance in Socially Responsible Corporations: New Empirical Insights from a Neo-Institutional Framework	Ntim, Collins G.; Soobaroyen, Teerooven	CORPORATE GOVERNANCE-AN INTERNATIONAL REVIEW	2013	73	10,43
US biopharmaceutical finance and the sustainability of the biotech business model	Lazonick, William; Tulum, Oener	RESEARCH POLICY	2011	72	8

The Influence of Corporate Psychopaths on Corporate Social Responsibility and Organizational Commitment to Employees	Boddy, Clive R.; Ladyshevsky, Richard K.; Galvin, Peter	JOURNAL OF BUSINESS ETHICS	2010	70	7
Are there gender-related influences on corporate sustainability? A study of women on boards of directors	Galbreath, Jeremy	JOURNAL OF MANAGEMENT & ORGANIZATION	2011	66	7,33
Integrated reporting in South Africa in 2012 Perspectives from South African institutional investors	Atkins, Jill; Maroun, Warren	MEDITARI ACCOUNTANCY RESEARCH	2015	63	12,6
Investing in socially responsible companies is a must for public pension funds - Because there is no better alternative	Sethi, SP	JOURNAL OF BUSINESS ETHICS	2005	60	4
The Governance of Corporate Sustainability: Empirical Insights into the Development, Leadership and Implementation of Responsible Business Strategy	Klettner, Alice; Clarke, Thomas; Boersma, Martijn	JOURNAL OF BUSINESS ETHICS	2014	57	9,5
Corporate social responsibility in a global economy	Kanji, Gopal K.; Chopra, Parvesh K.	TOTAL QUALITY MANAGEMENT & BUSINESS EXCELLENCE	2010	56	5,6
A Global Review of Insurance Industry Responses to Climate Change	Mills, Evan	GENEVA PAPERS ON RISK AND INSURANCE-ISSUES AND PRACTICE	2009	53	4,82
The Association between Sustainability Governance Characteristics and the Assurance of Corporate Sustainability Reports	Peters, Gary F.; Romi, Andrea M.	AUDITING-A JOURNAL OF PRACTICE & THEORY	2015	52	10,4
Designing a general set of sustainability indicators at the corporate level	Randari, Amir Hossein; Rostamy, Ali Asghar Anvary	JOURNAL OF CLEANER PRODUCTION	2015	50	10

Corporate Governance Practices that Address Climate Change: an Exploratory Study	Galbreath, Jeremy	BUSINESS STRATEGY AND THE ENVIRONMENT	2010	49	4,9
Determinants of Corporate Social Responsibility (CSR) Disclosure in Developed and Developing Countries: A Literature Review	Ali, Waris; Frynas, Jędrzej George; Mahmood, Zeeshan	CORPORATE SOCIAL RESPONSIBILITY AND ENVIRONMENTAL MANAGEMENT	2017	47	15,67
The Collaborative Enterprise	Tencati, Antonio; Zsolnai, Laszlo	JOURNAL OF BUSINESS ETHICS	2009	47	4,27
Real Earnings Management and Accrual-based Earnings Management in Family Firms	Achleitner, Ann-Kristin; Guenther, Nina; Kaserer, Christoph; Siciliano, Gianfranco	EUROPEAN ACCOUNTING REVIEW	2014	46	7,67
Reporting on sustainability and HRM: a comparative study of sustainability reporting practices by the world's largest companies	Ehnert, Ina; Parsa, Sepideh; Roper, Ian; Wagner, Marcus; Müller-Camen, Michael	INTERNATIONAL JOURNAL OF HUMAN RESOURCE MANAGEMENT	2016	45	11,25
Do ratings of firms converge? Implications for managers, investors and strategy researchers	Chatterji, Aaron K.; Durand, Rodolphe; Levine, David I.; Touboul, Samuel	STRATEGIC MANAGEMENT JOURNAL	2016	43	10,75
Corporate Climate Change-Related Governance Practices and Related Disclosures: Evidence from Australia	Haque, Shamima; Deegan, Craig	AUSTRALIAN ACCOUNTING REVIEW	2010	43	4,3
Corporate governance and environmental reporting: an Australian study	Gibson, Kathy; O'Donovan, Gary	CORPORATE GOVERNANCE-AN INTERNATIONAL REVIEW	2007	43	3,31
Approaching socially responsible investment with a comprehensive ratings scheme: Total social impact	Dillenburg, S; Greene, T; Erekson, H	JOURNAL OF BUSINESS ETHICS	2003	42	2,47

Early assessments of the gap between integrated reporting and current corporate reporting	Stent, Warwick; Dowler, Tuyana	MEDITARI ACCOUNTANCY RESEARCH	2015	40	8
Does the Voluntary Adoption of Corporate Governance Mechanisms Improve Environmental Risk Disclosures? Evidence from Greenhouse Gas Emission Accounting	Peters, Gary F.; Romi, Andrea M.	JOURNAL OF BUSINESS ETHICS	2014	40	6,67
Corporate Governance in the Debate on CSR and Ethics: Sensemaking of Social Issues in Management by Authorities and CEOs	Fassin, Yves; Van Rossem, Annick	CORPORATE GOVERNANCE-AN INTERNATIONAL REVIEW	2009	39	3,55
The impact of institutional and social context on corporate environmental, social and governance performance of companies committed to voluntary corporate social responsibility initiatives	Ortas, Eduardo; Alvarez, Igor; Jaussaud, Jacques; Garayar, Ainhoa	JOURNAL OF CLEANER PRODUCTION	2015	37	7,4
Environmental assessment for corporate sustainability by resource utilization and technology innovation: DEA radial measurement on Japanese industrial sectors	Sueyoshi, Toshiyuki; Goto, Mika	ENERGY ECONOMICS	2014	37	6,17
Does Triple Bottom Line reporting improve hotel performance?	Assaf, A. George; Josiassen, Alexander; Cvelbar, Ljubica Knezevic	INTERNATIONAL JOURNAL OF HOSPITALITY MANAGEMENT	2012	37	4,63
Corporate Governance and Sustainability Performance: Analysis of Triple Bottom Line Performance	Hussain, Nazim; Rigoni, Ugo; Orij, Rene P.	JOURNAL OF BUSINESS ETHICS	2018	36	18



Board Gender Diversity and Corporate Response to Sustainability Initiatives: Evidence from the Carbon Disclosure Project	Ben-Amar, Walid; Chang, Millicent; McIlkenny, Philip	JOURNAL OF BUSINESS ETHICS	2017	35	11,67
Social responsibility and financial performance: The role of good corporate governance	Rodriguez-Fernandez, Mercedes	BRQ-BUSINESS RESEARCH QUARTERLY	2016	34	8,5
Convergence in Environmental Reporting: Assessing the Carbon Disclosure Project	Matisoff, Daniel C.; Noonan, Douglas S.; O'Brien, John J.	BUSINESS STRATEGY AND THE ENVIRONMENT	2013	34	4,86
Composite indicator for measuring corporate sustainability	Docekalova, Marie Pavlakova; Kocmanova, Alena	ECOLOGICAL INDICATORS	2016	33	8,25
Learning from Enron	Deakin, S; Konzelmann, SJ	CORPORATE GOVERNANCE-AN INTERNATIONAL REVIEW	2004	33	2,06
Integrated reporting in South Africa: some initial evidence	Setia, Neelam; Abhayawansa, Subhash; Joshi, Mahesh; Huynh, Anh Vu	SUSTAINABILITY ACCOUNTING MANAGEMENT AND POLICY JOURNAL	2015	32	6,4
Green Is Good: Sustainability, Profitability, and a New Paradigm for Corporate Governance	Sneirson, Judd F.	IOWA LAW REVIEW	2009	30	2,73
The emergence of < IR >	Rowbottom, N.; Locke, J.	ACCOUNTING AND BUSINESS RESEARCH	2016	29	7,25
Communicating Corporate Social Responsibility - A Case of CSR Communication in Emerging Economies	Amaladoss, Martin Xavier; Manohar, Hansa Lysander	CORPORATE SOCIAL RESPONSIBILITY AND ENVIRONMENTAL MANAGEMENT	2013	29	4,14
The Role of Bank Reputation in Certifying Future Performance Implications of Borrowers' Accounting Numbers	Bushman, Robert M.; Wittenberg-Moerman, Regina	JOURNAL OF ACCOUNTING RESEARCH	2012	27	3,38

Environmental performance accountability: planet, people, profits	Burritt, Roger L.	ACCOUNTING AUDITING & ACCOUNTABILITY JOURNAL	2012	27	3,38
Coercive, normative and mimetic isomorphism as determinants of the voluntary assurance of sustainability reports	Martinez-Ferrero, Jennifer; Garcia-Sanchez, Isabel-Maria	INTERNATIONAL BUSINESS REVIEW	2017	26	8,67
Integrating Sustainability into Corporate Governance: An Empirical Study on Board Diversity	Ferrero-Ferrero, Idoya; Angeles Fernandez-Izquierdo, Maria; Jesus Munoz-Torres, Maria	CORPORATE SOCIAL RESPONSIBILITY AND ENVIRONMENTAL MANAGEMENT	2015	26	5,2
Do Women Leaders Promote Sustainability? Analyzing the Effect of Corporate Governance Composition on Environmental Performance	Glass, Christy; Cook, Alison; Ingersoll, Alicia R.	BUSINESS STRATEGY AND THE ENVIRONMENT	2016	25	6,25
The influence of corporate social responsibility disclosure on share prices Evidence from the United Kingdom	De Klerk, Marna; de Villiers, Charl; van Staden, Chris	PACIFIC ACCOUNTING REVIEW	2015	25	5
Financial crisis impact on sustainability reporting	Antonia Garcia-Benau, Ma; Sierra-Garcia, Laura; Zorio, Ana	MANAGEMENT DECISION	2013	25	3,57
Sustainability in business education in the Asia Pacific region: a snapshot of the situation	Naeem, Malik; Neal, Mark	INTERNATIONAL JOURNAL OF SUSTAINABILITY IN HIGHER EDUCATION	2012	25	3,13
Institutional investor activism on socially responsible investment: effects and expectations	Wen, Shuangge	BUSINESS ETHICS-A EUROPEAN REVIEW	2009	25	2,27
Business sustainability performance and cost of equity capital	Ng, Anthony C.; Rezaee, Zabihollah	JOURNAL OF CORPORATE FINANCE	2015	24	4,8
Board Effectiveness and the Voluntary Disclosure	Ben-Amar, Walid;	BUSINESS STRATEGY AND THE ENVIRONMENT	2015	23	4,6

of Climate Change Information	McIlkenny, Philip				
CSR reporting practices of Eurozone companies	Bonson, Enrique; Bednarova, Michaela	REVISTA DE CONTABILIDAD-SPANISH ACCOUNTING REVIEW	2015	23	4,6
Internal Audit's Role in GHG Emissions and Energy Reporting: Evidence from Audit Committees, Senior Accountants, and Internal Auditors	Trotman, Andrew J.; Trotman, Ken T.	AUDITING-A JOURNAL OF PRACTICE & THEORY	2015	23	4,6
Determinants of Climate Change Disclosure by Developed and Emerging Countries in Asia Pacific	Amran, Azlan; Periasamy, Vinod; Zulkafli, Abdul Hadi	SUSTAINABLE DEVELOPMENT	2014	23	3,83
(Corporate) governance, (shareholder) value and (sustainable) economic performance	Pitelis, CN	CORPORATE GOVERNANCE-AN INTERNATIONAL REVIEW	2004	23	1,44
Enhancing the Credibility of Reporting on Corporate Social Responsibility in Europe	De Beelde, Ignace; Tuybens, Sanne	BUSINESS STRATEGY AND THE ENVIRONMENT	2015	22	4,4
A path towards sustainability for the Nordic mining industry	Ranangen, Helena; Lindman, Asa	JOURNAL OF CLEANER PRODUCTION	2017	21	7
Corporate Social Responsibility of the Financial Sector Strengths, Weaknesses and the Impact on Sustainable Development	Weber, Olaf; Diaz, Michael; Schwegler, Regina	SUSTAINABLE DEVELOPMENT	2014	21	3,5
What are the drivers of sustainability reporting? A systematic review	Dienes, Dominik; Sassen, Remmer; Fischer, Jasmin	SUSTAINABILITY ACCOUNTING MANAGEMENT AND POLICY JOURNAL	2016	20	5
The Impact of Board Structure on Corporate Social Responsibility: A Temporal View	Galbreath, Jeremy	BUSINESS STRATEGY AND THE ENVIRONMENT	2017	19	6,33
The tone of business model disclosure: an impression management	Melloni, Gaia; Stacchezzini, Riccardo; Lai, Alessandro	JOURNAL OF MANAGEMENT & GOVERNANCE	2016	19	4,75

analysis of the integrated reports					
Sustainability Reporting: A Comparative Study of NGOs and MNCs	Crespy, Charles T.; Miller, Van V.	CORPORATE SOCIAL RESPONSIBILITY AND ENVIRONMENTAL MANAGEMENT	2011	19	2,11
Diversity of Board of Directors and Environmental Social Governance: Evidence from Italian Listed Companies	Cucari, Nicola; De Falco, Salvatore Esposito; Orlando, Beatrice	CORPORATE SOCIAL RESPONSIBILITY AND ENVIRONMENTAL MANAGEMENT	2018	18	9
The Effect of Country-Level Investor Protection on the Voluntary Assurance of Sustainability Reports	Herda, David N.; Taylor, Martin E.; Winterbotham, Glyn	JOURNAL OF INTERNATIONAL FINANCIAL MANAGEMENT & ACCOUNTING	2014	17	2,83
Dividends Behavior in State- Versus Family-Controlled Firms: Evidence from Hong Kong	He, Tina T.; Li, Wilson X. B.; Tang, Gordon Y. N.	JOURNAL OF BUSINESS ETHICS	2012	17	2,13
Gender Diversity on Boards and Firms' Environmental Policy	Li, Ji; Zhao, Fuqiang; Chen, Silu; Jiang, Wanxing; Liu, Tao; Shi, Shengping	BUSINESS STRATEGY AND THE ENVIRONMENT	2017	16	5,33
Board gender diversity and sustainability reporting quality	Al-Shaer, Habiba; Zaman, Mahbub	JOURNAL OF CONTEMPORARY ACCOUNTING & ECONOMICS	2016	16	4
Environmental management control systems: a conceptualization and a review of the empirical evidence	Guenther, Edeltraud; Endrikat, Jan; Guenther, Thomas W.	JOURNAL OF CLEANER PRODUCTION	2016	16	4
Corporate Governance and Environmental Sustainability: The Moderating Role of the National Institutional Context	Ortiz-de-Mandojana, Natalia; Aguilera-Caracuel, Javier; Morales-Raya, Matilde	CORPORATE SOCIAL RESPONSIBILITY AND ENVIRONMENTAL MANAGEMENT	2016	16	4

Women on boards, sustainability reporting and firm performance	Arayssi, Mahmoud; Dah, Mustafa; Jizi, Mohammad	SUSTAINABILITY ACCOUNTING MANAGEMENT AND POLICY JOURNAL	2016	16	4
Governance, employees and CSR: Integration is the key to unlocking value	Young, Suzanne; Thyil, Vijaya	ASIA PACIFIC JOURNAL OF HUMAN RESOURCES	2009	16	1,45
Exploring the challenges of preparing an integrated report	McNally, Mary-Anne; Cerbone, Dannielle; Maroun, Warren	MEDITARI ACCOUNTANCY RESEARCH	2017	15	5
Corporate governance and strategic human resource management: Four archetypes and proposals for a new approach to corporate sustainability	Martin, Graeme; Farndale, Elaine; Paauwe, Jaap; Stiles, Philip G.	EUROPEAN MANAGEMENT JOURNAL	2016	15	3,75
Corporate governance and corporate social responsibility disclosure: evidence from Pakistan	Lone, Ehtazaz Javaid; Ali, Amjad; Khan, Imran	CORPORATE GOVERNANCE-THE INTERNATIONAL JOURNAL OF BUSINESS IN SOCIETY	2016	15	3,75
Determinants of carbon management strategy adoption Evidence from Australia's top 200 publicly listed firms	Yunus, Somaiya; Elijido-Ten, Evangeline; Abhayawansa, Subhash	MANAGERIAL AUDITING JOURNAL	2016	15	3,75
Linkages between Corporate Sustainability Reporting and Public Policy	Beare, Dan; Buslovich, Ruvena; Searcy, Cory	CORPORATE SOCIAL RESPONSIBILITY AND ENVIRONMENTAL MANAGEMENT	2014	15	2,5
DETERMINATION OF ENVIRONMENTAL, SOCIAL AND CORPORATE GOVERNANCE INDICATORS: FRAMEWORK IN THE MEASUREMENT OF SUSTAINABLE PERFORMANCE	Kocmanova, Alena; Simberova, Iveta	JOURNAL OF BUSINESS ECONOMICS AND MANAGEMENT	2014	15	2,5
Corporate Social Responsibility and Governance: Information Disclosure in	Kaymak, Turhan; Bektas, Eralp	CORPORATE SOCIAL RESPONSIBILITY AND ENVIRONMENTAL MANAGEMENT	2017	14	4,67

Multinational Corporations					
Boardroom gender diversity and corporate sustainability practices: Evidence from Australian Securities Exchange listed firms	Nadeem, Muhammd; Zaman, Rashid; Saleem, Irfan	JOURNAL OF CLEANER PRODUCTION	2017	13	4,33
Governance maturity grid: a transition method for integrating sustainability into companies?	Allais, Romain; Roucoules, Lionel; Reyes, Tatiana	JOURNAL OF CLEANER PRODUCTION	2017	13	4,33
Sustainability and Convergence: The Future of Corporate Governance Systems?	Salvioni, Daniela M.; Gennari, Francesca; Bosetti, Luisa	SUSTAINABILITY	2016	13	3,25
Stakeholder-Centric Governance and Corporate Social Performance: A Cross-National Study	Shahzad, Ali M.; Rutherford, Matthew A.; Sharfman, Mark P.	CORPORATE SOCIAL RESPONSIBILITY AND ENVIRONMENTAL MANAGEMENT	2016	13	3,25
Tr-criterion modeling for constructing more-sustainable mutual funds	Utz, Sebastian; Wimmer, Maximilian; Steuer, Ralph E.	EUROPEAN JOURNAL OF OPERATIONAL RESEARCH	2015	13	2,6
Audit fees, auditor choice and stakeholder influence: Evidence from a family-firm dominated economy	Khan, Arifur; Muttakin, Mohammad Badrul; Siddiqui, Javed	BRITISH ACCOUNTING REVIEW	2015	13	2,6
Identifying Strategic Factors of the Implantation CSR in the Airline Industry: The Case of Asia-Pacific Airlines	Chang, Dong-Shang; Chen, Sheng-Hung; Hsu, Chia-Wei; Hu, Allen H.	SUSTAINABILITY	2015	13	2,6
Identification and prioritization of corporate sustainability practices using analytical hierarchy process	Zillur, Praveen Goyal; Rahman, Zillur; Kazmi, Absar Ahmad	JOURNAL OF MODELLING IN MANAGEMENT	2015	13	2,6

Sustainability and its Integration into Corporate Governance Focusing on Corporate Performance Management and Reporting	Krechovska, Michaela; Prochazkova, Petra Tausl	24TH DAAAM INTERNATIONAL SYMPOSIUM ON INTELLIGENT MANUFACTURING AND AUTOMATION, 2013	2014	13	2,17
CSR, Oil Palm and the RSPO: Translating boardroom philosophy into conservation action on the ground	Paoli, Gary D.; Yaap, Betsy; Wells, Philip L.; Sileuw, Aisyah	TROPICAL CONSERVATION SCIENCE	2010	13	1,3
Carbon Risk, Carbon Risk Awareness and the Cost of Debt Financing	Jung, Juhyun; Herbohn, Kathleen; Clarkson, Peter	JOURNAL OF BUSINESS ETHICS	2018	12	6
Corporate Board and Corporate Social Responsibility Assurance: Evidence from China	Liao, Lin; Lin, Teng (Philip); Zhang, Yuyu	JOURNAL OF BUSINESS ETHICS	2018	12	6
The Value Relevance of Environmental, Social, and Governance Performance: The Brazilian Case	Mar Miralles-Quiros, Maria; Luis Miralles-Quiros, Jose; Valente Goncalves, Luis Miguel	SUSTAINABILITY	2018	12	6
Enhancing Market Valuation of ESG Performance: Is Integrated Reporting Keeping its Promise?	Mervelskemper, Laura; Streit, Daniel	BUSINESS STRATEGY AND THE ENVIRONMENT	2017	12	4
Corporate governance and intellectual capital reporting in a period of financial crisis: Evidence from Portugal	Rodrigues, Lucia Lima; Tejedero-Romero, Francisca; Craig, Russell	INTERNATIONAL JOURNAL OF DISCLOSURE AND GOVERNANCE	2017	12	4
Lights and shadows on sustainability rating scoring	Escrig-Olmedo, Elena; Jesus Munoz-Torres, Maria; Angeles Fernandez-Izquierdo, Maria; Maria Rivera-Lirio, Juana	REVIEW OF MANAGERIAL SCIENCE	2014	12	2

Inside out: The interrelationships of sustainable performance metrics and its effect on business decision making: Theory and practice	Gong, Mengfeng; Simpson, Andrew; Koh, Lenny; Tan, Kim Hua	RESOURCES CONSERVATION AND RECYCLING	2018	11	5,5
When Stakeholder Representation Leads to Faultlines. A Study of Board Service Performance in Social Enterprises	Crucke, Saskia; Knockaert, Mirjam	JOURNAL OF MANAGEMENT STUDIES	2016	11	2,75
Business sustainability research: A theoretical and integrated perspective	Rezaee, Zabihollah	JOURNAL OF ACCOUNTING LITERATURE	2016	11	2,75
Valuing Stakeholder Engagement and Sustainability Reporting	Camilleri, Mark Anthony	CORPORATE REPUTATION REVIEW	2015	11	2,2
Governance, firm-level characteristics and their impact on the client's voluntary sustainability disclosures and assurance decisions	Kend, Michael	SUSTAINABILITY ACCOUNTING MANAGEMENT AND POLICY JOURNAL	2015	11	2,2
Strategic role of public relations in enterprise strategy, governance and sustainability-A normative framework	Steyn, Benita; Niemann, Lynne	PUBLIC RELATIONS REVIEW	2014	11	1,83
Are boards on board? A model of corporate board influence on sustainability performance	Galbreath, Jeremy	JOURNAL OF MANAGEMENT & ORGANIZATION	2012	11	1,38
Inverting the Pyramid of Values? Trends in Less-Developed Countries	Halter, Maria Virginia; Coutinho de Arruda, Maria Cecilia	JOURNAL OF BUSINESS ETHICS	2009	11	1
Evaluations of corporate sustainability indicators based on fuzzy similarity graphs	Docekalova, Marie Pavlakova; Doubravsky, Karel; Dohnal, Mirko; Kocmanova, Alena	ECOLOGICAL INDICATORS	2017	10	3,33



Measuring Corporate Sustainability and Environmental, Social, and Corporate Governance Value Added	Kocmanova, Alena; Docekalova, Marie Pavlakova; Skapa, Stanislav; Smolikova, Lenka	SUSTAINABILITY	2016	10	2,5
Developing CSR in professional football clubs: drivers and phases	Kolyperas, Dimitrios; Morrow, Stephen; Sparks, Leigh	CORPORATE GOVERNANCE-THE INTERNATIONAL JOURNAL OF BUSINESS IN SOCIETY	2015	10	2
Sustainability reporting: external motivators and internal facilitators	Nazari, Jamal A.; Herremans, Irene M.; Warsame, Hussein A.	CORPORATE GOVERNANCE-THE INTERNATIONAL JOURNAL OF BUSINESS IN SOCIETY	2015	10	2
Does good corporate governance lead to better sustainability reporting? an analysis using structural equation modeling	Janggu, Tamoi; Darus, Faizah; Zain, Mustaffa Mohamed; Sawani, Yussri	INTERNATIONAL CONFERENCE ON CORPORATE GOVERNANCE & STRATEGIC MANAGEMENT (ICGSM) 2014	2014	10	1,67
The emerging CEO agenda	Mascarenhas, Briance	JOURNAL OF INTERNATIONAL MANAGEMENT	2009	10	0,91
Business and society in Latin America: An introduction	Reficco, Ezequiel; Ogliastri, Enrique	ACADEMIA-REVISTA LATINOAMERICANA DE ADMINISTRACION	2009	10	0,91
Competing rationales for corporate governance in France: Institutional complementarities between financial markets and innovation systems	Lee, Soo H.; Yoo, Taeyoung	CORPORATE GOVERNANCE-AN INTERNATIONAL REVIEW	2008	10	0,83
Corporate social responsibility and sustainability challenges for a bancassurance company	Marsiglia, E; Falautano, I	GENEVA PAPERS ON RISK AND INSURANCE-ISSUES AND PRACTICE	2005	10	0,67

Corporate Governance: Estimating Resource Providing Corporative Industrial Organization	Sokolitsyn, Alexander Sergeevich; Ivanov, Maxim Vladimirovich; Sokolitsyna, Natalya Alexandrovna	SUSTAINABLE ECONOMIC GROWTH, EDUCATION EXCELLENCE, AND INNOVATION MANAGEMENT THROUGH VISION 2020, VOLS I-VII	2017	9	3
Integrated reports: disclosure level and explanatory factors	Adriana Rivera-Arrubla, Yaismir; Zorio-Grima, Ana; Garcia-Benau, Mara A.	SOCIAL RESPONSIBILITY JOURNAL	2017	9	3
Board of director's effectiveness and the stakeholder perspective of corporate governance: Do effective boards promote the interests of shareholders and stakeholders?	Garcia-Torea, Nicolas; Fernandez-Feijoo, Belen; de la Cuesta, Marta	BRQ-BUSINESS RESEARCH QUARTERLY	2016	9	2,25
Developing a fuzzy corporate performance rating system: a petrochemical industry case study	Randari, Amir Hossein	JOURNAL OF CLEANER PRODUCTION	2016	9	2,25
Audit committee and integrated reporting practice: does internal assurance matter?	Haji, Abdifatah Ahmed; Anifowose, Mutalib	MANAGERIAL AUDITING JOURNAL	2016	9	2,25
A Triple Bottom Line Dominant Logic for Business Sustainability: Framework and Empirical Findings	Svensson, Goran; Hogevoid, Nils; Ferro, Carlos; Varela, Juan Carlos Sosa; Padin, Carmen; Wagner, Beverly	JOURNAL OF BUSINESS-TO-BUSINESS MARKETING	2016	9	2,25
Modelling of Corporate Governance Performance Indicators	Kocmanova, Alena; Simberova, Iveta	INZINERINE EKONOMIKA-ENGINEERING ECONOMICS	2012	9	1,13
Social corporate governance and the problem of mission drift in socially-oriented microfinance institutions	Arena, Todd	COLUMBIA JOURNAL OF LAW AND SOCIAL PROBLEMS	2008	9	0,75

THE CORPORATE SUSTAINABILITY TYPOLOGY: ANALYSING SUSTAINABILITY DRIVERS AND FOSTERING SUSTAINABILITY AT ENTERPRISES	Jeronimo Silvestre, Winston; Antunes, Paula; Leal Filho, Walter	TECHNOLOGICAL AND ECONOMIC DEVELOPMENT OF ECONOMY	2018	8	4
A conceptual synthesis of organisational transformation: How to diagnose, and navigate, pathways for sustainability at universities?	Baker-Shelley, Alex; van Zeijl-Rozema, Annemarie; Martens, Pim	JOURNAL OF CLEANER PRODUCTION	2017	8	2,67
The effect of social screening on bond mutual fund performance	Henke, Hans-Martin	JOURNAL OF BANKING & FINANCE	2016	8	2
The Effects of Environmental Disclosure on Financial Performance in Malaysia	Nor, Norhasimah Md; Bahari, Norhabibi Aishah Shaiful; Adnan, Nor Amiera; Kamal, Sheh Muhammad Qamarul Ariffin Sheh; Ali, Inaliah Mohd	7TH INTERNATIONAL ECONOMICS & BUSINESS MANAGEMENT CONFERENCE (IEBMC 2015)	2016	8	2
Through Thick and Thin? How Self-determination Drives the Corporate Sustainability Initiatives of Multinational Subsidiaries	Shah, Kalim U.; Arjoon, Surendra	BUSINESS STRATEGY AND THE ENVIRONMENT	2015	8	1,6
Managing toxic chemicals in Australia: a regional analysis of the risk society	Benn, S	JOURNAL OF RISK RESEARCH	2004	8	0,5
Framing the triple bottom line approach: Direct and mediation effects between economic, social and environmental elements	Svensson, Goran; Ferro, Carlos; Hogevoold, Nils; Padin, Carmen; Varela, Juan Carlos Sosa; Sarstedt, Marko	JOURNAL OF CLEANER PRODUCTION	2018	7	3,5

A Cross-Country Investigation of Corporate Governance and Corporate Sustainability Disclosure: A Signaling Theory Perspective	Bae, Seong Mi; Masud, Md. Abdul Kaium; Kim, Jong Dae	SUSTAINABILITY	2018	7	3,5
When do Board and Management Resources Complement Each Other? A Study of Effects on Corporate Social Responsibility	Galbreath, Jeremy	JOURNAL OF BUSINESS ETHICS	2016	7	1,75
AN INITIAL REVIEW OF BIODIVERSITY REPORTING BY SOUTH AFRICAN CORPORATES: THE CASE OF THE FOOD AND MINING SECTORS	Mansoor, Hafsa; Maroun, Warren	SOUTH AFRICAN JOURNAL OF ECONOMIC AND MANAGEMENT SCIENCES	2016	7	1,75
Perception of stakeholders on corporate social responsibility of Islamic Banks in Jordan	Di Bella, Venere; Al-Fayoumi, Nedal	EUROMED JOURNAL OF BUSINESS	2016	7	1,75
A proposal for measuring sustainability in universities: a case study of Spain	Larran Jorge, Manuel; Herrera Madueno, Jesus; Calzado, Yolanda; Andrades, Javier	INTERNATIONAL JOURNAL OF SUSTAINABILITY IN HIGHER EDUCATION	2016	7	1,75
CORPORATE GOVERNANCE FOR ISLAMIC BANKING SUSTAINABILITY AND CAUX ROUND TABLE PRINCIPLES	Ahmad, Khaliq	AL-SHAJARAH	2015	7	1,4
Global challenges, sustainable development, and their implications for organizational performance	Virakul, Busaya	EUROPEAN BUSINESS REVIEW	2015	7	1,4
Project Governance - The Definition and Leadership Dilemma	Bekker, Michiel C.	PROCEEDINGS OF THE 2014 IPMA WORLD CONGRESS	2015	7	1,4

ENVIRONMENTAL PERFORMANCES - WAY TO BOOST UP FINANCIAL PERFORMANCES OF COMPANIES	Achim, Monica-Violeta; Borlea, Sorin Nicolae	ENVIRONMENTAL ENGINEERING AND MANAGEMENT JOURNAL	2014	7	1,17
Towards a More 'Ethically Correct' Governance for Economic Sustainability	Pitelis, Christos N.	JOURNAL OF BUSINESS ETHICS	2013	7	1
Not-For-Profit Ratios for Financial Resilience and Internal Accountability: A Study of Australian International Aid Organisations	Ryan, Christine; Irvine, Helen	AUSTRALIAN ACCOUNTING REVIEW	2012	7	0,88
Does hometown advantage matter? The case of institutional blockholder monitoring on earnings management in Korea	Liu, Chang; Chung, Chune Young; Sul, Hong Kee; Wang, Kainan	JOURNAL OF INTERNATIONAL BUSINESS STUDIES	2018	6	3
Does Corporate Governance Affect Sustainability Disclosure? A Mixed Methods Study	Mahmood, Zeeshan; Kouser, Rehana; Ali, Waris; Ahmad, Zubair; Salman, Tahira	SUSTAINABILITY	2018	6	3
Fostering Stakeholder Engagement: The Role of Materiality Disclosure in Integrated Reporting	Fasan, Marco; Mio, Chiara	BUSINESS STRATEGY AND THE ENVIRONMENT	2017	6	2
Sustainability and the reconstruction of academic finance	Lagoarde-Segot, Thomas; Paraque, Bernard	RESEARCH IN INTERNATIONAL BUSINESS AND FINANCE	2017	6	2
Institutional complexity and the meaning of loose coupling: Connecting institutional sayings and (not) doings	Misangyi, Vilmos F.	STRATEGIC ORGANIZATION	2016	6	1,5
Demand for, and impediments to, the disclosure of information about climate change-related corporate governance practices	Haque, Shamima; Deegan, Craig; Inglis, Robert	ACCOUNTING AND BUSINESS RESEARCH	2016	6	1,5

Corporate Governance and Environmental Disclosure in the Indonesian Mining Industry	Trireksani, Terri; Djajadikerta, Hadrian Geri	AUSTRALASIAN ACCOUNTING BUSINESS AND FINANCE JOURNAL	2016	6	1,5
Out of the ordinary? Appraising ISO 26000's CSR definition	Moratis, Lars	INTERNATIONAL JOURNAL OF LAW AND MANAGEMENT	2016	6	1,5
Culture, profitability, non-financial reporting and a meta-analysis Comments and observations	Maroun, Warren	MEDITARI ACCOUNTANCY RESEARCH	2015	6	1,2
Corporate Governance and Sustainability Practices in Islamic Financial Institutions: The Role of Country of Origin	Hashim, Fathyah; Mahadi, Nur Darina; Amran, Azlan	INTERNATIONAL ACCOUNTING AND BUSINESS CONFERENCE 2015, IABC 2015	2015	6	1,2
EXAMINING THE COMPONENTS REQUIRED FOR ASSESSING THE SUSTAINABILITY OF COMMUNITIES IN THE UK	AlWaer, Husam; Bickerton, Ruth; Kirk, David	JOURNAL OF ARCHITECTURAL AND PLANNING RESEARCH	2014	6	1
Re-inventing the Limited Liability Company	Tricker, Bob	CORPORATE GOVERNANCE-AN INTERNATIONAL REVIEW	2011	6	0,67
Managing reputational risk: A Reinsurer's view	Forstmoser, Peter; Herger, Nikodemus	GENEVA PAPERS ON RISK AND INSURANCE-ISSUES AND PRACTICE	2006	6	0,43
The influence of culture and corporate governance on corporate social responsibility disclosure: A cross country analysis	Adnan, Shayuti Mohamed; Hay, David; van Staden, Chris J.	JOURNAL OF CLEANER PRODUCTION	2018	5	2,5
Determinants Linked to Family Business Sustainability in the UAE: An AHP Approach	Oudah, Mohammed; Jabeen, Fauzia; Dixon, Christopher	SUSTAINABILITY	2018	5	2,5
Firms' Board Independence and Corporate Social Performance: A Meta-Analysis	Ortas, Eduardo; Alvarez, Igor; Zubeltzu, Eugenio	SUSTAINABILITY	2017	5	1,67

The Relationship between Firm Characteristics and the Disclosure of Sustainability Reporting	Wang, Mao-Chang	SUSTAINABILITY	2017	5	1,67
Code of Ethics: A Stratified Vehicle for Compliance	Adelstein, Jennifer; Clegg, Stewart	JOURNAL OF BUSINESS ETHICS	2016	5	1,25
Measuring the level and risk of corporate responsibility - An empirical comparison of different ESG rating approaches	Dorfleitner, Gregor; Halbritter, Gerhard; Mai Nguyen	JOURNAL OF ASSET MANAGEMENT	2015	5	1
The Influence of Unrelated and Related Diversification on Fraudulent Reporting	Chakrabarty, Subrata	JOURNAL OF BUSINESS ETHICS	2015	5	1
Social and environmental verification of SBF 120 firms : The impact of ownership structure and Board of directors	Gillet-Monjarret, Claire; Martinez, Isabelle	COMPTABILITE CONTROLE AUDIT	2012	5	0,63
The pivotal roles of corporate environment responsibility	Lee, Les Tien-Shang	INDUSTRIAL MANAGEMENT & DATA SYSTEMS	2012	5	0,63
Economic, Environmental and Social Issues and Corporate Governance in Relation to Measurement of Company Performance	Kocmanova, Alena; Nemecek, Petr	PROCEEDINGS OF THE 9TH INTERNATIONAL CONFERENCE LIBEREC ECONOMIC FORUM 2009	2009	5	0,45
Do Chief Sustainability Officers Make Companies Greener? The Moderating Role of Regulatory Pressures	Kanashiro, Patricia; Rivera, Jorge	JOURNAL OF BUSINESS ETHICS	2019	4	4
Environmental, social and governance transparency and firm value	Yu, Ellen Peiyi; Guo, Christine Qian; Bac Van Luu	BUSINESS STRATEGY AND THE ENVIRONMENT	2018	4	2
Equity crowdfunding, shareholder structures, and firm performance	Walthoff-Born, Xavier; Vanacker, Tom; Collewaert, Veroniek	CORPORATE GOVERNANCE-AN INTERNATIONAL REVIEW	2018	4	2

Socially responsible or reprehensible? Investors, electricity utility companies, and transformative change in Europe	Lozano, Rodrigo; Reid, Angus	ENERGY RESEARCH & SOCIAL SCIENCE	2018	4	2
Women directors and disclosure of intellectual capital information	Tejedo-Romero, Francisca; Rodrigues, Lucia Lima; Craig, Russell	EUROPEAN RESEARCH ON MANAGEMENT AND BUSINESS ECONOMICS	2017	4	1,33
Effect of Corporate Governance Structure on the Financial Performance of Johannesburg Stock Exchange (JSE)-Listed Mining Firms	Dzingai, Isaih; Fakoya, Michael Bamidele	SUSTAINABILITY	2017	4	1,33
Promoting societal governance: Stakeholders' engagement disclosure on Malaysian local authorities' websites	Midin, Mariam; Joseph, Corina; Mohamed, Nafsiah	JOURNAL OF CLEANER PRODUCTION	2017	4	1,33
Corporate citizenship and social responsibility policies in the United States of America	Camilleri, Mark Anthony	SUSTAINABILITY ACCOUNTING MANAGEMENT AND POLICY JOURNAL	2017	4	1,33
The relation between voluntary carbon disclosure and environmental performance The case of S&P 500	Giannarakis, Grigoris; Konteos, George; Sariannidis, Nikolaos; Chaitidis, George	INTERNATIONAL JOURNAL OF LAW AND MANAGEMENT	2017	4	1,33
Determinants of social and economic reportings Evidence from Australia, the UK and South African multinational enterprises	Al Farooque, Omar; Ahulu, Helena	INTERNATIONAL JOURNAL OF ACCOUNTING AND INFORMATION MANAGEMENT	2017	4	1,33
Corporate Sustainability Measurement and Assessment of Czech Manufacturing Companies using a Composite Indicator	Kocmanova, Alena; Docekalova, Marie Pavlakova; Simanaviciene, Zaneta	INZINERINE EKONOMIKA-ENGINEERING ECONOMICS	2017	4	1,33



Gender diversity within the workforce in the microfinance industry in Africa: Economic performance and sustainability	Augustine, Darline; Baraldi, Monica; Wheat, Christopher O.; Malgwi, Charles A.; Jones, Kisha S.	CANADIAN JOURNAL OF ADMINISTRATIVE SCIENCES-REVUE CANADIENNE DES SCIENCES DE L ADMINISTRATION	2016	4	1
The empirical study of executive compensation in China port and shipping listed companies based on the grey relational analysis	Chen, Jiajia; Zhang, Rong; Liu, Bin	GREY SYSTEMS-THEORY AND APPLICATION	2016	4	1
Gender on board: deconstructing the legitimate female director	Tremblay, Marie-Soleil; Gendron, Yves; Malsch, Bertrand	ACCOUNTING AUDITING & ACCOUNTABILITY JOURNAL	2016	4	1
Strategic interpretation on sustainability issues - eliciting cognitive maps of boards of directors	Bergman, Jukka-Pekka; Knutas, Antti; Luukka, Pasi; Jantunen, Ari; Tarkiainen, Anssi; Karlik, Aleksander; Platonov, Vladimir	CORPORATE GOVERNANCE-THE INTERNATIONAL JOURNAL OF BUSINESS IN SOCIETY	2016	4	1
A Comparative Analysis of International Corporate Social Responsibility Standards as Enterprise Policy/Governance Innovation Guidelines	Dankova, Petya; Valeva, Milena; Strukelj, Tjasa	SYSTEMS RESEARCH AND BEHAVIORAL SCIENCE	2015	4	0,8
BOARD DIVERSITY: MORE THAN A GENDER ISSUE?	Adams, Michael	DEAKIN LAW REVIEW	2015	4	0,8
Predictive Model for Measuring Sustainability of Manufacturing Companies	Kocmanova, Alena; Simanaviciene, Zaneta; Docekalova, Marie Pavlakova	INZINERINE EKONOMIKA-ENGINEERING ECONOMICS	2015	4	0,8
Dangerous frontiers in corporate governance	Clarke, Thomas	JOURNAL OF MANAGEMENT & ORGANIZATION	2014	4	0,67

The grounding of the flying bank	Hermann, Aaron; Rammal, Hussain G.	MANAGEMENT DECISION	2010	4	0,4
Sustainability Risk Disclosure Practices of Listed Companies in Australia	Dumay, John; Hossain, M. D. Amir	AUSTRALIAN ACCOUNTING REVIEW	2019	3	3
Measuring the social responsibility of European companies: a goal programming approach	Garcia-Martinez, Gabriel; Guijarro, Francisco; Poyatos, Juan A.	INTERNATIONAL TRANSACTIONS IN OPERATIONAL RESEARCH	2019	3	3
Do Boards of Directors Influence Corporate Sustainable Development? An Attention-Based Analysis	Galbreath, Jeremy	BUSINESS STRATEGY AND THE ENVIRONMENT	2018	3	1,5
Comparison of Sustainable Environmental, Social, and Corporate Governance Value Added Models for Investors Decision Making	Docekalova, Marie Pavlakova; Kocmanova, Alena	SUSTAINABILITY	2018	3	1,5
Corporate governance and corporate social responsibility disclosures: The case of GCC countries	Garas, Samy; ElMassah, Suzanna	CRITICAL PERSPECTIVES ON INTERNATIONAL BUSINESS	2018	3	1,5
Sustainability practices of family firms: the interplay between family ownership and long-term orientation	Memili, Esra; Fang, Hanqing Chevy; Koc, Burcu; Yildirim-Oktem, Ozlem; Sonmez, Sevil	JOURNAL OF SUSTAINABLE TOURISM	2018	3	1,5
Determinants of forward-looking disclosures in integrated reporting	Kilic, Merve; Kuzey, Cemil	MANAGERIAL AUDITING JOURNAL	2018	3	1,5
A Further Examination of the Impact of Corporate Social Responsibility and Governance on Investment Decisions	Cohen, Jeffrey; Holder-Webb, Lori; Khalil, Samer	JOURNAL OF BUSINESS ETHICS	2017	3	1

Green governance and sustainability reporting in Kazakhstan's oil, gas, and mining sector: Evidence from a former USSR emerging economy	Mahmood, Monowar; Orazalin, Nurlan	JOURNAL OF CLEANER PRODUCTION	2017	3	1
Sustainability assurance and assurance providers: Corporate governance determinants in stakeholder-oriented countries	Martinez-Ferrero, Jennifer; Garcia-Sanchez, Isabel-Maria	JOURNAL OF MANAGEMENT & ORGANIZATION	2017	3	1
The impact of corporate sustainability performance on information asymmetry: the role of institutional differences	Diebecker, Jan; Sommer, Friedrich	REVIEW OF MANAGERIAL SCIENCE	2017	3	1
Dynamic relationships between crude oil prices and socially responsible investing in Brazil: evidence for linear and non-linear causality	de Oliveira, E. M.; Cunha, F. A. F. S.; Cyrino Oliveira, F. L.; Samanez, C. P.	APPLIED ECONOMICS	2017	3	1
Cooperative governance and social performance of cooperative societies	Kyazze, Lawrence Musiitwa; Nkote, Isaac Nabeta; Wakaisuka-Isingoma, Juliet	COGENT BUSINESS & MANAGEMENT	2017	3	1
International Evidence on the Relationship between Insider and Bank Ownership and CSR Performance	Lopatta, Kerstin; Jaeschke, Reemda; Canitz, Felix; Kaspereit, Thomas	CORPORATE GOVERNANCE-AN INTERNATIONAL REVIEW	2017	3	1
DOES THE INSTITUTIONAL ENVIRONMENT AFFECT CSR DISCLOSURE? THE ROLE OF GOVERNANCE	Rodriguez, Maria Del Mar Miras; Perez, Bernabe Escobar	RAE-REVISTA DE ADMINISTRACAO DE EMPRESAS	2016	3	0,75
The business value of ESG performance: the Indian context	Chelawat, Hemlata; Trivedi, Indra Vardhan	ASIAN JOURNAL OF BUSINESS ETHICS	2016	3	0,75

CORPORATE GOVERNANCE, FIRM PERFORMANCE, AND ECONOMIC GROWTH - THEORETICAL ANALYSIS	Skare, Marinko; Hasic, Tea	JOURNAL OF BUSINESS ECONOMICS AND MANAGEMENT	2016	3	0,75
Supply chain criticality in sustainable and resilient enterprises	Edgeman, Rick; Wu, Zhaohui	JOURNAL OF MODELLING IN MANAGEMENT	2016	3	0,75
Insights into the IMF bailout debate: A review and research agenda	Li, Larry; Sy, Malick; McMurray, Adela	JOURNAL OF POLICY MODELING	2015	3	0,6
Growing Demand for ESG Information and Standards: Understanding Corporate Opportunities as Well as Risks	Stewart, Levi S.	JOURNAL OF APPLIED CORPORATE FINANCE	2015	3	0,6
SME Governance in Indonesia - A Survey and Insight from Private Companies	Jaswadi; Iqbal, Mohammad; Sumiadji	INTERNATIONAL ACCOUNTING AND BUSINESS CONFERENCE 2015, IABC 2015	2015	3	0,6
Corporate Sociability Analyzing Motivations for Collaborative Regulation	Findlay, Mark	ADMINISTRATION & SOCIETY	2014	3	0,5
The Internal Integrated Reporting and The Value Creation: a Case Study Approach	Doni, Federica; Gasperini, Andrea	IFKAD 2014: 9TH INTERNATIONAL FORUM ON KNOWLEDGE ASSET DYNAMICS: KNOWLEDGE AND MANAGEMENT MODELS FOR SUSTAINABLE GROWTH	2014	3	0,5
Sustainability: Environmental, Social and Corporate Governance Performance in Czech SMEs	Kocmanova, Alena; Docekalova, Marie; Nemecek, Petr; Simberova, Iveta	WMSCI 2011: 15TH WORLD MULTI-CONFERENCE ON SYSTEMICS, CYBERNETICS AND INFORMATICS, VOL I	2011	3	0,33
Sustaining the Buyout Governance Model: Inside Secondary Management Buyout Boards	Jelic, Ranko; Zhou, Dan; Wright, Mike	BRITISH JOURNAL OF MANAGEMENT	2019	2	2

Composition and Activity of the Board of Directors: Impact on ESG Performance in the Banking System	Birindelli, Giuliana; Dell'Atti, Stefano; Iannuzzi, Antonia Patrizia; Savioli, Marco	SUSTAINABILITY	2018	2	1
DETERMINANTS OF THE PERFORMANCE OF MICROFINANCE INSTITUTIONS: A SYSTEMATIC REVIEW	Hermes, Niels; Hudon, Marek	JOURNAL OF ECONOMIC SURVEYS	2018	2	1
Screening activities by socially responsible funds: A matter of agency?	Gangi, Francesco; Varrone, Nicola	JOURNAL OF CLEANER PRODUCTION	2018	2	1
Assurance on Corporate Governance Reports in Spain: Towards an Enhanced Accountability or a New Form of Public Relations?	Segui-Mas, Elies; Bollas-Araya, Helena-Maria; Polo-Garrido, Fernando	ADMINISTRATIVE SCIENCES	2018	2	1
Determinants of Conflict Minerals Disclosure Under the Dodd-Frank Act	Dalla Via, Nicola; Perego, Paolo	BUSINESS STRATEGY AND THE ENVIRONMENT	2018	2	1
Board Governance and Sustainability Disclosure: A Cross-Sectional Study of Singapore-Listed Companies	Hu, Meibo; Loh, Lawrence	SUSTAINABILITY	2018	2	1
UNIVERSITY of PENNSYLVANIA LAW REVIEW	Belinfanti, Tamara; Stout, Lynn	UNIVERSITY OF PENNSYLVANIA LAW REVIEW	2018	2	1
The impact of social, environmental and corporate governance disclosures on firm value: Evidence from Egypt	Aboud, Ahmed; Diab, Ahmed	JOURNAL OF ACCOUNTING IN EMERGING ECONOMIES	2018	2	1
Convergence in corporate governance systems and sustainability culture	Salvioni, Daniela M.; Franzoni, Simona; Gennari, Francesca; Cassano, Raffaella	INTERNATIONAL JOURNAL OF BUSINESS PERFORMANCE MANAGEMENT	2018	2	1

Corporate Governance and Financial Sustainability of Microfinance Institutions in Nigeria	Uchenna, Okoye Lawerenec; Adedayo, Erin Olayinka; Ahmed, Ado; Isibor, Areghan	SUSTAINABLE ECONOMIC GROWTH, EDUCATION EXCELLENCE, AND INNOVATION MANAGEMENT THROUGH VISION 2020, VOLS I-VII	2017	2	0,67
ASSESSING THE RELATIONSHIP AMONG CORPORATE GOVERNANCE, SUSTAINABILITY DISCLOSURE AND FINANCIAL PERFORMANCE	Hong, Ng Yen; San, Ong Tze	ASIA-PACIFIC MANAGEMENT ACCOUNTING JOURNAL	2016	2	0,5
Integrated Reporting, Connectivity, and Social Media	Adriana Rivera-Arrubla, Yaismir; Zorio-Grima, Ana	PSYCHOLOGY & MARKETING	2016	2	0,5
From sustainability to adaptation: Goldman Sachs' corporate real estate strategy	Keenan, Jesse M.	BUILDING RESEARCH AND INFORMATION	2016	2	0,5
Total business excellence - a new management model for operationalizing excellence	Ferdowsian, Mehran C.	INTERNATIONAL JOURNAL OF QUALITY & RELIABILITY MANAGEMENT	2016	2	0,5
Corporate Governance Provisions, Family Involvement, and Firm Performance in Publicly Traded Family Firms	Memili, Esra; Misra, Kaustav	INTERNATIONAL JOURNAL OF FINANCIAL STUDIES	2015	2	0,4
An Overview of Capital Market Development Fund-Bursa Research Scheme (CBRS)	Qasem, Ameen Ali Mohammed; Aripin, Norhani; Wan-Hussin, Wan Nordin	ADVANCED SCIENCE LETTERS	2015	2	0,4
ENVIRONMENTAL PERFORMANCE AND RESPONSIBLE CORPORATE GOVERNANCE: AN EMPIRICAL NOTE	Dragomir, Voicu D.	E & M EKONOMIE A MANAGEMENT	2013	2	0,29
Business Ethics as Field of Teaching, Training and Research in Oceania	Gustavson, Royston	JOURNAL OF BUSINESS ETHICS	2011	2	0,22

Disagreeing About the Climate	Nordberg, Donald	BUSINESS & SOCIETY	2010	2	0,2
An empirical analysis of the complementarities and substitutions between effects of ceo ability and corporate governance on socially responsible performance	Garcia-Sanchez, Isabel-Maria; Hussain, Nazim; Martinez-Ferrero, Jennifer	JOURNAL OF CLEANER PRODUCTION	2019	1	1
Impact of Environmental, Social, and Governance Information on Economic Performance: Evidence of a Corporate 'Sustainability Advantage' from Europe	Taliento, Marco; Favino, Christian; Netti, Antonio	SUSTAINABILITY	2019	1	1
ESG Performance and Shareholder Value Creation in the Banking Industry: International Differences	Mar Miralles-Quiros, Maria; Luis Miralles-Quiros, Jose; Redondo Hernandez, Jesus	SUSTAINABILITY	2019	1	1
MOTIVATION FOR DISCLOSURE OF CORPORATE SOCIAL RESPONSIBILITY: EVIDENCE FROM BANKING INDUSTRY IN INDONESIA	Hermawan, Atang; Gunardi, Ardi	ENTREPRENEURSHIP AND SUSTAINABILITY ISSUES	2019	1	1
Toward Sustainable Accounting Information: Evidence from IFRS Adoption in Korea	Lee, Woo Jae	SUSTAINABILITY	2019	1	1
Firms' Sustainability: Does Economic Policy Uncertainty Affect Internal Control?	Liao, Fang-Nan; Ji, Xiao-Li; Wang, Zhi-Ping	SUSTAINABILITY	2019	1	1
The effect of corporate governance on carbon emission disclosures Evidence from Turkey	Kilic, Merve; Kuzey, Cemil	INTERNATIONAL JOURNAL OF CLIMATE CHANGE STRATEGIES AND MANAGEMENT	2019	1	1
Assessing the Sustainable Room for Growth for a Particular Romanian Tourism Area of Business: The Case of Accommodation Businesses	Berinde, Sorin-Romulus; Corpadean, Adrian-Gabriel	SUSTAINABILITY	2019	1	1

Board Attributes and Corporate Social Responsibility Disclosure: A Meta-Analysis	Guerrero-Villegas, Jaime; Perez-Calero, Leticia; Manuel Hurtado-Gonzalez, Jose; Giraldez-Puig, Pilar	SUSTAINABILITY	2018	1	0,5
Creating Common Ground: A Communicative Action Model of Dialogue in Shareholder Engagement	Ferraro, Fabrizio; Beunzab, Daniel	ORGANIZATION SCIENCE	2018	1	0,5
Credibility of sustainability reports: The contribution of audit committees	Al-Shaer, Habiba; Zaman, Mahbub	BUSINESS STRATEGY AND THE ENVIRONMENT	2018	1	0,5
Beyond conventional boundaries: Corporate governance as inspiration for critical accounting research	Gendron, Yves	CRITICAL PERSPECTIVES ON ACCOUNTING	2018	1	0,5
Corporate Governance mechanisms as drivers that enhance the credibility and usefulness of CSR disclosure	del Mar Miras-Rodriguez, Maria; Di Pietra, Roberto	JOURNAL OF MANAGEMENT & GOVERNANCE	2018	1	0,5
The Effect of Analyst Coverage on the Relationship between Seasoned Equity Offerings and Investment Efficiency From Korea	Oh, Hyun Min; Kim, Woo Young	SUSTAINABILITY	2018	1	0,5
The Use of Transnational Labour Law in Steering Socially Responsible Corporate Governance towards Increased Worker Protection	Martin, Isabelle	CANADIAN JOURNAL OF LAW AND SOCIETY	2018	1	0,5
Corporate Sustainable Development. Revisiting the Relationship between Corporate Social Responsibility Dimensions	Sidhoum, Amer Ait; Serra, Teresa	SUSTAINABLE DEVELOPMENT	2018	1	0,5
Corporate Social Responsibility and Operational Inefficiency: A Dynamic Approach	Guillamon-Saorin, Encarna; Kapelko, Magdalena;	SUSTAINABILITY	2018	1	0,5



	Stefanou, Spiro E.				
Is Green Regulation Effective or a Failure: Comparative Analysis between Bangladesh Bank (BB) Green Guidelines and Global Reporting Initiative Guidelines	Masud, Md. Abdul Kaium; Hossain, Mohammad Sharif; Kim, Jong Dae	SUSTAINABILITY	2018	1	0,5
A Review of Corporate Social Responsibility and Real Estate Investment Trust Studies: An Australian Perspective	Westermann, Steffen; Niblock, Scott J.; Kortt, Michael A.	ECONOMIC PAPERS	2018	1	0,5
GOVERNING THE VOID BETWEEN STAKEHOLDER MANAGEMENT AND SUSTAINABILITY	Barnett, Michael L.; Henriques, Irene; Husted, Bryan W.	SUSTAINABILITY, STAKEHOLDER GOVERNANCE, AND CORPORATE SOCIAL RESPONSIBILITY	2018	1	0,5
Board compositions and social reporting: evidence from Malaysia	Mohd-Said, Ridzwana; Shen, Lim Teck; Nahar, Hairul Suhaimi; Senik, Rosmila	INTERNATIONAL JOURNAL OF MANAGERIAL AND FINANCIAL ACCOUNTING	2018	1	0,5
Well-governed responsibility spurs performance	Javed, Muzhar; Rashid, Muhammad Amir; Hussain, Ghulam	JOURNAL OF CLEANER PRODUCTION	2017	1	0,33
RELATIONSHIP ANALYSIS OF CORPORATE GOVERNANCE, CORPORATE SOCIAL RESPONSIBILITY DISCLOSURE AND ECONOMIC CONSEQUENCES: EMPIRICAL STUDY OF INDONESIA CAPITAL MARKET	Hapsoro, Dody; Fadhillah, Anna Fauzia	SOUTH EAST ASIAN JOURNAL OF MANAGEMENT	2017	1	0,33
The empirical relationship between the managerial conduct and internal control activities in South African small, medium and micro enterprises	Bruwer, Juan-Pierre; Coetzee, Philna; Meiring, Jacolize	SOUTH AFRICAN JOURNAL OF ECONOMIC AND MANAGEMENT SCIENCES	2017	1	0,33

Quality of Accounting Information and Sustainability in Brazilian Companies listed on the BM&FBovespa	da Silva, Gildo Rodrigues; da Costa, Fabio Moraes	REVISTA CIENCIAS ADMINISTRATIVAS	2017	1	0,33
SUSTAINABILITY AND CORPORATE GOVERNANCE IN A BUSINESS LAW COURSE: A REAL WORLD PROJECT	Hibschweiler, Arlene M.; Salzman, Martha L.	ATLANTIC LAW JOURNAL	2017	1	0,33
CORPORATE GOVERNANCE AND COMPANY LAW: THE DISCONNECT BETWEEN ACCOUNTABILITY AND DIRECTORS' DUTIES	Lim, Ernest	HONG KONG LAW JOURNAL	2017	1	0,33
Critical Evaluation of Environmental, Social and Governance Disclosures of Malaysian Property and Construction Companies	Siew, Renard Yung Jhien	CONSTRUCTION ECONOMICS AND BUILDING	2017	1	0,33
Taking stock of the waqf-based Islamic microfinance model	Abdullah, Rose; Ismail, Abdul Ghafar	INTERNATIONAL JOURNAL OF SOCIAL ECONOMICS	2017	1	0,33
Corporate Sustainability in the Tourism Sector: Is Integrated Reporting an Appropriate Strategy?	Cucari, Nicola; Mugova, Shame	PROCEEDINGS OF THE 5TH INTERNATIONAL CONFERENCE ON MANAGEMENT, LEADERSHIP AND GOVERNANCE (ICMLG 2017)	2017	1	0,33
Accessibility and transparency: impact on social economy	Jose Lopez-Arceiz, Francisco; Bellostas Perezgrueso, Ana Jose; Rivera Torres, Maria Pilar	ONLINE INFORMATION REVIEW	2017	1	0,33
Game theory and corporate governance: conditions for effective stewardship of companies exposed to climate change risks	Kruitwagen, Lucas; Madani, Kaveh; Caldecott, Ben; Workman, Mark H. W.	JOURNAL OF SUSTAINABLE FINANCE & INVESTMENT	2017	1	0,33

Linking pollution toxicity and human exposure to firm idiosyncratic risk	Metcalf, Ashley Y.; Mackelprang, Alan W.; Galbreth, Michael R.	JOURNAL OF CLEANER PRODUCTION	2016	1	0,25
Corporate governance and the institutionalization of socially responsible investing (SRI) in Korea	Jun, Hannah	ASIA PACIFIC BUSINESS REVIEW	2016	1	0,25
Governance as a Key Factor for Ensuring the Sustainability of Outsourcing Models	Sarbu, Alexandra; Mateescu, Ruxandra; Buchmuller, Melanie; Just, Vanessa	PROCEEDINGS OF THE 4TH INTERNATIONAL CONFERENCE ON MANAGEMENT, LEADERSHIP AND GOVERNANCE (ICMLG 2016)	2016	1	0,25
Validating a triple bottom line construct and reasons for implementing sustainable business practices in companies and their business networks	Padin, Carmen; Ferro, Carlos; Wagner, Beverly; Sosa Valera, Juan Carlos; Hogevoid, Nils M.; Svensson, Goran	CORPORATE GOVERNANCE-THE INTERNATIONAL JOURNAL OF BUSINESS IN SOCIETY	2016	1	0,25
Corporate governance in China: a review	Sabbaghi, Omid	CORPORATE GOVERNANCE-THE INTERNATIONAL JOURNAL OF BUSINESS IN SOCIETY	2016	1	0,25
Corporate governance mechanisms and accounting information quality of listed firms in Ghana	Kukah, Mawuena Akosua; Amidu, Mohammed; Abor, Joshua Yindenaba	AFRICAN JOURNAL OF ACCOUNTING AUDITING AND FINANCE	2016	1	0,25
PERFORMANCE OF TRADITIONAL INVESTMENT FUNDS AND ETFs LINKED TO SUSTAINABILITY AND CORPORATE GOVERNANCE	Soares, Elisangela de Magalhaes; Milani, Bruno	REVISTA DE GESTAO FINANÇAS E CONTABILIDADE	2015	1	0,2

Mathematical model for sustainability assessment of agriculture farms with biogas plants	Kasem, Edward; Trenz, Oldrich; Hrebicek, Jiri; Faldik, Oldrich	33RD INTERNATIONAL CONFERENCE MATHEMATICAL METHODS IN ECONOMICS (MME 2015)	2015	1	0,2
Corporate Governance of Islamic Financial Institutions in Malaysia	Sulaiman, Maliah; Abd Majid, Norakma; Arifin, Noraini Mohd	ASIAN JOURNAL OF BUSINESS AND ACCOUNTING	2015	1	0,2
Untangling the antecedents of code of ethics quality: does corporate governance matter?	Garegnani, Giovanni Maria; Merlotti, Emilia Piera; Russo, Angeloantonio	CORPORATE GOVERNANCE-THE INTERNATIONAL JOURNAL OF BUSINESS IN SOCIETY	2015	1	0,2
Changing paradigms in corporate governance: new cycles and new responsibilities	Clarke, Thomas	SOCIETY AND BUSINESS REVIEW	2015	1	0,2
Public bads and private firms: efficiency and sustainability with different allocations of voting rights	Prinz, Aloys; van der Burg, Tsjalle	EUROPEAN JOURNAL OF LAW AND ECONOMICS	2013	1	0,14
Sustainability Governance Across Time and Space: Connecting Environmental Stewardship in the Firm with the Global Community	Heuer, Mark	BUSINESS STRATEGY AND THE ENVIRONMENT	2012	1	0,13
The Evolution of Corporate Governance and Accounting in a Sustainability Context	Feleaga, Niculae; Feleaga, Liliana; Dragomir, Voicu Dan	PROCEEDINGS OF THE 8TH EUROPEAN CONFERENCE ON MANAGEMENT LEADERSHIP AND GOVERNANCE	2012	1	0,13
PERFORMANCE OF WORKER-OWNED COMPANIES: A LABOR CORPORATE GOVERNANCE MODEL?	Fernandez-Guadano, Josefina	INNOVAR-REVISTA DE CIENCIAS ADMINISTRATIVAS Y SOCIALES	2012	1	0,13
Investor's perception on corporate responsibility of Indonesian listed companies	Mulyadi, Martin Surya; Anwar, Yunita	AFRICAN JOURNAL OF BUSINESS MANAGEMENT	2011	1	0,11

VOLUNTARY DISCLOSURE, TRUSTEE GOVERNANCE AND BACKGROUND IN AUSTRALIAN SUPERANNUATION FUNDS	Tan, Monica Guo Sze; Cam, Marie-Anne	JASSA-THE FINSIA JOURNAL OF APPLIED FINANCE	2011	1	0,11
Sustainability reporting in the Mining sector: Identifying critical issues	Viviers, S.; Boudler, J-M	TYDSKRIF VIR GEESTESWETENSKAPP E	2010	1	0,1
Reinforcing experiential learning with training culture as an innovative governance strategy in informal microfinance institutions	Fomba, Emmanuel Mbebeb	INTERNATIONAL JOURNAL OF TECHNOLOGY MANAGEMENT	2009	1	0,09
Performance, ownership, and management turnover in privatized Slovenian companies	Cvelbar, Ljubica Knezevic; Domadenik, Polona; Prasnikar, Janez	EASTERN EUROPEAN ECONOMICS	2008	1	0,08
The future of science and technology in Southeast Asia	Yuthavong, Y	INTERNATIONAL JOURNAL OF TECHNOLOGY MANAGEMENT	2001	1	0,05
The financial and market consequences of environmental, social and governance ratings The implications of recent political volatility in Egypt	About, Ahmed; Diab, Ahmed	SUSTAINABILITY ACCOUNTING MANAGEMENT AND POLICY JOURNAL	2019	0	0
Determinants of materiality disclosure quality in integrated reporting: Empirical evidence from an international setting	Gerwanski, Jannik; Kordsachia, Othar; Velte, Patrick	BUSINESS STRATEGY AND THE ENVIRONMENT	2019	0	0
Determinants of Corporate Environmental Disclosure from an Asian Perspective	Roy, Abhijit; Ghosh, Santanu Kumar	IIM KOZHIKODE SOCIETY & MANAGEMENT REVIEW	2019	0	0

Mapping the ESG Behavior of European Companies. A Holistic Kohonen Approach	Iamandi, Irina-Eugenia; Constantin, Laura-Gabriela; Munteanu, Sebastian Madalin; Cernat-Gruici, Bogdan	SUSTAINABILITY	2019	0	0
A Bibliometric Review of Global Research on Corporate Governance and Board Attributes	Zheng, Chenglong; Kouwenberg, Roy	SUSTAINABILITY	2019	0	0
Improving Enterprises' Cross-Border M&A Sustainability in the Globalization Age Research on Acquisition and Application of the Foreign Experience	Xie, Zaiyang; Lin, Runhui; Mi, Jie; Li, Na	SUSTAINABILITY	2019	0	0
Dinosaurs in transition? A conceptual exploration of local incumbents in the swiss and German energy transition	Muehlemeier, Susan	ENVIRONMENTAL INNOVATION AND SOCIETAL TRANSITIONS	2019	0	0
Enhancing the competitiveness and sustainability of social enterprises in Hong Kong: A three-dimensional analysis	Leung, Sidney; Mo, Phyllis; Ling, Howard; Chandra, Yanto; Ho, So Sum	CHINA JOURNAL OF ACCOUNTING RESEARCH	2019	0	0
Integrated reporting: an exploratory study of French companies	Albertini, Elisabeth	JOURNAL OF MANAGEMENT & GOVERNANCE	2019	0	0
A Leasehold Approach to Corporate Social Responsibility	Greller, Martin M.; Valentine, Sean R.	EMPLOYEE RESPONSIBILITIES AND RIGHTS JOURNAL	2019	0	0
Which Corporate Social Responsibility Performance Affects the Cost of Equity? Evidence from Korea	Ok, Youngkyung; Kim, Jungmu	SUSTAINABILITY	2019	0	0
Information technology governance framework for improving organisational performance	Ako-Nai, Anyetei; Singh, Anesh M.	SOUTH AFRICAN JOURNAL OF INFORMATION MANAGEMENT	2019	0	0

Corporate corruption prevention, sustainable governance and legislation: First exploratory evidence from the Italian scenario	Lombardi, Rosa; Trequattrini, Raffaele; Cuozzo, Benedetta; Cano-Rubio, Myriam	JOURNAL OF CLEANER PRODUCTION	2019	0	0
Demand Uncertainty, Cost Behavior, and the Asian Financial Crisis: Evidence from Korea	Kwon, Dae-Hyun	SUSTAINABILITY	2019	0	0
Managing Multiple Logics: The Role of Performance Measurement Systems in Social Enterprises	Nielsen, Janni Grouleff; Lueg, Rainer; van Liempd, Dennis	SUSTAINABILITY	2019	0	0
Ingredients of Sustainable CEO Behaviour: Theory and Practice	Abatecola, Gianpaolo; Cristofaro, Matteo	SUSTAINABILITY	2019	0	0
Do Hierarchical Jumps in CEO Succession Invigorate Innovation? Evidence from Chinese Economy	Sarfraz, Muddassar; Qun, Wang; Shah, Syed Ghulam Meran; Fareed, Zeeshan	SUSTAINABILITY	2019	0	0
Sustainable Investment: Interrelated among Corporate Governance, Economic Performance and Market Risks Using Investor Preference Approach	Tseng, Ming-Lang; Tan, Phan Anh; Jeng, Shiou-Yun; Lin, Chun-Wei Remen; Negash, Yeneneh Tamirat; Darsono, Susilo Nur Aji Cokro	SUSTAINABILITY	2019	0	0
Board characteristics and sustainable energy performance of selected companies in South Africa	Fakoya, Michael Bamidele; Nakeng, Mancheleng Vanessa	SUSTAINABLE PRODUCTION AND CONSUMPTION	2019	0	0
Corporate governance integration with sustainability: a systematic literature review	E-Vahdati, Sahar; Zulkifli, Norhayah; Zakaria, Zarina	CORPORATE GOVERNANCE-THE INTERNATIONAL JOURNAL OF BUSINESS IN SOCIETY	2019	0	0

Corporate governance and financial performance for engaging socially and environmentally responsible practices	Fiandrino, Simona; Devalle, Alain; Cantino, Valter	SOCIAL RESPONSIBILITY JOURNAL	2019	0	0
Corporate risk taking and sustainability: a case of listed firms from USA and Germany	Younas, Zahid Irhsad; Zafar, Ameena	JOURNAL OF GLOBAL RESPONSIBILITY	2019	0	0
Research Topics in Accounting Fraud in the 21st Century: A State of the Art	Ramos Montesdeoca, Monica; Sanchez Medina, Agustin J.; Blazquez Santana, Felix	SUSTAINABILITY	2019	0	0
Assessing Sustainability-Related Systematic Reputational Risk through Voting Results in Corporate Meetings: A Cross-Industry Analysis	Vizcaino-Gonzalez, Marcos; Iglesias-Antelo, Susana; Romero-Castro, Noelia	SUSTAINABILITY	2019	0	0
The impact of social and environmental sustainability on financial performance: A global analysis of the banking sector	Nizam, Esma; Ng, Adam; Dewandaru, Ginanjar; Nagayev, Ruslan; Nkoba, Malik Abdulrahman	JOURNAL OF MULTINATIONAL FINANCIAL MANAGEMENT	2019	0	0
SUSTAINABILITY REPORTING. A ROMANIAN INSIGHT	Stanciu, Victoria; Bran, Florin Paul	QUALITY-ACCESS TO SUCCESS	2019	0	0
Corporate governance and sustainable business conduct-Effects of board monitoring effectiveness and stakeholder engagement on corporate sustainability performance and disclosure choices	Manning, Bart; Braam, Geert; Reimsbach, Daniel	CORPORATE SOCIAL RESPONSIBILITY AND ENVIRONMENTAL MANAGEMENT	2019	0	0
How does CEO pay slice influence corporate social responsibility? US-Canadian versus Spanish-French listed firms	Jouber, Habib	CORPORATE SOCIAL RESPONSIBILITY AND ENVIRONMENTAL MANAGEMENT	2019	0	0



Socially Responsible Human Resource Management as a Concept of Fostering Sustainable Organization-Building: Experiences of Young Polish Companies	Bombiak, Edyta; Marciniuk-Kluska, Anna	SUSTAINABILITY	2019	0	0
Does Corporate Social Responsibility Affect the Financial Performance of the Manufacturing Sector? Evidence from an Emerging Economy	Cherian, Jacob; Umar, Muhammad; Phung Anh Thu; Thao Nguyen-Trang; Sial, Muhammad Safdar; Nguyen Vinh Khuong	SUSTAINABILITY	2019	0	0
Co-CEOs and Asymmetric Cost Behavior	Lee, Jiyeon; Park, Jin-Ha; Hyeon, Jiwon	SUSTAINABILITY	2019	0	0
Sustainable development disclosure: Environmental, social, and governance reporting and gender diversity in the audit committee	Bravo, Francisco; Reguera-Alvarado, Nuria	BUSINESS STRATEGY AND THE ENVIRONMENT	2019	0	0
Strengthen Financial Holding Companies' Business Sustainability by Using a Hybrid Corporate Governance Evaluation Model	Huang, Jim-Yuh; Shen, Kao-Yi; Shieh, Joseph C. P.; Tzeng, Gwo-Hshiung	SUSTAINABILITY	2019	0	0
Financial performance and corporate governance in microfinance: Evidence from Asia	Iqbal, Sana; Nawaz, Ahmad; Ehsan, Sadaf	JOURNAL OF ASIAN ECONOMICS	2019	0	0
The Capability of Risk as a Corporate Reputation Driver to increase Market Value	Tristiari, Nila; Utomo, St Dwiwarso; Setiawanta, Yulita	QUALITY-ACCESS TO SUCCESS	2019	0	0
CORPORATE GOVERNANCE REPORTING AND FINANCIAL AND MARKET PERFORMANCE OF SELECTED COMPANIES ON ZAGREB STOCK EXCHANGE	Hasceck, Andreja; Butkovic, Damir; Kalazic, Zorislav	INTERDISCIPLINARY MANAGEMENT RESEARCH XV (IMR)	2019	0	0

Is corporate governance relevant to the quality of corporate social responsibility disclosure in large European companies?	Adel, Christine; Hussain, Mostaq M.; Mohamed, Ehab K. A.; Basuony, Mohamed A. K.	INTERNATIONAL JOURNAL OF ACCOUNTING AND INFORMATION MANAGEMENT	2019	0	0
Corporate social responsibility and sustainability committee inside the board	del Valle, Ignacio Danvila; Diez Esteban, Jose Maria; de Foronda Perez, Oscar Lopez	EUROPEAN JOURNAL OF INTERNATIONAL MANAGEMENT	2019	0	0
THE RELATIONSHIP BETWEEN CORPORATE GOVERNANCE AND INTEGRATED REPORTING: THAI EVIDENCE	Suttipun, Muttanachai; Bomlai, Anchalee	INTERNATIONAL JOURNAL OF BUSINESS AND SOCIETY	2019	0	0
Older and Wiser: How CEOs' Time Perspective Influences Long-Term Investments in Environmentally Responsible Technologies	Ortiz-de-Mandojana, Natalia; Bansal, Pratima; Alberto Aragon-Correa, J.	BRITISH JOURNAL OF MANAGEMENT	2019	0	0
Which Corporate Governance Mechanisms Drive CSR Disclosure Practices in Emerging Countries?	del Mar Miras-Rodriguez, Maria; Martinez-Martinez, Domingo; Escobar-Perez, Bernabe	SUSTAINABILITY	2019	0	0
The Effect of Corporate Governance on Earnings Quality and Market Reaction to Low Quality Earnings: Korean Evidence	Shin, Hyejeong; Kim, Su-In	SUSTAINABILITY	2019	0	0
Women in top positions on boards of directors: Gender policies disclosed in Italian sustainability reporting	Furlotti, Katia; Mazza, Tatiana; Tibiletti, Veronica; Triani, Silvia	CORPORATE SOCIAL RESPONSIBILITY AND ENVIRONMENTAL MANAGEMENT	2019	0	0

Is sustainability reporting (ESG) associated with performance? Evidence from the European banking sector	Buallay, Amina	MANAGEMENT OF ENVIRONMENTAL QUALITY	2019	0	0
The Concept of Business Legitimacy: Corporate Social Responsibility, Corporate Citizenship, Corporate Governance as Essential Elements of Ethical Business Legitimacy	Rendtorff, Jacob Dahl	RESPONSIBILITY AND GOVERNANCE: THE TWIN PILLARS OF SUSTAINABILITY	2019	0	0
Building an Industry-Oriented Business Sustainability Curriculum in Higher Education	Chen, Mei-hui; Wu, Yenchun Jim; Tsai, Kune-muh	SUSTAINABILITY	2018	0	0
Brief analysis of the international legal framework of corporate social responsibility	Ene, Charlotte	JURIDICAL TRIBUNE-TRIBUNA JURIDICA	2018	0	0
Which CSR activities are more consequential? Evidence from the Great Recession	Sakunasingha, Benjalux; Jiraporn, Pornsit; Uyar, Ali	FINANCE RESEARCH LETTERS	2018	0	0
An FSB board member can better align corporate governance with SIFI sustainability	Phillips, Emir; Desmoulins-Lebeault, Francois	QUARTERLY REVIEW OF ECONOMICS AND FINANCE	2018	0	0
Moderating Effects of Agency Problems and Monitoring Systems on the Relationship between Executive Stock Option and Audit Fees: Evidence from Korea	Lee, Sang Cheol; Park, Jaewan; Rhee, Mooweon; Lee, Yunkeun	SUSTAINABILITY	2018	0	0
The Taste for Corporate Responsibility: Heterogeneity and Consensus Around CR Indicators	Becchetti, Leonardo; Semplici, Lorenzo; Tridente, Michele	SOCIAL INDICATORS RESEARCH	2018	0	0
Factors associated with internal audit's involvement in environmental and social assurance and consulting	Soh, Dominic S. B.; Martinov-Bennie, Nonna	INTERNATIONAL JOURNAL OF AUDITING	2018	0	0

Does Corporate Social Responsibility Mediate the Relation between Boardroom Gender Diversity and Firm Performance of Chinese Listed Companies?	Sial, Muhammad Safdar; Zheng, Chunmei; Cherian, Jacob; Gulzar, M. A.; Phung Anh Thu; Khan, Tehmina; Nguyen Vinh Khuong	SUSTAINABILITY	2018	0	0
A critical review of the Corporate Governance dimension in the Sustainability Indexes questionnaires	Andreu Pinillos, A.; Fernandez-Fernandez, J. L.; Fernandez Mateo, J.	REVISTA DE COMUNICACION-PERU	2018	0	0
Foreign Monitoring and Audit Quality: Evidence from Korea	Lee, Sang Cheol; Rhee, Mooweon; Yoon, Jongchul	SUSTAINABILITY	2018	0	0
Environmental Firms' Better Attitude towards Nature in the Context of Corporate Compliance	Robina Ramirez, Rafael; Palos-Sanchez, Pedro R.	SUSTAINABILITY	2018	0	0
The Value of Public Sector Risk Management: An Empirical Assessment of Ghana	Kong, Yusheng; Lartey, Peter Yao; Bah, Fatoumata Binta Maci; Biswas, Nirmalya B.	ADMINISTRATIVE SCIENCES	2018	0	0
Accounting and Accountability in Fiji: A Review and Synthesis	Sharma, Umesh; An, Yi	AUSTRALIAN ACCOUNTING REVIEW	2018	0	0
Corporate transparency laws: A hollow victory?	Mares, Radu	NETHERLANDS QUARTERLY OF HUMAN RIGHTS	2018	0	0
The Effect of CEOs' Turnover on the Corporate Sustainability Performance of French Firms	Bernard, Yohan; Godard, Laurence; Zouaoui, Mohamed	JOURNAL OF BUSINESS ETHICS	2018	0	0

Conscious capitalism and corporate governance: construction of knowledge based on the literature	da Silva, Daniel Cargnin; Dutra, Ademar; Sehnem, Simone; Martignago, Graciella	NAVUS-REVISTA DE GESTAO E TECNOLOGIA	2018	0	0
INFLUENCE OF CORPORATE GOVERNANCE IN ISEBOVESPA'S PARTICIPATION	Tavares Junior, Ednilto Pereira; Barbosa Lustosa, Paulo Roberto; Henriques Sales, Isabel Cristina	REVISTA AMBIENTE CONTABIL	2018	0	0
Trends in Integrated Reporting: A State-Owned Company Analysis	Surty, Mahmood; Padia, Nirupa; Yasseen, Yaesh	SOUTHERN AFRICAN BUSINESS REVIEW	2018	0	0
Factors Influencing Successful Succession Transition of Small Family Businesses in Pakistan	Ahmad, Zeeshan; Imran, Muhammad; Siddique, Meh-Para; Khan, Reema	PACIFIC BUSINESS REVIEW INTERNATIONAL	2018	0	0
An Adapted Framework for Environmental Sustainability Reporting using Mobile Technologies	Calitz, Andre P.; Zietsman, Jaco F.	AFRICAN JOURNAL OF INFORMATION SYSTEMS	2018	0	0
Sovereign wealth funds, productivity and people: The impact of Norwegian Government Pension Fund-Global investments in the United Kingdom	Goergen, Marc; O'Sullivan, Noel; Wood, Geoffrey; Baric, Marijana	HUMAN RESOURCE MANAGEMENT JOURNAL	2018	0	0
The Firm and Common Pool Resource Theory: Understanding the Rise of Benefit Corporations	Hiller, Janine S.; Shackelford, Scott J.	AMERICAN BUSINESS LAW JOURNAL	2018	0	0
Does a Board Chairman's Political Connection Affect Green Investment?-From a Sustainable Perspective	Wang, Kai; Zhang, Hao-Min; Tsai, Sang-Bing; Wu, Li-Dong; Xue, Kun-Kun; Fan, He-Jun; Zhou, Jie; Chen, Quan	SUSTAINABILITY	2018	0	0

How Economic Sustainability is Created by Implementation of Good Corporate Governance in Small Scale Enterprises: Case Study in Tenun Songket Industry in West Sumatera	Engriani, Yunita; Budiarti, Astra Prima	PROCEEDINGS OF THE 2ND PADANG INTERNATIONAL CONFERENCE ON EDUCATION, ECONOMICS, BUSINESS AND ACCOUNTING (PICEEBA-2 2018)	2018	0	0
How Economic Sustainability is Created by Implementation of Good Corporate Governance in Small Scale Enterprises: Case Study in Tenun Songket Industry in West Sumatera	Engriani, Yunita; Budiarti, Astra Prima	PROCEEDINGS OF THE 2ND PADANG INTERNATIONAL CONFERENCE ON EDUCATION, ECONOMICS, BUSINESS AND ACCOUNTING (PICEEBA-2 2018)	2018	0	0
Impact of Corporate Governance on Company's Performance with Sustainability Reporting as an Intervening Variable in Indonesia	Machdar, Nera Marinda	PROCEEDINGS OF THE 5TH ANNUAL INTERNATIONAL CONFERENCE ON ACCOUNTING RESEARCH (AICAR 2018)	2018	0	0
The Effect of Disclosure of Corporate Social Responsibility and Good Corporate Governance to ROA in Sri Kehati Index	Effendi, Syahrul	PROCEEDINGS OF THE 5TH ANNUAL INTERNATIONAL CONFERENCE ON MANAGEMENT RESEARCH (AICMAR 2018)	2018	0	0
Responsibility and Governance in Achieving Sustainability	Crowther, David; Seifi, Shahla; Moyeen, Abdul	GOALS OF SUSTAINABLE DEVELOPMENT: RESPONSIBILITY AND GOVERNANCE	2018	0	0
A BLUEPRINT FOR INTEGRATING ESG INTO EQUITY PORTFOLIOS	Bender, Jennifer; Bridges, Todd; He, Chen; Lester, Anna; Sun, Xiaole	JOURNAL OF INVESTMENT MANAGEMENT	2018	0	0
GOVERNANCE OF BEHAVIOURAL BIASES IN ASSET MANAGEMENT INDUSTRY: INSIGHTS FROM FUND MANAGERS IN MALAYSIA	Ahmad, Zamri; Ibrahim, Haslindar; Tuyon, Jasman	ASIAN ACADEMY OF MANAGEMENT JOURNAL OF ACCOUNTING AND FINANCE	2018	0	0

ARE CORPORATE GOVERNANCE CODE DISCLOSURE AND ENGAGEMENT PRINCIPLES EFFECTIVE VEHICLES FOR CORPORATE ACCOUNTABILITY? THE UNITED KINGDOM AS A CASE STUDY	North, Gill	DEAKIN LAW REVIEW	2018	0	0
FINANCIAL ARCHITECTURE AS THE BASE OF THE FINANCIAL SAFETY OF THE ENTERPRISE	Sosnovska, Olga; Zhytar, Maksym	BALTIC JOURNAL OF ECONOMIC STUDIES	2018	0	0
A study on the earnings response coefficient (ERC) of socially responsible firms: Legal environment and stages of corporate social responsibility	Kim, Yoo Chan; Seol, Inshik; Kang, Yun Sik	MANAGEMENT RESEARCH REVIEW	2018	0	0
The Effect of Corporate Governance towards Corporate Social Responsibility Disclosure	Pramono, Hadi	PROCEEDINGS OF THE 5TH INTERNATIONAL CONFERENCE ON COMMUNITY DEVELOPMENT (AMCA 2018)	2018	0	0
Effect of Regulations on Financial Performance and Outreach of MFIs	Amin, Waqas; Qin, Fengming; Rauf, Abdul; Ahmad, Fayyaz	PUBLIC FINANCE QUARTERLY-HUNGARY	2018	0	0
The role of the internal audit function in integrated reporting: a developing economy perspective	Engelbrecht, Lindie; Yasseen, Yaesh; Omarjee, Irfaan	MEDITARI ACCOUNTANCY RESEARCH	2018	0	0
Board involvement in corporate sustainability reporting: evidence from Sri Lanka	Mudiyanselag, Nayana Chandani Swarnapali Rathnayaka	CORPORATE GOVERNANCE-THE INTERNATIONAL JOURNAL OF BUSINESS IN SOCIETY	2018	0	0
The role of the board in voluntary disclosure	Bueno, Giovana; Marcon, Rosilene; Pruner-da-Silva, Andre Leonardo;	CORPORATE GOVERNANCE-THE INTERNATIONAL JOURNAL OF BUSINESS IN SOCIETY	2018	0	0

	Ribeirete, Fabio				
A citation analysis of corporate social responsibility (1970-2014): insights from Islamic perspective	Alfakhri, Yazeed; Nurunnabi, Mohammad; Alfakhri, Demah	JOURNAL OF ISLAMIC MARKETING	2018	0	0
On the Way to Conscious Capitalism: From Marx to Modernity	Tkachenko, I. N.	EKONOMIKA REGIONA-ECONOMY OF REGION	2018	0	0
Explaining the adoption of benefit corporation laws by the US states	Murray, Susan M.	JOURNAL OF FINANCIAL ECONOMIC POLICY	2018	0	0
Reading between the lines: not all CSR is good CSR	Ding, David K.; Ferreira, Christo; Wongchoti, Udomsak	PACIFIC ACCOUNTING REVIEW	2018	0	0
Corporate risk-taking and performance in Malaysia: the effect of board composition, political connections and sustainability practices	Chong, Lee-Lee; Ong, Hway-Boon; Tan, Siow-Hooi	CORPORATE GOVERNANCE-THE INTERNATIONAL JOURNAL OF BUSINESS IN SOCIETY	2018	0	0
Business Internal Auditing - An Effective Approach in Developing Sustainable Management Systems	Puci, Jona; Guxholli, Suzana	EUROPEAN JOURNAL OF SUSTAINABLE DEVELOPMENT	2018	0	0
The effect of stakeholder pressure and corporate governance on the sustainability report quality	Rudyanto, Astrid; Siregar, Sylvia Veronica	INTERNATIONAL JOURNAL OF ETHICS AND SYSTEMS	2018	0	0
Modeling Complex Financial Sustainability of a Corporation in the Age of Global Economic Crises	Malyshenko, Vadim A.; Malyshenko, Konstantin A.	ECONOMIC AND SOCIAL CHANGES-FACTS TRENDS FORECAST	2018	0	0
The influence of corporate governance's decision on corporate social responsibility	Baldini, Maria Assunta; Bronzetti, Giovanni; Sicoli, Graziella	INTERNATIONAL JOURNAL OF BUSINESS PERFORMANCE MANAGEMENT	2018	0	0



Internationalisation and corporate governance in family businesses: a case study	Cristiano, Elena	INTERNATIONAL JOURNAL OF BUSINESS PERFORMANCE MANAGEMENT	2018	0	0
Do dimensions of corporate social responsibility affect earnings management?: Evidence from France	Ben Amar, Anis; Chakroun, Salma	JOURNAL OF FINANCIAL REPORTING AND ACCOUNTING	2018	0	0
Sustainability enhancement of corporate governance regime in India	Kansil, Ruchi; Singh, Archana	WORLD JOURNAL OF SCIENCE TECHNOLOGY AND SUSTAINABLE DEVELOPMENT	2018	0	0
An empirical investigation into the corporate culture of UK listed banks	Cox, Paul; Soobiah, Diandra	JOURNAL OF FINANCIAL REGULATION AND COMPLIANCE	2018	0	0
Selected factors that influence successful strategic planning in South African higher education	Bosire, Samuel M.	INDEPENDENT JOURNAL OF TEACHING AND LEARNING	2017	0	0
Revitalizing China's Economy by Improved Corporate Governance and State-Owned Enterprise Reforms	Molnar, Margit	JOURNAL OF INTERNATIONAL COMMERCE ECONOMICS AND POLICY	2017	0	0
Who should serve on health care boards? What should they do and how should they behave? A fresh look at the literature and the evidence	Chambers, N.; Harvey, G.; Mannion, R.	COGENT BUSINESS & MANAGEMENT	2017	0	0
Corporate governance mechanisms and intellectual capital	Tejedo-Romero, Francisca; Ferraz Esteves Araujo, Joaquim Filipe; Emmendoerfer, Magnus Luiz	RBGN-REVISTA BRASILEIRA DE GESTAO DE NEGOCIOS	2017	0	0
SUSTAINABILITY IN THE OIL INDUSTRY - A COMPARATIVE FINANCIAL ANALYSIS OF INTEGRATED AND	La Macchia, Evandro; Hall, James; Wasserman, Julio Cesar; Zotes, Luis Perez	SISTEMAS & GESTAO	2017	0	0

VERTICALIZED COMPANIES					
AN ANALYSIS OF THE DIMENSION OF CORPORATE GOVERNANCE IN COMPANIES LISTED ON THE ISE 2014 BM & FBOVESPA	Favero, Jeferson Deleon	REVISTA CONTABILIDADE E CONTROLADORIA-RC C	2017	0	0
Creation of a stakeholder integration method for corporate governance	Roberto Volpentesta, Jorge	ESTUDIOS GERENCIALES	2017	0	0
Towards integrated reporting: The inclusion of content elements of an integrated annual report in the chairmen's statements of JSE-listed companies	Mmako, N.; van Rensburg, M. Jansen	SOUTH AFRICAN JOURNAL OF BUSINESS MANAGEMENT	2017	0	0
Sustainability and Corporate Governance an Investigation on Firm Performance: A Study on Malaysian Public Listed Firms	Johl, Satirenjit Kaur; Salami, Oladipupo Luqman	ADVANCED SCIENCE LETTERS	2017	0	0
The performance dimension in symbolic management revisited: the functional role of traditional mechanisms in large Korean firms	Yoo, Taeyoung	ASIA PACIFIC BUSINESS REVIEW	2017	0	0
Modern innovations in corporate reporting	Vasilyeva, T. A.; Makarenko, I. A.	MARKETING AND MANAGEMENT OF INNOVATIONS	2017	0	0
Firm-specific and Board-specific Characteristics: Do They Matter for Corporate Sustainability Disclosure of Sri Lankan Listed Companies?	Swarnapali, R. M. N. C.; Le, Luo	PROCEEDINGS OF THE 14TH INTERNATIONAL CONFERENCE ON INNOVATION AND MANAGEMENT, VOLS I & II	2017	0	0
Selected Aspects to Determine of Sustainable Value in Enterprise Practice	Chvatalova, Zuzana; Hrebicek, Jiri	ENTERPRISE AND COMPETITIVE ENVIRONMENT	2017	0	0

The strength of the board on sustainability assurance decisions The moderating role of family business	Martinez-Ferrero, Jennifer; Rodriguez-Ariza, Lazaro; Garcia-Sanchez, Isabel Maria	JOURNAL OF SMALL BUSINESS AND ENTERPRISE DEVELOPMENT	2017	0	0
Governance of old religious orders: Benedictines and Dominicans	Wirtz, Peter	JOURNAL OF MANAGEMENT HISTORY	2017	0	0
Unholy or Pragmatic? Governance in a Post-Democratic World	Wells, Philippa	PROCEEDINGS OF THE 5TH INTERNATIONAL CONFERENCE ON MANAGEMENT, LEADERSHIP AND GOVERNANCE (ICMLG 2017)	2017	0	0
Audit fee premium: The potential effect of King III	Pendehama, Vincent; Padia, Nirupa; Callaghan, Chris	SOUTH AFRICAN JOURNAL OF ACCOUNTING RESEARCH	2017	0	0
The Impact of Electronic Corporate Governance in Knowledge Management	de Cuffa, Denise; Zago, Carine; Zarelli, Paula Regina; de Mello, Gilmar Ribeiro	NAVUS-REVISTA DE GESTAO E TECNOLOGIA	2016	0	0
ACCOUNTABILITY OF THE RELEVANCE OF INSTITUTIONS OF HIGHER EDUCATION TO SOCIETY	Franca, Silvano; Guberovic, Silvia Regina; Santos, Fernando de Almeida; Rosini, Alessandro Marco	REVISTA METROPOLITANA DE SUSTENTABILIDADE	2016	0	0
CORPORATE GOVERNANCE: THE CASE OF COOPERATIVE COPACOL	Bortoluzzi, Franciane; Leismann, Edison Luiz; Johann, Jerry Adriani	REVISTA METROPOLITANA DE SUSTENTABILIDADE	2016	0	0
Community engagement models in real estate-a case study of Tata Housing Development Company Limited	Mitra, Nayan	ASIAN JOURNAL OF BUSINESS ETHICS	2016	0	0

Corporate Governance, Responsibility and Sustainability: Initiatives in Emerging Economies	Basu, Rituparna	GLOBAL BUSINESS REVIEW	2016	0	0
The business of cricket and the shifting significance of accounting	Siddiqui, Javed; Humphrey, Christopher	ACCOUNTING HISTORY	2016	0	0
Pursuing triple bottom line sustainability through conscious corporate governance	Sukhdeo, B. A. F.; Arnolds, C. A.	SOUTH AFRICAN JOURNAL OF LABOUR RELATIONS	2016	0	0
Steering Toward True North: Canadian Corporate Law, Corporate Social Responsibility, and Creating Shared Value	Paramonova, Evguenia	MCGILL INTERNATIONAL JOURNAL OF SUSTAINABLE DEVELOPMENT LAW AND POLICY	2016	0	0
Measuring corporate governance in South Africa: Developments, concerns and suggestions	Mans-Kemp, N.; Erasmus, P.; Viviers, S.	SOUTHERN AFRICAN JOURNAL OF ACCOUNTABILITY AND AUDITING RESEARCH-SAJAAR	2016	0	0
A Study Of The Impact Of Corporate Governance Of The Upper Echelon On The Value Of The Firm - A Focus On The Gender Of The Board And Supervisory Board	Schmid, Jochen; Just, Vanessa; Heinemann, Bastian; Buchmuller, Melanie	VISION 2020: INNOVATION MANAGEMENT, DEVELOPMENT SUSTAINABILITY, AND COMPETITIVE ECONOMIC GROWTH, 2016, VOLS I - VII	2016	0	0
An Analysis of Explanations Submitted by Listed Companies BM&FBOVESPA for not Publicize the Sustainability Report or Similar	Dantas de Vasconcelos, Maria Livania; Silva Manzi, Suely Maria; Pimentel, Marcio Sampaio	REUNIR-REVISTA DE ADMINISTRACAO CONTABILIDADE E SUSTENTABILIDADE	2016	0	0
THE CORRELATION BETWEEN VOLATILITY AND VOLUNTARY DISCLOSURE OF FIRMS IN A MULTISTAKEHOLDER APPROACH.	Coluccia, Daniela; D'Amico, Eugenio; Solimene, Silvia; Fontana, Stefano	INNOVATION, ENTREPRENEURSHIP AND DIGITAL ECOSYSTEMS	2016	0	0

Firm's Growth and Sustainability: The Role of Institutional Investors in Mitigating the Default Risks of Sukuk and Conventional Bonds	Saad, Noriza Mohd; Haniff, Mohd Nizal; Ali, Norli	7TH INTERNATIONAL ECONOMICS & BUSINESS MANAGEMENT CONFERENCE (IEBMC 2015)	2016	0	0
Board structure-performance relationship in microfinance institutions (MFIs) in an emerging economy	Thrikawala, Sujani; Locke, Stuart; Reddy, Krishna	CORPORATE GOVERNANCE-THE INTERNATIONAL JOURNAL OF BUSINESS IN SOCIETY	2016	0	0
Social and Environmental Risks: The Role of Board Members	Darus, Faizah; Jangu, Tamoi	INNOVATION MANAGEMENT AND EDUCATION EXCELLENCE VISION 2020: FROM REGIONAL DEVELOPMENT SUSTAINABILITY TO GLOBAL ECONOMIC GROWTH, VOLS I - VI	2016	0	0
The corporate governance and social responsibility nexus in the Lebanese banking industry	Gali, Nazha; Hajjar, Dima; Jamali, Ibrahim	CORPORATE GOVERNANCE-THE INTERNATIONAL JOURNAL OF BUSINESS IN SOCIETY	2016	0	0
Board diversity and sustainability performance	Oosthuizen, A.; Lahner, S.	SOUTHERN AFRICAN BUSINESS REVIEW	2016	0	0
SOCIAL RESPONSIBILITY AND CORPORATE GOVERNANCE IN A BUILDING COMPANY	Osinski, Marilei; Roman, Darlan Jose; Pereira, Mauricio Fernandes	REVISTA ELETRONICA DE ESTRATEGIA E NEGOCIOS-REEN	2016	0	0
EMOTIONAL THRESHOLDS AND CHANGE AGENT SUCCESS IN CORPORATE SUSTAINABILITY	Blomfield, Jessica M.; Troth, Ashlea C.; Jordan, Peter J.	EMOTIONS AND ORGANIZATIONAL GOVERNANCE	2016	0	0
Equator Principles and Regulatory Governance in sustainable public contracts: implications for expropriations	da Silva Gomes Caldas, Roberto Correia; Martins, Thiago Penido	REVISTA BRASILEIRA DE ESTUDOS POLITICOS	2016	0	0

THE IMPORTANCE OF SUSTAINABILITY FOR COMPANIES IN THE ELECTRICITY SECTOR: USE OF SUSTAINABILITY REPORTS BASED ON THE GRI - GLOBAL REPORTING INITIATIVE	Lugoboni, Leonardo Fabris; Paulino, Adriana de Toledo; Moreira Zittei, Marcus Vinicius; Pereira, Raquel da Silva	REVISTA METROPOLITANA DE SUSTENTABILIDADE	2015	0	0
Priorities for Corporate Social Responsibility Reporting: Evidence from Listed Turkish Companies in Istanbul Stock Exchange	Cetinkaya, Melek; Agca, Veysel; Ozutku, Hatice	JOURNAL OF ECONOMIC AND SOCIAL STUDIES	2015	0	0
Communication and C-Suite: Some Strategic Contributions	Recalde Viana, Monica; Gutierrez-Garcia, Elena	ANALISI-QUADERNS DE COMUNICACIO I CULTURA	2015	0	0
Deciphering Corporate Governance and Environmental Commitments among Southeast Asian Transnationals: Uptake of Sustainability Certification	Roda, Jean-Marc; Kamaruddin, Norfaryanti; Tobias, Rafael Palhiarim	FORESTS	2015	0	0
Governance and Power: a guide for good practices in cooperatives and other people-centered associations	de Paula Xavier Vilela, Jose Ricardo; Carvalho Neto, Antonio; Bernardes, Patricia; Rocha Cardoso, Maria Beatriz	CONTABILIDADE GESTAO E GOVERNANCA	2015	0	0
Study on Corporate Governance of Stock Market in Korea: Network Analysis with relationship of Major Shareholders	Moon, Hyejung; Park, JangHo; Kim, SungKyung	2015 IEEE INTERNATIONAL CONGRESS ON BIG DATA - BIGDATA CONGRESS 2015	2015	0	0
The Reference Model of Corporate Performance Management in the Sustainability Context	Buresova, Veronika; Dvorakova, Lilia	Proceedings of the 3rd International Conference on Management Leadership and Governance (ICMLG 2015)	2015	0	0

Corporate Social Responsibility as a Trajectory to Actualization of Corporate Governance Strategy: Case study of Nairobi City Water and Sewerage Company	Mukoya, Kent A.; Mwaura, Mbutu	PROCEEDINGS OF THE 51ST ISOCARP CONGRESS	2015	0	0
Web Application for sustainability and Reporting for Czech Breweries	Faldik, Oldrich; Trenz, Oldrich; Hrebicek, Jiri; Kasem, Edward	18TH INTERNATIONAL CONFERENCE ENTERPRISE AND COMPETITIVE ENVIRONMENT	2015	0	0
Sustainability measures: a stakeholder focus beyond shareholders	Sirsly, Carol-Ann Tetrault	WORLD JOURNAL OF ENTREPRENEURSHIP MANAGEMENT AND SUSTAINABLE DEVELOPMENT	2015	0	0
Evaluation of Efficient and Inefficient Czech Companies Operating in the Manufacturing Industry Using Financial and Non-Financial Indicators and Data Envelopment Analysis	Kocmanova, Alena; Docekalova, Marie Pavlakova	INNOVATION MANAGEMENT AND SUSTAINABLE ECONOMIC COMPETITIVE ADVANTAGE: FROM REGIONAL DEVELOPMENT TO GLOBAL GROWTH, VOLS I - VI, 2015	2015	0	0
Green Banking : One Effort To Achieve The Principle Of Good Corporate Governance (GCG)	Dialysa, Fia	PROCEEDINGS OF THE INTERNATIONAL CONFERENCE ON ECONOMICS AND BANKING 2015	2015	0	0
The HOS Method Innovation as a Form of Support of Corporate Sustainability	Koch, Milos; Chvatalova, Zuzana	INNOVATION VISION 2020: FROM REGIONAL DEVELOPMENT SUSTAINABILITY TO GLOBAL ECONOMIC GROWTH, VOL I-VI	2015	0	0
The Zefis Portal for Information Systems: A Vision for Evaluation as a Path to Sustainability	Chvatalova, Zuzana; Koch, Milos	INNOVATION VISION 2020: FROM REGIONAL DEVELOPMENT SUSTAINABILITY TO GLOBAL ECONOMIC GROWTH, VOL I-VI	2015	0	0

A multi-stakeholder approach to voluntary disclosure of firms. An empirical research	Solimene, Silvia; Coluccia, Daniela; D'Amico, Eugenio; Fontana, Stefano	IFKAD 2015: 10TH INTERNATIONAL FORUM ON KNOWLEDGE ASSET DYNAMICS: CULTURE, INNOVATION AND ENTREPRENEURSHIP: CONNECTING THE KNOWLEDGE DOTS	2015	0	0
SOCIAL CAPITAL AND DIVERSITY MANAGEMENT	Bal, Canan Gamze; Akdemir, Mehmet Alper; Avcu, Gokcen	GLOBAL BUSINESS RESEARCH CONGRESS (GBRC)	2015	0	0
Corporate governance and economic sustainability: some thoughts based on the Albanian case	Cipi, Amali; Llaci, Shyqyri; Ferreira, Fernando A. F.	IFKAD 2014: 9TH INTERNATIONAL FORUM ON KNOWLEDGE ASSET DYNAMICS: KNOWLEDGE AND MANAGEMENT MODELS FOR SUSTAINABLE GROWTH	2014	0	0
Sustainable Performance Measurement Using Data Envelopment Analysis	Kocmanova, Alena; Docekalova, Marie Pavlakova	MATHEMATICAL METHODS IN ECONOMICS (MME 2014)	2014	0	0
Corporate Sustainability/CSR and the Influence of the Independent Director: 100% Pure New Zealand	Wells, Philippa; Ingle, Coral; Mueller, Jens	PROCEEDINGS OF THE 10TH EUROPEAN CONFERENCE ON MANAGEMENT LEADERSHIP AND GOVERNANCE (ECMLG 2014)	2014	0	0
Transforming Fragmented Industry into Sustainable Businesses with SMAC Technologies	Thecka, Subhas	2014 IST-AFRICA CONFERENCE PROCEEDINGS	2014	0	0
MARKET BARRIERS FOR VOLUNTARY CLIMATE CHANGE MITIGATION IN THE SOUTH AFRICAN PRIVATE SECTOR	de Jongh, Derick; Moellmann, Carmen M.	SOUTH AFRICAN JOURNAL OF ECONOMIC AND MANAGEMENT SCIENCES	2014	0	0



Environmental Sustainability: An Empirical Survey On Italian Listed Companies	Fontana, Stefano; Coluccia, Daniela; D'Amico, Eugenio; Solimene, Silvia	IFKAD 2014: 9TH INTERNATIONAL FORUM ON KNOWLEDGE ASSET DYNAMICS: KNOWLEDGE AND MANAGEMENT MODELS FOR SUSTAINABLE GROWTH	2014	0	0
Can Board Diversity Enhance the Integration of ESG Aspects in Management System?	Ferrero-Ferrero, Idoia; Angeles Fernandez-Izquierdo, Maria; Jesus Munoz-Torres, Maria	MODELING AND SIMULATION IN ENGINEERING, ECONOMICS, AND MANAGEMENT	2013	0	0
Incorporating Stakeholders' Preferences into CSR Ratings: Fuzzy TOPSIS Approach to Evaluate Agri-Food Companies	Escrig-Olmedo, Elena; Jesus Munoz-Torres, Maria; Angeles Fernandez-Izquierdo, Maria; Maria Rivera-Lirio, Juana	MODELING AND SIMULATION IN ENGINEERING, ECONOMICS, AND MANAGEMENT	2013	0	0
The Walls Between us: Exploring the Question of Governance for Sustainability	Wells, Philippa; Ingle, Coral; Mueller, Jens	PROCEEDINGS OF THE 9TH EUROPEAN CONFERENCE ON MANAGEMENT LEADERSHIP AND GOVERNANCE	2013	0	0
Exploring the Link between Governance, Internal Resources and Corporate Social Responsibility Reporting Practice	Darus, Faizah; Isa, Noor Hidayah Mat; Yusoff, Haslinda; Arshad, Roshayani	CREATING GLOBAL COMPETITIVE ECONOMIES: 2020 VISION PLANNING & IMPLEMENTATION, VOLS 1-3	2013	0	0
Bridging the Gap of Internal Audit functions: An Exploratory Evidence of Malaysian Cooperatives and Public Sector Organisations	Arif, Siti Maznah Mohd; Zainal, Nuur Syuhadaa; Othman, Rohana; Arts, Nooraslinda Abdul; Embi, Roslani	CREATING GLOBAL COMPETITIVE ECONOMIES: 2020 VISION PLANNING & IMPLEMENTATION, VOLS 1-3	2013	0	0

Data, Ontologies and Decision Making An Inter-disciplinary Case Study	Dobson, Stephen; Sukumar, Arun; O'Brien, Tony	ICEIS: PROCEEDINGS OF THE 15TH INTERNATIONAL CONFERENCE ON ENTERPRISE INFORMATION SYSTEMS - VOL 2	2013	0	0
MANAGEMENT OF SUSTAINABILITY IN THE BUSINESS AREA	Zavodna, Lucie Sara	INTERNATIONAL CONFERENCE: HRADEC ECONOMIC DAYS 2013 - ECONOMIC DEVELOPMENT AND MANAGEMENT OF REGIONS, PT III	2013	0	0
LOW CARBON ECONOMY DEVELOPMENT STRATEGY AND CORPORATE GOVERNANCE CHINESE EXPERIENCE	Xia, Chai Feng; Saltai, Issam Mf	PROCEEDINGS OF THE 7TH INTERNATIONAL MANAGEMENT CONFERENCE: NEW MANAGEMENT FOR THE NEW ECONOMY	2013	0	0
CSR Footprints in China: Foreign Companies in SEZs Share Best Practices	Carter, Connie	PROCEEDINGS OF THE THIRTEENTH WEST LAKE INTERNATIONAL CONFERENCE ON SMALL & MEDIUM BUSINESS (WLCSMB 2011)	2012	0	0
Corporate Governance and Company Boardroom Consideration in Malaysia Triple-Bottom Line Insights	Ahmad, Saidah Hamizah; Hashim, Rugayah; Ahmad, Jasmine	IEEE SYMPOSIUM ON BUSINESS, ENGINEERING AND INDUSTRIAL APPLICATIONS (ISBEIA 2012)	2012	0	0
Monetary Economics, Offshore Manufacturing, Sustainability and Domestic Job Creation of Multinational Companies-Examples and Comparisons from Apple Computers, See's Candies, and Volvo Cars	Fu, Yee-Tien	2012 IEEE INTERNATIONAL TECHNOLOGY MANAGEMENT CONFERENCE (ITMC)	2012	0	0

Sustainability Reporting: Japanese vs. European Automotive Manufacturers	Siow, Gladys	PROCEEDINGS OF USM-AUT INTERNATIONAL CONFERENCE 2012 SUSTAINABLE ECONOMIC DEVELOPMENT: POLICIES AND STRATEGIES	2012	0	0
Does good corporate disclosure matter to investors?	Mulyadi, Martin Surya; Anwar, Yunita	AFRICAN JOURNAL OF BUSINESS MANAGEMENT	2011	0	0
CHALLENGE TO THE SUSTAINABILITY OF MICROFINANCE INSTITUTIONS IN CHINA	Britzelmaier, Bernd; Xu, Yan; Kraus, Patrick	4TH ANNUAL EUROMED CONFERENCE OF THE EUROMED ACADEMY OF BUSINESS: BUSINESS RESEARCH CHALLENGES IN A TURBULENT ERA	2011	0	0
Evaluation of Factors that hinder Sustainable Banking of Commercial Banks in Uganda, Case of Stanbic Bank Limited Uganda (SBLU) and Centenary Bank Uganda	Donat, Bright; Asa, Asa Romeo	2011 INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES AND SOCIETY (ICSSS 2011), VOL 1	2011	0	0
THEORIES THAT LIE BEHIND CORPORATE GOVERNANCE	Crisan, Emil; Turdean, Ana-Maria	CHANGE MANAGEMENT IN A DYNAMIC ENVIRONMENT	2011	0	0
Reporting Complex Corporate Performance	Docekalova, Marie; Hornungova, Jana; Kocmanova, Alena	CREATING GLOBAL COMPETITIVE ECONOMIES: A 360-DEGREE APPROACH, VOLS 1-4	2011	0	0
An Exploratory Study on Sound Corporate Governance Practices for Family Owned Businesses in Pakistan	Gulzar, M. Awais; Wang, Zongjun	PROCEEDINGS OF 2010 INTERNATIONAL CONFERENCE ON HUMANITIES, HISTORICAL AND SOCIAL SCIENCES	2010	0	0
Value and Profitability of Real Estate Firms in China: the Role of Corporate Governance	Liu Shiyu; Wang Fusheng	PROCEEDINGS OF 2009 INTERNATIONAL CONFERENCE ON CONSTRUCTION & REAL ESTATE MANAGEMENT, VOLS 1 AND 2	2009	0	0

Corporate governance and sustainability: Challenges for theory and practice	Tysiachniouk, Maria S.	ENVIRONMENTAL POLITICS	2008	0	0
Information Release Through Internet: Empirical Evidence Towards a Company True and Fair View	Lopes, Ildio Tomas	PROCEEDINGS OF THE 5TH INTERNATIONAL CONFERENCE ON INTELLECTUAL CAPITAL AND KNOWLEDGE MANAGEMENT & ORGANISATIONAL LEARNING	2008	0	0
Social responsibility and sustainability in motorway corporate governance	Centrone, Giampaolo; Coslovich, Luca; Pesenti, Raffaele; Ukovich, Walter	4TH INTERNATIONAL CONFERENCE CITIZENS AND GOVERNANCE FOR SUSTAINABLE DEVELOPMENT	2006	0	0
THE AUSTRIAN WAY: DIRECTOR CONDUCT IN THE CONTEXT OF LEGAL AND CULTURAL FRAMEWORKS OF CORPORATE GOVERNANCE	Bickley, Maureen; Nowak, Margaret	CORPORATE GOVERNANCE: DOES ANY SIZE FIT	2005	0	0
Environment risk management - Towards proactive sustainability	Horn, AE	MINING RISK MANAGEMENT CONFERENCE 2003, PROCEEDINGS: EFFECTIVE RISK MANAGEMENT FOR MINING PROJECT OPTIMISATION	2003	0	0
Greening the boardroom: Corporate governance and business sustainability.	Goodstein, J	ADMINISTRATIVE SCIENCE QUARTERLY	1999	0	0

# **CHAPTER 3: SUSTAINABILITY REPORTING AS A TOOL TO IMPROVE TRANSPARENCY TOWARDS STAKEHOLDERS. EXPLORING REPORTING PRACTICES IN THE IMAGING INDUSTRY<sup>1</sup>**

---

## **3.1 INTRODUCTION**

The complexity that characterizes the international competitive system has enhanced the call for transparent reporting and the dissemination of information. Economic actors have a responsibility to stakeholder to disclose information concerning social and environmental impact being implemented by them. This implies the need for firms to use appropriate system to evaluate and control their own behavior and to communicate the result achieved. In particular, through the sustainability report of a firm gives information about the status quo of corporate sustainable development. The stakeholder theory states that the purpose of a business is to create value, besides shareholder and creditors, also for agents that are interested in companies' actions toward sustainability. The environmental and social activities implemented by firms are communicated to stakeholders using corporate sustainability reporting. In the recent past, several studies have been focusing their interest in Corporate Social Responsibility (CSR) and the relationship between corporate governance and the disclosure practices of an organization (Amran et al., 2009) Cerbioni and Parbonetti, 2007). Numerous definitions of CSR coexist. One of the most quoted definitions of CSR is coined by the European Commission, which reads as follows “A concept where by enterprises integrates social and environmental concerns in their business operation and in

---

<sup>1</sup> This work has been published as: Naciti V., Pulejo L., Rappazzo N. (2017). “Sustainability Reporting as a Tool to Improve Transparency towards Stakeholders. Exploring Reporting Practices in the Imaging Industry”, American Journal of Applied Sciences. ISSN Print: 1546-9239; ISSN Online: 1554-3641; DOI: 10.3844/ajassp.2017. This paper is the result of a joint effort of all the authors. However, Valeria Naciti contributed with paragraph 4.2, 4.4, 4,5 and 4.6; Luisa Pulejo contributed with paragraphs 4.1 and 4.7 while Nicola Rappazzo wrote paragraph 4.3.

their interaction with their stakeholders on a voluntary basis” (EU-Communication, July 2002).

Companies, in a social and political setting, are no longer considered as systems of economic and financial values production but must be considered as environmental development managers able to produce environmental and social value and in some cases also environmental and social disadvantage that appears in the form of damage to the environment. Interdependence is an emerging phenomenon and marginal “alterations” that occur in a part of the Earth may have repercussions in other parts of the planet in a short time, with an unmanageable butterfly effect. All this creates a high and growing unpredictability. If we look at the enterprise as a dynamic system, it becomes more and more important to evaluate its ability to adapt to changing conditions, to assess the degree of uncertainty and thus the risk of survival. Precisely on the assessment of this successful interaction capacity with the environment, the ability of entrepreneurial transformation does not have to focus solely on the economic development of the company but also to produce sustainable internal and environmental development, while remaining within the recognized ethical limits shape and consolidate the company’s reputation as a social actor. Recently, Life Cycle Assessment (LCA) methodology was developed in order to respond to the specific needs to measure the environmental impact of firm’s products and processes in term of resources consumption and pollution along their entire life cycle. The LCA has shifted to the forefront of environmental commitment for many companies, allowing a significant acceleration in the industry and improving the ever-more decisive climate policy perspectives that are geared to increasing demand for radical transparency from consumers, users, traders and governments. Furthermore, the LCA is starting to lead the design of individual products and processes and it is increasingly becoming a strategic tool for every company. The main question of the paper is: Are sustainability reporting tools based on product life-cycle useful to improve transparency towards stakeholders? Are sustainability reporting tools useful to improve corporate reputation? This study can contribute to strengthening the understanding, promotion discussion on the current state of the art of sustainability reports and to verify the development of the tools of corporate sustainability management to assess the environmental and social impact. Moreover, it wants to provide a

descriptive and critical knowledge linking LCA, corporate reputation and sustainability reporting using a multiple case study (Yin, 2009). In particular, the analysis was conducted on the main competitors of the imaging industry: Canon, Epson, Nikon and Sony.

### **3.2 CORPORATE SOCIAL RESPONSIBILITY AND SUSTAINABILITY REPORTING**

Corporate Sustainability (CS), that is an approach based on the firm's capacity to create value for the stakeholder in the long period by implementing business strategies, takes in account different dimensions: economic, cultural, ethical, social and environmental. Each company needs both internal and external purposes, to account periodically the financial and sustainability performances to response to an increased call for transparency. The internal and external communication of the corporate governance is a very important component for sustainable development.

Voluntary information is increasingly associated with the concept of Social Responsibility. For companies the development of a reputable capital goes through the activation of effective communication of the positive aspects for sustainability strategies. The growing experience in the accounting practices related to non-economic aspects pushes businesses a long-term focus on more coherent strategies, with a perspective time, which allows to identify the risks in advance opportunities for internal and external resources.

Several studies have focused on the relationship between CS and business strategy. Their purpose was to identify a variable that was better able to justify a positive correlation between CS and economic and financial performance (Husted and Allen, 2000). These studies argue that socially responsible behavior can have a positive influence on the financial performance if there is a connection in the planning phase between the social strategy and economic strategy (McWilliams et al., 2005). Moreover, Burke and Logsdon had already foreseen that the next step in the academic debate would focus on trying to clarify and quantify the competitive advantages generated by the CSR (Burke and Logsdon, 1996). They

believed that a new strategic direction (in terms of social responsibility) is to promote the social and financial interests of stakeholders.

Husted and Allen integrate the thought of Burke and Logsdon, holding that the concept of social strategy helps to create value for the company, claiming also that companies should think carefully about their capabilities and to develop strategies that enable them to make a unique contribution (Husted and Allen, 2000).

Coda also analyzes the topic of CSR integration in business strategy. In this regard, the author identifies the presence of many obstacles to the concrete input of social responsibility in the strategy of the company (Coda, 2005). However, he considers it useful to draw a process of cultural growth for the management that wants to follow this guidance.

In addition, several scientific contributions consider the CSR Strategy as the basis for the generation of competitive advantages (Branco & Rodrigues, 2008). In particular, Kotler and Lee (2005) argue that companies that decide to undertake a “serious” socially responsible path, characterized by the adoption and observance of the principles and logic related to it are in a position to obtain the following benefits:

- Incremental effect on sales and market share.
- Strengthening the brand positioning.
- Improving the image and reputation.
- Greater ability to attract, motivate and retain staff.
- Reduction in operating costs and increase efficiency.
- Increase the attractiveness for investors and financial analysts.

Also, an analysis of the literature shows that there are several positive effects of CSR on human resources management (Sharma et al., 2009). A company that cares about social issues may attract potential employees highly motivated, qualified and sensitive to moral values. It also contributes to creating a safer work environment, characterized by strong



individual motivation and high employee satisfaction. Therefore, it is clear how the research field that affects the correlation between the CSR and the Corporate Financial Performance (CFP) is in constant growth and evolution, distinguished, in particular, for the variety of methodological approaches adopted (Charlo et al., 2015; Lua et al., 2013; Zhou et al., 2015).

Prior research has focused on the relationship between the voluntary disclosure and the firm size and leverage (Simnett et al., 2009). They also demonstrated that countries that draw up sustainability reports are the ones that have stronger legal environments.

Several studies consider sustainability reporting as an important tool for demonstrating transparency, effective governance and to support decision-makers (Clarkson et al., 2008). These functions are not alternative to the disclosure function but complementary to it.

According to Brundtland (World Commission on Environmental and Development, 1987) sustainability is defined as the follows: “Meeting the needs of the present generation without compromising the ability of the future generation to meet their needs”.

The Global Reporting Initiative (GRI) wants to define guidelines for sustainability reporting, which is a type of reporting capable of integrates the social, environmental and economic components of business dynamics - known as triple bottom line. “Sustainability report is the practice of measuring, disclosing and being accountable to internal and external stakeholder for organizational performances towards the goal of sustainable development” (GRI, 2011).

The goal of GRI-G.4 is to help improve editing of the Sustainability Reports regardless of their own dimension, sector, or position and focus the attention of businesses on the reporting of significant elements that can improve the transparency of the actions taken by the companies towards stakeholders.

### **3.3 CORPORATE REPUTATION: AN ADDITIONAL INTANGIBLE ASSET**

Over the last few years, the cognitive expectations of the various classes of companies have significantly widened on aspects related both to values, to behaviors and to the results achieved.

The necessity to respond to such needs and the recognition of the importance of transparency in dealing with actors for value creation, are the basis for good responsible governance. An additional intangible asset that can generate value for the enterprise is corporate reputation, which is also heavily influenced by sustainability strategies. In the recent years, several studies were conducted on the relationship between Corporate Social Responsibility and Corporate Reputation (CR). On one hand, many cases recognized the CSR like a process to build a solid reputation (Vitezić, 2011; Armitage and Marston, 2008; Siltaoja, 2006; Brammer and Pavelin, 2006; Fombrun, 2005). On the other hand, studies showed that there are differences between CSR and CR but that allow to understand the complementarity relationship between them (Hillenbrand and Money, 2007; de Quevedo Puente, et al., 2007). Nevertheless, theoretical contributions are still limited. In particular, they are focusing on:

- Measurement of reputational factors and effects (Capuano, 2010; Watson, 2010; Gabbioneta et al., 2007; Caruana, 2001; Caruana and Chircop, 2001).
- Relationships that exist between reputation and economic-financial performances (de Quevedo Puente et al., 2007; Brammer and Pavelin, 2006; de la Fuente and de Quevedo Puente, 2003).
- Social reporting tools analysis in order to ascertain their suitability to represent commitment in social and environmental field (Khan, 2010; Viganò and Nicolai, 2009; Armitage and Marston, 2008; Coupland, 2006; Hasseldine et al., 2005; Fombrun et al., 2000).

Recently, Michelin (2011) has focused attention on the necessity to improve the comprehension about the relationship between Corporate Sustainability Disclosure (CSD) and CR. In particular, Michelin analysed the concept of reputation along three dimensions: Commitment to stakeholders, financial performance and media exposure. Instead, other scholars have investigated the link between Reputational Risk Management and theorization in social reporting (Bebbington et al., 2008).

Moreover, in the corporate context there is widespread awareness of the need to manage various socio-environmental variables. At the same time being recognized as sustainability disclosure an important role in enhancing the profile of reputation (Kongpunya et al., 2011; Friedman and Miles, 2001). Therefore, the Sustainability Report represents for companies a valuable information tool through which to disseminate news about values that inspire business policies. To make known the behaviour adopted can greatly affect the companies' reputation in the social and economic context (Fombrun, 1996). To obtain and maintain a good reputation is not always easy. Companies need a set of procedures and tools to adequately manage reputational risk. However, at the moment no significant methods and indicators have been identified to weigh this risk. The literature on the subject has not yet been able to provide the appropriate tools in order to achieve a turning point in this regard.

Nonetheless, most of the scholars involved in the issue agree that, sustainability disclosure is a determining variable for CR and that it can contribute to managing reputational risk (Bebbington et al., 2008; Friedman and Miles, 2001; Fombrun et al., 2000).

In view of this, the widespread information needs to provide a faithful picture of business behavior. Untruthful or inadequate information may, in fact, have a negative impact on business reputation and reflect on economic and financial performance (Roberts and Dowling, 2002). It is therefore evident that if the CSR variable as a mitigating element of reputational risk is not appropriately managed and accounted, it can become counterproductive. The CSR in case of gains/losses of reputation suffers of a "handicap" in terms of asymmetry in stakeholder behaviors (Klein and Dawar, 2004). The latter are more likely to penalize socially irresponsible behavior than to reward ethically correct conduct. In relation to the increasing complexity and variety of risks to be monitored and the constant search for greater transparency information, reputational risk management plays a crucial role in the wider scope of risk management.

Several studies focused on the impacts that may arise from a reputational crisis, as well the contribution that fair CRS policy can make in the management of this risk (de Quevedo Puente et al., 2007; Fombrun, 2005).

With regard to the measurement and assessment tools of reputation and reputational risk, over the last few years, the doctrine has been growing interest in that, contributing significantly to the understanding and development of these issues (Fombrun and Van Riel, 1997). An important role in the evolution of these studies is attributable to C.J. Fombrun. In 1997 he was the promoter of Reputation Institute foundation that contributed to the formulation of corporate reputation measurement models based on quantitative data. Like, for example Reputation Quotient<sup>SM</sup> (Fombrun et al., 2000; Fombrun and Foss, 2001; Gardberg and Fombrun, 2002) and Rep Trak<sup>TM</sup> Pulse (Ponzi et al., 2011).

To support the existence of a link between sustainability and corporate reputation there are studies carried out by the Reputation Institute that, thanks to the RepTrak model, have developed a valid technique to monitor variables that can influence an organization's reputation (Fig.1).

From these studies, it emerged that the key dimensions of corporate reputation are the governance, the type of products and services offered and citizenship. These are followed by the workplace, which is the treatment the company reserves to its employees.

In order to better understand the link, it is good to specify that governance is defined as the capacity to have ethical and transparent behaviors, while citizenship means the company's ability to maintain a good citizen's conduct, that is, to positively influence society, responsible for the environment and supporting the right causes. This implies that stakeholders in evaluating an organization place particular emphasis on its approach to sustainability issues.

The dense relational network that interests the company and its stakeholders can be organized through the development of the local clusters, geographic concentrations of companies, academic institutions, government agencies and various stakeholders.

Simultaneously, the diffusion of corporate reputation and reputational risk studies has grown the interest on the relationship between CR and Corporate Sustainability Disclosure (CDS). In some cases, in the doctrine has been emphasized that the motivations for companies to follow the path of voluntary disclosure are not to be found in the search for recognition of their own ethical responsibility, rather than to the need to manage their reputation

strategically (Cravens et al., 2003). Other scientific contributions refer to the key role of CSR reporting for the achievement and consolidation of a positive CR (Kongpunya et al., 2011) and for the management of reputational risk (Bebbington et al., 2008). In others, it has also been noted that voluntary risk reporting contributes to increasing the legitimacy of companies. This practice, on one hand helps to alleviate institutional pressure to increase the effectiveness of market discipline and on the other facilitating the “control” of key stakeholders through an effective management of CR (Barnett et al., 2006). Recent studies based on legitimacy theory have also shown that it is more likely to use social reporting tools for those companies that adopt a proactive strategy for the stakeholder expectations and that have good financial performance and are exposed to a significant media pressure; this allows them to increase the degree of social legitimacy and their reputation at the widest audience of stakeholders (Michelon, 2011). Additional contributions addressing risk management and voluntary disclosure have different results (Xifra and Ordeix, 2009). Lajili and Zéghal (2005) found that disclosure of risk information could jeopardize the uniformity, clarity and reflection of the reliability of the same information. However, Estrella (2004) believes that it can be particularly useful to integrate voluntary risk disclosure through “other regulatory tools, in particular with direct supervision and financial market discipline”.

CR is based on the organization’s ability to meet the expectations of stakeholders. It can be built in the long run only thanks to the experience. The ability to get reputations was one of the factors that attracted most businessmen, coming to the process of integrating sustainability into business processes. The impact that company’s reputation has on the company’s ability to operate had become intense as to create reputational risk management, in order to favor a strategic management of the same. Such strategies cannot be excluded from the dynamics that affect sustainability, since it has become a major stakeholder interest. In modern society the bearers of interest are aimed at sustainable development issues, so they can only become an integral part of variables that can influence corporate reputation.

### **3.4 SUSTAINABILITY REPORTING AND LCA**

Several studies provide that companies that have chosen business philosophy more sustainable are more successful than those simply oriented to environment (Graedel and Allembly, 2002).

In order to obtain comparable data, however, sustainability report need to be constructed and linked on the basis of product life cycles of the processes themselves and those comparisons between sustainable systems should have an objective result and a complete vision throughout the cycle of product life. The importance of the life cycle thinking in the economic context derives, exactly from this assumption.

The adoption of the Life Cycle Analysis method for evaluation of ecological dimension of product and processes can be helpful to the key innovative variable of sustainability by creating added value.

One of the weaknesses of sustainability reporting is that it does not include information regarding product and process. The quality of reporting should improve taking in consideration largely the life cycle approach. Moreover, the parameters used to report corporate sustainable and social responsibility are chiefly qualitative. Therefore, it is very difficult to aggregate sustainability indicators in univocal way.

LCA is now recognized as one of the most effective methods of environmental product policy and sees its application in eco-design, environmental marketing (Ecolabel) and environmental management. International ISO 14040-14044 (2006) define the procedure for carrying out an LCA and the four phases included in it: goal and scope, life cycle inventory, life cycle impact assessment and interpretation. The LCA allows determining the inbound and outbound flows of each product's lifecycle, assessing its environmental impact on a global scale, such as the greenhouse effect, thinning the ozone b and, or others. This analysis therefore allows to improve the environmental aspects of the products by intervening in the individual phases of their life cycle.

LCA methodology provides the beginning point to create good indicators for global sustainability reporting (Pflieger et al., 2002). In addition, it takes in account upstream and downstream process linking inventory results.

Several sustainability reports include a section devoted to the environmental impacts and resources used throughout in a product's life cycle.

According to Perrini and Tencati (2006), the environmental section has to comprise "input-output analysis, Life Cycle Assessment (LCA) and cost-benefit account related to environmental management of products/processes".

LCA has become the most commonly used tool of corporate environmental management to assess the environmental impact of a product, process or service. All relevant environmental parameters over the whole life cycle are determined, from material extraction, production to the end of the product and its recycling. The methodology of LCA is applicable to any industrial or service sector that provides a comprehensive and detailed view of the observation system in order to highlight and locate opportunities for reducing environmental impacts related to product life and to inform the "public" about the environmental impact of the product life cycle. LCA provides the main starting point for global sustainability reporting including the emerging future in this context. Input-output analysis allows finding and managing the information concerning the consumption of resources and their impact in terms of emissions (Suh et al., 2004).

The LCA is a fundamental support to the development of environmental labeling: in the definition of environmental reference criteria for a given product group or as a main tool for obtaining a Product ID (Gorre'e et al., 2000)

The LCA methodology diffusion depends mainly on three factors:

- New attention to product policies, as an important factor of the environmental policies.
- The presence of public opinion that requiring environmental quality criteria.

- The growing awareness that environmental issues can no longer be faced for individual compartments (air, water, soil), but require an assessment and a global intervention.

LCA methodology initially developed as a support to industrial decision-making has a very large application going from management of a single company to that of the national socio-economic systems. The approach focuses on the separate study of individual elements of the production system; it goes to a global view of the production system, in which all processing processes are taken into account as they participate in the realization of the function for which they were designed.

It is interesting to consider both the external and the internal benefits deriving from the application of the LCA:

- It can be used to achieve competitive advantages on the market by comparing the environmental impact between multiple products.
- Life cycle analysis is an informative basis for external certification.
- This tool can be used by businesses to orient public decisions, in order to demonstrate the pursuit of its environmental objectives.
- It provides information on the environmental impact related to the product life cycle, through subsequent validation of the Environmental Product Declaration (EPD).

This model has proven to be very useful for companies for the calculation of the impact associated with a product allowing moving towards a savings of energy and materials.

It also enables value creation through services and sustainable environmental practices focused on environmental and social responsibility. Stakeholders today are increasingly careful in evaluating the commitment of an organization to the transparency of business practices and their business environmental impact.



### **3.5 DATA AND METHODOLOGY**

The current paper contributes to the emergent area of sustainability research by using a multiple case study approach to identify characteristics that appear to be common across sustainability reporting. This methodology was also used in order to understand the relevance of LCA approach to increasing the information transparency of sustainability reports (Yin, 2009; Eisenhardt, 1991).

The first choice of method used to define the research plan was to focus on companies that:

- Belong to the same industry, in particular to the imaging industry.
- Have a firm experience in the development of social accountability tools.
- During the years have shown attention on environmental issues, deduced from their websites and from their reports.

For the definition of the survey sample we decided to refer to four companies: Canon; Epson; Sony and Nikon.

Regarding the data collection, we downloaded all the sustainability reports of the above companies available on the telematic network. In particular, for Canon, Epson and Sony, the reports analyzed for each single company were 14 for the period from 2003 to 2016. Regarding Nikon's sustainability reports are 11 for the period from 2006 to 2016. Overall 53 sustainability reports were analyzed.

### **3.6 RESULTS**

The main features observed are represented by a table that summarizes their presence in the sustainability reports (Table 1).

In particular, the first line representing refers to the years of publication of the reports; the second line lists the guidelines that companies have taken into account; the third highlights the companies that have been paying attention on management risk and more specifically on

corporate reputation and reputational risk; the fourth line indicates whether the document refers explicitly to stakeholder engagement both in the reporting process and in the activities carried out by the stakeholders; the fifth line shows whether there is a special section dedicated to the LCA methodology in the reports; finally, the last line indicates whether the reports were subject to assurance or not.

With regard to the features just mentioned above, some brief considerations can be made. First element that deserves to be highlighted is the fact that the reports produced by the company's subject of study have assumed a repetitive character, presenting an annual recurrence. This aspect, however, was a basic prerequisite for this investigation, as it provided comparability between the documents analyzed.

All companies use the Sustainability Reporting Guidelines of GRI. In the last reports they adopted G4 of GRI.

In particular, the Reports contain General Standard Disclosures (Strategy and Analysis; Organizational Profile; Commitments to External Initiatives; Identified Material Aspects and Boundaries; Stakeholder Engagement; Report Profile; GRI Content Index; Governance; Ethics and Integrity) and Specific Standard Disclosures (Economic; Environmental; Social: Human Rights; Social: Society; Social: Product Responsibility).

In addition to G4, Epson also adopts Environmental Reporting Guideline issued by the Japanese Ministry of Environment (2012) and ISO 26000:2010/ JIS Z 26000:2012 (Guidance on social responsibility).

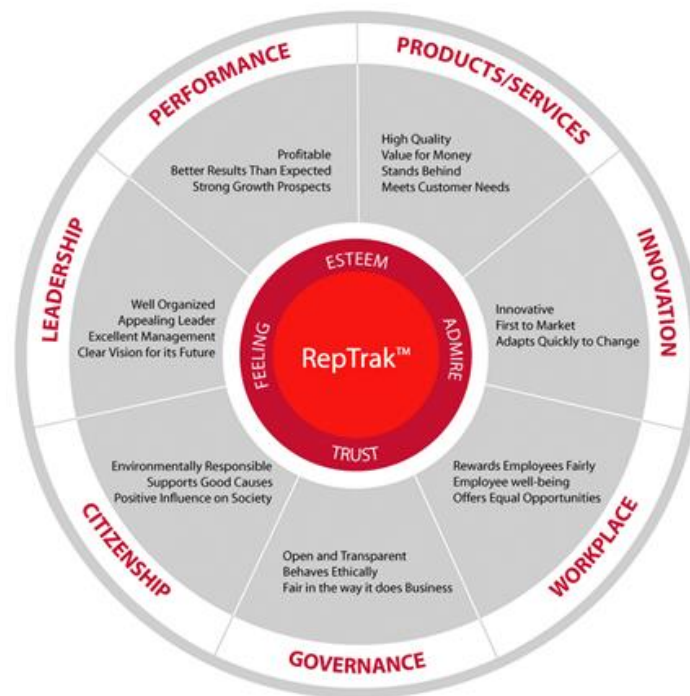
We also observed which companies dedicated a section to risk management. In the reports analyzed refer to Management of Security Risk in International trade, Crisis Management System, Legal Risk Management System, Business Risk Management and Financial Risk Management. For example, Canon has established the Risk Management Committee. This committee is comprised of three subcommittees, namely, the Financial Risk Management Subcommittee, Compliance Subcommittee and Business Risk Management Subcommittee. The Risk Management Committee “develops various measures with regard to improving the Canon Group's risk management system, including grasping any significant risks (violation

of laws and regulations, inappropriate financial reporting, quality issues and information leakage, etc.)”.

Nikon, instead, holds crisis management seminars for all employees scheduled for appointment overseas, which tailor to each individual in order to provide the necessary local knowledge.

**Table 1: Sustainability Reports’ features analyzed**

	Canon	Epson	Nikon	Sony
Years of publication	2003-2016	2003-2016	2006-2016	2003-2016
Sustainability reporting guidelines	Gri	Gri	Gri	Gri
Risk management system	X	-	X	X
Stakeholder engagement	X	X	X	X
LCA	X	X	X	X
Assurance	Assurance statement	-	Independent practioner’s assurance report	Third-party verification



**Fig. 1: RepTrak™ reputation model**

Furthermore, Nikon implemented measures to combat terrorism through specialized external organizations to increase knowledge about crisis management of the Crisis Management Secretariat of the Human Resource Department in the year ended March 31, 2016.

There is no explicit reference to the management of reputational risk. Although attention to reputable dynamics is palpable through a full reading of the reports, from a formal point of view, the management of reputational risk still assumes residual contours. However, the management of this risk is recognized as a strong strategic asset. As Nikon says: “We will not engage in any activities that damage Nikon’s reputation or financial interest in order to benefit ourselves or third parties”.

Moreover, the reports examined reveal the centrality of the stakeholder engagement, both as regards the construction and implementation of the company’s strategic plan as well as the social reporting process. In the specific case, Sony has activated participatory processes for members and employees. In particular, the participatory activity involved in the above-mentioned stakeholder categories has provided:

- The definition of the modalities and processes of dissemination and involvement of employees on the Operational Plan and the consequent work processes.
- Enhancing and enriching the Sustainability Report process with its shared construction and analysis of its results.
- Analysis of the profile and needs of the members and re-definition of the role.
- Analysis of the profile and needs of workers.

In particular, “Sony not only promotes engagement with stakeholders in implementing its CSR activities but also encourages the participation of multi-stakeholder groups in the planning of those activities, thereby contributing to the creation of a global framework for social responsibility”.

The surveyed companies have enabled the engagement processes to shareholders and employees. In particular, the analyzed companies have planned the definition of policies, actions and processes and involvement of employees; the strengthening and enrichment of the shared construction process of the Social Report and the analysis of the results; analysis of the profile and needs of the members and shared re-definition of the role; analysis of the profile and needs of employees.

Regarding the LCA section, we observed that all the companies use the lifecycle assessment methodology. Canon, for example says: “To reduce these impacts across the entire lifecycle, we convert each type of environmental impact to CO<sub>2</sub> and set as the overall goal for our Mid-Term Environmental Goals a 3% improvement per year in the lifecycle CO<sub>2</sub> emissions improvement index per product. We have incorporated this overall goal into our companywide goals, business goals and operational site goals using Lifecycle Assessment (LCA) methodology, resulting in environmentally conscious designs and production with due consideration for the entire lifecycle of a product”. Canon’s proprietary tool helped the company reduce carbon emissions in its newer product lines by 30% and reduce energy usage by up to 75%.

Also the Nikon Group implements product assessment at the planning and design stage of products to develop products with a low environmental impact throughout the entire life cycle: “We also provide feedback to targets set in the development of subsequent models by conducting evaluations of the environmental impact using the LCA method for some of our models”.

While the Epson tool does not include end-of-life criteria, it does highlight ways to reduce eventual waste by making different decisions in early design phases. In all cases, as with Canon tool, LCA was first used to look at existing products and company processes and measure the overall footprint of both. That new understanding fueled changes in product design and eventually companies took LCA to the next logical step and began evaluating decisions earlier and earlier in the design process.

Regarding to the assurance activity, Canon from 2003 has submitted its Third-Party Opinion reports and to an assurance statement with the purpose to ensuring its stakeholders the completeness, relevance and completeness of the information contained therein.

Nikon Corporation is recognized by SRI rating agencies and is included in the FTSE4Good Index Series, the Morningstar Socially Responsible Investment Index (MS-SRI), the ECPI Ethical Index Global, the Ethibel EXCELLENCE (Ethibel Investment Register) and MSCI Global Sustainability Indexes.

Moreover, Nikon elaborates an Independent Practitioner's assurance Report, in order to ensure that the economic and financial data in the report correspond to the accounting results and that the socio-environmental information is consistent with the content required by the guidelines adopted as a reference to the elaboration of the document.

### **3.7 CONCLUSION**

Sustainability report is a tool that companies use to communicate with stakeholders, for decision making and for marketing purpose. Companies are moving towards sustainability development with analysis that considers the life cycle of product, impact level of activities and automation of data administration.

This study, though preliminary and exploratory, has made possible to better understand the utility that a social accountability tool, which is the sustainability report, is able to offer in term of management and mitigation of reputational risk, with reference to a particular category of companies.

The results of the analysis have allowed us to ascertain how the social/sustainability reports play an important role in the activity of Reputational Risk Management. In this case the report acts as a tool for consolidating and increasing the trust relationship between the company and its customers, through a clear information transparency and stakeholder engagement. Despite the importance recognized to the social reporting tool, from the

examination of the reports, management of reputational risk still lacks the “right” representation.

This is mainly due to the difficulties that companies generally encounter in measuring this type of risk and not simply identifying them in the overall framework of risk management.

For this reason, it is considered useful to combine the study of the relationship between sustainability disclosure and corporate reputation - through a broader theoretical framework and comparative analysis of the sector - a research activity designed to develop new criteria and measurement methods that respond better to increasing reputational risk management demands.

Sustainability reports are appropriate detection tools. The approach to this methodology involves the examination of the ecological impact on all the phases of the life cycle of product. This methodology appears complex and it can generate applicative difficulties that can be addressed by defining a specific limit of analysis. LCA methodology has several operational advantages consistent with the underlying logic of product policy: it makes possible to compare products and services that perform the same function or meet the same need; it allows an overall evaluation of the product/service, thus avoiding the problem of simply transferring impacts from one stage to another and it is suitable for integration with other environmental policy tools. The use of life cycle assessment in combination with labels allows the immediate recognition of the ecologically oriented product.

Finally, to address the three dimensions of sustainability while respecting the definition of Sustainable development of Bruntland (1987) is possible by combining the three pillars and promoting exchanges and the possible convergence of different research fields and through more streamlined approaches and easier management and integration.

In conclusion, sustainability reporting tools based on product life-cycle are the most complete and conceptually exhaustive, but the still high degree of variability and interpretation of non-standardized tools opens the door to margins still too wide. Integration between analytical and computing tools is the best way for their expansion and improvement, demonstrating that the character of multidisciplinary in this subject is perhaps much more felt than others and is the only way which leads to the refinement of the methodology, in

order to have instruments of complete, effective and exhaustive sustainability. Sustainability reporting - if reports in a clear and complete way, using reporting as a tool for dialogue and confrontation with interested parties - is a valuable tool to ensure greater information transparency and, consequently, improve the relationship of trust with the relevant stakeholders.

## **References**

- Amran, A., Bin, A. M. R., & Hassan, B. C. H. M., 2009. Risk reporting: An exploratory study on risk management disclosure in Malaysian annual reports. *Managerial Auditing Journal*, 24: 39-57.
- Armitage, S. and C. Marston, 2008. Corporate disclosure, cost of capital and reputation: Evidence from finance directors. *British Accounting Rev.*, 40: 314-336.
- Barnett, M.L., J.M. Jermier and B.A. Lafferty, 2006. Corporate reputation: The definitional landscape. *Corporate Reputation Rev.*, 9: 26-38.
- Bebbington, J., C. Larrinaga-González and J.M. Moneva, 2008. Corporate social responsibility and reputation risk management. *Accounting Auditing Accountability J.*, 21: 337-362.
- Brammer, S.J. and S. Pavelin, 2006. Corporate reputation and social performance: The importance of fit. *J. Manage. Stud.*, 43: 435-455.
- Branco, M.C. and L.L. Rodrigues, 2008. Factors influencing social responsibility disclosure by Portuguese companies. *J. Bus. Ethics*, 83: 685-701.
- Burke, L. and J.M. Logsdon, 1996. How corporate social responsibility pays off. *Long Range Planning*, 29: 495-502. DOI: 10.1016/0024-6301(96)00041-6.
- Brundtland Report, 1987. United Nations World Commission on Environment and Development (WCED).
- Capuano, P., 2010. La misurazione del rischio reputazionale nel settore finanziario: Lo stato dell'arte e le prospettive. *Banche e Banchieri*, 37: 214-228.



- Caruana, A., 2001. Corporate reputation; concept and measurement. *J. Product Brand Manage.*, 6: 109-118.
- Caruana, A. and S. Chircop, 2001. Measuring corporate reputation: A case example. *Corporate Reputation Rev.*, 3: 43-57.
- Cerbioni, F. and A. Parbonetti, 2007. Exploring the effects of corporate governance on intellectual capital disclosure: an analysis of European biotechnology companies. *Eur. Accounting Rev.*, 16: 791-826.
- Charlo, M.J., I. Moya and A.M. Muñoz, 2015. Sustainable development and corporate financial performance: A study based on the ftse4good ibex index. *Business Strategy Environ.*, 24: 277-288.
- Clarkson, P., Y. Li, G. Richardson and F. Vasvari, 2008. Revisiting the relation between environmental performance and environmental disclosure: An empirical analysis. *Accounting, Organizations Society* 33: 303-327.
- Coupland, C., 2006. Corporate social and environmental responsibility in web-based report: Currency in the banking sector? *Critical Perspective Accounting*, 17: 865-881. DOI: 10.1016/j.cpa.2005.01.001
- Coda, V., 2005. Responsabilità Sociale E Strategia D'impresa. In: *Guida Critica Alla Responsabilità Sociale e al Governo D'impresa*, Sacconi L. (Ed.), Bancaria, Roma, ISBN-10: 8844906643.
- Cravens, K., O. Goad and S. Ramamoorti, 2003. The reputation index: Measuring and managing corporate reputation. *Eur. Manage. J.*, 21: 201-212.
- de la Fuente, S.J.M. and E. de Quevedo Puente, 2003. The concept and measurement of corporate reputation: An application to spanish financial intermediaries. *Corporate Reputation Rev.*, 5: 280-301.
- de Quevedo Puente E., J.M. de la Fuente Sabatè and J.B. Delgrado-Garcia, 2007. Corporate Social Performance and Coporate Reputation: Two Interwoven Perspectives. *Corporate Reputation Rev.*, 10: 60-72.

- Eisenhardt, K.M., 1991. Better stories and better constructs: The case for rigor and comparative logic. *Acad. Manage. Rev.*, 16: 620-627.
- Estrella, A., 2004. Bank capital and risk: Is disclosure enough? *J. Financial Services Res.*, 26: 145-160.
- Fombrun, C.J., 1996. *Reputation: Realizing Value from the Corporate Image*. 1st Edn., Harvard Business School Press, Boston, ISBN-10: 0875846335, pp: 441.
- Fombrun, C.J., 2005. Building corporate reputation through CSR initiatives: Evolving standards. *Corporate Reputation Rev.*, 8: 7-11.
- Fombrun, C.J., N.A. Gardberh and J.M. Sever, 2000. The reputation quotient<sup>SM</sup>: A multi-stakeholder measure of corporate reputation. *J. Brand Manage.*, 7: 241-255.
- Fombrun, C.J. and C. Van Riel, 1997. The reputational landscape. *Corporate Reputation Rev.*, 1: 5-13.
- Friedman, A.L. and S. Miles, 2001. Socially responsible investment and corporate social and environmental reporting in the UK: An exploratory study. *British Accounting Rev.*, 33: 523-548.
- Gabbioneta, C., D. Ravasi and P. Mazzola, 2007. Exploring the drivers of corporate reputation: A study of Italian securities analysts. *Corporate Reputation Rev.*, 10: 99-123.
- Gardberg, N., and C. Fombrun, 2002. The Global Reputation Quotient Project: First steps towards a cross-nationally valid measure of corporate reputation. *Corporate Reputation Review*, 4: 303-307.
- Gorre'e, M., J. Guine'e, G. Huppés and L. van Oers, 2000. *Environmental life cycle assessment of Linoleum*. Leiden University Leiden.
- Graedel, T.E. and B.R. Alleby, 2002. *Industria Ecology* 2nd Edn., Upper Saddle River, NJ: Practice Hall.
- GRI, 2011. *Sustainability Reporting Guidelines*, Amsterdam.

- Hasseldine, J., A.I. Salama and J.S. Toms, 2005. Quantity versus quality: The impact of environmental disclosures on the reputations of UK plcs. *British Accounting Rev.*, 37: 231-248.
- Hillenbrand, C. and K. Money 2007. Corporate responsibility and corporate reputation: Two separate concepts or two sides of the same coin? *Corporate Reputation Rev.*, 10: 261-277.
- Husted, B.W. and D.B. Allen 2000. Is it ethical to use ethics as strategy? in industry. *Int. J. Produc. Res.*, 51: 19-19.
- ISO, 2006. ISO 14044-environmental management e life cycle assessment e requirements and guidelines. Int. Organisation Standardisation, Geneva.
- Khan, M.H.U.Z., 2010. The effect of corporate governance elements on Corporate Social Responsibility (CSR) reporting: Empirical evidence from private commercial banks of Bangladesh. *Int. J. Law and Manage.*, 52: 82-109.
- Klein, J. and H. Dawar, 2004. Corporate social responsibility and consumers' attribution and brand evaluations in a product-harm crisis. *Int. J. Res. Marketing*, 21: 203-217.
- Kongpunya, P., P. Ussahawanitchakit and C. Khankaew, 2011. Accounting sustainability, disclosure quality, business ethics and corporate reputation: evidence from Thai listed firms. *Int. J. Bus. Res.*, 11: 93-107.
- Kotler, P., and N. Lee, 2005. *Corporate Social Responsibility – Doing the Most Good for Your Company and Your Cause*. New Jersey: John Wiley and Sons, Inc., HB 307, US, ISBN: 0-474-47611-0
- Lajili, K. and D. Zéghal, 2005. A content analysis of risk management disclosures in Canadian annual reports. *Canadian J. Administrative Sci.*, 22: 125-142.
- Lua, W.M., W.K. Wangb and H.L. Leec, 2013. The relationship between corporate social responsibility and corporate performance: Evidence from the US semiconductor industry. *Int. J. Produc. Res.*, 51: 5683-5695.

- McWilliams, A., D.S. Siegel and P.M. Wright, 2005. Corporate social responsibility: Strategic implications. *J. Manage. Stud.*, 43: 1-8.  
DOI: 10.1111/j.1467-6486.2006.00580.x
- Michelon, G., 2011. Sustainability disclosure and reputation: A comparative study. *Corporate Reputation Rev.*, 14: 79-96.
- Perrini, F. and A. Tencati, 2006. Sustainability and stakeholder management: The need for new corporate performance evaluation and reporting systems. *Business Strategy Environ.*, 15: 296-308.
- Pflieger, J.F., F. Clarac and L. Vinay, 2002. Postural modifications and neuronal excitability changes induced by a short-term serotonin depletion during neonatal development in the rat. *J. Neurosci.*, 22: 5108-5117
- Ponzi, L.J., C.J. Fombrun and N.A. Gardberg, 2011. RepTrak™ pulse: Conceptualizing and validating a short-form measure of corporate reputation. *Corp Reput Rev.*, 14: 15-3.
- Roberts, P.W. and G.R. Dowling 2002. Corporate reputation and sustained superior financial performance. *Strategic Manage. J.*, 23: 1077-1093.
- Siltaoja, M.E., 2006. Value priorities as combining core factors between CSR and reputation – a qualitative study. *J. Business Ethics*, 68: 91-111.
- Sharma, S., J. Sharma and A. Devki, 2009. Corporate social responsibility: The key role of human resource management. *Business Intelligence J.*, 2: 205-213.
- Simnett, R., A. Vanstraelen and W.F. Chua, 2009. Assurance on sustainability reports: An international comparison. *Accounting Rev.*, 84: 937-967.
- Suh, S., M. Lenzen, G.J. Treloar, H. Hondo and A. Horvath et al., 2004. System boundary selection in life-cycle inventories using hybrid approaches. *Environ. Sci. Technol.*, 38: 657-64.
- Viganò, F. and D. Nicolai, 2009. CSR in the European Banking Sector: Evidence from a Sector Survey. In *Corporate Social Responsibility in Europe*, Barth, R. and F. Wolff (Eds.), Edward Elgar Publishing Ltd., Cheltenham, UK.

- Vitezić, N., 2011. Corporate reputation and social responsibility: An analysis of large company in Croatia. *Int. Business Econom. Res. J.*, 10: 85-95.
- Watson, T., 2010. Reputation models, drivers and measurement. In: *Sage Handbook of Public Relations*, Heath, R.L., (Ed.), London, pp: 339-352.
- World Commission on Environment and Development, 1987. *Our Common Future*. Oxford University Press, Oxford/New York.
- Xifra, J. and E. Ordeix, 2009. Managing reputational risk in an economic downturn: the case of Banco Santander. *Public Relations Rev.*, 35: 353-360.
- Yin, R.K., 2009. *Case Study Research: Design and Methods*. 1st Edn., SAGE, Los Angeles, ISBN-10: 1412960991, pp: 219.
- Zhou, S.S., W. Pan and Z. Wang, 2015. An empirical examination of the link between corporate philanthropy and financial performance under the China context. *Int. J. Organizational Innovation*, 7: 76-95.

## **SECTION 2: QUANTITATIVE ANALISYS**

---

# **CHAPTER 4: CORPORATE GOVERNANCE AND BOARD OF DIRECTORS: THE EFFECT OF A BOARD COMPOSITION ON FIRM SUSTAINABILITY PERFORMANCE<sup>2</sup>**

---

## **4.1 INTRODUCTION**

Corporations, with their increased level of responsibility and accountability to their stakeholders, have felt that there is a need to take socially responsible behavior, to involve the various stakeholders in the management and to assess levels and methods of their participation (Duru et al., 2016).

In this sense, it is important to define a ‘code’ for corporate governance to give a substantial voice and representation to all corporate stakeholders, safeguarding their interests, rights and opportunities (Aras and Crowther, 2008).

The BoD, which is the main vehicle for corporate governance, is responsible for protecting the appropriate interests of stakeholders of a firm through directing its operation and by supporting its decision-making (Kaplan R. S., 2001). In general, the BoD of a firm is the body that determines policies for corporate management and makes decisions on major company issues (Krechovská and Prochazkova, 2014). Strong corporate governance has been shown to mitigate agency problems and to encourage managers to operate properly (Terjesen et al., 2014).

The connection between corporate governance and firm’s performance has been analyzed by following two main approaches. First, a stream of literature focused on corporate governance with reference to long-term strategies and specific policies (Hendry and Keil, 2004; Grinblatt and Titman, 2016). Second stream of literature focuses on the characteristics

---

<sup>2</sup> A revised version of this chapter has been published as: Naciti, V. (2019). Corporate governance and board of directors: the effect of a board composition on firm sustainability performance. *Journal of Cleaner Production*, 117727.

of a BoD such as size of board, gender, independence, age, CEO duality (Dalton et al., 1999; Finegold et al., 2007).

In the literature on BoD and corporate governance, the primary focus has been placed on the connection between the governance structure and firm's financial performance, which has been the primary interest of stakeholders (Dalton et al., 1999; Paniagua et al., 2018). Zona et al. (2018), show that BoD interlocks have a significant and positive relationship with the performance of resource-constrained firms. Weisbach (1988) shows that outside directors play an important role in monitoring management. Terjesen et al. (2015) show that female directors enhance board's efficiency measured by Tobin's Q and return on assets. Brown and Caylor (2006) explored the impact of corporate governance components on firm performance examining seven corporate governance indicators. The literature generally agrees that various characteristics of BoD composition affect firm's financial performance (Bhagat and Black, 1999; Duru et al., 2016).

In the recent years, however, environmental and social sustainability has been raised as an important issue by both shareholders and stakeholder (Galbreath, 2013). For example, in 2017 Occidental Petroleum Corporation's shareholders proposed to the company to report its climate-related vulnerabilities (Stockton, 2017). The case of Occidental Petroleum is not an isolated case; the asset held by Environmental, Social, and Governance investing community is growing (Sparkes, 2008). The Principles of Responsible Investing, a coalition of institutional investors, for example, manages over \$60 trillion in asset (Suh, 2017). Sustainable Development Goals put together by the United Nations call for a strong involvement from the private and public sector, adding to the existing stakeholder pressure from NGOs and shareholders (UN, 2015).

How firms respond to sustainability-related issues raised by shareholders and stakeholders, and how firm's governance structure plays a role in doing so are emerging research questions. Few studies, however, investigated the relationship between the BoD structure and firms' sustainability practices. Amran et al. (2014), for example, examine the impact of the composition of the board of directors (board size, independence and gender diversity) on sustainability reporting quality in the Asia-Pacific region. Burke et al. (2019) show that the board-level commitment appears to be positively related with corporate social performance.



Brammer and Pavelin (2006) investigate the relationship between corporate governance practices and environmental disclosure, while Mallin et al. (2013) add social disclosure.

However, the relationship between the composition of BoD and sustainability performance is yet to be fully understood. Therefore, the question arises: *Does the composition of a board of directors have any effect on sustainability performance?*

The objective of the paper is to analyze the influence of specific characteristics of a board composition (independent directors on board, board diversity and, separation of board chair and CEO roles) on the company's sustainability performance. We hypothesize that there is a relationship between the composition of the boards of director and the sustainability performance. Theoretically, our study builds on the agency and stakeholder theory. Our study may also be used to strengthening the state of a firms' sustainability performance. Finally, our study provides a descriptive knowledge that links sustainable development and corporate governance.

Empirically, we used a database provided by Sustainalytics Responsible Investment Services that gives us environmental, social and governance (ESG) information. We then supplemented the data with financial information from Compustat Global Vantage. Our final sample comprises 362 large firms. The analysis was performed using a system-generalized method of moments (SGMM) two-step estimator to determine the relationship between the BoD and sustainable performance.

The remainder of the paper is presented as follows. The next section reviews the theoretical underpinnings of sustainable development goals, corporate governance, corporate sustainability performance, and develops the hypotheses. In the third section, we present the sample, the data, and the empirical model. The fourth section lays out the empirical results. In the last section, we present our conclusion and implications.

## **4.2 THEORY AND HYPOTHESES DEVELOPMENT**

### **4.2.1 Corporate governance and sustainability**

Much like humans developing awareness and decision-making abilities, companies can also come to a state of self-awareness, assuming responsibility for their actions. Although the market economy can be efficient in the area of resource allocation, it is less in terms of equity. The rules of the law that regulate the market are not sufficient to guarantee business sustainability.

The social, environmental, and ethical dimensions of the business sector have become relevant in the twenty-first century. The dominant aspect of profit is reduced, and the need for enrichment is widened from a social, cultural, and environmental point of view. The law is imperfect and insufficient: even when it is excellent, it is static by nature and therefore hardly meets the current and above all future needs of citizens (UN, 2002). It is precisely in this context that ethics drives companies to one proactive attitude: overcoming compliance with applicable laws and making more responsible choices.

In 2014, the UN Member States, following a decision made at the Rio+20 Conference, proposed a set of Sustainable Development Goals (SDGs) that will supersede the Millennium Development Goals (MDGs) (UN, 2014).

What differentiates the SDGs from the MDGs is the importance of their environmental and social dimensions of sustainable and economic development with a strong focus on inclusive growth.

The new goals for 2030, although addressed to different categories of players - governments and institutions, civil society, and non-profit organizations - are specifically intended to be a boost for the business world. The SDGs recognize that companies play a key and decisive role as they are the main motivators of sustainable and economic development. A strongly proactive approach to sustainable development is required for the next 15 years through the development of new models of responsible business. Pursuing sustainable development goals will certainly benefit the private sector, as companies would have new business opportunities, as well as the ability to strengthen relationships with stakeholders.

One challenge that most companies face is linking new development to core business. Building on already solid foundations, while directing each new project towards sustainable development is crucial in this phase. In the near future, the private sector will become an ever-growing part of global development, which is why it is crucial that companies are progressively involved with international agencies to develop a comprehensive and shared vision on how to monitor and coordinate all the stakeholders' needs.

The implementation of sustainable goals is a requisition of corporate governance planning, and it requires structural measures that have implications in the company's establishment. For this reason, it is important to reconfigure the governance system that has been tasked with defining and implementing Corporate Sustainability (CS) policies and strategies (Van Marrewijk, 2003).

Recent studies have been suggesting that corporate governance and CS should not be considered independently of each other (Bear et al., 2010). It has been observed that certain CS activities are not particularly helpful when the corporate social responsibility orientation is not rooted in corporate governance. From the other side, corporate governance is not entirely effective without a CS unit that responds to the needs of the various stakeholders. The link between corporate governance and CS is unequivocally a two-way relationship. This implies a reconfiguration of corporate governance. CS has to be integrated into a company's functions, and become involved transversally in all management processes. In this sense, it is crucial that CS governance is rooted within the corporate leadership.

The literature that explains the relationship between corporate governance and sustainability performance is based on two dominant theories: agency theory (Jensen and Meckling, 1976) and stakeholder theory (Freeman, 1984).

Agency theory describes the presence of important problems in the principal-agent relationships. A conflict relationship can arise when the agent's goals differ from those of the principal. This is due to the presence of information asymmetry, opportunistic behavior, and a conflict of interests between managers and shareholders. Therefore, in order to align the principal-agent goals, agency theory suggests a separation of decision-making between them, and a reduction in the manager's discretion (Fama and Jensen, 1983).

Stakeholder theory identifies towards those who in concrete terms companies must be responsible, and is the starting point for reflection on the mechanisms through which the company obtains and loses its social legitimacy.

#### **4.2.2 Board of directors and sustainability performance**

The life of a company is closely related to the evolution of markets. Therefore, good corporate governance can be defined with reference to the various involved stakeholders and their expectations. In general, stakeholders are made up of different categories: shareholders, creditors, workers, suppliers, institutions, consumers, and the local community. Good corporate governance expresses shared responsibility. It is also the result of operational and strategic choices made by the various stakeholders involved. Currently, there is not a good governance model, but any model greatly depends on how the different interests of stakeholders are combined. From this viewpoint, stakeholders will judge good governance on the ability to generate value and benefits in accordance with expectations.

The BoD should work so that the managers' decisions reflect the shareholders' interests. "*A major structural mechanism to curtail such managerial 'opportunism' is the board of directors*" (Donaldson and Davis, 1991). According to the stakeholder theory, corporate managers should consider the interests of stakeholders to reduce the chance of a conflict of interests (Haniffa and Cooke, 2002). Researchers have used the stakeholder theory framework to explain the link between corporate governance and corporate social responsibility. Michelon and Parbonetti (2012) argue that good corporate governance uses CS to enhance the relationship between a company and its stakeholders.

Recent studies pay attention to the BoD as the main decision-making structure in a business (Zahra, 1993; García-Sánchez and Martínez-Ferrero 2018). They are required to ratify, control and evaluate managers' actions, as well as suspend their powers and hire new management (Fama and Jensen, 1983).

BoD have frequently been studied as a group of stakeholders within a company that have similar viewpoints in business practices (Useem, 1984). In the last decade, researchers have focused on the role of the boards of directors, and in particular their efficiency.

Many authors have found that the diversity on boards of directors, in terms of nationality, gender, and position, can provide organizational benefits and competitive advantages such as the ability to strategically attract human resources (Cox and Blake, 1991), and improve performance (Bhagat and Black., 1999). According to Cox, diversity in particular is "*the variation of social and cultural identities among people who are together in a defined employment or market setting.*" (Cox, 2001, p.3).

In our study we analyze three characteristics of a board composition: independent directors on board, board diversity and, separation of board chair and CEO roles.

#### ***4.2.2.1 Independent directors on board***

The presence of independent directors is showed to be an important corporate governance mechanism that can lead to a better supervision of board effectiveness (Said et al, 2009). The independence directors play a central role in speaking out in favor of strict compliance with the law and upholding minority stakeholders' interests (Fama and Jensen,1983). Moreover, independent directors show more compliance in the observance of the law and are more concerned about corporate social responsibility (Zahra & Stanton,1988).

*Agency Theory* asserts the idea that independent directors should hold a majority of board seats because they can monitor the agents' decisions effectively. Independent directors within the board of directors helps to reduce agency costs. Their function is in fact precisely to oversee the behavior of executive directors, in order to avoid possible behaviors that deviate from the social interest, and pursue personal enrichment objectives. They have a lower potential for a conflict of interest, and they are viewed as a tool that links the external stakeholders with firms (Akpan and Amran, 2014). Board independence might be crucial in monitoring and governing sustainable development issue. Independence is expected to provide new insights with regard to environmental and social stakeholders, contrary to the classic models that focus exclusively on financial performance (Galbreath J., 2010).

Moreover, because of the *Stakeholders Theory*, the independence of the BoD is expected to be positively associated with sustainability performance, since these are less subject to

shareholder pressures. A board with a substantial portion of independent directors can provide oversight for management and protect shareholders and stakeholders' interests.

Herda et al. (2014) have examined the relationship between voluntary disclosure of sustainability reporting and corporate governance for the 500 largest U.S. firms. They have found that firms with a greater proportion of independent board members are more likely to get a higher quality of sustainability reporting. This implies that greater board independence influences a firm to provide higher quality information and more transparency when reporting to stakeholders.

A review of empirical literature reveals different results on the association between independent directors and sustainability performance. Eng and Mark (2003) show that a higher number of independent directors on a board is negatively associated with social disclosure. Michelon and Parbonetti (2012), Allegrini and Greco (2013) find no significant link between the number of independent directors and sustainability disclosure. Hussain et al. (2018) note that a greater portion of independent directors on a BOD is associated with higher environmental and social performances. Karamanou and Vafeas (2005), and Prado-Lorenzo et al. (2009) show a positive relationship between independent directors on a BoD and CSR. Furthermore, Haniffa and Cooke (2005), Jo and Harjoto (2011) found that a greater proportion of independent directors increases the focus on social and environmental issues while also pursuing the interests of stakeholders.

Therefore, we hypothesize that:

Hypothesis I. *A high number of independent directors on a BOD is positively related with SP, ceteris paribus.*

#### **4.2.2.2 Board diversity**

Diversity on a BoD has been interpreted in several ways. According to Rao and Tilt (2015) the concept of diversity relate to board composition and the varied combination attributes, characteristics and expertise contributed by individual board members in relation to board

process and decision making. Some of the main characteristics of board of diversity are gender and nationality.

In the *Stakeholders Theory* framework, the presence of women on a BoD is expected to be positively associated with sustainability performance. Women are more oriented towards social problems than men are (Orij, 2010). Psychological research tends to conclude that female reasoning differs from that of men (Jaffe & Hyde 2000). Women are more inclined to use social reasoning, which allows them to establish good relationships and to respond to the needs of others.

Bart and McQueen (2013) consider that women on a board are significantly more effective than the men. They make decisions by using their “complex moral reasoning” (CMR), which implies the recognition and consideration of the rights of others, and the pursuit of equity through social cooperation.

Post, Rahman, and Rubow (2011) explain that BoD with three or more female administrators have a higher regard for environmental issues. Furthermore, gender inequality within the organization can be considered as a negative factor, leading to poor communication, greater conflicts, and less cooperation. Within a homogeneous group, there is more frequent communication and ease when sharing opinions.

Another series of empirical studies indicate that the presence of women in a BoD affects aggregate CSR performance. Zhang, Zhu and Ding (2012), showed that high CSR performances are associated with a greater presence of women on the BoD. Few studies have examined the relationship between gender diversity and SP. In addition, Fernandez-Feijoo, Romero and Ruiz (2012) showed that organizations with a higher number of female gender directors have a higher quality of CSR reporting and a higher incidence of assurance reports accompanying such disclosure.

Diversity in terms of nationality on a board is considered by literature as double-edged, with both pros and cons being based on a debate between having a heterogeneous board vs a homogeneous one (Hambrick et al, 1996).

Erhardt et al. (2003) studied the relationship between demographic diversity on a BOD with its company’s financial performance. Masulis et al. (2010) examined the effect of the foreign board members on firm performance. They stated a negative relationship between foreign

board members and Tobin's Q percentage. They found that board diversity is positively related with a firm's financial performance. In addition, Muller (2014) found that the proportion of foreign directors has significant and strong positive impacts on firm performance.

Janggu et al. (2014) examined the impact of good corporate governance on the sustainability disclosure of 100 publicly listed companies in Malaysia. They found that foreign directors do not have a significant influence on sustainability disclosure.

Frijns, Dodd and Cimerova (2016) state that diversity in terms of nationality on a board has been generally overlooked within board diversity research, while culture has become one of the important drivers that influences decision-making. However, national diversity in heterogeneous boards improves the quality of decision making for social and environmental actions that promote higher sustainability performance (Rao & Tilt, 2016).

Therefore, we hypothesize that:

*Hypothesis II. A high number of board diversity, in terms of gender and nationality, is positively related with SP, ceteris paribus.*

#### ***4.2.2.3 Separation of board chairperson and ceo roles***

Based on *Agency Theory*, the separation of board Chair and CEO roles increases the independence of the BoD from management (Michelon and Parbonetti, 2012). This separation may bring new knowledge, safeguard accountability and blight the board's ability to control managerial opportunism (Daily and Dalton, 1993). The separation of board chair and CEO role can enhance effectiveness in management responsibility, decrease agency cost and get better firm performance.

This is given by the fact that when there is CEO duality - CEO also holds the position of chairman- the power within the firm is concerted in one person's hands and this allows the CEO to control the management information (Nazar, 2018). In fact, when one person occupies both the CEO and Chair roles, a conflict of interest arises. For example, the CEO



can vote for his own salary. To have a combined role results in the ethical need for self-monitoring, which does not always work and can lead to an abuse of power.

Moreover, a non-executive board chairman is invested with a greater responsibility toward stakeholders, which increase the firm transparency. From this perspective, directors are linked with external factor which push to activate an internal corporate governance mechanism on firm's corporate sustainability initiatives.

Prior empirical literature provides competing results on the relationship between CEO duality and sustainability performance. Arena et al. (2014) report a positive relationship between CEO duality and environmental performance. Mallin et al. (2013) note a positive impact of CEO duality and sustainability reporting practices. Liao et al. (2014), Barako et al. (2006) report an insignificant relationship between CEO duality and sustainability initiative. This theoretical competition and the managerial theory that suggest a separation of the board Chairperson and CEO role obviously calls on an in-depth investigation of the variable.

Therefore, we hypothesize that:

*Hypothesis III. Separation of board Chairperson and CEO Roles is positively related with SP, ceteris paribus.*

### **4.3. DATA AND METHODOLOGY**

#### **4.3.1 Sample and data**

Our sample comprised 362 large industrial firms included in at least one year of the 2013-2016 Fortune Global 500 list, the world's 500 largest companies. The period of analysis, 2013 to 2016, comes immediately after the conference that took place in Rio de Janeiro in 2012. The objective of the conference was to renew the political commitment to sustainable development, and trying to channel companies towards common goals of sustainability. Therefore, our companies come from 6 regions (table 1 panel A) and 26 industries (table 1 panel B).

The *Sustainalytics Platform* database was used to extract data for the dependent and independent variables. Sustainalytics is a large company specializing in the analysis of socially responsible investment and covers 9,000 public and private firms. This database provides 199 items for eight sections: business ethics, corporate governance, employees, the environment, controversial activities, the supplier, the customers, and the community. Every item is rated on a scale from 0 (worst) to 100 (best), and a final Environmental, Social, and Governance (ESG) score is built with the sum of weighted averages from each item. Sustainalytics averages every item by using sector and country specific weights. This is because sectors and countries are subject to different policies and industry self-regulations, so stakeholder interests are assessed differently (Surroca et al., 2010). The information to build scores is extracted from multiple sources such as financial accounts, company documentation, databases, and interviews. *Sustainalytics* research methodology incorporates 42 global sectors and 70 core and industry-specific indicators. *Sustainalytics* data has been used in prior research on sustainability practices (Husted et al., 2017; Surroca et al., 2010). Scholars consider this database suitable for management studies as it uses a strong, reliable, and complete methodology in its framework.

The database was then completed with financial information from *Compustat Global Vantage* for the control variables.

**Table 1. Sample characteristics**

Region	Freq.	Percent	Cum
<b>Panel A</b>			
Africa	45	12.43	12.43
Asia	72	19.89	32.32
Europe	80	22.10	54.42
Latin America	43	11.88	66.30
North America	48	13.26	79.56
Oceania	74	20.44	100.00
<hr/>			
Industry	Freq.	Percent	Cum.
<b>Panel B</b>			
Auto Components	7	1.93	1.93
Banks	9	2.49	4.42
Chemicals	18	4.97	9.39
Commercial Services	21	5.80	15.19
Consumer Services	14	3.87	19.06
Diversified Financials	8	2.21	21.27
Diversified Metals	12	3.31	24.59
Electrical Equipment	14	3.87	28.45
Food Products	23	6.35	34.81
Food Retailers	15	4.14	38.95
Healthcare	13	3.59	42.54
Machinery	10	2.76	45.30
Media	12	3.31	48.62
Oil & Gas Producers	21	5.80	54.42
Paper & Forestry	12	3.31	57.73
Pharmaceuticals	22	6.08	63.81
Real Estate	6	1.66	65.47
Refiners & Pipelines	7	1.93	67.40
Retailing	7	1.93	69.34
Semiconductors	12	3.31	72.65
Software & Services	21	5.80	78.45
Technology Hardware	13	3.59	82.04
Telecommunication Services	22	6.08	88.12
Transportation	11	3.04	91.16
Transportation Infrastructure	20	5.52	96.69
Utilities	12	3.31	100.00
Total	362	100	

### 4.3.2 Measurement of variables

#### 4.3.2.1 Dependent variable

Sustainability performance (SP) is the dependent variable. The *Sustainalytics* rating was used to measure SP. Consistent with previous studies (Hillman and Keim, 2001; Surroca et al, 2010) we measure SP as the weighted sum of social and environmental dimensions which refers to six categories: operation, supply chain, employees, products and services,

customers and community. The final SP score is the sum of all items averaged by their corresponding weight and rated on a scale from 0 to 100. *Sustaynalytics* averages every item by using sector and country specific weights. This is because sectors and countries are subject to different policies and industry self-regulations, so stakeholder interests are assessed differently (Surroca et al, 2010).

#### ***4.3.2.2 Independent variables***

##### **Independent Directors on a BoD**

The *Sustainalytics* database provides corporate governance information in detail.

We use a *Board Independence* variable (BINDP) as a proportional measurement of the independent directors on the board. BINDP is ranked on a scale from 0 to 100. A score of zero is assigned when the majority of board members are non-independent and a score of 100 when two-thirds or more of the board members are independent.

##### **Board Diversity**

To measure the level of gender and/or national diversity on the board we used a *Board Diversity* (BDIVR) item from *Sustainalytics*. This item is ranked on a scale from 0 to 100. Zero means that the majority of board members have a nationality which is the same as the company's country, and the majority of board members are non-women; hundreds is assigned when two-thirds or more of board members have a nationality which is different from the company's country, and two-thirds or more of board members are women.

##### **Separation of Board Chair and CEO Roles**

We used a *Separation of Board Chair and CEO roles* (BSEPR) item from *Sustainalytics* to measure whether the positions of board chair and chief executive officer are held by the same persons. BSEPR is a variable ranked on a scale from 0 to 100. We have zero when the CEO and the chairman of the board are the same person and 100 when the CEO and the chairman of the board are two separate individuals.

#### 4.3.2.3 Control variables

Control variables include:

- *Firm risk* (RISK), which is calculated as the ratio of total debts/total asset (McGuire et al., 1988).
- *Firm size* (SIZE) is measured by the logarithm of the number of employees (Waddock and Graves, 1997).
- *Profitability* (ROA) is calculated as a ratio of operating income and total assets.

All control data were collected from the *Compustat* database.

#### 4.3.3 Methodology

Panel data analysis is the most efficient tool to use when data has both cross-sectional and time-series dimensions. The same cross-sectional unit is surveyed over time, so we have data that is *pooled* over space as well as time.

Some of our independent variables can be determined simultaneously with the dependent variable. In this case, we have a simultaneity issue. Therefore, in order to deal with the endogeneity and the unobserved fixed effects that are associated with each firm, we need to use an econometric model that can control these issues.

We can overcome this problem by using pooled OLS estimations, but when the unobserved effect is correlated with the independent variable, they produce estimators that are biased and inconsistent. To battle against this econometric challenge, researchers studying the relationship between Corporate Governance and firm performance have suggested using either the first differences or the fixed effects (within) estimators (De Andres and Vellelado, 2008). However, as shown by Hermalin and Weisbach (2003) a BoD is determined endogenously. The first differences and fixed effects (within) are inconsistent when the strict exogeneity condition fails. In the particular case of board structure, fixed effects estimators are biased because they fail to account for the effects of firm performance on current board structure (Wintoki et al., 2012). It takes some time before a company sees performance results after implementing a corporate governance mechanism (Haniffa & Hudaib, 2006).

As robustness check, following prior research (Arellano & Bond, 1991), in order to deal with heteroskedasticity, autocorrelation, heterogeneity, and endogenous and predetermined explanatory variables we tested our hypotheses using the system-generalized method of moments (SGMM) two-step estimator. SGMM is more appropriate in studies with short-sample periods and many cross sections (Roodman, 2006). This estimator contains two level equations requiring instrumental variables in order to remove the correlation issue between residuals and explanatory variables.

According Hermalin and Weisbach (2003) all BoD variables are assumed to be endogenously related with a firm's performance and are thus instrumented. Therefore, we choose lags  $t - 2$  and  $t - 3$  of all independent variables as instruments (Hermalin and Weisbach, 2003).

Two diagnostic tests have been reported. The first is the *Hansen/Sargan Test* of over-identifying restrictions. This test proves the validity of the instruments by analyzing the moment conditions used in the estimation technique. The instruments used are valid if the moment condition holds. *AR (2)* is the second test that analyzes the non-serial correlation among error terms.

Notice that results of SGMM two steps estimator are consistent with those *polled* OLS and panel fixed effects models.

## **4.4 RESULTS**

### **4.4.1 Descriptive results**

As previously mentioned, a sample of 362 companies based in 46 countries and operated in 26 industries was created. Table 2 shows the descriptive statistics in columns 2 and 3, while minimum and maximum scores are shown in columns 4 and 5, followed by Pearson correlation results. We find that SP has a positive and significant correlation with BDIVER and BSEPR. The correlation coefficient between SP and BDIVER is 39.9%, and 38.5% between SP and BSEPR. Both coefficients are significant at 1% significance level. We also note a negative correlation of BINDP with SP at 5% significance level.

In the above table, we also note that BDIVR is positively correlated with BSEPR and negatively correlated with BINDP at 5% significance level. We further note a negative correlation between BINDP and BSEPR at 1% significance level.

Table 2 shows no correlation above 0.5 among the variables of interest, and therefore multicollinearity is not considered to be an issue (Al-Shaer and Zaman, 2016).

**Table 2. Descriptive statistics and correlations**

Var.	Mean	Std. Dev.	Min.	Max.	1	2	3	4	5	6	7
1.SP	62.77	21.03	0	100	1						
2.BDIVR	44.89	12.73	0	100	0.393***	1					
3.BINDP	54.93	11.90	0	100	-0.118**	-0.104**	1				
4.BSEPR	54.93	14.43	0	100	0.385***	0.196**	0.425***	1			
5.ROA	3.34	5.23	-2.14	7.09	0.194***	0.230	0.183	0.134	1		
6.SIZE	3.66	1.03	1.62	8.15	0.131**	0.104**	0.223**	0.294**	0.141*	1	
7.RISK	24.67	12.49	0	82.69	-0.293*	-0.262*	0.173	0.232	0.173**	0.093*	1

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$  (two-tailed test)

#### 4.4.2 Empirical analysis

In this section, we investigated the effect of board characteristics on firm sustainability performance (SUSP). In Table 3, columns (1) to (4) report results from a pooled OLS approach. The results in columns (4) to (7) are obtained using fixed effects estimator. The regression estimates for both models show significant associations between the characteristics of the board of directors and sustainability performance. First, we find that our measure of board diversity has a positive and significant effect on SUSP at 1% level. These findings provide support for Hypothesis 1, suggesting that a high number of board diversity, in terms of gender and nationality, has a positive effect on sustainability performance.

Similarly, we also find that the separation of board chair and CEO role has a positive effect on SUSP. These findings provide strong support for Hypothesis 3, suggesting that the separation of board chair and CEO role can enhance effectiveness in management responsibility, decrease agency cost and get better firm sustainability performance.

For our measure of independent directors, we find that a greater proportion of independent Directors has a negative and highly significant effect on SUSP. This result does not provide support for Hypothesis 2, suggesting that independent directors have a negative effect on firm sustainability performance.

**Table 3**  
*Panel Data Analysis*

	SUSP (1)	SUSP (2)	SUSP (3)	SUSP (4)	SUSP (4)	SUSP (5)	SUSP (6)	SUSP (8)
BDIVR	0.0120*** (0.0412)			0.0630*** (1.9369)	0.0425** (0.0476)*			0.0394** (1.9498)
BINDP		-0.0102** (0.0543)		-0.0012* (0.0022)		-0.0158** (0.0515)		-0.0458* (0.0508)
BSEPR			0.0836*** (0.0253)	0.0391** (0.0327)			0.0442* (0.0171)	0.0556* (0.0295)
ROA	0.0541** (0.0694)	0.0381* (4.0090)	0.0272 (8.5877)	0.0425* (0.0258)	0.0209* (0.0063)	0.03883* (0.0123)	0.0459** (0.0219)	0.0623* (0.0012)
SIZE	0.0003** (0.0001)	0.0004** (0.0024)	0.0068*** (0.0028)	0.0032** (0.0012)	0.0000*** (0.0000)	0.0007** (0.0004)	0.0917* (0.0034)	0.0009** (0.0002)
RISK	0.0390 (0.0372)	0.0606* (0.0931)	0.0449 (0.0953)	0.0146* (0.00657)	0.0036** (0.0079)	0.0602 (0.0302)	0.0152* (0.0017)	0.0680 (0.0338)
Adj. R-squared	0.22	0.19	0.28	0.36	0.25	0.34	0.31	0.33

Notes: The sample includes 362 companies for 4 time periods, for a total of 1448 observations. All the models include the constant and time dummies. ( ) denotes standard errors, which are corrected for heteroscedasticity and clustered by id. \*\*\*, \*\*, and \* denote significance at 1%, 5%, and 10% respectively.



#### 4.4.3 Robustness check

In Table 4, we report the results after testing our hypotheses with the two-step GMM system estimator. In Table 4 model 1 we report the estimated results of the determinants of sustainability performance. Results show that board diversity and separation of board chair and CEO roles are significantly and positively associated with sustainability performance at 1% and 5% levels respectively. On the other hand, BINDP is negatively associated with SP at 5% level. Specifically, an increase in board diversity and a separation of board chair and CEO roles lead to an increase in the sustainability performance by 0.05 and 0.04 points respectively. Contrarily to our expectation, an increase on independent directors on a board leads to a decline in the sustainability performance by 0.01 points.

We indicate the first and second order correlation tests ( $AR_1$ ,  $AR_2$ ) and the *Hansen* tests for instrument validity. The statistical tests show that the set of instruments (moment conditions) we used to avoid the endogeneity problem are valid, and they show an absence of serial correlation (autocorrelation). The p-values for the AR (2) and *Hansen* tests are higher than 0.10, which is statistically insignificant. We performed sensitivity test by changing the lags of all independent variables and the results remain qualitatively unaffected.

An additional analysis was performed in order to understand how the composition of BoD effects sustainability performance in its two components: social and environmental dimensions. We split sustainability performance variable in social performance (SOCP) and environmental performance (ENVP) using the corresponding items for each variable.

Table 4 model 2 shows the estimated results of the determinants of the social performance. The results indicate that board diversity positively and significantly increase social performance. The board independent variable is negatively associated with social performance at 5% significance levels. The results imply an insignificant coefficient for separation of board chair and CEO role.

In table 4 model 3 we report the empirical results concerning the environmental performance. The Board diversity and the separation of board chair and CEO role are significantly associated with ENVP. Specifically, an increase in the board diversity leads to an increase in the environmental performance by 0.0476 point at 1% of significance level. An increase in the separation of board chair and CEO role leads to a higher environmental

performance by 0.0392 point at 5% significance level. The variable BINDP shows an insignificant coefficient.

The results of both estimations show that are AR (2) for testing the serial correlation and the Hansen test for testing the validity of instrument adopted are also valid.

**Table 4. Two-Step System GMM**

	SUSP (1)	SOCP (2)	ENVP (3)
BDIVR	0.0549*** (0.0012)	0.0388** (0.0011)	0.0476*** (0.0012)
BINDP	-0.0128** (0.0014)	-0.0462** (0.0016)	0.0293 (0.0021)
BSEPR	0.0399*** (0.0089)	0.0503 (0.0013)	0.0392** (0.0011)
ROA	0.0845** (0.0013)	0.0455* (0.0015)	0.0491** (0.0032)
SIZE	0.0140** (0.0013)	0.0271** (0.0043)	0.0156* (0.0036)
RISK	0.0166 (0.0016)	0.0166* (0.0092)	0.0182 (0.0019)
AR1 a (p value)	-2.29 (0.001)	-2.16 (0.001)	-2.38 (0.006)
AR2 b (p value)	-1.14 (0.355)	-1.23 (0.418)	-1.32 (0.173)
Hansen test (p value)	46.87 (0.42)	42.39 (0.56)	34.36 (0.48)

*Notes:* The sample includes 362 companies for 4 time periods, for a total of 1448 observations. All the models include the constant and time dummies. Robust Standard Error are in parentheses. \*\*\*, \*\*, \*, denote significance at 1%, 5%, and 10% respectively.

<sup>a</sup> Test for the presence of 1st order autocorrelation of residuals

<sup>b</sup> Test for the presence of 2nd order autocorrelation of residuals

<sup>c</sup> H0: instruments are valid

#### 4.5 CONCLUSION AND DISCUSSION

This paper examines the relationship between the composition of a board of directors and sustainability performance. We measure sustainability performance as the weighted score of five stakeholder groups using the corresponding *Sustaynalitics* weights by industries and countries. Using a sample of 362 companies and applying empirical tests, we find that the relationship between a board of directors and sustainability performance is significant. We consider different stakeholders' groups (the community, employees, suppliers, customers, and the environment) that each impact companies differently when focusing on sustainable performance. Lastly, we conducted a study using a dynamic model in order to take into account the complex interactions between the BoD and sustainability performance, and to answers to the call of Rao and Tilt (2016), who suggest longitudinal analysis in the study of board composition.

This study contributes to the literature in several ways. First, concerning the literature on board composition and firm sustainability performance, our results show that the composition of a board of directors influences sustainability performance. This backing the theoretical affirmations of agency and stakeholder theory concerning the board of directors' role in enhancing sustainability performance.

Consistent with *Agency Theory*, we find that the separation of board chair and CEO roles enhances sustainability performance. *Agency Theory* argues that the board of directors should monitor the agents' actions. If the chief executive officer also holds the position of the board's chairperson, the monitoring process cannot be effective (Hussain et al, 2016; Allegrini and Greco, 2013). Consistent with *Stakeholder Theory* we find that board diversity has a significant impact on sustainability performance. Our results also confirm the study by Zhang, Zhu and Ding (2013), who suggest that a more diverse board provides valuable resources and should improve a firm's performance.

Contrary to our expectation, however, our results do not support H1, which states that: *a high number of independent directors on a BOD is positively related with SP*. Instead, we find a negative relationship between the presence of independent directors on a board and SP.

Possible explanations to our results can be found in Bansal et al. (2018), where it was shown that the behavior of independent directors can be influenced by reputational risk. This risk can arise in the context of CSR disclosure decisions. The information that the independent directors receive from the management can be manipulative and misleading (Kravet and Muslu 2013). Also, Martínez-Ferrero and García-Sánchez (2018) examine the behavior of the independent director with respect to CSR disclosure. They find that the decisions made on CSR reporting are influenced by independent directors to protect their prestige from the threat of potentially misleading information. Accordingly, we claim that a similar reasoning can also hold in the case of sustainability performances addressed by this study.

Second, the study extends the existing literature by investigating the impact of the composition of a board of directors on both dimension of sustainability performance, social and environmental dimension.

An additional analysis was performed splitting our independent variable into two separate components: social performance and environmental performance. Results confirm that the board diversity is significantly associated with both dimensions. In fact, both female directors and foreign directors are attentive to shareholders' interest and can be more in tune with relational sustainability strategies.

Moreover, our results show that board independence has a negative impact on social performance and the separation on board chair and CEO role has a positive impact on environmental performance. Thus, we confirm that boards with a strong leadership are more likely to realize environmental investments and resist to the pressure of management to neglect such investments (McKendall et al., 1999).

Furthermore, the most important implication resulting on this study is to support specialists on how to improve environmental and social performance through the application of particular governance mechanisms. Strong corporate governance can be a valuable tool to mitigate agency problems and encourage managers to operate adequately for stakeholders' interests. Since the directors do not have direct access to information relating to company's strategic management, a strengthening of the BoD, represented by greater heterogeneity, could be a way to improve the company's sustainability performance and to ensure the right involvement of the stakeholders.

This study suffers of some limitations, which could be overcome with further research. We studied board composition in terms of gender, nationality, independent directors, and the separation of board chair and CEO roles. Future research could focus on age, background, and CSR committees. Finally, the sustainability performance index aggregates multiple social and environmental dimensions without making any assumption on how they are correlated. Furthermore, we have considered large firms that have the resources to invest in sustainability initiatives, the results should be generalized with caution. Future research should also include medium and small firms to broaden the scope of the study as a whole.

## References

- Akpan, E.O., Amran, N.A., 2014. Board characteristics and company performance: evidence from Nigeria. *Journal of Finance and Accounting*. 2, 81–89.
- Allegrini, M., Greco, G., 2013. Corporate boards, audit committees and voluntary disclosure: evidence from Italian Listed Companies. *Journal of Management and Governance*. 17, 187–216.
- Alvarez S.A., Barney J.B., 2004. Organizing rent generation and appropriation: toward a theory of the entrepreneurial firm. *Journal of Business Venturing*. 19, 621- 635.
- Andres, P., & Vallelado, E., 2008. Corporate governance in banking: The role of board of directors. *Journal of Banking and Finance*., 32, 2570–2580.
- Arellano, M., & Bond, S., 1991. Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. *Review of Economic Studies*. 58, 277–297.
- Arena, C., Bozzolan, S., Michelon, G., 2014. Environmental reporting: Transparency to stakeholders or stakeholder manipulation? An analysis of disclosure tone and the role of the board of directors. *Corporate Social Responsibility and Environmental Management*.
- Barako, D. G., Hancock, P., Izan, H. Y., 2006. Factors influencing voluntary corporate disclosure by Kenyan Companies. *Corporate Governance: An International Review*. 14, 107–125.

- Bart, C., McQueen, G., 2013. Why women make better directors? *International Journal of Business Governance and Ethics*. 8, 93-99.
- Bear, S., Rahman N., Post C., 2010, The Impact of Board Diversity and Gender Composition on Corporate Social Responsibility and Firm Reputation. *Journal of Business Ethics*. 97, 207–222.
- Bhagat, G., Black, S., 1999. The Uncertain Relationship between Board Composition and Firm Performance. *Business Lawyer*. 54, 921-963.
- Brammer, S., Brooks, C., Pavelin, S., 2006. Corporate social performance and stock returns: UK evidence from disaggregate measures. *Financial management*. 35, 97-116.
- Brown, L. D., Caylor, M. L., 2006. Corporate governance and firm valuation. *Journal of accounting and public policy*. 25, 409-434.
- Burke, J. J., Hoitash, R., Hoitash, U., 2019. The heterogeneity of board-level sustainability committees and corporate social performance. *Journal of Business Ethics*. 154, 1161-1186.
- Campbell, J. L., 2007. Why would corporations behave in socially responsible ways? An institutional theory of corporate social responsibility. *Academy of management Review*. 32, 946-967.
- Cox, Jr. T., 2001. Creating the Multicultural Organization: A strategy for Capturing the Power of Diversity. *Jossey-Bass, San Fransisco*. 3-16.
- Daily, C. M., Dalton, D. R., 1993. Board of directors leadership and structure: Control and performance implications, *Entrepreneurship Theory and Practice*. 17, 65–81.
- Dalton, D. R., Daily, C. M., Johnson, J. L., & Ellstrand, A. E., 1999. Number of directors and financial performance: A meta-analysis. *Academy of Management journal*. 42, 674-686.
- Donaldson, L., Davis J. H., 1991. Stewardship theory or agency theory: CEO governance and shareholder returns, *Australian Journal of Management*. 16, 49-64.

- Duru, A., Iyengar, R. J., Zampelli, E. M., 2016. The dynamic relationship between CEO duality and firm performance: The moderating role of board independence. *Journal of Business Research*. 69, 4269-4277.
- Eng, L. L., Mak, Y. T., 2003. Corporate governance and voluntary disclosure. *Journal of Accounting and Public Policy*. 22, 325–345.
- Erhardt, N. L., Werbel, J. D., Shrader, C. B., 2003. Board of Directors Diversity and Firm Financial Performance, *Corporate Governance: An International Review*. 11, 102–111.
- Fama, E. F., Jensen, M. C., 1983. Separation of ownership and control. *Journal of Law and Economics*. 26, 301–325.
- Fernandez-Feijoo, B., Romero, S., Ruiz, S., 2012. Does Board Gender Composition affect Corporate Social Responsibility Reporting?. *International Journal of Business and Social Science*. 3, 31-38.
- Finegold, D., Benson, G. S., & Hecht, D., 2007. Corporate boards and company performance: Review of research in light of recent reforms. *Corporate Governance: an international review*. 15, 865-878.
- Freeman, R. E., 1984. Strategic management: A stakeholder approach. *Englewood Cliffs, NJ: Prentice-Hall*.
- Frijns, B., Dodd, O., Cimerova, H., 2016. The impact of cultural diversity in corporate boards on firm performance. *Journal of Corporate Finance forthcoming*.
- García-Sánchez, I. M., Martínez-Ferrero, J., 2018. How do Independent Directors Behave with Respect to Sustainability Disclosure? *Corporate Social Responsibility and Environmental Management*. 25, 609–627.
- Grinblatt, M., & Titman, S. (2016). Financial markets & corporate strategy.
- Hambrick, D., Cho, T., Chen, M., 1996. The influence of top management team heterogeneity on firms' competitive movers. *Administrative Science Quarterly*. 41, 659-684.

- Haniffa, R. M., Cooke, T. E., 2002. Culture, corporate governance and disclosure in Malaysian corporations. *Abacus*. 38, 317–349.
- Haniffa, R. M., Cooke, T. E., 2005. The impact of culture and governance on corporate social reporting. *Journal of Accounting and Public Policy*. 24, 391–430.
- Hendry K, Kiel GC. 2004. The role of the board in firm strategy: integrating agency and organizational control perspectives. *Corporate Governance: an International Review* 12, 500-520
- Herda, D. N., Taylor, M. E., Winterbotham, G., 2014. The Effect of Country-Level Investor Protection on the Voluntary Assurance of Sustainability Reports. *J Int Financ Manage Account*. 25, 209-236.
- Hermalin, B.E., Weisbach, M.S., 2003. Boards of directors as an endogenously determined institution: A survey of the economic literature. *FRBNY Economic Policy Review*. 9, 7–26.
- Hillman, A. J., Keim G. D., 2001. ‘Shareholder Value, Stakeholder Management, and Social Issues: What’s the Bottom Line’, *Strategic Management Journal*. 22, 125-140.
- Hussain, N., Rigoni, U.; Orij, R. P., 2018. Corporate Governance and Sustainability Performance: Analysis of Triple Bottom Line Performance, *Journal of Business Ethics*. 2, 411-432.
- Husted, B. de Sousa-Filho, J., 2017. The impact of sustainability governance, country stakeholder orientation, and country risk on environmental, social, and governance performance. *Journal of Cleaner Production*.
- Jaffe, S., Hyde, J., 2000. Gender differences in moral orientation: a meta-analysis’. *Psychological Bulletin*. 5, 703–726.
- Jangu, T., Darus, F., Zain, M., Sawani, M., 2014. Does Good Corporate Governance Lead to Better Sustainability Reporting? An Analysis Using Structural Equation Modeling. *Procedia Social and Behavioral Sciences*. 145, 138-145.
- Jensen, M. C., Mechling, W., 1976. Theory of the firm: Managerial behavior, agency costs, and capital structure. *Journal of Financial Economics*. 3, 305-360.



- Jo, H., Harjoto, M., 2011. Corporate governance and firm value: The impact of corporate social responsibility. *Journal of Business Ethics*. 103, 351–383.
- Kaplan, R. S., 2001. Strategic performance measurement and management in nonprofit organizations. *Nonprofit management and Leadership*. 11, 353-370.
- Karamanou, I., Vafeas, N., 2005. The association between corporate boards, audit committees, and management earnings forecasts: An empirical analysis. *Journal of Accounting Research*. 43, 453–486.
- Kolk, A., 2005. Environmental issues and the MNE. *Research in Global Strategic Management*. 11, 147 162.
- Kravet, T., Volkan M., 2013. Textual risk disclosures and investors' risk perceptions. *Review of Accounting Studies*. 18, 1088–122.
- Krechovská, M., Procházková, P.T., 2014. Sustainability and its Integration into Corporate Governance Focusing on Corporate Performance Management and Reporting. *Procedia Engineering*. 69, 1144-1151.
- Liao, L., Luo, L., Tang, Q., 2014. Gender diversity, board independence, environmental committee and greenhouse gas disclosure. *The British Accounting Review*.
- Lodhia, S., Martin, N., 2014. Corporate sustainability indicators: an Australian mining case study. *Journal of Cleaner Production*. 84, 107-115.
- Mallin, C., Michelon, G., Raggi, D., 2013. Monitoring intensity and stakeholders' orientation: How does governance affect social and environmental disclosure? *Journal of Business Ethics*. 114, 29-43.
- Masulis, RW, Wang, C., Xie, F., 2012. Globalizing The Boardroom-The Effects of Foreign Directors on Corporate Governance and Firm Performance. *Journal of Accounting and Economics*. 53, 527-55.
- McGuire, J. B., Sundgren, A., Schneeweis, T., 1988. Corporate social responsibility and firm financial performance. *Academy of Management Journal*. 31, 354-372.
- Michelon, G., Parbonetti, A., 2012. The effect of corporate governance on sustainability disclosure. *Journal of Management & Governance*. 16, 477-509

- Muller, V.O., 2014. The impact of board composition on the financial performance of FTSE100 constituents. *Procedia-Social and Behavioral Sciences*. 109, 969-975.
- Nazar, M. C. A., 2016. Does CEO Duality Affect the Firm Performance? Evidence from Sri Lanka. *International Journal of Advances in Management and Economics*. 5, 56-60.
- Nunes, B., Alamino, R.C., Shaw, D., Bennett, D., 2016. Modelling sustainability performance to achieve absolute reductions in socio-ecological systems. *Journal of Cleaner Production*. 132, 32-44.
- Orij, R., 2010. Corporate social disclosures in the context of national cultures and stakeholder theory, *Accounting, Auditing & Accountability Journal*. 23, 868- 889.
- Ortas, E., Alvarez, I., Jaussaud, J., Garayar, A., 2015. The impact of institutional and social context on corporate environmental, social and governance performance of companies committed to voluntary corporate social responsibility initiatives. *Journal of Cleaner Production*. 108, 673-684.
- Paniagua-Dominguez, R., Yu, Y. F., Khaidarov, E., Choi, S., Leong, V., Bakker, R. M., ... & Kuznetsov, A. I., 2018. A metalens with a near-unity numerical aperture. *Nano letters*. 18, 2124-2132.
- Post, C., Rahman, N., Rubow, E., 2011. Green Governance: Boards of Directors' Composition and Environmental Corporate Social Responsibility. *Business & Society*. 50, 189-223.
- Prado-Lorenzo, J.-M., Garcia-Sanchez, I.-M., 2010. The role of the board of directors in disseminating relevant information on greenhouse gases. *Journal of Business Ethics*. 97, 391-424.
- Rahdari, A.H., Rostamy, A.A.A., 2015. Designing a general set of sustainability indicators at the corporate level. *Journal of Cleaner Production*. 108, 757-771.
- Rao, K., Tilt C., 2016. Board diversity and CSR reporting: An Australian study. *Meditari Accountancy Research*. 24, 182–210.
- Roodman D., 2006. How to Do Xtabond2: An Introduction to “Difference” and “System” GMM in Stata. *Centre for Global Development*, WP n.103.

- Suh, S., 2017. How The Investment Community may save the planet (and your retirement funds) from Climate Change. *Huffpost*.
- Said, R., Zainuddin, Y. H., Haron, H., 2009. The relationship between corporate social responsibility disclosure and corporate governance characteristics in Malaysian public listed companies. *Social Responsibility Journal*. 5, 212-226.
- Sparkes, R., 2008. Socially responsible investment. *Handbook of finance*. 2.
- Surroca, J., Tribo, J. A., Waddock, S., 2010. Corporate responsibility and financial performance: The role of intangible resources. *Strategic Management Journal*. 31, 463-490.
- Stockton, N., 2017. How boring old pension funds might curb global warming. *Wired*.
- Terjesen, S., Aguilera, R., Lorenz, R., 2014. Legislating a woman's seat on the board: Institutional factors driving gender quotas for boards of directors. *Journal of Business Ethics*.
- United Nations (UN), 2015. Countries Reach Historic Agreement to Generate Financing for New Sustainable Development Agenda. <http://www.un.org/esa/ffd/ffd3/press-release/countries-reach-historic-agreement.html>
- Useem, M., 1984. *The Inner Circle: Large Corporations and the Rise of Business Political Activity in the U.S. and U.K.* New York: Oxford University Press.
- Van Marrewijk, M., 2003, Concept and Definitions of CSR and Corporate Sustainability: Between Agency and Communion. *Journal of Business Ethic*. 44, 95–105.
- Waddock, S., Graves, S., 1997. The corporate social performance financial performance link. *Strategic Management Journal*. 18, 303-319.
- Zahra, S. A., Stanton, W. W., 1988. The implications of board of directors composition for corporate strategy and performance. *International Journal of Management*. 5, 229–236.
- Zahra, S., 1993. A conceptual model of entrepreneurship as firm behavior: a critique and extension. *Entrepreneurship Theor. Pract.* 16, 5 – 21.

Zhang, J. Q., Zhu, H., Ding, H.-B., 2012. Board Composition and Corporate Social Responsibility: An Empirical Investigation in the Post Sarbanes-Oxley Era. *Journal of Business Ethics*.

Zona, F., Boyd, B. K., Takacs Haynes, K., 2018. Coordination, control, or charade? The role of board interlocks among business group members. *Management Decision*.

# **CHAPTER 5: CORPORATE GOVERNANCE PRACTICES AND FIRMS' GREENHOUSE GAS EMISSIONS**

---

## **5.1 INTRODUCTION**

Climate Change is one of the main challenges that our society is facing in the 21st century. There is a widespread consensus in the international scientific community regarding both the origin of the phenomenon due to human activity, as well as the sign and magnitude of its effects (IPCC, 2014). In particular, climate change is expected to have a profound effect on future development trajectories, especially in the case where the average atmospheric temperature increases beyond 2° C (IPCC, 2014).

Under the Paris Agreement on climate change, countries are committed to reduce their greenhouse gas (GHG) emissions through Nationally Determined Contributions (NDCs) (Rogelj et al, 2016). Under NDCs some countries are instituting cap and trade policy or voluntary commitments from private sectors that require firms to actively manage their GHG emissions (Richards et al., 2016). In addition, some businesses have voluntarily committed to reduce GHG emissions in the absence of government initiatives (Borghei et al., 2018).

Companies are responding to the problem of climate change in several ways: purchasing carbon offsets, improving supplier engagement to reduce their own emissions, and applying several technological solutions. For example, Bansal (2019) show that oil and gas companies attempted to use new technologies in their production process with the goal of reducing their carbon footprint. Van Vuuren et al. (2018) examine the rapid implementation of the best technologies to a deep reduction of GHG emissions. Perry et al. (2008) show that the results of renewable technologies consequently reduced the release of CO<sub>2</sub>.

Another type of effort to reduce firms' GHG emissions has been placed on corporate governance practices (Aguilera et al, 2018). L'Oréal, for example, created managerial incentives to address climate change by tying executive compensation to GHG reporting

scores from CDP, which runs annual greenhouse gas emission disclosures on behalf of institutional investors (L'Oréal Sustainability Commitment, 2017). Unilever consider motivating its business divisions by attaching financial and non-financial incentives to the agenda of reducing carbon footprint (Unilever Sustainable Living Plan Performance Summary, 2017). Nestlé ensures managerial sustainability and oversees the long-term succession planning of the Board by the Nomination and Sustainability Committee (NSC) (Nestlé Creating Shared Value, 2018).

However, empirical evidence on the relationship between governance practices toward climate mitigation and firm's GHG emissions are lacking in the literature. Doda et al. (2016) examine the relationship between carbon management strategies and GHG emissions. The authors find little compelling evidence that commonly adopted management strategies are reducing emissions. Galbreath (2010) investigate how well 98 firms are addressing climate change through governance dimensions.

In this paper, we are attempting to answer the following question:

RQ: Are the level of firm's GHG emissions and the governance practices on climate change related?

We examine the relation between corporate governance practices and GHG emissions for a sample of 1,612 individual firms across 56 countries. We used both Scope 1 (direct emissions) and Scope 2 (indirect emissions) GHG emissions data from the Carbon Disclosure Project (CDP). We measure corporate governance practices using firms' voluntarily responses to the CDP annual questionnaire.

The remainder of the paper proceeds as follow. The next section presents climate change and private sector. The third section describes the relevant literature corporate governance and environmental performance. The fourth section discusses the research design. The fifth section presents our empirical results. The last section presents discussion and conclusion.

## **5.2 CLIMATE CHANGE AND PRIVATE SECTOR**

Business sustainability is based on the idea that companies must take responsibility for the environmental, social, and economic impacts generated by their activities, even at the

expense of their stakeholders. The reason for the expansion of the company's responsibilities lies in recognizing the connection between long-term profitability and the socio-economic-environmental context in which it is located.

In 1997, the Greenhouse Gas Protocol (GHGP) was born. It was the result of an initiative by the World Resource Institute (WRI) and the World Business Council for Sustainable Development (WBCSD), which recognized the need of an international accounting standard for greenhouse gas emissions. The WRI and WBCSD believed this would be necessary to track the evolution of international policies on global climate change.

After almost four years, the first edition of the GHGP was published under the name, "Corporate Accounting and Reporting Standards". The GHGP aims to provide companies with a set of tools and methodologies that can be used to calculate their GHG. According to the reporting standards, the emissions must be reported and divided into three categories, called scopes.

Scope 1 emissions are direct emissions that come from owned or controlled sources by the company. Scope 2 includes indirect emissions that come from the generation of purchased electricity. Scope 3 emissions are all indirect emissions (not included in scope 2) subsumes all other indirect emissions (such as transportation or extraction of purchased materials).

The increase in average global temperature has consequences on the world's ecosystem, leading to a progressive rise in sea levels, the retreat of glaciers and snow cover, and an increase in intensity and frequency of extreme weather. These issues not only affect the environment, but also economies, and the health and mobility of country's citizens.

If action is not taken, by the end of the century, global warming could exceed the 2° C threshold set as a target by the international agreement reached in Paris, France in 2015 (COP21) and referred to by the UN in the 2030 Agenda. The COP21 commits European states to continue their efforts to limit the temperature increase to just 1.5° C, while still keeping it below 2° C globally. Europe has already achieved its goal of reducing greenhouse gas emissions by 2020, with industry and energy contributing the most.

The most important corporate sustainability initiative was conceived in 1999, when the then Secretary General of the United Nations (UN), Kofi Annan, addressed the business community in Davos, Switzerland. There he proposed an initiative called the "Global

Compact" for sustainability. This pact was launched the following year in New York, NY. The Global Compact was and still is a momentous step for the United Nations, as it not only recognizes the role of businesses as partners in a more sustainable and inclusive developmental environment, but because it directly activates the UN in this private sector engagement project. However, this poses two key questions: how can one distinguish between strategic and tactical choices? And, how can joining the Global Compact as the result of an opportunistic choice based on exclusively reputational needs be avoided?

The main answers to these questions are closely linked to the Global Compact's mission. The first, internal, is related to the fact that sustainability must be strategically integrated into the businesses core by its executives. The second, external and more demanding, concerns the commitment that the company must put on providing a significant contribution to global goals, defined internationally by the UN.

Currently, several countries are adopting the 17 Sustainable Development Goals defined in the 2030 Agenda. The Agenda, which addresses all countries to implement its SDGs, aims to unify nations in the pursuit of creating a more sustainable global-environment, regardless of socio-economic-political status. To achieve this, nations must work together with businesses to develop cleaner energy sources, universal access to clean water, improving infrastructure, and the development of the *circular economy*.

From here we can understand how businesses are called to create value: first, by proposing solutions for a smarter and cleaner economy, and secondly, by paying particular attention to the quality of development.

Particularly, climate change is a key challenge in terms of sustainable development. The warming of the earth's atmosphere is causing changes in the global climate system that threatens all countries. From the survival of large sections of the population in under-developed countries to infrastructure and select economic sectors in developed regions. Furthermore, changes in precipitation and temperature cycles are also affecting ecosystems, such as: forests, farmland, mountain regions, oceans, as well as the people living there. Global carbon dioxide (CO<sub>2</sub>) increased by over 50% between 1990 and 2012.

Climate change is a global issue affecting all nations, and the action of governments and its institutions alone will not be enough to provide a remedy. The private sector must play a



primary role in combating climate change. Businesses must take responsibility in reducing emissions in a way that is both cost-effective and in-line with their corporate mission and values.

Business benefits go far beyond reducing emissions, companies that are able to assess and understand the risks and opportunities related to the climate will be able to make better decisions over the long term, leading to new business opportunities. In addition to communicating the dangers of exposure to harmful emissions (carbon exposure), companies all over the world should make a prediction about the future and what risks they will face. In this context, entrepreneurs must carry out "stress tests" so that the losses related to climate change can be assessed, both in terms of production processes and policies introduced by the company to curb the emissions of GHG.

### **5.3 EFFECTIVENESS OF CORPORATE GOVERNANCE PRACTICES IN ADDRESSING CLIMATE CHANGE**

Climate change and firms' strategies in managing GHG emissions have been discussed in the context of corporate governance (Lee, 2012). Kolk and Pinkse (2005) discuss business strategies as a choice between economic interest and firm's responsibility to climate change. The authors identify three strategic options for climate change: process improvement, product development, and new product/market combinations. Jeswani et al. (2008) identify the strategies adopted by firms in different sectors focusing on energy-efficiency. Haque et al. (2016) investigate sustainability disclosure tools of Australian firms with reference to corporate governance practices. Their results show that low levels of disclosure of climate change-related corporate governance practices are associated, among other factors, with a lack of proactive stakeholder engagement. Sullivan and Gouldson (2017) examine the effect the external government pressures on corporate strategies and actions related on climate change. Their study shows that internal governance processes on climate change strategies are influenced by external government pressures. However, firms will be willing to pursue climate change strategies only if financial benefits are expected to exceed related costs.

The effectiveness of these climate change strategies in achieving reductions in GHG emissions, however, has not been addressed by the literature. Here we build hypotheses on the relationship of corporate governance practices and GHG emissions based on stakeholder–agency paradigm (Hill and Jones, 1992).

In the traditional paradigm on agents and principals, the stakeholders' interests can diverge from managers' strategies to allocate the firm's resources (Lee, 2012). Accordingly, the literature on corporate governance and environmental management suggests that stakeholders' interests and corporate governance's preferences may diverge because stakeholders show a greater interest on climate change than the interest shown by managers (Bansal, 2005; Sharma and Henriques, 2005). Nevertheless, according to Hill and Jones (1992), managers have to propose strategic decisions and allocate resources in order to guarantee stakeholders' interests are addressed. In short, managers are understood as agents of stakeholders within an implicit contractual relationship, and corporate governance process is the main mechanisms through which conflicting interests are solved (Hill and Jones, 1992).

Following the stakeholder-agency paradigm, we argue that corporate governance practices reduce the gap between the interests of agents and principals, increasing the willingness of managers to satisfy the environmental preferences of stakeholders. In this study we analyze four specific practices for climate change and the reduction of GHG emissions: (1) instituting managerial incentives, (2) engaging in public policy on climate change, (3) disclosure of organization's response to climate change and GHG emissions and (4) assigning climate change-related responsibilities to executives.

### **5.3.1 Incentives**

Incentives are the most diffused corporate governance practices to align the interests of stakeholders with those of the managers (Zajac and Westphal, 1994). Several studies have examined the role of managerial incentives on firm's performance (Agarwal et al., 2009;

Hall and Murphy, 2003; Coles et al. 2018). Banerjee and Homroy (2018) analyzed the effect of managerial incentives in alignment strategic objectives of managers and stakeholders, and found that ownership structure affects the incentives optimizing strategies on firm's performance. Castellaneta (2016) investigates the relationship incentives and competitive advantage through capability building. The study shows how managerial incentives effect three different areas of firm capabilities, which are the main drivers of competitive advantage. Moreover, Cao et al. (2018) show how managerial incentives are related to compensation policy and firm performance. in particular, the study finds that promotion in career exhibits a strong positive relation with firm performance.

In the context of climate change, we hypothesize that these effects of managerial incentives improve the propensity of managers in making decisions on environmental issues. On the one hand, an improvement in environmental performance is often associated to improved financial performance (Lenssen et al. 2005; Chen et al. 2015; Gök and Peker, 2017). On the other, managerial incentives also increase the ability of stakeholders to exert pressure on managers toward environmental issues. Therefore, we hypothesize that:

*H1: The presence of managerial incentives for climate change is positively related to a lower amount of firm's GHG emissions.*

### **5.3.2 Public Policy**

Public policy is an important driver to align managerial and stakeholder interests (Hill and Jones, 1992; Osemeke and Adegbite, 2016). While new climate change policies, such as carbon tax or emissions cap, may negatively affect the company's financial performance (Fankhauser et al., 2016), they create a responsibility for managers to comply with the new policy, which enables stakeholders to assert their interests (Hillman and Hitt, 1999). For example, the Sarbenes-Oxley act of the U.S., also known as Public Company Accounting Reform and Investor Protection 2002, has made managers' responsibilities grow exponentially, including environmental responsibility. In this case, exposure to new policies

that are aligned with stakeholders' interests allows managers to act on behalf of the stakeholders in order to reduce the risk associated with their responsibility (Lankoski, 2006).

Therefore, we hypothesize that:

*H2: Exposure to public policies on climate change is positively related to a lower amount of firm's GHG emissions.*

### **5.3.3 Disclosure**

According to Ullmann (1985), stakeholder power is an important consideration in the firm's operation, such that stakeholders can influence business objectives. Active engagement of stakeholders represents an important corporate governance mechanism, which is being used to influence corporate governance in the social, environmental area (Solomon and Solomon, 2006). The process of stakeholder involvement concerns specifically the communication and iterations between the company and the stakeholders. The involvement of investors, in particular, has substantial effects for corporate governance practices and corporate reputation (Foster and Jonker, 2005). The involvement of stakeholders brings immediate advantages in terms of image, improving the reputation of the company with undisputed commercial and relationship benefits (Treviño et al., 2006). In the context of climate change, managers can modify the firm's strategic direction under the pressure of some specific stakeholder groups, who can press on their environmental interest to influence firm's behavior. Therefore, we hypothesize that:

*H3: The presence of initiatives that engage climate change-related stakeholders is positively related to a lower amount of firm's GHG emissions.*

### **5.3.4 Board of directors**

The board of directors has legitimacy to exert pressure on managers in monitoring stakeholders' interests (Fama and Jensen, 1983; Jensen and Meckling, 1976). Independent directors, for example, should act protecting shareholders interest as well as the other stakeholders' preferences (Zattoni, and Cuomo, 2010). Several studies have shown that certain compositions of a board of directors can influence firm environmental performance (Arena et al, 2015; Jizi, 2017; Cucari et al, 2018; Naciti 2019). Post et al. (2011) show that a board of directors with a higher presence of independent directors has a higher regard for environmental issues.

Moreover, Kassinis and Vafeas (2002) argue that some directors, who do not directly represent a specific stakeholder, will probably defend the interest of environmental stakeholders.

If the responsibility for climate change issue is entrusted to the board of directors, the degree of pressure that stakeholders exert on managers may grow in the presence of directors who represent the interests of stakeholders. Therefore, we hypothesize that:

*H4: The presence of a responsibility on climate change entrusted on the board of director is positively related to a lower amount of firm's GHG emissions.*

## **5.4 RESEARCH DESIGN**

### **5.4.1 Sample and Data**

Following prior research (Stanny E., 2013; Kim Y., 2013; Matisoff D. C., et al., 2013), we use Carbon Disclosure Project (CDP) dataset from years 2011-2015, which contains 8,060 unique firm-year observations from 1,612 individual firms across 56 countries. CDP is a private, not-for-profit organization launched in 2000; it runs a system that offers companies and countries the possibility of measuring, detecting, managing and sharing information on their greenhouse gas emissions at a global level with the aim of improving their carbon

footprint. Companies that want to be classified in the CDP must respond to a questionnaire that detects the actions taken, objectives and strategies in the field of climate change management. Furthermore, answering the questionnaire and obtaining a good score brings to companies' great visibility on a global level, thus stimulating the interest of the increasing number of institutional investors who include ESG (Environmental, Social & Governance) issues in their investment choices. Since 2003, CDP has annually distributed questionnaires to the largest listed firms around the world, such as listed firms of the S&P 500 index and Global 500 index (Kolk et al., 2008). The questionnaire is organized in categories such as governance, strategy, risk management, and emissions performance, and it consist of a series of questions to which a firm responds by selecting a discrete choice from a drop-down menu or providing numerical data and text in details about its policy or strategy.

From the questionnaires we have extracted information regarding the quantity of GHG emissions produced (Scope 1 and Scope 2) and the corporate governance practices implemented. We complemented these data with financial data from the same period extracted from Compustat. The collected information has allowed us to build a panel dataset.

#### **5.4.2 Variables and Model**

Table I describes the dependent, independent and control variables.

##### **Dependent variable**

*GHG emissions* are our dependent variable. For each reporting year, companies responding to CDP questionnaires provided information on gross global Scope 1 and 2 (combined and non-combined) emissions, measured in metric tons of CO<sub>2</sub> per unit currency of total revenues. It was not possible to include Scope 3 due to the paucity of data. In line with previous studies (Wang et al., 2013; Marcotullio et al., 2013), we took the logarithmic form of the total Scope 1 and 2 GHG emissions.

## **Independent Variables**

In order to test our hypotheses, following prior studies we selected four questions from the CDP questionnaire (see appendix) that are related to the four factors that we addressed in the theoretical section:

- *Incentives* is a dummy variable that is equal to 1 if the firm provides incentives for the management to address climate change and GHG emissions, and 0 otherwise.
- *Public Policy* is a dummy variable that takes the value of 1 if the firm engages in activities that could influence public policy on climate change, and 0 otherwise. This variable represents a proxy of the influence that climate-related policies have on firms, under the assumption that firms engage in climate-related activities to influence public policies if they are affected by existing policies or expect to be affected by future policies.
- *Disclosure* is a dummy variable that takes the value of 1 if the firm publishes information about the organization's response to climate change other than in CDP response, and 0 otherwise. This variable represents a proxy of stakeholders' engagement, which is stimulated by the firm's effort to communicate and disclose information about the firm's actions to address climate change.
- *Responsibility* is a dummy variable that takes value of 1 if the highest level of direct responsibility is entrusted to the board of directors or to the senior manager, and the value of 0 if there are no individual board members or committees with overall responsibility for climate change.

## **Control variables**

This study controls for several variables effecting the company's GHG emissions.

Consistent with previous studies (Brammer and Pavelin, 2008; Stanny and Ely, 2008; Clarkson et al., 2008), controls were placed on *Size*, *Leverage*, and *Price-to-Book*. *Size* has been measured by taking the natural log of total assets; *Leverage* is calculated by Debt-to-equity ratio, and *Price-to-Book* is estimated as market value divided by book value of equity. Following the study of Ben-Ben-Amar and McIlhenny (2015), the control for industry was introduced by creating a *High-carbon* dummy variable that takes the value of one, if a firm

belongs to a high-carbon-impact industrial sector (automobiles & components, chemicals, forest products, gas & electrical utilities, oil & gas, mining, pipelines, precious metals, steel and transportation) and zero otherwise. Moreover, the control for country and year is attained by using dummy variables.

**Table 1. Variables Description**

Variable	Description	Source
GHG EMISSIONS	Calculated as the logarithm of total emissions	CDP questionnaires
INCENTIVES	Dummy variable that is equal to 1 if firm provides incentive for the management	CDP questionnaires
PUBLIC POLICY	Dummy variable that is equal to 1 if the firm engages in activities that could influence public policy	CDP questionnaires
DISCLOSURE	Dummy variable that is equal to 1 if the firm publishes information about the organization's response to climate other than in CDP response?	CDP questionnaires
RESPONSIBILITY	Dummy variable that is equal to 1 if the highest level of direct responsibility is entrusted to the board or senior manager	CDP questionnaires
SIZE	Natural log of total assets	COMPUSTAT
LEVERAGE	Debt-to-equity ratio.	COMPUSTAT
PRICE-TO-BOOK	Price to book value of equity.	COMPUSTAT
HIGH-CARBON	Dummy variable that is equal to 1 if the firm belongs to a high carbon impact industrial sector	CDP questionnaires
YEAR	Year dummies	CDP questionnaires
COUNTRY	Country dummies	CDP questionnaires

## Model

The model examines the effects of corporate governance practices addressing climate change by focusing on GHG emissions. To examine such effects, several variations of cross-sectional time series data are used. The following multivariate analysis model is used:

$$\text{Equation (1)} \quad Y = \alpha + \sum_j \beta_j CGPractice_j + \sum_k \gamma_k Control_k + \varepsilon$$



Where:

$Y$  = natural logarithm of firm's GHG emissions;

$\alpha$  = intercept;

$\beta_j, \gamma_k$  = coefficients to be estimated;

$CGPractice_j$  = set of corporate governance practices;

$Control_k$  = set of firm level controls;

$\varepsilon$  = error term.

## **5.5 RESULTS**

### **5.5.1 Descriptive statistics**

Table 2 presents number of companies, emissions and firm size with industry breakdowns. The sample comprises 1,612 firms across 11 industries. Among them, the sector Industrials with 339 companies represents 21% of the sample, followed by Materials with 12%, which also has the highest level of emissions. Banks and Financials industries represent 18% of the total sample, with lower emissions an average as compared to other industries.

Table 3 provides descriptive statistics of all explanatory variables and Pearson's correlation matrix. Analysis of the correlation matrix lends support to a negative relationship between GHG emissions and corporate governance variables. Furthermore, examining the correlation matrix, we find no correlation above 0.5 among the variables used in the study, indicating insufficient evidence of multi-collinearity problem (Al-Shaer and Zaman, 2016).

**Table 2. Industry descriptive data**

Industry	No. of companies	Size	Log GHG emissions
Banks	114	12.46	4.65
Consumer Discretionary	188	11.65	5.40
Consumer Staples	110	14.38	6.18
Energy	97	11.43	6.46
Financials	182	15.12	4.72
Health Care	96	15.68	5.79
Industrials	339	10.67	6.11
Information Technology	141	12.55	5.66
Materials	192	14.72	6.73
Telecommunication Services	51	10.46	4.77
Utilities	102	10.27	5.71
Sample	1,612	12.67	5.65

**Table 3. Descriptive statistics and correlations**

Var.	Mean	Std. Dev.	1	2	3	4	5	6	7	8	9
GHG EMISSIONS	5.65	2.65	1.0000								
INCENTIVES	0.92	0.27	<b>-0.0646</b>	1.0000							
PUBLIC POLICY	0.75	0.44	-0.0186	<b>0.3015</b>	1.0000						
DISCLOSURE	0.18	0.38	<b>-0.0334</b>	<b>0.0561</b>	<b>0.0707</b>	1.000					
RESPONSIBILITY	0.04	0.20	<b>-0.0234</b>	-0.0017	-0.0018	0.0123	1.0000				
HIGH-CARBON	0.52	0.49	0.0106	<b>0.1098</b>	<b>0.1491</b>	<b>0.3056</b>	0.0222	1.0000			
SIZE	12.672	1.864	0.007	<b>0.0034</b>	-0.0213	-0.0053	0.0581	<b>0.0062</b>	1.0000		
LEVERAGE	0.68	0.93	0.0228	0.0269	-0.0023	-0.0030	<b>0.0018</b>	-0.0506	0.0015	1.0000	
PRICE-TO-BOOK	2.34	1.86	<b>0.0317</b>	<b>0.0358</b>	-0.0169	0.0091	0.0034	-0.0233	<b>0.0035</b>	-0.3952	1.0000

Table III reports Pearson's correlation coefficients for all variables used in the regressions. Spearman correlations (unreported for brevity) are consistent with the Pearson correlations. Boldface indicates statistical significance at the 1% level.

### **5.5.2 Multivariate analysis**

We estimate the relationship between corporate governance practices and GHG emissions by estimating Equation (1). In Table 4, we report outcomes of the multivariate regression for the pooled sample in the span period 2011-2015. Model 1 shows our basic regression, where year and country effects are not considered. We can see that Incentives, Responsibility, and Disclosure are negative and statistically significant at the 5% level, suggesting that firms that apply these types of practices produce lower GHG emissions.

The variable Public Policy is statically insignificant. When we include year fixed effects in Model 2, the variables Incentives, Responsibility, and Disclosure remain negative and statistically significant at the 5% level. Given that our sample comprises firms from 56 countries, we control in Model 3 for country effects, which allow us capturing unspecified variations across countries. The coefficients for Incentives, Responsibility, and Disclosure continue to be negative and statistically significant at the 1% and 5% levels. The insignificance of coefficient for Public Policy persists. These findings provide strong support for Hypotheses 1, 3 and 4, thus suggesting that instituting managerial incentives on climate change, assigning climate change-related responsibilities to executives and communicating organization's response to climate change can help reduce firms' GHG emissions.

Furthermore, Models 4 and 5 show regression results by separating firms into US and non-US, respectively. Results show that in US firms only Incentives and Responsibility are significantly and negatively associated with GHG emissions at the 5% level. While, looking at non-US firms, Incentives, Responsibility, and Disclosure continue to be negative and statistically significant at the 5% level. Moreover, unlike Models 1-4, Public Policy comes out to be negative and statistically significant at the 10% level. These findings provide weak support for Hypothesis 3, suggesting that engaging in activities to influence public policies on climate change is associated to lower GHG emissions in some countries, but not in others, depending on the sensitivity of the country's political system to respond to pressures from interest groups.

**Table 4. Corporate Governance Practices and GHG emissions**

Model	1	2	3	4	5
INCENTIVES	<b>-0.768 **</b> (0.145)	<b>-0.813**</b> (0.094)	<b>-0.621**</b> (0.126)	<b>-0.437**</b> (0.072)	<b>-0.673**</b> (0.089)
PUBLIC POLICY	-0.076 (0.003)	-0.050 (0.002)	-0.024 (0.002)	-0.092 (0.001)	<b>-0.166*</b> (0.002)
DISCLOSURE	<b>-0.437**</b> (0.041)	<b>-0.672**</b> (0.037)	<b>-0.400***</b> (0.043)	-0.361 (0.027)	<b>-0.382**</b> (0.040)
RESPONSIBILITY	<b>-0.326**</b> (0.016)	<b>-0.546**</b> (0.021)	<b>-0.470***</b> (0.014)	<b>-0.316**</b> (0.013)	<b>-0.268**</b> (0.015)
SIZE	2.561 (0.172)	<b>2.536*</b> (0.164)	<b>3.146***</b> (0.147)	<b>2.167*</b> (0.128)	<b>2.376*</b> (0.164)
LEVERAGE	0.146 (0.010)	<b>0.184**</b> (0.034)	<b>0.138*</b> (0.022)	<b>0.201**</b> (0.018)	<b>0.143*</b> (0.024)
PRICE-TO-BOOK	1.076 (0.181)	1.074 (0.172)	<b>1.026*</b> (0.137)	1.041 (0.134)	<b>1.069*</b> (0.183)
HIGH-CARBON	<b>0.076**</b> (0.011)	<b>0.135**</b> (0.018)	<b>0.312***</b> (0.011)	<b>0.137**</b> (0.012)	<b>0.214**</b> (0.016)
Constant	<b>0.161***</b> (0.042)	<b>0.134***</b> (0.036)	<b>0.185***</b> (0.042)	<b>0.163***</b> (0.037)	<b>0.142***</b> (0.055)
Year Effect	No	Yes	Yes	Yes	Yes
Country Effect	No	No	Yes	No	No
Adj.R <sup>2</sup>	0.424	0.432	0.437	0.322	0.394
N. obs	8,060	8,060	8,060	1,980	6,080

This table reports regression results of GHG emissions on variables representing corporate governance practices, and all others are control variables. The sample consists of 8,060 firm-year observations from 56 countries over the period 2011-2015. GHG emissions are our dependent variable, estimated as the logarithm of total emissions. Standard errors – adjusted for potential heteroscedasticity and clustered at the country level- are in parentheses. \*\*\*, \*\*, \*, denote significance at 1%, 5%, and 10%, respectively. All two-tailed.

### 5.5.3 Robustness check

To ensure robustness to our results, we performed several sensitivity tests (Table 5). We re-run our basic equation by using a quantile regression to better control for the presence of

outliers (Model 1 Table 5), and a panel fixed effects regression to control for the unobserved fixed effects that are associated with each firm (Model 2 Table 5). Namely, when the unobserved effect is correlated with the independent variable, pooled OLS produce estimators that are biased and inconsistent. In corporate governance studies, De Andres and Vellelado (2008) suggest using either the first differences or the fixed effects (within) estimators. Using either the quantile regression or fixed effects regressions does not affect our results.

Another problem inherent to the empirical analysis is the endogeneity issue. Endogeneity refers to situations in which an explanatory variable is correlated with the error term. This can arise for three common causes: reverse causality, omitted variables and measurement errors. Reverse causality means two variables are jointly determined. For example, if we have two variables X and Y and they are jointly determined, then it means X causes Y and Y causes X (Baltagi, 2008). In order to check whether our regression suffers from reverse causality, the best solution is to re-estimate the model using lagged independent variables. If the sign of the independent variables changes and is significant, this means that the regression suffers from reverse causality; if there are no changes in the sign of the independent variables, then we can rule out reverse causality.

In line with previous studies (Busch et al., 2012; Lewandowski, 2017; Delmas et al., 2015; Trumpp and Guenther, 2015), we lagged the independent variables by one year to address the presence of endogeneity (Model 3 Table V). When we estimate our regression with lags t-1 of independent variables as instruments, our core results remain qualitatively unaffected.

**Table 5. Robustness check**

Model	1	2	3
INCENTIVES	<b>-0.347***</b> (0.006)	<b>-0.484**</b> (0.034)	
L. INCENTIVES			<b>-0.322**</b> (0.156)
PUBLIC POLICY	-0.349 (0.011)	-0.088 (0.174)	
L. PUBLIC POLICY			-0.139 (0.192)
DISCLOSURE	<b>-0.347*</b> (0.012)	<b>-0.523**</b> (0.239)	
L. DISCLOSURE			<b>-0.111*</b> (0.135)
RESPONSIBILITY	<b>-0.463***</b> (0.005)	<b>-0.375**</b> (0.155)	
L. RESPONSIBILITY			<b>-0.234**</b> (0.125)
SIZE	3.648 (0.001)	<b>2.636*</b> (0.034)	<b>2.492</b> (0.051)
LEVERAGE	<b>0.137**</b> (0.063)	<b>0.364*</b> (0.031)	<b>0.137*</b> <b>(0.074)</b>
PRICE-TO-BOOK	<b>1.149**</b> (0.042)	1.124 (0.137)	<b>1.346*</b> (0.137)
HIGH-CARBON	<b>0.522***</b> (0.006)	<b>0.471*</b> (0.012)	<b>0.267*</b> (0.023)
Constant	<b>0.234***</b> (0.016)	<b>0.326***</b> (0.037)	<b>0.367***</b> (0.022)
Year Effect	Yes	No	Yes
Country Effect	Yes	No	Yes
R <sup>2</sup>	0.367	0.436	0.367
N. obs	8,060	8,060	8,060

This table reports regression results of GHG emissions on variables representing corporate governance practices, and all others are control variables. The sample consists of 8,060 firm-year observations from 56 countries over the period 2011-2015. GHG emissions are our dependent variable, estimated as the logarithm of total emissions. Standard errors – adjusted for heteroscedasticity and clustered at the country level- are in parentheses. \*\*\*, \*\*, \*, denote significance at 1%, 5%, and 10%, respectively. All two-tailed.

## 5.6 CONCLUSIONS AND DISCUSSION

In this study, we analyzed the relationship between corporate governance mechanisms and climate change using a multivariate analysis applied to the 2011-2015 GHG emissions dataset from 1,612 firms across 56 countries in 11 industries. Overall, our analyses provide meaningful results. First, we find that firms that provide incentives to their management to address climate-related issues are negatively related to the amount of firm's GHG emissions. This result is in line with Jensen and Meckling (1976) and Kock et al. (2012) that showed positive relationship between managerial incentives and firm's environmental performance. Secondly, we find that the companies that involve stakeholders in the formulation of their policies or corporate strategies are negatively related to GHG emissions. This negative relationship is in line with the study by Foster and Jonker (2005), which showed that sustainability is a business management model that, through stakeholder engagement, improves firm performance by maximizing reputation and value.

Moreover, our results show that firms in which the highest level of direct responsibility is entrusted to the board or senior manager are negatively related to GHG emissions. This finding is in line with Fama and Jensen (1983), who argued that board acts in favor of protecting and managing stakeholders' interests.

Overall, research outcomes suggest that firm's governance practices on climate change and the amount of GHG emissions or the GHG emissions intensity are closely related.

A further analysis was conducted by dividing the full sample into US and non-US firms. When we estimate our regression only with US firms the coefficients for *Incentives* and *Responsibility* remain negative and statistically significant, but our independent variable *Disclosure* is not significant. By contrast, when we estimate our regression considering only non-US firms, all our independent variables are negative and statistically significant. Since *Disclosure* measures whether a company informs its stakeholders about activities performed in response to climate change, our results suggest that the relevance of stakeholders' engagement is country specific. In particular, stakeholders' engagement seems less relevant in the US with respect to other countries, either because the overall information system is more developed in the US (and thus individual companies' communication activity is less

relevant), or because the US public opinion exerts lower pressures on companies to deal with climate change.

Our study contributes to the literature on corporate governance and climate change in several ways. First, our study offers an evidence that firms' GHG emissions and governance practices are related. Previous studies (Hussain et al. 2016; Bassen and Kovacs, 2008; Kassinis and Vafeas, 2002) were focusing on the relationship between corporate governance and general sustainability performance, but, to our best knowledge, the relationship between firms' GHG emissions and governance practices has not been addressed.

Second, by taking a stakeholder- agency theory perspective proposed by Hill and Jones (1992), our paper confirms the existence of a direct link between stakeholders and corporate governance. The threat of damaging activism that can be brought on by stakeholders has an influence on the decision-maker's environmental strategies, which in turn is influenced by corporate governance practices. Overall, our study contributes to stakeholder-agency literature by exploring the way in which corporate governance practices mitigate conflicts between stakeholders and managers in relation to environmental issues.

Third, we found a difference between US and non-US firms. One potential reason of this finding is that the political system and the outhoruty of government can influence the decisions of managers (Galbreath, 2010). For Example, European governments have been more involved in sustainable activity addressed to climate change (Aguilera et al., 2006). Also, the US shareholder model of corporate governance tends to place profits maximization as the main business goal rather than commitment in social activities such as climate change (Friedman, 1970). Moreover, according to the institutional theory, organizational practices become spread and homogenize due to three forces, namely coercive, mimetic and normative (DiMaggio and Powell, 1983). By examining the presence of these three forces it is possible to explain convergence on organizational practices and behavior.

Furthermore, our paper contributes to the environmental governance literature (Russo and Harrison, 2005; Kassinis and Vefegas, 2002; Kock et al., 2012), where the impact of governance practices in environmental problem solving has not been widely studied. Our results show that instituting certain corporate governance mechanisms can address climate change problem.



However, these results should be interpreted in the context of their limitations. First, our sample includes only large firms, since it is limited to CDP respondents. As most academic climate change databases that offer information mainly for listed companies, in CDP small and medium-sized enterprises are limited, since they show a series of difficulties in implementing strategies on climate change. Furthermore, CDP respondents voluntarily respond to the survey, so that the sample could suffer from self-selection bias (Luo and Tang, 2016). However, future research could investigate both CDP respondents and companies that do not follow a CDP approach.

Second, we did not consider the possibility that other variables could intervene in the associations among corporate governance practices and GHG emissions. It is possible, for example, that other corporate governance dimensions influence the causal links among our model variables.

Moreover, our sample includes companies from 56 countries which differ in their government policies and initiatives addressed to climate change. However, future studies could take into account the effect of institutional environments and differences based on different cultural aspects.

## **References**

- Agarwal, S., Driscoll, J. C., Gabaix, X., & Laibson, D. (2009). The age of reason: Financial decisions over the life cycle and implications for regulation. *Brookings Papers on Economic Activity*, 2009(2), 51-117.
- Aguilera, R. V., Judge, W. Q., & Terjesen, S. A. (2018). Corporate governance deviance. *Academy of Management Review*, 43(1), 87-109.
- Al-Shaer, H.; Zaman, M. (2016). Board gender diversity and sustainability reporting quality. *J. Contemp. Account. Econ.*, 2016, 12, 210–222.
- and *Environment* 28: 374–393.
- Andres, P., & Vallelado, E., 2008. Corporate governance in banking: The role of board of directors. *Journal of Banking and Finance.*, 32, 2570–2580.
- Arena, C., Bozzolan, S., & Michelon, G. (2015). Environmental reporting: Transparency to stakeholders or stakeholder manipulation? An analysis of disclosure tone and the role of

- the board of directors. *Corporate Social Responsibility and Environmental Management*, 22(6), 346-361.
- Baltagi, B. (2008). *Econometric analysis of panel data*. John Wiley & Sons.
- Banerjee, S., & Homroy, S. (2018). Managerial incentives and strategic choices of firms with different ownership structures. *Journal of Corporate Finance*, 48, 314-330.
- Bansal, N., Srivastava, V. K., & Kheraluwala, J. (2019). Rooftop Solar Power Generation: An Opportunity to Reduce Greenhouse Gas Emissions. In *Greenhouse Gas Emissions* (pp. 141-160). Springer, Singapore.
- Bansal, R. C., & Goyal, M. (2005). *Activated carbon adsorption*. CRC press.
- Bassen, A., Kovacs, A., (2008). Environmental, Social and Governance Key Performance Indicators from a Capital Market Perspective. *Zeitschrift für Wirtschaftsund Unternehmensethik (zfwu)*. *J. Business Econ. Ethics* 182e192.
- Beleya, P., Raman, G., Chelliah, M. K., & Nodeson, S. (2015). Sustainability and green practices at Malaysian seaports: Contributors to the core competitiveness. *Journal of Business Management and Economics*, 23-27.
- Ben-Amar W, McIlkenny P. 2015. Board effectiveness and the voluntary disclosure of climate change information. *Business Strategy and the Environment* 24: 704–719.
- Borghei, Z., Leung, P., & Guthrie, J. (2018). Does voluntary greenhouse gas emissions disclosure reduce information asymmetry? Australian evidence. *Afro-Asian Journal of Finance and Accounting*, 8(2), 123-147.
- Brammer S, Pavelin S. (2008). Factors influencing the quality of corporate environmental disclosure. *Business Strategy and the Environment* 17(2):120–136.
- Busch T, Lehmann N, Hoffmann VH. 2012. Corporate social responsibility, negative externalities, and financial risk: the case of climate change.
- Cao, X., Lemmon, M., Pan, X., Qian, M., & Tian, G. (2018). Political promotion, CEO incentives, and the relationship between pay and performance. *Management Science*.
- Castellaneta, F. (2016). Building firm capability: managerial incentives for top performance. *Journal of Business Strategy*, 37(4), 41-46.
- CDP. 2014. Connection between Climate Change and Business Models: an Evolving Agenda. CDP Brazil 100 Climate Change. [https:// b8f65cb373b1b7b15feb](https://b8f65cb373b1b7b15feb)

c70d8ead6ced550b4d987d7c03fcdd1d.ssl.cf3.rackcdn.com/cms/reports/documents/000/000/870/original/CDPbrazil-climate-change-report-2014-english.pdf?1472045024

- Chen, Y. S., Lai, S. B., & Wen, C. T. (2006). The influence of green innovation performance on corporate advantage in Taiwan. *Journal of business ethics*, 67(4), 331-339.
- Clarkson PM, Li Y, Richardson GD, Vasvari FP. (2008). Revisiting the relation between environmental performance and environmental disclosure: an empirical analysis. *Accounting, Organizations and Society* 33: 303–327.
- Coles, J. L., & Li, Z. F. (2018). Managerial attributes, incentives, and performance. *Incentives, and Performance* (August 28, 2018).
- Cucari, N., Esposito De Falco, S., & Orlando, B. (2018). Diversity of board of directors and environmental social governance: Evidence from Italian listed companies. *Corporate Social Responsibility and Environmental Management*, 25(3), 250-266.
- De Beer, E., & Rensburg, R. (2011). Towards a theoretical framework for the governing of stakeholder relationships: A perspective from South Africa. *Journal of Public Affairs*, 11(4), 208-225.
- Delmas MA, Nairn-Birch N, Lim J. 2015. Dynamics of environmental and financial performance: the case of greenhouse gas emissions. *Organization*
- Disclosure Project (CDP). 2009. Carbon Disclosure Project Investor Research Project 2009 New York, NY.
- Doda, B., Gennaioli, C., Gouldson, A., Grover, D., & Sullivan, R. (2016). Are corporate carbon management practices reducing corporate carbon emissions?. *Corporate Social Responsibility and Environmental Management*, 23(5), 257-270.
- European Commission. 2000. Green Paper on Greenhouse Gas Emissions Trading within the European Union. Brussels.
- European Commission. 2003. Scheme for Greenhouse Gas Emissions Allowance Trading Within the Community, Directive 2003/87/EC of the European Parliament and of the Council. L 275/32.
- Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *The journal of law and Economics*, 26(2), 301-325.

- Fankhauser, S., Gennaioli, C., & Collins, M. (2016). Do international factors influence the passage of climate change legislation?. *Climate Policy*, 16(3), 318-331.
- Foster, D., & Jonker, J. (2005). Stakeholder relationships: the dialogue of engagement. *Corporate Governance: The international journal of business in society*, 5(5), 51-57.
- Galbreath, J. (2010). How does corporate social responsibility benefit firms? Evidence from Australia. *European Business Review*, 22(4), 411-431.
- Gök, O., & Peker, S. (2017). Understanding the links among innovation performance, market performance and financial performance. *Review of Managerial Science*, 11(3), 605-631.
- Hall, B. J., & Murphy, K. J. (2003). The trouble with stock options. *Journal of economic perspectives*, 17(3), 49-70.
- Hill, C. W., & Jones, T. M. (1992). Stakeholder-agency theory. *Journal of management studies*, 29(2), 131-154.
- Hillman, A. J., & Hitt, M. A. (1999). Corporate political strategy formulation: A model of approach, participation, and strategy decisions. *Academy of management review*, 24(4), 825-842.
- Hussain, N., Rigoni, U., & Orij, R.P. (2018). Corporate governance and sustainability performance: Analysis of triple bottom line performance. *Journal of Business Ethics*, 149(2): 411-432.
- Hussain, N., Rigoni, U., & Orij, R.P. (2018). Corporate governance and sustainability performance: Analysis of triple bottom line performance. *Journal of Business Ethics*, 149(2): 411-432.
- Jensen, M. C., & Mechling, W. (1976). Theory of the firm: Managerial behavior, agency costs, and capital structure. *Journal of Financial Economics*, 3(October): 305-360.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of financial economics*, 3(4), 305-360.
- Jeswani, H. K., Wehrmeyer, W., & Mulugetta, Y. (2008). How warm is the corporate response to climate change? Evidence from Pakistan and the UK. *Business Strategy and the Environment*, 17(1), 46-60.

- Jizi, M. (2017). The influence of board composition on sustainable development disclosure. *Business Strategy and the Environment*, 26(5), 640-655.
- Kassinis G, Vafeas N. (2002). Corporate boards and outside stakeholders as determinants of environmental litigation. *Strategic Management Journal* 23: 399–415.
- Kassinis, G., Panayiotou, A., Dimou, A., & Katsifaraki, G. (2016). Gender and environmental sustainability: A longitudinal analysis. *Corporate Social Responsibility and Environmental Management*, 23(6), 399-412.
- Kim Y. (2013). Environmental, sustainable behaviors and innovation of firms during the financial crisis. *Business Strategy and the Environment* published online DOI:10.1002/bse.1811
- Kock, C. J., Santaló, J., & Diestre, L. (2012). Corporate governance and the environment: What type of governance creates greener companies. *Journal of Management Studies*, 49, 492-514.
- Kolk, A., & Pinkse, J. (2005). Business responses to climate change: identifying emergent strategies. *California Management Review*, 47(3), 6-20.
- Kolk, A., Levy, D., & Pinkse, J. (2008). Corporate responses in an emerging climate regime: The institutionalization and commensuration of carbon disclosure. *European Accounting Review*, 17(4), 719-745.
- Lankoski, L. (2006). Environmental and economic performance: The basic links. Schaltegger, S. and Wagner, M. *Managing the Business Case for Sustainability* Sheffield: Greenleaf Publishing, 32-46.
- Lee, S. Y. (2012). Corporate carbon strategies in responding to climate change. *Business Strategy and the Environment*, 21(1), 33-48.
- Lenssen, G., van den Berghe, L., Louche, C., Roper, J., & Cheney, G. (2005). The meanings of social entrepreneurship today. *Corporate Governance: The international journal of business in society*.
- Lewandowski, Stefan. (2017). “Corporate carbon and financial performance: The role of emission reductions.” *Business Strategy and the Environment* 26, no. 8 (2017): 1196-1211.

- Luo L, Tang Q. (2016). Determinants of the quality of corporate carbon management systems: an international study. *International Journal of Accounting* 51(2): 275–305. <https://doi.org/10.1016/j.intacc.2016.04.007>
- Marcotullio P. J., A. Sarzynski, J. Albrecht, N. Schulz, and J. Garcia (2013). The geography of global urban greenhouse gas emissions: an exploratory analysis. *Climatic Change*, 121, 621–634. doi: 10.1007/s10584-013-0977-z, ISSN: 0165- 0009, 1573–1480.
- Matisoff DC, Noonan DS, O'Brien JJ. (2012). Convergence in environmental reporting: assessing the Carbon Disclosure Project. *Business Strategy and the Environment*. DOI: 10.1002/bse.1741
- OECD. 2009. OECD Strategic Response to the Financial and Economic Crisis. <http://www.oecd.org/crisisresponse> [5 June 2011].
- Osemeke, L., & Adegbite, E. (2016). Regulatory multiplicity and conflict: Towards a combined code on corporate governance in Nigeria. *Journal of business ethics*, 133(3), 431-451.
- Perry, D. A., Oren, R., & Hart, S. C. (2008). *Forest ecosystems*. JHU press.
- Post, C., Rahman, N., & McQuillen, C. (2015). From board composition to corporate environmental performance through sustainability-themed alliances. *Journal of Business Ethics*, 130(2), 423-435.
- Reynolds, S. J., Schultz, F. C., & Hekman, D. R. (2006). Stakeholder theory and managerial decision-making: Constraints and implications of balancing stakeholder interests. *Journal of Business Ethics*, 64(3), 285-301.
- Richards, M., Bruun, T. B., Campbell, B. M., Gregersen, L. E., Huyer, S., Kuntze, V., ... & Vasileiou, I. (2016). How countries plan to address agricultural adaptation and mitigation: An analysis of Intended Nationally Determined Contributions. CCAFS dataset.
- Rogelj, J., Den Elzen, M., Höhne, N., Fransen, T., Fekete, H., Winkler, H., ... & Meinshausen, M. (2016). Paris Agreement climate proposals need a boost to keep warming well below 2 C. *Nature*, 534(7609), 631.
- Seward, J. K., & Walsh, J. P. (1996). The governance and control of voluntary corporate spin-offs. *Strategic Management Journal*, 17(1), 25-39.

- Sharma, S., & Henriques, I. (2005). Stakeholder influences on sustainability practices in the Canadian forest products industry. *Strategic management journal*, 26(2), 159-180.
- Solomon, J. F., & Solomon, A. (2006). Private social, ethical and environmental disclosure. *Accounting, Auditing & Accountability Journal*, 19(4), 564-591.
- Stanny E, Ely K. (2008). Corporate environmental disclosures about the effects of climate change. *Corporate Social Responsibility and Environmental Management* 15: 338–348.
- Stanny, E. (2013). Voluntary disclosures of emissions by US firms. *Business Strategy and the Environment*, 22(3), 145–158.
- Trumpp C, Guenther T. (2015). Too little or too much? Exploring U-shaped relationships between corporate environmental performance and corporate financial performance. *Business Strategy and the Environment* 26: 49–68.
- Ullmann, A. A. (1985). Data in search of a theory: A critical examination of the relationships among social performance, social disclosure, and economic performance of US firms. *Academy of management review*, 10(3), 540-557.
- UNEP. 2018. Emissions Gap Report 2018. United Nations Environment Programme.
- United Nations (UN)., 2015. Countries Reach Historic Agreement to Generate Financing for New Sustainable Development Agenda. <http://www.un.org/esa/ffd/ffd3/press-release/countries-reach-historic-agreement.html>
- United Nations Framework Convention on Climate Change (2014). Decision CP/20. Lima Call for Action. Retrieved from [https://unfccc.int/files/meetings/lima\\_dec\\_2014.pdf](https://unfccc.int/files/meetings/lima_dec_2014.pdf)
- United Nations Framework Convention on Climate Change (2015). INDC submission. Retrieved from [http://unfccc.int/focus/indc\\_portal/items/8766.php](http://unfccc.int/focus/indc_portal/items/8766.php)
- United Nations Framework Convention on Climate Change (UNFCCC). 2008. Kyoto Protocol Reference Manual on Accounting of Emissions and Assigned Amount. UNFCCC: Germany.
- Urry, J. (2015). Climate change and society. In *Why the social sciences matter* (pp. 45-59). Palgrave Macmillan, London.
- Vvan Vuuren, D. P., Stehfest, E., Gernaat, D. E., van den Berg, M., Bijl, D. L., de Boer, H. S., ... & Hof, A. F. (2018). Alternative pathways to the 1.5 C target reduce the need for negative emission technologies. *Nature Climate Change*, 8(5), 391.

Wang, L., Li, S., Gao, S. (2013), Do Greenhouse Gas Emissions Affect Financial Performance? - An Empirical Examination of Australian Public Firms. *Business Strategy and the Environment*. DOI: 10.1002/bse.1790.

Weinhofer, G., & Hoffmann, V. H. (2010). Mitigating climate change—how do corporate strategies differ?. *Business Strategy and the Environment*, 19(2), 77-89.

Zajac, E. J., & Westphal, J. D. (1994). The costs and benefits of managerial incentives and monitoring in large US corporations: When is more not better?. *Strategic management journal*, 15(S1), 121-142.

## Appendix

### CDP questionnaire

Incentives	Do you provide incentives for the management of climate-related issues, including the attainment of targets?
Public Policy	Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues?
Disclosure	Have you published information about your organization’s response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response?
Responsibility	Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues